Environmental and Radiological Data Summary and Health Risk Evaluation for the American Jewish University Brandeis-Bardin Campus at Simi Valley, California

**Technical Memorandum** 

**April 2016** 

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## LIST OF ACRONYMS AND ABBREVIATIONS

μg/L Micrograms per liter

AJU American Jewish University

ATSDR Agency for Toxic Substances and Disease Registry

BBC Brandeis-Bardin Campus
BBI Brandeis-Bardin Institute
BCI Brandeis Camp Institute
BTV Background Threshold Values

Cal/EPA California Environmental Protection Agency

CDM Smith (consulting firm)

CERCLA Comprehensive Environmental Response, Compensation, and Liability Act

cm<sup>2</sup> Square centimeter

COPC Contaminants of potential concern

Cs-137 Cesium-137

CSM Conceptual site model

DHS Department of Health Services

DOE Department of Energy
DQO Data Quality Objectives

DTSC California Department of Toxic Substances Control

EPA Environmental Protection Agency
EPC Exposure-point concentration

GPS Global positioning system

HGL HydroGeoLogic, Inc. (consulting firm)
HHRA Human Health Risk Assessment

HI Hazard Index

IRIS Integrated Risk Information System

K-M Kaplan-Meier

LA RWQCB Los Angeles Regional Water Quality Control Board

LUT Look-up Tables

m<sup>3</sup>/kg Cubic meter per kilogram

MDC Minimum detectable concentration mg/cm<sup>2</sup> Milligrams per square centimeter

mg/day Milligrams per day
mg/kg Milligrams per kilogram
mg/kg-day Milligram per kilogram per day

mg/m<sup>3</sup> Milligram per cubic meter
MWH MWH (consulting firm)

NASA National Aeronautics and Space Administration

NBZ Northern Buffer Zone ng/g Nanogram per gram

NRC Nuclear Regulatory Commission

OEHHA Office of Environmental Health Hazard Assessment

PA/SI Preliminary assessment/site inspection
PAH Polycyclic Aromatic Hydrocarbon

PCB Polychlorinated biphenyls pCi/g Picocuries per gram

pCi/g Picocuries per gran
pCi/L Picocuries per liter

PEF Particulate emission factors
PRG Preliminary Remediation Goals

Pu-238 Plutonium-239

QA Quality assurance QC Quality control

RAGS Risk Assessment Guidance for Superfund RBRA Radiological background reference areas RCRA Resource Conservation and Recovery Act

RfC Reference concentrations

RfD Reference doses

REL Reference exposure levels

RMDF Radioactive Material Disposal Facility

RSBL Risk-based screening levels
RSL Regional Screening Levels

SF Slope factors
SI Site inspection

SIM Selective ion monitoring

Sr-90 Strontium-90

SSFL Santa Susana Field Laboratory

TCE Trichloroethene Tetra Tech Tetra Tech Inc.

TPH Total petroleum hydrocarbons

UCL95 95 percent upper confidence limit

USL95 Upper Simultaneous Limit statistic, at 95% confidence

URF Unit risk factors

Weston Weston Solutions Inc. (consulting firm)

Y-90 Yttrium-90

## KEY TERMS DEFINED

**Analyte** A substance being identified and measured.

**Background Sites**Background sites are areas that have similar characteristics as

the area being studied, but are not impacted by the potential

contaminant source. Used for purposes of comparison.

Contaminant The word "contaminant" has a somewhat different connotation

for environmental scientists than it does in common speech. In an environmental study, "contaminant" generally refers to any physical, chemical, biological, or radiological substance present in soil or water. Because the term includes even the most

minute quantity of these substances, the presence of contaminants does not necessarily indicate a health risk.

**Data Gap Analysis** A review of previous environmental studies to determine if any

additional testing or improved technologies should be utilized

to enhance the study of the area in question.

**Gamma Radiation** A type of energy emitted from both natural and artificial

sources. Natural sources include the decay of naturally occurring radioisotopes, as well as cosmic rays that strike the Earth's surface. Artificial sources can include fission from nuclear reactors, fallout from nuclear weapons tests, or high-

energy physics experiments.

**Health Risk Evaluation** An analysis that combines environmental data with information

about how the property is used to calculate a single number representing the risk posed to site users. Risk levels are presented as a probability that a site user could be affected by environmental conditions. Where the contaminants of concern are potential carcinogens, EPA generally considers a site with a

risk level less than 1 in 1,000,000 to be acceptable.

**Northern Buffer Zone** 170-acre area of remote, undeveloped land at the border

between SSFL and BBC, approximately two miles from the center of camp. Rough terrain makes this the Northern Buffer Zone very difficult to access. This property did not belong to BBC before 1972 and was sold to Boeing in the mid-1990s.

**Radiological Study** Any study intended to discover the presence of radioactive

substances in the environment.

## **EXECUTIVE SUMMARY**

This Technical Memorandum presents the results of an environmental and radiological investigation and health risk evaluation performed by Tetra Tech, Inc. (Tetra Tech) at the Brandeis-Bardin Campus (BBC) located in the Simi Valley, California. The BBC is situated in close proximity to the Santa Susana Field Laboratory (SSFL), a former nuclear and rocket testing facility. Operations at the SSFL are known to have released chemical and radiological contaminants into the environment, and the SSFL has been undergoing extensive investigation and remediation for several decades under the oversight of both the Environmental Protection Agency (EPA) and the California Department of Toxic Substances Control (DTSC). The SSFL investigation has assessed contamination both on and off-site, and investigations to date have uniformly found that contaminants originating from the SSFL have not migrated to the BBC in a manner that creates a health risk for campers, residents, or other BBC visitors.

Tetra Tech was retained as a third party consultant to (1) perform a detailed review of existing environmental, chemical and radiological studies conducted within and outside the BBC property boundary; (2) determine if any additional testing or improved technologies should be utilized to enhance the study of the BBC (data gap analysis); (3) develop a strategy for further site testing; (4) execute the further site testing; and (5) evaluate the risk posed to campers, residents, and visitors of the BBC using newly-collected data.

Tetra Tech conducted a comprehensive literature review on all available relevant information and environmental investigations which have been conducted at the SSFL and associated off-site areas, including those conducted by EPA, Cal EPA, DTSC, Brandeis-Bardin and others at the BBC since 1992. This, and all other studies consistently concluded that environmental conditions at the BBC posed no risk to users of the site. Tetra Tech then conducted a critical evaluation of the existing studies to identify any additional testing protocols that might augment the work that had already done. While these studies presented no data gaps of concern, as a matter of assurance, Tetra Tech recommended, and subsequently performed, both a continuous GPS-based gamma radiation survey and soil sampling on the BBC property.

The mobile GPS-based gamma radiation survey, a technology not available when previous investigations were conducted, was performed over the entirety of the camp area as well as in the drainage areas leading from the Northern Buffer Zone toward the center of the BBC property. This survey showed no statistically significant difference in gamma radiation readings compared with background levels (or naturally occurring levels). Soil samples taken from the primary usage areas and the drainage areas were also tested for a suite of radiological and chemical analytes. Strontium-90 (Sr-90), a radionuclide that has become ubiquitous in soil globally due to atmospheric nuclear weapons testing fallout, was detected at an average concentration of 0.0817 pCi/g, with a range from non-detect (<0.075 pCi/g) to 0.182 pCi/g. Tetra Tech evaluated the risk to campers and other site users based on a series of highly conservative assumptions, including that the highest detected concentration of Sr-90 represented all soil on the property. This analysis concluded that the risk to human health caused by Sr-90 (.043 in 1,000,000 excess cancer risk) is less than one-twentieth the risk level that DTSC and EPA consider acceptable (1 in 1,000,000 excess cancer risk). All other analytes tested were found to be below background levels.

Tetra Tech's risk evaluation is consistent with prior risk assessments for off-site areas that found no appreciable risks at the BBC through soil exposure pathways. It demonstrates that human health risks associated with BBC soils are well below levels of concern and are consistent with background levels. Tetra Tech's risk evaluation, literature review, and background comparison analysis of all available site data indicate that the environmental and radiological conditions at the BBC pose no unacceptable human health risk to campers, camp counselors, visitors, or residents at the site.

## 1.0 INTRODUCTION

This Technical Memorandum presents the results of a critical document review, data gap analysis, and site testing performed by Tetra Tech Inc. (Tetra Tech) as a third-party professional consulting firm on behalf of the American Jewish University (AJU). Tetra Tech was tasked with analyzing and evaluating available information collected to date at the Brandeis-Bardin Campus (BBC) located in Ventura County, California, then recommending and performing further site testing to characterize any environmental health risks associated with the use of the BBC facility. Tetra Tech also conducted a radiological and soil investigation.

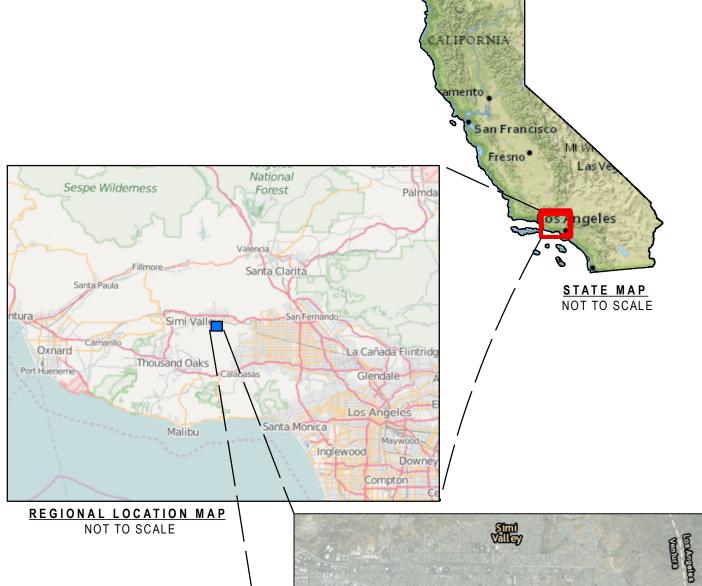
The BBC is in close proximity to the Santa Susana Field Laboratory (SSFL), a former nuclear and rocket science research facility that has been the subject of multiple environmental investigations under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and the Resource Conservation and Recovery Act (RCRA). The objective of this investigation was to identify whether the BBC property is impacted by contaminants originating from the SSFL at levels that pose an unacceptable risk to the campers, residents, and visitors of the BBC property. As described in this Technical Memorandum, Tetra Tech conducted a literature review and data gap analysis, radiological and soil sampling investigation, and risk evaluation using published risk-based screening values. As set forth in Section 8.0 below, the results of this investigation indicate that the environmental and radiological conditions at the BBC pose no unacceptable human health risk to campers, camp counselors, visitors, or residents at the site.

#### 1.1 SITE LOCATION AND BACKGROUND

Originally founded by Dr. Shlomo Bardin in 1941, the Brandeis Camp Institute (BCI) was named to honor the first Jewish United States Supreme Court Justice, Louis D. Brandeis, and was originally located in various states, including New Hampshire, Pennsylvania, and North Carolina. In 1947, the BCI purchased land in the foothills of the Santa Susana Mountains in Ventura County, California. In 1953, Dr. Bardin established Camp Alonim as residential summer camp for children. The camp witnessed expansion of youth programs and unprecedented growth of its adult retreat and Shabbat afternoon programming in the 1970s and 1980s. In the 2000s, the campus began to focus on experiential and environmental programming in partnerships with a variety of institutions in Southern California and throughout North America.

In 2007, the Brandeis-Bardin Institute (BBI) merged with the University of Judaism to become the AJU. The Ventura County property is known today as the BBC of the AJU (referred to as the BBC throughout the rest of this Technical Memorandum). The AJU acquired the campus in 2007 after internal due diligence had been conducted on the environmental conditions of the property.

The BBC is situated to the south of Simi Valley located in Ventura County, California. The BBC currently encompasses 2,878 acres and is zoned as rural agricultural; however, the property is also used for camping and hiking. Figure 1 provides a regional location map showing the BBC with respect to the Simi Valley and the State of California.





NOT TO SCALE

Brandeis-Bardin Campus
Property Boundary

Prepared for:

American Jewish
University

SITE LOCATION MAP

TETRA TECH
3801 Automation Way Suite 100
Fort Collins, Cobrado 80525
(970) 223-89600 (970) 223-7171 fax

 BRANDEIS-BARDIN CAMPUS
 Project no.:

 .ocation:
 Date:

 VENTURA COUNTY, CA
 MAR 2016

Figure 1

The SSFL, a former nuclear and rocket testing facility, is located directly adjacent and to the south of the BBC. The SSFL was built many years prior to the significant urban sprawl that currently surrounds it. Before it was developed, the SSFL was used for ranching. Development of the land started in 1948 by North American Aviation, a predecessor of Boeing (Environmental Protection Agency [EPA] 2007). The main operations at the SSFL included research, development, and testing of liquid fueled rocket engines. Prior to 1996, Rocketdyne and the Rockwell International Corporation operated at the site. Post-1996, the site was operated by Boeing, the National Aeronautics and Space Administration (NASA), and the Department of Energy (DOE).

The SSFL is divided into four administrative areas (Area I, Area II, Area III, and Area IV) and a buffer zone. Nuclear-related operations were conducted at the SSFL Area IV from 1953 until 1988, with non-nuclear operations continuing through 1998. During and after the period of Area IV operations, buildings and land in the radiological areas were decommissioned, and, if necessary, remediated, surveyed, verified, and released by the appropriate regulatory agencies including the Energy Research and Development Administration, the DOE, the Nuclear Regulatory Commission (NRC), and the California Department of Health Services (DHS). The buildings and soil have been decommissioned and released using applicable regulatory standards as authorized by Congress and the State of California (Sapere 2005). Table 1 provides the surface area and current ownership for the SSFL (EPA 2007).

**Table 1 Summary of SSFL Administrative Areas Current Ownership** 

SSFL Administrative Area	Surface Area (acres)	Ownership
Area I	670	Boeing/NASA
Area II	409	NASA
Area III	114	Boeing
Area IV	290	Boeing/DOE

Multiple operations at the SSFL over the last six decades have resulted in contamination of surface and subsurface environmental media by various hazardous substances (EPA 2007) with the areas of the SSFL. Numerous investigations have been conducted throughout all four areas at the SSFL site over the past three decades (EPA 2007; MWH 2007).

The SSFL was identified as a potential hazardous waste site and entered into the Comprehensive Environmental Response, Compensation, and Liability Information System in 1980. The SSFL is listed in the Resource Conservation and Recovery Information System database as a Treatment, Storage and Disposal Facility. Since 1980, EPA has conducted investigations at various locations throughout the SSFL. EPA completed the preliminary assessment and visual site inspection portions of the RCRA Facility Assessment in 1994. Under the authority of CERCLA and the Superfund Amendments and Reauthorization Act of 1986, a contractor (Weston Solutions Inc. [Weston]) was tasked to conduct a site inspection (SI) of Area IV (also referred to as the Energy Technology Engineering Center). The SI report on Area IV was completed in 2003 (Weston 2003). In 2007, all of the SSFL locations (Area 1 through Area IV) were combined into a parent site to allow EPA to evaluate the entire site as a single entity. Weston conducted a preliminary assessment/site inspection (PA/SI) of the SSFL, which was completed in November 2007. A number of other PA/SI investigations and reports have been conducted for selected areas within Area IV as early as 1989.

All properties located adjacent to the SSFL are referred to as "off-site" properties in this Technical Memorandum. There are six off-site areas adjacent to the SSFL, including the BBC, summarized in Table 2. The primary area of focus for this investigation is the BBC; however, careful consideration has also been given to the available regional data from the SSFL itself and within the other off-site areas.

Table 2 Summary of Off-Site Areas Adjacent to the Santa Susana Field Laboratory

Offsite Property Name	Property Size (acres)	Geographic Relation to the SSFL
Brandeis-Bardin Campus	2,354	North/Northwest
Runkle Canyon	1,523	West/Northwest
Bell Canyon	1,673	South
Sage Ranch	512	Northeast
Ahmanson Ranch	5,449	South/Southwest
Dayton Canyon	358	East

The BBC is located to the north and is hydrologically and hydraulically downgradient of the SSFL. In addition to the BBC, there are a number of off-site areas adjacent to or near the SSFL that have been the subject of one or more off-site environmental investigations (MWH 2007). Other off-site areas include: Santa Monica Mountains Conservancy's Sage Ranch, Black Canyon, Woolsey Canyon, Dayton Canyon, Chatsworth Reservoir, Bell Canyon, Ahmanson Ranch, and Runkle Canyon. Many of these properties have undergone a number of changes in ownership and name since environmental investigations have begun around the SSFL.

The California Department of Toxic Substances Control (DTSC) is the lead regulatory agency overseeing the investigation and cleanup of contaminated soil and groundwater at the SSFL. Multiple state, federal, and local government agencies also play a role in the cleanup under way at the SSFL site. Independent sampling of the off-site areas has been conducted in the past by a number of organizations, including but not limited to the following (DTSC 2016):

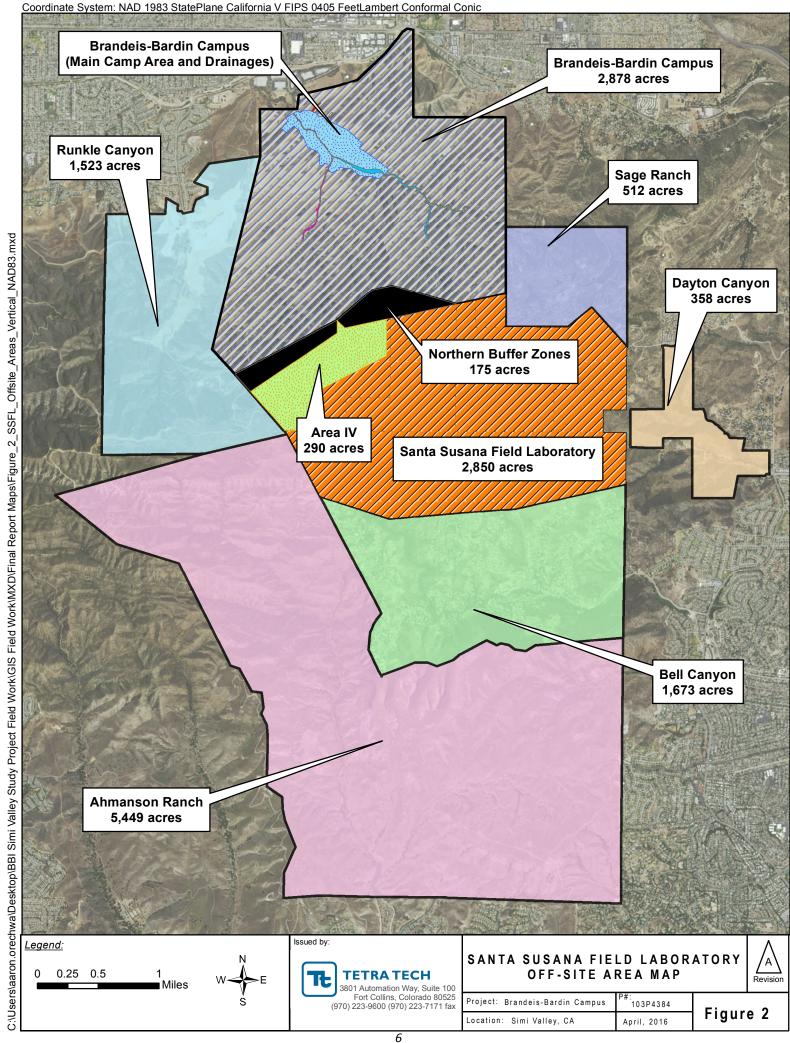
- Allwest Remediation for Dayton Canyon
- Argonne National Laboratory
- California DHS Environmental Management Branch
- California DHS Radiologic Health Branch
- EPA Office of Radiation and Indoor Air
- Essential Management Services for L.A. Department of Water and Power
- Foster Wheeler Environmental Corporation for Runkle Canyon
- Groundwater Resources Corporation. Later became Haley & Aldrich
- Joel Cehn as a consultant to the BBI
- Kleinfelder Corporation for Ahmanson Ranch Development
- Lawrence Livermore National Laboratory for the Rocketdyne Recreation Center
- McLaren Hart Environmental Engineering Corporation (McLaren-Hart) for the Brandeis-Bardin and Santa Monica Mountains Conservancy

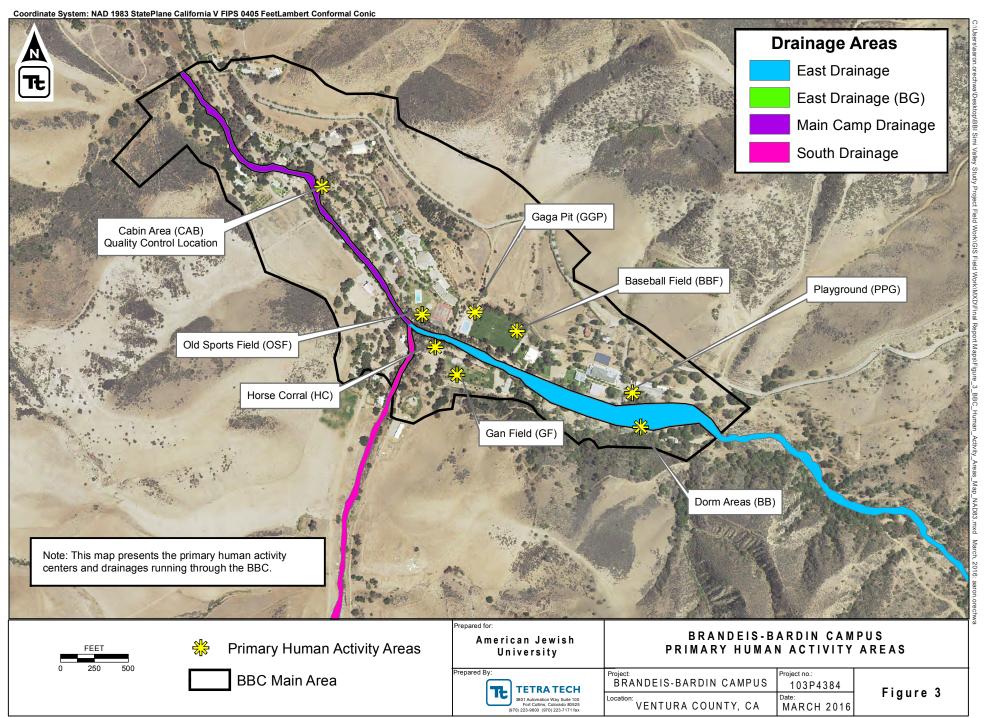
- Miller Brooks Environmental Incorporated for Runkle Canyon
- MHW
- Oak Ridge Associated Universities
- Oak Ridge Institute of Science and Education for radiological release verification sampling
- Ogden Environmental and Energy Services for Bell Canyon
- QST Environmental Incorporate for Runkle Canyon
- Regional Water Quality Control Board (RWQCB)

Rocketdyne began its off-site study at the BBC in 1992. Two multi-media studies were conducted at BBC and at Sage Ranch in 1992 and 1994, as discussed in Section 4.2 and Section 5.1. In addition to Rocketdyne's quality assurance (QA) program, EPA and DHS and BBI analyzed more than 40 split samples that Rocketdyne also analyzed. Soil and sediment monitoring studies were conducted in four main areas off the SSFL site. These areas include the BBI (McLaren-Hart 1993; 1995), the Santa Monica Mountains Conservancy (McLaren-Hart 1993; 1995), Ahmanson Ranch (Kleinfelder 2000), and the Bell Canyon areas (Ogden 1998). The focus of this investigation is specifically with the BBC; however, the reports from the other off-site areas were evaluated to identify information pertinent to the condition of the BBC. During the 1992 and 1994 studies, contamination was discovered in the region of the BBC referred to now as the Northern Buffer Zone (NBZ), a strip of land immediately adjacent to the SSFL and approximately 1.5-2 miles from BBC's main camp areas. EPA reported the results of this study confirmed the presence of radionuclides on the BBC, Boeing subsequently purchased the parcel of land containing these areas with observed contamination from the BBI in 1997. EPA determined that the radionuclides found in the NBZ of the BBC do not pose a threat to human health or the environment (EPA 1995).

The primary human activity centers for the BBC were identified through risk evaluation surveys by AJU field personnel during a site visit in February 2016 (Tetra Tech 2016). The SSFL is on a topographic high within the Simi Valley and is hydrologically upgradient of the BBC. A portion of the natural ephemeral drainage channels from the SSFL flow onto and through the BBC. In 2013, Boeing completed its Interim Source Removal Action to improve water quality in two drainage locations in the northern (leading to the BBC) and the southeastern portions of the SSFL. Additionally, Boeing utilizes both active and passive treatment technologies as part of their water management strategy aimed at improving water quality that exits the SSFL.

Figure 2 provides a map showing the primary off-site areas in relation to the SSFL, Area IV, and the NBZ. Figure 3 provides a detailed map showing the primary human activity centers within the BBC main area and the primary drainages identified by Tetra Tech that flow through the BBC. The hydrologic and geologic conditions of the BBC, SSFL, and surrounding areas are described in the following Section 1.2





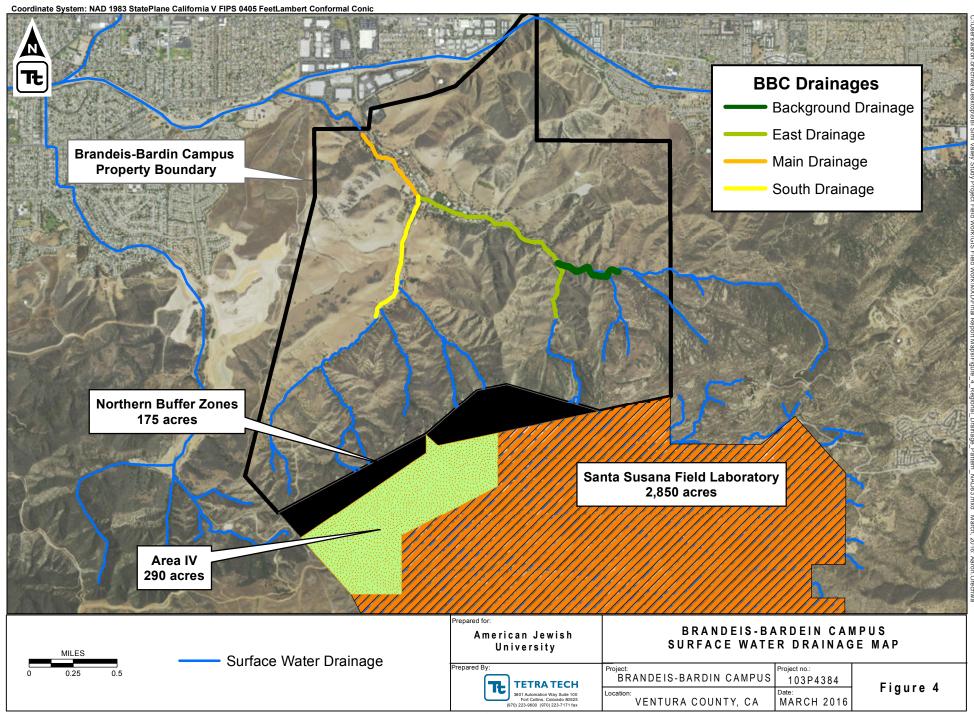
#### 1.2 Hydrologic and Geologic Setting

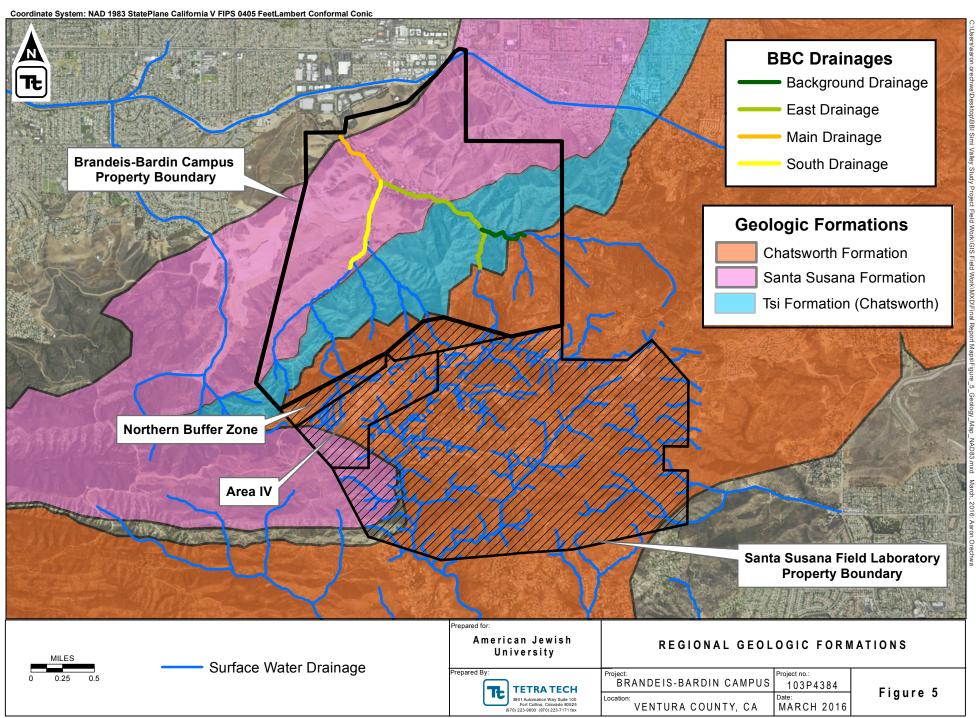
The BBC is located in a semiarid region of California where precipitation averages approximately 18 inches per year. Available regional data shows few perennial surface water features within the regional study area. In less arid environments, perennial stream flow is often sustained by groundwater discharge during the drier seasons (summer) and contributes to the total stream flow during wetter seasons (AquaResource 2007). The BBC is located hydrologically downgradient of a portion of the SSFL to the northwest. A map showing the primary drainages identified by Tetra Tech that flow through the BBC property are shown in Figure 4. Additionally, the regional drainages are shown in blue using information from the National Hydrography Dataset.

Most surface water that collects and drains at the SSFL is intermittent and is conveyed off site via one of four drainages; Northwestern Drainage, the Northern Drainage, the Happy Valley Drainage, and the Bell Creek Drainage. The majority of the surface water (estimated at greater than 60 percent) from the SSFL runs off the southern property boundary through Bell Canyon and into Bell Creek, which subsequently discharges into the Los Angeles River (MWH 2007). Historically, the remaining 40 percent of the runoff from the SSFL drains toward the BBC. As described in Section 1.1, Boeing has implemented stormwater management strategies since 2012 including removal action and both active and passive treatment technologies that improves the water quality of stormwater exiting the SSFL prior to draining to off-site areas, including the BBC. The SSFL is located on a local topographic high 800 to 900 feet above the surrounding valleys, and the groundwater from the SSFL migrates from the site downhill to the Simi Valley and the San Fernando Valley (EPA 2007).

There are two primary geologic formations within the BBC: the Chatsworth formation, and the Santa Susana formation. The Chatsworth formation consists of three unnamed members deposited in the late Cretaceous by turbidity currents in deep ocean at depths ranging from 4,000 feet to 5,000 feet. The Chatsworth formation is a fractured and faulted sandstone with interbeds of siltstones, mudstones, and shales (AquaResource 2007). This formation is the primary water-bearing formation underlying the SSFL (Cherry and others 2007). The Chatsworth formation underlies approximately 80 percent of Area IV and is composed primarily of sandstone interbedded with siltstone and shale (CDM Smith [CDM] 2015). Surface runoff may be stored and transmitted from the shallow groundwater system to the underlying Chatsworth Formation. Depth to water ranges from 2 feet to 35 feet below ground surface. Groundwater elevations are season and location dependent.

The Santa Susana formation underlies the southwestern-most portion of the Area IV study area and the majority of the BBC. The Santa Susana formation is composed of interbedded claystone, siltstone, and thin sandstone layers, underlying approximately 20 percent of Area IV. A map showing the regional geologic formations is provided in Figure 5.

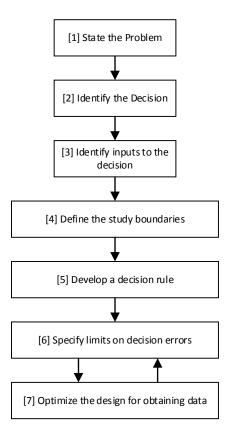




#### 1.3 DATA QUALITY OBJECTIVES

Tetra Tech used the Data Quality Objectives (DQO) process to develop a sampling strategy to satisfy the BBC radiological and soil investigation program objectives. The DQO process involves seven formalized steps discussed in EPA *Guidance for the Data Quality Objectives Process* (EPA 1994). Figure 6 provides a flowchart of the DQO process. The DQO process provides a useful framework for planning and implementation of the monitoring and data collection program. The DQO process is a systematic data collection planning process developed by EPA to ensure the right type, quality, and quantity of data are collected to support decision making (EPA 1994). DQOs are qualitative and quantitative statements to fulfill the following objectives:

- Clarify the study objectives.
- Define the most appropriate data to collect.
- Determine the most appropriate conditions for collecting the data.
- Specify acceptable levels of decision errors to be used as the basis for establishing the quantity and quality of data needed to support the decision.



**Figure 6 DQO Process Flow Chart** 

Application of the DQO process to this investigation involved the following six steps:

- **STEP 1:** State the problem The public is concerned that SSFL operations may have resulted in residual radiation and soil contamination at the BBC property. The property is currently in use by the public, including camping in some open areas.
- **STEP 2:** *Identify the decision* Determine whether levels of residual contamination meet the criteria for human health based on current site use and background levels.
- STEP 3: Identify inputs to the decision Conduct literature review, data gap analysis and further site investigation to both address any identified data gaps and verify current environmental and radiological conditions. Conduct a screening level human health risk evaluation by assessing previously collected data and, if applicable, new data collected based on the data gap analysis.
- STEP 4: Define the study boundaries Study boundaries included the BBC property, with focus on the most sensitive and critical areas within the BBC including high use areas identified through risk and exposure evaluation surveys and drainage areas flowing through the BBC property boundary.
- STEP 5: Develop a decision rule If concentrations of applicable radionuclides and other contaminants associated with the SSFL in soil and sediment meet human health risk evaluation criteria based on current site uses or are within background levels, there is no unacceptable risk to human health.
- **STEP 6:** Specify the limits on decision errors Conduct data quality review of existing data available for the site and perform a risk evaluation on any data collected at the human activity centers and/or drainages that exceed regional background concentrations.

The DQO process is iterative. A seventh step in the process is to evaluate the information from the previous steps and optimize the study design for obtaining the data.

#### 1.4 Purpose and Scope of Work

The objective of this investigation was to evaluate the environmental condition of the BBC property to determine whether contaminants originating from the SSFL pose unacceptable risk to the campers and personnel on the property. This investigation was performed by (1) performing a detailed review of existing environmental, chemical, and radiological studies conducted within and outside the BBC property boundary; (2) identifying any gaps in existing studies, based on past practices or current technologies; (3) developing a strategy for further site testing, both to fill in identified data gaps and to verify current site conditions; (4) executing the further site testing; and (5) assessing the risk posed to campers, residents, and visitors of the BBC on the basis of both existing and newly-collected data. Tetra Tech's conclusions and recommendations about the environmental and radiological conditions at the site with regard to regulatory standards and human health risk are presented in Section 9.0 and Section 10.0.

Tetra Tech conducted a literature review of site assessments, historical sampling data, and available critical studies related to the characterization of the BBC. Data quality was reviewed to verify that the appropriate sampling methodologies, laboratory analysis, sampling locations, and sampling type were utilized. Sampling locations were evaluated to determine whether the appropriate data density and sampling strategies were used and to identify whether potential outfall or exposure areas had been characterized. Additionally, statistical evaluations from past studies were reviewed to determine whether more recent guidance for statistical analysis of environmental monitoring data was available. Conclusions and data interpretations were also evaluated to verify that the data support the conclusions made by the authors of previous studies.

Based on the detailed review of the studies related to the BBC, data gaps are identified in this Technical Memorandum. Recommendations and options to fill data gaps have been provided as needed. The results of the review and data gap analysis are presented in this Technical Memorandum.

In summary, the primary objectives of this Technical Memorandum include the following:

- Perform a critical review of existing environmental, chemical, and radiological studies conducted within and outside the BBC property boundary.
- Provide a summary of contaminants of potential concern (COPC) identified within environmental
  media at the BBC, including soil/sediment, groundwater, surface water, indoor and outdoor air
  quality, and food as identified by an exposure pathway assessment.
- Determine if any additional testing or improved technologies should be utilized to enhance the study of the BBC (data gap analysis).
- Develop a strategy for further site testing.
- Execute the further site testing.
- Assess the risk posed to campers, residents, and visitors of the BBC on the basis of both existing and newly-collected data.

#### 1.5 Tech Memorandum Organization

This memorandum is organized into eleven sections. After this introduction, this memorandum includes the following sections:

- Section 2.0, Human Exposure Pathways, provides an evaluation of the exposure pathways and
  environmental media relevant to the potential for human health risk to campers, visitors, and
  residents at the BBC.
- **Section 3.0, Literature Review,** provides the criteria used in selection of historical documents for review and provides a summary of the documents reviewed.
- **Section 4.0, Previous Background Investigations**, summarizes the methodology and results of previous background studies pertaining the BBC or SSFL.
- **Section 5.0, Previous Site Investigations,** summarizes selected previous site investigations, including off-site data evaluation studies that pertain to the BBC.
- **Section 6.0, Overview of Potential Contaminants from the SSFL**, discusses the COPCs associated with each environmental medium and human health exposure pathway.
- Section 7.0, Data Gap Analysis, provides an overview and the results of the data gap analysis.
- **Section 8.0, 2016 Site Investigation**, presents the results of 2016 radiological and soil investigation and compares these to background levels.
- Section 9.0, Health Risk Evaluation, provides a summary of historical risk assessments for the BBC, an overview of the screening-level risk evaluation of 2016 data collected at the BBC, results of an exposure assessment, and results of a quantitative exposure analysis at the BBC.
- **Section 10.0, Conclusions,** summarizes the overall results of the investigation.
- Section 11.0, References.

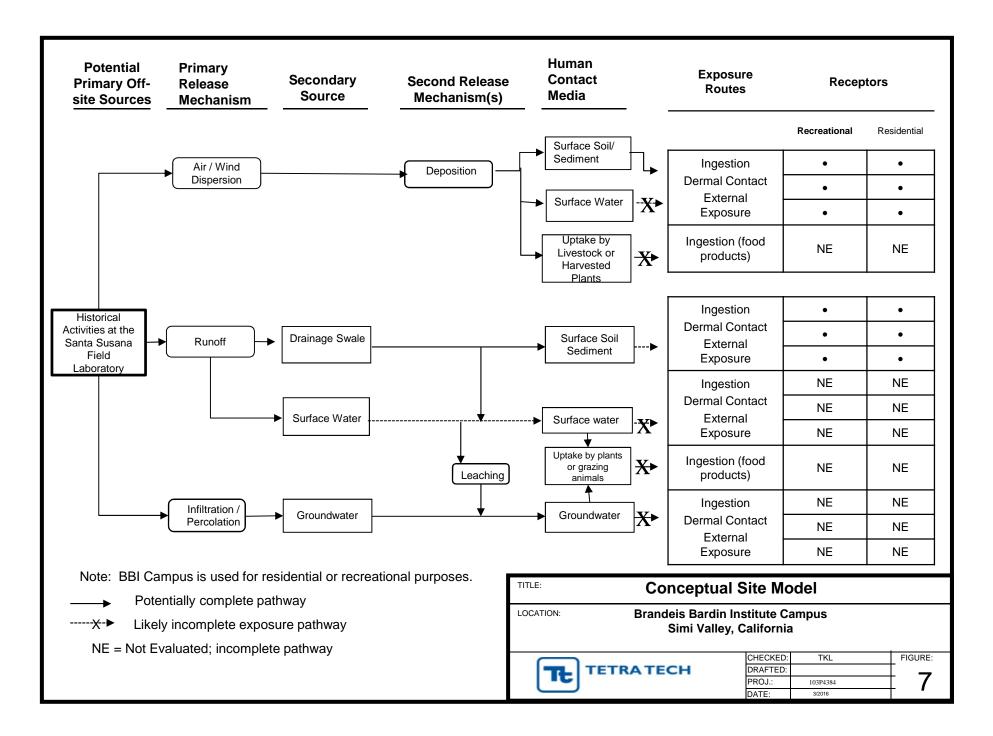
## 2.0 HUMAN EXPOSURE PATHWAYS

As described in Section 1.4, one purpose of this investigation is to assess whether sufficient information related to the BBC is available to ascertain the current level of risk related to the existing environmental and radiological conditions at the site, and to collect more field data if determined necessary by the data gap analysis. This section presents an overview of the environmental media that could potentially transport contaminants from the SSFL the BBC, and the potential human exposure pathways to those media.

This investigation included a literature review focused on the available information related to the BBC. The literature review focused on documents and historical data based on primary exposure pathways that pose the greatest risk to campers and residents at the BBC. A health risk evaluation for the BBC is presented in Section 9.0. Historical risk evaluations conducted at the BBC were reviewed in development of the conceptual site model (CSM) to determine the human contact media and exposure routes to identify likely receptors (Figure 7). A summary of the historical risk evaluations is provided in Section 9.0. The media evaluated to determine the primary exposure pathways included: soil/sediment, groundwater, surface water, air, and food. The following subsections describe the basis for the exposure pathway evaluation.

#### 2.1 SOIL AND SEDIMENT

Comprehensive investigations have been conducted at the BBC to evaluate the soil radionuclide and chemical concentrations. The most comprehensive study was conducted in the 1990s prior to the establishment of the BBC in 2007. Soil contamination above background levels was determined to be present at the northern boundary of the SSFL on land subsequently purchased from the BBI by Boeing in 1997. While the other study areas in the BBC were shown to not be statistically different than background, these study areas did not necessarily focus on the primary human activity centers at the present day "camp site". Further discussion on the historical sampling investigations and the respective sampling study areas on the BBC are presented in Section 4.0 and Section 5.0. Campers, residents, and visitors potentially contact soil and sediment as part of their normal use of BBC; therefore, soil and sediment media are considered potential exposure routes and were evaluated as part of this investigation.



#### 2.2 GROUNDWATER AND SURFACE WATER

Groundwater and surface water at the BBC are not used as potable water source. Water is supplied to the campus from the Calleguas Municipal Water District, which is strictly monitored as a drinking water source. The AJU confirmed that no groundwater or surface water from on site is currently being utilized for any site purpose (Tetra Tech 2016). Because campers and residents at the BBC are not exposed to either groundwater or surface water, these media were not identified as a potential exposure routes and were not evaluated in the quantitative exposure analysis performed by Tetra Tech. However, monitoring wells do exist on the BBC and have been sampled at regular intervals by various organizations. Additionally, groundwater flow modeling has been conducted in the past as outlined in AquaResource (2007) and Cherry et al. (2007). In general, the contaminants in groundwater that have been detected at the SSFL include trichloroethene (TCE), perchlorate, and tritium. All were detected infrequently and at low levels. TCE and tritium are discussed in the following subsections. Surface water leaving the SSFL area is regulated by the Los Angeles Regional Water Quality Control Board (LA RWQCB). The SSFL is regulated under a National Pollutant Discharge Elimination System permit that specifies the levels of contaminants that may be discharged to surface water as storm water runoff or treated groundwater that is released from the SSFL. Effective April 1, 2015, the limits are as 5 micrograms per liter (μg/L) for TCE, 6 μg/L for perchlorate, 20,000 picocuries per liter (pCi/L) for tritium and 8 pCi/L for strontium-90 (Sr-90) (LA RWQCB 2015).

#### 2.3 AIR

In the past, when the SSFL was fully active, burning operations and other processes likely released contaminants to the air. These airborne constituents, whether particles or organic chemicals, could have traveled off site in the direction of prevailing winds at the time. However, SSFL practices have not included direct releases to air since the 1980s. The SSFL and BBC are located within the South Coast Air Quality Management District. Air pollution controls and permits at SSFL are regulated by the Ventura County Air Pollution Control District. In the absence of any known sources of nearby air contaminants, air is not a medium of concern for the BBC at this point in time, and air is accordingly not considered to be a medium for potential exposure for this investigation.

#### 2.4 FOOD

The BBC campus has fruit orchards, as well as cows, chickens, and goats. The fruit orchards produce oranges, lemons, avocados, persimmons, and pears that are fed to the farm animals; the fruit is not harvested for human consumptions. The farm animals are not raised for consumption. The cows may produce milk, but this is not consumed by humans. Approximately 10 to 20 cows per year are sold to an off-site vendor (Tetra Tech 2016). The chickens also produce eggs but these are not consumed by campers or visitors to the BBC. Because residents and campers do not consume food products produced on site, ingestion of food is not considered an exposure pathway for this investigation. However, fruit and milk have been sampled for the presence of SSFL-related contaminants since 1993 by a private consultant hired by Brandeis-Bardin and now the AJU. Overall, more than 10 samples of food products and vegetation have been collected from the BBC. Most did not contain any SSFL-related contaminants. Crops and milk have been analyzed for dioxins, perchlorate, metals, cesium, and tritium. Dioxins were not detected. Perchlorate, metals, cesium, and tritium were found at levels consistent with background and store-purchased food items.

## 3.0 LITERATURE REVIEW

This investigation included a comprehensive literature review of environmental and radiological site investigations or studies conducted at the BBC, including background investigations. This section presents a summary of the literature review and selection of primary documents for a more detailed document review as part of this investigation.

The literature review conducted by Tetra Tech focused on studies related to characterization or assessment of soil contaminant levels at the BBC or surrounding areas. Generally, the primary pathways for human exposure are ingestion, inhalation, dermal contact, and external exposure to soil and sediment (Section 2.0). Therefore, the literature review focused on available information related specifically to soil and sediment investigations conducted at the BBC. The following criteria were evaluated in selecting documents for a more detailed review and summary as part of this investigation from the numerous investigations related to the BBC and SSFL:

- 1. The investigation involved the assessment or collection of soil and sediment contaminant data at the BBC or adjacent areas, including chemical and radionuclide laboratory analysis.
- 2. The investigation followed an approved work plan.
- 3. Data QA and quality control (QC) procedures were stringent and well documented, including recordkeeping and documentation, data validation, and laboratory data QC.

In total, 12 primary documents met the above criteria and were evaluated as part of the literature review and data summary process. Table 3 presents a comprehensive list of the primary documents reviewed as part of this investigation. A detailed analysis was conducted to evaluate the previous background investigations including both local and regional background studies related to soil and sediment concentrations. These studies are summarized in Section 4.0. Tetra Tech reviewed the primary documents and provides a detailed summary of each investigation and any pertinent conclusions from regulatory agencies related to human health risk in Section 5.0.

After reviewing the available information from the primary documents, Tetra Tech developed a list of the primary contaminations of concern (Section 6.0) and conducted a data gap analysis (Section 7.0) to identify whether any more data were needed to accurately characterize any health risks associated with present site uses. An overview of the data gap analysis is presented in Section 7.1 and the results of the data gap analysis are presented in Section 7.2.

**Table 3 Summary of Primary Documents Reviewed** 

Title of Publication	Date	Prepared By	Prepared For	Area Evaluated
Multi-Media Sampling Report for the Brandeis- Bardin Institute and the Santa Monica Mountains Conservancy	1993	McLaren-Hart Environmental Engineering Corporation	Boeing/Rocketdyne	BBC
Additional Soil and Water Sampling The Brandeis- Badin Institute and Santa Monica Mountains Conservancy	1995	McLaren-Hart Environmental Engineering Corporation	Boeing/Rocketdyne	ввс
Bell Canyon Area Soil Sampling Report Ventura County, California, Volume I	1998	Ogden	Boeing/Rocketdyne	Located adjacent to the SSFL to the south
Site Inspection Report Energy Technology Engineering Center/Area IV Simi Hills, California	2003	Weston	EPA	SSFL and BBC
Soil Background Report Santa Susana Field Laboratory Ventura County, California	2005	MWH	Boeing/Rocketdyne	SSFL and adjacent off-site properties
Preliminary Assessment/Site Inspection Report Santa Susana Field Laboratory Simi Valley, California	2007	Weston	EPA	SSFL
Offsite Data Evaluation Report Santa Susana Field Laboratory Ventura County, California	2007	MWH	Boeing/Rocketdyne	SSFL and adjacent off-site properties, including BBC
Final Radiological Background Study Report Santa Susana Field Laboratory Ventura County, California	2011	HydroGeoLogic, Inc. (HGL)	EPA	SSFL
Final Gamma Radiation Scanning Report Area IV Radiological Study Santa Susana Field Laboratory Ventura County, California	2012	HGL	EPA	SSFL
EPA Radiological Characterization Study Results [Public Notice Document] for SSFL	2012	EPA	Public	Summary of Results and Notification of Public Meeting
Technical Memorandum Phase 3 Chemical Data Gap Investigation Sampling Results Subarea 7 and Northern Buffer Zone in Area IV	2014	CDM	DOE	BBC/SSFL
Technical Memorandum Phase 3 Chemical Data Gap Investigation Sampling Results Go-Backs, Trenches and Soil Vapor Locations Santa Susana Field Laboratory Ventura County, California	2015	CDM	DOE	BBC/SSFL
Brandeis-Bardin Institute and American Jewish University Private Consultant (Joel Cehn) Assorted Technical Memorandums and Laboratory Reporting	1991- Present	Joel Cehn	BBI/AJU	BBC

## 4.0 PREVIOUS BACKGROUND INVESTIGATIONS

A number of local and regional soil background investigations have been conducted at the SSFL and offsite areas, including the BBC. This section presents an overview of background studies and summarizes all of the pertinent soil background environmental and radiological background studies associated with the BBC and surrounding areas. The investigations reviewed and summarized here met the criteria for evaluation presented in Section 3.0.

#### 4.1 Overview of Guidance Related to Background Studies

EPA and the Department of Navy describe "background" as substances or locations that are not influenced by existing site-related sources of contamination and are often specified as either representing the naturally occurring background or the anthropogenic background (Naval Facilities Engineering Command 2002; EPA 2002a). The following describe both of these background types (EPA 2002a):

- 1. *Naturally occurring* substances present in the environment in forms that have not been influenced by human activity; and
- 2. Anthropogenic- natural and human-made substances present in the environment as a result of human activities (not specifically related to the site in question).

A number of different background studies have been conducted at the SSFL and off-site areas. For the BBC, there are substantial available background data. Tetra Tech evaluated three main soil radiological background studies including McLaren-Hart (1993; 1995), Ogden (1998), and HGL (2011) to gain a better understanding of the radionuclide background concentrations for cesium-137 (Cs-137) and Sr-90. Additionally, two main soil chemical background studies including MWH (2005) and DTSC (2012) were also evaluated and summarized in the following sections.

# 4.2 Multi-Media Sampling Background Investigation Report (1992 and 1994)

Tetra Tech identified the first soil background studies performed specifically at the BBC as those undertaken in 1992 and 1994 by McLaren-Hart. The results of these sampling effort were presented in the McLaren-Hart (1993; 1995) reports and in EPA's *Site Inspection Report* (Weston 2003). Six background reference areas were selected and sampled as part of the 1992 study. During this study, a total of three soil samples were collected at the six locations and analyzed for a suite of radionuclides including Cs-137, Sr-90, Plutonium-238 (Pu-238), and tritium. During the 1994 investigation additional background locations were identified and sampled at a higher frequency. Tetra Tech has summarized the laboratory analytical results for Cs-137 and Sr-90 for the background samples from the 1992 and 1994 field investigations. These results are provided in Table 4.

Table 4 Summary of 1992 and 1994 McLaren-Hart Soil Background Samples

Background Area	Sample ID	Year Collected	Cs-137 (pCi/g) <sup>1</sup>	Lab Qualifier <sup>2</sup>	S-90 (pCi/g)	Lab Qualifier
	BG-01-005	1992	0.092		0.03	
	BG-01-008	1992	0.04	U	0.01	
	BG-01-100	1992	0.18		0.05	
RP [BG-01]	BG-01-016	1994	0.04	U	0.09	U
KP [BG-01]	BG-01-034	1994	0.1		0.1	U
	BG-01-082	1994	0.04	U	0.08	U
	BG-01-087	1994	0.158		0.07	J
	BG-01-090	1994	0.175		0.1	U
	BG-02-007	1992	0.17		0.02	
	BG-02-074	1992	0.04	U	0.01	U
	BG-02-076	1992	0.099		0.03	
CCD [DC 02]	BG-02-007	1994	0.06	U	0.13	
SSP [BG-02]	BG-02-017	1994	0.213		0.12	
	BG-02-074	1994	0.05	U	0.08	U
	BG-02-076	1994	0.04	U	0.09	U
	BG-02-085	1994	0.04	U	0.13	
	BG-03-001	1992	0.07	U	0.01	U
BC [BG-03]	BG-03-019	1992	0.07	U	0.02	
	BG-03-059	1992	0.05	U	0.01	
	BG-04-025	1992	0.15		0.02	
WSS [BG-04]	BG-04-029	1992	0.14		0.02	
	BG-04-090	1992	0.19		0.05	
	BG-05-016	1992	0.74		0.05	
	BG-05-026	1992	0.067		0.08	
	BG-05-074	1992	0.1		0.05	
	BG-05-017	1994	0.147		0.088	
HC [BG-05]	BG-05-027	1994	0.099		0.1	
	BG-05-050	1994	0.101		0.069	
	BG-05-056	1994	0.148		0.097	
	BG-05-074	1994	0.153		0.084	
	BG-06-033	1992	0.097		0.03	
SMMNRA [BG-06]	BG-06-089	1992	0.06	U	0.03	
•	BG-06-096	1992	0.14		0.02	
	BG-09-003	1994	0.05	U	0.13	
	BG-09-005	1994	0.188		0.1	U
WRP [BG-09]	BG-09-013	1994	0.198		0.12	
•	BG-09-057	1994	0.06	U	0.11	
	BG-09-096	1994	0.079		0.12	

Table 4 Summary of 1992 and 1994 McLaren-Hart Soil Background Samples (Continued)

Background Area	Sample ID	Year Collected	Cs-137 (pCi/g) <sup>1</sup>	Lab Qualifier <sup>2</sup>	S-90 (pCi/g)	Lab Qualifier
	BG-10-001	1994	0.245		0.098	
	BG-10-002	1994	0.276		0.09	U
WRPR [BG-10]	BG-10-003	1994	0.257		0.09	U
	BG-10-004	1994	0.215		0.04	U
	BG-10-005	1994	0.456		0.09	U
	BG-11-010	1994	0.158		0.089	
	BG-11-011	1994	0.109		0.1	U
TCP [BG-11]	BG-11-031	1994	0.059		0.09	U
	BG-11-036	1994	0.067		0.1	U
	BG-11-075	1994	0.113		0.09	U
	BG-12-001	1994	0.03	U	0.08	U
	BG-12-002	1994	0.031		0.09	U
TCPR [BG-12]	BG-12-003	1994	0.042		0.09	U
	BG-12-004	1994	0.097		0.09	U
	BG-12-005	1994	0.03	U	0.05	U
	BG-14-001	1994	0.04	U	0.082	
	BG-14-002	1994	0.085		0.09	U
RPR [BG-14]	BG-14-003	1994	0.080		0.08	U
	BG-14-004	1994	0.03	U	0.07	U
1nCi/a - nice curies non a	BG-14-005	1994	0.04	U	0.05	U

¹pCi/g = picocuries per gram

The summary statistics for the background samples collected in 1992 and 1994 are presented in McLaren-Hart (1993; 1995) and Weston (2003). In the 1992 and 1994 McLaren-Hart background investigation, the analytes that were not detected above the minimum detectable concentration (MDC), a value of one-half the detection limit was used to calculate the mean and standard deviation for the background samples (Weston 2003). These calculations resulted in a mean and standard deviation of the Cs-137 background concentration of 0.108 pCi/g and 0.096 pCi/g, respectively. Two standard deviations above the mean Cs-137 background concentration was used for comparison to site levels and resulted in 0.3 pCi/g. Similarly, these calculations resulted in a mean and standard deviation of the Sr-90 background concentration of 0.065 pCi/g and 0.034 pCi/g, respectively. Two standard deviations above the mean Sr-90 background concentration was used for comparison to site levels and resulted in 0.13 pCi/g.

Substitution is not recommended for datasets with a high percentage of non-detects – it is not an unequivocal method of analysis (Helsel 2005). Furthermore, the substitution method is not recommended by more recent EPA guidance documents (EPA 2002a), which recommend additional statistical methods for inference of summary statistics other than substitution. The standard method for estimating summary statistics of censored data is the nonparametric Kaplan-Meier (K-M) method which is an intrinsic function with ProUCL 5.0 (an EPA designed statistical software package). Therefore, Tetra Tech used ProUCL 5.0 to evaluate the 1992 and 1994 soil background datasets for Cs-137 and Sr-90, the primary radionuclide COPCs identified for this site. The mean, standard deviation, and the mean plus two times the standard deviation were calculated using the K-M statistical method as shown in Table 5. Using the same rationale

<sup>&</sup>lt;sup>2</sup>Lab qualifier = "U" indicates the reported value is less than the minimum detectable concentration (MDC)

as the McLaren-Hart (1993; 1995) reports, the mean plus two times the standard deviation for Cs-137 and Sr-90 are 0.349 pCi/g and 0.127 pCi/g, respectively, both more conservative than previously estimated in McLaren-Hart (1993; 1995).

Table 5 Descriptive Statistical Summary of 1993 McLaren-Hart Soil Background Data for Radionuclides

McLaren-Hart (1993) Soil Background				
Descriptive Statistic	Cs-137	S-90		
Minimum (pCi/g)	< 0.04	<0.01		
Maximum (pCi/g)	0.19	0.08		
# of Non-Detects	6	2		
Number of Samples	18	18		
% of Censored Data	33%	11%		
McLaren-Hart (1995) S	oil Backgrou	ınd		
Descriptive Statistic	Cs-137	S-90		
Minimum (pCi/g)	<0.03	<0.04		
Maximum (pCi/g)	0.456	0.13		
# of Non-Detects	13	25		
Number of Samples	40	40		
% of Censored Data	33%	63%		
Summary Statistics fo	r All Sample	es		
Mean (pCi/g)²	0.117	0.0507		
Standard Deviation (pCi/g) <sup>3</sup>	0.116	0.0381		
Mean + 2*SD (pCi/g)	0.349	0.127		

<sup>&</sup>lt;sup>1</sup>pCi/g = picocuries per gram

## 4.3 BELL CANYON SOIL BACKGROUND STUDY (1998)

In 1998, the Bell Canyon off-site area was evaluated to provide information about naturally occurring, background soil conditions. Three background locations were selected in undeveloped portions of Bell Canyon and three were located in the undeveloped, open-space southern portion of the SSFL (Ogden 1998). The results of this background study are summarized in Ogden (1998) and in Weston (2003). Note: the Cs-137 value provided in Table 3-4 in Ogden (1998) incorrectly states the measured concentration of BCBS09S01/RH046 as 0.18 pCi/g and not < 0.18 PCi/g. The background Cs-137 concentrations ranged between <0.033 pCi/g and 0.15 pCi/g. No summary statistics were provided in either of the reports. Tetra Tech calculated the mean and 95 percent upper confidence limit (95UCL) using the K-M statistical method using ProUCL 5.0 statistical software. The Bell Canyon background soil sampling results are provided in Table 6.

<sup>&</sup>lt;sup>2</sup>Mean was calculated using K-M Statistics in ProUCL 5.0

<sup>&</sup>lt;sup>3</sup>Standard Deviation was calculated using K-M Statistics in ProUCL 5.0

Table 6 Bell Canyon Soil Background Results for Cesium-137 (Ogden 1998)

Sample ID	Cs-137 (pCi/g) <sup>1</sup>	Lab Qualifier <sup>2</sup>	
BCSS09 S01 (RH026)	< 0.033	U	
BCSS11 S01 (RH033)	0.08		
BCSS12 S01 (RH036)	0.15		
BCSS13 S01 (RH041)	0.10		
BCBS09 S01 (RH046)	< 0.18	U	
BCSS14 S01 (RH047)	0.036		
Mean (pCi/g) <sup>3</sup>	0	.0798	
Standard Deviation (pCi/g)4	0.0435		
Mean + 2*SD (pCi/g)	0.167		

<sup>&</sup>lt;sup>1</sup>pCi/g = picocuries per gram

#### 4.4 SSFL RADIOLOGICAL BACKGROUND STUDY (2012)

In September 2008, EPA released a public statement indicating their intention to conduct a study (EPA 2008) to determine the level of radioactivity in soils surrounding the SSFL. The study was intended to be the first phase of work of a full radiological characterization of the SSFL site. In November 2012, EPA announced in another fact sheet that the field work for the background study was completed (EPA 2012). This study was one of the most comprehensive and expensive technical investigations ever undertaken for low-level radioactive contamination (EPA 2012). The objective of the SSFL Radiological Background Study was to determine background radionuclide concentrations within the surface and subsurface soils overlying the two geologic formation present at the SSFL: the Chatsworth and Santa Susana formations (HGL 2011). The study was conducted by HGL on behalf of EPA. EPA's role was limited to providing technical assistance to DTSC and DOE by conducting the radiological investigation at Area IV and the NBZ, an area bounding the former Rocketdyne test facility. EPA utilized the latest technology in analytical tools and techniques to develop Background Threshold Values (BTV), which are used to identify areas that exceed background concentrations.

On November 27, 2012, EPA published the *Final Technical Memorandum Look-up Table Recommendations Santa Susana Field Laboratory Area IV Radiological Study* (HGL 2012b). This technical memorandum provided EPA's recommendations to DTSC regarding the use of BTVs as the basis for development of Look-up Tables (LUT) for radiological contamination. The BTVs provided in the technical memorandum are the basis for developing future LUT values used to identify radiological contamination. The BTVs for the COPCs identified in this Technical Memorandum are 0.193 pCi/g for Cs-137 and 0.075 pCi/g for Sr-90. EPA recommended to DTSC that BTVs be used in development of LUT values for all future phases of investigation, remediation, and closure of the Area IV study area (HGL 2012b). For comparison purposes, Tetra Tech utilized the above mentioned BTVs when comparing the 2016 site data collected, as discussed in Section 5.6 and Section 8.0.

<sup>&</sup>lt;sup>2</sup>Lab qualifier = "U" indicates the reported value is less than the MDC

<sup>&</sup>lt;sup>3</sup>Mean was calculated using K-M Statistics in ProUCL 5.0

<sup>&</sup>lt;sup>4</sup>95 UCL = 95% Upper Confidence Limit using K-M Statistics in ProUCL 5.0

#### 4.5 DTSC COMBINED-DATA CHEMICAL BACKGROUND STUDY

In December 2012, DTSC issued a combined-data Background Threshold Values and Methodology Narrative Chemical Soil Background Study (DTSC 2012). The study recommended that the use of the Upper Simultaneous Limit statistic, at 95% confidence (USL95) be used for development of the LUT values to be used as field action levels in the SSFL remedial cleanup efforts. This document summarized the USL95s for soil concentrations of metals. This analysis represents the most recent and comprehensive analysis of chemical background concentrations at the SSFL, to date. Tetra Tech utilized the information from this study for comparative analysis of data collected during the 2016 soil investigation. Table 7 provides DTSC-established BTVs for chemical constituents in soils.

**Table 7 DTSC Background Threshold Value for Chemical Constituents** 

Metals	BTV (mg/kg) <sup>1</sup>
Aluminum	50,300
Antimony	0.86
Arsenic	39.7
Barium	318.75
Beryllium	1.87
Boron	29.35
Cadmium	0.58
Calcium	32,000
Chromium	80.85
Cobalt	38
Copper	102
Iron	65,402
Lead	42.15
Magnesium	16387
Manganese	959
Mercury <sup>2</sup>	0.13
Molybdenum	2.74
Nickel	113
Potassium	12,358
Selenium	0.896
Silver	0.138
Sodium	1,530
Thallium	0.991
Vanadium	150.6
Zinc <sup>2</sup>	215

<sup>1</sup>BTV= background threshold value 95% Upper Simultaneous Limit (USL95) determined by DTSC in 2012.

<sup>2</sup>Lookup Table Value, DTSC (2013)

mg/kg = Milligrams per kilogram

#### 4.6 SUMMARY OF FINDINGS

The objective of the background evaluation was to identify and summarize the soil background studies that have been conducted within the region of the BBC. This evaluation involved assessment of previous background sampling studies conducted at the SSFL, BBC, or other adjacent off-site areas for both radionuclides and chemical soil background concentrations. In some cases, Tetra Tech utilized more modern and mathematically relevant statistical approaches than the past approaches. Once the previous studies were identified and summarized, the secondary objective was to evaluate a number of factors involved in the conclusions of these studies, namely identification of reference background areas, statistical methodology used in development of background levels, and data quality assessment and validation methodology used to qualify the data. Overall, the data quality review process for the historical soil background investigations showed that the data quality meets the requirements for background identification and characterization and should be considered of sufficient quality for comparison with the other investigations.

Tetra Tech concluded that the results of the 2011 EPA Background Evaluation for the SSFL presented in HGL (2011) was the most comprehensive background evaluation performed to date and should be used for the assessment of background radionuclide concentrations for comparative analysis purposes at the BBC. However, for comparative purposes and for conservatism the McLaren-Hart (1993; 1995) and Ogden (1998) background radionuclide concentrations were also utilized. Table 8 provides the BTVs identified in the historical soil radionuclide background studies. The BTV for the McLaren-Hart (1993; 1995) and Ogden (1998) studies is the 95UCL calculated using a statistical approach for censored data sets as recommended in EPA (2002a; 2009b) and Helsel (2005; 2012).

Table 8 Summary of Soil Radionuclide Background Threshold Values for Cs-137 and Sr-90

Background Investigation	Background Threshold Value (BTV)		
	Cs-137 (pCi/g)	Sr-90 (pCi/g)	
McLaren-Hart (1993; 1995) <sup>1</sup>	0.349	0.127	
Ogden (1998) <sup>2</sup>	0.167	-	
HGL (2011) <sup>3</sup>	0.193	0.075	

 $<sup>^{1,2}</sup>$  Based on the Mean + 2 times the Standard Deviation calculated using K-M Statistics in ProUCL 5.0

<sup>&</sup>lt;sup>3</sup>Value obtained from the HGL (2012b) Look-up Table Technical Memorandum

## 5.0 PREVIOUS SITE INVESTIGATIONS

This section presents the summary review and results of selected environmental and radiological studies presented in Section 3.0 pertaining to the BBC. The results of the previous investigations are compared with background values where applicable and any conclusions by regulatory agencies based on the information presented in these studies are summarized as well.

### 5.1 Multimedia Sampling Investigations (1992, 1994)

The most comprehensive environmental and radiological sampling conducted at the BBC to date were the 1992 and 1994 field investigations summarized in McLaren-Hart (1993) and McLaren-Hart (1995), respectively. These assessments were intended by EPA to determine whether properties adjacent to and north of the SSFL, including the BBC the Sage Ranch Park properties, had been exposed to releases from SSFL (Figure 2). These studies were performed according to DTSC-approved work plans. In September 2003, Weston published the *Site Inspection Report Energy Technology Engineering Center/Area IV Simi Hills California* on behalf of EPA (Weston 2003). The Weston (2003) report summarized the results of the 1992 and 1994 investigative efforts in detail.

Soil and water sampling were conducted on the BBC and at Sage Ranch in 1992 and 1994. Background evaluations were also conducted as discussed in Section 4.2. During the 1992 study, 118 soil/sediment and a number of surface water samples were collected from nine human activity and drainage areas at the BBC and Sage Ranch. During the 1994 study, 124 soil/sediment samples were collected from nine human activity and drainage areas, and these were analyzed for tritium with additional analytes as defined by the sampling areas (McLaren-Hart 1995). Within the BBC there were 20 primary study areas evaluated, referred to as BB-01 through BB-20. A number of soil or sediment samples were collected using a random systematic grid within each of the study areas as presented in McLaren-Hart (1993; 1995) and in Weston (2003). The samples were submitted for radionuclide analysis — primarily for Cs-137, Sr-90, Pu-238, and tritium. The primary COPCs evaluated for this investigation include Cs-137 and Sr-90, and the maximum of these COPC results for each study area and the data collected are provided in Table 9. Figure 8 provides the location of most of the 1992 and 1994 study areas (with the exception of BB-11) in relation to the primary human activity areas identified in 2016. It is evident that only five study areas from 1992 and 1994 investigations were located within the BBC main area as identified in Figure 8. This was noted in Tetra Tech's data gap analysis (Section 7.0) and led to the recommendation for further sampling.

While there were individual samples above BTVs, the 1992 and 1994 studies concluded that none of the study areas had radionuclides present at concentrations statistically higher than background levels. Concentrations of Cs-137 and Sr-90 were highest in BB-16 and BB-17, both located in the NBZ which was subsequently purchased by Boeing and is no longer part of the BBC. The terrain in this region is difficult to access and likely did not provide an exposure route for users of the BBC property, even prior to its sale to Boeing in 1997.

In July 1995, EPA announced the results of the SSFL's Offsite Sampling Program in an EPA Update (EPA 1995). This EPA Update stated that based on EPA calculations, the theoretical cancer probability or risk to campers or camp counselors was less than EPA's threshold level for action of 1 x 10<sup>-6</sup> lifetime cancer risk (one additional case of cancer per 1 million people).

Table 9 Summary of Maximum Radionuclide Concentrations from 1992/1994 Investigations

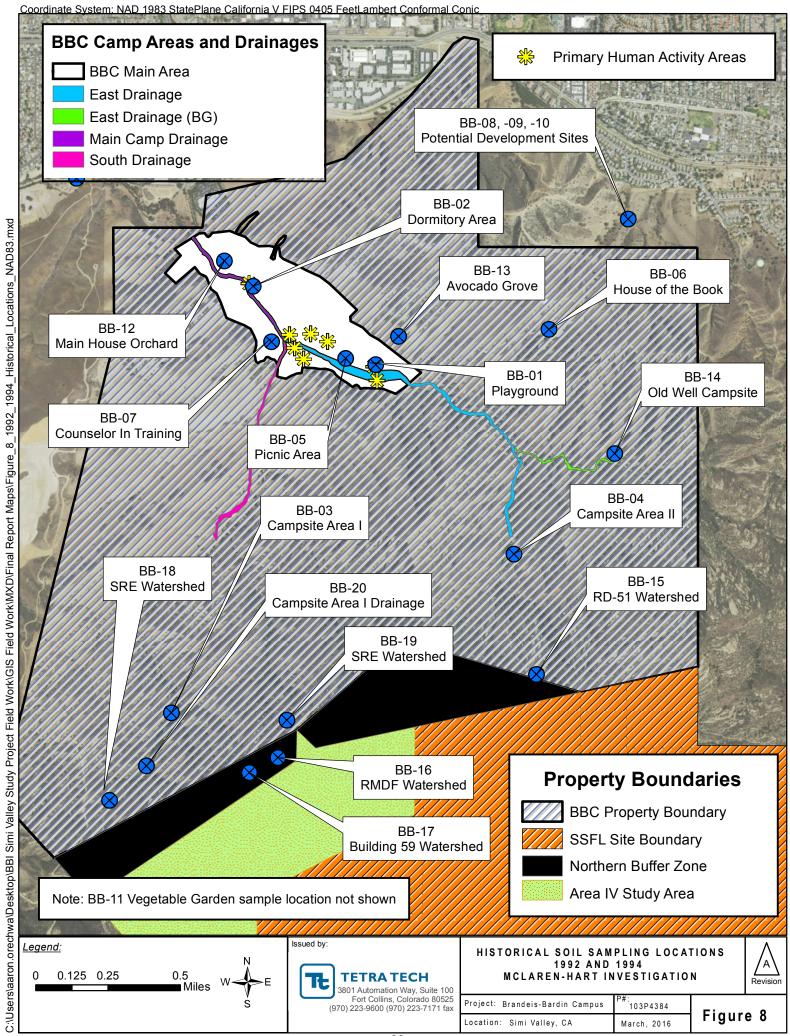
Study Area ID	Study Area Name	Maximum Cs-137 (pCi/g) <sup>1</sup>	Year Collected	Maximum Sr-90 (pCi/g)	Year Collected
BB-01	Playground	0.10	1992	0.04	1992
BB-02	Dormitory Area	0.10	1992	0.02	1992
BB-03	Campsite I	0.38	1992	0.09	1992
BB-04	Campsite II	0.15	1992	0.03	1992
BB-05	Picnic Area	0.22	1992	0.06	1992
BB-06	House of Book	< 0.05 U	1992	0.02	1992
BB-07	Counselor In Training Area	0.13	1992	0.02	1992
BB-08	Potential Development Site I	0.17	1992	0.02	1992
BB-09	Potential Development Site II	0.11	1992	0.02	1992
BB-10	Potential Development Site III	0.16	1992	0.06	1992
BB-11	Vegetable Garden	0.20	1992	0.02	1992
BB-12	Main House Orchard	0.15	1992	0.04	1992
BB-13	Avocado Grove	0.10	1992	0.01	1992
BB-14	Old Well Campsite	0.27	1992	0.06	1992
BB-15	RD-51 Watershed	0.052	1992	0.01	1992
BB-16	RMHF Watershed	0.46	1994	0.24	1994
BB-17	Building 59 Watershed	0.385	1994	0.03	1992
BB-18	Sodium Burn Pit Watershed	0.085	1992	0.02	1992
BB-19	SRE Watershed	0.30	1992	0.12	1994
BB-20	Campsite I Drainage	0.11	1994	0.18	1994

<sup>&</sup>lt;sup>1</sup>pCi/g = picocuries per gram

Note: BB-11 sampling location not shown on Figure 8

Tetra Tech reviewed the environmental monitoring program designed and implemented by McLaren-Hart in 1992 and 1994. The program met data quality objectives: sufficient QA/QC procedures, data validation, and sampling documentation and recordkeeping protocol were followed. The results of the data quality review indicated that the data collected were sufficient and no data gaps existed with regards to environmental sampling with the exception of the gamma radiation survey quality procedures as described in Section 7.0. Additionally, statistical techniques used in McLaren-Hart (1993; 1995) are outdated and a more robust analysis was conducted on the 1992 and 1994 background soil samples as presented in Section 4.2; Tetra Tech's approach led to higher conservatism for the background analysis. Overall, the environmental and radiological data collected in both the 1992 and 1994 McLaren-Hart field investigations should be considered valid and may be used for the purposes of risk evaluation as was done by multiple regulatory review agencies including EPA, DTSC, and Agency for Toxic Substances and Disease Registry (ATSDR).

<sup>&</sup>lt;sup>2</sup>Lab qualifier = "U" indicates the reported value is less than the minimum detectable concentration (MDC)



# 5.2 OFF-SITE DATA EVALUATION REPORT (2007)

Pursuant to Section 3.4.9 of the Consent Order for Corrective Action signed by DTSC, Boeing, NASA, and DOE in August 2007 (EPA 2007), MWH conducted an investigative study to present and evaluate off-site chemical and radiological sampling data from various environmental media compiled from 18 different field sampling and analysis programs within a 15 mile radius of SSFL over the past nearly 60 years. MWH submitted an off-site evaluation report (MWH 2007) on behalf of DOE and Boeing. The objectives of this report were to summarize all off-site media sampling and testing data for chemicals and radionuclides conducted by Boeing, NASA, or DOE around the SSFL and evaluate the data for completeness to make conclusions and recommendations for additional sampling if needed (MWH 2007). This evaluation included data review of off-site properties and areas including the BBC. MWH concluded the off-site sampling results are sufficient with no data gaps identified except within the ongoing investigation or cleanup. The off-site sample results, including the data evaluated at the BBC, for dioxins, polychlorinated biphenyls (PCB), perchlorate, total petroleum hydrocarbons (TPH), and radionuclides were found to be not significantly different than background.

Groundwater contamination originating from the SSFL has migrated off site as stated in Weston (2003). The groundwater beneath the SSFL site is contaminated with TCE, with current data indicating concentrations as high as 110,000 µg/L. The release is likely attributable to the SSFL site because TCE has been used extensively throughout the SSFL's operational history (Weston 2003). The 2007 off-site data evaluation conducted by MWH concluded that available data and ongoing monitoring indicate that contaminants in groundwater have only migrated off site in the northeast portion of the SSFL area which is an area of extensive, ongoing investigations (MWH 2007). The other off-site sampling results indicate that the groundwater flow system has not transported contaminants from beneath the SSFL to off-site locations, including the BBC (MWH 2007). The AJU confirmed that no groundwater is currently being utilized at the site (Tetra Tech 2016). The main water source for the BBC is the Calleguas Municipal Water District- which is strictly monitored on many different regulatory levels. Therefore, it can be concluded that groundwater contamination is not a human health risk for campers, residents, or visitors of the BBC. Groundwater was not evaluated in the quantitative exposure analysis performed by Tetra Tech.

# 5.3 Area IV Radiological Characterization Study (2012)

HGL was tasked by EPA to conduct an extensive radiological characterization study at the SSFL Area IV and the NBZ. The HGL study was performed to meet the requirements of the State of California's Senate Bill 990 and subsequently the Administrative Order on Consent for Remedial Action (DTSC 2010). A background study was performed as part of the HGL study. EPA's radiological characterization study involved collecting a total of 3,375 soil and sediment samples, and 215 groundwater and surface water samples within Area IV and the NBZ. Each sample was analyzed for one or more of 54 radioactive contaminants. During this evaluation no information was gathered on the BBC specifically; however, the results of this study showed very limited radiological contamination remained within the NBZ (HGL 2012a). Only isolated radionuclide detections were found in the NBZ and there was no pattern or grouping of exceedances above field action levels (HGL 2012a). Because the NBZ is situated between the SSFL and the BBC, the results of this study tend to suggest that contaminants originating from the SSFL are unlikely to have significantly impacted the BBC.

# 5.4 CDM Phase 3 Northern Buffer Zone Sampling (2014)

The "Technical Memorandum Phase 3 Chemical Data Gap Investigation Sampling Results Subarea 7 and Northern Buffer Zone in Area IV" was prepared by CDM for the DOE and published in June 2014. Figure 2-2 of CDM (2014) provides the NBZ Phase 3 soil sampling locations, and indicates that a number of samples (~22 samples) were collected on the BBC to the north of the Northern Buffer Zone boundary which is located on the BBC. The Subarea 7 and NBZ Phase 3 soil samples, including the samples collected on the BBC drainages and northern property, were subject to analysis using at least one of the following methods as part of the 2014 study:

- Metals using EPA Methods 6010C/6020A, 7471B (mercury), and 7199 (chromium VI)
- Soil pH using EPA Method 9045M
- Polycyclic Aromatic Hydrocarbons (PAH) using Method 8270D selective ion monitoring (SIM)
- N-Nitrosodimethylamine using EPA Method 8270D SIM
- Pesticides using EPA Method 8081B
- Herbicides using EPA Method 8151A
- PCBs/PCTs using EPA Method 8082A
- Dioxins/furans using EPA Method 1613B
- Formaldehyde using EPA Method 8315A
- TPH-EFH using EPA Method 8015M
- TPH-GRO using EPA Method 8015M

Samples were collected and submitted for laboratory analysis to Eurofin Lancaster Laboratory. The analytical results of the 2013 study as well as QA/QC data results from that study are summarized in Table 3-4 through Table 3-6 of CDM (2014). The 2014 CDM technical memorandum (CDM 2014) also provides a description of the sampling activities and a discussion of the analytical data review findings for Phase 3 sampling in Subarea 7 and NBZ. The technical memorandum does not provide an interpretation of the results.

# 5.5 CDM Go Back Soil Sampling (2014)

Tetra Tech reviewed the "Technical Memorandum Phase 3 Chemical Data Gap Investigation Sampling Results Go-Backs, Trenches and Soil Vapor Locations Santa Susana Field Laboratory Ventura County, California" prepared by CDM for the DOE and published in June 2015. Figure 2-1 of CDM (2015) provides the go back sampling locations. As shown on Figure 2-1, a number of samples were collected to the north of the NBZ boundary which is located within the BBC property.

A total of 10 sample locations are shown to be completely located within the BBC property boundary. An additional four samples are at or near the boundary between the NBZ and the northern portion of the BBI campus. The technical memorandum does not provide an interpretation of the results.

# 5.6 INDEPENDENT TESTING (2004 - PRESENT)

In addition to the studies that met the criteria described in Section 3.0, the BBI (Pre-2007) and the AJU hired independent consultant Joel Cehn to conduct environmental monitoring of the property. The environmental media sampled included soil, groundwater, surface water, vegetation, and milk. The consultant collected numerous samples over the past two decades as summarized in the Table 10. The testing was done independent of agency approved work plans and was primarily intended to verify that contaminants had not migrated from SSFL onto the BBC property. The laboratory results of these sampling events were provided in the form of technical memorandums from the consultant to the AJU (or Brandeis-Bardin pre-2007) (Cehn 2013). In many cases, the sampling was conducted in conjunction with outside consultants working with Boeing or NASA under guidance from government regulatory agencies.

Table 10 Frequency of Independent Environmental Monitoring Conducted at BBC from 2004 to Present

Date	Soil	Groundwater or Surface Water	Vegetation	Milk
3/3/2004	16	5	1	
3/1/2004	4			
4/1/2004	2		-	
7/8/2004		14	5	1
6/26/1905				
4/25/2006	1			
5/15/2006	16		3	2
1/8/2010	5	-		
8/22/2011		7	6	
1/30/2012		8		
12/30/2013		10		
7/11/2014				
9/30/2014	-	3	10	
12/21/2015	7	6		

The soil samples were submitted for non-radionuclide analytes including metals, dioxins, and PCBs. Tetra Tech evaluated the information from these sampling events and concluded that the mean soil concentrations of the metals concentrations from the samples were all below the BTVs established by DTSC in 2012, as discussed in Section 4.5.

# 6.0 OVERVIEW OF POTENTIAL CONTAMINANTS FROM THE SSFL

Tetra Tech's human exposure pathway assessment determined the primary pathways for human exposure are ingestion, inhalation, dermal contact, and external exposure to soil and sediment (Section 2.1). The primary COPCs identified from previous studies for soil and sediment include Cs-137, Sr-90, metals, and perchlorate. Pu-239, iodine-129, and cobalt-60 were not evaluated because these analytes were not detected above detection limits in any of the samples collected from the BBC (Weston 2003) in the 1992 McLaren-Hart study (McLaren-Hart 1993). Additionally, naturally occurring radionuclides such as uranium, thorium, and radium were not evaluated for this investigation because these are not associated with the historical operations at the SSFL. The following subsections present overview summaries of the primary COPCs for soil and sediment evaluated as part of this investigation.

#### 6.1 CESIUM-137

Cesium is a naturally occurring element found in soil, dust, and rock in its stable form of cesium-133. Radioactive forms of cesium, such as Cs-137, are associated with nuclear fuel sources and are created from the fission of uranium in fuel rods during normal operations or from explosion of nuclear weapons. Radioactive cesium can be released to the environment through normal operations of a nuclear power facility, explosion of nuclear weapons, or accidents involving nuclear fuel (ATSDR 2004). Cs-137 is one of the man-made radionuclides which has been identified as a COPC at the SSFL due to the operational history at the facility. Cs-137 decays to stable barium-137 with a half-life of 30 years. Cs-137 is a beta/gamma emitter. Cesium tends to bind to soil particles and typically remains in the surface soil. It is not, therefore, readily available for uptake by vegetation through roots. However, natural cesium is present in plants and animals at concentrations of 1 nanogram per gram (ng/g) to 300 ng/g, and Cs-137 has been detected worldwide in surface water and food products (ATSDR 2004).

# 6.2 STRONTIUM-90

Radioactive Sr-90 is produced when uranium and plutonium undergo fission. Large amounts of radioactive Sr-90 were produced during atmospheric nuclear weapons tests conducted in the 1950s and 1960s. As a result of atmospheric testing and radioactive fallout, strontium was dispersed globally. Sr-90 has been identified as a COPC at the SSFL due to the operation history at the facility. Sr-90 decays to yttrium-90 (Y-90) with a half-life of 29 years. Y-90 is also unstable and decays to stable zirconium-90 with a half-life of 64 hours. Sr-90 and Y-90 are expected to be in equilibrium, a steady-state condition of equal activities. Sr-90 and Y-90 are beta emitters so are not easily detected by gamma scanning. However, the beta emission from Y-90 can produce x-rays that may be detected by gamma measurements.

# 6.3 METALS

Previous SSFL operations resulted in soil and groundwater contamination at the SSFL. Metals in the soils at the SSFL have been identified as primary COPCs associated with the operational history of at the facility. Metals naturally exist in all soils at concentrations representative of the local geology. Establishing background concentrations for the SSFL and surrounding areas was the focus of several investigations, with the most recent being published in 2012 that established background threshold values for non-radionuclides (DTSC 2012).

# 6.4 PERCHLORATE

Perchlorates are colorless salts that have no odor and dissolve easily in water. Perchlorates are used in explosives, fireworks, and rocket fuel. Perchlorates can form naturally in the atmosphere and are present in rainfall. Additionally, high levels can occur naturally in some locations (such as South Texas, New Mexico, and northern Chile) (ATSDR 2008). Ammonium perchlorate is the type of perchlorate found in rocket fuel. Perchlorate is a known SSFL-related contaminant and has been detected in groundwater at the SSFL.

# 7.0 DATA GAP ANALYSIS

A data gap analysis was performed after reviewing the historical information and previous investigation conducted at the BBC as described in Section 4.0 and Section 5.0. This section provides a brief overview of the data gap analysis and the results of the data gap analysis.

# 7.1 OVERVIEW OF DATA GAP ANALYSIS

On behalf of the DOE and Boeing, a comprehensive data evaluation was conducted by MWH in 2007 to determine whether more sampling was required to reliably evaluate health risks associated with the off-site locations. More detailed discussion of this off-site data evaluation is provided in Section 5.2. The results of the MWH off-site data evaluation concluded there were no data gaps (MWH 2007). Nonetheless, Tetra Tech conducted a data gap analysis to review the adequacy of the existing environmental and radiological data collected solely at the BBC related to various environmental media with specific reference to use the data in site characterization, background comparisons, and risk—based screening level assessments. The goal of the data gap analysis was to determine if sufficient data are available to characterize the current existing environmental and radiological conditions at the BBC in order to evaluate any risk to campers, residents, and visitors who may be at the site during various times of the year. The specific technical objective of this effort was to determine whether spatial, temporal, analytical, or data quality gaps exist.

# 7.2 RESULTS OF DATA GAP ANALYSIS

Site investigations were conducted at the BBC in 1992 and 1994 by McLaren-Hart, as summarized in McLaren-Hart (1993, 1995). These site investigations involved collection of static gamma exposure rate measurements. However, these reports lacked substantive information related to geospatial location, QC techniques and results, and detailed information on the radiation instrumentation used in these studies, including calibration documentation. The gamma surveys involved only static measurements; no continuous gamma surveys were conducted and thus presented a data gap based on the availability of newer technology. The development of global positioning system (GPS)-based gamma radiation surveys in the past two decades has reduced the spatial and quantitative uncertainties associated with discrete point and static-grid measurements (Whicker 2015). It was recommended that a comprehensive continuous gamma radiation survey using mobile GPS-based survey systems be conducted within the BBC main camp area and the BBC drainages as well as within identified background reference areas. The purpose of these surveys was to ascertain any statistical and radiological anomalies that may be present at the BBC to evaluate the potential for radiological contamination from gamma-emitting radionuclides.

Soil sampling for radionuclide analysis had not been conducted since the 1992 and 1994 field investigations (McLaren-Hart 1993, 1995). It was recommended that collection of sediment and soil samples at the BBC main camp area and the drainages be conducted. It was also recommended that a comprehensive soil sampling investigation be conducted at high use areas within the BBC and at drainage areas where the flow paths originated from the Area IV region of the SSFL. Sediment and soil samples were analyzed for radionuclides, metals, and perchlorate. The results of the soil investigation were compared with the results of the background reference area samples for both the sediment and soil samples. The results of this investigation are summarized in the following section and set forth in detail in Appendix A.

# 8.0 2016 SITE INVESTIGATION

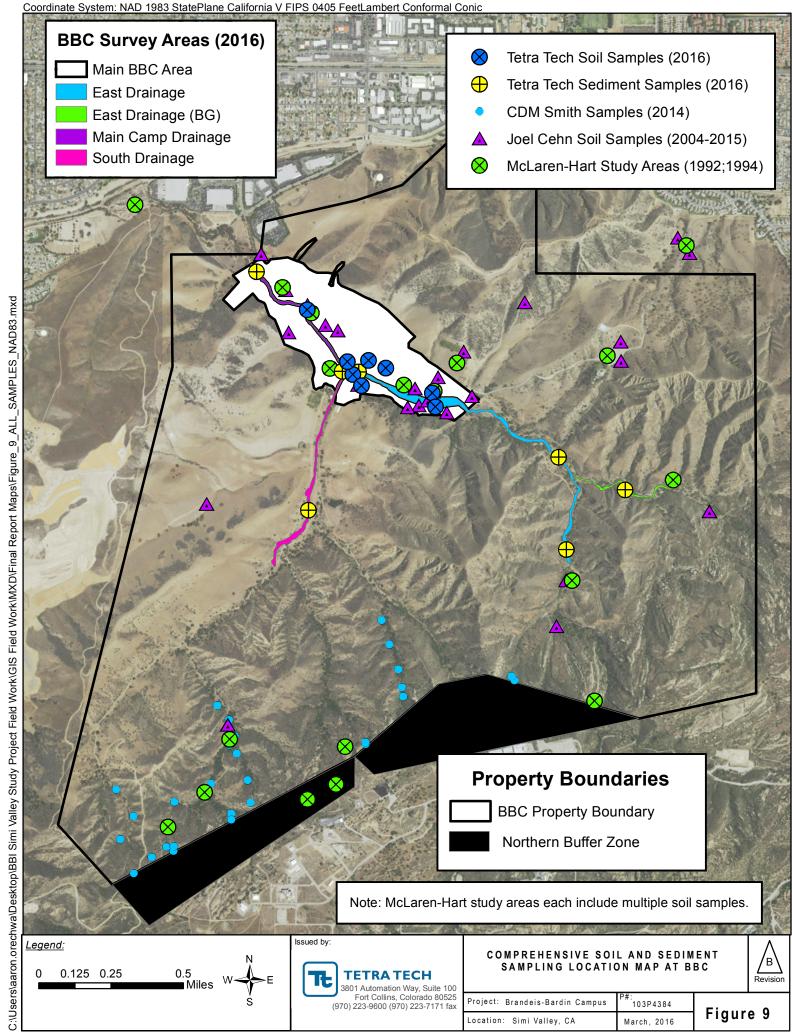
Based on the results of the data gap analysis (Section 7.0), Tetra Tech recommended that a comprehensive continuous gamma radiation survey using mobile GPS-based survey systems within the BBC main camp area, the BBC drainages, , and identified background reference areas. The purpose of these surveys was to ascertain any statistical and radiological anomalies that may be present at the BBC to assess the potential for radiological contamination from gamma-emitting radionuclides (e.g. Cs-137). Tetra Tech also recommended collection of sediment and soil samples at the BBC main camp area and the drainages. Tetra Tech's recommendations were reviewed and approved by the AJU, and Tetra Tech implemented the proposed radiological and soil investigations in February 2016. This section presents a brief summary and conclusions of the 2016 radiological and soil investigation. The final *Radiological and Soil Investigation Report* is provided in Appendix A.

# 8.1 OVERVIEW

The purpose of this investigation was to assess the environmental and radiological conditions at the BBC site relative to background. The investigation was focused on areas where the potential for contaminant migration from the nearby SSFL may exist (such as drainages leading from the SSFL) and within areas where campers are most likely to be spend their time. This investigation included the following:

- Mobile GPS-based gamma radiation surveys at areas within the BBC and at identified radiological background reference areas (RBRA).
- A soil sampling investigation at drainages entering and passing through the BBC, within selected exposure areas at the BBC, and at background reference locations identified by Tetra Tech.

The goal of the continuous gamma radiation survey was to characterize the spatial distribution of gamma radiation emanating from surface soils within the BBC, at drainages entering and draining through the BBC property, and at background reference areas. The purpose of the soil sampling was to collect information on the existing radiological and chemical conditions within the drainages and primary exposure areas of the BBC. The gamma radiation survey provides information on gamma emitting radionuclides in the terrestrial environment but does not identify the specific radionuclides (man-made or naturally occurring). The surveys also do not detect certain radionuclides, such as Sr-90, that do not emit gamma radiation. Tetra Tech recommended laboratory analysis of soil samples to investigate not only the presence of non-gamma emitter radionuclides, but also non-radioactive analytes associated with the SSFL operations (i.e., certain metals and perchlorate). The following two subsections summarize the results of the gamma radiation survey and soil investigation at the BBC (Appendix A). A map providing all of the historical soil and sediment sampling locations in the vicinity of the BBC property (excluding sampling conducted on the SSFL itself) is provided in Figure 9.

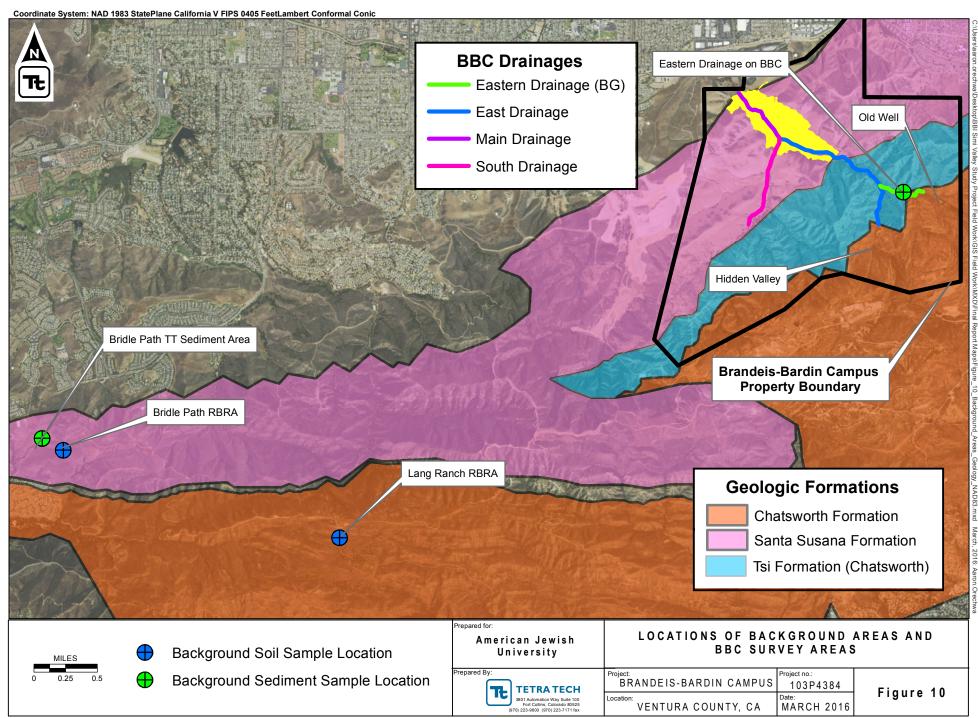


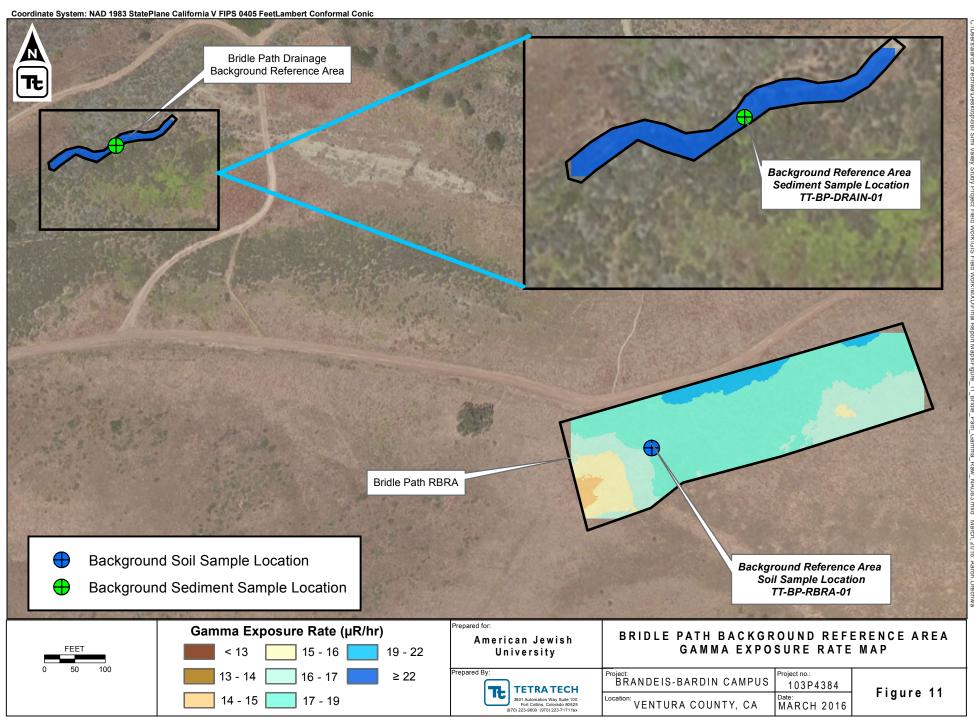
# 8.2 GAMMA SURVEY RESULTS

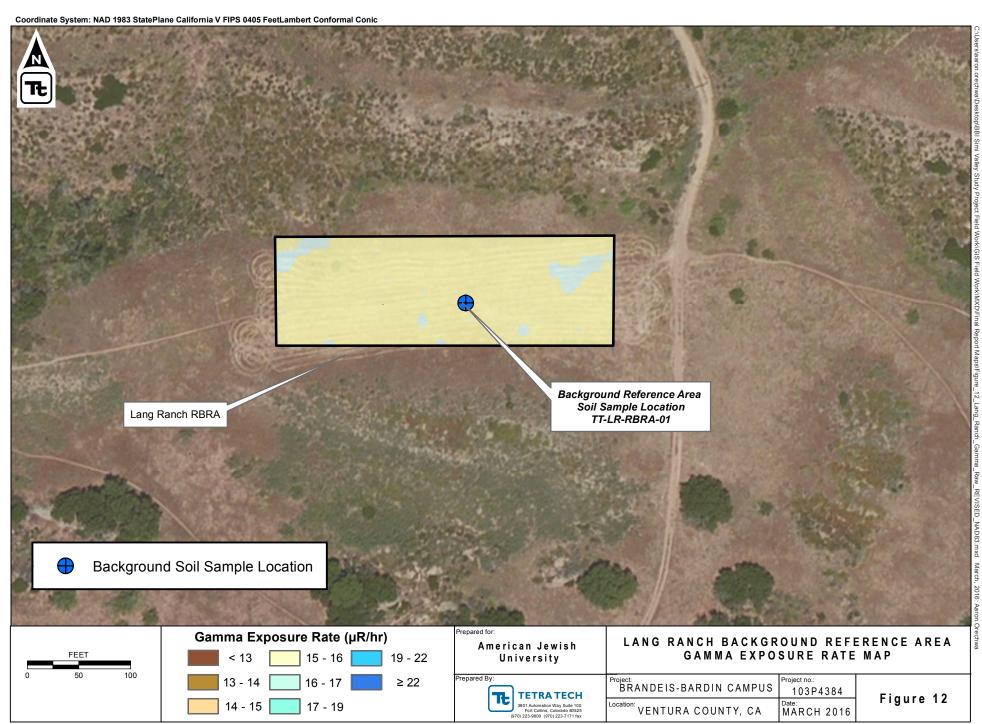
Tetra Tech performed a continuous gamma radiation survey in February 2016 at the BBC property and at four background areas following the methods outlined in Appendix A. The comprehensive continuous gamma radiation surveys used in this investigation were intended to ascertain whether radiological anomalies may be present at the BBC, and if so, to assess the potential for radiological contamination from gamma-emitting radionuclides. Tetra Tech compared on-site gamma radiation data with background reference area data that represented background conditions with no potential contamination from the SSFL. These background reference areas were selected using EPA approved background areas from HGL (2011, 2012a) referred to as RBRAs. Additional background drainage reference areas were selected based on strict criteria including geologic characteristics, proximity to existing RBRAs, and flow origination in order to avoid biases in the comparative analysis. The same measurement techniques and instrumentation were used on site and off site as recommended in the NRC guidance document NUREG 1501 (NRC 1994).

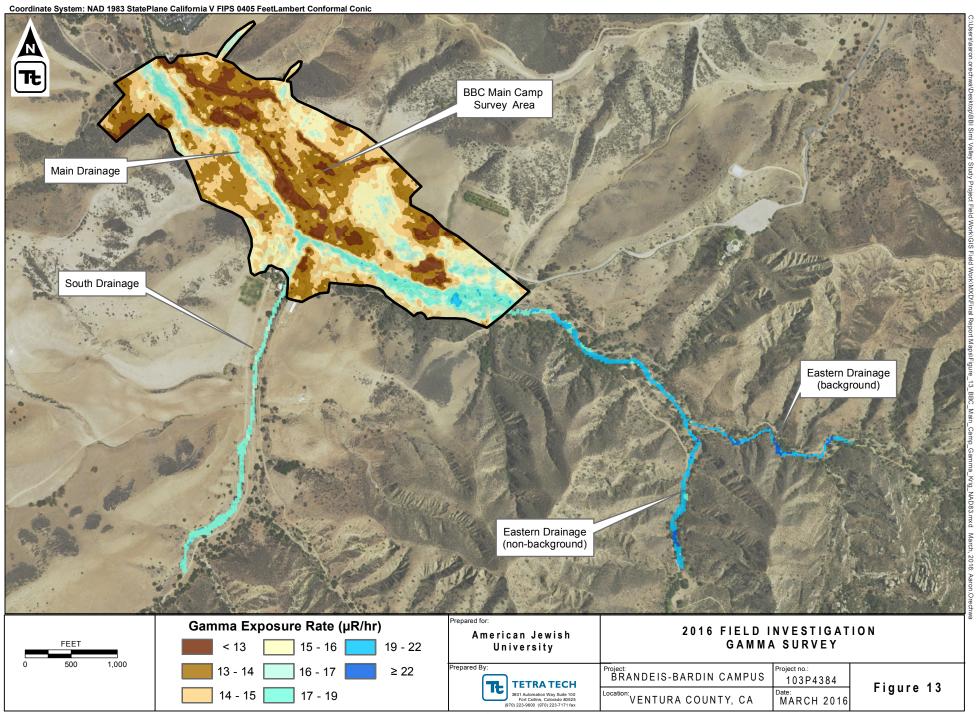
The gamma radiation survey collected 39,463 gamma exposure rate measurements within the six areas at the BBC. An additional 4,166 gamma exposure rate measurements were collected within four background reference areas within the two primary geologic formations covering the BBC and the SSFL (e.g., Santa Susana and Chatsworth) as shown in Figure 5 to establish four background reference points. A statistical analysis was performed on the gamma exposure rates collected within the BBC main camp area and the BBC drainages. The gamma radiation datasets collected within these regions of the BBC property were compared statistically with the gamma radiation datasets collected at background reference areas, which included background soil plot areas and background sediment areas. The results from the gamma radiation surveys within the BBC property showed there is no statistically significant difference between the mean of the gamma exposure rate distributions within the BBC main camp area and the gamma exposure rate distributions within EPA-selected RBRAs. Similarly, the results showed no statistically significant difference between the mean of the gamma exposure rate distributions within the BBC drainages (North, Main, South, and Eastern Drainages) and the mean of the gamma exposure rate distributions measured within the background drainage reference areas. A map showing the locations of the BBC gamma survey areas, including the Old Well and Hidden Valley areas, and the background reference areas is provided in Figure 10. The gamma exposure rate maps for the Bridle Path and Lang Ranch background reference areas are provided in Figure 11 and Figure 12, respectively. A gamma exposure rate map showing the results of the 2016 field investigation gamma radiation surveys are provided in Figure 13 and Figure 14.

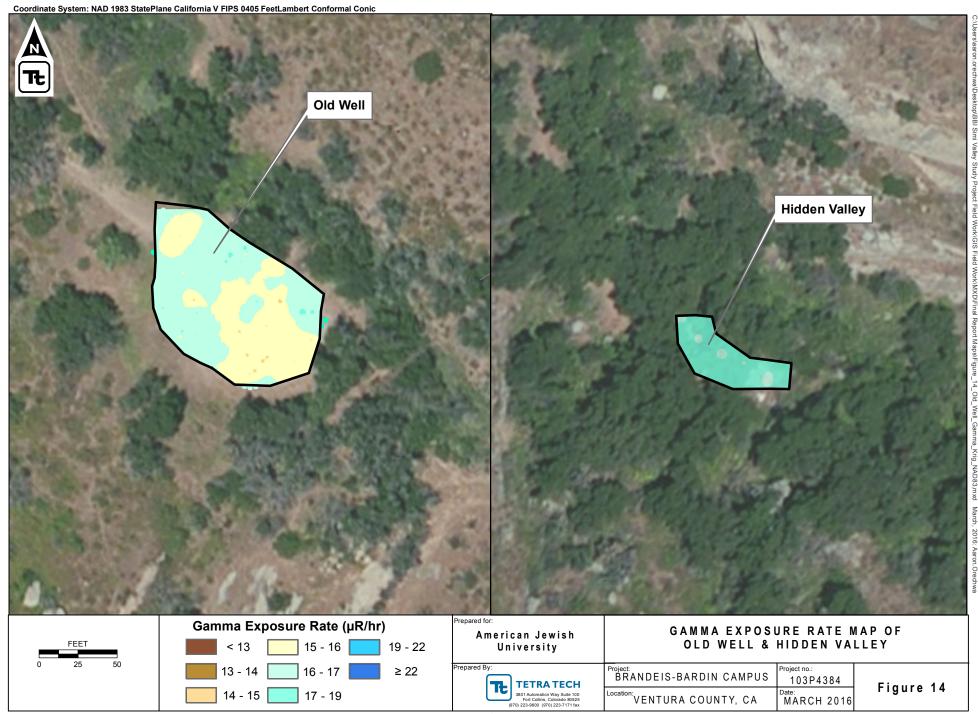
A number of documents and records were generated during the field activities, including instrument calibration records, field logbooks, sample collection logs, and chain of custodies. These materials are included in Appendix A.











# 8.3 Soil and Sediment Investigation Results

In addition to performing the gamma survey in February 2016, Tetra Tech also collected soil and sediment samples from various locations on the BBC property. The soil sampling investigation was conducted by Tetra Tech in February 2016 during the same mobilization as the gamma radiation survey. Soil and sediment samples were collected within the primary areas of high use within the BBC and at drainage areas where the flow paths potentially originate from the Area IV region of the SSFL. The purpose of the soil investigation was to collect information on the existing radiological and chemical conditions. Both the sediment and soil samples were analyzed for the COPCs identified in Section 6.0, specifically including: radionuclides, metals, and perchlorate. For validation purposes, individual soil samples were also collected within the approved RBRAs identified in HGL (2011). The results of the soil investigation from the site areas were compared with the results of the background reference area samples collected by Tetra Tech for both the sediment and soil samples as presented in Appendix A. The geospatial coordinates for the sediment and soil sampling locations are presented in Table 11 and Table 12. A map showing the locations of the soil and sediment sampling locations is provided in Figure 15.

**Table 11 Geospatial Information for Sediment Sample Locations** 

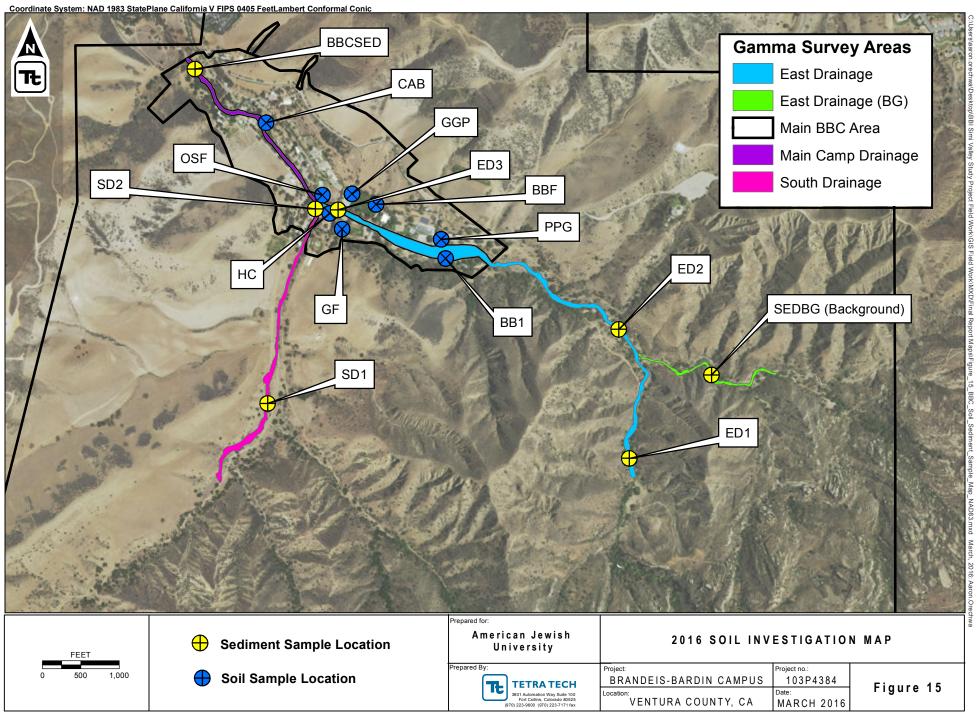
Sample ID	Background (Y/N)	QC	Latitude <sup>1</sup>	Longitude
TT-SD1-01	-	Primary	34.24957740	-118.7122916
TT-BPDRAINAGE-01	Υ	Primary	34.22185176	-118.8113390
TT-SEDBG-01	Υ	Primary	34.25070834	-118.6931649
TT-ED1-01	-	Primary	34.24770261	-118.6966891
TT-ED2-01	-	Primary	34.25230858	-118.6971849
TT-ED3-01	-	Primary	34.25652561	-118.7093089
TT-SD2-01	-	Primary	34.25742761	-118.7113001
TT-BBCSED-01	=	Primary	34.26152343	-118.7155219

<sup>&</sup>lt;sup>1</sup>The coordinates are provided in WGS84.

**Table 12 Geospatial Information for Soil Sample Locations** 

Sample ID	Background (Y/N)	QC	Latitude <sup>1</sup>	Longitude
TT-BP-RBRA-01	Υ	Primary	34.220501230	-118.808406299
TT-PPG-01	=	Primary	34.255498222	-118.704861556
TT-BB1-01	=	Primary	34.254806065	-118.704658109
TT-BBF-01	-	Primary	34.256729301	-118.707671696
TT-GGP-01	=	Primary	34.257103941	-118.708705857
TT-HC-01	=	Primary	34.256395463	-118.709662709
TT-GF-01	-	Primary	34.255834150	-118.709124137
TT-OSF-01	=	Primary	34.257047021	-118.709985644
TT-CAB-01	=	Primary	34.259619495	-118.712440820
TT-LR-RBRA-01	Υ	Primary	34.210758977	-118.770357270

<sup>&</sup>lt;sup>1</sup>The coordinates are provided in WGS84.



#### 8.3.1 Sediment Investigation Results

The sediment samples were submitted to a certified laboratory for analysis of Cs-137, Sr-90, metals, and perchlorate. Appendix A presents the results of the sediment samples compared with the background drainage reference areas, and are summarized briefly below. The sediment sample locations are provided in Table 11 and Figure 15 (Note: one background sediment sample location not shown in Figure 10 is provided on a map in Appendix A). A total of six sediment samples were collected at non-background locations within drainages entering or flowing through the BBC. An additional two sediment samples were collected in background reference drainage areas. The sediment samples were submitted for Cs-137, Sr-90, metals, and perchlorate. All of the perchlorate results were below MDCs and are not presented in tables. The sediment samples were submitted to a certified laboratory for analysis of Cs-137, Sr-90, metals, and perchlorate. Appendix A presents the results of the sediment samples compared with the background drainage reference areas, and are summarized briefly below.

All of the reported Cs-137 concentrations for the sediment samples were below the laboratory reported MDCs and all of the results were below the background Cs-137 values for the samples collected by Tetra Tech in February 2016. Table 13 presents the sediment sample Cs-137 results compared with the background values established from previous background investigations summarized in Section 4.6. All of the sediment samples are within the limits of the background values for Cs-137.

Table 13 Summary of 2016 Sediment Sample Cs-137 Results Compared with Background Values

		Cesium-137			
Sample ID	Sample Area	Result (pCi/g) <sup>1</sup>	Precision +/-	MDC <sup>2</sup>	Lab Qualifier <sup>3</sup>
TT-ED1-01	Non-Background	< 0.097	-	0.097	U
TT-ED2-01	Non-Background	< 0.090	-	0.09	U, G
TT-ED3-01	Non-Background	< 0.091	-	0.091	U, G
TT-SD1-01	Non-Background	< 0.095	-	0.095	U, G
TT-SD2-01	Non-Background	< 0.095	-	0.095	U, G
TT-BBCSED-01	Non-Background	< 0.087	-	0.087	U
		<b>Background Comparison</b>			
Sample Area	Data Source	BTV <sup>4</sup> (pCi/g)	Description		
Background	McLaren-Hart (1993; 1995)	0.349	— Mean +2 times Standard Deviation⁵		1 Deviation <sup>5</sup>
Background	Ogden (1998)	0.167			
Background	HGL (2011)	0.193	Look-up Table BTV (HGL 2012b)		

<sup>&</sup>lt;sup>1</sup>pCi/g = picocuries per gram

<sup>&</sup>lt;sup>2</sup>MDC = minimum detectable concentration

<sup>&</sup>lt;sup>3</sup>Lab qualifier = "U" less than MDC; "G" sample density differs more than 15% from laboratory control sample

<sup>&</sup>lt;sup>4</sup>BTV = background threshold value (value considered to be background for comparison)

<sup>&</sup>lt;sup>5</sup>The mean and the standard deviation were calculated using the K-M statistics in ProUCL 5.0

Five of the six reported Sr-90 concentrations for the sediment samples were below the laboratory reported MDCs. With the exception of TT-SD2-01, all samples were below the background Sr-90 values for the samples collected by Tetra Tech in February 2016. Table 14 presents the sediment sample Sr-90 results compared with the background values established from previous background investigations summarized in Section 4.6. All of the sediment samples, with the exception of TT-SD2-01, are within the limits of the background values for Sr-90. The Sr-90 value for TT-SD2-01 is 0.182 pCi/g +/- 0.064 pCi/g; the lower limit of the detection sensitivity is calculated to be 0.118 pCi/g, which is below the background value calculated for the McLaren-Hart (1993; 1995) dataset but higher than the BTV established in HGL (2012b). Therefore, a risk evaluation using risk-based screening levels was performed and is summarized in Section 9.0.

Table 14 Summary of 2016 Sediment Sample Sr-90 Results Compared to Background Values

			Strontium	-90	
Sample ID	Sample Area	Result (pCi/g) <sup>1</sup>	Precision +/-	MDC <sup>2</sup>	Lab Qualifier <sup>3</sup>
TT-ED1-01	Non-background	< 0.088	-	0.088	U
TT-ED2-01	Non-background	< 0.097	-	0.097	U
TT-ED3-01	Non-background	< 0.089	-	0.089	U
TT-SD1-01	Non-background	< 0.075	-	0.075	U
TT-SD2-01	Non-background	0.182	0.064	0.081	
TT-BBCSED-01	Non-background	< 0.104	-	0.104	U
	Background Comparison				
Sample Area	Data Source	BTV <sup>4</sup> (pCi/g)	Description		
Background	McLaren-Hart (1993; 1995)	0.127	Mean +2 times Standard Deviation⁵		rd Deviation <sup>5</sup>
Background	HGL (2011)	0.075	Look-up Table BTV		BTV

<sup>&</sup>lt;sup>1</sup>pCi/g = picocuries per gram

<sup>&</sup>lt;sup>2</sup>MDC = minimum detectable concentration

<sup>3</sup>Lab qualifier = "U" less than MDC; "G" sample density differs more than 15% from laboratory control sample

<sup>&</sup>lt;sup>4</sup>BTV = background threshold value (value considered to be background for comparison)

<sup>&</sup>lt;sup>5</sup>The mean and the standard deviation were calculated using the K-M statistics in ProUCL 5.0

All of the average metals concentrations measured from the sediment samples collected at the BBC drainages had reported concentrations below the background values. Detailed summary of tables of all of the laboratory analytical results are provided in the soils investigation report in Appendix A. For comparative purposes, Tetra Tech compared the average of the sediment metals concentrations with the background values presented for these metals by DTSC in 2012, as discussed in Section 4.5. The results of the sediment sample metals concentrations compared with the background values are presented in Table 15. All of the average metals concentrations measured from the sediment samples collected at the BBC drainages had reported concentrations below the background values.

**Table 15 Sediment Metals Concentrations Compared to Background Levels** 

Analyte	Non-Background Sediment Sample			BTV (mg/kg) <sup>1</sup>
	Min	Min Max Average		
Aluminum	2,400	8,700	5,300	50,300
Antimony	0.035	0.15	0.10	0.86
Arsenic	1.3	4.7	2.8	39.7
Barium	16.00	61	40.2	318.75
Beryllium	0.13	0.5	0.29	1.87
Cadmium	< 0.017	0.13	0.07	0.58
Calcium	840	4,300	2,440	32,000
Chromium	3.7	13.0	8.0	80.85
Cobalt	1.7	8	4.0	38
Copper	2.60	10.0	6.2	102
Iron	5,700	20,000	11,683	65,402
Lead	2.700	8.9	5.8	42.15
Magnesium	1,100	4,600	2,667	16387
Manganese	65.0	340	189	959
Mercury	< 0.0034	0.011	0.007	$0.13^{2}$
Nickel	2.30	9.2	5.43	113
Potassium	960	3,000	1,943	12,358
Selenium	0.35	0.83	0.532	0.896
Silver	0.022	0.07	0.047	0.138
Sodium	80	160	125	1,530
Thallium	0.077	0.240	0.148	0.991
Vanadium	8.6	34	20	150.6
Zinc	16.00	59	35.8	215 <sup>2</sup>

<sup>&</sup>lt;sup>1</sup>BTV= background threshold value USL95 determined by DTSC in 2012.

All of the perchlorate results in sediment were below MDCs.

<sup>&</sup>lt;sup>2</sup>LUT Value, DTSC (2013)

mg/kg = Milligram per kilogram

#### 8.3.2 Soil Investigation Results

A total of eight soil samples were collected at non-background locations within areas of high use (Figure 3). An additional two soil samples were collected in the RBRAs (i.e. Bridle Path and Lang Ranch). The soil sample locations are provided in Table 12 and Figure 15 (Note some background soil locations that are not shown in Figure 10 are provided on maps in Appendix A). Like the sediment samples, the soil samples were submitted to a certified laboratory for analysis of Cs-137, Sr-90, metals, and perchlorate. Appendix A presents the results of the soil samples compared with the background drainage reference areas, and these are summarized briefly below.

All of the reported Cs-137 concentrations for the soil samples were below the laboratory reported MDCs, with the exception of TT-OSF-01 (0.101 pCi/g). However, all of the results were below the background Cs-137 values for the samples collected by Tetra Tech in February 2016. Table 16 presents the soil sample Cs-137 results compared with the background values established from previous background investigations summarized in Section 4.6. All of the soil samples are within the limits of the background values for Cs-137.

Table 16 Summary of 2016 Soil Sample Cs-137 Results Compared to Background Values

		Cesium-137				
Sample ID	nple ID Sample Area	Result (pCi/g) <sup>1</sup>	Precision +/-	MDC <sup>2</sup>	Lab Qualifier <sup>3</sup>	
TT-BB1-01	Non-Background	< 0.097	-	0.097	U, G	
TT-BBF-01	Non-Background	< 0.098	-	0.098	U	
TT-CAB-01	Non-Background	< 0.081	-	0.081	U, G	
TT-GF-01	Non-Background	< 0.098	-	0.098	U, G	
TT-GGP-01	Non-Background	< 0.097	-	0.097	U	
TT-HC-01	Non-Background	< 0.092	-	0.092	U, G	
TT-OSF-01	Non-Background	0.101	-	0.099	G	
TT-PPG-01	Non-Background	< 0.095	-	0.095	U	
	Вас	kground Comparis	son			
Sample Area	Data Source	BTV (pCi/g)	Description			
Background	McLaren-Hart (1993; 1995)	0.349	Mean +2 times Standard Deviation		rd Daviation	
Background	Ogden (1998)	0.167			iu Deviation	
Background	HGL (2011)	0.193	Look-up Table BTV (HGL 2012b)			

<sup>&</sup>lt;sup>1</sup>pCi/g = picocuries per gram

All of the eight reported Sr-90 concentrations for the soil samples were below the laboratory reported MDCs and were also below the background Sr-90 values for the samples collected by Tetra Tech in February 2016. Table 17 presents the soil sample Sr-90 results compared with the background values established from previous background investigations summarized in Section 4.6. All of the soil samples are within the limits of the background values for Sr-90.

<sup>&</sup>lt;sup>2</sup>MDC = minimum detectable concentration

<sup>&</sup>lt;sup>3</sup>Lab qualifier = "U" less than MDC; "G" sample density differs more than 15% from laboratory control sample

<sup>&</sup>lt;sup>4</sup>BTV = background threshold value (value considered to be background for comparison)

<sup>&</sup>lt;sup>5</sup>The mean and the standard deviation were calculated using the K-M statistics in ProUCL 5.0

Table 17 Summary of 2016 Soil Sample Sr-90 Results Compared to Background Values

		Strontium-90			
Sample ID	Sample Area	Result (pCi/g) <sup>1</sup>	Precision +/-	MDC <sup>2</sup>	Lab Qualifier <sup>3</sup>
TT-BB1-01	Non-background	< 0.081	-	0.081	U
TT-BBF-01	Non-background	< 0.081	-	0.081	U
TT-CAB-01	Non-background	< 0.092	-	0.092	U
TT-GF-01	Non-background	< 0.104	-	0.104	U
TT-GGP-01	Non-background	< 0.074	-	0.074	U
TT-HC-01	Non-background	< 0.082	-	0.082	U
TT-OSF-01	Non-background	< 0.096	-	0.096	U
TT-PPG-01	Non-background	<0.097	-	0.097	U
	Backgroun	d Comparison	1		
Sample Area	Data Source	BTV <sup>4</sup> (pCi/g)	Description		า
Background	McLaren-Hart (1993; 1995)	0.127	Mean +2 times Standard Deviation <sup>5</sup>		l Deviation⁵
Background	HGL (2011)	0.075	Loo	k-up Table E	BTV

<sup>&</sup>lt;sup>1</sup>pCi/g = picocuries per gram

All of the average metals concentrations measured from the soil samples collected at the areas of highest use within the BBC had reported concentrations below the background values. The sediment samples were submitted for laboratory analysis of metals. Detailed summary of tables of all of the laboratory analytical results are provided in the soils investigation report in Appendix A. For comparative purposes, Tetra Tech compared the average of the sediment metals concentrations with the background values presented for these metals by DTSC in 2012, as discussed in Section 4.5. The results of the sediment sample metals concentrations compared with the background values are presented in Table 18. All of the average metals concentrations measured from the soil samples collected at the areas of highest use within the BBC had reported concentrations below the background values.

<sup>&</sup>lt;sup>2</sup>MDC = minimum detectable concentration

<sup>&</sup>lt;sup>3</sup>Lab qualifier = "U" less than MDC; "G" sample density differs more than 15% from laboratory control sample

<sup>&</sup>lt;sup>4</sup>BTV = background threshold value (value considered to be background for comparison)

<sup>&</sup>lt;sup>5</sup>The mean and the standard deviation were calculated using the K-M statistics in ProUCL 5.0

**Table 18 Soil Metals Concentrations Compared to Background Levels** 

Analyte	Non-Background Soil Sample (mg/kg)			BTV (mg/kg) <sup>1</sup>
7	Min	Max	Average	2(8/8/
Aluminum	1,200	13,000	7,025	50,300
Antimony	0.038	0.28	0.16	0.86
Arsenic	0.85	5.8	3.5	39.7
Barium	9.40	170	77.4	318.75
Beryllium	0.11	0.59	0.35	1.87
Cadmium	0.03	0.57	0.23	0.58
Calcium	2,100	14,000	6,150	32,000
Chromium	3.3	22.0	11.6	80.85
Cobalt	0.93	11	5.1	38
Copper	1.50	34.0	12.6	102
Iron	2,800	24,000	13,250	65,402
Lead	0.620	31.0	10.3	42.15
Magnesium	510	6,500	3,364	16387
Manganese	39.0	480	246	959
Mercury	0.038	0.043	0.0405	$0.13^{2}$
Nickel	1.80	18.0	8.70	113
Potassium	310	5,100	2,933	12,358
Selenium	0.32	1.9	0.819	0.896
Silver	0.0065	0.10	0.051	0.138
Sodium	100	990	353	1,530
Thallium	0.024	0.280	0.153	0.991
Vanadium	6.1	50	28	150.6
Zinc	4.80	150	54.4	215 <sup>2</sup>

<sup>&</sup>lt;sup>1</sup>BTV= background threshold value USL95 determined by DTSC in 2012.

All of the perchlorate results were below MDCs.

<sup>&</sup>lt;sup>2</sup>Lookup Table Value, DTSC (2013) mg/kg = Milligrams per kilogram

# 9.0 HEALTH RISK EVALUATION

Samples have been collected at the BBC in various media historically, and on-site soil and sediment samples were collected in February 2016. This section evaluates the current environmental health risks associated with BBC by synthesizing prior studies with the 2016 BBC data.

#### 9.1 SUMMARY OF HISTORICAL RISK EVALUATIONS FOR BBC

As part of the investigations and remedial actions performed for the SSFL, off-site areas had been investigated to determine whether, and to what extent, contamination had migrated off-site through air, runoff, surface water, and groundwater. As described in Section 4.0, off-site background areas had also been identified.

Data from these prior studies were analyzed using risk-based screening levels (RSBL) identified by regulatory agencies. The RBSLs included many potentially complete exposure pathways to allow efficient and conservative risk-based evaluations of sampling results. Note that many investigations have been performed at the SSFL itself; risk assessments for on-site areas or those to the west, east, and south are not reviewed here as those assessments and reports do not reflect exposures at the BBC. Published assessments related to the BBC are summarized below.

# 9.1.1 1993 and 1995 McLaren-Hart Reports

The sampling results from the 1992 and 1994 investigations at the BBC are presented in McLaren-Hart (1993; 1995) and Weston (2003). While the studies involved both the BBC and Sage Mountain Ranch areas, only the information relating to BBC is discussed here. As summarized in EPA (1995), the off-site study began in 1992 by collecting 118 soil samples, seven surface water samples, four groundwater samples and nine fruit samples. Forty samples collected by Rocketdyne were also independently analyzed by EPA, California DHS, and the BBI. McLaren-Hart (1993) provided results of samples collected in 1992 at the BBC from the following locations (many are shown on Figure 8):

- Perimeter of Playground (BB-01)
- Dormitory Area (BB-02)
- Campsite Area 1 (BB-03)
- Campsite Area 2 (BB-04)
- Picnic Area (BB-05)
- House of the Book (BB-06)
- Counselor-in-Training Area (BB-07)
- Potential development Sites 1, 2, and 3 (BB-08, BB-09, BB-10)
- Vegetable Garden (BB-11)
- Main House Orchard (BB-12)
- Avocado Grove (BB-13)
- Old Well Campsite (BB-14)

The 1993 study found two areas on BBI property near the Rocketdyne property boundary where tritium, cesium, and strontium results could either have been related to SSFL activities or to background. Therefore, additional on-site sampling at BBC and background sampling for radionuclides were conducted in 1994 and reported in McLaren-Hart (1995). McLaren-Hart (1993) noted one area that had an elevated mercury result for sediment (location BB-18) near the property boundary of BBC and Rocketdyne. This area was remediated after the 1993 report and confirmation sampling showed no residual contamination (McLaren-Hart 1995).

Surface soil samples were collected in 1994 from the same areas as in 1992 with the exception of the Counsellor-in-training Area (BB-07), Potential Development Sites 1, 2, and 3 (BB-08 through BB-10), and the Vegetable Garden area (BB-11). The surface soil samples from 10 areas were re-analyzed for tritium, as samples from the 1993 study could not be validated by the laboratory for those areas. Again, the samples were collected in cooperation with EPA, California DHS, and Brandeis-Bardin. The 1995 study identified only two impacted areas - the Building 59 Watershed (BB-17) and the Radioactive Material Disposal Facility (RMDF) Watershed (BB-16) - that contained tritium, cesium, or strontium at concentrations above background. No other samples from the BBC contained radionuclides statistically above background levels (Weston 2003). The Building 59 Watershed and the RMDF Watershed sample locations are located within the existing NBZ and both are over 1.5 miles to the south from the center of the BBC Main Area as shown on Figure 8. In addition, EPA determined that the radionuclides in the watershed sediment samples were at concentrations that "do not pose a threat to human health or the environment" (EPA 1995). Specifically, EPA calculated a risk to campers and camp counselors of less than 1 in one million from direct daily exposure to those locations for at least one month per year for 4 years; such exposure would have been unlikely given the distance of the impacted areas from the designated campground areas and the areas used by BBI for camp activities. EPA communicated these findings both in the EPA Update of July 1995 and in a public meeting in August 1995.

Boeing purchased the locations found to have above-background concentrations of radionuclides and mercury from BBI in 1997 and no longer are available for use by the BBC campers or residents. Additionally, the terrain in this region makes access extremely difficult for members of the public.

#### 9.1.2 ATSDR 1999

In 1999, the ATSDR reviewed SSFL data, potential releases from the SSFL, and potential off-site exposures to chemicals and radionuclides through air, surface water, and groundwater. Regarding airborne exposures, ATSDR concluded (ATSDR 1999):

"Based on the distance from the on-site release sources to off-site residential areas, the predominant wind directions, the meteorological conditions at the site, and the rapid dispersion and degradation of oxidants in air, it is unlikely that off-site residents have been, or currently are being exposed to chemicals and radionuclides at concentrations that would result in adverse human health effects." [Emphasis in original].

The report also states that the surface soil that may have been impacted by SSFL activities was confined to the area just north of the Rocketdyne property boundary and "this area has been purchased by Rocketdyne and is now part of the SSFL buffer zone. Sr-90 and tritium were detected at concentrations slightly above background levels in these areas" (ATSDR 1999). The ASTDR (1999) noted that Sr-90 at 7.79 pCi/L and tritium at 1,500 pCi/L were detected in the RMDF Watershed (BB-16) but concluded that these concentrations do not pose a risk to off-site receptors.

Regarding chemicals in groundwater and surface water (groundwater emerging as seeps and springs), ATSDR concluded:

"Plumes of TCE-contaminated ground water have migrated off site along the northeast and northwest boundaries of SSFL ... The facility purchased the property overlying the northwest TCE plume from the Brandeis-Bardin Institute such that this area is now on site [i.e., a part of the SSFL property] and comprises the northwest buffer area."

While TCE may have been migrating off-site toward the BBC, Boeing purchased this land area and access was no longer granted to BBC patrons or employees. The 1999 ATSDR report also noted that since 1987, the SSFL operated a network of groundwater remediation and treatment wells and eight contaminant treatment systems. By 1999, more than 1.4 billion gallons of contaminated water had been treated since initiation of the treatment system. The ATSDR report (1999) also stated that "water level data from the monitor, remediation, and supply wells indicates that long term water levels underlying SSFL have declined as much as 200 feet." This decline in water elevations, per the ATSDR report, "creates ground water flows towards the central portion of the SSFL facility and has likely reduced off-site migration of ground water contaminants."

The ATSDR (1999) report concluded the following in regard to groundwater and surface water:

"Based on our preliminary review of the available data, there is no indication that residents living near the SSFL have been exposed, or are currently being exposed to chemicals or radionuclides in ground water or surface water at levels that would result in adverse human health effects."

Overall, after review of SSFL and data reported in the McLaren-Hart 1993 and 1995 reports, ASTDR concluded (ATSDR 1999) that:

"Chemicals and radionuclides have migrated by sediment transport in surface water runoff from the SSFL to off-site areas. In general, maximum concentrations have been detected *just outside* the SSFL property boundary; concentrations decrease rapidly with increasing distance from the facility. The area surrounding the SSFL is rugged and hilly and not easily accessible to persons in the nearby community. There is a limited likelihood that persons in the community would come into contact with chemicals and radionuclides in soils and sediment just off site of the SSFL. In addition, maximum concentrations of chemicals and radionuclides at these off-site areas are not at levels that would result in adverse human health effects if human exposure were to occur (DeRosa 1997; ATSDR 1997, 1998]. Chemicals and radionuclides have not been found in samples collected in *more distant* residential or recreational areas surrounding the SSFL, including Bell Canyon, Brandeis-Bardin Institute, and Santa Monica Mountains Conservancy, at levels that would result in adverse human health effects if any human exposure were to occur in these off-site areas."

# 9.2 Overview of Risk Evaluation Using 2016 Data

Tetra Tech conducted a human health risk evaluation from COPCs detected in the sampled environmental media at the BBC. The goal was to evaluate the investigation data and relevant risk assessment information to systematically estimate potential exposures and associated risks. The key components of the risk evaluation include:

- Identification of COPCs;
- Assessment of potential exposures to COPCs;
- Assessment of health effects of the COPCs; and
- Characterization of health risks and discussion of uncertainties.

The human health risk evaluation was conducted in accordance with guidance developed by EPA in the Risk Assessment Guidance for Superfund (RAGS) [EPA 1989; 1992a; 1992b; 1992c; 1996a; 1996b; 1997; 2002a; 2002b; 2002c; 2004; 2009a; 2016a], DTSC in the Supplemental Guidance for Human Health Multimedia Risk Assessments of Hazardous Waste Sites and Permitted Facilities (DTSC 1992; 1997; 2009a; 2009b, 2014), and the Preliminary Endangerment Assessment Guidance (DTSC 2015a).

The analysis was conducted using RBSLs for surface soils. RBSLs were selected from two primary sources: Human Health Risk Assessment (HHRA) Note 3 (DTSC 2016a) and EPA Regional Screening Levels (RSL) (EPA 2015). DTSC values were used preferentially (DTSC 2015b), and EPA RSLs were used if DTSC had not calculated an alternative screening level. RBSLs used for this screening evaluation are presented in Table 19 and are described further in Section 9.5.4.

Both DTSC and EPA publish RBSLs that may be used to evaluate and remediate potentially contaminated sites. The screening levels, based on default exposure parameters for the general population including adults and children, are chemical- and medium-specific. RBSLs that are based on a residential exposure, listed below in Table 14, are those for metals that were included in the soil analyses. Additionally, an RBSL for Sr-90 was calculated using the EPA calculator for radionuclides; this value was calculated to include the same exposure pathways and parameters as those of the published RBSLs for metals.

Both DTSC and EPA have published values based on residential exposure assumptions (350 days per year, 26 years, including exposures of both adults and children); DTSC provides RBSLs based on its preferred toxicity values for those chemicals where the calculated RBSL is 3 times lower than the EPA value (DTSC 2016a), as is the case for arsenic, cadmium, lead, mercury, and nickel. The values are tabulated below for chemicals analyzed in the 2016 soil and sediment samples. A further description of the RBSLs and risk assessment principles is provided in Section 9.5.1 to Section 9.5.4.

**Table 19 Risk-based Screening Levels for Residential Exposures** 

Chemical	EPA Residential RBSLs (mg/kg) <sup>1</sup>	DTSC RBSLs (mg/kg) <sup>2</sup>
Aluminum	77,000	
Antimony	31	
Arsenic	0.68*	0.067*
Barium	15,000	
Cadmium	71	5.23
Cobalt	23	
Copper	3,100	
Lead	400	80
Manganese	1,800	
Mercury (soluble salts)	23	8.8
Nickel	1,500	490
Selenium	390	
Silver	390	
Thallium	0.78	
Vanadium	390	
Zinc	23,000	
Radionuclides	EPA PRGs <sup>3</sup>	
Sr-90+daughters	4.2 pCi/g	Not Applicable

<sup>&</sup>lt;sup>1</sup>Residential soil RBSL (EPA 2015). Includes pathways of soil ingestion, dermal contact, and inhalation of particulates as appropriate.

<sup>2</sup>Residential soil RBSL (DTSC 2016). Values are calculated by DTSC only for those chemicals that differ significantly from EPA values and includes pathways of soil ingestion, dermal contact, and inhalation of particulates as appropriate.

PRG = Preliminary Remediation Goals

Note that specific RBSLs have been calculated for a variety of off-site receptors of the SSFL. Those screening levels have been reviewed by EPA and DTSC (MWH 2012) for use for off-site receptors. However, the exposures at BBC are different from those used in the SSFL calculations. Therefore, RBSLs from EPA and DTSC were used in this evaluation, along with calculated site-specific risk-based concentrations for Sr-90.

# 9.3 CHEMICALS OF POTENTIAL CONCERN

COPCs for the BBC are those chemicals and radionuclides, detected in surface soil samples at concentrations that exceed background or ambient levels. For the purposes of the screening level risk evaluation, the background comparison consisted of a comparison of each BBC sediment and soil sample to the two sediment or two soil background samples collected from reference areas in 2016 as well as to the BTVs established by DTSC for the SSFL area (DTSC 2012). An analyte was retained for the risk assessment if the detected concentration exceeded the BTV. A description of the development of BTVs is available in DTSC 2012. This comparison resulted in only Sr-90 being retained as a COPC.

Perchlorate was not detected in any soil or sediment sample at a detection limit of less than 25 microgram per kilogram and was therefore not further evaluated.

<sup>&</sup>lt;sup>3</sup>EPA 2016a. Radionuclide PRG Calculator, Residential Soil Concentrations – includes soil ingestion, external exposure, and inhalation exposures.

# 9.4 EXPOSURE ASSESSMENT

The CSM for the BBC provides the basis for identifying and evaluating the potentially complete human exposure pathways. As shown in the CSM (Figure 7), potential sources of COPCs at the BBC include soil, sediment, groundwater, and surface water. The CSM also illustrates the potential chemical migration pathways, exposure points, and exposure routes that have been considered for the BBC. Based on an initial evaluation, chemical fate and transport processes were used to define the potential migration pathways, and include (1) transfer of COPCs between environmental media, such as soil and air; and (2) transport of COPCs through movement of an environmental medium by natural advective and dispersive processes, such as air dispersion or runoff. Each of these potential exposure pathways is shown on the CSM (Figure 7) as are the groups of receptors potentially exposed to the COPCs in each environmental medium. The exposure pathways assumed to be complete for each group of receptors are incidental ingestion of soil, inhalation of particulates, dermal contact with soil (nonradionuclides only), and external exposure (radionuclides only).

The BBC is topographically downgradient and to the north of the SSFL. To the east, the BBC is bordered by recreational space at Sage Ranch and Santa Susana Knolls (a residential development), and residential development has also occurred to the west. As described previously, migration of contaminants from the SSFL can occur through air dispersion, movement of surface or groundwater, and sediment transport through drainages. Groundwater is not currently used at the BBC for any human contact or consumption purposes. Therefore, groundwater exposure pathways were not considered in the risk evaluation. As indicated previously, the surface water that is intermittently present at the Site has been sampled as part of the past investigations. Surface water samples collected from two locations were analyzed for tritium as reported in 1995 (McLaren-Hart 1995) and have been periodically tested for tritium since that time, with all results reported as consistent with rainfall, background, or well below screening levels. It has been noted that surface water is rarely, if ever, present during the summer months when campers are present at the BBC. Surface water exposure, therefore, was not included in the risk evaluation. Ingestion of food products grown at the BBC is also not a completed exposure pathway for humans, as food products grown at the BBC are not for human consumption, and harvesting of food products is prohibited.

Currently, the BBC is used throughout the year for religious ceremonies, conferences, retreats, and occasional camping by permission only. During the summer, the BBC hosts both day and overnight campers for varying numbers of weeks. During the summer, camp counselors and counselors-in-training may be present for up to 9 weeks. Most camp activities occur within the area shaded in blue on Figure 2. Those attending the camps could have direct contact with soil, including incidental ingestion of soil and dermal contact with soil. In addition, there are year-round residents at the BBC. Direct contact (resulting in incidental soil ingestion, inhalation of particulates, and dermal contact with soil) with COPCs in soil are also complete pathways for on-site residents. Neither group of receptors has contact with groundwater, nor are they permitted to harvest fruits or vegetables grown at the BBC. They are not likely to have any contact with surface water as it is only present intermittently within the camp area and usually not present in the summer.

Based on current site use, two groups of receptors were identified as potentially exposed to COPCs in soil and sediment at the BBC: campers and on-site residents. Both groups of receptors are assumed to have direct contact with soil through incidental ingestion, dermal contact, and inhalation of airborne particulates. For radionuclides, the exposure pathways are soil ingestion, inhalation, and external exposure. Given that the default exposure assumptions for a residential receptor include a longer exposure duration (26 years) and frequency (350 day per year) than a camper could feasibly experience,

the residential RSLs were used to provide an upper-bound evaluation of potential risks for both campers and on-site residents. The potentially complete exposure pathways included in the screening levels are also shown in Figure 7.

# 9.5 QUANTITATIVE EXPOSURE ANALYSIS

Chemical exposure is a result of the intake or uptake of a chemical from the environment. Each complete exposure pathway selected for quantitative analysis was included in the RBSLs and evaluated using pathway-specific models as described in EPA (1989) guidance.

The screening levels are calculated using the same principles and exposure parameters as a forward risk calculation. In general, the formula used for calculating a screening level for soil is as follows:

Screening Level 
$$\left(\frac{mg}{kg}\right) = \frac{TR \times BW \times AT}{TF \times CR \times EF \times ED}$$

where

TR = Target Risk  $(1 \times 10^{-6})$ ;

BW = Body weight (kg);

AT = Averaging time for pathway-specific exposure period (days);

TF = Toxicity factor (chemical and pathway specific);

CR = Contact rate with environmental medium per unit time (e.g., milligrams per day [mg/day]);

EF = Exposure frequency (days/year); and

ED = Exposure duration (years).

This generalized formula is modified according to the factors necessary to evaluate each complete exposure pathway and is expanded to include exposure through all completed exposure pathways. For the residential exposure scenario, this included ingestion of soil, particulate inhalation, dermal contact with soil (nonradionuclides only), and external exposure (radionuclides only).

EPA publishes RSLs for many chemicals, and they are updated regularly to include any changes in toxicity values, exposure parameters, or other chemical and physical properties of the chemicals that are relevant to the calculation of RBSLs (EPA 2015). DTSC has also published screening levels for some chemicals when DTSC recommends toxicity values that are significantly different from EPA-recommended values. Formulas for calculating RSLs are presented in DTSC (2016).

Both EPA and DTSC RBSLs employ the same methodology. RBSLs are calculated using default exposure parameters and, for soil, include the exposure pathways of incidental ingestion, dermal contact, and inhalation of particulates (for volatile chemicals, the RBSL also includes the inhalation of volatilized COPC). Each chemical is provided a composite screening value that includes all of these pathways. A full list of RBSLs is included as Appendix B. EPA and DTSC recommend that, at sites with more than one COPC, a sum of the ratios approach be used to sum risks or hazards across all COPCs, as follows:

$$Risk = \left[ \left( \frac{Conc_x}{SL_x} \right) + \left( \frac{Conc_y}{SL_y} \right) + \left( \frac{Conc_z}{SL_z} \right) \right] \times 10^{-6}$$

Where:

 $Conc_x = concentration of COPC_x$ 

 $SL_x$  = screening level for  $COPC_x$  based on carcinogenic endpoint

A similar approach is used for noncarcinogenic chemicals to calculate a total hazard index (HI). However, as there was only one COPC retained for the risk evaluation, it was not necessary to sum risks across chemicals.

# 9.5.1 Exposure Parameters

Table 20 presents the exposure parameters that were used to conservatively estimate risks from exposure to COPCs identified in soil at the BBC.

#### 9.5.1.1 Campers

Campers are assumed to be children that may visit the Site for varying numbers of days and weeks depending on age and type of camp in which they are enrolled. Day campers are assumed to be 5 to 12 years old, attend camp for 8 hours per day for a maximum of 40 days per year (5 days per week for 8 weeks) for a maximum of 7 years. For the overnight campers, sessions are offered for 2 to 3 weeks for ages 8 to 15 years; it was assumed that the overnight camper would be present 24 hours per day for 3 weeks, for a maximum of 7 years. Finally, counselors and counselors in training, typically 15 years old and older, could be at the camp for 9 weeks over the summer, again for 25 hours per day. To evaluate the maximum exposure, it was assumed that a "camper receptor" would therefore be exposed to the campsite areas 65 days per year, for 6 years as a child and for 20 years as an adult. As these values are lower than those assumed for a residential receptor, the residential risk-based concentrations published by DTSC and EPA were used to evaluate this exposure scenario to ensure a conservative analysis of risk.

#### 9.5.1.2 On-Site Residents

There are some residential tenants at the BBC, whose leases are renewed on an annual basis. The health protective assumption was made that a resident could live at the site with an exposure duration of a total of 26 years (6 as a child and 20 as an adult). This assumption was made to be consistent with residential exposure used for evaluation of other off-site areas, and is a conservative assumption regarding residential exposures (DTSC 2016; EPA 2015). Default exposure parameters were used to evaluate risk to these receptors.

#### 9.5.2 Exposure Point Concentrations

An exposure-point concentration (EPC) is the concentration of a chemical in the environmental medium (e.g., soil) at the point of contact with a receptor (e.g., camper). In accordance with EPA (1989, 2002a) guidance, the EPCs for soil were represented by the reasonable maximum exposure point concentrations, i.e., the lower of the maximum or the 95UCL on the mean concentration. Maximum concentrations were typically used as EPCs only when insufficient samples or detected concentrations were available to calculate a 95UCL concentration. Sr-90 was only detected once; therefore the sole detected concentration

was used as the EPC for the screening level risk evaluation, in accordance with DTSC guidance (DTSC 2015a, 2015b).

**Table 20 Exposure Parameters Used in Residential RBSLs** 

Exposure Parameter	Residential Scenario Value	Source
Exposure Frequency [EF]	350	DTSC 2014
(days/year)	330	EPA 2015
Exposure Duration [ED]	26 (6 child/ 20 adult)	DTSC 2014
(years)	20 (6 child) 20 addit)	EPA 2015
Exposure Time [ET]	24	DTSC 2014
(hours/day)	24	EPA 2015
D = d - 14/ - ! = b + [D14/]	15 (child) / 80 (adult)	DTSC 2014
Body Weight [BW] kg		EPA 2015
Cail ingestion [ID] (mg/day)	200 (abild) / 100 (adult)	DTSC 2014
Soil ingestion [IR] (mg/day)	200 (child) / 100 (adult)	EPA 2015
Dermal Contact – Soil [SA] (cm²/event)	2373 (child)/6032 (adult)	EPA 2015
Particulate Emission Factor	1.32E+09	DTSC 2014
[PEF] (m³/kg)	1.32E+U9	EPA 2015
Adherence Factor ( <b>AF</b> )	0.2 (child) / 0.07 (adult)	DTSC 2014
(mg/cm²)	0.2 (child) / 0.07 (adult)	EPA 2015

cm<sup>2</sup> = Square centimeter

m<sup>3</sup>/kg = cubic meter per kilogram

mg/cm<sup>2</sup> = Milligrams per square centimeter

#### 9.5.3 Particulate Emission Factors

Particulate emission factors (PEF) were used to assess potential exposure to dust particulates emitted from soil and dispersed atmospherically. The residential screening levels are calculated using a particulate emission factor of  $1.36 \times 10^9$  cubic meter per kilogram (m³/kg), per DTSC (2016) and EPA (2015). This parameter is listed in Table 20. As described in EPA (1991a), "the PEF relates the contaminant concentration in soil with the concentration of respirable particles in air due to fugitive dust from surface soil."

#### 9.5.4 Toxicity Values

Toxicity values used in the calculation of risk-based concentrations are based on either carcinogenic effects or noncarcinogenic effects. Some chemicals are considered to have both carcinogenic and noncarcinogenic effects. Both types of toxicity values are described below.

Certain chemicals are regulated as carcinogens based on the likelihood that exposure could potentially cause cancer in humans. Numerical estimates of cancer risk for these chemicals are presented as cancer potency factors (or slope factors [SF]) and unit risk factors (URF). The SF and URF defines the cancer risk posed by constant lifetime exposure to one unit of a carcinogen (in units of risk per milligram per kilogram per day [mg/kg-day] for oral SFs and risk per milligram per cubic meter [mg/m³] for inhalation URFs) and assumes that there is no threshold for the effect. Oral cancer slope factors and inhalation URFs (SF<sub>o</sub> and

URFs) were obtained from several sources, based on the hierarchy identified in DTSC (2015a) and EPA (2009a) guidance. The hierarchy of sources is as follows:

- California EPA's (Cal/EPA's) Office of Environmental Health Hazard Assessment (Toxicity Criteria database) (OEHHA 2016);
- 2. Integrated Risk Information System (IRIS) database (EPA 2016b);
- 3. EPA's Provisional Peer Reviewed Toxicity Values;
- ATSDR; and
- 5. EPA's Health Effects Assessment Summary Tables.

The toxicity values used are integrated in DTSC- and EPA-calculated risk based screening levels. The tables included in Appendix B contain the toxicity values used by these respective agencies in the calculation of the residential RBSLs.

All radionuclides are considered to be carcinogenic and toxicity values are based only on carcinogenic potential. The units for radionuclide toxicity values are expressed as risk/pCi rather than mass per body weight because body weight is not included in the assessment of radionuclide risk. Table 21 lists the toxicity value used for Sr-90 in the calculation of a RBSL.

Isotope Inhalation (risk/pCi) External Exposure (risk/year per pCi/g) Ingestion (risk/pCi) Sr-90+D 4.33 x 10<sup>-10</sup> 1.95 x 10<sup>-8</sup> 1.35 x 10<sup>-10</sup>

**Table 21 Toxicity Values for Strontium-90** 

Some chemicals have not been shown to have carcinogenic effects and different toxicity values are used to assess health effects of these chemicals. Non-carcinogenic health effects are evaluated using reference doses (RfD) and reference concentrations (RfC) developed by EPA and reference exposure levels (REL) developed by Cal/EPA. The RfDs, RfCs, and RELS are health-based criteria based on the assumption that a threshold exists for non-carcinogenic toxic effects (e.g., liver or kidney damage). In general, the RfD, RfC, or REL is an estimate (with uncertainty spanning perhaps an order of magnitude) of a daily exposure to the human population (including sensitive subgroups) that is likely to be without an appreciable risk of deleterious effects during a lifetime of exposure (EPA 1989). RfDs and oral RELs are expressed as acceptable daily doses in mg/kg-day, while RfCs are expressed as acceptable exposure concentrations in units of mg/m³.

The RfDs, RfCs, and RELs are obtained from Cal/EPA and IRIS, based on the hierarchy identified in DTSC (2015a) and EPA (2015) guidance. Again, toxicity values are included in the risk-based concentrations calculated by DTSC and EPA and are listed in those tables, included as Appendix B.

#### 9.5.5 Risk Characterization

Risk characterization integrates the exposure assessment and chemical toxicity information to quantitatively estimate potential health risks due to COPCs. In a risk characterization, risk estimates are determined for each COPC based on the potentially complete pathways, and results are summed across

all COPCs. In this report, Sr-90 was the only COPC detected in any sample above background levels. Sr-90 therefore represents the only potential risk factor to be characterized.

Risk probabilities can be compared with the generally acceptable risk range specified by EPA. According to the revised National Contingency Plan, carcinogenic risks from exposures at Superfund sites are considered to be unacceptable at a level greater than  $1 \times 10^{-4}$  (1 in 10,000), whereas risks less than  $1 \times 10^{-6}$  (1 in 1,000,000) are considered to be acceptable. Action may not be necessary in the risk range of  $10^{-6}$  to  $10^{-4}$ . This statement is supported in the directive "Role of the Baseline Risk Assessment in Superfund Remedy Selection Decisions" (EPA 1991b), which indicates action is generally warranted at a site when the cumulative carcinogenic risk for any medium is greater than  $10^{-4}$  or the cumulative non-carcinogenic HI exceeds 1. In general, a potential excess individual lifetime cancer risk of  $1 \times 10^{-6}$  is used by EPA and DTSC as a "point of departure" when determining whether chemical exposures represent a potentially unacceptable level of risk to public health. This range of potentially acceptable risks helps put the numerical risk estimate into perspective.

Hazards associated with noncarcinogenic effects can be similarly estimated as hazard indices. However, Sr-90 is not assessed for noncarcinogenic effects and hazard indices are therefore not presented in this Technical Memorandum.

As described in Section 6.2.2 of Appendix A, the Sr-90 concentrations for all of the samples ranged between < 0.074 pCi/g to 0.182 pCi/g, and the mean Sr-90 concentration for all of the soil samples is 0.0817 pCi/g. The highest concentration of Sr-90 detected in the soil samples collected by Tetra Tech (which was also the only detection that exceeded background levels) was 0.182 pCi/g. At a concentration of 0.182 pCi/g, Sr-90 is associated with a risk to a residential receptor of .043 x 10<sup>-6</sup> (4 in 100,000,000), well below the level of significance per EPA or DTSC. This risk incorporates exposure through soil ingestion, inhalation of particulates, and external exposure. It represents the incremental lifetime risk of cancer to an individual exposed to that concentration for 350 days per year for 26 years. It includes the exposure of a child for 6 years and an adult for 20 years. These exposure assumptions are at the high end of potential exposures for residents and greatly exceed the exposures of campers and counselors. The estimated risk is, therefore, highly conservative and is likely a significant overestimate of potential risk to BBC residents, campers, counselors, CITs, visitors, and other site users.

It should also be noted that the concentration assessed, 0.182 pCi/g, may still be at background levels even though it was retained as a COPC. As described in Section 4.0, the Look-up table values used to evaluate whether radionuclides are above background are dependent on the precision reported by the laboratory. The precision varies and can change the calculated upper limit of background values for a given dataset depending on the laboratory used for the soil analysis.

In addition, Sr-90 was detected only once, but the risk evaluation assumes that a person would be consistently exposed to this concentration for a 26-year duration, which is unlikely, especially as it was detected in a drainage sample rather than an area of regular, daily contact. This conservative assumption is made for the purposes of estimating an upper-bound risk, but it ignores that 17 other site samples did not report a detection of Sr-90. If these samples were averaged to provide a more typical long-term EPC, the risks would be significantly lower than  $0.043 \times 10^{-6}$ .

# 10.0 CONCLUSIONS

Numerous investigations have been conducted at the SSFL and associated off-site areas over the past three decades. Tetra Tech conducted a comprehensive literature review on all available information and environmental investigations conducted on the BBC and at SSFL and associated off-site areas since 1992. These studies consistently concluded that environmental conditions at BBC posed no risk to users of the site. Tetra Tech then conducted a critical evaluation of the existing studies to identify any additional testing protocols that might augment the work that had already done. Based on that analysis, Tetra Tech recommended, and subsequently performed in 2016, both a continuous gamma radiation survey and soil sampling on the BBC property.

The mobile GPS-based gamma radiation survey, a technology not available when previous investigations were conducted, was performed over the entirety of the camp area as well as in the drainage areas leading from the Northern Buffer Zone toward the center of the BBC property. This survey showed no statistically significant difference in gamma radiation readings compared with background levels (or naturally occurring levels). Soil samples taken from the primary usage areas and the drainage areas were also tested for a suite of radiological and chemical analytes. Strontium-90 (Sr-90), a radionuclide that has become ubiquitous in soil globally due to atmospheric nuclear weapons testing fallout, was detected at an average concentration of 0.0817 pCi/g, with a range from non-detect (<0.075 pCi/g) to 0.182 pCi/g. Tetra Tech evaluated the risk to campers and other site users based on a series of highly conservative assumptions, including that the highest detected concentration of Sr-90 represented all soil on the property. This analysis concluded that the risk to human health caused by Sr-90 (.043 in 1,000,000 excess cancer risk) is less than one-twentieth the risk level that DTSC and EPA consider acceptable (1 in 1,000,000 excess cancer risk). All other analytes tested were found to be below background levels.

Tetra Tech's risk evaluation is consistent with previously conducted risk assessments for off-site areas that found no appreciable risks at the BBC through soil exposure pathways. It demonstrates that human health risks associated with BBC soils are well below levels of concern and are consistent with background levels. The 2016 risk evaluation and comparative background analysis of all available site data indicate that the environmental and radiological conditions at the BBC pose no unacceptable human health risk to campers, camp counselors, visitors, or residents at the site.

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# APPENDIX A

RADIOLOGICAL AND SOIL INVESTIGATION REPORT

## Radiological and Soil Investigation Report for the American Jewish University Brandeis-Bardin Campus at Simi Valley, California

## **April 2016**

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## LIST OF ATTACHMENTS

Attachment A	Survey and Soil Sampling Standard Operating Procedures
Attachment B	Calibration Documentation for Radiation Instrumentation Used in BBC Gamma Survey
Attachment C	Gamma Radiation Survey QA/QC Results and Data Validation Summary Report
Attachment D	Scanned Copy of the Field Logbook
Attachment E	Photographic Log
Attachment F	Raw Gamma Radiation Data Maps
Attachment G	Laboratory Reports
Attachment H	ProUCL Statistical Analysis Output

#### 1.0 INTRODUCTION

This technical report presents the methods and results of the radiological and soil sampling investigation conducted by Tetra Tech Inc. (Tetra Tech) at the American Jewish University (AJU) Brandeis-Bardin Campus (BBC) property in Simi Valley, California. The following subsections present the scope of work and report organization.

#### 1.1 Scope of Work

The purpose of this investigation was to assess the environmental and radiological conditions at the BBC site relative to background. Following a review and analysis of prior BBC studies dating back to 1992, Tetra Tech recommended the further site testing described below to verify and enhance existing information about the environmental condition of the BBC. The investigation was focused on areas where the potential for contaminant migration from the nearby Santa Susana Field Laboratory (SSFL) may exist (such as drainages leading from the SSFL) and within areas where campers are most likely to be spend their time. This investigation included the following:

- Mobile GPS-based gamma radiation surveys at areas within the BBC and at identified radiological background reference areas (RBRA).
- A soil sampling investigation at drainages entering and passing through the BBC, within selected high use areas at the BBC, and at background reference locations identified by Tetra Tech.

#### 1.2 DATA QUALITY OBJECTIVES

Tetra Tech used the Data Quality Objectives (DQO) process to develop a sampling strategy to satisfy the objectives of the BBC radiological and soil investigation program. The DQO process involves seven steps discussed in the U.S. Environmental Protection Agency (EPA) *Guidance for the Data Quality Objectives Process* (EPA 1994). Figure 1 is a flowchart of the DQO process. The DQO process provides a useful framework for planning and implementing the monitoring and data collection program. The DQO process is a systematic data collection planning process developed by EPA to ensure the right type, quality, and quantity of data are collected to support decision making (EPA 1994). DQOs are qualitative and quantitative statements to fulfill the following objectives:

- 1. Clarify the study objectives.
- 2. Define the most appropriate data to collect.
- 3. Determine the most appropriate conditions for collecting the data.
- 4. Specify acceptable levels of decision errors to be used as the basis for establishing the quantity and quality of data needed to support the decision.

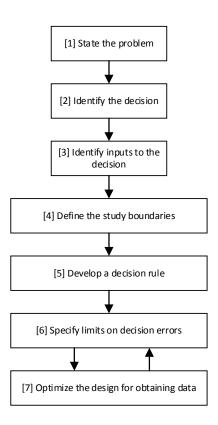


Figure 1 DQO Process Flow Chart

Application of the DQO process to this investigation involved the following six steps:

- STEP 1: State the problem SSFL operations may have resulted in residual radiation and soil contamination at the BBC property. The property is currently in use by the public, including camping in some open areas.
- STEP 2: Identify the decision Determine whether levels of residual contamination meet the criteria for human health based on current site use and/or background.
- STEP 3: Identify inputs to the decision Concentrations of applicable radionuclides, metals, and perchlorate in soil (Gamma exposure rate scanning data and soil sample analysis data).
- STEP 4: Define the study boundaries Study boundaries include the BBC high use areas where campers spend the majority of their time, drainages leading into and flowing through the site, and background reference areas identified by Tetra Tech.
- STEP 5: Develop a decision rule If concentrations of applicable radionuclides in soil meet human health risk assessment criteria based on current site uses or are within background levels, there is no unacceptable risk to human health.
- STEP 6: Specify the limits on decision errors A systematic grid based approach for gamma radiation survey transects was used. Additionally, soil sampling was performed at camp areas and at drainages.

The DQO process is iterative. A seventh step in the process is to evaluate the information from the previous steps and optimize the study design for obtaining the data.

#### 1.3 REPORT ORGANIZATION

This report is organized into seven sections including the following:

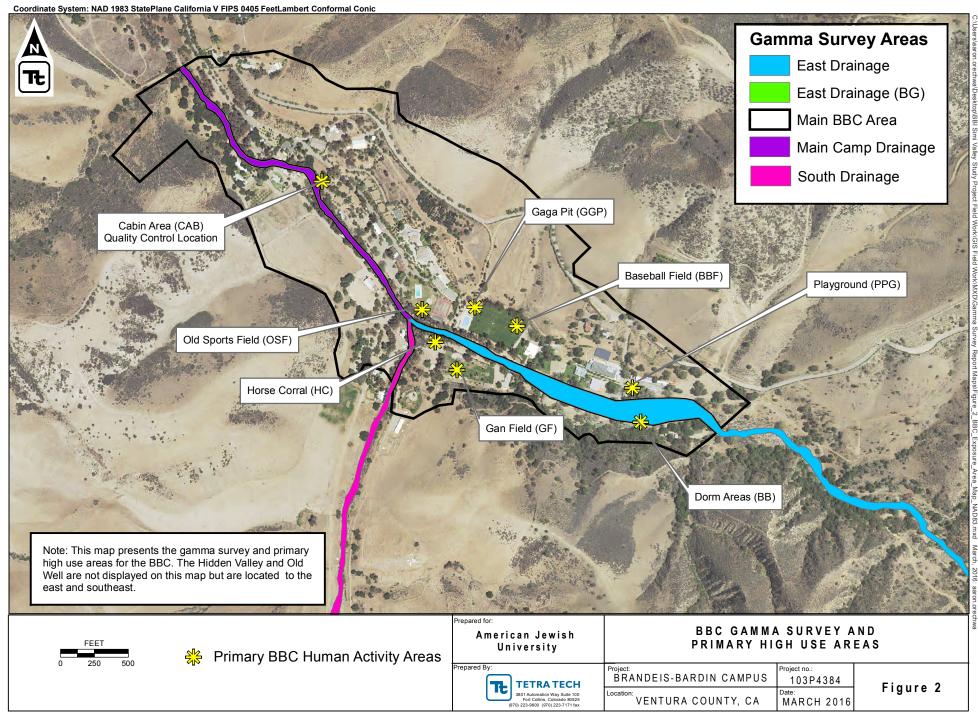
- **Section 2.0, Site Background**, provides a brief summary of the environmental setting and describes the area investigated.
- Section 3.0, Methods, discusses the various investigation activities.
- Section 4.0, Overview of Background Reference Area Selection and Results, discusses the
  selection process used to identify and survey/sample background reference areas, including
  results of the gamma radiation survey within the background reference areas.
- Section 5.0, Gamma Radiation Survey Results, presents the results of the gamma radiation survey within the BBC property and the drainages entering and flowing through the BBC property.
- **Section 6.0, Soil Sampling Investigation Results,** summarizes the overall results and transmits the soil sampling laboratory analysis results.
- Section 7.0, Comparative Background Gamma Analysis, presents a comparison of reference and site data.
- Section 8.0, Conclusions, summarizes the overall results of the investigation.
- Section 9.0, References.

3

#### 2.0 SITE BACKGROUND

The BBC property is located in the Simi Valley, California, northwest of the Santa Susana Field Laboratory. Figure 2 shows the gamma survey and areas of highest use at the BBC. A number of environmental and radiological investigations have previously been conducted at the BBC. The most comprehensive investigations to date at the BBC include the 1992 and 1994 field investigations by Rocketdyne under oversight by EPA (McLaren-Hart 1993; 1995). Limited gamma exposure rate measurements have been collected at the BBC. Based on review of McLaren-Hart (1993, 1995) studies, it was concluded that a site assessment would benefit from additional gamma survey work, particularly because more precise surveying technology has been developed since the McLaren-Hart study time period. Furthermore, the information available lacked clear methods and quality assurance/quality control (QA/QC) results, making it difficult to validate the data presented. Additionally, the radiation levels were measured at static locations on a random grid sampling pattern. Newer technologies that were not available at the time of the McLaren-Hart studies have integrated mobile sensors with positioning systems. These new systems allow for greater data acquisition in a more efficient manner through continuous gamma scanning, rather than discrete gamma measurements at set intervals. Tetra Tech recommended conducting a comprehensive continuous gamma radiation survey as described in the main text of the Technical Memorandum. A conventional gamma scan to acquire data at each study area was employed using a mobile scanning system with integrated global positioning systems. Scanning refers to a portable mobile radiation detection system moved across the surface of the study area at a specified density, with the intent of identifying anomalies of the radiation field within the BBC property compared with background reference areas.

Under EPA oversight, multi-media investigations were performed at the BBC in 1992 and 1994 (McLaren-Hart 1993, 1995) involving sediment and soil sampling throughout the BBC property. Samples were analyzed for selected radionuclides and non-radionuclide analytes. A review of the historical data collected at the BBC is presented in the main text of the Technical Memorandum. Tetra Tech collected soil samples as part of this investigation to provide an independent analysis of the radiological and environmental conditions at the BBC property, particularly focused on main areas of interest within the BBC camp where residents and campers spend the majority of their time. The following section discusses the field investigation methods.



#### 3.0 METHODS

This section describes the radiological field survey and soil sampling investigation methods performed by Tetra Tech in February 2016.

#### 3.1 RADIOLOGICAL FIELD SURVEYS

This section presents the purpose, methods, and quality assurance/quality control procedures associated with the radiological field surveys conducted by Tetra Tech.

#### 3.1.1 Purpose

Gamma radiation surveys are non-destructive methods of analysis that can be applicable as a screening and radionuclide-specific methodology and can be used as part of the baseline data collection process (EPA 2006) or for assessment of radiological anomalies or identifying potential contamination areas. On open ground, about two-thirds of the gamma radiation dose comes from radionuclides contained in the top 15 centimeters (cm) of soil (NRC 1994). Radionuclides found in the terrestrial environment can be natural or man-made. Soils and rock exhibit differing levels of radioactivity, depending on concentrations of naturally occurring potassium, uranium, thorium, and radium. Anthropogenic events, such as nuclear weapons testing and the recent Fukushima disaster, have spread detectable concentrations of radionuclides across the globe. The use of Global Positioning System (GPS)-based gamma radiation survey systems (both in situ spectroscopy and total gamma count) is an established methodology for characterizing the spatial distribution of gamma radiation from naturally occurring radioactive materials [NORM] (Whicker and others 2015) and man-man made radionuclides in soils (HGL 2012).

The spatial variability of gamma exposure rates at a particular site provides a better measure of the variation of radionuclide activity in soil for that particular site. The goal of the continuous gamma radiation survey was to characterize the spatial distribution of gamma radiation emanating from surface soils within the BBC, at drainages entering and draining through the BBC property, and at background reference areas. Additionally, the gamma data can then be used to predict the effective dose rates from the surface soils using cross calibration and correlation methods. There are two primary purposes of this survey:

- 1. Identify the spatial distribution of gamma radiation emanating from the terrestrial environment at the BBC, drainages, and background reference areas.
- 2. Utilize the data collected to guide soil sampling to determine the concentration of manmade radionuclide present in surface soils at the BBC and drainages.

Tetra Tech conducted a continuous gamma radiation survey at the BBC property and at various background areas following the methods outlined in Section 3.1.2. The gamma radiation survey QA/QC methods are presented in Section 3.1.4.

#### 3.1.2 Gamma Radiation Survey Method

Tetra Tech performed a comprehensive continuous gamma radiation survey within the BBC and drainages and at five background reference areas. The gamma radiation survey was performed in accordance with Standard Operating Procedure (SOP) 1, Mobile Gamma Radiation Surveying, included in Attachment A. Tetra Tech used mobile backpack scanning systems consisting of non-collimated 2-inch by 2-inch Ludlum 44-10 thallium laced sodium iodide (NaI(TI)) scintillation detectors coupled to Ludlum 2350-1 data loggers

and a portable GPS. The mobile gamma survey systems consisted of GPS receivers and gamma radiation detectors along with proprietary software developed by Tetra Tech (2006) installed on field laptop computers. The survey was conducted in a manner allowing for rapid gamma exposure rate scanning and simultaneous geospatial data acquisition; paired data were recorded once every 1 to 2 seconds. The GPS systems used the Wide Area Augmentation System (WAAS), providing GPS signal correction to enhance position accuracy within ±2 meters. All of the instruments used during the gamma scan survey were factory-calibrated within the manufacturer-recommended 12-month period, as discussed further in Section 3.1.4. A scanning rate of 0.5 meters per second (m/s) (about 1 mph) is used for distributed gamma emitting constituents (NRC 2000). A detector height of 1 meter (m) above ground surface was used for this study as recommended for baseline radiological studies (OSD 2012; EPA 1999) and used in other projects (ERG 2009a, 2009b; Tetra Tech 2010).

All measurement data were automatically stored and processed with the measurement location information for mapping and real-time analysis by field engineers. Real-time mapping allows the field engineer to maintain position on pre-determined scan transect lines and to help identify any problems that arise during the scanning efforts. The gamma radiation survey was performed on initial scan transects of 30-m spacing within the BBC and background areas and on 2-m spacing through the sediment drainage areas. Nal(Tl) detector systems exhibit energy-dependent response characteristics as shown in Figure 3; the radiation energy spectrum associated with background radiation from soils found at sites contaminated with man-made radionuclides such as cesium-137 (Cs-137) or with naturally occurring radionuclides can be adequately characterized for the purposes set forth in this investigation using these systems. Tetra Tech's experience at similar sites indicates that Nal(Tl) detector response to significant above-background gamma radiation sources near the ground surface ranges horizontally to about 1.5 m, giving the detector an estimated ground surface field of view about 3 m in diameter.

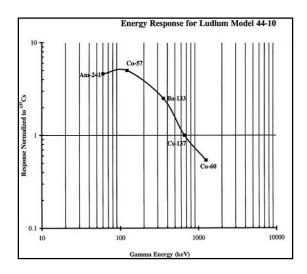


Figure 3 Energy Response for Ludlum Model 44-10 with Cesium-137 Source

The Ludlum 2350-1 data logger system employs a calibration factor to internally convert detector counts per minute to exposure rate. The calculated exposure rate, directly proportional to the measured count rate, is transmitted by the data logger to the scanning system portable computer. No record of count rate is retained by the system, but count rate can be back-calculated using the instrument-specific calibration factor. The results of the gamma radiation survey within the background reference areas and BBC/drainage areas are presented in Section 4.0 and Section 5.0, respectively.

#### 3.1.3 Geospatial Mapping Methods

Geostatistical methods are powerful tools for mapping spatial data and providing interpolation between existing data points and are commonly used in geographic, geological, and environmental sciences as outlined in Journel et al. (1978), David (1977), and Verly et al. (1984). More specifically, geospatial analysis kriging techniques applied to radiological survey data are discussed in Whicker et al. (2008). For the purposes of the BBC radiological study, kriging was used to interpolate the gamma radiation point data. Kriging is a geostatistical method utilizing the statistical properties of the measured points. Kriging is the method of geospatial interpolation used for this project. There are three types of kriging: ordinary, simple, and universal. The kriging results are displayed on a grid or mesh and provide detailed informative characterizations of radiological parameters across the entire BBC survey areas. Tetra Tech utilized ArcGIS© Geostatistical Analyst to perform all analyses on the radiological. The exploratory spatial data analysis tools contained within ArcGIS© Geostatistical Analyst, allows the engineer to visualize and explore the data sets using statistical methods to best determine which model and parameters most accurately represent the data. Multiple kriging scenarios were evaluated for the BBC survey areas and the best method was selected based on a number of criteria prior to final model selection. The gamma radiation survey maps for this project are kriged maps.

#### 3.1.4 Radiological Investigation QA/QC Methods

Tetra Tech adhered to strict QA/QC protocols in conducting the gamma radiation surveys in this investigation. QA includes qualitative factors that provide confidence in the results, while QC involves quantitative field evidence that supports the validity of results. Tetra Tech used data quality indicators as recommended in Multi-Agency Radiological Survey Site Investigation Manual (MARSSIM) (NRC 2000) and Multi-Agency Radiological Laboratory Analytical Protocols Manual (MARLAP) (NRC 2004) where possible to ensure the data being collected are reliable. All of the radiation detection instruments employed during the field work were factory calibrated within the previous 12 months. Data developed with the field-qualified instruments are then interchangeable, allowing instrument substitution when needed. Copies of factory calibration documentation for the three detectors used during the survey are provided in Attachment B. Under the QC program, factory-calibrated instruments were required to meet on-site field test criteria (for example, calibration checks). Tetra Tech field personnel collected quantitative measurements as part of the QC program, including:

- 1. Pre-survey and post-survey field instrument calibration checks.
- 2. Field instrument checks performed beginning of each day, middle of day, and end of day including: background, field strip, Cs-137 source check.

Detailed descriptions of the QA/QC procedures and project QC requirements are provided in Attachment C. Additionally, the results of the gamma radiation survey and data validation review are presented in Attachment C.

#### 3.2 SOIL SAMPLING INVESTIGATION

#### 3.2.1 Purpose

The purpose of the soil sampling was to collect information on the existing radiological and chemical conditions within the drainages and high use areas of the BBC. The gamma radiation survey provides information on gamma emitting radionuclides in the terrestrial environment but does not specify which

radionuclides are present (man-made or naturally occurring) and to what extent. The surveys also do not provide information on radionuclides, such as strontium-90 (Sr-90), that are undetectable within the field gamma scanning detection systems. Laboratory analysis of soil samples can provide this information, and this sampling was conducted as part of this study.

#### 3.2.2 Soil Investigation Methods

All surface sediment and soil samples were collected at a depth of 0 to 15 cm below ground surface (bgs). The sediment and soil sampling was conducted in accordance with SOP 2, Soil Sampling, included in Attachment A. Sample locations were identified by field engineers based on a risk assessment interview with camp personnel (Tetra Tech 2016) to select strategic locations based on camper and residence activities. Soil samples were also collected within the drainages upstream of the BBC. Discrete samples were collected at all of the locations. Soil samples were submitted to an accredited laboratory for analysis [ALS Laboratories, Fort Collins, Colorado]. All soil samples were submitted for the laboratory analytical procedures and minimum detection limits specified in Table 1. The QA/QC methods and data validation project criteria for the soil investigation program are presented in Section 3.2.3 and in SOP 2. A scanned copy of the field logbook is provided in Attachment D. A photographic log showing the gamma radiation survey field activities is provided in Attachment E.

**Table 1 Summary of Laboratory Analytical Methods and Detection Limits** 

<u> </u>			
Analyte	Laboratory MDC¹/(Reporting Limit)	Method	
Cesium-137	0.1 pCi/g <sup>2</sup>	EPA 901.1 M	
Strontium-90	0.25 pCi/g	ASTM D5811	
Mercury	3.6 μg/kg³ (33.3 μg/kg)	EPA SW 7471A	
Metals (TAL <sup>4</sup> )	varies	EPA SW 6020	
Perchlorate	20 μg/kg	EPA 314.0	

<sup>&</sup>lt;sup>1</sup>MDC = minimum detectable concentration. Varies by method and sample. May be lower than specified in this table.

#### 3.2.3 Soil Investigation QA/QC Methods

Tetra Tech followed the QA/QC procedures presented in SOP 2, Soil Sampling, in Attachment A. Field duplicate samples were collected as part of the QC program. A field duplicate is defined as a second sample from the same location, collected in immediate succession, using identical techniques; these samples were submitted to the laboratory to quantify precision and bias. One field duplicate was submitted for every 20 primary samples. Data validation testing, including evaluation of precision and QA acceptance criteria for the soil investigation program, is described in SOP 2, Soil Sampling, in Attachment A.

<sup>&</sup>lt;sup>2</sup>pCi/g = picocuries per gram

<sup>&</sup>lt;sup>2</sup>µg/kg = micrograms per kilogram

<sup>&</sup>lt;sup>4</sup>TAL = target analyte list. Includes 23 metals with varying MDCs

# 4.0 OVERVIEW OF BACKGROUND REFERENCE AREA SELECTION AND RESULTS

This section presents an overview of the selection process used by Tetra Tech to identify appropriate background reference areas from unimpacted sites for comparison with data collected on site at the BBC. The results of the gamma radiation surveys at the background reference areas are presented in this section.

#### 4.1 OVERVIEW

Background ionizing radiation consists of four major sources: terrestrial, cosmic, cosmogenic, and man-made. Terrestrial radiation produces the largest dose to people living in the United States. The remaining three components are relatively minor contributors to the dose from background at sea level compared with terrestrial radiation (NRC 1994). Virtually all materials found in nature have some natural radioactivity. Rocks, soil, water, plants, and animal life all have varying degree of terrestrial radionuclides (NRC 1994). The most significant of these are naturally occurring (such as uranium, thorium, and potassium). Nuclear reactors and weapons have produced large quantities of radionuclides through the fissioning of uranium and other heavy elements and the activation of various elements. It is well documented that Cs-137 and Sr-90 were deposited throughout the globe as a result of nuclear weapons tests conducted in the atmosphere.

A number of investigations have been performed to date to establish a local baseline or background reference data values for comparison to the SSFL and adjacent off-site areas. Background soil data were collected and evaluated by McLaren-Hart on behalf of the U.S. EPA Region 9 in both 1992 and 1994, as summarized in McLaren-Hart (1993, 1995). The data from these two investigative efforts were evaluated, reviewed, validated, and summarized in the Site Inspection Report prepared for the EPA and described in Weston (2003). The most extensive radiological characterization study to date of the SSFL at Area IV and the Northern Buffer Zone was conducted by HydroGeoLogic Inc. (HGL) in 2011 for the EPA. The results of this study are presented in HGL (2011). HGL identified Radiological Background Reference Areas (RBRA) at unimpacted locations 3 to 6 miles outside the SSFL boundary. These areas were surveyed for gamma radiation and soil radionuclide concentrations. Surface and subsurface soil samples were collected at three RBRAs for the primary background study (HGL 2011). Two of these RBRAs overlie the Chatsworth geologic formation (Lang Ranch and Rocky Peak), and one overlies the Santa Susana formation (Bridle Path).

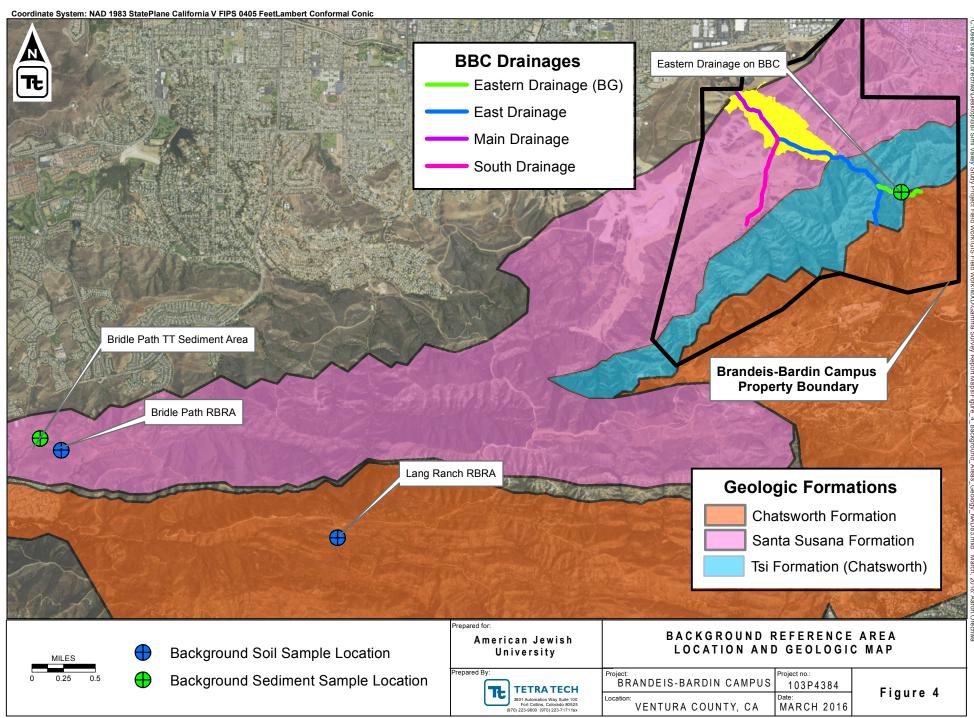
Differences in the distribution of both naturally occurring and man-made gamma-emitting radionuclides within the terrestrial environment (such as in soil) can be found across sites locally and across the U.S. The concentrations of terrestrial radionuclides vary from place to place in much the same way that mineral deposits can be expected to vary from geologic processes over time; the variation in total gamma radiation levels among sites relates directly to the concentrations of principal gamma-emitting radionuclides in the local soil (NRC 1994). Background radiation levels should be established from appropriate background reference areas and include assessment of exposure rates in various media (Abelquist 2001). The selection of the reference areas is an important factor that must be considered when comparing on-site BBC radiation values that could be affected by anthropogenic activities, including the historical activities at the SSFL.

Tetra Tech conducted a background study at a number of locations using information available from previous investigations and from information collected in the field. The purpose of the Tetra Tech background investigation was to collect individual data sets of gamma exposure rates and soil concentrations from selected background reference areas and compare these data to the data collected within the BBC and drainages. Tetra Tech designed the background study to incorporate the EPA identified background areas as well as selecting additional background reference areas within specified unimpacted drainages for comparison. A total of five background reference areas from two primary sources were evaluated as part of this investigation: (1) RBRAs from the U.S. EPA background study in HGL (2011), and (2) locations identified by Tetra Tech field engineers. An objective of this background field investigation was to evaluate the potential that radioactive and other chemical constituents were released to the BBC from SSFL-related activities at concentrations greater than background levels. The selection of unimpacted background reference areas in similar geology and soils is crucial for comparing on-site radiological measurements and radionuclide soil concentrations (and non-radionuclide) to the background reference areas. Table 2 presents the background reference areas and geologic formations underlain in each area and the surface soil types for each area. Surface soil maps were obtained from the on-line Natural Resources Conservation Service (NRCS) web soil survey program and determined for each background reference area.

Table 2 Summary Information for Selected Radiological Background Reference Areas

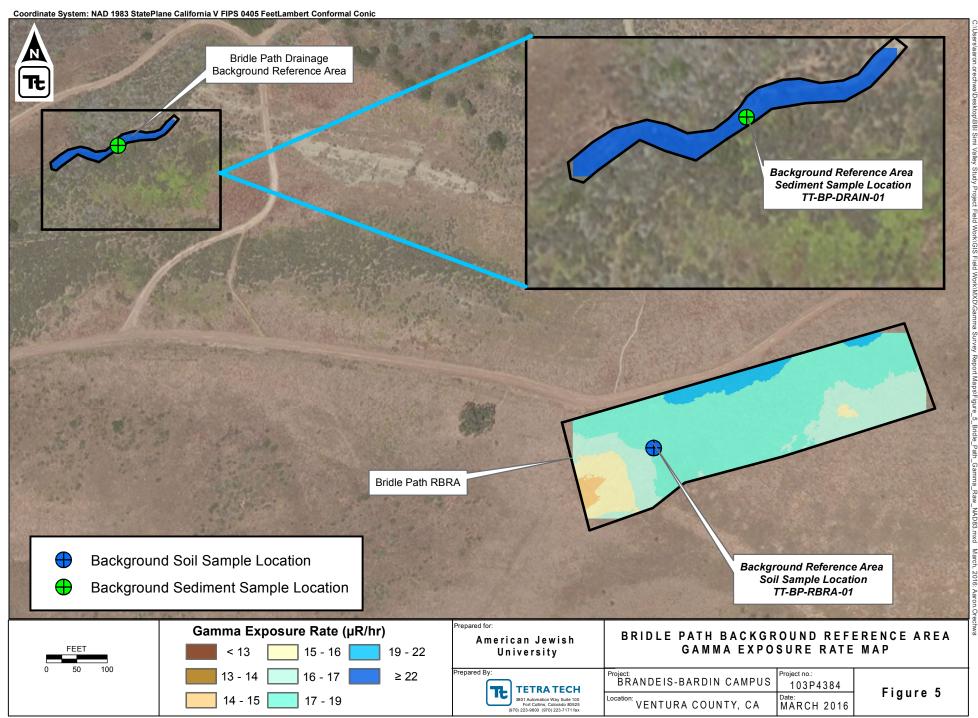
Background Reference Area ID	Geologic Formation	Surface Soil Type			
Bridle Path RBRA	Santa Susana	Castaic-Balcom complex, 30 to 50 percent slopes [CfF2]; Soper gravelly loam, 30 to 50 percent slopes, eroded [SvF2]			
Bridle Path TT Drainage Area		Castaic-Balcom complex, 30 to 50 percent slopes [CfF2]			
Lang Ranch RBRA		Botella loam, 2 to 9 percent slopes, warm MAAT, higher MA			
Eastern Drainage on BBC	Chatsworth	Cortina stony sandy loam, 2 to 9 percent slopes			

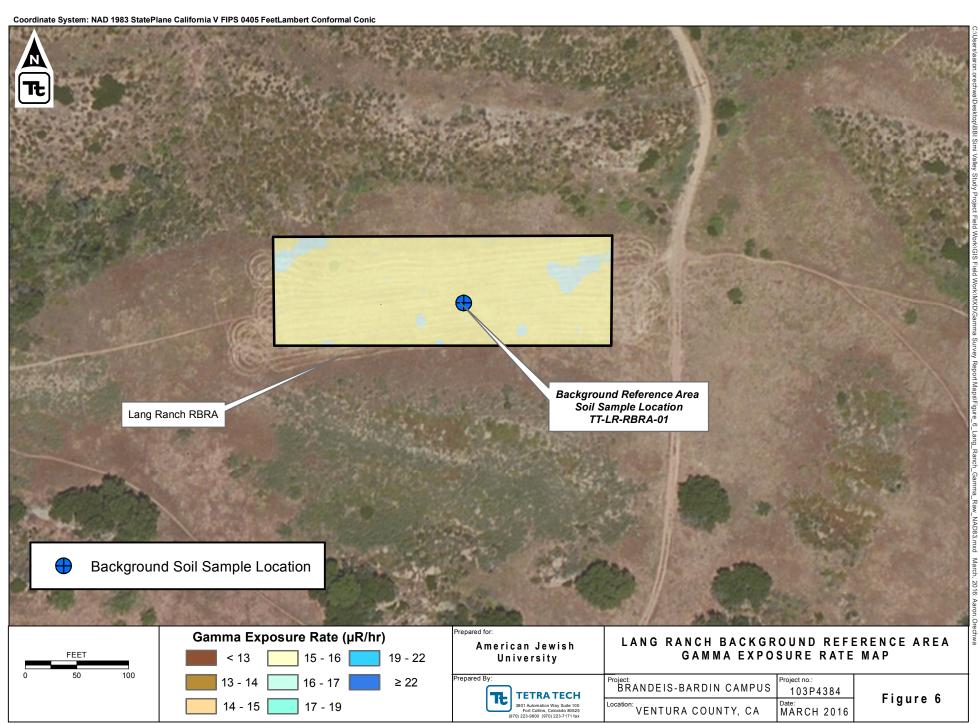
In addition to the Bridle Path RBRA identified in HGL (2011), Tetra Tech identified another area within the vicinity (less than 500 feet) of the Bridle Path RBRA as suitable background drainage reference area. This sediment drainage nearby was evaluated to provide a reference drainage to compare with the BBC drainages within the Santa Susana formation. A drainage that does not receive hydrologic inputs from the SSFL Area IV was evaluated (Eastern Drainage). The Eastern drainage falls within the Chatsworth formation. The sediment and soil background reference area data were compared to the sediment and soil areas identified and evaluated within the BBC property.



#### 4.2 GAMMA SURVEY RESULTS IN BACKGROUND REFERENCE AREAS

Tetra Tech conducted a gamma radiation survey in the five background reference areas presented in Table 2 and Figure 4 in accordance with the methods presented in Section 3.1 and SOP 1, Mobile Gamma Radiation Surveying included in Attachment A. Field engineers collected 4,166 gamma exposure rate measurements within the five background reference areas from February 16, 2016, through February 18, 2016 (Figure 5 and Figure 6). Soil samples were also collected within Bridle Path RBRA, Bridle Path (TT-Drainage), Lang Ranch RBRA, and Eastern Drainage (BG). Soil samples were submitted for radiochemical laboratory analysis of Cs-137 and Sr-90. Prior studies have uniformly indicated that the primary radionuclides associated with the SSFL are Cs-137 and Sr-90. Furthermore, the 1992 and 1994 investigative efforts at BBC showed that other radionuclides, such as plutonium-239 (Pu-239) and cobalt-60 (Co-60), were not present above detection limits (Weston 2003). Accordingly, Pu-239 and Co-60 were not included in this investigation. The following subsections present the results of the background gamma radiation surveys for each of the background reference area evaluated. The laboratory results for the sediment and soil samples collected in the background reference areas are provided in Section 6.0.





#### 4.2.1 Bridle Path RBRA (EPA Location)

Bridle Path RBRA was selected as background reference location because it was evaluated in the HGL (2011) study and significant data are available from the previous investigative efforts. The Bridle Path RBRA is approximately 6 miles from the BBC and is underlain by the Santa Susana formation, the same geologic formation that the majority of the BBC property falls within, as shown in Figure 4. The results of the gamma radiation survey are presented graphically in Figure 5 and summarized in Table 3. A Goodness of fit test (GOF) using the EPA software, ProUCL 5.0, was used to calculate an appropriate statistical distribution that best fits the gamma exposure rate measurements collected within the Bridle Path RBRA. This information is useful when statistically comparing the data from within the BBC areas and the background reference areas evaluated during this investigation. The results of the GOF showed that the data within the Bridle Path RBRA fit a number of distributions (including normal, lognormal, and gamma). A statistical representation of the gamma exposure rates for the Bridle Path RBRA is shown in Figure 7. The probability plot and histogram show graphically how well the data fit a lognormal distribution.

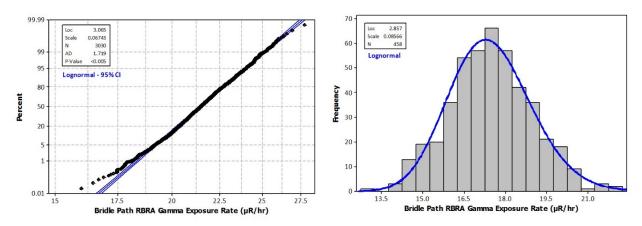


Figure 7 Probability Plot and Frequency Histogram of Bridle Path RBRA Gamma Exposure Rates

The ground cover observed during this investigation included high grass and moist soil conditions. The sampling conditions within the Bridle Path RBRA can be observed through the photographic log provided in Attachment E. The background conditions for the soil area at the Bridle Path RBRA may not reflect the radiological conditions within a drainage environment due to vegetative cover, soil moisture, and soil type. Therefore, an alternative background drainage reference area within the same geology as the Bridle Path RBRA was selected to study, as shown in Figure 4. The results of this analysis are provided in Section 4.2.3.

#### 4.2.2 Lang Ranch RBRA (EPA Location)

The Lang Ranch RBRA was selected as background reference location because it was evaluated in the HGL (2011) study and significant data are available from the previous investigation efforts. The Lang Ranch RBRA is approximately 5 miles from the BBC and is underlain by the Chatsworth formation, the same geologic formation that is the origin of the drainage channels that enter the BBC from the south, as shown in Figure 4. The results of the gamma radiation survey are presented graphically in Figure 6 and summarized in Table 3. A GOF test using the EPA software, ProUCL 5.0, was used to calculate an appropriate statistical distribution that best fits the gamma exposure rate measurements collected within the Lang Ranch RBRA. This information is useful when statistically comparing the data from within the BBC areas and the background reference areas evaluated during this investigation. The results of the GOF

showed that the data within the Lang Ranch RBRA fits a number of distributions (including normal, lognormal, and gamma). A statistical graphical representation of the gamma exposure rates for the Lang Ranch Path RBRA is shown in Figure 8. The probability plot and histogram show graphically how well the data fit a lognormal distribution.

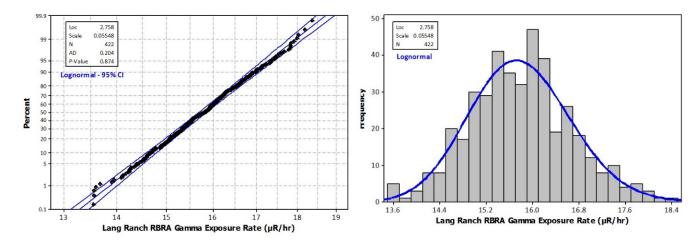


Figure 8 Probability Plot and Frequency Histogram of Lang Ranch Path RBRA Gamma Exposure Rates

The ground cover observed during this investigation included high grass and moist soil conditions. The sampling conditions within the Lang Ranch RBRA can be observed through the photographic log provided in Attachment E. The background conditions for the soil area at the Lang Ranch RBRA may not reflect the radiological conditions within a drainage environment due to vegetative cover, soil moisture, and soil type. Therefore, an alternative background drainage reference area within the same geology as the Lang Ranch RBRA was selected to study, as shown in Figure 4. The results of this analysis are provided in Section 4.2.3.

#### 4.2.3 Summary of Background Drainage Reference Areas (Tetra Tech Locations)

In addition to the two RBRAs identified in the HGL (2011) background study, Tetra Tech field engineers identified two additional background reference areas. The rationale for selecting these locations is described in Section 4.2. Two of these locations were in close proximity to, and had similar geologic and surface soil characteristics as, the Bridle Path RBRA. These locations were selected to demonstrate the variability of terrestrial radiation within just a short distance from the EPA-identified RBRAs, in addition to evaluating the radiological characteristics of drainages rather than the open soil environment. Figure 5 shows the background drainage reference area evaluated and the close proximity to the main Bridle Path RBRA evaluation area. The second background drainage reference location identified by Tetra Tech was from the Eastern Drainage (BG) entering the BBC site. This background reference area was selected because it does not receive its primary drainage flows from the known radiologically contaminated region of the SSFL referred to as Area IV. Summary statistics for the gamma radiation surveys for all of the background reference areas are presented in Table 3.

#### 4.2.3.1 Bridle Path TT-Drainage Background Reference Area (Tetra Tech Location)

The Bridle Path TT-drainage background reference area is located near Thousand Oaks, California, adjacent to the EPA-identified Bridle Path RBRA and approximately 6.4 miles from the centroid of the BBC property. This area was selected as a background reference location based on its proximity to the

EPA-identified Bridle Path RBRA and because it represents the conditions of an unimpacted drainage within the Santa Susana geologic formation. This region has been identified as unimpacted in the HGL (2011) report and fits the requirements for a background reference area well. The results of the gamma radiation survey within the Bridle Path drainage are shown on Figure 5. This background reference area exhibited gamma readings up to 38.6 microroentgens per hour ( $\mu$ r/hr), which is higher than any exposure level observed on the BBI property during this investigation. A statistical graphical summary is provided in Figure 9. The data collected within this drainage do not fall within any specified parametric distribution and follow closely to a bimodal distribution.

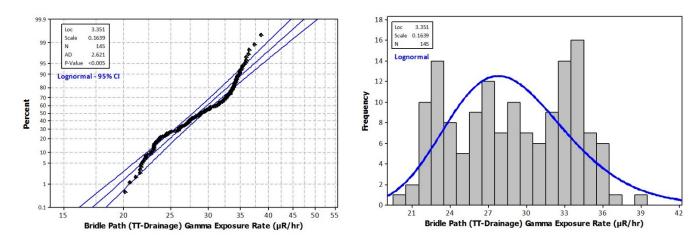


Figure 9 Probability Plot and Frequency Histogram of Bridle Path TT-Drainage Gamma Exposure Rates

#### 4.2.3.2 Eastern Drainage (BG) Background Reference Area (Tetra Tech Location)

The Eastern Drainage (BG) background reference area is a drainage entering the primary Eastern Drainage into the BBC. This area was selected as a background reference location because it represents the conditions of a channel draining the Chatsworth formation that is unimpacted from the Area IV region of the SSFL. This drainage region has been identified as hydrologically unimpacted from the SSFL's Area IV operations based on review of local flow paths obtained from the National Hydrography Dataset (NHD) from the U.S. Geological Survey (USGS) and fits the requirements for a background reference area as well. Further discussion is provided in the main text of the Technical Memorandum.

A GOF test using the EPA software, ProUCL 5.0, was used to calculate an appropriate statistical distribution that best fits the gamma exposure rate measurements collected within the Eastern Drainage background reference area. This information is useful for statistically comparing the data from within the BBC areas and the background reference areas evaluated during this investigation. The results of the GOF showed that the data within the Eastern Drainage (BG) background reference area fit a number of distributions (including normal, lognormal, and gamma). A statistical graphical representation of the gamma exposure rates for the Eastern Drainage (BG) background reference area is shown in Figure 10. The probability plot and histogram show graphically how well the data fit a lognormal distribution.

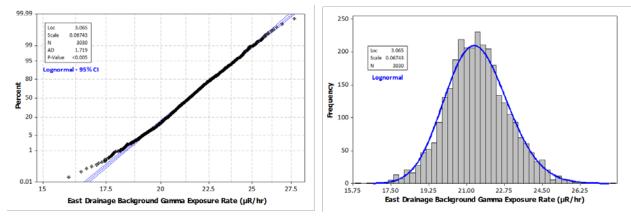


Figure 10 Probability Plot and Frequency Histogram of East Drainage Gamma Exposure Rates

#### 4.2.4 Summary of Background Drainage Reference Areas (Tetra Tech Locations)

The summary statistics of the gamma radiation surveys at the background reference areas are provided in Table 3. Figure 5 and Figure 6 depict the raw gamma exposure rates for the Bridle Path and Lang Ranch background reference areas, respectively. The gamma exposure rate measurements for the Eastern Drainage (BG) is provided in Section 5.0, given its proximity to the BBC property. A lognormal probability plot showing the multiple background reference area gamma exposure rates on one graph is provided in Figure 11. A statistical evaluation comparing the gamma exposure rates collected within the BBC main area and drainages and the gamma exposure rates collected within the background reference areas is provided in Section 7.0.

Table 3 Summary Statistics of Gamma Exposure Rate Measurements at Background Reference Areas

Background Reference Area	# of Points	Minimum (μR/hr)	Maximum (μR/hr)	Average (μR/hr)	Standard Deviation (µR/hr)	Median (μR/hr)	95 <sup>th</sup> Percentile (µR/hr)	99 <sup>th</sup> Percentile (µR/hr)
Bridle Path RBRA	458	13.1	21.9	17.5	1.5	17.5	20.0	21.3
Bridle Path (TT- Drainage)	145	20.1	38.6	28.9	4.6	28.7	35.5	36.9
Lang Ranch RBRA	422	13.5	18.4	15.8	0.9	15.8	17.3	17.9
East Drainage (BG)	3,030	16.0	27.7	21.5	1.4	21.4	24.0	25.1
All Areas	4,166	13.1	38.6	20.8	3.0	21.1	24.4	32.6

<sup>1</sup>μR/hr = microroentgen per hour

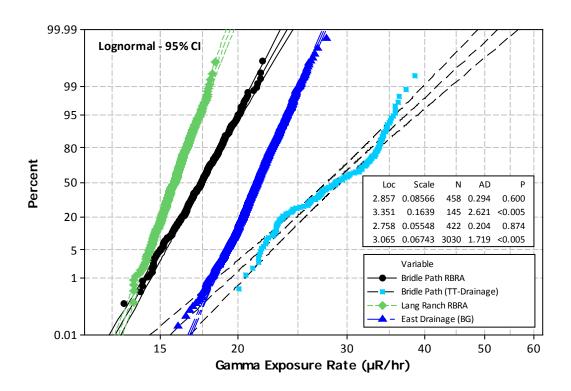


Figure 11 Bridle Path Background Reference Area Gamma Exposure Rate Map

## 5.0 GAMMA RADIATION SURVEY RESULTS

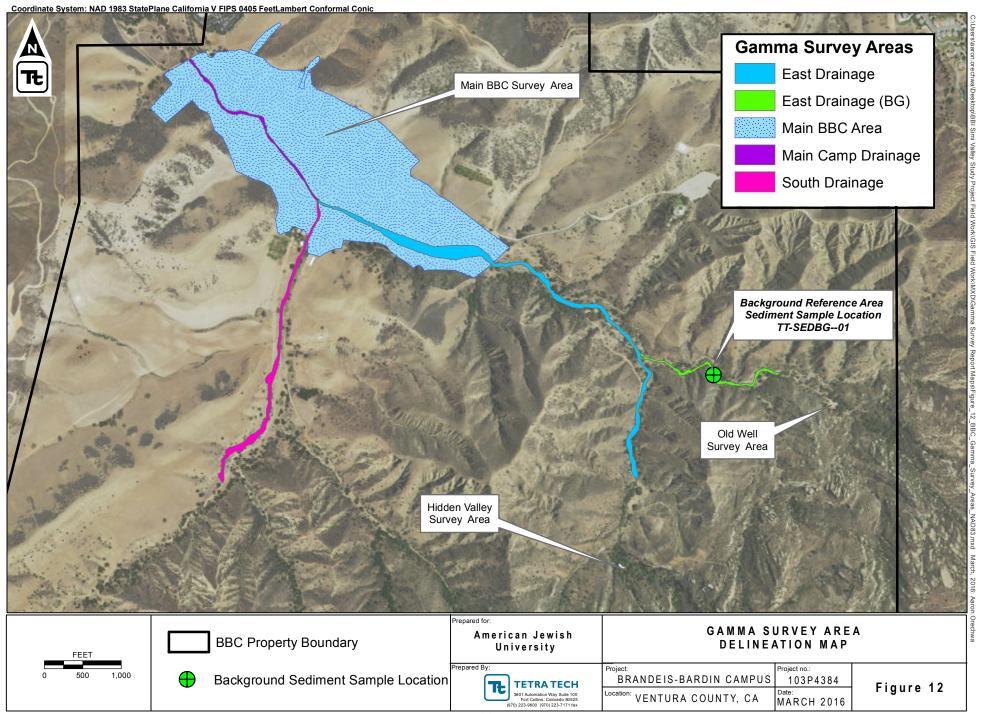
This section presents the results of the gamma radiation survey conducted by Tetra Tech field engineers the week of February 15, 2016.

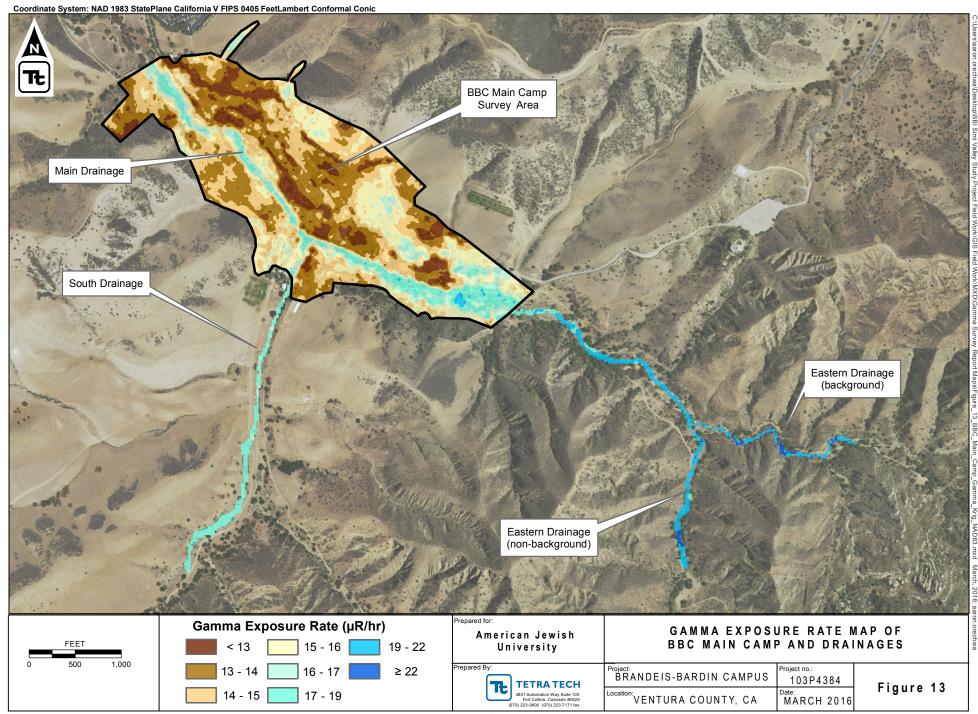
Tetra Tech conducted gamma radiation surveys at the BBC property from February 16, 2016 through February 18, 2016. The surveys were performed in accordance with the methods presented in Section 3.1 and in accordance with SOP 1, *Mobile Gamma Radiation Surveying* included in Attachment A. Field engineers collected 39,463 gamma exposure rate measurements within the six areas identified in Table 4. The gamma exposure rates ranged between  $8.2~\mu\text{R/hr}$  to  $25.5~\mu\text{R/hr}$ . The summary statistics of the gamma radiation surveys performed at these areas are also presented in Table 4. A map delineating the different survey areas is provided on Figure 12. Figure 13 provides a kriged gamma exposure rate map of the BBC main camp area and drainage survey areas. Figure 14 provides a kriged gamma exposure rate map of the Old Well and Hidden Valley survey areas. The Old Well and Hidden Valley areas were also surveyed to assess the existing radiological conditions; these areas are potential exposure centers to campers evaluated in the McLaren-Hart (1993; 1995) investigations. The raw gamma exposure rate maps are provided in Attachment F.

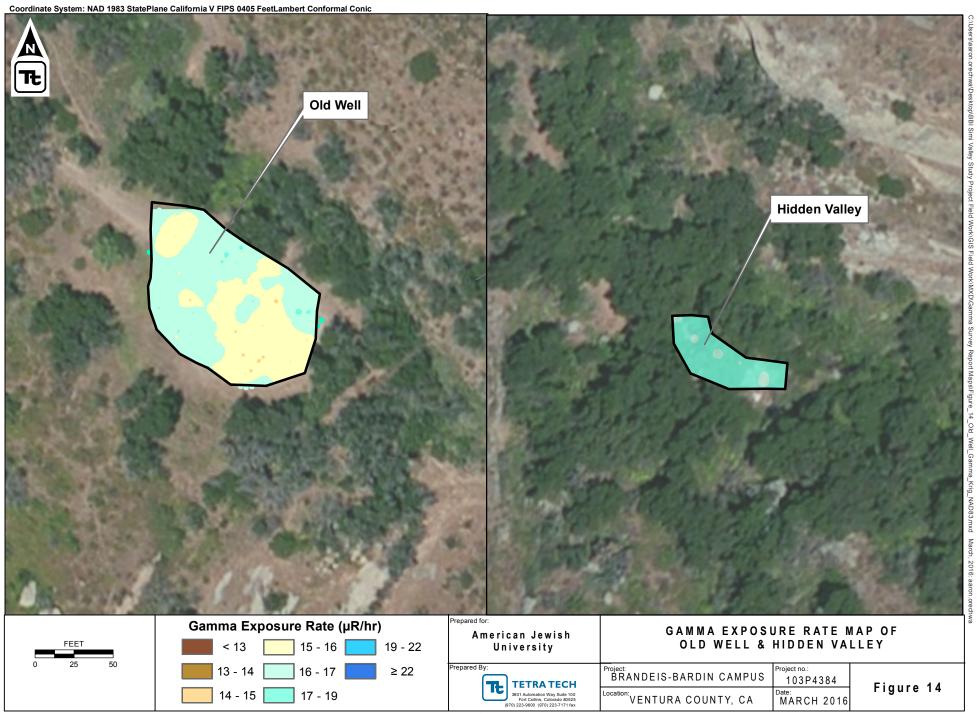
Table 4 Summary of Gamma Exposure Rate Measurements Collected at the BBC

Survey Area	Number of Points	Minimum (μR/hr)¹	Maximum (μR/hr)	Average (μR/hr)	Median (μR/hr)	Standard Deviation (µR/hr)	95 <sup>th</sup> Percentile (µR/hr)	99 <sup>th</sup> Percentile (µR/hr)
BBC Main Area	25,585	8.2	22.4	14.4	14.3	1.6	17.0	18.3
Hidden Valley	59	15.1	19.5	17.5	17.6	1.0	18.8	19.3
Old Well	124	13.7	18.5	16.1	16.1	1.0	17.7	18.1
South Drainage	4,330	13.3	22.0	17.6	17.7	1.2	19.6	20.4
Main Channel Drainage	1,681	12.2	20.5	17.2	17.3	1.2	19.1	19.7
East Channel Drainage	7,684	11.1	25.5	19.2	19.1	1.7	22.0	23.4
All Non- Background Survey Areas	39,463	8.2	25.5	15.8	15.4	2.5	20.3	22.0

<sup>1</sup>μR/hr = microroentgen per hour







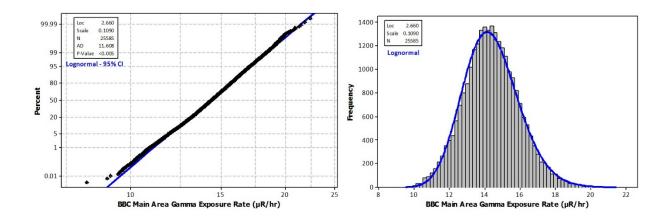


Figure 15 Probability Plot and Frequency Histogram of BBC Main Area Gamma Exposure Rates

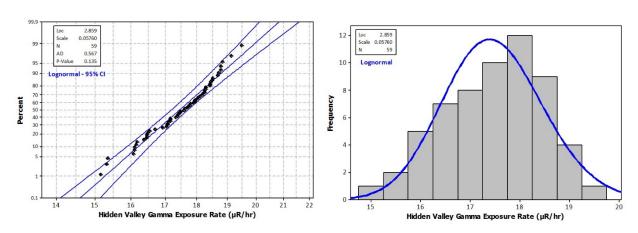


Figure 16 Probability Plot and Frequency Histogram of Hidden Valley Gamma Exposure Rates

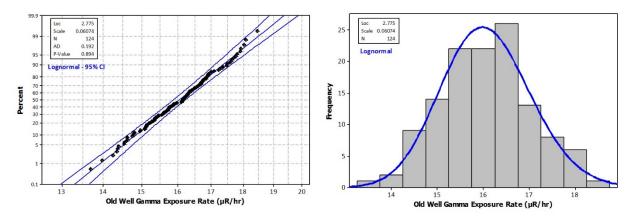


Figure 17 Probability Plot and Frequency Histogram of Old Well Gamma Exposure Rates

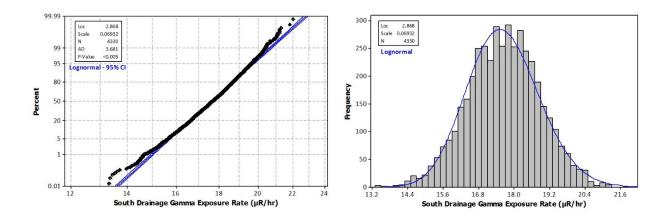


Figure 18 Probability Plot and Frequency Histogram of South Drainage Gamma Exposure Rates

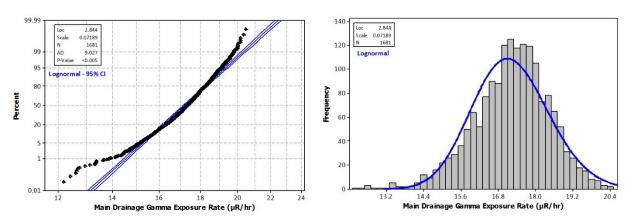


Figure 19 Probability Plot and Frequency Histogram of Main Drainage Gamma Exposure Rates

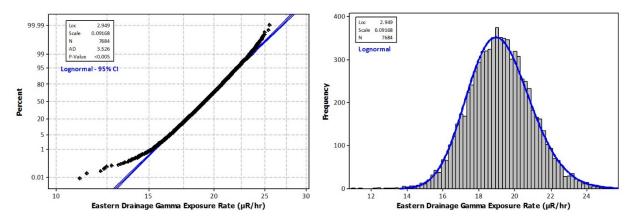


Figure 20 Probability Plot and Frequency Histogram of Eastern Drainage Gamma Exposure Rates

## 6.0 SOIL SAMPLING INVESTIGATION RESULTS

Tetra Tech collected eight drainage sediment samples (drainages were dry at the time of sample collection) and ten soil samples as part of the BBC radiological and soil investigation in accordance with the methods outlined in Section 3.2. The geology and considerations for background sediment and soil sampling are discussed in Section 4.0.

Two of the sediment samples were collected in background drainage reference areas in accordance with the sampling methods presented in Section 3.2. One background sediment sample (TT-BP-DRAINAGE-01) was collected at the background drainage adjacent to the EPA identified Bridle Path RBRA as shown on Figure 5. The other background sediment sample (TT-SEDBG-01) was collected within the Eastern Drainage (background) as shown on Figure 12. The two background soil samples were collected from the RBRAs identified in HGL (2011), one from the Bridle Path area, and one from the Lang Ranch area.

Table 5 and Table 6 provide the sample identification and geospatial information for the sediment and soil sample locations, respectively. The sediment and soil samples were submitted for laboratory analysis of radionuclides, metals, and perchlorate as presented in Table 1. Figure 21 shows the locations of the sediment and soil samples collected within the BBC main camp area and the primary drainages entering the BBC. The following subsections present the laboratory analytical results for the sediment and soil samples analyzed for Cs-137 (Section 6.1), Sr-90 (Section 6.2), (Section 6.3), and perchlorate (Section 6.4).

All sediment and soil samples were collected in accordance with the methods described in Section 3.2 and in SOP 2 in Attachment 1. A scanned copy of the field logbook is provided in Attachment D. A photographic log, which includes photos of most sampling locations, is provided in Attachment E. Laboratory analytical reports for the sediment and soil samples are provided in Attachment G.

**Table 5 Geospatial Information for Sediment Sample Locations** 

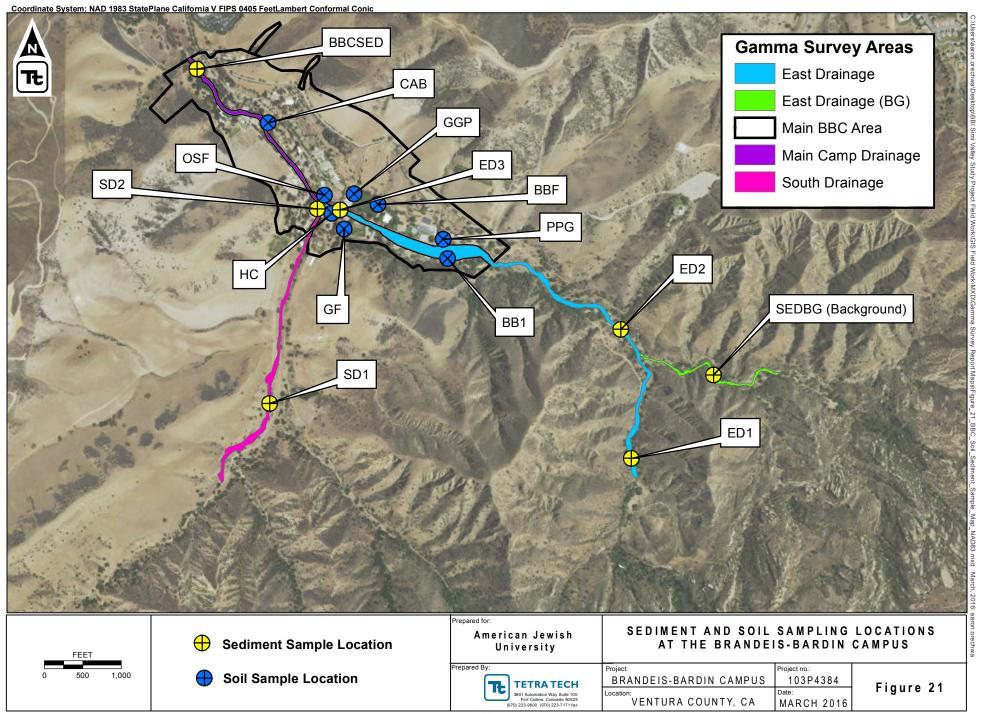
Sample ID	Background (Y/N)	QC	Latitude <sup>1</sup>	Longitude
TT-SD1-01	-	Primary	34.24957740	-118.7122916
TT-BPDRAINAGE-01	Υ	Primary	34.22185176	-118.8113390
TT-SEDBG-01	Υ	Primary	34.25070834	-118.6931649
TT-ED1-01	-	Primary	34.24770261	-118.6966891
TT-ED2-01	-	Primary	34.25230858	-118.6971849
TT-ED3-01	-	Primary	34.25652561	-118.7093089
TT-SD2-01	-	Primary	34.25742761	-118.7113001
TT-BBCSED-01	=	Primary	34.26152343	-118.7155219

 $<sup>{}^{\</sup>scriptscriptstyle 1}\!\mathsf{The}$  coordinates are provided in WGS 84.

**Table 6 Geospatial Information for Soil Sample Locations** 

Sample ID	Background (Y/N)	QC	Latitude <sup>1</sup>	Longitude
TT-BP-RBRA-01	Υ	Primary	34.220501230	-118.808406299
TT-PPG-01	=	Primary	34.255498222	-118.704861556
TT-BB1-01	=	Primary	34.254806065	-118.704658109
TT-BBF-01	-	Primary	34.256729301	-118.707671696
TT-GGP-01	=	Primary	34.257103941	-118.708705857
TT-HC-01	-	Primary	34.256395463	-118.709662709
TT-GF-01	=	Primary	34.255834150	-118.709124137
TT-GF-02	=	Duplicate	34.255834150	-118.709124137
TT-OSF-01	=	Primary	34.257047021	-118.709985644
TT-CAB-01	-	Primary	34.259619495	-118.712440820
TT-LR-RBRA-01	Υ	Primary	34.210758977	-118.770357270

<sup>&</sup>lt;sup>1</sup>The coordinates are provided in WGS 84.



#### 6.1 CESIUM-137 ANALYTICAL RESULTS

This section presents the laboratory analytical results for Cs-137 within the sediment and soil samples collected at background reference areas, within the BBC main camp area, and within the BBC drainages.

#### 6.1.1 Background Reference Area Cs-137 Sediment and Soil Sample Results

Tetra Tech collected sediment and soil samples within the background reference areas as described in Section 4.0. These samples were submitted to an accredited laboratory for analysis of Cs-137 for the methods and requested MDCs presented in Table 1. Table 7 presents the laboratory analytical results of the Cs-137 mass activity concentrations for the background reference area locations.

Table 7 Cs-137 Laboratory Results for Sediment and Soil Background Samples

			Cesium-137	'	
Sample ID	Sample Type	Result (pCi/g) <sup>1</sup>	Precision +/-	MDC <sup>2</sup>	Lab Qualifier <sup>3</sup>
TT-SEDBG1-01	Sediment	< 0.099	0.061	0.099	U
TT-BP-DRAIN-01	Sediment	0.140	0.065	0.094	G
TT-BP-RBRA-01	Soil	< 0.090	0.058	0.090	U, G
TT-LR-RBRA-01	Soil	< 0.098	0.063	0.098	U, G

<sup>&</sup>lt;sup>1</sup>pCi/g = picocuries per gram

### 6.1.2 BBC Main Camp Area and BBC Drainage Cs-137 Sediment and Soil Sample Results

Tetra Tech collected six non-background sediment samples within the primary drainages entering the BBC as shown on Figure 21. The Cs-137 laboratory analytical results for the non-background sediment samples are presented in Table 8. For comparative purposes, the background reference Cs-137 laboratory analytical results are also provided in Table 8. All six of the sediment samples were below the minimum detection concentrations (MDC) for Cs-137 by gamma spectroscopy (EPA 901.1). The maximum MDC for the sediment Cs-137 analysis results was < 0.097 picocuries per gram (pCi/g). One of the two background reference sediment samples was a non-detect (< 0.087 pCi/g); the other sample (TT-BP-DRAIN-01), had a reported value of 0.140 pCi/g with a precision of +/- 0.052 pCi/g. All of the non-background sediment samples were below the MDC and below the levels of the background drainage area reference samples.

Table 8 Cs-137 Laboratory Results for Sediment Samples

		Cesium-137					
Sample ID	Sample Area	Result (pCi/g) <sup>1</sup>	Precision +/-	MDC <sup>2</sup>	Lab Qualifier <sup>3</sup>		
TT-ED1-01	Non-Background	< 0.097	0.057	0.097	U		
TT-ED2-01	Non-Background	< 0.090	0.057	0.090	U, G		
TT-ED3-01	Non-Background	< 0.091	0.050	0.091	U, G		
TT-SD1-01	Non-Background	< 0.095	0.053	0.095	U, G		
TT-SD2-01	Non-Background	< 0.095	0.056	0.095	U, G		
TT-BBCSED-01	Non-Background	< 0.087	0.052	0.087	U		
TT-BBCSED-01	Background	< 0.087	0.052	0.087	U		
TT-BP-DRAIN-01	Background	0.140	0.065	0.094	G		

<sup>&</sup>lt;sup>1</sup>pCi/g = picocuries per gram

<sup>&</sup>lt;sup>2</sup>MDC = minimum detectable concentration.

<sup>&</sup>lt;sup>3</sup>Lab qualifier = "U" less than MDC; "G" sample density differs more than 15% from laboratory control sample

<sup>&</sup>lt;sup>2</sup>MDC = minimum detectable concentration.

<sup>&</sup>lt;sup>3</sup>Lab qualifier = "U" less than MDC; "G" sample density differs more than 15% from laboratory control sample

Tetra Tech collected eight non-background soil samples throughout the BBC high use areas throughout the BBC as shown on Figure 21. The Cs-137 laboratory analytical results for the non-background soil samples are presented in Table 9. For comparative purposes, the background reference Cs-137 laboratory analytical results are also provided in Table 9. Seven of the eight soil samples were below the laboratory reported MDC. The soil sample collected at the "Old Sports Field" (TT-OSF-01) had a detectable Cs-137 concentration of 0.101 pCi/g- lower than any risk or background based criteria, as discussed in the Technical Memorandum. The maximum MDC for the soil Cs-137 analysis results was <0.098 pCi/g. Both of the two background reference soil samples were below the laboratory reported Cs-137 MDC.

The summary statistics, including the sample mean and standard deviation, for the Cs-137 non-background soil sampling data were computed using the Kaplan-Meier (K-M) method, which was applied using the EPA's ProUCL.5.0 statistical software package. This method is a nonparametric survival analysis method for left censored data which should be applied to data sets with larger portions of non-detect data (Helsel 2005, 2012; EPA 2009). The mean Cs-137 concentration for all of the soil samples is 0.0835 pCi/g with a standard deviation of 0.007 pCi/g.

Table 9 Cs-137 Laboratory Results for Soil Samples

			Cesium-137	1	
Sample ID	Sample Area	Result (pCi/g) <sup>1</sup>	Precision +/- MDC <sup>2</sup>		Lab Qualifier <sup>3</sup>
TT-BB1-01	Non-Background	< 0.097	0.058	0.097	U, G
TT-BBF-01	Non-Background	< 0.098	0.055	0.098	U
TT-CAB-01	Non-Background	< 0.081	0.055	0.081	U, G
TT-GF-01	Non-Background	< 0.098	0.056	0.098	U, G
TT-GGP-01	Non-Background	< 0.097	0.055	0.097	U
TT-HC-01	Non-Background	< 0.092	0.053	0.092	U, G
TT-OSF-01	Non-Background	0.101	0.065	0.099	G
TT-PPG-01	Non-Background	< 0.095	0.053	0.095	U
TT-BP-RBRA-01	Background	< 0.090	0.058	0.090	U, G
TT-LR-RBRA-01	Background	< 0.098	0.063	0.098	U, G

<sup>&</sup>lt;sup>1</sup>pCi/g = picocuries per gram

#### 6.2 STRONTIUM-90 ANALYTICAL RESULTS

This section presents the laboratory analytical results for Sr-90 within the sediment and soil samples collected at background reference areas, within the BBC main camp area, and within the BBC drainages.

### 6.2.1 Background Reference Area Sr-90 Sediment and Soil Sample Results

Tetra Tech collected sediment and soil samples within the background reference areas as described in Section 4.0. These samples were submitted to an accredited laboratory for analysis of Sr-90 for the methods and requested MDCs presented in Table 1. Table 10 presents the laboratory analytical results of the Sr-90 mass activity concentrations for the background reference area locations. All of the background reference sample Sr-90 results were below the MDC. The reported Sr-90 lab results ranged between < 0.075 pCi/g to < 0.096 pCi/g.

<sup>&</sup>lt;sup>2</sup>MDC = minimum detectable concentration.

<sup>&</sup>lt;sup>3</sup>Lab qualifier = "U" less than MDC; "G" sample density differs more than 15% from laboratory control sample

Table 10 Summary of Sr-90 Laboratory Results for Sediment and Soil Background Samples

		Strontium-90					
Sample ID	Sample Type	Result (pCi/g) <sup>1</sup>	Precision +/-	MDC <sup>2</sup>	Lab Qualifier <sup>3</sup>		
TT-SEDBG1-01	Sediment	< 0.075	-	0.075	U		
TT-BP-DRAIN-01	Sediment	< 0.083	-	0.083	U		
TT-BP-RBRA-01	Soil	< 0.096	-	0.096	U		
TT-LR-RBRA-01	Soil	< 0.089	-	0.089	U		

<sup>&</sup>lt;sup>1</sup>pCi/g = picocuries per gram

#### 6.2.2 BBC Main Camp Area and BBC Drainage Sr-90 Sediment and Soil Sample Results

Tetra Tech collected six non-background sediment samples within the primary drainages entering the BBC as shown on Figure 21. The Sr-90 laboratory analytical results for the non-background sediment samples are presented in Table 11. For comparative purposes, the background reference Sr-90 laboratory analytical results are also provided in Table 11. Five of the six sediment samples were below the MDC for Sr-90. The sample location, TT-SD2-01, had a detectable concentration of 0.182 pCi/g of Sr-90. Both of the two background reference sediment samples were non-detects (< 0.075 pCi/g and < 0.083 pCi/g). Five of the six the non-background sediment samples were below the MDC and therefore below the levels for one background drainage reference area.

Table 11 Summary of Sr-90 Laboratory Results for Sediment Samples

		Strontium-90					
Sample ID	Sample Area	Result (pCi/g) <sup>1</sup>	Precision +/-	MDC <sup>2</sup>	Lab Qualifier <sup>3</sup>		
TT-ED1-01	Non-background	< 0.088	-	0.088	U		
TT-ED2-01	Non-background	< 0.097	-	0.097	U		
TT-ED3-01	Non-background	< 0.089	-	0.089	U		
TT-SD1-01	Non-background	< 0.075	-	0.075	U		
TT-SD2-01	Non-background	0.182	0.064	0.081			
TT-BBCSED-01	Non-background	< 0.104	-	0.104	U		
TT-SEDBG1-01	Background	< 0.075	-	0.075	U		
TT-BP-DRAIN-01	Background	< 0.083	-	0.083	U		

 $<sup>^{1}</sup>$ pCi/g = picocuries per gram

Tetra Tech collected eight non-background soil samples throughout the BBC high use areas throughout the BBC as shown on Figure 21. The Sr-90 laboratory analytical results for the non-background soil samples are presented in Table 12. For comparative purposes, the background reference Sr-90 laboratory analytical results are also provided in Table 12. All eight of the soil samples were below the laboratory reported MDC.

<sup>&</sup>lt;sup>2</sup>MDC = minimum detectable concentration.

<sup>3</sup>Lab qualifier = "U" less than MDC; "G" sample density differs more than 15% from laboratory control sample

<sup>&</sup>lt;sup>2</sup>MDC = minimum detectable concentration.

<sup>&</sup>lt;sup>3</sup>Lab qualifier = "U" less than MDC; "G" sample density differs more than 15% from laboratory control sample

Table 12 Summary of Sr-90 Laboratory Results for Soil Samples

		Strontium-90					
Sample ID	Sample Area	Result (pCi/g) <sup>1</sup>	Precision +/-	MDC <sup>2</sup>	Lab Qualifier <sup>3</sup>		
TT-BB1-01	Non-background	< 0.081	-	0.081	U		
TT-BBF-01	Non-background	< 0.081	-	0.081	U		
TT-CAB-01	Non-background	< 0.092	-	0.092	U		
TT-GF-01	Non-background	< 0.104	-	0.104	U		
TT-GGP-01	Non-background	< 0.074	-	0.074	U		
TT-HC-01	Non-background	< 0.082	-	0.082	U		
TT-OSF-01	Non-background	< 0.096	-	0.096	U		
TT-PPG-01	Non-background	<0.097	-	0.097	U		
TT-BP-RBRA-01	Background	< 0.096	-	0.096	U		
TT-LR-RBRA-01	Background	< 0.089	-	0.089	U		

<sup>&</sup>lt;sup>1</sup>pCi/g = picocuries per gram

The mean concentration for the Sr-90 non-background soil and sediment sampling data collected at the BBC was computed using the K-M method, which was applied using the EPA's ProUCL.5.0 statistical software package. This method is a nonparametric survival analysis method for left censored data which should be applied to data sets with larger portions of non-detect data (Helsel 2005, 2012; EPA 2009). The K-M method was used here because 14 of the 15 samples were below the detection limits for Sr-90. The Sr-90 concentrations for all of the samples ranged between < 0.074 pCi/g to 0.182 pCi/g, and the mean Sr-90 concentration for all of the soil samples is 0.0817 pCi/g.

#### 6.3 METALS

The soil samples collected by Tetra Tech were submitted to ALS Laboratory for analysis of a variety of metals.

#### 6.3.1 Background Reference Area Metals Sediment and Soil Sample Results

Tetra Tech collected sediment and soil samples within the background reference areas as described in Section 4.0. These samples were submitted to an accredited laboratory for analysis of 23 metals for the methods and requested MDCs presented in Table 1. Table 13 through Table 18 presents the laboratory analytical results of the metals concentrations for the background reference area locations.

Table 13 Metals Laboratory Results for Sediment and Soil Background Samples (AI, Sb, As, Ba)

Sample ID	Sample Type	Aluminum (mg/kg) <sup>1</sup>	Antimony (mg/kg)	Arsenic (mg/kg)	Barium (mg/kg)
TT-SEDBG1-01	Sediment	4,800	0.081	2	36
TT-BP-DRAIN-01	Sediment	14,000	0.17	6.1	87
TT-BP-RBRA-01	Soil	13,000	0.21	5.9	100
TT-LR-RBRA-01	Soil	14,000	0.34	10	130

<sup>&</sup>lt;sup>1</sup>mg/kg = milligrams per kilogram

<sup>&</sup>lt;sup>2</sup>MDC = minimum detectable concentration.

<sup>&</sup>lt;sup>3</sup>Lab qualifier = "U" less than MDC; "G" sample density differs more than 15% from laboratory control sample

Table 14 Metals Laboratory Results for Sediment and Soil Background Samples (Be, Cd, Ca, Cr)

Sample ID	Sample Type	Beryllium (mg/kg) <sup>1</sup>	Cadmium (mg/kg)	Calcium (mg/kg)	Chromium (mg/kg)
TT-SEDBG1-01	Sediment	0.21	0.064	2,900	6.7
TT-BP-DRAIN-01	Sediment	0.54	0.21	22,000	34
TT-BP-RBRA-01	Soil	0.65	0.27	3,700	24
TT-LR-RBRA-01	Soil	0.81	0.36	3,600	30

<sup>&</sup>lt;sup>1</sup>mg/kg = milligrams per kilogram

Table 15 Metals Laboratory Results for Sediment and Soil Background Samples (Co, Cu, Fe, Pb)

Sample ID	Sample Type	Cobalt (mg/kg) <sup>1</sup>	Copper (mg/kg)	Iron (mg/kg)	Lead (mg/kg)
TT-SEDBG1-01	Sediment	2.9	4	9,700	4.3
TT-BP-DRAIN-01	Sediment	9.1	13	29,000	10
TT-BP-RBRA-01	Soil	8.4	12	24,000	12
TT-LR-RBRA-01	Soil	11	19	28,000	16

<sup>&</sup>lt;sup>1</sup>mg/kg = milligrams per kilogram

Table 16 Metals Laboratory Results for Sediment and Soil Background Samples (Mg, Mn, Hg, Ni)

Sample ID	Sample Type	Magnesium (mg/kg) <sup>1</sup>	Manganese (mg/kg)	Mercury (mg/kg)	Nickel (mg/kg)
TT-SEDBG1-01	Sediment	2,500	160	0.0055 <sup>J</sup>	5.4
TT-BP-DRAIN-01	Sediment	1,0000	470	0.021 <sup>J</sup>	14
TT-BP-RBRA-01	Soil	5,000	380	0.023 <sup>J</sup>	13
TT-LR-RBRA-01	Soil	6,200	510	0.027 <sup>J</sup>	31

<sup>&</sup>lt;sup>1</sup>mg/kg = milligrams per kilogram

Lab qualifier = "J" indicates the same result is less than the Reporting Limit but greater than Method Detection Limit (MDL)

Table 17 Metals Laboratory Results for Sediment and Soil Background Samples (K, Se, Ag, Na)

Sample ID	Sample Type	Potassium (mg/kg) <sup>1</sup>	Selenium (mg/kg)	Silver (mg/kg)	Sodium (mg/kg)
TT-SEDBG1-01	Sediment	1,600	0.55	0.013	120
TT-BP-DRAIN-01	Sediment	3,300	1	0.03	310
TT-BP-RBRA-01	Soil	4,000	1.3	0.021	190
TT-LR-RBRA-01	Soil	5,100	1.5	0.053	190

<sup>&</sup>lt;sup>1</sup>mg/kg = milligrams per kilogram

Table 18 Metals Laboratory Results for Sediment and Soil Background Samples (TI, V, Z)

Sample ID	Sample Type	Thallium (mg/kg) <sup>1</sup>	Vanadium (mg/kg)	Zinc (mg/kg)
TT-SEDBG1-01	Sediment	0.13	17	31
TT-BP-DRAIN-01	Sediment	0.24	74	71
TT-BP-RBRA-01	Soil	0.32	52	62
TT-LR-RBRA-01	Soil	0.39	47	80

<sup>&</sup>lt;sup>1</sup>mg/kg = milligrams per kilogram

#### 6.3.2 BBC Main Camp Area and BBC Drainage Metals Sediment and Soil Sample Results

Tetra Tech collected six non-background sediment samples within the primary drainages entering the BBC as shown on Figure 21. The metals laboratory analytical results for the non-background sediment samples are presented in Table 19 through Table 24. For comparative purposes, the background reference metals laboratory analytical results are also provided in these tables. In general, all of the metals results for the non-background sediment samples were within the reported metals concentrations of the two background sediment samples.

Table 19 Metals Laboratory Results for Sediment Samples (Al, Sb, As, Ba)

Sample ID	Sample Area	Aluminum (mg/kg) <sup>1</sup>	Antimony (mg/kg)	Arsenic (mg/kg)	Barium (mg/kg)
TT-ED1-01	Non-Background	3,700	0.035	2.2	29
TT-ED2-01	Non-Background	6,300	0.11	2.7	57
TT-ED3-01	Non-Background	5,600	0.15	3	41
TT-SD1-01	Non-Background	8,700	0.12	4.7	61
TT-SD2-01	Non-Background	5,100	0.086	3.1	37
TT-BBCSED-01	Non-Background	2,400	0.077	1.3	16
TT-SEDBG1-01	Background	4,800	0.081	2	36
TT-BP-DRAIN-01	Background	14,000	0.17	6.1	87

<sup>&</sup>lt;sup>1</sup>mg/kg = milligrams per kilogram

Table 20 Metals Laboratory Results for Sediment Samples (Be, Cd, Ca, Cr)

Sample ID	Sample Area	Beryllium (mg/kg) <sup>1</sup>	Cadmium (mg/kg)	Calcium (mg/kg)	Chromium (mg/kg)
TT-ED1-01	Non-Background	0.22	0.036	2,500	4.9
TT-ED2-01	Non-Background	0.32	0.13	2,300	8.9
TT-ED3-01	Non-Background	0.28	0.091	4,300	9.6
TT-SD1-01	Non-Background	0.5	0.058	2,800	13
TT-SD2-01	Non-Background	0.27	0.08	1,900	7.7
TT-BBCSED-01	Non-Background	0.13	< 0.017 <sup>∪</sup>	840	3.7
TT-SEDBG1-01	Background	0.21	0.064	2,900	6.7
TT-BP-DRAIN-01	Background	0.54	0.21	22,000	34

<sup>1</sup>mg/kg = milligrams per kilogram Lab qualifier = "U" less than MDC

Table 21 Metals Laboratory Results for Sediment Samples (Co, Cu, Fe, Pb)

Sample ID	Sample Area	Cobalt (mg/kg) <sup>1</sup>	Copper (mg/kg)	Iron (mg/kg)	Lead (mg/kg)
TT-ED1-01	Non-Background	2.6	3.2	8,400	3.4
TT-ED2-01	Non-Background	3.9	6.3	12,000	8.9
TT-ED3-01	Non-Background	4.3	10	12,000	6.1
TT-SD1-01	Non-Background	7.6	10	20,000	8.4
TT-SD2-01	Non-Background	4	4.9	12,000	5
TT-BBCSED-01	Non-Background	1.7	2.6	5,700	2.7
TT-SEDBG1-01	Background	2.9	4	9,700	4.3
TT-BP-DRAIN-01	Background	9.1	13	29,000	10

<sup>&</sup>lt;sup>1</sup>mg/kg = milligrams per kilogram

Table 22 Metals Laboratory Results for Sediment Samples (Mg, Mn, Hg, Ni)

Sample ID	Sample Area	Magnesium (mg/kg) <sup>1</sup>	Manganese (mg/kg)	Mercury (mg/kg)	Nickel (mg/kg)
TT-ED1-01	Non-Background	1,800	150	0.0057 <sup>J</sup>	2.8
TT-ED2-01	Non-Background	3,100	220	0.011 <sup>J</sup>	6.3
TT-ED3-01	Non-Background	3,100	200	0.011 <sup>J</sup>	7
TT-SD1-01	Non-Background	4,600	340	0.0081 <sup>J</sup>	9.2
TT-SD2-01	Non-Background	2,300	160	0.0071 <sup>J</sup>	5
TT-BBCSED-01	Non-Background	1,100	65	< 0.0034 <sup>U</sup>	2.3
TT-SEDBG1-01	Background	2,500	160	0.0055 <sup>J</sup>	5.4
TT-BP-DRAIN-01	Background	10,000	470	0.021 <sup>J</sup>	14

<sup>&</sup>lt;sup>1</sup>mg/kg = milligrams per kilogram Lab qualifier = "U" less than MDC

Lab qualifier = "J" indicates the same result is less than the Reporting Limit but greater than Method Detection Limit (MDL)

Table 23 Metals Laboratory Results for Sediment Samples (K, Se, Ag, Na)

Sample ID	Sample Area	Potassium (mg/kg) <sup>1</sup>	Selenium (mg/kg)	Silver (mg/kg)	Sodium (mg/kg)
TT-ED1-01	Non-Background	1,300	0.54	0.061	150
TT-ED2-01	Non-Background	2,300	0.4	0.058	160
TT-ED3-01	Non-Background	2,300	0.35	0.066	120
TT-SD1-01	Non-Background	3,000	0.83	0.028	120
TT-SD2-01	Non-Background	1,800	0.43	< 0.0054 <sup>∪</sup>	80
TT-BBCSED-01	Non-Background	960	0.64	0.022	120
TT-SEDBG1-01	Background	1,600	0.55	0.013	120
TT-BP-DRAIN-01	Background	3,300	1	0.03	310

<sup>1</sup>mg/kg = milligrams per kilogram Lab qualifier = "U" less than MDC

Table 24 Metals Laboratory Results for Sediment Samples (TI, V, Zn)

Sample ID	Sample Area	Thallium (mg/kg) <sup>1</sup>	Vanadium (mg/kg)	Zinc (mg/kg)
TT-ED1-01	Non-Background	0.11	13	24
TT-ED2-01	Non-Background	0.18	21	43
TT-ED3-01	Non-Background	0.14	22	40
TT-SD1-01	Non-Background	0.24	34	59
TT-SD2-01	Non-Background	0.14	20	33
TT-BBCSED-01	Non-Background	0.077	8.6	16
TT-SEDBG1-01	Background	0.13	17	31
TT-BP-DRAIN-01	Background	0.24	74	71

<sup>&</sup>lt;sup>1</sup>mg/kg = milligrams per kilogram

Tetra Tech collected eight non-background soil samples from the highest use areas throughout the BBC as shown on Figure 21. The laboratory analytical results for metals in the non-background soil samples are presented in Table 25 through Table 30. For comparative purposes, the background reference metals laboratory analytical results are also provided in these tables. In general, all of the metals results for the non-background sediment samples were within the reported metals concentrations of the two background sediment samples.

Table 25 Metals Laboratory Results for Soil Samples (Al, Sb, As, Ba)

Sample ID	Sample Type	Aluminum (mg/kg) <sup>1</sup>	Antimony (mg/kg)	Arsenic (mg/kg)	Barium (mg/kg)
TT-BB1-01	Non-Background	4,600	0.18	3.5	39
TT-BBF-01	Non-Background	7,500	0.15	5.8	170
TT-CAB-01	Non-Background	13,000	0.28	5.1	120
TT-GF-01	Non-Background	9,600	0.18	3.7	75
TT-GGP-01	Non-Background	1,200	0.038	0.85	9.4
TT-HC-01	Non-Background	5,700	0.18	3.1	87
TT-OSF-01	Non-Background	12,000	0.21	4.9	90
TT-PPG-01	Non-Background	2,600	0.082	1.4	29
TT-BP-RBRA-01	Background	13,000	0.21	5.9	100
TT-LR-RBRA-01	Background	14,000	0.34	10	130

<sup>&</sup>lt;sup>1</sup>mg/kg = milligrams per kilogram

Table 26 Metals Laboratory Results for Soil Samples (Be, Cd, Ca, Cr)

Sample ID	Sample Type	Beryllium (mg/kg) <sup>1</sup>	Cadmium (mg/kg)	Calcium (mg/kg)	Chromium (mg/kg)
TT-BB1-01	Non-Background	0.3	0.099	2,100	6.8
TT-BBF-01	Non-Background	0.24	0.064	4,900	7.6
TT-CAB-01	Non-Background	0.59	0.48	8,400	22
TT-GF-01	Non-Background	0.5	0.23	4,100	15
TT-GGP-01	Non-Background	0.026 <sup>J</sup>	0.03 <sup>J</sup>	5,300	3.3
TT-HC-01	Non-Background	0.23	0.34	14,000	11
TT-OSF-01	Non-Background	0.49	0.57	5,000	21
TT-PPG-01	Non-Background	0.11	0.031 <sup>J</sup>	5,400	6
TT-BP-RBRA-01	Background	0.65	0.27	3,700	24
TT-LR-RBRA-01	Background	0.81	0.36	3,600	30

<sup>&</sup>lt;sup>1</sup>mg/kg = milligrams per kilogram

Lab qualifier = "J" indicates the same result is less than the Reporting Limit but greater than Method Detection Limit (MDL)

Table 27 Metals Laboratory Results for Soil Samples (Co, Cu, Fe, Pb)

Sample ID	Sample Type	Cobalt (mg/kg) <sup>1</sup>	Copper (mg/kg)	Iron (mg/kg)	Lead (mg/kg)
TT-BB1-01	Non-Background	3.2	5.7	11,000	7.6
TT-BBF-01	Non-Background	3.2	6.7	9,700	7.7
TT-CAB-01	Non-Background	11	34	24,000	31
TT-GF-01	Non-Background	6.4	11	20,000	11
TT-GGP-01	Non-Background	0.93	1.5	2,800	0.62
TT-HC-01	Non-Background	4.4	11	10,000	5.2
TT-OSF-01	Non-Background	10	27	23,000	17
TT-PPG-01	Non-Background	1.9	3.7	5,500	2.3
TT-BP-RBRA-01	Background	8.4	12	24,000	12
TT-LR-RBRA-01	Background	11	19	28,000	16

¹mg/kg = milligrams per kilogram

Table 28 Metals Laboratory Results for Soil Samples (Mg, Mn, Hg, Ni)

Sample ID	Sample Type	Magnesium (mg/kg) <sup>1</sup>	Manganese (mg/kg)	Mercury (mg/kg)	Nickel (mg/kg)
TT-BB1-01	Non-Background	1,900	170	0.014 <sup>J</sup>	5.1
TT-BBF-01	Non-Background	2,400	250	0.011 <sup>J</sup>	3.2
TT-CAB-01	Non-Background	6,500	450	0.038	18
TT-GF-01	Non-Background	5,000	320	0.017 <sup>J</sup>	11
TT-GGP-01	Non-Background	510	39	0.0084 <sup>J</sup>	1.8
TT-HC-01	Non-Background	3,000	180	0.02 <sup>J</sup>	11
TT-OSF-01	Non-Background	6,300	480	0.043	16
TT-PPG-01	Non-Background	1,300	81	0.0081 <sup>J</sup>	3.5
TT-BP-RBRA-01	Background	5,000	380	0.023 <sup>J</sup>	13
TT-LR-RBRA-01	Background	6,200	510	0.027 <sup>J</sup>	31

<sup>&</sup>lt;sup>1</sup>mg/kg = milligrams per kilogram

Lab qualifier = "J" indicates the same result is less than the Reporting Limit but greater than Method Detection Limit (MDL)

Table 29 Metals Laboratory Results for Soil Samples (K, Se, Ag, Na)

Sample ID	Sample Type	Potassium (mg/kg) <sup>1</sup>	Selenium (mg/kg)	Silver (mg/kg)	Sodium (mg/kg)
TT-BB1-01	Non-Background	1,800	1.9	0.0065	120
TT-BBF-01	Non-Background	1,800	0.32	0.023	410
TT-CAB-01	Non-Background	5,100	0.78	0.095	160
TT-GF-01	Non-Background	4,400	0.97	0.047	370
TT-GGP-01	Non-Background	310	0.44	< 0.0052∪	100
TT-HC-01	Non-Background	4,900	0.76	0.035	990
TT-OSF-01	Non-Background	4,400	1	0.1	520
TT-PPG-01	Non-Background	750	0.38	< 0.0052∪	150
TT-BP-RBRA-01	Background	4,000	1.3	0.021	190
TT-LR-RBRA-01	Background	5,100	1.5	0.053	190

<sup>1</sup>mg/kg = milligrams per kilogram Lab qualifier = "U" less than MDC

Table 30 Metals Laboratory Results for Soil Samples (TI, V, Zn)

Sample ID	Sample Area	Thallium (mg/kg) <sup>1</sup>	Vanadium (mg/kg)	Zinc (mg/kg)
TT-BB1-01	Non-Background	0.11	19	38
TT-BBF-01	Non-Background	0.15	28	23
TT-CAB-01	Non-Background	0.28	50	150
TT-GF-01	Non-Background	0.26	34	71
TT-GGP-01	Non-Background	0.024	6.1	4.8
TT-HC-01	Non-Background	0.1	25	35
TT-OSF-01	Non-Background	0.25	46	100
TT-PPG-01	Non-Background	0.053	13	13
TT-BP-RBRA-01	Background	0.32	52	62
TT-LR-RBRA-01	Background	0.39	47	80

¹mg/kg = milligrams per kilogram

### 6.4 PERCHLORATE

Perchlorate was analyzed in all samples collected at the background, BBC, and sediment locations. All of the perchlorate results were below the MDC. A copy of the laboratory analytical results for the perchlorate analysis is provided in Attachment G.

# 7.0 COMPARATIVE BACKGROUND GAMMA ANALYSIS

### 7.1 DISCUSSION OF METHODOLOGY

Tetra Tech compared the gamma data sets from the background reference areas with the BBC main camp area and the BBC drainages to determine if any radiological anomalies exist or if there is potential for contamination on site associated with the SSFL operations. The BBC main camp area and the BBC drainages are potentially receiving runoff from the SSFL. To compare these areas with the background reference areas, Tetra Tech conducted analysis using ProUCL 5.0 (ProUCL) software. The ProUCL capabilities include two-population hypothesis testing used to perform site versus background comparisons. The two primary two-population hypothesis testing methods used for the comparative background analysis included the Student's t-test and the Wilcoxon-Mann-Whitney (WMW). Both of these tests assume the following null hypothesis (Ho): Ho: The mean (and/or median) of Sample 1 (e.g. the Site Area) is less than or equal to Sample 2 (background sample). If the data is consistent with the null hypothesis, then the Site Area gamma exposure field is at or below background.

Tetra Tech surveyed four areas as discussed in Section 5.0. These survey areas included: BBC Main Area, Main Drainage, South Drainage, and Eastern Drainage (non-BG). The BBC Main Area was compared with the RBRAs identified by the EPA (Bridle Path and Lang Ranch) which represent both of the geologic formations found on site at the BBC property. Figure 22 presents the distribution on lognormal probability plots for the BBC Main Camp Area and the two soil background reference areas. A number of statistical analysis calculations were conducted as part of this comparative analysis. The results of the model outputs are provided in Attachment H.

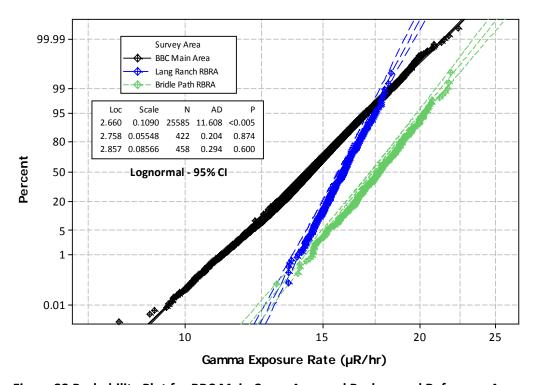


Figure 22 Probability Plot for BBC Main Camp Area and Background Reference Areas

# 7.2 STATISTICAL ANALYSIS OF SITE AREA GAMMA RESULTS COMPARED TO BACKGROUND

Table 31 provides the results of two-sample hypothesis testing for the two different statistical tests mentioned earlier (t-test and WMW) for both RRBAs. For all four scenarios (1A/1B and 2A/2B) the null hypothesis was not rejected. It can therefore be concluded that the gamma exposure field within the BBC Main Camp is less than or equal to the gamma exposure field of the background RBRAs. All of the tests had a confidence level of 95 percent ( $\alpha = 0.05$ ).

Table 31 Summary of Hypothesis Testing Results for BBC Main Camp Area vs. Background Gamma

Scenario	Two Sample Test	Sample 1	Sample 2	Н。	Result	Conclusion
1A	t-test			Sample 1 Mean <= Sample 2 Mean	Do Not Reject H₀	BBC Main Camp gamma mean is less than or equal to Lang Ranch RBRA background gamma mean
1B	WMW	BBC Main Camp	Lang Ranch RBRA	Sample 1 Mean/Median <= Sample 2 Mean/Median	Do Not Reject H₀	BBC Main Camp gamma mean/median is less than or equal to Lang Ranch RBRA background gamma mean/median
2A	t-test	BBC Main	Bridle Path	Sample 1 Mean <= Sample 2 Mean	Do Not Reject H₀	BBC Main Camp gamma mean is less than or equal to Bridle Path RBRA background gamma mean
2B	WMW	Camp	RBRA	Sample 1 Mean/Median <= Sample 2 Mean/Median	Do Not Reject H₀	BBC Main Camp gamma mean/median is less than or equal to Bridle Path RBRA background gamma mean/median

The Main Drainage was compared with the background reference drainage areas identified by the Tetra Tech which represent both of the geologic formations found onsite within the BBC property drainages. Figure 23 presents the distribution on lognormal probability plots for the Main Drainage and the two soil background drainage reference areas.

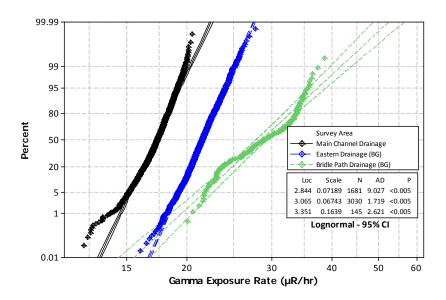


Figure 23 Probability Plot for Main Drainage and Background Drainage Reference Areas

Table 32 provides the results of two-sample hypothesis testing for the two different statistical tests mentioned earlier (t-test and WMW) comparing the Main Drainage and the two background sediment drainages. For all four scenarios (1A/1B and 2A/2B) the null hypothesis was not rejected. We therefore conclude that the gamma exposure field within the Main Drainage is less than or equal to the gamma exposure field of the unimpacted drainages. All of the tests had a confidence level of 95 percent ( $\alpha = 0.05$ ).

Table 32 Summary of Hypothesis Testing Results for Main Drainage vs. Background Gamma

Scenario	Two Sample Test	Sample 1	Sample 2	Н₀	Result	Conclusion
1A	t-test	Main	East Drainage	Sample 1 Mean <= Sample 2 Mean	Do Not Reject H₀	Main Drainage gamma mean is less than or equal to East Drainage (BG) gamma mean
1B	WMW	Drainage	East Drainage (BG)	Sample 1 Mean/Median <= Sample 2 Mean/Median	Do Not Reject H₀	Main Drainage gamma mean/median is less than or equal to East Drainage (BG) gamma mean/median
2A	t-test	Main	Bridle Path	Sample 1 Mean <= Sample 2 Mean	Do Not Reject H₀	Main Drainage gamma mean is less than or equal to Bridle Path Drainage (BG) gamma mean
2B	WMW	Main Drainage	Drainage (BG)	Sample 1 Mean/Median <= Sample 2 Mean/Median	Do Not Reject H₀	Main Drainage gamma mean/median is less than or equal to Bridle Path Drainage (BG) gamma mean/median

The South Drainage was compared with the background reference drainage areas identified by the Tetra Tech which represent both of the geologic formations found onsite within the BBC property drainages. Figure 24 presents the distribution on lognormal probability plots for the Main Drainage and the two soil background drainage reference areas.

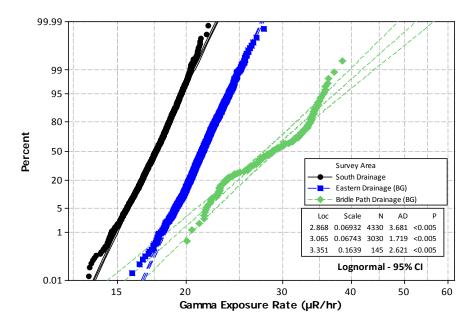


Figure 24 Probability Plot for South Drainage and Background Drainage Reference Areas

Table 33 provides the results of two-sample hypothesis testing for the two different statistical tests mentioned earlier (t-test and WMW) comparing the South Drainage and the two background sediment drainages. For all four scenarios (1A/1B and 2A/2B) the null hypothesis was not rejected. We therefore conclude the gamma exposure field within the South Drainage is less than or equal to the background gamma exposure field within the unimpacted drainages. All of the tests had a confidence level of 95 percent ( $\alpha = 0.05$ ).

Table 33 Summary of Hypothesis Testing Results for South Drainage vs. Background Gamma

Scenario	Two Sample Test	Sample 1	Sample 2	Н。	Result	Conclusion
1A	t-test	South	Fact Drainage	Sample 1 Mean <= Sample 2 Mean	Do Not Reject H₀	South Drainage gamma mean is less than or equal to East Drainage (BG) gamma mean
1B	WMW	Drainage	East Drainage (BG)	Sample 1 Mean/Median <= Sample 2 Mean/Median	Do Not Reject H₀	South Drainage gamma mean/median is less than or equal to East Drainage (BG) gamma mean/median
2A	t-test	South	Bridle Path	Sample 1 Mean <= Sample 2 Mean	Do Not Reject H₀	South Drainage gamma mean is less than or equal to Bridle Path Drainage (BG) gamma mean
2B	WMW	Drainage	Drainage (BG)	Sample 1 Mean/Median <= Sample 2 Mean/Median	Do Not Reject H₀	South Drainage gamma mean/median is less than or equal to Bridle Path Drainage (BG) gamma mean/median

The Eastern Drainage (non-BG) are compared with the background reference drainage areas identified by the Tetra Tech which represent both of the geologic formation found onsite within the BBC property drainages. Figure 25 presents the distribution on lognormal probability plots for the Main Drainage and the two soil background drainage reference areas.

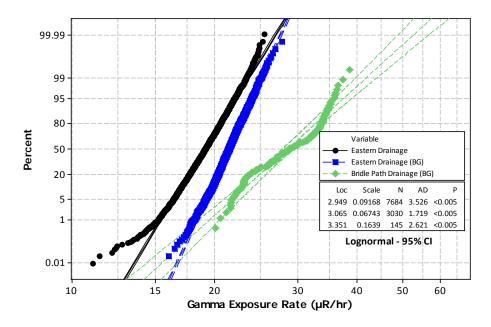


Figure 25 Probability Plot for Eastern Drainage and Background Drainage Reference Areas

Table 34 provides the results of two-sample hypothesis testing for the two different statistical tests mentioned earlier (t-test and WMW) comparing the East Drainage (non-background) and the two background sediment drainages. For all four scenarios (1A/1B and 2A/2B) the null hypothesis was not rejected. We therefore conclude that the gamma exposure field within the Eastern Drainage (non-BG) is less than or equal to the gamma exposure field of the unimpacted drainages. All of the tests had a confidence level of 95 percent ( $\alpha = 0.05$ ).

Table 34 Summary of Hypothesis Testing Results for Eastern Drainage vs. Background Gamma

Scenario	Two Sample Test	Sample 1	Sample 2	Н₀	Result	Conclusion
1A	t-test	Eastern	East Drainage	Sample 1 Mean <= Sample 2 Mean	Do Not Reject H₀	Eastern Drainage (non-BG) gamma mean is less than or equal to East Drainage (BG) gamma mean
1B	WMW	Drainage (non-BG)	(BG)	Sample 1 Mean/Median <= Sample 2 Mean/Median	Do Not Reject H₀	Eastern Drainage (non-BG) gamma mean/median is less than or equal to East Drainage (BG) gamma mean/median
2A	t-test	Eastern	Dridle Doth	Sample 1 Mean <= Sample 2 Mean	Do Not Reject H₀	Eastern Drainage (non-BG) gamma mean is less than or equal to Bridle Path Drainage (BG) gamma mean
2B	WMW	Drainage (non-BG)	Bridle Path Drainage (BG)	Sample 1 Mean/Median <= Sample 2 Mean/Median	Do Not Reject Ho	Eastern Drainage (non-BG) gamma mean/median is less than or equal to Bridle Path Drainage (BG) gamma mean/median

### 8.0 CONCLUSIONS

Comprehensive investigations have been conducted at the Brandeis-Bardin Institute's campus by a number of different entities and individuals within the past three decades, including those conducted by EPA, Cal EPA, DTSC, etc. These historical investigations are evaluated and presented in the main text of the Technical Memorandum. As part of the Data Gap Analysis presented in the main text of the Technical Memorandum, additional sampling of the BBC main camp area and drainages entering the BBC main camp area (BBC drainages) had been recommended. The purpose of the additional sampling is described in the Technical Memorandum and discussed below.

The comprehensive continuous gamma radiation surveys used in this investigation were intended to ascertain whether radiological anomalies may be present at the BBC, and if so, to assess the potential for radiological contamination from gamma-emitting radionuclides. The gamma radiation survey was performed in February 2016 by Tetra Tech's radiological field engineers. A statistical analysis was performed on the gamma exposure rates collected within the BBC main camp area and the BBC drainages. The gamma radiation datasets collected within these regions of the BBC property were compared statistically with the gamma radiation datasets collected at background reference areas, which included background soil plot areas and background sediment areas.

The results from the gamma radiation surveys within the BBC property showed there is no statistically significant difference between the mean of the gamma exposure rate distributions within the BBC main camp area and the gamma exposure rate distributions within the EPA-selected RBRAs. Similarly, there is no statistically significant difference between the mean of the gamma exposure rate distributions within the BBC drainages (North, Main, South, and Eastern Drainages) and the mean of the gamma exposure rate distributions measured within the background drainage reference areas.

The soil sampling investigation was conducted at the high use areas within the BBC and at drainage areas where the flow paths potentially originate from the Area IV region of the Santa Susana Field Laboratory to collect information on the existing radiological and chemical conditions. Both the sediment and soil samples were analyzed for radionuclides, metals, and perchlorate. The results of the soil investigation from the site areas were compared with the results of the background reference area samples collected by Tetra Tech for both the sediment and soil samples. A more comprehensive background comparative analysis is presented within the main text of the Technical Memorandum. The Cs-137 concentrations measured in all sediment samples were all below the MDCs. Similarly, all but one of the Cs-137 concentrations measured in the soil samples were below the MDCs. The Cs-137 concentration of the one sample which exceeded the MDC was detected at 0.101 pCi/g, which is within the detection sensitivity limits of the background regional limits. Five of the six of the sediment samples were below the MDC for Sr-90, with the exception of location TT-SD2-01 which had a detectable concentration of 0.182 pCi/g. A risk assessment for Sr-90 is provided in the main text of the Technical Memorandum. The Sr-90 concentrations measured in the soil samples were all below the MDCs. The metals concentrations for the sediment and soil samples collected at the BBC are within the expected ranges of background identified from the samples collected during this investigation. All of the sediment and soil samples submitted for perchlorate analysis were below the MDCs. Further discussion of the comparative background analysis and risk assessment is provided in the main text of the Technical Memorandum.

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## **ATTACHMENT A**

Survey and Soil Sampling Standard Operating Procedures



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### 1.0 PURPOSE

This Standard Operating Procedure (SOP) describes the protocol and methods for performing a continuous mobile gamma radiation survey as part of the monitoring program for the Brandeis-Bardin Campus (BBC) radiological and soil investigation conducted by Tetra Tech Inc. (Tetra Tech). The methods presented in this SOP include equipment operation, survey techniques, and instrument calibration requirements.

### 1.1 EQUIPMENT AND MATERIALS

Each mobile gamma survey system consists of:

- (1) USB-compatible laptop or mobile computer installed with Tetra Tech *ScanSystem* software, *GammaViewer* software, and a global mapping software
- (1) Standard backpack or ATV (shown on Figure 1)
- (2) USGlobalSat global positioning system (GPS) Receiver with USB Interface
- (1) Ludlum 44-10 Sodium Iodide (NaI) scintillation detector (shown in Figure 2)
- (1) Ludlum 2350-1 data logger (shown in Figure 2)
- (1) 4 port USB hub
- (1) 3-foot Ludlum coaxial cable
- (1) RS232 Serial to USB Converter
- (1) Ludlum RS232 data cable



Figure 1 Mobile GPS Integrated Gamma Survey System – Backpack (left) and ATV (right)



Figure 2 Ludlum 2350-1 Data Logger (left) and Ludlum 44-10 NaI Scintillator

### 2.0 PROCEDURE

### 2.1 BACKPACK AND SYSTEM SETUP

Ensure the 2350-1 data logger has sufficient battery voltage, which is defined as greater than 5.6 volts (V). If the charge is less than 5.6V, place four new D-size batteries correctly without allowing the battery to drop directly into the battery compartment. Connect the RS232 serial converter to the RS232 port on the Ludlum 2350-1 data logger. Connect GPS receivers and serial converter to the 4-port USB hub and connect the USB hub to the field computer. Open "Device Manager" and note which COMM ports have been assigned to the various USB devices.

### 2.2 SCANSYSTEM SOFTWARE OPERATIONS

ScanSystem software will be used to record simultaneous GPS location data and gamma exposure rate data When the program is first launched, click the "Configure" button, and then the "Disable Ports" function. Assign the correct COMM port ID to the Rad and GPS locations. Select "Enable Ports" and close the window. Next click "Start GPS." Both GPS and gamma exposure rate data should now be displayed in real time on the ScanSystem main screen. A screenshot showing the ScanSystem menu is shown in Figure 3.

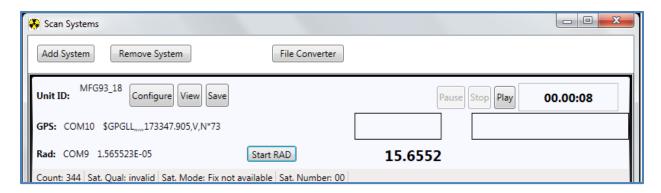


Figure 3 ScanSystem Screenshot

To log data, click the "Play" button. The software will ask if previous data are to be overwritten (Figure 4). To save data, click "Stop," then the "Save" icon, select a directory, and name the text file. Warning: if you select "Overwrite Data" by mistake, you should save a new file with a different name to avoid erasing the existing scan data file.

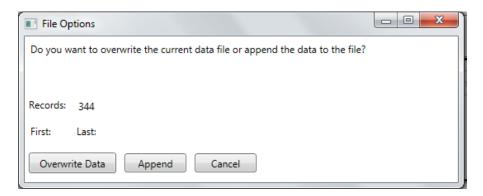


Figure 4 Screenshot of Interface (overwrite screen)

Text file names should include the detector ID, date and time, and project ID. The software will ask if current data are to be cleared from the application at this point (Figure 5). If you will continue scanning for the day, do not clear the application. Clear the application only at the beginning of a new scanning day. If you do clear the application by mistake, just save a new file and continue to append to the new file.

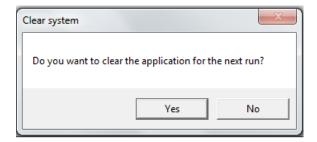


Figure 5 Screenshot of Interface (clear screen)

### 2.3 Mapping Software Operations

Mapping software can be used to visually guide operators over the pre-defined survey path. It displays current location overlaid on shapefiles. Shapefiles, as long as properly projected, are supported with different software types. The WGS84 datum is preferred to avoid confusion. It is recommended to use mapping software with pre-entered transect lines to be viewed on a laptop or hand-held GPS device.

### 2.4 SCAN PROCESS

The proposed gamma exposure rate scanning methodology is consistent with Nuclear Regulatory Commission Regulation [NUREG] 1620 (NRC 2003) and Multi-Agency Radiation Survey and Site Investigation Manual [MARRSIM] (NRC 2000) guidance documents. Gamma scanning will be conducted under the oversight of a qualified and trained engineer. Transects will be surveyed to attain the coverage as determined by the Lead Field Engineer. Scanning speed will be maintained between 1 and 3 miles per

hour. The gamma detector will be positioned at a height of approximately 1 meter above ground surface, whether backpack or ATV mounted. The detector "sees" terrestrial sources of gamma radiation with relatively good efficiency from a circular area with a radius of approximately 1 meter when held at a height of 1 meter. Care must be taken during scanning to prevent slips, trips, and falls as well as contact with biological hazards such as snakes and insects.

### 3.0 RECORDS

### 3.1 Survey Records

Documenting scanning results and observations from the field is important (NRC 2000). Surveys will be recorded as follows:

- Field personnel will record survey information in the field logbook.
- Surveys will be documented in writing. The person performing the survey is responsible for correct and accurate documentation of survey data.
- Surveys will be documented as they are performed whenever possible in a clear and legible manner using black or blue ink.
- Survey points or sample locations will be indicated, as applicable, and the associated measurements recorded. Provide sufficient detail to adequately describe each specific area surveyed.
- Instrument check records must be included with the survey records in the field logbook.

### 4.0 QUALITY ASSURANCE AND QUALITY CONTROL

All radiological characterization projects Tetra Tech conducts incorporate specific data quality assurance and quality control (QA/QC) protocols. In general, QA includes qualitative factors that provide confidence in the results, while QC involves quantitative field evidence that supports the validity of the results. Tetra Tech uses QA/QC methods as data quality indicators that are outlined in NRC (2000). The QA/QC survey procedures used by Tetra Tech are industry accepted techniques that ensure the data collected are of the highest quality and reliability.

### 4.1 QUALITY ASSURANCE

Calibration refers to the measurement and adjustment of the instrument response in a particular radiation field of known intensity (NRC, 2000). Calibration of all radiation detection equipment is the primary method for QA that is used to ensure the data collected are of high quality and reliable. Tetra Tech ensures all instruments used during radiological projects are factory calibrated within 12 months per the manufacturer's recommendation. Scanned copies of calibration documentation for all instruments are included in Attachment B of this report.

### 4.2 QUALITY CONTROL

The primary QC method Tetra Tech uses involves daily QC checks. These checks are measurements performed each time an instrument is used to ensure consistency of performance during the project, including for any given instrument over time, and between different instruments on any given day. The specified protocol used on this project involves quantitative QC checks using a background as well as a known source.

The daily QC checks that are used include:

- Daily Checks: Daily background, field strip, and check source QC measurements that will be conducted in the field at the site. Daily QC measurements will be collected on site at a designated background location selected by the lead field engineer. Control charts are used to present the results.
- **Pre-** and **Post-survey:** Pre-survey and post-survey background and check source QC measurements that will be performed at a designated location off site. The results are presented in tables, probability plots, and histograms.

#### 4.2.1 Daily QC Measurements

Each day before the gamma radiation survey, instrument comparison QC measurements will be performed for all NaI detectors potentially used to survey the site. Sets of individual background QC measurements will be compared under the same counting geometries. Under the QA program, factory-calibrated instruments must also meet on-site field test criteria. Data developed using any of the field-qualified instruments are then interchangeable, allowing instrument substitution if needed.

- Field Check Results:
  - For normally distributed data, 99 percent of all measurements are expected to fall within ±3 standard deviations from the mean. Background, field strip, and check source standard deviation values are recalculated twice daily throughout the project. Any instrument with a QC measurement result falling outside ±3 standard deviations from the mean of all QC measurements on the field check control chart requires investigation. A detector exceeding control limits on any QC check (background or source check) is replaced with a pre-qualified spare detector and returned to the manufacturer for evaluation, repair, and recalibration.
  - QC measurements, including a background check and a source check, are performed twice daily during the work for each scanning system in use. These checks are performed outdoors at a specified location.

The Ludlum 2350 data logger system employs a calibration factor to internally convert detector counts per minute to exposure rate. The calculated exposure rate, directly proportional to the measured count rate, is transmitted by the data logger to the scanning system portable computer. The system does not retain a record of count rate, but count rates can be calculated using the instrument-specific calibration factors.

Daily count rate variations within these limits are functions of several possible variables, including exact placement of detector systems during daily checks and recent variations in barometric pressure. Low detector count rates at very low background gamma exposure rates contribute significantly to variability in count rates. Differences in the internal characteristics of the detector, including minor issues with the NaI detector crystal or variations in the photomultiplier tube optical interface, can also affect NaI detector readings.

The data should be compiled and input into control charts and analyzed at the end of each day to identify any anomalies. Control charts are used to monitor performance of the radiation detection instruments and also provide quantitative indications of data uncertainty. A control chart is a graphical plot of measurement results with respect to time; an example control chart is shown below in Figure 6. A control chart of the daily calibration checks for the duration of the project will be included in the final report.



**Figure 6 Example of Control Chart** 

### 4.2.2 Pre-Survey and Post-Survey QC Measurements

Before and after the gamma survey, field personnel will collect instrument QC measurements at a designated indoor location for each NaI detector that could be used for the gamma survey. The purpose of the pre-survey and post-survey QC protocol is to quantify the consistency of readings among the different detection systems. The pre-survey and post-survey calibration checks consist of background and source cesium-137 (Cs-137) measurements collected at the Tetra Tech office in Fort Collins, Colorado. The average value of the measurements will be compared using the mean, probability plots, and histograms and comparing various statistical measures such as the Anderson-Darling coefficient and the correlation coefficient (R). An example of this analysis is shown in Figure 7 and Figure 8.

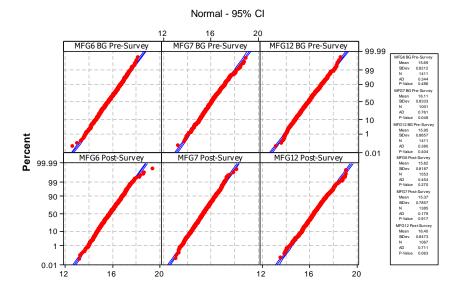
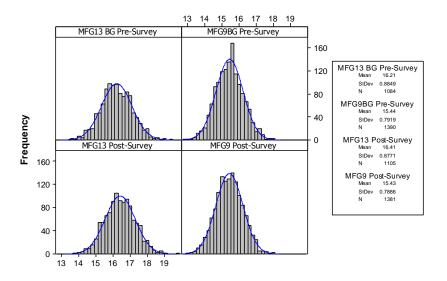


Figure 7 Example of Probability Plot Comparisons



**Figure 8 Example of Frequency Histogram Comparisons** 

### 5.0 REFERENCES

U.S. Nuclear Regulatory Commission (NRC). 2000. Multi-Agency Radiological Site Survey and Investigation Manual. NUREG-1575, Rev. 1. August 2000 (with 2001 addendum).

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SOP 2 – SOIL SAMPLING

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### 1.0 PURPOSE

This Standard Operating Procedure (SOP) describes the protocol and methods for collecting surface soil samples as part of the monitoring program for the Brandeis-Bardin Campus (BBC) radiological and soil investigation. Sample handling, labeling, documentation, preservation, shipping, and analysis are addressed in Sections 5 and 6 of this SOP.

### 2.0 PRECAUTIONS

The following precautions will be observed during sampling:

- All sample containers will be inspected for cleanliness and flaws prior to use.
- Latex or nitrile gloves will be worn during sample collection.
- Sample collection equipment will be decontaminated as described in this document.

### 3.0 EQUIPMENT AND MATERIALS

The following equipment is required to collect soil samples:

- Field logbook or equivalent and permanent black pens
- Sample containers (plastic 1-gallon Ziploc ® bags)
- Stainless steel spoons
- Scoop, shovel, or other device for collecting soil samples
- 5 gallon buckets for collecting and mixing soil samples
- Riffle splitter with ½-inch slot for homogenizing and splitting
- Engineer's tape (graduated in centimeter [cm] increments)
- Decontamination equipment and supplies
- Disposable latex / nitrile gloves
- Digital camera

### 4.0 PROCEDURE

The following procedures will be used to decontaminate equipment and collect soil samples.

### 4.1 SAMPLING LOCATIONS

Soil sampling locations will be selected in the field by the Lead Field Engineer. Sampling locations may be adjusted in the field as necessary for access and to accommodate field conditions. The sampling information, including time, date, and sample identification (ID), will be entered into the field logbook.

### 4.2 EQUIPMENT DECONTAMINATION PROCEDURES

Sampling equipment will be decontaminated between sample collection points, if the equipment is not disposable, to avoid cross contamination between samples. Decontamination equipment may include pump sprayers, spray bottles, deionized water, phosphate-free soap solution, scrub brushes, buckets, disposable gloves, and paper towels. Field personnel will wear disposable gloves while decontaminating equipment.

The following decontamination procedures will be followed for sampling equipment:

- 1. Visually inspect sampling equipment for adhered soil; a disposable paper towel or stiff brush will be used to remove any visible material.
- 2. If visible contamination remains, wash the field equipment with phosphate-free soap and water, rinse with distilled water, and air dry or wipe with disposable paper towels.
- 3. Deposit all disposable items, such as paper towels and disposable gloves, into a garbage bag and dispose of properly.

### 4.3 PRE-SAMPLING INSPECTION

Prior to sampling, the sampling site will be inspected and any unusual conditions will be noted in the field logbook. Photographs will also be taken to document sampling location any unusual site conditions.

### 4.4 Soil Sample Collection

The soil sample for each grid will consist of collection of a discrete sample and will consist of approximately equal volumes of soil. The sample will be collected using a trowel or shovel as appropriate for the material. Sufficient volume of soil will be collected such that the 1-gallon plastic bag will be approximately half full. If necessary, rocks and vegetation will be removed as recommended in Section 5.2.2 [5] of Nuclear Regulatory Commission Regulation (NUREG) 1620 (NRC 2003). Visible soil will be brushed off the sampling tools between sampling. All soil samples will be submitted to ALS Laboratory in Fort Collins, Colorado. Samples are to be analyzed for cesium-137 (Cs-137), strontium-90 (Sr-90), target analyte metals, mercury, and perchlorate; the laboratory methods are specified in Table 1.

Analyte	Laboratory MDC¹/(Reporting Limit)	Method
Cesium-137	0.1 pCi/g <sup>2</sup>	901.1 M
Strontium-90	0.25 pCi/g	ASTM D5811
Mercury	3.6 μg/kg (33.3 μg/kg)	SW 7471A
Metals (TAL <sup>2</sup> )	varies	SW 6020
Perchlorate	20 μg/kg	314.0

**Table 1 Laboratory Analytical Methods** 

<sup>&</sup>lt;sup>1</sup>MDC = minimum detectable concentration. Varies by method and sample. May be lower than specified in this table.

<sup>&</sup>lt;sup>2</sup>pCi/g = picocuries per gram

<sup>&</sup>lt;sup>3</sup>TAL = target analyte list. Includes 23 metals with varying MDCs

Unless otherwise noted methods are published by the U.S. Environmental Protection Agency.

### 4.5 QUALITY CONTROL

Duplicate samples will be collected during soil sampling for quality control (QC) purposes. These QC samples are known as field duplicates. QC samples will be labeled with QC identification numbers (Section 5.4) and sent to the laboratory with the other samples for analysis. A field duplicate is defined as a second sample (or measurement) from the same location, collected in immediate succession, using identical techniques. Both the primary samples and field duplicate samples will be homogenized and split as described above. A minimum of one field duplicate will be submitted per 20 primary samples during the soil sampling. Data validation will be performed on the laboratory results for primary and duplicate samples as described in the sections below.

#### 4.5.1 Evaluation of Precision of QC Samples

Data will be validated by an independent data validation specialist. Data validation will include a quantitative evaluation of precision between primary and field duplicate samples. Precision can be defined by the amount of scatter or variance that occurs in repeated measurements of a particular analyte. Two types of duplicate equations are used to evaluate the precision between the primary soil sample and the field duplicate soil sample. The first criterion for precision acceptance or rejection for this project is the relative percent difference (RPD) between the primary and field duplicate samples. The RPD equation is as follows:

$$RPD(\%) = \frac{|S - D|}{\frac{(S + D)}{2}} \times 100$$

where:

RPD = relative percent difference, non-detects are excluded

S = concentration of primary sample

D = concentration of field duplicate sample

The second criterion is the duplicate error ratio (DER), which accounts for uncertainties from both the primary and duplicate sample into the equation. The DER is calculated when precision estimates are provided using the following equation:

$$DER = \frac{|S - D|}{\sqrt{\sigma_s^2 + \sigma_d^2}}$$

where:

S = primary sample result

D = duplicate sample result measured field sample concentration

 $\sigma_s$  = primary sample uncertainty

 $\sigma_d$  = duplicate sample uncertainty

#### 4.5.2 QC Acceptance for Sampling Data

The project QC acceptance limits are based on the RPD and DER testing results for all applicable samples. Analytical results for field duplicate soil samples will be evaluated by calculating the RPD and DER between the two samples when both values of the primary/field duplicate sample pair are greater than five times the reporting limit (RL) for a given analyte. The QC acceptance limits are an RPD of less than 30 percent and a DER less than 1.96. Data validation flags or data qualifiers are assigned to the analytical data that

exceed the project QC acceptance limits. The data qualifiers shown in Table 2 are applied to the data that do not meet the performance acceptance criteria discussed above. The QC acceptance goal is that 85 percent of the samples must meet the project QC acceptance criteria.

**Table 2 Summary of Data QC Qualifiers** 

Data Qualifier	Description of Data Qualifier
К	RPD > 30% and the concentration is greater than five times the RL <sup>1</sup>
J	RPD > 30% and the concentration is less than five times the RL
G	DER > 1.96 and the concentration is greater than five times the RL
н	DER > 1.96 and the concentration is less than five times the RL

<sup>&</sup>lt;sup>1</sup>RL = reporting limit

# 5.0 SAMPLE CONTAINERS, PRESERVATIVES, AND HOLDING TIMES

### 5.1 SAMPLE CONTAINERS

Proper sample preparation practices will be observed to minimize sample contamination and potential repeat analyses caused by anomalous analytical results. Appropriately sized re-sealable freezer plastic bags will be used for the grid samples. The sample bags will be labeled as described in Section 5.4.1.

### 5.2 SAMPLE PRESERVATION

No sample preservation is required for soil samples.

#### 5.3 SAMPLE HOLDING TIMES

Limits on sample holding times are established to minimize chemical changes in a sample prior to analysis or extraction. A holding time is defined as the maximum allowable time between sample collection and analysis or extraction, based on the nature of the analyte of interest and chemical stability factors. There is no specified holding time for samples to be submitted for Cs-137 or Sr-90. A 180-day holding time is recommended for analysis of metals. Samples will be submitted as soon as is practicable after samples are collected to facilitate timely turn-around of analytical results.

After they are collected, samples will be labeled as described in the following section, prepared as described in the previous sections, and placed in a cooler for delivery to the laboratory. The coolers will be taped shut and chain-of-custody (CoC) seals will be attached to the outside of the cooler to ensure that the cooler cannot be opened without breaking the seal.

### 5.4 SAMPLE LABELING

Sample containers will be identified using the following labeling scheme. Each sample will identify the Survey unit where a sample was collected in as well as the number corresponding to the sample grid. The date and time of each sample will be noted on the sample container as well.

Primary Sample Label: **TT-BBF-01**Field Duplicate Sample Label: **TT-BBF-02** 

Where:

**BBF** = Location identifier (for example, BBF = baseball field) **01/02** = Primary or Field Duplicate Sample ID

# 6.0 RECORDS

#### 6.1 FIELD LOGBOOK

All information pertinent to field sampling will be recorded in a field logbook or equivalent. The field logbook will be a bound book with consecutively numbered pages. All entries in logbooks will be made in waterproof ink, and corrections will consist of line-out deletions. Entries in the logbook will include the following, as applicable:

- Date and time of sample collection
- Sample identification
- Sample location (global positioning system [GPS] coordinates— digital measurement is acceptable also)
- Sample depth
- Physical description of sample (color, texture)
- Weather and physical and environmental conditions during field activity
- Names of sampling personnel and any visitors
- Photograph log
- Sampling equipment and method
- Information concerning sampling decisions
- Field observations
- A summary of daily tasks and information concerning sampling changes and scheduling modifications
- Signature and date at bottom of each page by personnel responsible for observations

### 6.2 SAMPLE CHAIN OF CUSTODY

During field sampling activities, traceability of the sample must be maintained from the time the samples are collected until laboratory data are reported. Traceability of samples and associated identification data is crucial for resolving future problems if analytical results are called into question and for minimizing the possibility of sample mix-up. Initial information concerning collection of the samples will be recorded in the field logbook as described above. Information on the custody, transfer, handling, and shipping of samples will be recorded on a CoC form.

The sampler is responsible for initiating and filling out the CoC form. The CoC form will be signed by the sampler when samples are relinquished to anyone else. A CoC form will be completed for each set of samples collected and will contain the following information:

- Sampler's signature and affiliation
- Project number
- Date and time of collection
- Sample identification number
- Sample type
- Analyses requested (can provide laboratory project quote number)
- Number of containers
- Signature of persons relinquishing custody, dates, and times
- Signature of persons accepting custody, dates, and times
- Any additional instructions to the laboratory

The person responsible for delivering the samples to the laboratory will sign the CoC form, retain a copy of the form, document the method of shipment, and send the original form with the samples. Tetra Tech will maintain a copy of the CoC. When the samples arrive at the laboratory, the person receiving the samples will sign the CoC form and return a copy to the Project Manager. Copies of all CoC documentation will be compiled and maintained in the central files. The original CoC forms will remain with the samples until the time of final disposition. When samples are returned for disposal, the laboratory will send the original CoC to Tetra Tech. This CoC will then be incorporated into the central files. CoC forms will be provided by either the analytical laboratory or Tetra Tech.

# 6.3 FIELD OBSERVATIONS

The field logbook will contain sufficient information so that the sampling activity can be reconstructed without relying on the memory of field personnel. The logbook will be kept in the field technician's possession or in a secure place during sampling activities. After sampling, the completed logbook shall be maintained and filed as part of the permanent project record. A scanned copy of the field logbook will be included as an appendix to the final report.

# 7.0 REFERENCES

U. S. Nuclear Regulatory Commission (NRC). 2003. Standard Review Plan for the Review of a Reclamation Plan for Mill Tailings Sites Under Title II of the Uranium Mill Tailings Radiation Control Act of 1978. Final Report. NUREG-1620, Rev. 1. June.

# **ATTACHMENT B**

CALIBRATION DOCUMENTATION FOR RADIATION INSTRUMENTATION USED IN BBC GAMMA SURVEY



Designer and Manufacturer of Scientific and Industrial

#### CERTIFICATE OF CALIBRATION

#### LUDLUM MEASUREMENTS, INC.

501 Oak Street

10744 Dutchtown Road

865-392-4601

325-235-5494 Instruments Sweetwater, TX 79556, U.S.A. Knoxville, TN 37932, U.S.A. MFG-1 CUSTOMER TETRA TECH MFG, INC. 20272834/424330 ORDER NO. 2350-1 98616 Ludlum Measurements, Inc. Serial No. Mfg. Model 5-Aug-16 Cal. Interval 1 Year Meterface Cal. Date 5-Aug-15 Cal Due Date Check mark 
√applies to applicable instr. and/or detector IAW mfg. spec. 36 % 700.8 mm Hg Alt New Instrument Instrument Received Within Toler. +-10% 10-20% Out of Tol. Requiring Repair Other-See comments V Mechanical check Input Sens. Linearity **V** Reset check F/S Resp. check Window Operation V Audio check Alarm Setting check Battery check (Min. Volt) VDC Integrated Dose check V Ratemeter Linearity check Recycle Mode check Threshold Data Log check Overload check Scaler Readout check 100 10 Dial Ratio mV Calibrated in accordance with LMI SOP 14.9 rev 05/15/2015. Calibrated in accordance with LMI SOP 14.8 rev 12/05/89. ✓ HV Readout (2 points) Ref./Inst. V Ref./Inst. **COMMENTS:** Firmware: 37122N26 I/O Firmware: 37123N05 Resolution for Cs137≈10.72% Calibrated with 39" cable. Gamma Calibration: GM detectors positioned perpendicular to source except for M 44-9 in which the front of probe faces source. Probe High Units/ Dead Time Calibration Linearity ±10%\* Model Voltage Time Base Correction Factor Constant Serial # Threshold 4 / PR102508 100 2 1.508518E-05 5.527553E+10 44-10 1050 Detector # 1 100 1 1.508517E-05 1.000000E+00 Detector # 2 44-10 PR102508 1050 7 / 0.000000F+00 1 000000F+00 Detector # 3 CS137PK 662KEV 712 642 1 Detector # Units: 0 -- rad, 1 -- Gray, 2 -- rem, 3 -- Sv, 4 -- R, 5 -- C/Kg, 6 -- Disintegrations, -- Counts, 8 -- Ci/cm sq., 9 -- Bq/cm sq. \* See attached detector documentation, if applica Time Base:0 -- Seconds,1 -- Minutes, 2 -- Hours REFERENCE INSTRUMENT INSTRUMENT REFERENCE INSTRUMENT INSTRUMENT RECEIVED CAL. POINT RECEIVED METER READING\* CAL. POINT METER READING' Digital 400cpm 400 00 101 Readout 400kcpm F10000 10) 10 40cpm 4/000 40kcpm 4000 4kcpm CIK Ludlum Measurements, Inc. certifies that the above instrument has been calibrated by standards traceable to the National Institute of Standards and Technology, or to the calibration facilities of

other International Standards Organization members, or have been derived from accepted values of natural physical constants or have been derived by the ratio type of calibration techniques. State of Texas Calibration License No. LO-1963 The calibration system conforms to the requirements of ANSI/NCSL Z540-1-1994 and ANSI N323-1978. Reference Instruments and/or Sources: Cs-137 S/N: 059 2171CP 2261CP 720 734 781 1131 1616 1696 5105 5717CO 5719CO | 60646 | 70897 | 73410 | E552 | G112 | T M565 | S-394 | S-1054 | T10081 | T10082 Neutron Am-241 Be S/N: Ra-226 S/N: Y982 Alpha S/N Beta S/N Other Ra-226 S/N Y982 ✓ Multimeter S/N ▼ m 500 S/N 289158 Calibrated By: Reviewed By:

# LUDLUM MEASUREMENTS, INC.

501 Oak Street 325-235-5494

Sweetwater, TX 79556, U.S.A.

10744 Dutchtown Road 865-392-4601 Knoxville, TN 37932, U.S.A.

#### Model 2350 Bench Test Data

Customer TETRA	A TECH MFG, INC.	Date	5-Aug-15	Order #.	20272834/424330
Model2350-1	Serial No. 9861	6 Detector	٢/١٩٠١٥	Serial No	PR102508
Source CSNSC	١٠١٠٩٩٤				
High Voltage	1050 V As Found	\ <u>&gt; 5</u> V. Input	10.00 mV A	As Found	mV.
Cal. Constant	5.527553E+10	as found 5.	96862 Exi	<i>3</i>	
Dead Time	1.508518E-05	as found \_\	676146 E.	05	
Alarm Setting: F	Ratemeter1000000000	.000000 as found	1.0 Et 29		
S	Scaler1000000	.000000 as found	1.0 Et4		
lı	ntegrated dose 10000000	00.0000 as found	1.0 Ex=9		
Overload On	☑ Off as found ☐ On ☐	Off Window	as for	und \oso	
	Reference Point	"As Found" Readings: Meter Reading  1.48  2.48  2.46  284  130  45.2)	Meter R	Reading  RINC  RRINC	
Other					
	~ >>			Data E.A	\ <
Signature	Erand grouber			Date 5. A	179.13

FORM C6-1 02/26/2013



# LUDLUM MEASUREMENTS, INC.

501 Oak Street 325-235-5494

5494

10744 Dutchtown Road 865-392-4601

Sweetwater, TX 79556, U.S.A. Knoxville, TN 37932, U.S.A.

### Bench Test Data For Detector

Detector	<b>~\</b> ^ 10	Serial No. PR1	02508		
Customer TET	TRA TECH MFG	, INC.		Order #.	20272834/424330
Counter	2350-1	Serial No. 9861	16	Counter Input Sensitivity	10.00 mV
Count Time	6 Second	\$		Distance Source to Detector	Surface
Other Cal Co	onstant = 1.0000	00E+00 Dead Time =	1.508517E-05		
High Voltage	Background	Size zo Muci	Isotope	lsotope	Isotope
950	480	11116			
/330	457	11486			
×1050	464	11305			
60//	501	11570			
1150	494	11437			
150	441	11430			
1250	52)	11503			
1300	273	11087			
\\$50	60	71724			
12400	660	12044			
1450	701	15571			
/222	798	1214			
\550	1265	13.521			
***************************************					

8/5/2015 10:38:18 AM Detector Setup Barcodes GENERATED:

Model 2350-1 Serial Number: 98616

Detector Setup Number: 1



Set High Voltage: 1050



\*W1000\$WOFF\$P\* Set Window: 1000, OFF



Set Scaler Count Time: 6



Set Readout Time Base: hours



\*SL1.508518E-05\$-\* Set Dead Time: 1.508518E-05



\*SC5.527553E+10\$W\*

Set Calibration Constant: 5.527553E+10



\*M44-10\$K\*

Set High Detector Model: 44-10



\*NPR102508\$1\*

Set High Detector Serial #: PR102508



Set High Ratemeter Alarm: 1.000000E+09



Set High Scaler Alarm: 1000000



Set High Dose Alarm: 1.000000E+09





Set Threshold: 100



\*O40.0\$OOFF\$6\* Set Overload: 40.0,OFF



\*SU45F\* Set Readout Units: R



Set Readout Range Multiplier: Auto



\*SVD0\$P\*
Set Display Mode: Normal



Set Display Mode: Parameters

\*SVD2\$R\*
Set Display Mode: Detector

Set Active Detector Setup: 1

Detector Setup Barcodes GENERATED: 8/5/2015 10:38:18 AM

Model 2350-1 Serial Number: 98616

Detector Setup Number: 2



\*HIU50\$J\*
Set High Voltage: 1050



\*W1000\$WOFF\$P\* Set Window: 1000,OFF



Set Scaler Count Time: 6



\*SB1\$-\*

Set Readout Time Base: minutes



\*SL1.508517E-05\$Z\* Set Dead Time: 1.508517E-05



\*SC1.000000E+00\$0\*

Set Calibration Constant: 1.000000E+00



\*M44-10\$K\*

Set High Detector Model: 44-10



\*NPR102508\$1\*

Set High Detector Serial #: PR102508



\*J1.000000E+09\$V\* Set High Ratemeter Alarm: 1.000000E+09



\*K1000000\$H\*
Set High Scaler Alarm: 1000000



\*P1.000000E+09\$.\* Set High Dose Alarm: 1.000000E+09



\*SP2\$8\*



Set Threshold: 100



\*O40.0\$OOFF\$6\* Set Overload: 40.0,OFF



\*SU7\$I\*
Set Readout Units: c



\*SM0\$3\*

Set Readout Range Multiplier: Auto



\*SVD0\$P\*

Set Display Mode: Normal



\*SVD1\$Q\*

Set Display Mode: Parameters



\*SVD2\$R\*

Set Display Mode: Detector

\*D2\$B\*

Set Active Detector Setup: 2

Detector Setup Barcodes GENERATED: 8/5/2015 10:38:19 AM

Model 2350-1 Serial Number: 98616

Detector Setup Number: 3



\*H712\$N\*

Set High Voltage: 712



\*W40\$WON\$L\* Set Window: 40,0N



\*F6\$H\*

Set Scaler Count Time: 6



\*SB1\$-\*

Set Readout Time Base: minutes



\*SL0.000000E+00\$8\* Set Dead Time: 0.000000E+00



\*SC1.000000E+00\$0\*

Set Calibration Constant: 1.000000E+00



\*MCS137PK\$S\*

Set High Detector Model: CS137PK



\*N662KEV\$C\*

Set High Detector Serial #: 662KEV



\*J1.000000E+09\$V\*

Set High Ratemeter Alarm: 1.000000E+09



\*K1000000\$H\*

Set High Scaler Alarm: 1000000



\*P1.000000E+09\$.\*

Set High Dose Alarm: 1.000000E+09



\*SP3\$9\*



\*T642\$.\* Set Threshold: 642



\*O40.0\$OOFF\$6\* Set Overload: 40.0,OFF



\*SU7\$1\*
Set Readout Units: c



Set Readout Range Multiplier: Auto



\*SVD0\$P\*
Set Display Mode: Normal



Set Display Mode: Parameters

\*SVD2\$R\*
Set Display Mode: Detector

Set Active Detector Setup: 3

Detector Setup Checklist GENERATED: 8/5/2015 10:38:24 AM

Model 2350-1 Serial Number: 98616

Detector Setup Number: 1

The following list is stored as detector setup D1 in the Model 2350.

I have verified the list below has no discrepancies with the 

Comments:

User ID

User ID
High Voltage = 1050 volts
Threshold = 100
Window = 1000,OFF
Overload Current = 40.0 micro amperes
Scaler Count Time = 6 seconds
Readout Units = R
Readout Time Base = hours
Readout Range Multiplier = Auto
Detector Dead Time = 1.508518E-05
Detector Calibration Constant = 5.527553E-10

Detector Calibration Constant = 5.527553E+10

Detector Model Number = 44-10

Detector Serial Number = PR102508

Ratemeter Alarm Setting = 1.000000E+09

Scaler Alarm Setting = 1000000

Integrated Dose Alarm Setting = 1.000000E+09

Low Count Alarm Setting = 0.000000E+00
Operating Batter Voltage = 5.4 volts

Detector Setup Checklist GENERATED: 8/5/2015 10:38:24 AM

Model 2350-1 Serial Number: 98616

Detector Setup Number: 2

The following list is stored as detector setup D2 in the Model 2350.

I have verified the list below has no discrepancies with the detector settings table:

Comments:

User ID

= 1050 volts

High Voltage Threshold = 100

Threshold = 100
Window = 1000,OFF
Overload Current = 40.0 micro amperes
Scaler Count Time = 6 seconds
Readout Units = c
Readout Time Base = minutes
Readout Range Multiplier = Auto
Detector Dead Time = 1.508517E-05
Detector Calibration Constant = 1.000000E:00 Detector Calibration Constant = 1.000000E+00

Detector Model Number = 44-10

Detector Serial Number = PR102508

Ratemeter Alarm Setting = 1.000000E+09

Scaler Alarm Setting = 1000000

Integrated Dose Alarm Setting = 1.000000E+09

Low Count Alarm Setting = 0.000000E+00 Operating Batter Voltage = 5.4 volts

Detector Setup Checklist GENERATED: 8/5/2015 10:38:25 AM

Model 2350-1 Serial Number: 98616

Detector Setup Number: 3

The following list is stored as detector setup D3 in the Model 2350.

I have verified the list below has no discrepancies with the 

Comments:

User ID

High Voltage Threshold Window = 712 volts = 642

Window = 40.0N

Overload Current = 40.0 micro amperes

Scaler Count Time = 6 seconds

Readout Units = c

Readout Time Base = minutes

Readout Range Multiplier = Auto

Detector Dead Time = 0.000000E+00

Detector Calibration Constant = 1.000000E+00

Detector Calibration Constant = 1.000000E+00

Detector Model Number = CS137PK

Detector Serial Number = 662KEV

Ratemeter Alarm Setting = 1.000000E+09

Scaler Alarm Setting = 1000000 Integrated Dose Alarm Setting = 1.000000E+09 Low Count Alarm Setting = 0.000000E+00 Operating Batter Voltage = 5.4 volts



Designer and Manufacturer of Scientific and Industrial Instruments

### CERTIFICATE OF CALIBRATION

MF6-11

# LUDLUM MEASUREMENTS, INC.

501 Oak Street

10744 Dutchtown Road

325-235-5494

865-392-4601

325-235-5494 865-392-4601 Sweetwater, TX 79556, U.S.A. Knoxville, TN 37932, U.S.A.

CUSTOME	R TETRA TECH	H MFG, INC.				ORDER NO	O20272834/42	24330
Mfg.	Ludlum Measu	rements, Inc.	Model	2350-	1	Serial No	120635	200 12
Cal. Date	5-A	ug-15 Cal D	ue Date	5-Aug-16	Cal. Inter	/al 1 Year	Meterface	N/A
heck mark	√applies to applic	cable instr. and/or dete	ector IAW mfg. sp	ec. T.	75°F	RH36	% Alt700.8	_mm Hg
New Ins	strument Instru	ument Received	Within Toler. +-	10% 🗌 10-20%	Out of Tol.	Requiring Repai	r Other-See cor	nments
<b>▼</b> Mechan	nical check					☐ Ir	nput Sens. Linearity	
	sp. check	Reset chec			Operation			
▼ Audio c		▼ Alarm Setti			check (Min. Volt)	4.4VDC		
✓ Rateme ✓ Data Lo	eter Linearity check	✓ Integrated I ✓ Overload c			Mode check Readout check		shold Ratio 100 =	10 mV
		rith LMI SOP 14.8 rev		<u> </u>	d in accordance with			10 1110
✓ HV	Readout (2 points)	Ref./Inst.	500 /	Constant of the Constant of th	V Ref./Inst		/_ 2005	V
COMMEN	TS: Firmwar	re: 37122N26						
I/O Firmv	ware: 37123NC	5 Resolution	for Cs137≈9.	.96% Calibr	ated with 39"	cable.		
Gamma Calibr	ation: GM detectors p	positioned perpendicular to	o source except for I	the fرا 44-9 in whi	ront of probe faces sour	ce.		
	Probe		High		Units/	Dead Time	Calibration	Linearity
) at a at a v # 1	Model	Serial #	Voltage	Threshold	Time Base	Correction Facto	South Billion P. C.	±10%*
Detector # 1	LMI44-10	PR102507	1100	100	4 / 2	1.742716E-05	5.376195E+10	
Detector # 2	LMI44-10	PR102507	1100	100	7 / 1	1.742715E-05	1.000000E+00	
etector # 3	CS137/PK	662KEV	794	642	7 / 1/	0.000000E+00	1.000000E+00	
etector#	y <del></del>							
etector#								
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etector#								
etector#								
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etector#								
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etector#								
etector#	4	(400-00-00-00-00-00-00-00-00-00-00-00-00-			**************************************			
etector#								
etector#	-							
	rad, 1 Gray, 2 ren	n, 3 Sv, 4 R, 5 C/K		s, Counts, 8 Ci/o	cm sq., 9 Bq/cm sq.	ras iron roomaanaa kaanaa iron maan iron oo o		
ime Base:0	Seconds,1 Minutes	, 2 Hours				* See	attached detector docume	entation, if app
	REFERENCE	INSTRUMENT	INSTRU		REFERENCE	INSTRUME		
Digital Readout	CAL. POINT 400kcpm	RECEIVED 39991 (0		READING*	CAL. POINT 400cpm	RECEIVED	METER F	READING*
rtoudout	40kcpm	4/000 /	H000	/	40cpm		1 4	1
	4kcpm	400	UW.		79			
her International	Standards Organization	e above instrument has been members, or have been deriv uirements of ANSI/NCSL Z540	ed from accepted value	es of natural physical co	nal Institute of Standards ar onstants or have been deriv	ed by the ratio type of ca	calibration facilities of alibration techniques. Calibration License No. LO	1063
		urces: Cs-137 S/N: 059		1CP 720 734	781 1131		1909 1916CP 510	
5719CO	60646 70897							
Alpha	S/N		Beta S/N			Other		
<b>√</b> m 50	0 S/N2	89158	Ra-226 S/N Y98	32	<b>✓</b> Multim	eter S/N	93870637	
alibrated By	marel	Margan			Date 5.	Ang-15		
Reviewed By	7	Wall 1	^		Date	Auglis		



#### LUDLUM MEASUREMENTS, INC. Designer and Manufacturer

501 Oak Street 325-235-5494

10744 Dutchtown Road 865-392-4601

Sweetwater, TX 79556, U.S.A.

Knoxville, TN 37932, U.S.A.

### Model 2350 Bench Test Data

CustomerTETRA TEC	H MFG, INC.	Date	5-Aug-15	Order #	20272834/424330
Model <u>2350-1</u>	Serial No. 120635	Detector	44-10	Serial No.	PR102507
Source <u>C 5/5/1. \.</u>	in (;				
High Voltage		<b>∞</b> V. Input	10.00 mV A	s Found \\o	mV.
Cal. Constant	5.376195E+10	as found <u>5</u> .	376/45 Ex10		
Dead Time	1.742716E-05	as found\.	742716 E-65	3	
Alarm Setting: Rateme	eter 100000000.0000	000 as found	1.0 Eto9		
Scaler	1000000.0000	000 as found	1.0 E+06		
Integra	ted dose1000000000.00	ooo as found	1.0 8 409		
Overload On	off as found ☐ On ⓓOff	Window	as fou	ind \vvv	
Detector Received	Reference Point    2000	"As Found" Readings: Meter Reading  2.02 mRihl  1.56  1.03  505 MRIH  143	After Adjustmer  Meter R	Readings: eading	ther-See comments
	m grahar			Date 5.A	<u>~5·\5</u>



# LUDLUM MEASUREMENTS, INC.

501 Oak Street 325-235-5494

10744 Dutchtown Road

Sweetwater, TX 79556, U.S.A.

865-392-4601 Knoxville, TN 37932, U.S.A.

### Bench Test Data For Detector

ustomer TE	TRA TECH MFG	, INC.		Order #.	20272834/424330
ounter	2350-1	Serial No. 12063	35	Counter Input Sensitivity	10.00 n
ount Time _	6 Secon	λs		Distance Source to Detector	Surface
ther Cal C	onstant = 1.0000	000E+00 Dead Time = 1	.742715E-05		·
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/000	55\	10615			
\o 52	554	10945			
*//10	574	\o44)			
1150	541	10860			
1500	566	11111			
1250	572	10484			
/300	550	10843			
1350	565	10546			
1400	570	11023			
1450	812	11240			
/5>>	1126	11842			

Detector Setup Barcodes GENERATED: 8/5/2015 12:58:40 PM

Model 2350-1 Serial Number: 120635

Detector Setup Number: 1



\*H1100\$F\* Set High Voltage: 1100



Set Window: 1000, OFF



Set Scaler Count Time: 12



Set Readout Time Base: hours



\*SL1.742716E-05\$-\* Set Dead Time: 1.742716E-05



Set Calibration Constant: 5.376195E+10



\*MLMI44-10\$ \*

Set High Detector Model: LMI44-10



Set High Detector Serial #: PR102507



Set High Ratemeter Alarm: 1.000000E+09



Set High Scaler Alarm: 1000000



Set High Dose Alarm: 1.000000E+09



Set Threshold: 100



Set Overload: 4.0,OFF



Set Readout Units: R



Set Readout Range Multiplier: Auto



Set Display Mode: Normal



Set Display Mode: Parameters

Set Display Mode: Detector

Set Active Detector Setup: 1

Detector Setup Barcodes GENERATED: 8/5/2015 12:58:41 PM

Model 2350-1 Serial Number: 120635

Detector Setup Number: 2



\*H1100\$F\* Set High Voltage: 1100



Set Window: 1000, OFF



Set Scaler Count Time: 6



\*SB1\$-\*

Set Readout Time Base: minutes



Set Dead Time: 1.742715E-05



Set Calibration Constant: 1.000000E+00



\*MLMI44-10\$ \*

Set High Detector Model: LMI44-10



Set High Detector Serial #: PR102507



Set High Ratemeter Alarm: 1.000000E+09



Set High Scaler Alarm: 1000000



Set High Dose Alarm: 1.000000E+09





Set Threshold: 100



\*04.0\$OOFF\$6\*
Set Overload: 4.0,OFF



\*SU7\$1\* Set Readout Units: c



Set Readout Range Multiplier: Auto



Set Display Mode: Normal



\*SVD1\$Q\*
Set Display Mode: Parameters



\*5VDZ5R\* Set Display Mode: Detector

Set Active Detector Setup: 2

Detector Setup Barcodes GENERATED: 8/5/2015 12:58:41 PM

Model 2350-1 Serial Number: 120635

Detector Setup Number: 3



Set High Voltage: 794



\*W40\$WON\$L\* Set Window: 40,0N



\*F6\$H\*

Set Scaler Count Time: 6



\*SB1\$-\*

Set Readout Time Base: minutes



\*SL0.000000E+00\$8\* Set Dead Time: 0.000000E+00



\*SC1.000000E+00\$0\*

Set Calibration Constant: 1.000000E+00



\*MCS137/PK\$P\*

Set High Detector Model: CS137/PK



\*N662KEU\$C\*

Set High Detector Serial #: 662KEV



\*J1.000000E+09\$V\*

Set High Ratemeter Alarm: 1.000000E+09



\*K1000000\$H\*

Set High Scaler Alarm: 1000000



\*P1.000000E+09\$.\*

Set High Dose Alarm: 1.000000E+09



\*SP3\$9\*

Set Threshold: 642



Set Overload: 4.0,OFF

Set Readout Units: c

Set Readout Range Multiplier: Auto

\*SVDO\$P\*

Set Display Mode: Normal

Set Display Mode: Parameters

\*SVD2\$R\* Set Display Mode: Detector

Set Active Detector Setup: 3

Detector Setup Checklist GENERATED: 8/5/2015 12:58:48 PM

Model 2350-1 Serial Number: 120635

Detector Setup Number: 1

The following list is stored as detector setup D1 in the Model 2350.

I have verified the list below has no discrepancies with the 

Comments:

User ID

= 1100 volts = 100

User ID High Voltage Threshold Window

Window = 1000,OFF

Overload Current = 4.0 micro amperes

Scaler Count Time = 12 seconds

Readout Units = R

Readout Time Base = hours

Readout Range Multiplier = Auto

Detector Dead Time = 1.742716E-05

Detector Calibration Constant = 5.376195E+10 Detector Model Number = LMI44-10

Detector Serial Number = PR102507

Ratemeter Alarm Setting = 1.000000E+09

Scaler Alarm Setting = 1.000000E+09

Integrated Dose Alarm Setting = 1.000000E+09

Low Count Alarm Setting = 0.000000E+00
Operating Batter Voltage = 5.2 volts

Detector Setup Checklist GENERATED: 8/5/2015 12:58:49 PM

Model 2350-1 Serial Number: 120635

Detector Setup Number: 2

The following list is stored as detector setup D2 in the Model 2350.

I have verified the list below has no discrepancies with the 

Comments:

User ID

= 1100 volts

High Voltage
Threshold
Window = 100

Window = 1000,OFF

Overload Current = 4.0 micro amperes

Scaler Count Time = 6 seconds

Readout Units = c

Readout Time Base = minutes

Readout Range Multiplier = Auto

Detector Dead Time = 1.742715E-05

Detector Calibration Constant = 1.00000E:00 Detector Calibration Constant = 1.000000E+00 Detector Model Number = LMI44-10

Detector Serial Number = PR102507

Ratemeter Alarm Setting = 1.000000E+09

Scaler Alarm Setting = 1000000

Integrated Dose Alarm Setting = 1.000000E+09 Low Count Alarm Setting = 0.000000E+00 Operating Batter Voltage = 5.2 volts Detector Setup Checklist GENERATED: 8/5/2015 12:58:49 PM

Model 2350-1 Serial Number: 120635

Detector Setup Number: 3

The following list is stored as detector setup D3 in the Model 2350.

I have verified the list below has no discrepancies with the 

Comments:

User ID High Voltage Threshold Window = 794 volts = 642 Window = 642

Window = 40,0N

Overload Current = 4.0 micro amperes

Scaler Count Time = 6 seconds

Readout Units = c

Readout Time Base = minutes

Readout Range Multiplier = Auto

Detector Dead Time = 0.000000E+00

Detector Calibration Constant = 1.000000E+00

Detector Calibration Constant = 1.000000E+00 Detector Model Number = CS137/PK

Detector Serial Number = 662KEV

Ratemeter Alarm Setting = 1.000000E+09

Scaler Alarm Setting = 1000000

Integrated Dose Alarm Setting = 1.000000E+09

Low Count Alarm Setting = 0.000000E+00 Operating Batter Voltage = 5.2 volts

Designer and Manufacturer of Scientific and Industrial Instruments

TETRA TECH MOE INO

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Page of

FORM C22A 09/28/2015

#### CERTIFICATE OF CALIBRATION

### LUDLUM MEASUREMENTS, INC.

501 Oak Street 10744 Dutchtown Road

Lam.	
325-235-5494	865-392-4601
Sweetwater, TX 79556, U.S.A.	Knoxville, TN 37932, U.S.A.

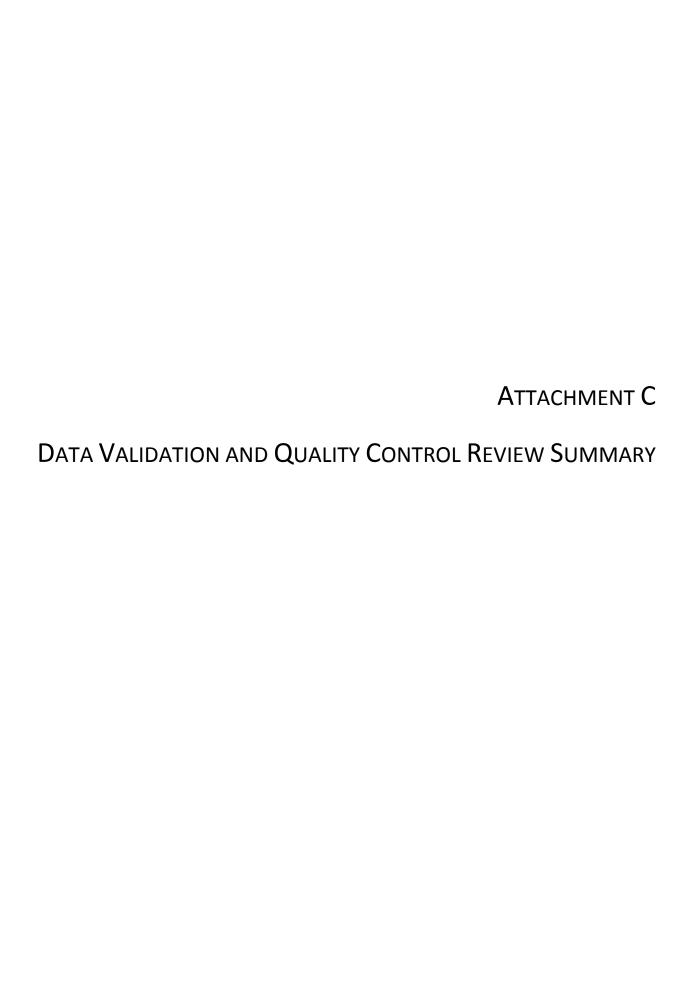
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Cal. Date				28-Oct-16	Cal. Inter	val <u>1 Year</u>	_ Meterface	0-200µrem/
neck mark	k <b>√</b> applies to applica	able instr. and/or detector	r IAW mfg. spec.	T	74 °F	RH35	_ % Alt	704.0 mm Hg
New	Instrument Instru	ment Received Wi	ithin Toler. +-10%	10-20%	Out of Tol.	Requiring Repair	Other-S	ee comments
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AC Inst.

Only

Failed:

Passed Dielectric (Hi-Pot) and Continuity Test



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# 1.0 OVERVIEW

The data validation process for the Brandeis-Bardin Campus (BBC) radiological and soil investigation involved a review of quality assurance (QA) and quality control (QC) data and review of the laboratory data packages. The data validation and QA/QC review process is intended to assess the technical reliability and the degree of confidence in the reported analytical data. The primary goal of the methods presented in this attachment is to ensure that the information and decisions made from the Brandeis-Bardin radiological and soil investigation are supported by data of the type and quality needed and expected for their intended use. The Data Validation and QC Review Program was conducted by Tetra Tech and includes a sample-specific process that extends the evaluation of data beyond method, procedural, or contractual compliance to determine the analytical quality of a specific data set (EPA 2002). This attachment summarizes the methods and results of the BBC radiological and soil investigation Data Validation and QC Review Program.

# 2.0 DATA VALIDATION METHODS

#### 2.1 DATA VALIDATION TESTING

An evaluation of the precision data validation testing between primary and duplicate samples was performed where applicable on the data collected. The primary testing methods involved calculating relative percent difference (RPD) and the duplicate error ratio (DER). The DER was used for radiochemistry analytes where an individual precision was reported for the analytes. The applicable environmental media evaluated for this project included soil samples and ambient gamma exposure rate measurements. A minimum of one field duplicate was collected for every 20 primary soil samples collected in the field. Similarly, the evaluation of precision by calculation of RPD by comparing parameters from the pre-survey and post-survey mean gamma exposure rate was performed on the radiation instrumentation calibration check data.

#### 2.1.1 RPD Evaluation

The data validation analysis performed by Tetra Tech included the quantitative evaluation of precision between primary and field duplicate soil samples. Precision can be defined by the amount of scatter or variance that occurs in repeated measurements of a particular analyte. Two types of duplicate equations are used to evaluate the precision between the primary soil sample and the field duplicate soil sample. The first equation for precision acceptance and rejection for this project was based on the RPD of the field duplicates. The RPD equation is given by:

$$RPD(\%) = \frac{|S - D|}{\frac{(S + D)}{2}} \times 100$$

where:

RPD = relative percent difference, non-detects are excluded

S = concentration of primary sample

D = concentration of duplicate sample

#### 2.1.2 DER Evaluation

The second equation used was the DER, which factors the uncertainties from both the unknown and duplicate sample into the equation. The DER is calculated between duplicates for all samples which precision estimates were provided and the equation for DER is given by:

$$DER = \frac{|S - D|}{\sqrt{{\sigma_s}^2 + {\sigma_d}^2}}$$

where:

S = primary sample result

D = duplicate sample result measured field sample concentration;

 $\sigma_s$  = primary sample uncertainty

 $\sigma_s$  = primary sample uncertainty

 $\sigma_d$  = duplicate sample uncertainty

### 2.2 QC ACCEPTANCE LIMITS

The QC acceptance limits are based on the type of media being analyzed. This subsection summarizes the QC acceptance criteria for soil sampling data and gamma radiation survey calibration checks.

#### 2.2.1 QC Acceptance for Sampling Data

The QC acceptance limits are based on the RPD and DER testing results for all applicable samples. Tetra Tech evaluated the analyte results for the field duplicate soil samples by calculating the RPD and DER between the two samples when both values of the field/ duplicate pair were greater than five times the reporting limit (RL) for a given analyte. The QC acceptance limits are an RPD of less than 30% and a DER of less than 1.96. Data validation flags or data qualifiers are given to the analytical data which exceed the acceptance limits. The data qualifiers are applied to the data that do not meet the performance acceptance criteria discussed above. A total QC acceptance goal is 85% of the samples for all analytes shall meet the QC acceptance criteria.

Table C-1 Summary of Data QC Qualifiers

Data Qualifier	Description of Data QC Qualifier
К	RPD > 30% and the average concentration is greater than five times the RL or MDL
J	RPD > 30% and the average concentration is less than five times the RL or MDL.
G	DER > or = 1.96 and the average concentration is greater than five times the RL or MDL.
н	DER > or = 1.96 and the average concentration is less than five times the RL or MDL.

#### 2.2.2 QC Acceptance for Gamma Radiation Calibration Check QC Data

The two primary QC methods for the gamma radiation survey outlined in the report include daily field calibration checks and pre-survey and post-survey calibration checks.

#### 2.2.2.1 Daily Field Check Instrument Calibration QC Acceptance Limits

As discussed in Section 3.1.3 of the Technical Memorandum, for normally distributed data, 99% of all measurements are expected to fall within ±3 standard deviations from the mean. Background, field strip, and check source standard deviation values were recalculated three times daily throughout the project duration. Any instrument with a QC measurement result falling outside ±3 standard deviations from the mean of all QC measurements on the field check control chart required investigation. A detector exceeding control limits on any QC check (background or field strip) would be replaced with a pre-qualified spare detector and sent back to the manufacturer for evaluation, repair, and recalibration. All data collected from that instrument would be removed from the project database and new data would be collected using the spare detection instruments.

#### 2.2.2.2 Pre-survey and Post-Survey Instrument Calibration Check QC Acceptance Limits

The RPD was calculated between the mean pre-survey and mean post-survey background and cesium-137 (Cs-137) response gamma exposure rate for each instrument used in the survey. The QC acceptance limit is an RPD of less than 10% for all radiation survey instruments. Additionally, a parametric analysis was performed on the pre-survey and post-survey data sets for both background and Cs-137 response gamma exposure rates. The Anderson-Darling (AD) statistic was used to assess how well the data follow a particular distribution. For the gamma radiation instrumentation, the data should follow a normal distribution at all times under controlled conditions. The corresponding p-value must be greater than 0.05 in order to accept the null hypothesis that the data follow a specified distribution. For the purposes of the QC data validation testing, the data were plotted on a normal distribution probability plot and the AD statistic and corresponding p-value calculated using the statistical software Minitab 16 \*\*. All of the presurvey and post-survey data was required to have a p-value exceeding 0.02-0.05 or follow a normal (i.e. Gaussian) distribution plotted on a normal probability plot for the instrument data to be considered reliable.

# 3.0 SOIL SAMPLING FIELD QC SUMMARY

A total of 19 soil samples were collected as discussed in the main text of the Technical Memorandum. Therefore, to maintain the QC frequency discussed in Section 2.0, only one field duplicate sample was collected by Tetra Tech as part of the radiological and soil investigation monitoring program. The quality control samples consist of a primary field sample and a field duplicate sample. The duplicate sample was sent blindly to the laboratory to be tested using the same methods as the primary sample. The precision was analyzed for each data pair using the data validation methods outlined in Section 2.1. A summary of the soil sampling field QC results are provided in Section 3.3.

# 3.1 Soil Sampling QC Results (Radionuclides)

#### 3.1.1 Cesium-137 Soil Sampling QC Results

Table C-2 provides the field and duplicate laboratory results for Cs-137. Both of these samples reported Cs-137 concentrations below the minimum detectable concentration (MDC) which is equivalent to the RL for this procedure. Therefore, no data validation was performed. No data QC qualifiers are provided for the Cs-137 data validation and QC review. These samples met the data validation and QC requirements for the project.

Table C-2 Summary of Cs-137 Laboratory Results for Primary and Duplicate Soil Sample

Sample ID	Cs-137 (pCi/g)	Precision +/-	MDC	Lab Qualifier <sup>1</sup>
TT-GF-01	< 0.089	-	0.089	U
TT-GF-02	< 0.097	-	0.097	U

<sup>&</sup>lt;sup>1</sup>Lab qualifier = "U" less than MDC

#### 3.1.2 Strontium-90 Soil Sampling QC Results

Table C-3 provides the field and duplicate laboratory results for Sr-90. Both of these samples reported Sr-90 concentrations below the MDC which is equivalent to the RL for this procedure. Therefore, no data validation was performed. No data QC qualifiers are provided for the Sr-90 data validation and QC review. These samples met the data validation and QC requirements for the project.

Table C-3 Summary of Sr-90 Laboratory Results for Primary and Duplicate Soil Sample

Sample ID	Sr-90 (pCi/g)	Precision +/-	MDC	Lab Qualifier <sup>1</sup>
TT-GF-01	< 0.104	-	0.104	U
TT-GF-02	< 0.102	-	0.102	U

<sup>&</sup>lt;sup>1</sup>Lab qualifier = "U" less than MDC

#### 3.2 Soil Sampling QC Results (Non-Radionuclides)

#### 3.2.1 Metals Soil Sampling Field QC Results

Table C-4 provides the field and duplicate laboratory results for metals. The RPD was calculated between the primary and field duplicate soil samples TT-GF-01 and TT-GF-02. The QC samples met the RPD limits for all constituents; therefore these samples met the data validation and QC requirements for the project.

Table C-4 Summary of Sr-90 Laboratory Results for Primary and Duplicate Soil Sample

	TT-G	F-01	тт-с	GF-02	Relative Percent	Data OC
Analyte	Value (mg/kg)	MDL (mg/kg)	Value (mg/kg)	MDL (mg/kg)	Difference	Data QC Qualifier
Aluminum	9,600	1.8	9,300	1.9	3.2%	-
Antimony	0.18	0.02	0.14	0.02	25.0%	-
Arsenic	3.7	0.038	4.5	0.04	19.5%	-
Barium	75	0.068	75	0.07	0.0%	-
Beryllium	0.5	0.016	0.51	0.016	2.0%	-
Cadmium	0.23	0.019	0.17	0.02	30.0%	-
Calcium	4,100	11	4,300	11	4.8%	-
Chromium	15	0.083	15	0.087	0.0%	_
Cobalt	6.4	0.061	6.3	0.063	1.6%	-
Copper	11	0.29	11	0.3	0.0%	-
Iron	20,000	3.9	19,000	4.1	5.1%	-
Lead	11	0.022	11	0.023	0.0%	-
Magnesium	5,000	4.3	4,900	4.4	2.0%	-
Manganese	320	0.072	310	0.074	3.2%	-
Nickel	11	0.3	11	0.31	0.0%	-
Potassium	4,400	21	4,200	21	4.7%	-
Selenium	0.97	0.043	0.94	0.044	3.1%	-
Silver	0.047	0.0059	0.03	0.0062	-	-
Sodium	370	19	340	20	8.5%	-
Thallium	0.26	0.0047	0.26	0.0049	0.0%	-
Vanadium	34	0.052	34	0.053	0.0%	-
Zinc	71	0.49	76	0.51	6.8%	-
Mercury	0.017 <sup>J</sup>	0.0042	0.016 <sup>J</sup>	0.004	-	-

#### 3.2.2 Perchlorate Soil Sampling Field QC Results

Perchlorate was analyzed in all samples collected at the background, BBC, and sediment locations. All of the perchlorate results were below the MDL. Therefore, no data validation was performed. No data QC qualifiers are provided for the perchlorate data validation and QC review. These samples met the data validation and QC requirements for the project. A copy of the laboratory analytical results for the perchlorate analysis is provided in Attachment F of the Technical Memorandum.

#### 3.3 SOIL SAMPLING DATA VALIDATION AND QC REVIEW

The results of the QC data review are provided in Section 3.1 and Section 3.2. The overall goal is that 85% of the data shall not exceed the RPD or DER acceptance criteria; this goal has been achieved for the soil sampling data. One hundred percent of soil sample sets that met the RPD acceptance criteria. No DER data validation was performed on the radionuclide analyses (Cs-137 and Sr-90) because all of the samples reported concentrations below the MDL. All of the soil samples for this project met the project QC acceptance criteria.

#### 4.0 RADIATION INSTRUMENTATION QC SUMMARY

As described in the Section 3.1.4 of the Technical Memorandum, Tetra Tech adheres to strict QA/QC protocol when conducting gamma radiation surveys. QA includes qualitative factors that provide confidence in the results, while QC involves quantitative, field evidence that supports the validity of results. Tetra Tech uses data quality indicators as recommended in MARSSIM (NRC, 2000) and MARLAP (NRC, 2006) to ensure the data being collected are reliable. This section summarizes the methods and results of the QC analyses performed for those detectors that were actually used during the survey. The QC protocol involved pre-survey and post-survey calibration checks and instrument calibration field checks. Before and after performing the gamma radiation survey at BBC, Tetra Tech performed QC analyses for the radiation instruments that were used during the 2016 BBC radiological investigation and soil investigation program. The purpose of the QC analyses is to quantify the consistency of gamma exposure readings between detectors.

Two detectors, identified as MFG-1 and MFG-11 were utilized during the gamma radiation surveys. The QC analysis involved calibration checks of these instruments under a controlled indoor environment for pre-survey and post-survey. The pre-survey check was performed on February 5, 2016 for MFG-1 and February 12, 2016 for MFG-11 and the post-survey check for both of these instruments was performed on February 22, 2016. The pre-survey and post-survey calibration checks involved the collection of 1,000 background measurements and 1,000 Cs-137 source checks under a controlled environment.

Additionally, field engineers performed daily QC checks during the field work at a designated background area located on the BBC. The daily checks included background and field strip calibration checks. Under these circumstances, all data from any given set of properly calibrated and correctly functioning radiation instruments should follow a normal distribution.

#### 4.1 GAMMA RADIATION SURVEY QA/QC METHODS

#### 4.1.1 Gamma Radiation Survey Data Quality Assurance Procedures

An important QA protocol includes instrument calibration. All of the radiation detection equipment employed during the field work must have been factory calibrated within the previous 12 months. Data developed using any of the field-qualified instruments are then interchangeable, allowing instrument substitution as needed. Copies of factory calibration documentation for the two detectors used during the survey are provided in Attachment B.

#### 4.1.2 Gamma Radiation Survey Data Quality Control Procedures

Under the QC program, factory-calibrated instruments must also meet on-site field test criteria. Calibration checks are measurements performed to verify instrument performance each time an instrument is used (NRC, 2000). Tetra Tech field personnel collected quantitative measurements as part of the QC program including:

- 1.) daily field instrument calibration checks; and
- 2.) pre-survey and post-survey instrument calibration checks.

A control chart is a graphical plot of measurement results with respect to time and helps monitor performance of the radiation detection instrumentation (NRC, 2000).

#### Daily Field Instrument Calibration Field Check:

The instrument calibration field checks consist of collecting measurements using the scan systems from a static background area, field strip area approximately 10 meters in length, and static Cs-137 source checks at the pre-determined background area. For this particular project, the field checks were performed in an area within the cabins near the administration building at the BBC. The following criteria were used to assess the daily field calibration checks:

- For normally distributed data, 99 percent of all measurements are expected to fall within ±3 standard deviations from the mean. Background, field strip, and check source standard deviation values were recalculated three times daily throughout the project. Any instrument with a QC measurement result falling outside ±3 standard deviations from the mean of all QC measurements on the field check control chart would require investigation. A detector exceeding control limits on any QC check (background, field strip, or Cs-137 source check) would be replaced with a prequalified spare detector and sent back to the manufacturer for evaluation, repair, and recalibration.
- QC measurements, including a background check, field strip check, and Cs-137 source check were performed three times daily during the work for each scanning system in use. These checks were performed outdoors at the same time and location each day. The daily field strip check provides an indication of total measurement uncertainty from turbulent movement for each mobile system being used in the field.

#### *Pre-Survey and Post-Survey Instrument Calibration Check:*

In addition to daily QC checks, pre-survey and post-survey QC instrument measurements were collected at an indoor location for each NaI(TI) detector that would be potentially used during the gamma radiation survey. The purpose of these measurements was to quantify the consistency of readings among the detectors, under controlled conditions before (pre-survey) and after (post-survey) the field survey. A minimum of 1,000 background and Cs-137 source measurements were collected both pre-survey and post-survey for each detector under the same counting conditions. The pre-survey and post-survey QC checks were performed at the Tetra Tech office in Fort Collins, Colorado, prior to and after the field work. The data validation criterion and results for the pre-survey and post-survey analysis are discussed in the following section.

#### 4.2 PRE-SURVEY AND POST-SURVEY CALIBRATION CHECK QC RESULTS

This section summarizes the QC results for the background and Cs-137 source response measurements for the pre-survey and post-survey. The QC acceptance criteria are discussed in Section 2.2 of this attachment. The QC acceptance criteria for the pre-survey and post-survey mean background and Cs-137 source response gamma exposure rate are less than 10% RPD. Additionally, the p-value must be greater than 0.05 for all gamma exposure rate distributions. Tables C-5 and C-6 show the pre- and post-survey background QC results for detectors MFG-1 and MFG-11. Figures C-1 and C-2 present the frequency histograms and probability plots for the pre- and post-survey background QC results, respectively. Tables C-7 and C-8 show the pre- and post-survey Cs-137 source check QC results for detectors MFG-1 and MFG-11. Figures C-3 and C-4 present the frequency histograms and probability plots for the pre- and post-survey Cs-137 source check QC results, respectively. A summary of the gamma radiation instrumentation data validation and QC review is provided in Section 4.4.

Table C-5 Instrument MFG-1 Pre-Survey and Post-Survey Background QC Results

Survey:	Pre-Survey	Post-Survey	
Date:	02/12/16	02/22/16	Relative Percent Difference
Detector ID:	MF	G-1	
# of Readings	1,000	1,000	-
Average	16.7	16.8	0.95%
Median	16.7	16.9	1.12%
Standard Deviation	0.88	0.86	1.41%
95 <sup>th</sup> Percentile	18.2	18.3	0.64%
99 <sup>th</sup> Percentile	18.7	18.8	0.60%

Table C-6 Instrument MFG-11 Pre-Survey and Post-Survey Background QC Results

Survey:	Pre-Survey	Post-Survey	
Date:	02/05/16	02/22/16	Relative Percent Difference
Detector ID:	MF	G-11	
# of Readings	1,000	1,000	-
Mean	16.5	16.9	2.24%
Median	16.5	16.9	2.16%
Standard Deviation	0.81	0.88	8.55%
95 <sup>th</sup> Percentile	17.8	18.4	3.25%
99 <sup>th</sup> Percentile	18.6	18.9	1.74%

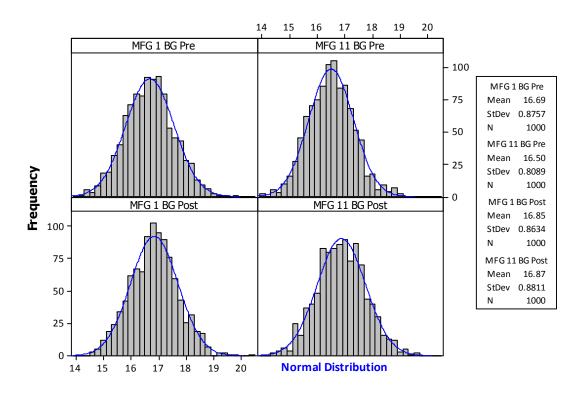


Figure C-1 Frequency Histograms for Pre-Survey and Post-Survey Background Measurements

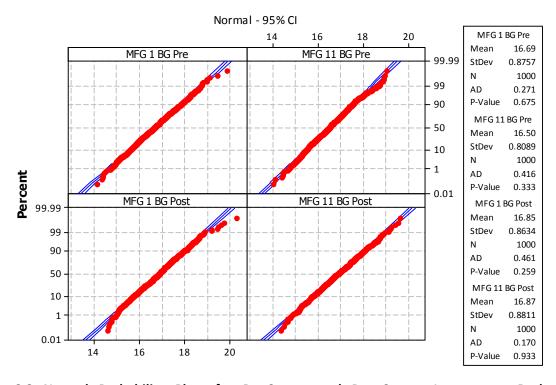


Figure C-2 Normal Probability Plots for Pre-Survey and Post-Survey Instruments Background Measurements

Table C-7 Instrument MFG-1 Pre-Survey and Post-Survey Cs-137 Source Check QC Results

Survey:	Pre-Survey	Post-Survey	
Date:	02/12/16	02/22/16	Relative Percent Difference
Detector ID:	MI	G-1	
# of Readings	1,000	1,000	-
Average	186	182	2.05%
Median	186	182	2.05%
Standard Deviation	2.84	2.88	1.24%
95 <sup>th</sup> Percentile	191	187	2.05%
99 <sup>th</sup> Percentile	193	189	2.07%

Table C-8 Instrument MFG-11 Pre-Survey and Post-Survey Cs-137 Source Check QC Results

Survey:	Pre-Survey	Post-Survey	
Date:	02/05/16	02/22/16	Relative Percent Difference
Detector ID:	MF	G-11	
# of Readings	1,000	1,000	n/a
Average	180	178	1.00%
Median	180	178	0.87%
Standard Deviation	2.85	2.77	3.01%
95 <sup>th</sup> Percentile	184	183	0.97%
99 <sup>th</sup> Percentile	186	184	1.38%

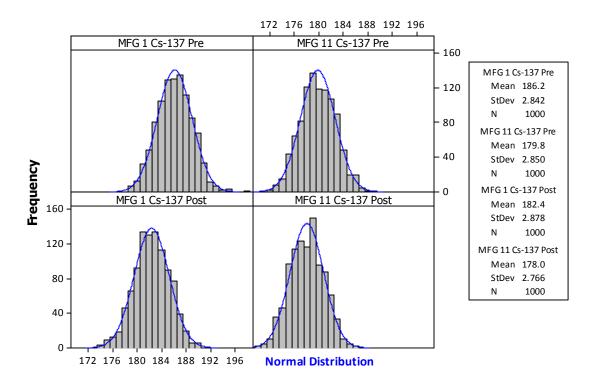


Figure C-3 Frequency Histograms for Pre-Survey and Post-Survey Cs-137 Source Response Measurements

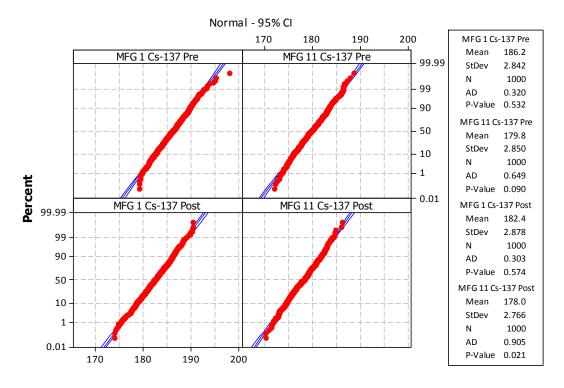
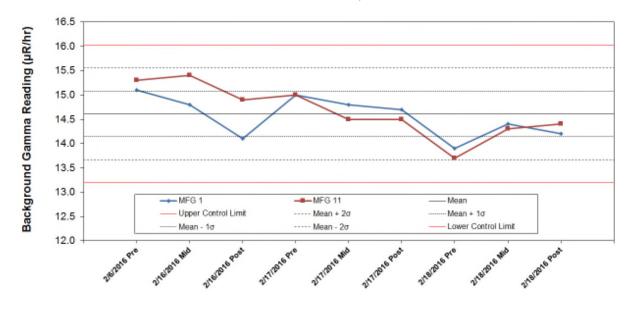


Figure C-4 Normal Probability Plots for Pre-Survey and Post-Survey Cs-137 Source Response Measurements

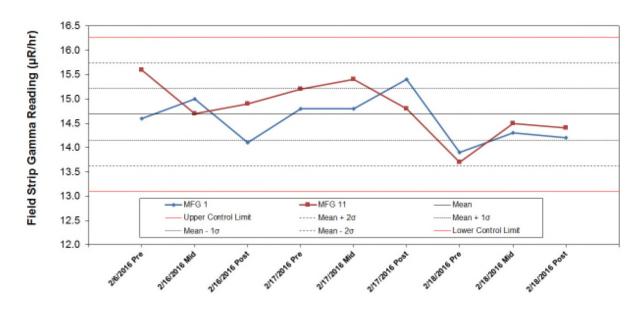
#### 4.3 Daily Field Calibration Check QC Results

The QC charts showing the results of the daily field calibration checks for background, field strip, and Cs-137 source checks are shown on Figures C-5 through C-7, respectively. A summary of the gamma radiation instrumentation data validation and QC review is provided in Section 4.4.



QC Measurement Date and Time

Figure C-5 Daily Field Calibration Check Results (Background)



QC Measurement Date and Time

Figure C-6 Daily Field Calibration Check Results (Field Strip)

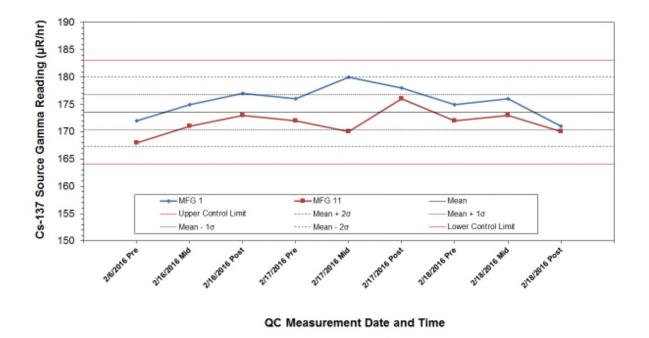


Figure C-7 Daily Field Calibration Check Results (Cs-137 Source Check)

#### 4.4 GAMMA RADIATION SURVEY DATA VALIDATION AND QC REVIEW

All of the pre-survey and post-survey gamma radiation survey calibration checks met the established acceptance criteria. All of the daily field calibration checks were within the control limits and, therefore, met the QC acceptance criteria. The gamma radiation survey data is of the highest quality and can be considered reliable.

#### 5.0 REFERENCES

[EPA] 2002. United States Environmental Protection Agency. Guidance on Environmental Data Verification and Data Validation. EPA QA/G-8. Washington, DC. November.

## ATTACHMENT D SCANNED COPY OF FIELD LOGBOOK

Radiological and Soil Investigation
Field Sampling Logbook

February 2016

### JOB BOOK

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To find angle for a given distance and deflection.

Rule 1. Multiply the given distance by .01745 (def. for 1° for 1 ft.) and divide given deflection by the product.

the given distance. Rule 2. Multiply given deflection by 57.3, and divide the product by

To find deflection for a given angle and distance. Multiply the angle by .01745, and the product by the distance.

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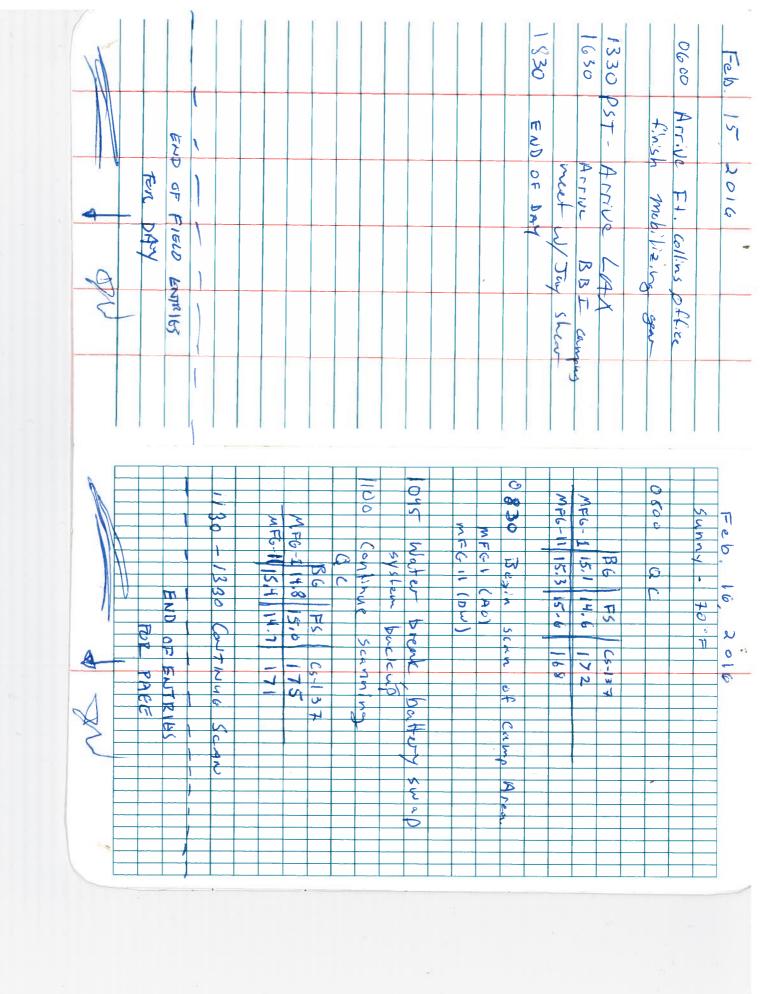
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PERFORM MORNING Q C OT DROOM	STAPPED SCANNING DUS TO RAIN DEURY
	CONFLETED DRAINAGE SCAN CS 1500
PARTY CLOUDY, 650	
	CO 11, 2010 00 00 00 00 VIII

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	For PAGE
PAGG	SAMMAR LIPIT TO GUES
END OF BINTERES FOR	
7-12-01	DATE 2/18/16
X16 = 17.6 X50 = 0.70 85, 90,100, 9.0, 7.5,10,5,10.5,16.5	TIME 1430 PHOTO J GPS CONCECTED
16 1745 BICREN: 10	IDS TT-BP-RBRA-GI
AREAN THIS DEVILOR IN VALUE OF THE SHAPE OF	2 Collect individual Soil Sample
0,5,10,5,	soil majstre cantent
2/14/16	en 1400 , Note dense vegetation, high
	- Z
8,6 = 15.5 [50 = 0.96] 7.5, 8, 8.5, 8,5,8,9,8,7,8x	
21.8/16 1645 Bicken: 9,99,9,59,85	max 19.6 MR/hr
ARRIVE OF YOLD WELL'IN [SONE JAMOUE]	
	50 0.9 May
LEFT TO DO SAMOUNG @ 1630	mean 17.6 pp/hr
MFG-11 14.3 14.5	10- second Aug. Cammo Exposur a las high
34/ B.H.	
BG F5 C5 137	as "SDI
20-044 OC & 19 12	LOCATION LOGGED IN DATA FILE 18BI-SAMWING
1	12.0 14.0 11.0
LEFT THOUSAND OAKS, CA Q 1545	14.0 15.0 11.0
2/18/16 1530	11.0 13.5 13.0
17-89-DRAW-01-6"	8.5 14.0 12.0
SAMPLET	10,5 11.0 12.0
PLOT NEAR BP-ROBA.	BICRON MEASUREMENT ( SDI ( HEN/M)
a CONDUCTED SCANI (SOIL SAMPLING IN SECURIOR PRAIN	1130 SEDIMENT SAMOLE IN BBC SOUTH DRAINSEE
TEB 18/2016	FEB. 18 2016
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	"Harry Land" THE COLOR OF THE C
1 0	
	1.7 (SD=0.51) 45, 45 ES ES
	1810
	"Ga Ga Pit" TT-GBP-01 (Soil)
X = 18,4 (50= 0.59)	
2/18/16 /850	~
TT-88CS&D-CI Brans Na	1805 5,515, 6,5
P. S	"Baseball fight" TT- BBF-01 BICAND: 5, 8, 7, 6, 5,5
2 1/8/16 57: 10.01 7 7 7 7	
8,9,6,8,5,16,8,85	10=13,7 (50-0,55) 6, 5.5, 6, 6.5, 6, 4.5
TT-SDZ-OI (Sediment	2/18/16 1750 Bicar: 6,5, 7,0,7,6,6,6,5,5
C	"Playgrand" TT-PPG-OI (Soil) Pritzker Playgrand
2	
BICRON: 6.5, 7, 75, 9, 9, 5, 75, 8, 6, 7, 7	2.8.5
TT-CF-42 (DUAUCATE) XX	2/18/16 1740 9,9.5,10,5,10,5,9,7.5, 85,85
"Gan Field" 77-6F-01 2/18/16 1835	T-ED2-01 (Sediment) BICON 8,9,5, 11, 10,5, 8,5
1	
810=121 (SB=038)	8 = 22.8 pt. / (1.1050) 11,12.5
2/18/16 /8/15 WO BICKEN	zhalit 1730 14, 11, 9, 5, 10, 10.5, 12, 13, 10
TT-ED3-01 (sediment)	TT-ED1-01 (Scalineat) Sicent 9, 10, 10.5, 9, 13
) •	11 0 0 0

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		Top 2/8/16
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	F(X LAX TO WAY OBJO!!	810=15,3 850=0,65
	1-EPT BAC & 0500 P	1920
	-	
	FER 19, 2016	FER 18,7016

ATTACHMENT E
PHOTOGRAPHIC LOG



#### Brandeis-Bardin Radiological Investigation Attachment E – Photographic Log

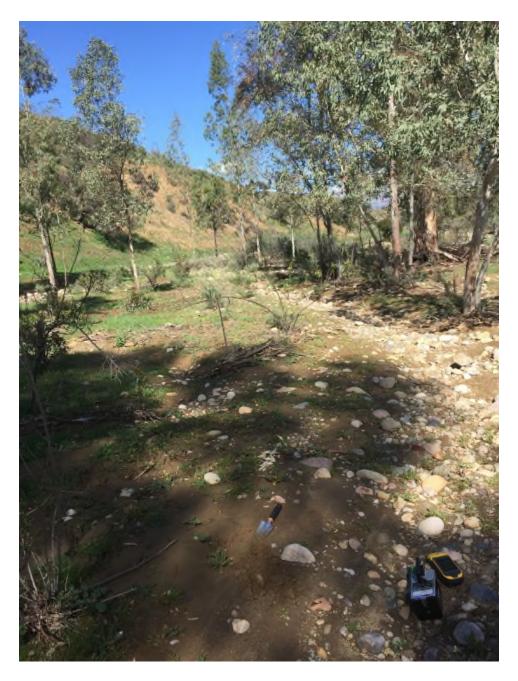


Photo 1: TT-SD-01 Sampling Location (2/18/16)



Photo 2: Bridle Path RBRA (2/17/16)



Photo 3: Bridle Path RBRA Gamma Radiation Survey (2/17/16)



Photo 4: TT-BP-RBRA-01 Soil Sampling Location (2/17/16)



Photo 5: TT-BP-DRAINAGE-01 Sediment Sampling Location (2/17/16)



Photo 6: Bridle Path Drainage Gamma Radiation Survey (2/17/16)

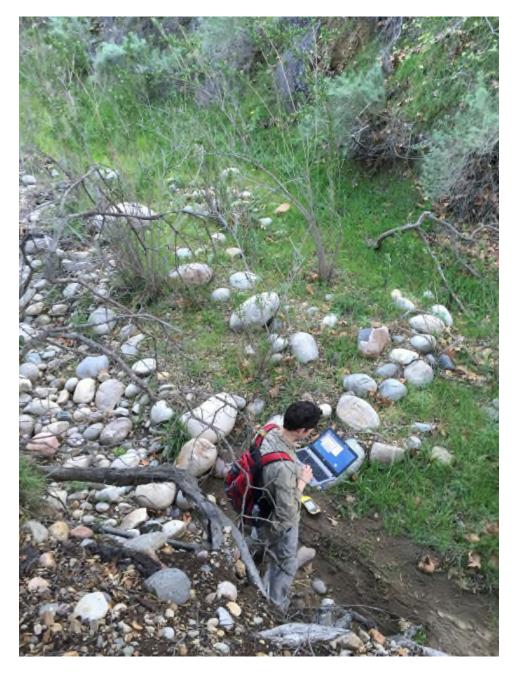


Photo 7: TT-SEDBG1-01 Sediment Sample Location (Eastern Drainage Background) [2/18/16]

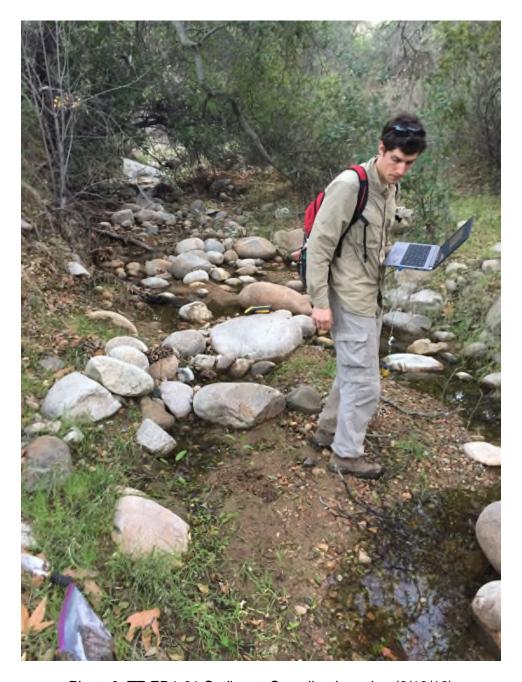


Photo 8: TT-ED1-01 Sediment Sampling Location (2/18/16)

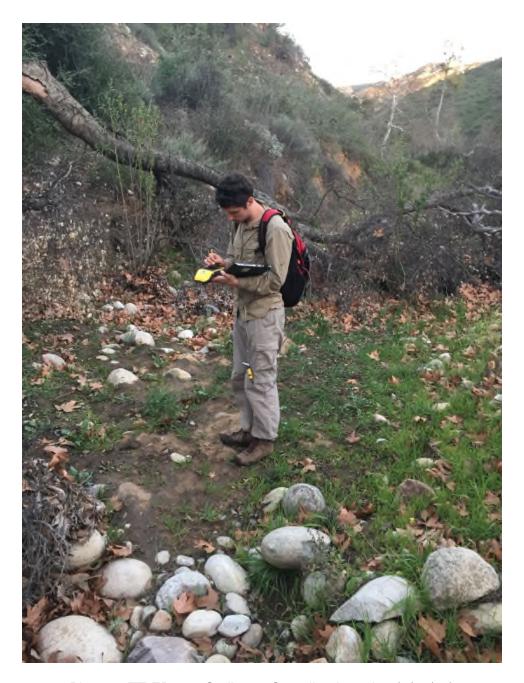


Photo 9: TT-ED2-01 Sediment Sampling Location (2/18/16)

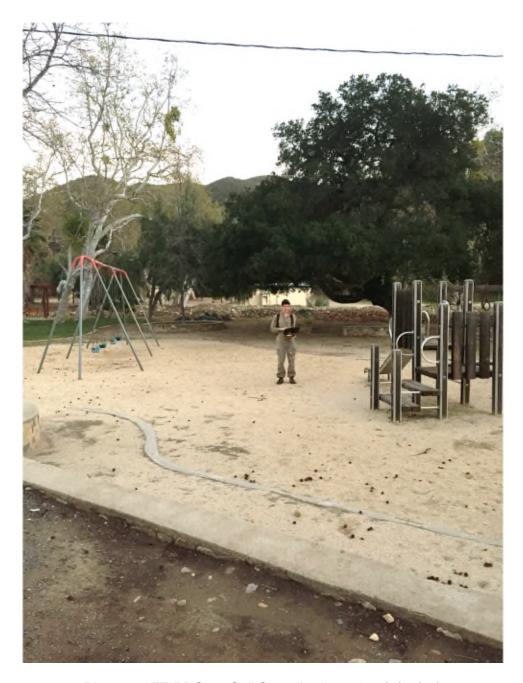


Photo 10: TT-PPG-01 Soil Sampling Location (2/18/16)



Photo 11: TT-BB1-01 Soil Sampling Location (2/18/16)



Photo 12: TT-BBF-01 Soil Sampling Location (2/18/16)

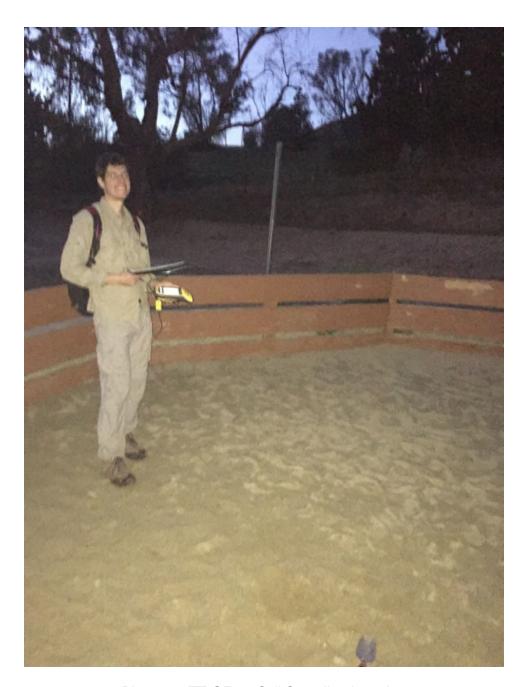
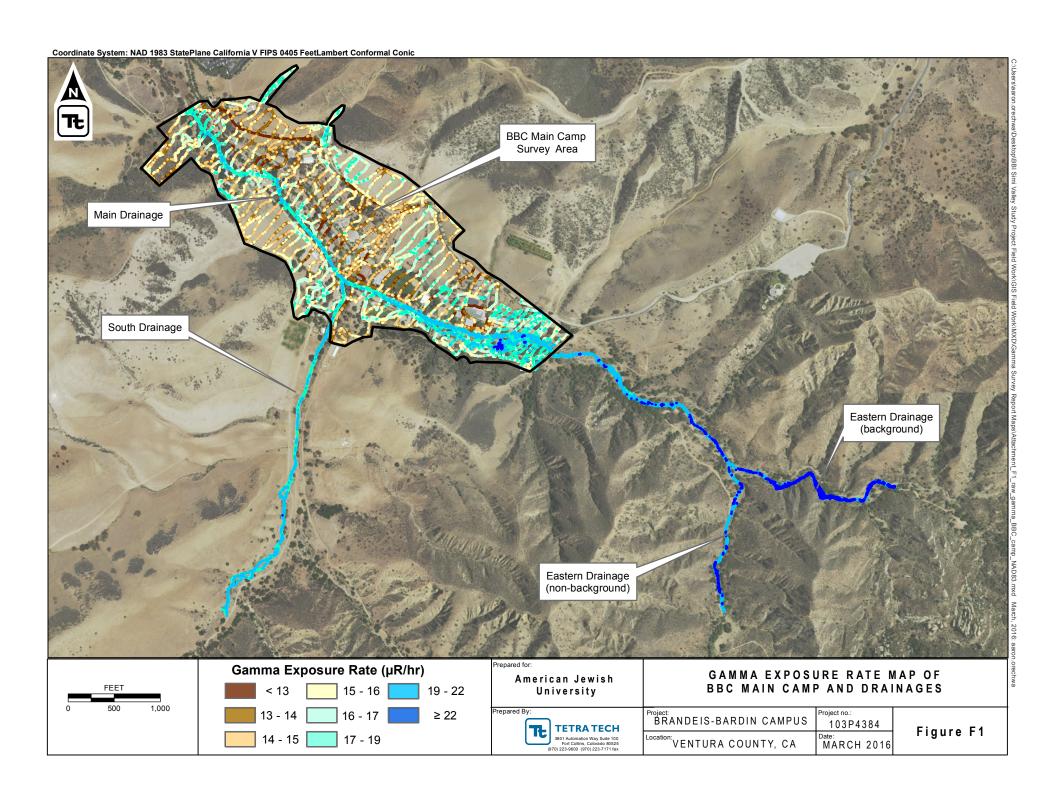
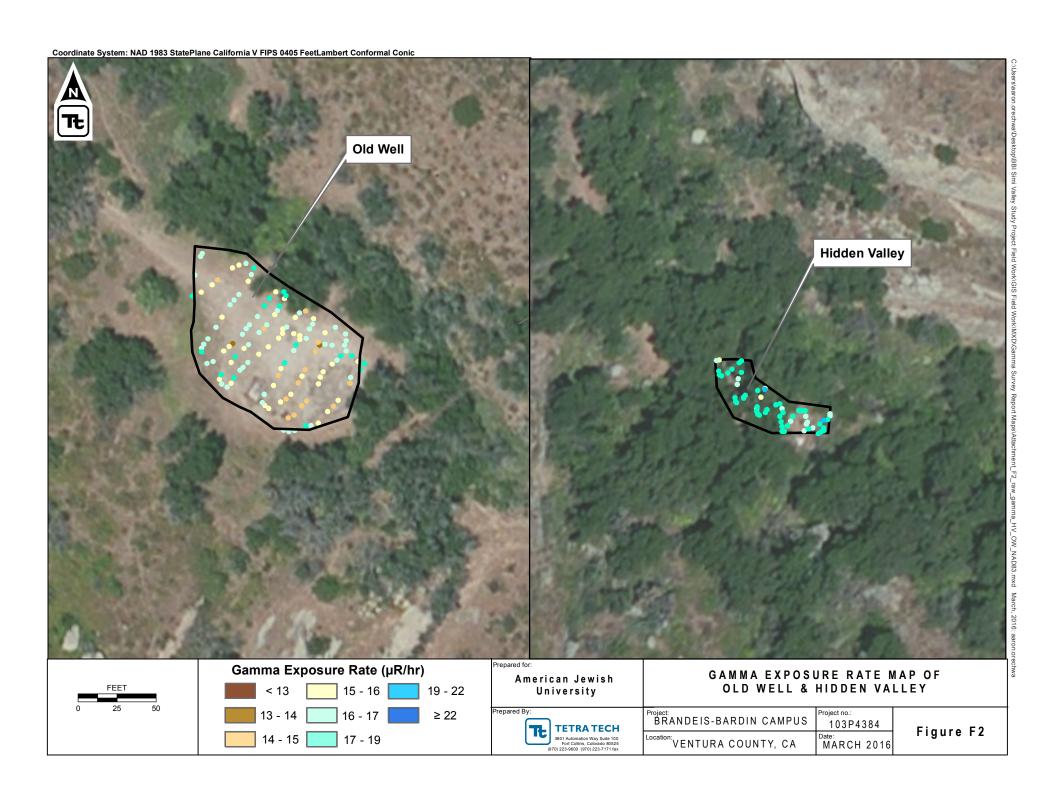
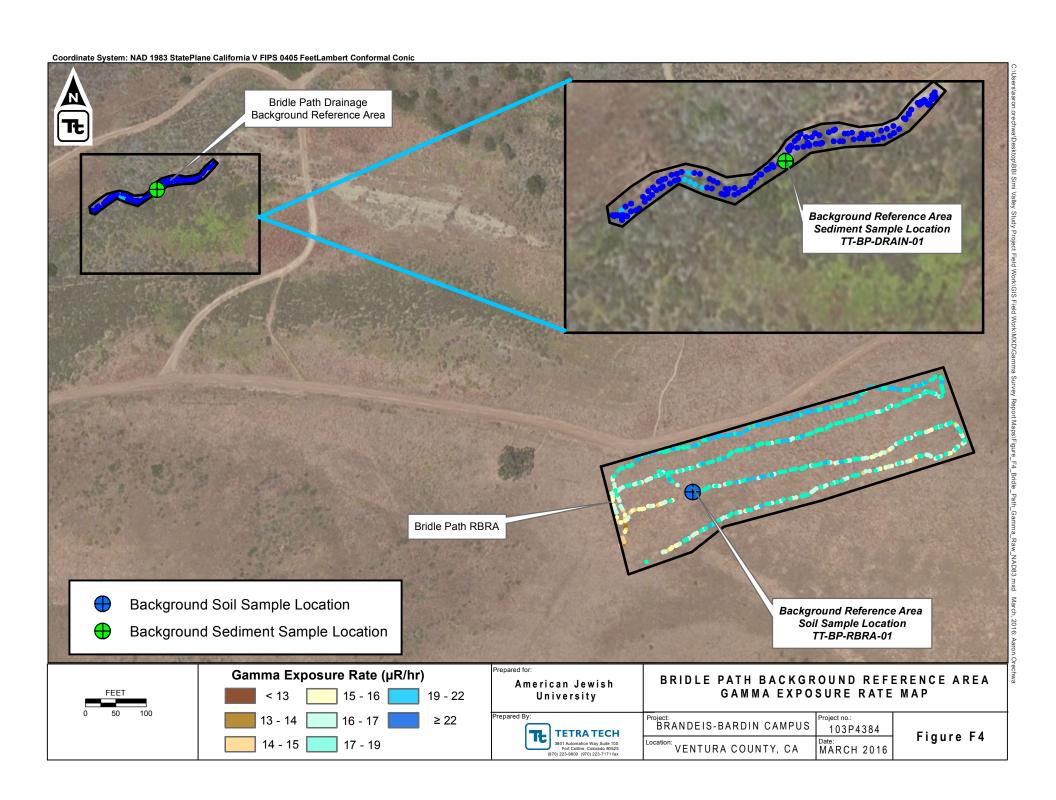


Photo 13: TT-GF-01 Soil Sampling Location

## ATTACHMENT F RAW GAMMA RADIATION DATA MAPS







ATTACHMENT G

LABORATORY REPORTS



# Gamma Spectroscopy Case Narrative

# Tetra Tech MM, Inc.

103P4384 -- Brandeis-Bardin Campus

Work Order Number: 1602335

- 1. This report consists of analytical results and supporting documentation for 19 soil samples received by ALS on 2/25/2016.
- 2. These samples were prepared according to the current revision of SOP739.
- 3. The samples were analyzed for the presence of gamma emitting radionuclides according to the current revision of SOP713. The analyses were completed on 3/2/2016.
- 4. The analysis results for these samples are reported on a "Dry Weight" basis in units of pCi/gram.
- 5. There are cases where the sample density is less than the associated calibration standard density. Cases that exceed the limit of +/- 15% of the density of the calibration standard are flagged with a 'G', denoting a significant density difference between the sample and calibration standard. Consequently, the results may be biased high for the flagged results in this workorder. If requested, ALS can perform a transmission spike in order to estimate a magnitude of this bias. The results are reported without further qualification.
- 6. No further problems were encountered with either the client samples or the associated quality control samples. All remaining quality control criteria were met.



The data contained in the following report have been reviewed and approved by the personnel listed below. In addition, ALS certifies that the analyses reported herein are true, complete and correct within the limits of the methods employed.

Hannah Alt	3/3/16
Hannah Alt	Date
Radiochemistry Primary Data Reviewer	
	3/4/16
Radiochemistry Final)Data Reviewer	Date
( ) wolf	<u>3/4/16</u> Date

# **ALS Environmental -- FC**

# Sample Number(s) Cross-Reference Table

**OrderNum:** 1602355

Client Name: Tetra Tech MM, Inc.

Client Project Name: 103P4384

Client Project Number: Brandeis-Bardin Campus

**Client PO Number:** 

Client Sample Number	Lab Sample Number	COC Number	Matrix	Date Collected	Time Collected
TT-LR-RBRA-01	1602355-1		SOIL	16-Feb-16	15:35
TT-BP-RBRA-01	1602355-2		SOIL	18-Feb-16	14:30
TT-BP-DRAIN-01	1602355-3		SOIL	18-Feb-16	15:30
TT-SEDBG1-01	1602355-4		SOIL	18-Feb-16	16:55
TT-SD1-01	1602355-5		SOIL	18-Feb-16	11:30
TT-SD2-01	1602355-6		SOIL	18-Feb-16	18:40
TT-ED1-01	1602355-7		SOIL	18-Feb-16	17:30
TT-ED2-01	1602355-8		SOIL	18-Feb-16	17:40
TT-ED3-01	1602355-9		SOIL	18-Feb-16	18:25
TT-BBCSED-01	1602355-10		SOIL	18-Feb-16	18:50
TT-PPG-01	1602355-11		SOIL	18-Feb-16	17:50
TT-CAB-01	1602355-12		SOIL	18-Feb-16	19:30
TT-GF-01	1602355-13		SOIL	16-Feb-16	18:35
TT-GF-02	1602355-14		SOIL	18-Feb-16	18:35
TT-OSF-01	1602355-15		SOIL	18-Feb-16	19:00
TT-BBF-01	1602355-16		SOIL	18-Feb-16	18:05
TT-BB1-01	1602355-17		SOIL	18-Feb-16	17:55
TT-HC-01	1602355-18		SOIL	18-Feb-16	18:10
TT-GGP-01	1602355-19		SOIL	18-Feb-16	18:10

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TF: (800) 443-1511 PH: (970) 490-1511 FX: (970) 490-1522 225 Commerce Drive, Fort Collins, Colorado 80524

Chain-of-Custody

ALS WORKORDER #

Turnaround time for samples received after 2 p.m. will be calculated beginning from the next business day.

Turnaround time for samples received Saturday will be calculated beginning from the next business day.

SEE NOTES SECTION RETURN 5 Sr-90 (Rush 8 days) MDC = 0.25 pCi/g [Method ASTM D5811] PARAMETER/METHOD REQUEST FOR ANALYSIS Cs-137 (Rush 8 days) MDC = 0.1 pCi/g [Method 901.1 M] BY LAB I Dioxins/Furans (Rush 8 days) [Method 1613B] G DISPOSAL Perchlorate (Rush 8 days) [Method 314] × × × u. × Metals - TAL [Method 6020A] × × × × × × × × ш × Mercury [Method 7471 A] × × × × × × × × × × ۵ Aaron Orechwa/Daniel Workman × × × ပ × × × × × × × × × × × × × × × × 8 × ပ × ۵ ш I × × × × × 8 u. 7 × × G ⋖ × ဗွ PRESERVATIVE ďa n⁄a n/a n/a n/a n/a n/a n/a n/a n/a ADDRESS 3801 Automation Way Suite #100 SAMPLER aaron.orechwa@tetratech.com # OF BOTTLES CITY / STATE / ZIP | Fort Collins, CO 80521 SAMPLE TIME 1730 1740 INVOICE ATTN TO Aaron Orechwa 1655 1130 1840 1825 1430 1530 1535 RUSH (8 days) PHONE (970)420-9395 **Tetra Tech** AJU-BBC 2/18/16 2/18/16 2/18/16 2/18/16 SAMPLE DATE 2/16/16 2/18/16 2/18/16 2/18/16 2/18/16 2/18/16 BILL TO COMPANY E-MAIL TURNAROUND TIME SITE ID FAX PURCHASE ORDER **EDD FORMAT** MATRIX SOIL SOIL SOIL SOIL SOIL SOIL SOIL SOIL SOIL ADDRESS 3801 Automation Way Suite #100 FIELD ID aaron.orechwa@tetratech.com Brandeis-Bardin Campus Fort Collins, CO 80521 TT-LG-RBRA-01 TT-BP-DRAIN-01 TT-BP-RBRA-01 TT-SEDBG1-01 SEND REPORT TO Aaron Orechwa (970)420-9395 TT-ED3-01 TT-SD1-01 TT-SD2-01 TT-ED2-01 COMPANY NAME Tetra Tech TT-ED1-01 103P4384 E-MAIL CITY / STATE / ZIP PHONE FĀ 6 PROJECT NAME PROJECT No. (2) 3 6 Į+ LABID

RELINQUISH		EL / OC ED	REPORT LEVEL / OC REQUIRED		Please hold and store ALL samples until further notice.	until f	mples	LL sa	tore /	ld and s	Please ho
							Ì			-	
Form 202r9						S	NOTES				
uid E = extract	 = =	W = water	'Time Zone (Circle): EST CST MST PST Matrix: O = oil S = soil NS = non-soil solid W = water L = liquid E = extract	S = soil	Matrix: O = oil	PST	MST	CST	EST	(Circle):	*Time Zone
							١	l	1		

Please hold and store ALL samples until further notice.	<u></u>
Please provide all results for < detectable concentrations (MDC).	
Please do MDC of 0.25 pCi/g (or lower) for Sr-90 if possible.	

Summary
(Standard QC)
LEVEL II
(Standard QC)
LEVEL III (Std QC + forms)
LEVEL IV (Std QC + forms)

1-HCl 2-HNO3 3-H2SO4 4-NaOH 5-NaOH/ZnAcetate 6-NaHSO4 7-4°C 8-Other

PRESERVATION KEY

RELINQUISHED BY		Aaron Orechwa	2/25/2016	12:25
RECEIVED BY		Swill Malley	37-52-2	1225
RELINQUISHED BY	0			
RECEIVED BY				
RELINQUISHED BY				
RECEIVED BY				

DATE

PRINTED NAME

SIGNATURE

extract F = filter

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2/18/16

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TT-BBCSED-01

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TT-PPG-01 TT-CAB-01

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225 Commerce Drive, Fort Collins, Colorado 80524 TF: (800) 443-1511 PH: (970) 490-1511 FX: (970) 490-1522

# Chain-of-Custody

ALS WORKORDER #

1602355

PAGE

Turnaround time for samples received after 2 p.m. will be calculated beginning from the next business day.

Aaron Orechwa/Daniel Workman Turnaround time for samples received Saturday will be calculated beginning from the next business day.

SAMPLER

RUSH (8 days)

TURNAROUND TIME

													-			
PROJECT NAME	Brandeis-Bardin Campus	S	SITE ID AJU-BBC	ВС			_					DISPOSAL	AL.	BY LAB	ь	RETURN
PROJECT No.	103P4384	EDD FORMAT	3MAT						PAF	AMETE	R/MET	PARAMETER/METHOD REQUEST FOR ANALYSIS	UEST F	OR ANA	TASIS	
		PURCHASE ORDER	RDER				_	A Cs	137 (Ru	sh 8 day	s) MDC	Cs-137 (Rush 8 days) MDC = 0.1 pCi/g [Method 901.1 M]	/g [Meth	od 901.1	[M	
COMPANY NAME	Tetra Tech	BILL TO COMPANY		Tetra Tech			<b>1</b>	B Sr-	90 (Rust	8 days	MDC =	Sr-90 (Rush 8 days) MDC = 0.25 pCi/g [Method ASTM D5811]	g [Meth	od ASTN	D5811	_
SEND REPORT TO	Aaron Orechwa	INVOICE ATTN TO		Aaron Orechwa				C Me	rcury [M	Mercury [Method 7471 A]	.71 A]					
ADDRESS	ADDRESS 3801 Automation Way Suite #100	ADDI	ADDRESS 3801	3801 Automation Way Suite #100	ay Suite #	100		D Me	tals - TA	L [Metho	Metals - TAL [Method 6020A]	Ŋ				
CITY / STATE / ZIP	CITY/STATE/ZIP Fort Collins, CO 80521	CITY / STATE / ZIP		Fort Collins, CO 80521	521		3	ed 3	chlorate	(Rush 8	days) [I	Perchlorate (Rush 8 days) [Method 314]	[4]			
PHONE	(970)420-9395	<b>a</b>	PHONE (970)	(970)420-9395			_	F Dic	xins/Fur	ans (Ru	sh 8 day	Dioxins/Furans (Rush 8 days) [Method 1613B]	d 1613E	_		
FAX			FAX					5	:							
E-MAIL	aaron.orechwa@tetratech.com	Ú	E-MAIL aaro	aaron.orechwa@tetratech.com	tratech.co	m.		н								
				:				ſ								
LAB ID	PIELD 10	MATRIX	SAMPLE	SAMPLE TIME	# OF BOTTLES	PRESERVATIVE	20	<	S B	O	ш	ц	5	I	_	SEE NOTES SECTION
	TT-GF-01	SOIL	2/16/16	1835	1	n/a	<u>`</u>	×	×	×	×					
(2)	TT-GF-02	SOIL	2/18/16	1835	1	n/a		×	×	×	×					
(E)	TT-0SF-01	SOIL	2/18/16	1900	-	n/a		×	×	×	×					
3	TT-BBF-01	SOIL	2/18/16	1805	-	n/a		×	×	×	×				_	
	TT-BB1-01	SOIL	2/18/16	1755	1	n/a		×	×	×	×					
9	TT-HC-01	SOIL	2/18/16	1810	1	n/a		×	×	×	×				$\dashv$	
<b>(</b>	TT-GGP-01	SOIL	2/18/16	1810	1	n/a		×	×	×	×					
		SOIL	2/18/16		1	n/a		×	×	×	×					
		SOIL	2/18/16		1	n/a		×	×	×	×					
		SOIL	2/18/16		1	n/a		×	×	×	×				$\dashv$	
		SOIL	2/18/16		1	n/a		×	×	×	×				_	
		SOIL	2/18/16		-	n/a		×	×	×	×					
*Time Zone (Circle):	EST CST MST PST Matrix: O = oil S = soil NS = r	S = soil NS = non-soil solid W = water L = liquid E = extract	r L = liquid E	= extract F = filter				ŀ				-				
	NOTES		Ē	Form 202r9		SIGNATURE				PRINTED NAME	NAME			DATE	-	TIME
		30, 12,12														

Please hold and store ALL samples until further notice.	HEPOR RE	REPORT LEVEL / QC REQUIRED
(MDC)		Summary
Please provide all results for < defectable concentrations (mbc).		(Standard QC)
14:		LEVEL
Piease do MUC of 0.25 pc//g (of lower) for Sr-30 if possible.		(Standard QC)
• <del>f</del>		LEVEL III (Std
9		QC + forms)
29		LEVEL IV (Std QC +
		forms + raw data)

PRESERVATION KEY 1-HCI 2-HNO3 3-H2SO4 4-NaOH 5-NaOH/ZnAcetate 6-NaHSO4 7-4°C 8-Other

RELINQUISHED BY		Aaron Orechwa	2/25/2016	12:25
RECEIVED BY	CAX	SLOUT Malley	5221 71-52-2	1225
RELINQUISHED BY	O			
RECEIVED BY				٠
RELINQUISHED BY				
RECEIVED BY				



# ALS Environmental - Fort Collins CONDITION OF SAMPLE UPON RECEIPT FORM

	Client: Tetra tech. FC Workorder No: 160 Z3	355	_	
			<b>2-2</b> 5-	<u> </u>
1.	Does this project require any special handling in addition to standard ALS procedures?		YES	(NO)
2.	Are custody seals on shipping containers intact?	NE	YES	NO
3.	Are Custody seals on sample containers intact?	N	YES	NO
4.	Is there a COC (Chain-of-Custody) present or other representative documents?		YES	NO
5.	Are the COC and bottle labels complete and legible?		YES	NO
6.	Is the COC in agreement with samples received? (IDs, dates, times, no. of samples, no. of containers, matrix, requested analyses, etc.)		YES	NO
7.	Were airbills / shipping documents present and/or removable?	, OFF	YES	NO
8.	Are all aqueous samples requiring preservation preserved correctly? (excluding volatiles)	A	YES	NO
9.	Are all aqueous non-preserved samples pH 4-9?		YES	NO
10.	Is there sufficient sample for the requested analyses?		YES	NO
11.	Were all samples placed in the proper containers for the requested analyses?		(YES)	NO
12.	Are all samples within holding times for the requested analyses?		(YES)	NO
13.	Were all sample containers received intact? (not broken or leaking, etc.)		YES	NO
14.	Are all samples requiring no headspace (VOC, GRO, RSK/MEE, Rx CN/S, radon) headspace free? Size of bubble: < green pea > green pea		YES	NO
15.	Amount of sediment: dusting moderateheavy Amount		YES	NO
16	Were the samples shipped on ice?		YES	(NO
17	Were cooler temperatures measured at $0.1-6.0^{\circ}$ C? IR gun used*: #2 #4 ON	- 1	YES	NO
	Cooler #:			
	Temperature (°C): 4n6			
	No. of custody seals on cooler:			
	DOT Survey/ Acceptance External µR/hr reading:			-
	Background μR/hr reading:			
	Were external μR/hr readings ≤ two times background and within DOT acceptance criteria? YES / NO/NA (If no, see Form	008.)		
Ь А	Additional Information: PROVIDE DETAILS BELOW FOR A NO RESPONSE TO ANY QUESTION ABOVE, EXCEPT		ID#16.	
	* Sample 1 coc says TT-LG-BBRA-01 > bags Says TT			SRA-ol
_	4 log per baggie ID TT-LR-RBRA-01. Ow 2/25/			
_	(M* 2/25/)			
			2/2	5/11-
If	f applicable, was the client contacted? VES NO / NA Contact: Awm Orechwa Da Project Manager Signature / Date:	ite/Tim	ne: <u>Z                                   </u>	2110
P	'roject Manager Signature / Date: 2/25/16		17	,25

\*IR Gun #2: Oakton, SN 29922500201-0066 \*IR Gun #4: Oakton, SN 2372220101-0002

# **PAI 713 Rev 13 Method Blank Results**

Lab Name: ALS Environmental -- FC

Work Order Number: 1602355

Client Name: Tetra Tech MM, Inc.

ClientProject ID: 103P4384 Brandeis-Bardin Campus

Lab ID: GS160226-1MB

Sample Matrix: SOIL Prep SOP: PAI 739 Rev 12

Prep Batch: GS160226-1 QCBatchID: GS160226-1-1 Final Aliquot: 215 g Result Units: pCi/g

Date Collected: 28-Feb-16 Library: USGS.LIB Date Prepared: 28-Feb-16

Run ID: GS160226-1A Count Time: 270 minutes

File Name: 160215d01

Date Analyzed: 29-Feb-16

CASNO	Target Nuclide	Result +/- 2 s TPU	MDC	Requested MDC	DL	Lab Qualifier
10045-97-3	Cs-137	-0.001 +/- 0.022	0.040	0.1	NA	U

### Comments:

Qualifiers/Flags:

 $\ensuremath{\mathsf{U}}\xspace$  - Result is less than the sample specific MDC or less than the associated TP

Y1 - Chemical Yield is in control at 100-110%. Quantitative Yield is assumed.

Y2 - Chemical Yield outside default limits.

LT - Result is less than Requested MDC, greater than sample specific MDC.

SQ - Spectral quality prevents accurate quantitation.

SI - Nuclide identification and/or quantitation is tentative.

TI - Nuclide identification is tentative.

R - Nuclide has exceeded 8 halflives.

M - Requested MDC not met.

B - Analyte concentration greater than MDC.

B3 - Analyte concentration greater than MDC but less than Requested MDC.

DL - Decision Level

Data Package ID: GSS1602355-1

Abbreviations:

TPU - Total Propagated Uncertainty

MDC - Minimum Detectable Concentration

**BDL** - Below Detection Limit

# **PAI 713 Rev 13**

# Laboratory Control Sample(s)

Lab Name: ALS Environmental -- FC

Work Order Number: 1602355

Client Name: Tetra Tech MM, Inc.

ClientProject ID: 103P4384 Brandeis-Bardin Campus

Lab ID: GS160226-1LCS

Sample Matrix: SOIL

Prep Batch: GS160226-1

Final Aliquot: 215 g Result Units: pCi/g

Library: ANALYTICAL

Prep SOP: PAI 739 Rev 12 Date Collected: 28-Feb-16

QCBatchID: GS160226-1-1 Run ID: GS160226-1A Count Time: 30 minutes

File Name: 160216d02

Date Prepared: 28-Feb-16

Date Analyzed: 29-Feb-16

CASNO	Target Nuclide	Results +/- 2s TPU	MDC	Spike Added	% Rec	Contro I Limits	Lab Qualifier
14596-10-2	Am-241	433 +/- 54	19	460.2	94.2	85 - 115	Р
10198-40-0	Co-60	167 +/- 20	1	173.1	96.3	85 - 115	Р
10045-97-3	Cs-137	166 +/- 19	1	173.0	95.8	85 - 115	P,M3

### Comments:

Qualifiers/Flags:

U - Result is less than the sample specific MDC or less than the associated TP

TPU - Total Propagated Uncertainty

Abbreviations:

LT - Result is less than Requested MDC, greater than sample specific MDC.

MDC - Minimum Detectable Concentration

Y1 - Chemical Yield is in control at 100-110%. Quantitative Yield is assumed.

Y2 - Chemical Yield outside default limits.

SQ - Spectral quality prevents accurate quantitation.

L - LCS Recovery below lower control limit.

SI - Nuclide identification and/or quantitation is tentative.

H - LCS Recovery above upper control limit. P - LCS Recovery within control limits.

TI - Nuclide identification is tentative.

M - The requested MDC was not met.

R - Nuclide has exceeded 8 halflives.

M3 - The requested MDC was not met, but thereported

activity is greater than the reported MDC.

Date Printed: Friday, March 04, 2016

Data Package ID: GSS1602355-1

**ALS Environmental -- FC** 

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# **PAI 713 Rev 13**

# **Duplicate Sample Results (DER)**

Lab Name: ALS Environmental -- FC

Work Order Number: 1602355

Client Name: Tetra Tech MM, Inc.

ClientProject ID: 103P4384 Brandeis-Bardin Campus

Field ID: TT-HC-01

Lab ID: 1602355-18DUP

Library: USGS.LIB

Sample Matrix: SOIL

Prep SOP: PAI 739 Rev 12 Date Collected: 18-Feb-16

Date Prepared: 28-Feb-16

Date Analyzed: 29-Feb-16

Prep Batch: GS160226-1 QCBatchID: GS160226-1-1

Run ID: GS160226-1A Count Time: 135 minutes

Report Basis: Dry Weight

Final Aliquot: 155 g

Prep Basis: Dry Weight Moisture(%): NA

Result Units: pCi/g File Name: 160222d03

CASNO Analyte		Sample			Duplicate			DER	DER
	Allalyte	Result +/- 2 s TPU	MDC	Flags	Result +/- 2 s TPU	MDC	Flags		Lim
10045-97-3	Cs-137	0.013 +/- 0.053	0.092	U,G	0.026 +/- 0.059	0.099	U,G	0.154	2.13

### **Comments:**

### **Duplicate Qualifiers/Flags:**

U - Result is less than the sample specific MDC.

Y1 - Chemical Yield is in control at 100-110%. Quantitative yield is assumed.

Y2 - Chemical Yield outside default limits.

W - DER is greater than Warning Limit of 1.42

D - DER is greater than Control Limit of 2.13

LT - Result is less than Request MDC, greater than sample specific MDC

M - Requested MDC not met.

M3 - The requested MDC was not met, but the reported activity is greater than the reported MDC.

L - LCS Recovery below lower control limit.

P - LCS, Matrix Spike Recovery within control limits.

H - LCS Recovery above upper control limit.

N - Matrix Spike Recovery outside control limits

DER - Duplicate Error Ratio BDL - Below Detection Limit

TPU - Total Propagated Uncertainty

NR - Not Reported

Abbreviations:

SQ - Spectral quality prevents accurate quantitation.

SI - Nuclide identification and/or quantitation is tentative.

TI - Nuclide identification is tentative.

R - Nuclide has exceeded 8 halflives.

G - Sample density differs by more than 15% of LCS density.

Data Package ID: GSS1602355-1

Date Printed: Friday, March 04, 2016

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# PAI 713 Rev 13 Sample Results

Lab Name: ALS Environmental -- FC

Work Order Number: 1602355

Client Name: Tetra Tech MM, Inc.

ClientProject ID: 103P4384 Brandeis-Bardin Campus

Field ID: TT-LR-RBRA-01

Lab ID: 1602355-1

Library: USGS.LIB

Sample Matrix: SOIL

Prep SOP: PAI 739 Rev 12

Date Collected: 16-Feb-16

Date Prepared: 28-Feb-16

Date Analyzed: 29-Feb-16

Prep Batch: GS160226-1

QCBatchID: GS160226-1-1 Run ID: GS160226-1A

Count Time: 120 minutes Report Basis: Dry Weight Final Aliquot: 157 g

Prep Basis: Dry Weight Moisture(%): NA Result Units: pCi/g File Name: 160219d03

CASNO	Target Nuclide	Result +/- 2 s TPU	MDC	Requested MDC	DL	Lab Qualifier
10045-97-3	Cs-137	0.079 +/- 0.063	0.098	0.1	NA	U,G

# **Comments:**

### Qualifiers/Flags:

- $\ensuremath{\mathsf{U}}\xspace$  Result is less than the sample specific MDC or less than the associated TP
- Y1 Chemical Yield is in control at 100-110%. Quantitative Yield is assumed.
- Y2 Chemical Yield outside default limits.
- LT Result is less than Requested MDC, greater than sample specific MDC.
- M3 The requested MDC was not met, but the reported activity is greater than the reported MDC.
- $\ensuremath{\mathsf{M}}$  The requested MDC was not met.

### Abbreviations:

- TPU Total Propagated Uncertainty
- MDC Minimum Detectable Concentration
- BDL Below Detection Limit
- DL Decision Level
- Data Package ID: GSS1602355-1

- SQ Spectral quality prevents accurate quantitation.
- SI Nuclide identification and/or quantitation is tentative.
- TI Nuclide identification is tentative
- R Nuclide has exceeded 8 halflives.
- $\mbox{\bf G}$  Sample density differs by more than 15% of LCS density.

# PAI 713 Rev 13 Sample Results

Lab Name: ALS Environmental -- FC

Work Order Number: 1602355

Client Name: Tetra Tech MM, Inc.

ClientProject ID: 103P4384 Brandeis-Bardin Campus

Field ID: TT-BP-RBRA-01

Lab ID: 1602355-2

1602355-2 **Da** 

Library: USGS.LIB

Sample Matrix: SOIL

Prep SOP: PAI 739 Rev 12

Date Collected: 18-Feb-16

Date Prepared: 28-Feb-16

Date Analyzed: 29-Feb-16

Prep Batch: GS160226-1

QCBatchID: GS160226-1-1 Run ID: GS160226-1A Count Time: 240 minutes Report Basis: Dry Weight Final Aliquot: 123 g

Prep Basis: Dry Weight Moisture(%): NA Result Units: pCi/g File Name: 160214d01

	CASNO	Target Nuclide	Result +/- 2 s TPU	MDC	Requested MDC	DL	Lab Qualifier
1	0045-97-3	Cs-137	0.082 +/- 0.058	0.090	0.1	NA	U,G

# **Comments:**

### Qualifiers/Flags:

- $\ensuremath{\mathsf{U}}\xspace$  Result is less than the sample specific MDC or less than the associated TP
- Y1 Chemical Yield is in control at 100-110%. Quantitative Yield is assumed.
- Y2 Chemical Yield outside default limits.
- LT Result is less than Requested MDC, greater than sample specific MDC.
- M3 The requested MDC was not met, but the reported activity is greater than the reported MDC.
- $\ensuremath{\mathsf{M}}$  The requested MDC was not met.

### Abbreviations:

- TPU Total Propagated Uncertainty
- MDC Minimum Detectable Concentration
- BDL Below Detection Limit
- DL Decision Level

Data Package ID: GSS1602355-1

- SQ Spectral quality prevents accurate quantitation.
- SI Nuclide identification and/or quantitation is tentative.
- TI Nuclide identification is tentative
- R Nuclide has exceeded 8 halflives.
- $\mbox{\bf G}$  Sample density differs by more than 15% of LCS density.

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# **PAI 713 Rev 13** Sample Results

Lab Name: ALS Environmental -- FC

Work Order Number: 1602355

Client Name: Tetra Tech MM, Inc.

ClientProject ID: 103P4384 Brandeis-Bardin Campus

Field ID: TT-BP-DRAIN-01 Lab ID: 1602355-3

Library: USGS.LIB

Sample Matrix: SOIL

Prep SOP: PAI 739 Rev 12 Date Collected: 18-Feb-16

Date Prepared: 28-Feb-16

Date Analyzed: 29-Feb-16

Prep Batch: GS160226-1

QCBatchID: GS160226-1-1 Run ID: GS160226-1A

Count Time: 180 minutes Report Basis: Dry Weight

Final Aliquot: 115 g

Prep Basis: Dry Weight Moisture(%): NA Result Units: pCi/q File Name: 160214d02

CASNO	Target Nuclide	Result +/- 2 s TPU	MDC	Requested MDC	DL	Lab Qualifier
10045-97-3	Cs-137	0.140 +/- 0.065	0.094	0.1	NA	G

# Comments:

# Qualifiers/Flags:

- U Result is less than the sample specific MDC or less than the associated TP
- Y1 Chemical Yield is in control at 100-110%. Quantitative Yield is assumed.
- Y2 Chemical Yield outside default limits.
- LT Result is less than Requested MDC, greater than sample specific MDC.
- M3 The requested MDC was not met, but the reported activity is greater than the reported MDC.
- M The requested MDC was not met.

### Abbreviations:

- TPU Total Propagated Uncertainty
- MDC Minimum Detectable Concentration
- **BDL** Below Detection Limit
- DL Decision Level
- Data Package ID: GSS1602355-1

- SQ Spectral quality prevents accurate quantitation.
- SI Nuclide identification and/or quantitation is tentative.
- TI Nuclide identification is tentative
- R Nuclide has exceeded 8 halflives.
- G Sample density differs by more than 15% of LCS density.

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# **PAI 713 Rev 13** Sample Results

Lab Name: ALS Environmental -- FC

Work Order Number: 1602355

Client Name: Tetra Tech MM, Inc.

ClientProject ID: 103P4384 Brandeis-Bardin Campus

Field ID: TT-SEDBG1-01 Lab ID: 1602355-4

Library: USGS.LIB

Sample Matrix: SOIL

Prep SOP: PAI 739 Rev 12 Date Collected: 18-Feb-16

Date Prepared: 28-Feb-16

Date Analyzed: 29-Feb-16

Prep Batch: GS160226-1

QCBatchID: GS160226-1-1 Run ID: GS160226-1A

Count Time: 180 minutes Report Basis: Dry Weight

Final Aliquot: 185 g

Prep Basis: Dry Weight Moisture(%): NA Result Units: pCi/q File Name: 160323d04

CASNO	Target Nuclide	Result +/- 2 s TPU	MDC	Requested MDC	DL	Lab Qualifier
10045-97-3	Cs-137	0.054 +/- 0.061	0.099	0.1	NA	U

# Comments:

### Qualifiers/Flags:

- U Result is less than the sample specific MDC or less than the associated TP
- Y1 Chemical Yield is in control at 100-110%. Quantitative Yield is assumed.
- Y2 Chemical Yield outside default limits.
- LT Result is less than Requested MDC, greater than sample specific MDC.
- M3 The requested MDC was not met, but the reported activity is greater than the reported MDC.
- M The requested MDC was not met.

### Abbreviations:

- TPU Total Propagated Uncertainty
- MDC Minimum Detectable Concentration
- **BDL** Below Detection Limit
- DL Decision Level
- Data Package ID: GSS1602355-1

- SQ Spectral quality prevents accurate quantitation.
- SI Nuclide identification and/or quantitation is tentative.
- TI Nuclide identification is tentative
- R Nuclide has exceeded 8 halflives.
- G Sample density differs by more than 15% of LCS density.

# **PAI 713 Rev 13** Sample Results

Lab Name: ALS Environmental -- FC

Work Order Number: 1602355

Client Name: Tetra Tech MM, Inc.

ClientProject ID: 103P4384 Brandeis-Bardin Campus

Field ID: TT-SD1-01 Lab ID: 1602355-5

Library: USGS.LIB

Sample Matrix: SOIL

Prep SOP: PAI 739 Rev 12 Date Collected: 18-Feb-16

Date Prepared: 28-Feb-16 Date Analyzed: 29-Feb-16 Prep Batch: GS160226-1

QCBatchID: GS160226-1-1 Run ID: GS160226-1A Count Time: 130 minutes

Report Basis: Dry Weight

Final Aliquot: 159 g

Prep Basis: Dry Weight Moisture(%): NA Result Units: pCi/q File Name: 160190d08

CASNO	Target Nuclide	Result +/- 2 s TPU	MDC	Requested MDC	DL	Lab Qualifier
10045-97-3	Cs-137	-0.007 +/- 0.053	0.095	0.1	NA	U,G

# Comments:

# Qualifiers/Flags:

- U Result is less than the sample specific MDC or less than the associated TP
- Y1 Chemical Yield is in control at 100-110%. Quantitative Yield is assumed.
- Y2 Chemical Yield outside default limits.
- LT Result is less than Requested MDC, greater than sample specific MDC.
- M3 The requested MDC was not met, but the reported activity is greater than the reported MDC.
- M The requested MDC was not met.

### Abbreviations:

- TPU Total Propagated Uncertainty
- MDC Minimum Detectable Concentration
- **BDL** Below Detection Limit
- DL Decision Level
- Data Package ID: GSS1602355-1

Date Printed: Friday, March 04, 2016

- SQ Spectral quality prevents accurate quantitation.
- SI Nuclide identification and/or quantitation is tentative.
- TI Nuclide identification is tentative
- R Nuclide has exceeded 8 halflives.
- G Sample density differs by more than 15% of LCS density.

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# **PAI 713 Rev 13** Sample Results

Lab Name: ALS Environmental -- FC

Work Order Number: 1602355

Client Name: Tetra Tech MM, Inc.

ClientProject ID: 103P4384 Brandeis-Bardin Campus

Field ID: TT-SD2-01 Lab ID: 1602355-6

Library: USGS.LIB

Sample Matrix: SOIL

Prep SOP: PAI 739 Rev 12 Date Collected: 18-Feb-16

Date Prepared: 28-Feb-16 Date Analyzed: 29-Feb-16 Prep Batch: GS160226-1 QCBatchID: GS160226-1-1

Run ID: GS160226-1A Count Time: 150 minutes

Report Basis: Dry Weight

Final Aliquot: 157 g

Prep Basis: Dry Weight Moisture(%): NA Result Units: pCi/q File Name: 160189d09

CASNO	Target Nuclide	Result +/- 2 s TPU	MDC	Requested MDC	DL	Lab Qualifier
10045-97-3	Cs-137	0.026 +/- 0.056	0.095	0.1	NA	U,G

# Comments:

### Qualifiers/Flags:

- U Result is less than the sample specific MDC or less than the associated TP
- Y1 Chemical Yield is in control at 100-110%. Quantitative Yield is assumed.
- Y2 Chemical Yield outside default limits.
- LT Result is less than Requested MDC, greater than sample specific MDC.
- M3 The requested MDC was not met, but the reported activity is greater than the reported MDC.
- M The requested MDC was not met.

### Abbreviations:

- TPU Total Propagated Uncertainty
- MDC Minimum Detectable Concentration
- **BDL** Below Detection Limit
- DL Decision Level
- Data Package ID: GSS1602355-1

Date Printed: Friday, March 04, 2016

- SQ Spectral quality prevents accurate quantitation.
- SI Nuclide identification and/or quantitation is tentative.
- TI Nuclide identification is tentative
- R Nuclide has exceeded 8 halflives.
- G Sample density differs by more than 15% of LCS density.

**ALS Environmental -- FC** 

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# PAI 713 Rev 13 Sample Results

Lab Name: ALS Environmental -- FC

Work Order Number: 1602355

Client Name: Tetra Tech MM, Inc.

ClientProject ID: 103P4384 Brandeis-Bardin Campus

Field ID: TT-ED1-01

Lab ID: 1602355-7

Library: USGS.LIB

Sample Matrix: SOIL

Prep SOP: PAI 739 Rev 12

Date Collected: 18-Feb-16

Date Prepared: 28-Feb-16

Date Analyzed: 29-Feb-16

Prep Batch: GS160226-1

QCBatchID: GS160226-1-1
Run ID: GS160226-1A
Count Time: 130 minutes

Report Basis: Dry Weight

Final Aliquot: 194 g

Prep Basis: Dry Weight Moisture(%): NA Result Units: pCi/g File Name: 160198d06

CASNO	Target Nuclide	Result +/- 2 s TPU	MDC	Requested MDC	DL	Lab Qualifier
10045-97-3	Cs-137	0.015 +/- 0.057	0.097	0.1	NA	U

# **Comments:**

### Qualifiers/Flags:

- $\ensuremath{\mathsf{U}}\xspace$  Result is less than the sample specific MDC or less than the associated TP
- Y1 Chemical Yield is in control at 100-110%. Quantitative Yield is assumed.
- Y2 Chemical Yield outside default limits.
- LT Result is less than Requested MDC, greater than sample specific MDC.
- M3 The requested MDC was not met, but the reported activity is greater than the reported MDC.
- $\ensuremath{\mathsf{M}}$  The requested MDC was not met.

### Abbreviations:

- TPU Total Propagated Uncertainty
- MDC Minimum Detectable Concentration
- BDL Below Detection Limit
- DL Decision Level
- Data Package ID: GSS1602355-1

- SQ Spectral quality prevents accurate quantitation.
- SI Nuclide identification and/or quantitation is tentative.
- TI Nuclide identification is tentative
- R Nuclide has exceeded 8 halflives.
- $\mbox{\bf G}$  Sample density differs by more than 15% of LCS density.

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# **PAI 713 Rev 13** Sample Results

Lab Name: ALS Environmental -- FC

Work Order Number: 1602355

Client Name: Tetra Tech MM, Inc.

ClientProject ID: 103P4384 Brandeis-Bardin Campus

Field ID: TT-ED2-01 Lab ID: 1602355-8

Library: USGS.LIB

Sample Matrix: SOIL

Prep SOP: PAI 739 Rev 12 Date Collected: 18-Feb-16

Date Prepared: 28-Feb-16

Date Analyzed: 02-Mar-16

Prep Batch: GS160226-1

QCBatchID: GS160226-1-1 Run ID: GS160226-1A Count Time: 120 minutes

Report Basis: Dry Weight

Final Aliquot: 160 g

Prep Basis: Dry Weight Moisture(%): NA Result Units: pCi/q File Name: 160237d05

CASNO	Target Nuclide	Result +/- 2 s TPU	MDC	Requested MDC	DL	Lab Qualifier
10045-97-3	Cs-137	0.066 +/- 0.057	0.090	0.1	NA	U,G

# Comments:

### Qualifiers/Flags:

- U Result is less than the sample specific MDC or less than the associated TP
- Y1 Chemical Yield is in control at 100-110%. Quantitative Yield is assumed.
- Y2 Chemical Yield outside default limits.
- LT Result is less than Requested MDC, greater than sample specific MDC.
- M3 The requested MDC was not met, but the reported activity is greater than the reported MDC.
- M The requested MDC was not met.

### Abbreviations:

- TPU Total Propagated Uncertainty
- MDC Minimum Detectable Concentration
- **BDL** Below Detection Limit
- DL Decision Level

Data Package ID: GSS1602355-1

- SQ Spectral quality prevents accurate quantitation.
- SI Nuclide identification and/or quantitation is tentative.
- TI Nuclide identification is tentative
- R Nuclide has exceeded 8 halflives.
- G Sample density differs by more than 15% of LCS density.

# PAI 713 Rev 13 Sample Results

Lab Name: ALS Environmental -- FC

Work Order Number: 1602355

Client Name: Tetra Tech MM, Inc.

ClientProject ID: 103P4384 Brandeis-Bardin Campus

Field ID: TT-ED3-01 Lab ID: 1602355-9 Sample Matrix: SOIL

Prep SOP: PAI 739 Rev 12

Date Collected: 18-Feb-16

Prep Batch: GS160226-1 QCBatchID: GS160226-1-1

Run ID: GS160226-1A

Final Aliquot: 129 g
Prep Basis: Dry Weight
Moisture(%): NA
Result Units: pCi/q

File Name: 160225d05

Library: USGS.LIB

Date Prepared: 28-Feb-16

Date Analyzed: 29-Feb-16

**Count Time:** 150 minutes **Report Basis:** Dry Weight

CASNO	Target Nuclide	Result +/- 2 s TPU	MDC	Requested MDC	DL	Lab Qualifier
10045-97-3	Cs-137	-0.025 +/- 0.050	0.091	0.1	NA	U,G

# **Comments:**

### Qualifiers/Flags:

- $\ensuremath{\mathsf{U}}\xspace$  Result is less than the sample specific MDC or less than the associated TP
- Y1 Chemical Yield is in control at 100-110%. Quantitative Yield is assumed.
- Y2 Chemical Yield outside default limits.
- LT Result is less than Requested MDC, greater than sample specific MDC.
- M3 The requested MDC was not met, but the reported activity is greater than the reported MDC.
- $\ensuremath{\mathsf{M}}$  The requested MDC was not met.

### Abbreviations:

- TPU Total Propagated Uncertainty
- MDC Minimum Detectable Concentration
- BDL Below Detection Limit
- DL Decision Level
- Data Package ID: GSS1602355-1

Date Printed: Friday, March 04, 2016

- SQ Spectral quality prevents accurate quantitation.
- SI Nuclide identification and/or quantitation is tentative.
- TI Nuclide identification is tentative
- R Nuclide has exceeded 8 halflives.
- $\mbox{\bf G}$  Sample density differs by more than 15% of LCS density.

- u.u.: uo....go ....

# **PAI 713 Rev 13** Sample Results

Lab Name: ALS Environmental -- FC

Work Order Number: 1602355

Client Name: Tetra Tech MM, Inc.

ClientProject ID: 103P4384 Brandeis-Bardin Campus

Field ID: TT-BBCSED-01 Lab ID: 1602355-10

Library: USGS.LIB

Sample Matrix: SOIL

Prep SOP: PAI 739 Rev 12 Date Collected: 18-Feb-16 Date Prepared: 28-Feb-16

Date Analyzed: 29-Feb-16

Prep Batch: GS160226-1

QCBatchID: GS160226-1-1 Run ID: GS160226-1A Count Time: 120 minutes

Report Basis: Dry Weight

Final Aliquot: 214 g

Prep Basis: Dry Weight Moisture(%): NA Result Units: pCi/q File Name: 160199d06

CASNO	Target Nuclide	Result +/- 2 s TPU	MDC	Requested MDC	DL	Lab Qualifier
10045-97-3	Cs-137	0.027 +/- 0.052	0.087	0.1	NA	U

# Comments:

### Qualifiers/Flags:

- U Result is less than the sample specific MDC or less than the associated TP
- Y1 Chemical Yield is in control at 100-110%. Quantitative Yield is assumed.
- Y2 Chemical Yield outside default limits.
- LT Result is less than Requested MDC, greater than sample specific MDC.
- M3 The requested MDC was not met, but the reported activity is greater than the reported MDC.
- M The requested MDC was not met.

### Abbreviations:

- TPU Total Propagated Uncertainty
- MDC Minimum Detectable Concentration
- **BDL** Below Detection Limit
- DL Decision Level
- Data Package ID: GSS1602355-1

- SQ Spectral quality prevents accurate quantitation.
- SI Nuclide identification and/or quantitation is tentative.
- TI Nuclide identification is tentative
- R Nuclide has exceeded 8 halflives.
- G Sample density differs by more than 15% of LCS density.

# PAI 713 Rev 13 Sample Results

Lab Name: ALS Environmental -- FC

Work Order Number: 1602355

Client Name: Tetra Tech MM, Inc.

ClientProject ID: 103P4384 Brandeis-Bardin Campus

Field ID: TT-PPG-01 Lab ID: 1602355-11

Library: USGS.LIB

Sample Matrix: SOIL

Prep SOP: PAI 739 Rev 12

Date Collected: 18-Feb-16

Date Prepared: 28-Feb-16

Date Analyzed: 29-Feb-16

Prep Batch: GS160226-1

QCBatchID: GS160226-1-1 Run ID: GS160226-1A

**Count Time:** 120 minutes **Report Basis:** Dry Weight

Final Aliquot: 187 g

Prep Basis: Dry Weight Moisture(%): NA Result Units: pCi/g File Name: 160220d03

CASNO	Target Nuclide	Result +/- 2 s TPU	MDC	Requested MDC	DL	Lab Qualifier
10045-97-3	Cs-137	-0.014 +/- 0.053	0.095	0.1	NA	U

# **Comments:**

# Qualifiers/Flags:

- $\ensuremath{\mathsf{U}}\xspace$  Result is less than the sample specific MDC or less than the associated TP
- Y1 Chemical Yield is in control at 100-110%. Quantitative Yield is assumed.
- Y2 Chemical Yield outside default limits.
- LT Result is less than Requested MDC, greater than sample specific MDC.
- M3 The requested MDC was not met, but the reported activity is greater than the reported MDC.
- $\ensuremath{\mathsf{M}}$  The requested MDC was not met.

### Abbreviations:

- TPU Total Propagated Uncertainty
- MDC Minimum Detectable Concentration
- BDL Below Detection Limit
- DL Decision Level

Data Package ID: GSS1602355-1

- SQ Spectral quality prevents accurate quantitation.
- SI Nuclide identification and/or quantitation is tentative.
- TI Nuclide identification is tentative
- R Nuclide has exceeded 8 halflives.
- $\mbox{\bf G}$  Sample density differs by more than 15% of LCS density.

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# **PAI 713 Rev 13** Sample Results

Lab Name: ALS Environmental -- FC

Work Order Number: 1602355

Client Name: Tetra Tech MM, Inc.

ClientProject ID: 103P4384 Brandeis-Bardin Campus

Field ID: TT-CAB-01 Lab ID: 1602355-12

Library: USGS.LIB

Sample Matrix: SOIL

Prep SOP: PAI 739 Rev 12 Date Collected: 18-Feb-16

Date Prepared: 28-Feb-16

Date Analyzed: 29-Feb-16

Prep Batch: GS160226-1

QCBatchID: GS160226-1-1 Run ID: GS160226-1A

Count Time: 120 minutes Report Basis: Dry Weight

Final Aliquot: 121 g

Prep Basis: Dry Weight Moisture(%): NA Result Units: pCi/q File Name: 160191d08

CASNO	Target Nuclide	Result +/- 2 s TPU	MDC	Requested MDC	DL	Lab Qualifier
10045-97-3	Cs-137	0.079 +/- 0.055	0.081	0.1	NA	U,G

# Comments:

# Qualifiers/Flags:

- U Result is less than the sample specific MDC or less than the associated TP
- Y1 Chemical Yield is in control at 100-110%. Quantitative Yield is assumed.
- Y2 Chemical Yield outside default limits.
- LT Result is less than Requested MDC, greater than sample specific MDC.
- M3 The requested MDC was not met, but the reported activity is greater than the reported MDC.
- M The requested MDC was not met.

### Abbreviations:

- TPU Total Propagated Uncertainty
- MDC Minimum Detectable Concentration
- **BDL** Below Detection Limit
- DL Decision Level
- Data Package ID: GSS1602355-1

- SQ Spectral quality prevents accurate quantitation.
- SI Nuclide identification and/or quantitation is tentative.
- TI Nuclide identification is tentative
- R Nuclide has exceeded 8 halflives.
- G Sample density differs by more than 15% of LCS density.

# **PAI 713 Rev 13** Sample Results

Lab Name: ALS Environmental -- FC

Work Order Number: 1602355

Client Name: Tetra Tech MM, Inc.

ClientProject ID: 103P4384 Brandeis-Bardin Campus

Field ID: TT-GF-01 Lab ID: 1602355-13

Library: USGS.LIB

Sample Matrix: SOIL

Prep SOP: PAI 739 Rev 12 Date Collected: 16-Feb-16

Date Prepared: 28-Feb-16 Date Analyzed: 29-Feb-16 Prep Batch: GS160226-1

QCBatchID: GS160226-1-1 Run ID: GS160226-1A

Count Time: 270 minutes Report Basis: Dry Weight

Final Aliquot: 123 g

Prep Basis: Dry Weight Moisture(%): NA Result Units: pCi/q File Name: 160194d09

CASNO	Target Nuclide	Result +/- 2 s TPU	MDC	Requested MDC	DL	Lab Qualifier
10045-97-3	Cs-137	-0.005 +/- 0.056	0.098	0.1	NA	U,G

# Comments:

# Qualifiers/Flags:

- U Result is less than the sample specific MDC or less than the associated TP
- Y1 Chemical Yield is in control at 100-110%. Quantitative Yield is assumed.
- Y2 Chemical Yield outside default limits.
- LT Result is less than Requested MDC, greater than sample specific MDC.
- M3 The requested MDC was not met, but the reported activity is greater than the reported MDC.
- M The requested MDC was not met.

### Abbreviations:

- TPU Total Propagated Uncertainty
- MDC Minimum Detectable Concentration
- **BDL** Below Detection Limit
- DL Decision Level
- Data Package ID: GSS1602355-1

- SQ Spectral quality prevents accurate quantitation.
- SI Nuclide identification and/or quantitation is tentative.
- TI Nuclide identification is tentative
- R Nuclide has exceeded 8 halflives.
- G Sample density differs by more than 15% of LCS density.

# **PAI 713 Rev 13** Sample Results

Lab Name: ALS Environmental -- FC

Work Order Number: 1602355

Client Name: Tetra Tech MM, Inc.

ClientProject ID: 103P4384 Brandeis-Bardin Campus

Field ID: TT-GF-02 Lab ID: 1602355-14

Library: USGS.LIB

Sample Matrix: SOIL

Prep SOP: PAI 739 Rev 12 Date Collected: 18-Feb-16

Date Prepared: 28-Feb-16

Date Analyzed: 29-Feb-16

Prep Batch: GS160226-1

QCBatchID: GS160226-1-1 Run ID: GS160226-1A

Count Time: 160 minutes Report Basis: Dry Weight

Final Aliquot: 112 g

Prep Basis: Dry Weight Moisture(%): NA Result Units: pCi/q File Name: 160227d05

	CASNO	Target Nuclide	Result +/- 2 s TPU	MDC	Requested MDC	DL	Lab Qualifier
Ī	10045-97-3	Cs-137	0.034 +/- 0.058	0.097	0.1	NA	U,G

# Comments:

# Qualifiers/Flags:

- U Result is less than the sample specific MDC or less than the associated TP
- Y1 Chemical Yield is in control at 100-110%. Quantitative Yield is assumed.
- Y2 Chemical Yield outside default limits.
- LT Result is less than Requested MDC, greater than sample specific MDC.
- M3 The requested MDC was not met, but the reported activity is greater than the reported MDC.
- M The requested MDC was not met.

### Abbreviations:

- TPU Total Propagated Uncertainty
- MDC Minimum Detectable Concentration
- **BDL** Below Detection Limit
- DL Decision Level
- Data Package ID: GSS1602355-1

- SQ Spectral quality prevents accurate quantitation.
- SI Nuclide identification and/or quantitation is tentative.
- TI Nuclide identification is tentative
- R Nuclide has exceeded 8 halflives.
- G Sample density differs by more than 15% of LCS density.

Date Printed: Friday, March 04, 2016 **ALS Environmental -- FC** Page 14 of 19

# **PAI 713 Rev 13** Sample Results

Lab Name: ALS Environmental -- FC

Work Order Number: 1602355

Client Name: Tetra Tech MM, Inc.

ClientProject ID: 103P4384 Brandeis-Bardin Campus

Field ID: TT-OSF-01 Lab ID: 1602355-15

Library: USGS.LIB

Sample Matrix: SOIL

Prep SOP: PAI 739 Rev 12 Date Collected: 18-Feb-16

Date Prepared: 28-Feb-16

Date Analyzed: 29-Feb-16

Prep Batch: GS160226-1

QCBatchID: GS160226-1-1 Run ID: GS160226-1A Count Time: 205 minutes

Report Basis: Dry Weight

Final Aliquot: 110 g

Prep Basis: Dry Weight Moisture(%): NA Result Units: pCi/q File Name: 160195d08

CASNO	Target Nuclide	Result +/- 2 s TPU	MDC	Requested MDC	DL	Lab Qualifier
10045-97-3	Cs-137	0.101 +/- 0.065	0.099	0.1	NA	G

# Comments:

# Qualifiers/Flags:

- U Result is less than the sample specific MDC or less than the associated TP
- Y1 Chemical Yield is in control at 100-110%. Quantitative Yield is assumed.
- Y2 Chemical Yield outside default limits.
- LT Result is less than Requested MDC, greater than sample specific MDC.
- M3 The requested MDC was not met, but the reported activity is greater than the reported MDC.
- M The requested MDC was not met.

### Abbreviations:

- TPU Total Propagated Uncertainty
- MDC Minimum Detectable Concentration
- **BDL** Below Detection Limit
- DL Decision Level
- Data Package ID: GSS1602355-1

- SQ Spectral quality prevents accurate quantitation.
- SI Nuclide identification and/or quantitation is tentative.
- TI Nuclide identification is tentative
- R Nuclide has exceeded 8 halflives.
- G Sample density differs by more than 15% of LCS density.

Date Printed: Friday, March 04, 2016 **ALS Environmental -- FC** Page 15 of 19

# PAI 713 Rev 13 Sample Results

Lab Name: ALS Environmental -- FC

Work Order Number: 1602355

Client Name: Tetra Tech MM, Inc.

ClientProject ID: 103P4384 Brandeis-Bardin Campus

Field ID: TT-BBF-01
Lab ID: 1602355-16

Library: USGS.LIB

Sample Matrix: SOIL

Prep SOP: PAI 739 Rev 12

Date Collected: 18-Feb-16

**Date Prepared:** 28-Feb-16 **Date Analyzed:** 29-Feb-16

Prep Batch: GS160226-1

QCBatchID: GS160226-1-1 Run ID: GS160226-1A Count Time: 180 minutes

Count Time: 180 minutes
Report Basis: Dry Weight

Final Aliquot: 192 g

Prep Basis: Dry Weight Moisture(%): NA Result Units: pCi/g File Name: 160325d04

CASNO	Target Nuclide	Result +/- 2 s TPU	MDC	Requested MDC	DL	Lab Qualifier
10045-97-3	Cs-137	-0.027 +/- 0.055	0.098	0.1	NA	U

# Comments:

# Qualifiers/Flags:

- $\ensuremath{\mathsf{U}}\xspace$  Result is less than the sample specific MDC or less than the associated TP
- Y1 Chemical Yield is in control at 100-110%. Quantitative Yield is assumed.
- Y2 Chemical Yield outside default limits.
- LT Result is less than Requested MDC, greater than sample specific MDC.
- M3 The requested MDC was not met, but the reported activity is greater than the reported MDC.
- M The requested MDC was not met.

### Abbreviations:

- TPU Total Propagated Uncertainty
- MDC Minimum Detectable Concentration
- BDL Below Detection Limit
- DL Decision Level
- Data Package ID: GSS1602355-1

Date Printed: Friday, March 04, 2016

- SQ Spectral quality prevents accurate quantitation.
- SI Nuclide identification and/or quantitation is tentative.
- TI Nuclide identification is tentative
- R Nuclide has exceeded 8 halflives.
- $\mbox{\bf G}$  Sample density differs by more than 15% of LCS density.

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**ALS Environmental -- FC** 

Page 16 of 19

# **PAI 713 Rev 13** Sample Results

Lab Name: ALS Environmental -- FC

Work Order Number: 1602355

Client Name: Tetra Tech MM, Inc.

ClientProject ID: 103P4384 Brandeis-Bardin Campus

Field ID: TT-BB1-01 Lab ID: 1602355-17

Library: USGS.LIB

Sample Matrix: SOIL

Prep SOP: PAI 739 Rev 12 Date Collected: 18-Feb-16

Date Prepared: 28-Feb-16

Date Analyzed: 02-Mar-16

Prep Batch: GS160226-1

QCBatchID: GS160226-1-1 Run ID: GS160226-1A

Count Time: 150 minutes Report Basis: Dry Weight

Final Aliquot: 161 g

Prep Basis: Dry Weight Moisture(%): NA Result Units: pCi/q File Name: 160202d08

CASNO	Target Nuclide	Result +/- 2 s TPU	MDC	Requested MDC	DL	Lab Qualifier
10045-97-3	Cs-137	0.033 +/- 0.058	0.097	0.1	NA	U,G

# Comments:

# Qualifiers/Flags:

- U Result is less than the sample specific MDC or less than the associated TP
- Y1 Chemical Yield is in control at 100-110%. Quantitative Yield is assumed.
- Y2 Chemical Yield outside default limits.
- LT Result is less than Requested MDC, greater than sample specific MDC.
- M3 The requested MDC was not met, but the reported activity is greater than the reported MDC.
- M The requested MDC was not met.

### Abbreviations:

- TPU Total Propagated Uncertainty
- MDC Minimum Detectable Concentration
- **BDL** Below Detection Limit
- DL Decision Level
- Data Package ID: GSS1602355-1

- SQ Spectral quality prevents accurate quantitation.
- SI Nuclide identification and/or quantitation is tentative.
- TI Nuclide identification is tentative
- R Nuclide has exceeded 8 halflives.
- G Sample density differs by more than 15% of LCS density.

Date Printed: Friday, March 04, 2016 **ALS Environmental -- FC** Page 17 of 19

# PAI 713 Rev 13 Sample Results

Lab Name: ALS Environmental -- FC

Work Order Number: 1602355

Client Name: Tetra Tech MM, Inc.

ClientProject ID: 103P4384 Brandeis-Bardin Campus

Field ID: TT-HC-01

Lab ID: 1602355-18

Library: USGS.LIB

Sample Matrix: SOIL

Prep SOP: PAI 739 Rev 12

Date Collected: 18-Feb-16

**Date Prepared:** 28-Feb-16 **Date Analyzed:** 29-Feb-16

Prep Batch: GS160226-1

QCBatchID: GS160226-1-1 Run ID: GS160226-1A

Run ID: GS160226-1A
Count Time: 120 minutes
Report Basis: Dry Weight

Final Aliquot: 155 g

Prep Basis: Dry Weight Moisture(%): NA Result Units: pCi/g File Name: 160215d02

CASNO	Target Nuclide	Result +/- 2 s TPU	MDC	Requested MDC	DL	Lab Qualifier
10045-97-3	Cs-137	0.013 +/- 0.053	0.092	0.1	NA	U,G

# Comments:

# Qualifiers/Flags:

- $\ensuremath{\mathsf{U}}\xspace$  Result is less than the sample specific MDC or less than the associated TP
- Y1 Chemical Yield is in control at 100-110%. Quantitative Yield is assumed.
- Y2 Chemical Yield outside default limits.
- LT Result is less than Requested MDC, greater than sample specific MDC.
- M3 The requested MDC was not met, but the reported activity is greater than the reported MDC.
- M The requested MDC was not met.

### Abbreviations:

- TPU Total Propagated Uncertainty
- MDC Minimum Detectable Concentration
- BDL Below Detection Limit
- DL Decision Level
- Data Package ID: GSS1602355-1

- SQ Spectral quality prevents accurate quantitation.
- SI Nuclide identification and/or quantitation is tentative.
- TI Nuclide identification is tentative
- R Nuclide has exceeded 8 halflives.
- $\mbox{\bf G}$  Sample density differs by more than 15% of LCS density.

Date Printed: Friday, March 04, 2016 ALS Environmental -- FC Page 18 of 19

# **PAI 713 Rev 13** Sample Results

Lab Name: ALS Environmental -- FC

Work Order Number: 1602355

Client Name: Tetra Tech MM, Inc.

ClientProject ID: 103P4384 Brandeis-Bardin Campus

Field ID: TT-GGP-01 Lab ID: 1602355-19 Sample Matrix: SOIL

Prep SOP: PAI 739 Rev 12 Date Collected: 18-Feb-16

Prep Batch: GS160226-1 QCBatchID: GS160226-1-1 Run ID: GS160226-1A Count Time: 120 minutes

Report Basis: Dry Weight

Final Aliquot: 188 g Prep Basis: Dry Weight Moisture(%): NA Result Units: pCi/q File Name: 160200d06

Library: USGS.LIB

Date Prepared: 28-Feb-16 Date Analyzed: 29-Feb-16

CASNO	Target Nuclide	Result +/- 2 s TPU	MDC	Requested MDC	DL	Lab Qualifier
10045-97-3	Cs-137	0.002 +/- 0.055	0.097	0.1	NA	U

### Comments:

### Qualifiers/Flags:

- U Result is less than the sample specific MDC or less than the associated TP
- Y1 Chemical Yield is in control at 100-110%. Quantitative Yield is assumed.
- Y2 Chemical Yield outside default limits.
- LT Result is less than Requested MDC, greater than sample specific MDC.
- M3 The requested MDC was not met, but the reported activity is greater than the reported MDC.
- M The requested MDC was not met.

### Abbreviations:

- TPU Total Propagated Uncertainty
- MDC Minimum Detectable Concentration
- **BDL** Below Detection Limit
- DL Decision Level
- Data Package ID: GSS1602355-1

- SQ Spectral quality prevents accurate quantitation.
- SI Nuclide identification and/or quantitation is tentative.
- TI Nuclide identification is tentative
- R Nuclide has exceeded 8 halflives.
- G Sample density differs by more than 15% of LCS density.

# **PAI 713 Rev 13**

# Sample Duplicate Results

Lab Name: ALS Environmental -- FC

Work Order Number: 1602355

Client Name: Tetra Tech MM, Inc.

ClientProject ID: 103P4384 Brandeis-Bardin Campus

Field ID: TT-HC-01 Lab ID: 1602355-18DUP

Library: USGS.LIB

Sample Matrix: SOIL

Prep SOP: PAI 739 Rev 12 Date Collected: 18-Feb-16 Date Prepared: 28-Feb-16

Date Analyzed: 29-Feb-16

Prep Batch: GS160226-1 QCBatchID: GS160226-1-1

Run ID: GS160226-1A Count Time: 135 minutes Report Basis: Dry Weight

Final Aliquot: 155 g

Prep Basis: Dry Weight Moisture(%): NA Result Units: pCi/g File Name: 160222d03

CASNO	Target Nuclide	Result +/- 2 s TPU	MDC	Requested MDC	DL	Lab Qualifier
10045-97-3	Cs-137	0.026 +/- 0.059	0.099	0.1	NA	U,G

### Comments:

### Qualifiers/Flags:

- U Result is less than the sample specific MDC or less than the associated TPU.
- Y1 Chemical Yield is in control at 100-110%. Quantitative yield is assumed.
- Y2 Chemical Yield outside default limits.
- LT Result is less than Requested MDC, greater than sample specific MDC.
- M The requested MDC was not met.
- M3 The requested MDC was not met, but thereported activity is greater than the reported MDC.
- W DER is greater than Warning Limit of 1.42
- D DER is greater than Control Limit of 2.13

### Abbreviations:

- TPU Total Propagated Uncertainty
- MDC Minimum Detectable Concentration
- BDL Below Detection Limit
- DL Decision Level

- SQ Spectral quality prevents accurate quantitation.
- SI Nuclide identification and/or quantitation is tentative.
- TI Nuclide identification is tentative.
- R Nuclide has exceeded 8 halflives.
- G Sample density differs by more than 15% of LCS density.

Data Package ID: GSS1602355-1

Friday, March 04, 2016

**Date Printed:** 

**ALS Environmental -- FC** 

Page 1 of 1



# Strontium-90 Resubmission Case Narrative

# Tetra Tech MM, Inc.

# 103P4384 -- Brandeis-Bardin Campus

Work Order Number: 1602355

- 1. This report consists of the analytical results for 19 soil samples received by ALS on 2/25/2016.
- 2. These samples were prepared according to the current revisions of SOP 707 and SOP 736.
- 3. These samples were analyzed for the presence of <sup>90</sup>Sr according to the current revision of SOP 724. The analyses were completed on 3/4/2016.
- 4. Total radio-strontium is reported as <sup>90</sup>Sr. The presence of other radioisotopes of strontium may cause positive bias in the measured strontium concentration.
- 5. The analysis results for these samples are reported on a 'Dry Weight' basis in units of pCi/gram.
- 6. No anomalous situations were encountered during the preparation and analysis of these samples. All quality control criteria were met.

The data contained in the following report have been reviewed and approved by the personnel listed below. In addition, ALS certifies that the analyses reported herein are true, complete and correct within the limits of the methods employed.

Hannah Alt	3/10/16
Hannah Alt	Date
Radiochemistry Primary Data Reviewer	
	3/11/16
Radiochemistry Final Data Reviewer	

# **ALS Environmental -- FC**

# Sample Number(s) Cross-Reference Table

**OrderNum:** 1602355

Client Name: Tetra Tech MM, Inc.

Client Project Name: 103P4384

Client Project Number: Brandeis-Bardin Campus

**Client PO Number:** 

Client Sample Number	Lab Sample Number	COC Number	Matrix	Date Collected	Time Collected
TT-LR-RBRA-01	1602355-1		SOIL	16-Feb-16	15:35
TT-BP-RBRA-01	1602355-2		SOIL	18-Feb-16	14:30
TT-BP-DRAIN-01	1602355-3		SOIL	18-Feb-16	15:30
TT-SEDBG1-01	1602355-4		SOIL	18-Feb-16	16:55
TT-SD1-01	1602355-5		SOIL	18-Feb-16	11:30
TT-SD2-01	1602355-6		SOIL	18-Feb-16	18:40
TT-ED1-01	1602355-7		SOIL	18-Feb-16	17:30
TT-ED2-01	1602355-8		SOIL	18-Feb-16	17:40
TT-ED3-01	1602355-9		SOIL	18-Feb-16	18:25
TT-BBCSED-01	1602355-10		SOIL	18-Feb-16	18:50
TT-PPG-01	1602355-11		SOIL	18-Feb-16	17:50
TT-CAB-01	1602355-12		SOIL	18-Feb-16	19:30
TT-GF-01	1602355-13		SOIL	16-Feb-16	18:35
TT-GF-02	1602355-14		SOIL	18-Feb-16	18:35
TT-OSF-01	1602355-15		SOIL	18-Feb-16	19:00
TT-BBF-01	1602355-16		SOIL	18-Feb-16	18:05
TT-BB1-01	1602355-17		SOIL	18-Feb-16	17:55
TT-HC-01	1602355-18		SOIL	18-Feb-16	18:10
TT-GGP-01	1602355-19		SOIL	18-Feb-16	18:10

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225 Commerce Drive, Fort Collins, Colorado 80524 TF: (800) 443-1511 PH: (970) 490-1511 FX: (970) 490-1522

Chain-of-Custody

ALS WORKORDER #

PAGE

Turnaround time for samples received after 2 p.m. will be calculated beginning from the next business day.

Aaron Orechwa/Daniel Workman Turnaround time for samples received Saturday will be calculated beginning from the next business day. SAMPLER TURNAROUND TIME

RUSH (8 days)

											-					
PROJECT NAME	Brandeis-Bardin Campus		SITE ID AJU-BBC	Ç							1	DISPOSAL		BY LAB	٥ ا	RETORN
PROJECT No. 103P4384	103P4384	EDD FORMAT	MAT						PAR	AMETER	METHO	PARAMETER/METHOD REQUEST FOR ANALYSIS	ST FO	3 ANAL	SIS	
		PURCHASE ORDER	DER				4		37 (Rus	h 8 days	MDC =	Cs-137 (Rush 8 days) MDC = 0.1 pCi/g [Method 901.1 M]	[Method	901.1 N	_	
COMPANY NAME Tetra Tech	Tetra Tech	BILL TO COMPANY	ANY Tetra Tech	Tech			B		0 (Rush	8 days) I	ADC = 0	Sr-90 (Rush 8 days) MDC = 0.25 pCi/g [Method ASTM D5811]	Method	ASTM [	5811]	
SEND REPORT TO	Aaron Orechwa	INVOICE ATTN TO	_	Aaron Orechwa			3		oury [Me	Mercury [Method 7471 A]	1 A]					
ADDRESS	_	ADD	ADDRESS 3801	3801 Automation Way Suite #100	ay Suite #	100	a		als - TAI	Metals - TAL [Method 6020A]	6020A]					
CITY / STATE / ZIP	Fort Collins, CO 80521	CITY / STATE / ZIP		Fort Collins, CO 80521	521		Ш		chlorate	Rush 8	lays) [Me	Perchlorate (Rush 8 days) [Method 314]				
PHONE		ā	PHONE (970)4	(970)420-9395			L		ins/Fur	ns (Rust	8 days)	Dioxins/Furans (Rush 8 days) [Method 1613B]	1613B]			
FAX			FAX				5									
E-MAIL	aaron.orechwa@tetratech.com	ů	E-MAIL aaron	aaron.orechwa@tetratech.com	ratech.co	E	I	_								
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LABID	FIELD ID	MATRIX	SAMPLE	SAMPLE TIME	# OF BOTTLES	PRESERVATIVE	00	A B	U	۵	ш	ъ О	± 			SEE NOTES SECTION
$\epsilon$	TT-LØ-88RA-01	SOIL	2/16/16	1535	-	n/a		×	×	×	×	×				
(5)	TT-BP-RBRA-01	SOIL	2/18/16	1430	1	n/a		×	×	×	×	×	-			
(2)	TT-BP-DRAIN-01	SOIL	2/18/16	1530	1	n/a		×	×	×	×	×	_	-		
€	TT-SEDBG1-01	SOIL	2/18/16	1655	-	n/a		×	×	×	×	×		_		
NS NS	TT-SD1-01	SOIL	2/18/16	1130	1	n/a		×	×	×	×					
9	TT-SD2-01	SOIL	2/18/16	1840	-	n/a		×	×	×	×			_		
(f)	TT-ED1-01	SOIL	2/18/16	1730	-	n/a		×	×	×	×					
<b>@</b>	TT-ED2-01	SOIL	2/18/16	1740	-	n/a		×	×	×	×			-	_	
<b>E</b>	ТТ-ЕD3-01	SOIL	2/18/16	1825	-	n/a		×	×	×	×					
(E	TT-BBCSED-01	SOIL	2/18/16	1850	1	n/a		×	×	×	×			_		
3	TT-PPG-01	SOIL	2/18/16	1750	1	n/a		×	×	×	×		$\dashv$	-	_	
6	TT-CAB-01	SOIL	2/18/16	1930	-	n/a		×	×	×	×					
*Time Zone (Circle):	EST CST MST PST Matrix: O = oil S = soil NS = non-soil solid W = water L = liquid E = extract F = filter	soil solid W = wate	r L = liquid E	= extract F = filter				,				-			-	
	NOTES		For	Form 202r9		SIGNATURE		_		PRINTED NAME	VAME	_	2	DATE	$\downarrow$	TIME

5221 12:25

77-52-2 2/25/2016

Swell Malley Aaron Orechwa

RELINQUISHED BY

RECEIVED BY

1-HCl 2-HNO3 3-H2SO4 4-NaOH 5-NaOH/ZnAcetate 6-NaHSO4 7-4°C 8-Other

PRESERVATION KEY

RELINQUISHED BY RECEIVED BY

Summary (Standard QC) LEVEL II (Standard QC) LEVEL III (Std QC + forms) LEVEL IV (Std QC + forms + raw data)

RELINQUISHED BY

REPORT LEVEL / QC REQUIRED

Please provide all results for < detectable concentrations (MDC). Dease do MDC of 0.25 pCi/g (or lower) for Sr-90 if possible.

Please hold and store ALL samples until further notice.

RECEIVED BY

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225 Commerce Drive, Fort Collins, Colorado 80524 TF: (800) 443-1511 PH: (970) 490-1511 FX: (970) 490-1522

# Chain-of-Custody

ALS WORKORDER #

1602355

PAGE

Turnaround time for samples received after 2 p.m. will be calculated beginning from the next business day.

Aaron Orechwa/Daniel Workman Turnaround time for samples received Saturday will be calculated beginning from the next business day. SAMPLER

RUSH (8 days)

TURNAROUND TIME

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PROJECT NAME	PROJECT NAME Brandeis-Bardin Campus	SIT	SITE ID AJU-BBC	ည္က			_					DISF	DISPOSAL	BY LAB	AB	or R	RETURN
PROJECT No.	103P4384	EDD FORMAT	MAT						ΙΔ	RAMET	ER/ME	THOD R	PARAMETER/METHOD REQUEST FOR ANALYSIS	FOR A	NALYSI	S	
		PURCHASE ORDER	рев					<b>V</b>	s-137 (F	ush 8 da	tys) MD	C = 0.1 p	Cs-137 (Rush 8 days) MDC = 0.1 pCi/g [Method 901.1 M]	ethod 90	1.1 M]		
COMPANY NAME	Tetra Tech	BILL TO COMPANY		Tetra Tech				<b>B</b>	r-90 (Ru	sh 8 day	s) MDC	= 0.25 p	Sr-90 (Rush 8 days) MDC = 0.25 pCi/g [Method ASTM D5811]	thod AS	TM D58	Ē	
SEND REPORT TO	Aaron Orechwa	INVOICE ATTN TO	1	Aaron Orechwa				ک د	ercury [	Mercury [Method 7471 A]	'471 A]						
ADDRESS	ADDRESS 3801 Automation Way Suite #100	ADDRESS		3801 Automation Way Suite #100	ay Suite #	100		Q	etals - T	Metals - TAL [Method 6020A]	709 pou	0A]					
CITY / STATE / ZIP	Fort Collins, CO 80521	CITY / STATE / ZIP		Fort Collins, CO 80521	521			ш	erchlora	te (Rush	8 days)	Perchlorate (Rush 8 days) [Method 314]	d 314]				
PHONE	(970)420-9395	Ĭ	PHONE (970)	(970)420-9395				F	ioxins/F	rans (R	ush 8 da	ays) [Me	Dioxins/Furans (Rush 8 days) [Method 1613B]	3BJ			
FAX			FAX	:				5	:								
E-MAIL	aaron.orechwa@tetratech.com	E-A	E-MAIL aaror	aaron.orechwa@tetratech.com	tratech.co	m		Ξ									
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LAB ID	FIELD ID	MATRIX	SAMPLE	SAMPLE TIME	# OF BOTTLES	PRESERVATIVE	8	∢	<u> </u>	O O	E	T.	ŋ	I	-	ر - د	SEE NOTES SECTION
	TT-GF-01	SOIL	2/16/16	1835	1	n/a		×	×	×	×						
(2)	TT-GF-02	SOIL	2/18/16	1835	1	n/a		×	×	×	×						
(E)	TT-0SF-01	SOIL	2/18/16	1900	-	n/a		×	×	^ ×	×						
3	TT-BBF-01	SOIL	2/18/16	1805	-	n/a		×	×	^ ×	×						
	TT-BB1-01	SOIL	2/18/16	1755	1	n/a		×	×	×	×						
9	TT-HC-01	SOIL	2/18/16	1810	1	n/a		×	×	×	×						
<b>E</b>	TT-GGP-01	SOIL	2/18/16	1810	-	n/a		×	×	×	×	_					
		SOIL	2/18/16		1	n/a		×	×	×	×						
		SOIL	2/18/16		1	n/a		×	×	×	×		_				
		SOIL	2/18/16		1	n/a		×	×	×	×						
		SOIL	2/18/16		1	n/a		×	×	×	×		-				
		SOIL	2/18/16		1	n/a		×	×	×	×						
*Time Zone (Circle):	*Time Zone (Circle): EST CST MST PST Matrix: O = oil S = soil NS = non-soil solid W = water L =	on-soil solid W = water	L = liquid E	liquid E = extract F = filter	_												
				Form 202r9		SIGNATURE				PRINTE	PRINTED NAME			DATE	-	I	TIME
			L			1		ľ					L		Ī		

Please hold and store ALL samples until further notice.	REPOR RE	REPORT LEVEL / QC REQUIRED
Please provide all results for < detectable concentrations (MDC).		Summary (Standard QC)
Please do MDC of 0.25 pCi/g (or lower) for Sr-90 if possible.		LEVEL II (Standard QC)
of 2		LEVEL III (Std QC + forms)
28		LEVEL IV (Std QC + forms + raw data)

_	_	j
	8-Other	
	7-4°C	
	6-NaHSO4	
	1-HCI 2-HNO3 3-H2SO4 4-NaOH 5-NaOH/ZnAcetate 6-NaHSO4 7-4°C 8-Other	
	4-NaOH	
	3-H2SO4	
	2-HN03	
	무무	
	PRESERVATION KEY	
	¥.	

RELINQUISHED BY		Aaron Orechwa	2/25/2016	12:25
RECEIVED BY	CAX	SLOT Malley	5221 77-52-2	1225
RELINQUISHED BY				
RECEIVED BY				
RELINQUISHED BY				
RECEIVED BY				



# ALS Environmental - Fort Collins CONDITION OF SAMPLE UPON RECEIPT FORM

Client: Tetra tech. FC Workorder No: 160 Z 35	<u>5                                    </u>	_
Project Manager: ARW Initials: SOM Date:	Z- <b>Z</b> S-	16
Does this project require any special handling in addition to standard ALS procedures?	YES	(NO)
2. Are custody seals on shipping containers intact?	YES	NO
3. Are Custody seals on sample containers intact?	YES	NO
4. Is there a COC (Chain-of-Custody) present or other representative documents?	(YES)	NO
5. Are the COC and bottle labels complete and legible?	YES	NO
Is the COC in agreement with samples received? (IDs, dates, times, no. of samples, no. of containers, matrix, requested analyses, etc.)	YES	NO
Were airbills / shipping documents present and/or removable?	YES	NO
8. Are all aqueous samples requiring preservation preserved correctly? (excluding volatiles)	YES	NO
Are all aqueous non-preserved samples pH 4-9?	YES	NO
10. Is there sufficient sample for the requested analyses?	YES	NO
Were all samples placed in the proper containers for the requested analyses?	YES	NO
12. Are all samples within holding times for the requested analyses?	(YES)	NO
13. Were all sample containers received intact? (not broken or leaking, etc.)	YES	NO
14. Are all samples requiring no headspace (VOC, GRO, RSK/MEE, Rx CN/S, radon) headspace free? Size of bubble: < green pea > green pea	YES	NO
Amount of sediment: dusting moderate heavy Amount	YES	NO
16. Were the samples shipped on ice?	YES	(N)
17. Were cooler temperatures measured at 0.1-6.0°C? IR gun used*: #2 #4 ONLY	YES	(NO
Temperature (°C): AM6  No. of custody seals on cooler:     No. of custody seals on cooler:   No. of custody seals on custod	ND #16.	3RA-01
If applicable, was the client contacted? VES/NO/NA Contact: Aaron Die Chwa Date/Ti  Project Manager Signature / Date:	me: <u>2/2</u> 14	:5/16

\*IR Gun #2: Oakton, SN 29922500201-0066 \*IR Gun #4: Oakton, SN 2372220101-0002

### **PAI 724 Rev 11 Method Blank Results**

Lab Name: ALS Environmental -- FC

Work Order Number: 1602355

Client Name: Tetra Tech MM, Inc.

ClientProject ID: 103P4384 Brandeis-Bardin Campus

Lab ID: SR160228-1MB

Sample Matrix: SOIL

Prep Batch: SR160228-1

Final Aliquot: 1.99 g

Prep SOP: PAI 707 Rev 14 Date Collected: 28-Feb-16

QCBatchID: SR160228-1-1 Run ID: SR160228-1A

Result Units: pCi/g File Name: SRC0303A

Date Prepared: 28-Feb-16

Count Time: 600 minutes

Date Analyzed: 03-Mar-16

CASNO	Target Nuclide	Result +/- 2 s TPU	MDC	Requested MDC	DL	Lab Qualifier
10098-97-2	Sr-90	0.033 +/- 0.059	0.108	0.25	NA	U

### **Chemical Yield Summary**

Carrier/Tracer	Amount Added	Result	Units	Yield	Control Limits	Flag
STRONTIUM	1017	966.2	ug	95.0	40 - 110 %	

#### Comments:

#### Qualifiers/Flags:

 $\ensuremath{\mathsf{U}}\xspace$  - Result is less than the sample specific MDC.

Y1 - Chemical Yield is in control at 100-110%. Quantitative Yield is assumed.

Y2 - Chemical Yield outside default limits.

LT - Result is less than Requested MDC, greater than sample specific MDC.

Abbreviations:

TPU - Total Propagated Uncertainty

MDC - Minimum Detectable Concentration

BDL - Below Detection Limit

M - Requested MDC not met.

B - Analyte concentration greater than MDC.

B3 - Analyte concentration greater than MDC but less than Requested MDC.

DL - Decision Level

Data Package ID: SR1602355-1

Date Printed: Thursday, March 10, 2016

### **PAI 724 Rev 11**

### Laboratory Control Sample(s)

Lab Name: ALS Environmental -- FC

Work Order Number: 1602355

Client Name: Tetra Tech MM, Inc.

Sr-90

ClientProject ID: 103P4384 Brandeis-Bardin Campus

Lab ID: SR160228-1LCS

10098-97-2

Sample Matrix: SOIL

Prep Batch: SR160228-1

Final Aliquot: 1.99 g

94.4

Prep SOP: PAI 707 Rev 14 Date Collected: 28-Feb-16

QCBatchID: SR160228-1-1

5.065

Result Units: pCi/g

Run ID: SR160228-1A Count Time: 30 minutes

File Name: SRC0303

75 - 125

P,M3

Date Prepared: 28-Feb-16 Date Analyzed: 03-Mar-16

4.8 +/- 1.3

	CASNO	Target Nuclide	Results +/- 2s TPU	MDC	Spike Added	Contro I Limits	Lab Qualifier
- 1							4

### **Chemical Yield Summary**

Carrier/Tracer	Amount Added	Result	Units	Yield	Control Limits	Flag
STRONTIUM	1020	1018	ug	99.8	40 - 110 %	

### Comments:

### Qualifiers/Flags:

U - Result is less than the sample specific MDC.

LT - Result is less than Requested MDC, greater than sample specific MDC.

Y1 - Chemical Yield is in control at 100-110%. Quantitative Yield is assumed.

Y2 - Chemical Yield outside default limits.

L - LCS Recovery below lower control limit.

H - LCS Recovery above upper control limit.

P - LCS Recovery within control limits.

M - The requested MDC was not met.

M3 - The requested MDC was not met, but thereported activity is greater than the reported MDC.

Data Package ID: SR1602355-1

Date Printed: Thursday, March 10, 2016

Abbreviations:

TPU - Total Propagated Uncertainty

MDC - Minimum Detectable Concentration

### **PAI 724 Rev 11**

### **Duplicate Sample Results (DER)**

Lab Name: ALS Environmental -- FC

Work Order Number: 1602355

Client Name: Tetra Tech MM, Inc.

ClientProject ID: 103P4384 Brandeis-Bardin Campus

Field ID: TT-HC-01

Lab ID: 1602355-18DUP

Sample Matrix: SOIL
Prep SOP: PAI 707 Rev 14

Date Collected: 18-Feb-16

Date Prepared: 28-Feb-16

Date Analyzed: 08-Mar-16

**Prep Batch:** SR160228-1 **QCBatchID:** SR160228-1-1

Run ID: SR160228-1C Count Time: 600 minutes

Report Basis: Dry Weight

Final Aliquot: 2.08 g

Prep Basis: Dry Weight Moisture(%): NA Result Units: pCi/g

File Name: SRC0308D

CASNO	Analyte	Sample			Duplicate			DER	DER
	Allalyte	Result +/- 2 s TPU	MDC	Flags	Result +/- 2 s TPU	MDC	Flags		Lim
10098-97-2	Sr-90	0.050 +/- 0.047	0.082	U	0.053 +/- 0.045	0.078	U	0.0451	2.13

### **Comments:**

#### Duplicate Qualifiers/Flags:

- U Result is less than the sample specific MDC.
- Y1 Chemical Yield is in control at 100-110%. Quantitative yield is assumed.
- Y2 Chemical Yield outside default limits.
- $\ensuremath{\mathsf{W}}$  DER is greater than Warning Limit of 1.42
- D DER is greater than Control Limit of 2.13
- LT Result is less than Request MDC, greater than sample specific MDC
- M Requested MDC not met.
- M3 The requested MDC was not met, but the reported
- activity is greater than the reported MDC.

  L LCS Recovery below lower control limit.
- H LCS Recovery above upper control limit.
- P LCS, Matrix Spike Recovery within control limits.
- N Matrix Spike Recovery outside control limits

Data Package ID: SR1602355-1

Abbreviations:

TPU - Total Propagated Uncertainty

DER - Duplicate Error Ratio

BDL - Below Detection Limit

NR - Not Reported

\_\_\_\_\_\_\_

Date Printed: Thursday, March 10, 2016

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# PAI 724 Rev 11 Sample Results

Lab Name: ALS Environmental -- FC

Work Order Number: 1602355

Client Name: Tetra Tech MM, Inc.

ClientProject ID: 103P4384 Brandeis-Bardin Campus

Field ID: TT-LR-RBRA-01

Lab ID: 1602355-1

Sample Matrix: SOIL

Prep SOP: PAI 707 Rev 14

Date Collected: 16-Feb-16

**Date Prepared:** 28-Feb-16 **Date Analyzed:** 04-Mar-16

Prep Batch: SR160228-1

QCBatchID: SR160228-1-1 Run ID: SR160228-1B

Count Time: 600 minutes Report Basis: Dry Weight Final Aliquot: 2.25 g

Prep Basis: Dry Weight Moisture(%): NA Result Units: pCi/g File Name: SRC0304

CASNO	Target Nuclide	Result +/- 2 s TPU	MDC	Requested MDC	DL	Lab Qualifier
10098-97-2	Sr-90	0.051 +/- 0.050	0.089	0.25	NA	U

# **Chemical Yield Summary**

Carrier/Tracer	Amount Added	Result	Units	Yield	Control Limits	Flag
STRONTIUM	1072	990.2	ug	92.4	40 - 110 %	

### **Comments:**

### Qualifiers/Flags:

- U Result is less than the sample specific MDC.
- Y1 Chemical Yield is in control at 100-110%. Quantitative Yield is assumed.
- Y2 Chemical Yield outside default limits.
- $\ensuremath{\mathsf{LT}}$  Result is less than Requested MDC, greater than sample specific MDC.
- M3 The requested MDC was not met, but the reported activity is greater than the reported MDC.
- $\ensuremath{\mathsf{M}}$  The requested MDC was not met.

#### Abbreviations:

TPU - Total Propagated Uncertainty

MDC - Minimum Detectable Concentration

BDL - Below Detection Limit

DL - Decision Level

Data Package ID: SR1602355-1

Date Printed: Thursday, March 10, 2016

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# PAI 724 Rev 11 Sample Results

Lab Name: ALS Environmental -- FC

Work Order Number: 1602355

Client Name: Tetra Tech MM, Inc.

ClientProject ID: 103P4384 Brandeis-Bardin Campus

Field ID: TT-BP-RBRA-01

Lab ID: 1602355-2

Sample Matrix: SOIL

Prep SOP: PAI 707 Rev 14 Date Collected: 18-Feb-16

**Date Prepared:** 28-Feb-16 **Date Analyzed:** 04-Mar-16

Prep Batch: SR160228-1

QCBatchID: SR160228-1-1
Run ID: SR160228-1B

Count Time: 600 minutes
Report Basis: Dry Weight

Final Aliquot: 2.11 g

Prep Basis: Dry Weight Moisture(%): NA Result Units: pCi/g File Name: SRC0304

CASNO	Target Nuclide	Result +/- 2 s TPU	MDC	Requested MDC	DL	Lab Qualifier
10098-97-2	Sr-90	0.019 +/- 0.052	0.096	0.25	NA	U

# **Chemical Yield Summary**

Carrier/Tracer	Amount Added	Result	Units	Yield	Control Limits	Flag
STRONTIUM	1017	953.9	ug	93.8	40 - 110 %	

### **Comments:**

### Qualifiers/Flags:

- U Result is less than the sample specific MDC.
- Y1 Chemical Yield is in control at 100-110%. Quantitative Yield is assumed.
- Y2 Chemical Yield outside default limits.
- $\ensuremath{\mathsf{LT}}$  Result is less than Requested MDC, greater than sample specific MDC.
- M3 The requested MDC was not met, but the reported activity is greater than the reported MDC.
- $\ensuremath{\mathsf{M}}$  The requested MDC was not met.

Abbreviations:

TPU - Total Propagated Uncertainty

MDC - Minimum Detectable Concentration

BDL - Below Detection Limit

DL - Decision Level

Data Package ID: SR1602355-1

Date Printed: Thursday, March 10, 2016

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# PAI 724 Rev 11 Sample Results

Lab Name: ALS Environmental -- FC

Work Order Number: 1602355

Client Name: Tetra Tech MM, Inc.

ClientProject ID: 103P4384 Brandeis-Bardin Campus

Field ID: TT-BP-DRAIN-01

Lab ID: 1602355-3

Sample Matrix: SOIL

Prep SOP: PAI 707 Rev 14

Date Collected: 18-Feb-16

**Date Prepared:** 28-Feb-16 **Date Analyzed:** 07-Mar-16

Prep Batch: SR160228-1

QCBatchID: SR160228-1-1 Run ID: SR160228-1C

Count Time: 600 minutes Report Basis: Dry Weight Final Aliquot: 2.02 g

Prep Basis: Dry Weight Moisture(%): NA Result Units: pCi/g File Name: SRC0307B

CASNO	Target Nuclide	Result +/- 2 s TPU	MDC	Requested MDC	DL	Lab Qualifier
10098-97-2	Sr-90	0.078 +/- 0.050	0.083	0.25	NA	U

# **Chemical Yield Summary**

Carrier/Tracer	Amount Added	Result	Units	Yield	Control Limits	Flag
STRONTIUM	1191	1157	ug	97.2	40 - 110 %	

### **Comments:**

### Qualifiers/Flags:

- U Result is less than the sample specific MDC.
- Y1 Chemical Yield is in control at 100-110%. Quantitative Yield is assumed.
- Y2 Chemical Yield outside default limits.
- $\ensuremath{\mathsf{LT}}$  Result is less than Requested MDC, greater than sample specific MDC.
- M3 The requested MDC was not met, but the reported activity is greater than the reported MDC.
- $\ensuremath{\mathsf{M}}$  The requested MDC was not met.

#### Abbreviations:

TPU - Total Propagated Uncertainty

MDC - Minimum Detectable Concentration

BDL - Below Detection Limit

DL - Decision Level

Data Package ID: SR1602355-1

Date Printed: Thursday, March 10, 2016

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### **PAI 724 Rev 11** Sample Results

Lab Name: ALS Environmental -- FC

Work Order Number: 1602355

Client Name: Tetra Tech MM, Inc.

ClientProject ID: 103P4384 Brandeis-Bardin Campus

Field ID: TT-SEDBG1-01 Lab ID: 1602355-4

Sample Matrix: SOIL

Prep SOP: PAI 707 Rev 14 Date Collected: 18-Feb-16

Date Prepared: 28-Feb-16

Date Analyzed: 07-Mar-16

Prep Batch: SR160228-1

QCBatchID: SR160228-1-1 Run ID: SR160228-1C

Count Time: 600 minutes Report Basis: Dry Weight

Final Aliquot: 2.26 g

Prep Basis: Dry Weight Moisture(%): NA Result Units: pCi/q File Name: SRC0307B

CASNO	Target Nuclide	Result +/- 2 s TPU	MDC	Requested MDC	DL	Lab Qualifier
10098-97-2	Sr-90	0.052 +/- 0.043	0.075	0.25	NA	U

# **Chemical Yield Summary**

Carrier/Tracer	Amount Added	Result	Units	Yield	Control Limits	Flag
STRONTIUM	1090	1038	ug	95.2	40 - 110 %	

### **Comments:**

### Qualifiers/Flags:

- U Result is less than the sample specific MDC.
- Y1 Chemical Yield is in control at 100-110%. Quantitative Yield is assumed.
- Y2 Chemical Yield outside default limits.
- LT Result is less than Requested MDC, greater than sample specific MDC.
- M3 The requested MDC was not met, but the reported activity is greater than the reported MDC.
- M The requested MDC was not met.

Abbreviations:

TPU - Total Propagated Uncertainty

MDC - Minimum Detectable Concentration

BDL - Below Detection Limit

DL - Decision Level

Data Package ID: SR1602355-1

Date Printed: Thursday, March 10, 2016

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### **PAI 724 Rev 11** Sample Results

Lab Name: ALS Environmental -- FC

Work Order Number: 1602355

Client Name: Tetra Tech MM, Inc.

ClientProject ID: 103P4384 Brandeis-Bardin Campus

Field ID: TT-SD1-01 Lab ID: 1602355-5

Sample Matrix: SOIL

Prep SOP: PAI 707 Rev 14 Date Collected: 18-Feb-16 Date Prepared: 28-Feb-16

Date Analyzed: 07-Mar-16

Prep Batch: SR160228-1

QCBatchID: SR160228-1-1 Run ID: SR160228-1C Count Time: 600 minutes

Report Basis: Dry Weight

Final Aliquot: 2.24 g

Prep Basis: Dry Weight Moisture(%): NA Result Units: pCi/q File Name: SRC0307B

CASNO	Target Nuclide	Result +/- 2 s TPU	MDC	Requested MDC	DL	Lab Qualifier
10098-97-2	Sr-90	0.055 +/- 0.043	0.075	0.25	NA	U

# **Chemical Yield Summary**

Carrier/Tracer	Amount Added	Result	Units	Yield	Control Limits	Flag
STRONTIUM	1104	1069	ug	96.8	40 - 110 %	

### **Comments:**

### Qualifiers/Flags:

- U Result is less than the sample specific MDC.
- Y1 Chemical Yield is in control at 100-110%. Quantitative Yield is assumed.
- Y2 Chemical Yield outside default limits.
- LT Result is less than Requested MDC, greater than sample specific MDC.
- M3 The requested MDC was not met, but the reported activity is greater than the reported MDC.
- M The requested MDC was not met.

Abbreviations:

TPU - Total Propagated Uncertainty

MDC - Minimum Detectable Concentration

BDL - Below Detection Limit

DL - Decision Level

Data Package ID: SR1602355-1

Date Printed: Thursday, March 10, 2016

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# PAI 724 Rev 11 Sample Results

Lab Name: ALS Environmental -- FC

Work Order Number: 1602355

Client Name: Tetra Tech MM, Inc.

ClientProject ID: 103P4384 Brandeis-Bardin Campus

Field ID: TT-SD2-01 Lab ID: 1602355-6 Sample Matrix: SOIL

Prep SOP: PAI 707 Rev 14

Date Collected: 18-Feb-16

**Date Prepared:** 28-Feb-16 **Date Analyzed:** 07-Mar-16

Prep Batch: SR160228-1 QCBatchID: SR160228-1-1

Run ID: SR160228-1C Count Time: 600 minutes Report Basis: Dry Weight Final Aliquot: 2.03 g

Prep Basis: Dry Weight Moisture(%): NA Result Units: pCi/g File Name: SRC0307B

	CASNO	Target Nuclide	Result +/- 2 s TPU	MDC	Requested MDC	DL	Lab Qualifier
1009	98-97-2	Sr-90	0.182 +/- 0.064	0.081	0.25	NA	LT

# **Chemical Yield Summary**

Carrier/Tracer	Amount Added	Result	Units	Yield	Control Limits	Flag
STRONTIUM	1044	1033	ug	99.0	40 - 110 %	

### **Comments:**

### Qualifiers/Flags:

- U Result is less than the sample specific MDC.
- Y1 Chemical Yield is in control at 100-110%. Quantitative Yield is assumed.
- Y2 Chemical Yield outside default limits.
- $\ensuremath{\mathsf{LT}}$  Result is less than Requested MDC, greater than sample specific MDC.
- M3 The requested MDC was not met, but the reported activity is greater than the reported MDC.
- $\ensuremath{\mathsf{M}}$  The requested MDC was not met.

#### Abbreviations:

TPU - Total Propagated Uncertainty

MDC - Minimum Detectable Concentration

BDL - Below Detection Limit

DL - Decision Level

Data Package ID: SR1602355-1

Date Printed: Thursday, March 10, 2016

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# PAI 724 Rev 11 Sample Results

Lab Name: ALS Environmental -- FC

Work Order Number: 1602355

Client Name: Tetra Tech MM, Inc.

ClientProject ID: 103P4384 Brandeis-Bardin Campus

Field ID: TT-ED1-01 Lab ID: 1602355-7 Sample Matrix: SOIL

**Prep SOP:** PAI 707 Rev 14 **Date Collected:** 18-Feb-16

**Date Prepared:** 28-Feb-16 **Date Analyzed:** 07-Mar-16

Prep Batch: SR160228-1

QCBatchID: SR160228-1-1 Run ID: SR160228-1C

**Count Time:** 600 minutes **Report Basis:** Dry Weight

Final Aliquot: 2.00 g

Prep Basis: Dry Weight Moisture(%): NA Result Units: pCi/g File Name: SRC0307B

CASNO	Target Nuclide	Result +/- 2 s TPU	MDC	Requested MDC	DL	Lab Qualifier
10098-97-2	Sr-90	0.041 +/- 0.049	0.088	0.25	NA	U

# **Chemical Yield Summary**

Carrier/Tracer	Amount Added	Result	Units	Yield	Control Limits	Flag
STRONTIUM	1082	991.0	ug	91.6	40 - 110 %	

### **Comments:**

### Qualifiers/Flags:

- U Result is less than the sample specific MDC.
- Y1 Chemical Yield is in control at 100-110%. Quantitative Yield is assumed.
- Y2 Chemical Yield outside default limits.
- $\ensuremath{\mathsf{LT}}$  Result is less than Requested MDC, greater than sample specific MDC.
- M3 The requested MDC was not met, but the reported activity is greater than the reported MDC.
- $\ensuremath{\mathsf{M}}$  The requested MDC was not met.

#### Abbreviations:

TPU - Total Propagated Uncertainty

MDC - Minimum Detectable Concentration

BDL - Below Detection Limit

DL - Decision Level

Data Package ID: SR1602355-1

Date Printed: Thursday, March 10, 2016

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# PAI 724 Rev 11 Sample Results

Lab Name: ALS Environmental -- FC

Work Order Number: 1602355

Client Name: Tetra Tech MM, Inc.

ClientProject ID: 103P4384 Brandeis-Bardin Campus

Field ID: TT-ED2-01

Lab ID: 1602355-8

Sample Matrix: SOIL

Prep SOP: PAI 707 Rev 14 Date Collected: 18-Feb-16

**Date Prepared:** 28-Feb-16 **Date Analyzed:** 07-Mar-16

Prep Batch: SR160228-1

QCBatchID: SR160228-1-1 Run ID: SR160228-1C

Count Time: 600 minutes
Report Basis: Dry Weight

Final Aliquot: 2.05 g

Prep Basis: Dry Weight Moisture(%): NA Result Units: pCi/g File Name: SRA0307

CASNO	Target Nuclide	Result +/- 2 s TPU	MDC	Requested MDC	DL	Lab Qualifier
10098-97-2	Sr-90	0.022 +/- 0.052	0.097	0.25	NA	U

# **Chemical Yield Summary**

Carrier/Tracer	Amount Added	Result	Units	Yield	Control Limits	Flag
STRONTIUM	1045	967.2	ug	92.6	40 - 110 %	

### **Comments:**

### Qualifiers/Flags:

- U Result is less than the sample specific MDC.
- Y1 Chemical Yield is in control at 100-110%. Quantitative Yield is assumed.
- Y2 Chemical Yield outside default limits.
- $\ensuremath{\mathsf{LT}}$  Result is less than Requested MDC, greater than sample specific MDC.
- M3 The requested MDC was not met, but the reported activity is greater than the reported MDC.
- $\ensuremath{\mathsf{M}}$  The requested MDC was not met.

#### Abbreviations:

TPU - Total Propagated Uncertainty

MDC - Minimum Detectable Concentration

BDL - Below Detection Limit

DL - Decision Level

Data Package ID: SR1602355-1

Date Printed: Thursday, March 10, 2016

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# PAI 724 Rev 11 Sample Results

Lab Name: ALS Environmental -- FC

Work Order Number: 1602355

Client Name: Tetra Tech MM, Inc.

ClientProject ID: 103P4384 Brandeis-Bardin Campus

Field ID: TT-ED3-01 Lab ID: 1602355-9 Sample Matrix: SOIL

Prep SOP: PAI 707 Rev 14

Date Collected: 18-Feb-16

**Date Prepared:** 28-Feb-16 **Date Analyzed:** 07-Mar-16

Prep Batch: SR160228-1

QCBatchID: SR160228-1-1 Run ID: SR160228-1C

Count Time: 600 minutes Report Basis: Dry Weight Final Aliquot: 2.18 g

Prep Basis: Dry Weight Moisture(%): NA Result Units: pCi/g File Name: SRA0307

CASNO	Target Nuclide	Result +/- 2 s TPU	MDC	Requested MDC	DL	Lab Qualifier
10098-97-2	Sr-90	0.049 +/- 0.050	0.089	0.25	NA	U

# **Chemical Yield Summary**

Carrier/Tracer	Amount Added	Result	Units	Yield	Control Limits	Flag
STRONTIUM	1132	1017	ug	89.9	40 - 110 %	

### **Comments:**

### Qualifiers/Flags:

- U Result is less than the sample specific MDC.
- Y1 Chemical Yield is in control at 100-110%. Quantitative Yield is assumed.
- Y2 Chemical Yield outside default limits.
- $\ensuremath{\mathsf{LT}}$  Result is less than Requested MDC, greater than sample specific MDC.
- M3 The requested MDC was not met, but the reported activity is greater than the reported MDC.
- $\ensuremath{\mathsf{M}}$  The requested MDC was not met.

#### Abbreviations:

TPU - Total Propagated Uncertainty

MDC - Minimum Detectable Concentration

BDL - Below Detection Limit

DL - Decision Level

Data Package ID: SR1602355-1

Date Printed: Thursday, March 10, 2016

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# PAI 724 Rev 11 Sample Results

Lab Name: ALS Environmental -- FC

Work Order Number: 1602355

Client Name: Tetra Tech MM, Inc.

ClientProject ID: 103P4384 Brandeis-Bardin Campus

**Field ID:** TT-BBCSED-01 **Lab ID:** 1602355-10

Sample Matrix: SOIL

Prep SOP: PAI 707 Rev 14

Date Collected: 18-Feb-16

**Date Prepared:** 28-Feb-16 **Date Analyzed:** 07-Mar-16

Prep Batch: SR160228-1

QCBatchID: SR160228-1-1 Run ID: SR160228-1C

Count Time: 600 minutes Report Basis: Dry Weight Final Aliquot: 2.01 g

Prep Basis: Dry Weight Moisture(%): NA Result Units: pCi/g File Name: SRA0307

CASNO	Target Nuclide	Result +/- 2 s TPU	MDC	Requested MDC	DL	Lab Qualifier
10098-97-2	Sr-90	0.077 +/- 0.060	0.104	0.25	NA	U

# **Chemical Yield Summary**

Carrier/Tracer	Amount Added	Result	Units	Yield	Control Limits	Flag
STRONTIUM	1150	1008	ug	87.6	40 - 110 %	

### **Comments:**

### Qualifiers/Flags:

- U Result is less than the sample specific MDC.
- Y1 Chemical Yield is in control at 100-110%. Quantitative Yield is assumed.
- Y2 Chemical Yield outside default limits.
- $\ensuremath{\mathsf{LT}}$  Result is less than Requested MDC, greater than sample specific MDC.
- M3 The requested MDC was not met, but the reported activity is greater than the reported MDC.
- $\ensuremath{\mathsf{M}}$  The requested MDC was not met.

Abbreviations:

TPU - Total Propagated Uncertainty

MDC - Minimum Detectable Concentration

BDL - Below Detection Limit

DL - Decision Level

Data Package ID: SR1602355-1

Date Printed: Thursday, March 10, 2016

ALS Environmental -- FC

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# PAI 724 Rev 11 Sample Results

Lab Name: ALS Environmental -- FC

Work Order Number: 1602355

Client Name: Tetra Tech MM, Inc.

ClientProject ID: 103P4384 Brandeis-Bardin Campus

Field ID: TT-PPG-01

Lab ID: 1602355-11

Sample Matrix: SOIL

Prep SOP: PAI 707 Rev 14

Date Collected: 18-Feb-16

**Date Prepared:** 28-Feb-16 **Date Analyzed:** 07-Mar-16

Prep Batch: SR160228-1

QCBatchID: SR160228-1-1 Run ID: SR160228-1C

**Count Time:** 600 minutes **Report Basis:** Dry Weight

Final Aliquot: 2.03 g

Prep Basis: Dry Weight Moisture(%): NA Result Units: pCi/g File Name: SRA0307

CASNO	Target Nuclide	Result +/- 2 s TPU	MDC	Requested MDC	DL	Lab Qualifier
10098-97-2	Sr-90	0.056 +/- 0.055	0.097	0.25	NA	U

# **Chemical Yield Summary**

Carrier/Tracer	Amount Added	Result	Units	Yield	Control Limits	Flag
STRONTIUM	1089	1004	ug	92.1	40 - 110 %	

### **Comments:**

### Qualifiers/Flags:

- U Result is less than the sample specific MDC.
- Y1 Chemical Yield is in control at 100-110%. Quantitative Yield is assumed.
- Y2 Chemical Yield outside default limits.
- $\ensuremath{\mathsf{LT}}$  Result is less than Requested MDC, greater than sample specific MDC.
- M3 The requested MDC was not met, but the reported activity is greater than the reported MDC.
- $\ensuremath{\mathsf{M}}$  The requested MDC was not met.

Abbreviations:

TPU - Total Propagated Uncertainty

MDC - Minimum Detectable Concentration

BDL - Below Detection Limit

DL - Decision Level

Data Package ID: SR1602355-1

Date Printed: Thursday, March 10, 2016

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# PAI 724 Rev 11 Sample Results

Lab Name: ALS Environmental -- FC

Work Order Number: 1602355

Client Name: Tetra Tech MM, Inc.

ClientProject ID: 103P4384 Brandeis-Bardin Campus

Field ID: TT-CAB-01

Lab ID: 1602355-12

Sample Matrix: SOIL

Prep SOP: PAI 707 Rev 14

Date Collected: 18-Feb-16

Date Prepared: 28-Feb-16

Date Analyzed: 07-Mar-16

Prep Batch: SR160228-1

Report Basis: Dry Weight

QCBatchID: SR160228-1-1 Run ID: SR160228-1C Count Time: 600 minutes Final Aliquot: 2.14 g

Prep Basis: Dry Weight Moisture(%): NA Result Units: pCi/g File Name: SRA0307

CASNO	Target Nuclide	Result +/- 2 s TPU	MDC	Requested MDC	DL	Lab Qualifier
10098-97-2	Sr-90	0.062 +/- 0.052	0.092	0.25	NA	U

# **Chemical Yield Summary**

Carrier/Tracer	Amount Added	Result	Units	Yield	Control Limits	Flag
STRONTIUM	1089	954.7	ug	87.7	40 - 110 %	

### **Comments:**

### Qualifiers/Flags:

- U Result is less than the sample specific MDC.
- Y1 Chemical Yield is in control at 100-110%. Quantitative Yield is assumed.
- Y2 Chemical Yield outside default limits.
- $\ensuremath{\mathsf{LT}}$  Result is less than Requested MDC, greater than sample specific MDC.
- M3 The requested MDC was not met, but the reported activity is greater than the reported MDC.
- $\ensuremath{\mathsf{M}}$  The requested MDC was not met.

Abbreviations:

TPU - Total Propagated Uncertainty

MDC - Minimum Detectable Concentration

BDL - Below Detection Limit

DL - Decision Level

Data Package ID: SR1602355-1

Date Printed: Thursday, March 10, 2016

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# PAI 724 Rev 11 Sample Results

Lab Name: ALS Environmental -- FC

Work Order Number: 1602355

Client Name: Tetra Tech MM, Inc.

ClientProject ID: 103P4384 Brandeis-Bardin Campus

Field ID: TT-GF-01

Lab ID: 1602355-13

Sample Matrix: SOIL

Prep SOP: PAI 707 Rev 14

Date Collected: 16-Feb-16

**Date Prepared:** 28-Feb-16 **Date Analyzed:** 04-Mar-16

Prep Batch: SR160228-1

QCBatchID: SR160228-1-1 Run ID: SR160228-1B

**Count Time:** 600 minutes **Report Basis:** Dry Weight

Final Aliquot: 2.00 g

Prep Basis: Dry Weight Moisture(%): NA Result Units: pCi/g File Name: SRC0304

CASNO	Target Nuclide	Result +/- 2 s TPU	MDC	Requested MDC	DL	Lab Qualifier
10098-97-2	Sr-90	0.058 +/- 0.058	0.104	0.25	NA	U

# **Chemical Yield Summary**

Carrier/Tracer	Amount Added	Result	Units	Yield	Control Limits	Flag
STRONTIUM	1099	959.5	ug	87.3	40 - 110 %	

### **Comments:**

### Qualifiers/Flags:

- U Result is less than the sample specific MDC.
- Y1 Chemical Yield is in control at 100-110%. Quantitative Yield is assumed.
- Y2 Chemical Yield outside default limits.
- $\ensuremath{\mathsf{LT}}$  Result is less than Requested MDC, greater than sample specific MDC.
- M3 The requested MDC was not met, but the reported activity is greater than the reported MDC.
- $\ensuremath{\mathsf{M}}$  The requested MDC was not met.

#### Abbreviations:

TPU - Total Propagated Uncertainty

MDC - Minimum Detectable Concentration

BDL - Below Detection Limit

DL - Decision Level

Data Package ID: SR1602355-1

Date Printed: Thursday, March 10, 2016

# PAI 724 Rev 11 Sample Results

Lab Name: ALS Environmental -- FC

Work Order Number: 1602355

Client Name: Tetra Tech MM, Inc.

ClientProject ID: 103P4384 Brandeis-Bardin Campus

Field ID: TT-GF-02 Lab ID: 1602355-14 Sample Matrix: SOIL

Prep SOP: PAI 707 Rev 14

Date Collected: 18-Feb-16

**Date Prepared:** 28-Feb-16 **Date Analyzed:** 04-Mar-16

Prep Batch: SR160228-1

QCBatchID: SR160228-1-1
Run ID: SR160228-1B

Count Time: 600 minutes
Report Basis: Dry Weight

Final Aliquot: 2.00 g

Prep Basis: Dry Weight Moisture(%): NA Result Units: pCi/g File Name: SRC0304

CASNO	Target Nuclide	Result +/- 2 s TPU	MDC	Requested MDC	DL	Lab Qualifier
10098-97-2	Sr-90	0.081 +/- 0.059	0.102	0.25	NA	U

# **Chemical Yield Summary**

Carrier/Tracer	Amount Added	Result	Units	Yield	Control Limits	Flag
STRONTIUM	1136	1002	ug	88.2	40 - 110 %	

### **Comments:**

### Qualifiers/Flags:

- U Result is less than the sample specific MDC.
- Y1 Chemical Yield is in control at 100-110%. Quantitative Yield is assumed.
- Y2 Chemical Yield outside default limits.
- $\ensuremath{\mathsf{LT}}$  Result is less than Requested MDC, greater than sample specific MDC.
- M3 The requested MDC was not met, but the reported activity is greater than the reported MDC.
- $\ensuremath{\mathsf{M}}$  The requested MDC was not met.

Abbreviations:

TPU - Total Propagated Uncertainty

MDC - Minimum Detectable Concentration

BDL - Below Detection Limit

DL - Decision Level

Data Package ID: SR1602355-1

Date Printed: Thursday, March 10, 2016

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# PAI 724 Rev 11 Sample Results

Lab Name: ALS Environmental -- FC

Work Order Number: 1602355

Client Name: Tetra Tech MM, Inc.

ClientProject ID: 103P4384 Brandeis-Bardin Campus

Field ID: TT-OSF-01

Lab ID: 1602355-15

Sample Matrix: SOIL

Prep SOP: PAI 707 Rev 14

Date Collected: 18-Feb-16

**Date Prepared:** 28-Feb-16 **Date Analyzed:** 07-Mar-16

Prep Batch: SR160228-1

QCBatchID: SR160228-1-1 Run ID: SR160228-1C

Count Time: 600 minutes
Report Basis: Dry Weight

Final Aliquot: 2.03 g

Prep Basis: Dry Weight Moisture(%): NA Result Units: pCi/g File Name: SRA0307

CASNO	Target Nuclide	Result +/- 2 s TPU	MDC	Requested MDC	DL	Lab Qualifier
10098-97-2	Sr-90	0.042 +/- 0.053	0.096	0.25	NA	U

# **Chemical Yield Summary**

Carrier/Tracer	Amount Added	Result	Units	Yield	Control Limits	Flag
STRONTIUM	1017	855.5	ug	84.1	40 - 110 %	

### **Comments:**

### Qualifiers/Flags:

- U Result is less than the sample specific MDC.
- Y1 Chemical Yield is in control at 100-110%. Quantitative Yield is assumed.
- Y2 Chemical Yield outside default limits.
- $\ensuremath{\mathsf{LT}}$  Result is less than Requested MDC, greater than sample specific MDC.
- M3 The requested MDC was not met, but the reported activity is greater than the reported MDC.
- $\ensuremath{\mathsf{M}}$  The requested MDC was not met.

Abbreviations:

TPU - Total Propagated Uncertainty

MDC - Minimum Detectable Concentration

BDL - Below Detection Limit

DL - Decision Level

Data Package ID: SR1602355-1

Date Printed: Thursday, March 10, 2016

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# PAI 724 Rev 11 Sample Results

Lab Name: ALS Environmental -- FC

Work Order Number: 1602355

Client Name: Tetra Tech MM, Inc.

ClientProject ID: 103P4384 Brandeis-Bardin Campus

Field ID: TT-BBF-01

Lab ID: 1602355-16

Sample Matrix: SOIL

Prep SOP: PAI 707 Rev 14

Date Collected: 18-Feb-16

**Date Prepared:** 28-Feb-16 **Date Analyzed:** 07-Mar-16

Prep Batch: SR160228-1

QCBatchID: SR160228-1-1 Run ID: SR160228-1C Count Time: 600 minutes Report Basis: Dry Weight Final Aliquot: 2.13 g

Prep Basis: Dry Weight Moisture(%): NA Result Units: pCi/g File Name: SRA0307

CASNO	Target Nuclide	Result +/- 2 s TPU	MDC	Requested MDC	DL	Lab Qualifier
10098-97-2	Sr-90	0.055 +/- 0.046	0.081	0.25	NA	U

# **Chemical Yield Summary**

Carrier/Tracer	Amount Added	Result	Units	Yield	Control Limits	Flag
STRONTIUM	1076	1020	ug	94.8	40 - 110 %	

### **Comments:**

### Qualifiers/Flags:

- U Result is less than the sample specific MDC.
- Y1 Chemical Yield is in control at 100-110%. Quantitative Yield is assumed.
- Y2 Chemical Yield outside default limits.
- $\ensuremath{\mathsf{LT}}$  Result is less than Requested MDC, greater than sample specific MDC.
- M3 The requested MDC was not met, but the reported activity is greater than the reported MDC.
- $\ensuremath{\mathsf{M}}$  The requested MDC was not met.

Abbreviations:

TPU - Total Propagated Uncertainty

MDC - Minimum Detectable Concentration

BDL - Below Detection Limit

DL - Decision Level

Data Package ID: SR1602355-1

Date Printed: Thursday, March 10, 2016

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# PAI 724 Rev 11 Sample Results

Lab Name: ALS Environmental -- FC

Work Order Number: 1602355

Client Name: Tetra Tech MM, Inc.

ClientProject ID: 103P4384 Brandeis-Bardin Campus

Field ID: TT-BB1-01 Lab ID: 1602355-17 Sample Matrix: SOIL

Prep SOP: PAI 707 Rev 14

Date Collected: 18-Feb-16

Date Prepared: 28-Feb-16

Date Analyzed: 08-Mar-16

Prep Batch: SR160228-1 QCBatchID: SR160228-1-1

Run ID: SR160228-1C Count Time: 600 minutes Report Basis: Dry Weight Final Aliquot: 2.15 g

Prep Basis: Dry Weight Moisture(%): NA Result Units: pCi/g File Name: SRC0308D

CAS	NO	Target Nuclide	Result +/- 2 s TPU	MDC	Requested MDC	DL	Lab Qualifier
10098-97	'-2	Sr-90	0.056 +/- 0.046	0.081	0.25	NA	U

# **Chemical Yield Summary**

Carrier/Tracer	Amount Added	Result	Units	Yield	Control Limits	Flag
STRONTIUM	1096	984.5	ug	89.8	40 - 110 %	

### **Comments:**

### Qualifiers/Flags:

- U Result is less than the sample specific MDC.
- Y1 Chemical Yield is in control at 100-110%. Quantitative Yield is assumed.
- Y2 Chemical Yield outside default limits.
- $\ensuremath{\mathsf{LT}}$  Result is less than Requested MDC, greater than sample specific MDC.
- M3 The requested MDC was not met, but the reported activity is greater than the reported MDC.
- $\ensuremath{\mathsf{M}}$  The requested MDC was not met.

Abbreviations:

TPU - Total Propagated Uncertainty

MDC - Minimum Detectable Concentration

BDL - Below Detection Limit

DL - Decision Level

Data Package ID: SR1602355-1

Date Printed: Thursday, March 10, 2016

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### **PAI 724 Rev 11** Sample Results

Lab Name: ALS Environmental -- FC

Work Order Number: 1602355

Client Name: Tetra Tech MM, Inc.

ClientProject ID: 103P4384 Brandeis-Bardin Campus

Field ID: TT-HC-01 Lab ID: 1602355-18 Sample Matrix: SOIL

Prep SOP: PAI 707 Rev 14 Date Collected: 18-Feb-16

Date Prepared: 28-Feb-16 Date Analyzed: 08-Mar-16 Prep Batch: SR160228-1 QCBatchID: SR160228-1-1

Run ID: SR160228-1C Count Time: 600 minutes

Report Basis: Dry Weight

Final Aliquot: 2.12 g

Prep Basis: Dry Weight Moisture(%): NA Result Units: pCi/q

File Name: SRC0308D

CASNO	Target Nuclide	Result +/- 2 s TPU	MDC	Requested MDC	DL	Lab Qualifier
10098-97-2	Sr-90	0.050 +/- 0.047	0.082	0.25	NA	U

# **Chemical Yield Summary**

Carrier/Tracer	Amount Added	Result	Units	Yield	Control Limits	Flag
STRONTIUM	1148	1054	ug	91.7	40 - 110 %	

### **Comments:**

### Qualifiers/Flags:

- U Result is less than the sample specific MDC.
- Y1 Chemical Yield is in control at 100-110%. Quantitative Yield is assumed.
- Y2 Chemical Yield outside default limits.
- LT Result is less than Requested MDC, greater than sample specific MDC.
- M3 The requested MDC was not met, but the reported activity is greater than the reported MDC.
- M The requested MDC was not met.

#### Abbreviations:

TPU - Total Propagated Uncertainty

MDC - Minimum Detectable Concentration

BDL - Below Detection Limit

DL - Decision Level

Data Package ID: SR1602355-1

Date Printed: Thursday, March 10, 2016

### **PAI 724 Rev 11**

### **Sample Duplicate Results**

Lab Name: ALS Environmental -- FC

Work Order Number: 1602355

Client Name: Tetra Tech MM, Inc.

ClientProject ID: 103P4384 Brandeis-Bardin Campus

Field ID: TT-HC-01

Lab ID: 1602355-18DUP

Sample Matrix: SOIL

Prep SOP: PAI 707 Rev 14 Date Collected: 18-Feb-16 Date Prepared: 28-Feb-16

Date Analyzed: 08-Mar-16

Prep Batch: SR160228-1 QCBatchID: SR160228-1-1

Run ID: SR160228-1C

**Count Time:** 600 minutes **Report Basis:** Dry Weight

Final Aliquot: 2.08 g

Prep Basis: Dry Weight
Moisture(%): NA

Result Units: pCi/g File Name: SRC0308D

CASNO	Target Nuclide	Result +/- 2 s TPU	MDC	Requested MDC	DL	Lab Qualifier
10098-97-2	Sr-90	0.053 +/- 0.045	0.078	0.25	NA	U

### **Chemical Yield Summary**

Carrier/Tracer	Amount Added	Result	Units	Yield	Control Limits	Flag
STRONTIUM	1113	1048	ug	94.2	40 - 110 %	

#### **Comments:**

#### Qualifiers/Flags:

- U Result is less than the sample specific MDC.
- Y1 Chemical Yield is in control at 100-110%. Quantitative yield is assumed.
- Y2 Chemical Yield outside default limits.
- LT Result is less than Requested MDC, greater than sample specific MDC.
- M The requested MDC was not met.
- M3 The requested MDC was not met, but thereported activity is greater than the reported MDC.
- $\ensuremath{W}$  DER is greater than  $\ensuremath{W}$  arning Limit of 1.42
- $\ensuremath{\text{D}}$   $\ensuremath{\text{DER}}$  is greater than Control Limit of 2.13

#### Abbreviations:

TPU - Total Propagated Uncertainty

MDC - Minimum Detectable Concentration

**BDL** - Below Detection Limit

DL - Decision Level

Data Package ID: SR1602355-1

Thursday, March 10, 2016

Date Printed:

**ALS Environmental -- FC** 

Page 1 of 1

# PAI 724 Rev 11 Sample Results

Lab Name: ALS Environmental -- FC

Work Order Number: 1602355

Client Name: Tetra Tech MM, Inc.

ClientProject ID: 103P4384 Brandeis-Bardin Campus

Field ID: TT-GGP-01 Lab ID: 1602355-19 Sample Matrix: SOIL

Prep SOP: PAI 707 Rev 14

Date Collected: 18-Feb-16

Date Prepared: 28-Feb-16

Date Analyzed: 08-Mar-16

Prep Batch: SR160228-1

QCBatchID: SR160228-1-1 Run ID: SR160228-1C Count Time: 600 minutes

Report Basis: Dry Weight

Final Aliquot: 2.15 g

Prep Basis: Dry Weight Moisture(%): NA Result Units: pCi/g File Name: SRC0308D

C	CASNO	Target Nuclide	Result +/- 2 s TPU	MDC	Requested MDC	DL	Lab Qualifier
1009	98-97-2	Sr-90	0.062 +/- 0.044	0.074	0.25	NA	U

# **Chemical Yield Summary**

Carrier/Tracer	Amount Added	Result	Units	Yield	Control Limits	Flag
STRONTIUM	1080	1021	ug	94.5	40 - 110 %	

### **Comments:**

### Qualifiers/Flags:

- U Result is less than the sample specific MDC.
- Y1 Chemical Yield is in control at 100-110%. Quantitative Yield is assumed.
- Y2 Chemical Yield outside default limits.
- $\ensuremath{\mathsf{LT}}$  Result is less than Requested MDC, greater than sample specific MDC.
- M3 The requested MDC was not met, but the reported activity is greater than the reported MDC.
- $\ensuremath{\mathsf{M}}$  The requested MDC was not met.

Abbreviations:

TPU - Total Propagated Uncertainty

MDC - Minimum Detectable Concentration

BDL - Below Detection Limit

DL - Decision Level

Data Package ID: SR1602355-1

Date Printed: Thursday, March 10, 2016

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# Metals Case Narrative

# Tetra Tech MM, Inc.

# 103P4384 - Brandeis-Bardin Campus

Work Order Number: 1602355

- 1. This report consists of 19 soil samples.
- 2. The samples were received intact at ambient temperature by ALS on 02/25/16.
- 3. The samples were prepared and analyzed based on SW-846, 3<sup>rd</sup> Edition procedures.

For analysis by ICP-MS, the samples were digested following method 3050B and the current revision of SOP 806.

For analysis by Cold Vapor AA (CVAA), the samples were digested following method 7471A and the current revision of SOP 812.

Analysis by ICP-MS followed method 6020A and the current revision of SOP 827.

Analysis by CVAA followed method 7471A and the current revision of SOP 812.

- 5. All standards and solutions are NIST traceable and were used within their recommended shelf life.
- 6. The samples were prepared and analyzed within the established hold times.

All in house quality control procedures were followed, as described below.

- 7. General quality control procedures.
  - A preparation (method) blank and laboratory control sample were digested and analyzed with the samples in each digestion batch.
  - The preparation (method) blank associated with each digestion batch was below the reporting limit for the requested analytes.
  - All laboratory control sample criteria were met.



- All initial and continuing calibration blanks were below the reporting limit for the requested analytes.
- All initial and continuing calibration verifications were within the acceptance criteria for the requested analytes.
- The interference check samples associated with Method 6020A were analyzed.
- 8. Matrix specific quality control procedures.

Sample 1602355-1 was designated as the quality control sample for each analysis.

Similarity of matrix and therefore relevance of the QC results should not be automatically inferred for any sample other than the native sample selected for QC.

■ A matrix spike and matrix spike duplicate were digested and analyzed with each batch. All acceptance criteria for accuracy were met with the following exceptions:

<u>Analyte</u>	Sample ID
Antimony	1602355-1MS/MSD
Arsenic	1602355-1MS/MSD
Cadmium	1602355-1MS/MSD
Calcium	1602355-1MS
Lead	1602355-1MS/MSD
Thallium	1602355-1MS

The native sample results are flagged for matrix spike failure and an analytical post spike was performed. The result of the spike for calcium was unacceptable indicating that the matrix may be affecting quantitation of this analyte. The results of the spike for the remaining analytes were acceptable indicating that the matrix was not significantly affecting quantitation of these analytes.

Matrix spike recoveries could not be evaluated for the following analytes:

<u>Analyte</u>	<u>Sample ID</u>
Aluminum	1602355-1
Barium	1602355-1
Iron	1602355-1
Magnesium	1602355-1
Manganese	1602355-1
Potassium	1602355-1
Vanadium	1602355-1

The concentrations of these analytes in the native sample were greater than four times the concentration of matrix spike added during the digestion. When sample concentration is that much greater than the spike added, spike recoveries may not be accurate. The laboratory control sample indicates that the digestion and analysis were in control.



 A sample duplicate and matrix spike duplicate were digested and analyzed with each batch. All acceptance criteria for precision were met with the following exceptions:

<u>Analyte</u>	Sample ID
Antimony	1602355-1D
Cadmium	1602355-1D
Solonium	1602355-1D -1M9

1602355-1D, -1MSD Selenium

The native sample results are flagged for duplicate failure. Where spike duplicate precision was outside control limits only the duplicate page shows the flag.

A serial dilution was analyzed with the ICP batch. All acceptance criteria were met with the following exceptions:

<u>Analyte</u>	Sample ID
Arsenic	1602355-1L
Calcium	1602355-1L
Chromium	1602355-1L
Thallium	1602355-1L
Vanadium	1602355-1L

The native sample results are flagged for serial dilution failure.

9. It is a standard practice that samples for ICP-MS are analyzed at a dilution.

The data contained in the following report have been reviewed and approved by the personnel listed below. In addition, ALS certifies that the analyses reported herein are true, complete and correct within the limits of the methods employed.

Date Inorganics Primary Data Reviewer 3/4/16 atà Reviewer Date



### **Inorganic Data Reporting Qualifiers**

The following qualifiers are used by the laboratory when reporting results of inorganic analyses.

- Result qualifier -- A "J" is entered if the reported value was obtained from a reading that was
  less than the Reporting Limit but greater than or equal to the Method Detection Limit (MDL).
  If the analyte was analyzed for but not detected a "U" is entered. For samples, negative
  values are reported as non-detects ("U" flagged). For blanks, if the absolute value of the
  negative value is above the MDL and below the reporting limit, then the result is "J" flagged.
- QC qualifier -- Specified entries and their meanings are as follows:
  - E The reported value is estimated because of the presence of interference. An explanatory note may be included in the narrative.
  - M Duplicate injection precision was not met.
  - N Spiked sample recovery not within control limits. A post spike is analyzed for all ICP analyses when the matrix spike and or spike duplicate fail and the native sample concentration is less than four times the spike added concentration.
  - Z Spiked recovery not within control limits. An explanatory note may be included in the narrative.
  - \* Duplicate analysis (relative percent difference) not within control limits.
  - S SAR value is estimated as one or more analytes used in the calculation were not detected above the detection limit.

# **ALS Environmental -- FC**

# Sample Number(s) Cross-Reference Table

**OrderNum:** 1602355

Client Name: Tetra Tech MM, Inc.

Client Project Name: 103P4384

Client Project Number: Brandeis-Bardin Campus

**Client PO Number:** 

Client Sample Number	Lab Sample Number	COC Number	Matrix	Date Collected	Time Collected
TT-LR-RBRA-01	1602355-1		SOIL	16-Feb-16	15:35
TT-BP-RBRA-01	1602355-2		SOIL	18-Feb-16	14:30
TT-BP-DRAIN-01	1602355-3		SOIL	18-Feb-16	15:30
TT-SEDBG1-01	1602355-4		SOIL	18-Feb-16	16:55
TT-SD1-01	1602355-5		SOIL	18-Feb-16	11:30
TT-SD2-01	1602355-6		SOIL	18-Feb-16	18:40
TT-ED1-01	1602355-7		SOIL	18-Feb-16	17:30
TT-ED2-01	1602355-8		SOIL	18-Feb-16	17:40
TT-ED3-01	1602355-9		SOIL	18-Feb-16	18:25
TT-BBCSED-01	1602355-10		SOIL	18-Feb-16	18:50
TT-PPG-01	1602355-11		SOIL	18-Feb-16	17:50
TT-CAB-01	1602355-12		SOIL	18-Feb-16	19:30
TT-GF-01	1602355-13		SOIL	16-Feb-16	18:35
TT-GF-02	1602355-14		SOIL	18-Feb-16	18:35
TT-OSF-01	1602355-15		SOIL	18-Feb-16	19:00
TT-BBF-01	1602355-16		SOIL	18-Feb-16	18:05
TT-BB1-01	1602355-17		SOIL	18-Feb-16	17:55
TT-HC-01	1602355-18		SOIL	18-Feb-16	18:10
TT-GGP-01	1602355-19		SOIL	18-Feb-16	18:10

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**S Environmental** 

225 Commerce Drive, Fort Collins, Colorado 80524 TF: (800) 443-1511 PH: (970) 490-1511 FX: (970) 490-1522

# Chain-of-Custody

ALS WORKORDER #

PAGE

Turnaround time for samples received after 2 p.m. will be calculated beginning from the next business day.

Turnaround time for samples received Saturday will be calculated beginning from the next business day.

TURNAROUND TIME RUSH (8 days) SAMPLER Aaron Orechwa/Daniel Workman

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PROJECT NAME	Brandeis-Bardin Campus	STIS	SITE ID AJU-BBC	ي			_					DISPOSAL	SAL	BY LAB	o	RETURN
	103P4384	EDD FORMAT							PA	RAMETE	R/MET	PARAMETER/METHOD REQUEST FOR ANALYSIS	QUEST	FOR AN	ALYSIS	
		PURCHASE ORDER	EB				<u>'</u>	A Cs	.137 (Ru	ısh 8 day	s) MDC	Cs-137 (Rush 8 days) MDC = 0.1 pCi/g [Method 901.1 M]	i/g [Met	hod 901.	[M	
COMPANY NAME	Tetra Tech	BILL TO COMPANY	INY Tetra Tech	Tech				B Sr-	90 (Rus	h 8 days	MDC=	Sr-90 (Rush 8 days) MDC = 0.25 pCi/g [Method ASTM D5811]	i/g [Meth	nod AST	A D5811	
SEND REPORT TO		INVOICE ATTN TO	_	Aaron Orechwa				C Me	rcury [N	Mercury [Method 7471 A]	171 A]					
ADDRESS	3801 Automation Way Suite #100	ADDRESS		3801 Automation Way Suite #100	ay Suite #	100		a Me	tals - T/	Metals - TAL [Method 6020A]	od 6020	4				
CITY / STATE / ZIP	Fort Collins, CO 80521	CITY / STATE / ZIP		Fort Collins, CO 80521	521			E Pe	rchlorate	(Rush	3 days)	Perchlorate (Rush 8 days) [Method 314]	314]			
PHONE		H	PHONE (970)4	(970)420-9395			_	т Ö	xins/Fu	ans (Ru	sh 8 day	Dioxins/Furans (Rush 8 days) [Method 1613B]	od 1613	<u>B</u>		
FAX			FAX					5								
E-MAIL	aaron.orechwa@tetratech.com	E-N	E-MAIL aaron	aaron.orechwa@tetratech.com	ratech.co	E		_				:				
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LAB ID	FIELD ID	MATRIX	SAMPLE	SAMPLE TIME	# OF BOTTLES	PRESERVATIVE	ဗ	4	8	o o	ш	L	g	Ŧ		SEE J NOTES SECTION
$\epsilon$	TT-LØ-RBRA-01	SOIL	2/16/16	1535	-	n/a		×	×	×	×	×				
(5)	TT-BP-RBRA-01	SOIL	2/18/16	1430	1	n/a		×	×	×	<u>×</u>	×				
(S	TT-BP-DRAIN-01	SOIL	2/18/16	1530	+	n/a		×	×	×	<u>×</u>	×				
Œ	TT-SEDBG1-01	SOIL	2/18/16	1655	1	n/a		×	×	×	×	×				
S	TT-SD1-01	SOIL	2/18/16	1130	1	n/a		×	×	×	×				1	
3	TT-SD2-01	SOIL	2/18/16	1840	1	n/a		×	×	×	<u>×</u>					
(f)	TT-ED1-01	SOIL	2/18/16	1730	-	n/a		×	×	×	×					
0	TT-ED2-01	SOIL	2/18/16	1740	-	n/a		×	×	×	×				_	
6	TT-ED3-01	SOIL	2/18/16	1825	-	n/a		×	×	×	<u>×</u>				$\dashv$	
@	TT-BBCSED-01	SOIL	2/18/16	1850	-	n/a		×	×	×	×	_				_
3	TT-PPG-01	SOIL	2/18/16	1750	-	n/a		×	×	×	<u>×</u>					-
(E)	TT-CAB-01	SOIL	2/18/16	1930	-	n/a		×	×	×	×					
*Time Zone (Circle):	EST CST MST PST Matrix: O = oil S = soil NS =	S = soil NS = non-soil solid W = water L = liquid E = extract F = filter	L = liquid E	<pre>= extract F = filte</pre>				f							-	
	NOTES	l	For	Form 202r9		SIGNATURE	$\Lambda$			PRINTE	PRINTED NAME			DATE	+	TIME
		יייי ובעבו / טט			_			_			4		_	SPERMIE	_	15.55

Please hold and store ALL samples until further notice.	# # # # # # # # # # # # # # # # # # #	REPORT LEVEL / UC REQUIRED	
Diease provide all results for < detectable concentrations (MDC).		Summary (Standard OC)	
		(Standard do)	_
Please do MDC of 0.25 pCi/g (or lower) for Sr-90 if possible.		(Standard OC)	
		P+3/ 11 11/11	_
0			
4		CC + rorms)	_
•		LEVEL IV (Std QC +	

	REPORT LEVEL / OC REQUIRED	RELINQUISHED BY		Aaron Orechwa	2/2	2/25/2016
(MDC).	Summary (Standard QC)	RECEIVED BY		Soull Malley	71-52-2	٩
<u>o</u>	LEVEL II (Standard QC)	RELINQUISHED BY	0			
	LEVEL III (Std QC + forms)	RECEIVED BY				
	LEVEL IV (Std QC + forms + raw data)	RELINGUISHED BY				

RECEIVED BY

1-HC| 2-HNO3 3-H2SO4 4-NaOH 5-NaOH/ZnAcetate 6-NaHSO4 7-4°C 8-Other

PRESERVATION KEY

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TF: (800) 443-1511 PH: (970) 490-1511 FX: (970) 490-1522 225 Commerce Drive, Fort Collins, Colorado 80524

# Chain-of-Custody

ALS WORKORDER #

602355

Turnaround time for samples received after 2 p.m. will be calculated beginning from the next business day.

Turnaround time for samples received Saturday will be calculated beginning from the next business day.

SAMPLER

RUSH (8 days)

**TURNAROUND TIME** 

Aaron Orechwa/Daniel Workman

SEE NOTES SECTION RETURN TIME þ Sr-90 (Rush 8 days) MDC = 0.25 pCi/g [Method ASTM D5811] PARAMETER/METHOD REQUEST FOR ANALYSIS Cs-137 (Rush 8 days) MDC = 0.1 pCi/g [Method 901.1 M] BY LAB DATE I Dioxins/Furans (Rush 8 days) [Method 1613B] G DISPOSAL Perchlorate (Rush 8 days) [Method 314] ш Metals - TAL [Method 6020A] × × × × × × × × × × × × PRINTED NAME Mercury [Method 7471 A] × × × × × × ۵ × × × × × × × × × × × × × × × × × × O × × × × × × × × × × × ×  $\mathbf{\omega}$ × 8 ပ ۵ ш 4 ш × × × × × G I 7 × × × × 4 × × ဗွ SIGNATURE PRESERVATIVE n/a n/a n⁄a n/a n/a ďa n/a u⁄a ďa n/a n/a n/a ADDRESS 3801 Automation Way Suite #100 E-MAIL aaron.orechwa@tetratech.com # OF BOTTLES Fort Collins, CO 80521 Matrix: O = oil S = soil NS = non-soil solid W = water L = liquid E = extract F = filter SAMPLE TIME INVOICE ATTN TO Aaron Orechwa 1805 1810 1835 1835 1900 1755 1810 (970)420-9395 BILL TO COMPANY | Tetra Tech orm 202r9 SITE ID AJU-BBC 2/18/16 SAMPLE DATE 2/18/16 2/18/16 2/18/16 2/18/16 2/18/16 2/18/16 2/18/16 2/18/16 2/16/16 2/18/16 2/18/16 CITY / STATE / ZIP PHONE PURCHASE ORDER FĀ **EDD FORMAT** SOIL MATRIX SOIL ADDRESS 3801 Automation Way Suite #100 FELD 10 aaron.orechwa@tetratech.com PROJECT NAME Brandeis-Bardin Campus CITY / STATE / ZIP Fort Collins, CO 80521 CST MST PST SEND REPORT TO Aaron Orechwa (970)420-9395 TT-GGP-01 Tetra Tech TT-0SF-01 TT-BBF-01 TT-BB1-01 TT-HC-01 TT-GF-02 PROJECT No. | 103P4384 TT-GF-01 EST PHONE E-MAIL COMPANY NAME FAX \*Time Zone (Circle): <u>ම</u> 6 હ Ŝ LAB ID

Summary (Standard QC) LEVEL II (Standard QC) LEVEL III (Std QC + forms) REPORT LEVEL / QC REQUIRED Please hold and store ALL samples until further notice.

Please provide all results for < detectable concentrations (MDC).

Please do MDC of 0.25 pCi/g (or lower) for Sr-90 if possible.

RELINQUISHED BY		Aaron Orechwa	2/25/2016	12:25
RECEIVED BY	CAL	Siot Malley	5221 71-52-2	1225
RELINQUISHED BY		,		
RECEIVED BY				
RELINQUISHED BY				
RECEIVED BY				

LEVEL IV (Std QC -forms + raw data)

1-HCI 2-HNO3 3-H2SO4 4-NaOH 5-NaOH/ZnAcetate 6-NaHSO4 7-4°C 8-Other

PRESERVATION KEY



# ALS Environmental - Fort Collins CONDITION OF SAMPLE UPON RECEIPT FORM

Client: Tetra tech. FC Workorder No: 160 Z 35	<u>5                                    </u>	_					
Project Manager: ARW Initials: SOM Date:	Z- <b>Z</b> S-	16					
Does this project require any special handling in addition to standard ALS procedures?	YES	(NO)					
2. Are custody seals on shipping containers intact?	YES	NO					
3. Are Custody seals on sample containers intact?	YES	NO					
4. Is there a COC (Chain-of-Custody) present or other representative documents?	(YES)	NO					
5. Are the COC and bottle labels complete and legible?	YES	NO					
Is the COC in agreement with samples received? (IDs, dates, times, no. of samples, no. of containers, matrix, requested analyses, etc.)	YES	NO					
Were airbills / shipping documents present and/or removable?	YES	NO					
8. Are all aqueous samples requiring preservation preserved correctly? (excluding volatiles)	YES	NO					
Are all aqueous non-preserved samples pH 4-9?	YES	NO					
10. Is there sufficient sample for the requested analyses?	YES	NO					
Were all samples placed in the proper containers for the requested analyses?	YES	NO					
12. Are all samples within holding times for the requested analyses?	(YES)	NO					
13. Were all sample containers received intact? (not broken or leaking, etc.)  14. Are all samples requiring no headspace (VOC, GRO, RSK/MEE, Rx CN/S, radon) headspace free? Size of bubble: < green pea > green pea  YES No.							
Amount of sediment: dusting moderate heavy Amount	YES	NO					
16. Were the samples shipped on ice?	YES	(N)					
17. Were cooler temperatures measured at 0.1-6.0°C? IR gun used*: #2 #4 ONLY	YES	(NO					
Temperature (°C): AM6  No. of custody seals on cooler:     No. of custody seals on cooler:   No. of custody seals on custod	ND #16.	3RA-01					
If applicable, was the client contacted? VES/NO/NA Contact: Aaron Die Chwa Date/Ti  Project Manager Signature / Date:	me: <u>2/2</u> 14	:5/16					

\*IR Gun #2: Oakton, SN 29922500201-0066 \*IR Gun #4: Oakton, SN 2372220101-0002

# Method SW6020A Sample Results

Lab Name: ALS Environmental -- FC

Work Order Number: 1602355

Client Name: Tetra Tech MM, Inc.

ClientProject ID: 103P4384 Brandeis-Bardin Campus

**Field ID:** TT-LR-RBRA-01 **Lab ID:** 1602355-1

Sample Matrix: SOIL % Moisture: 11.1 Date Collected: 16-Feb-16

Date Extracted: 29-Feb-16 Date Analyzed: 02-Mar-16 Prep Method: SW 3050 Rev B

Analysis ReqCode: arsenic

Prep Batch: IP160229-1

QCBatchID: IP160229-1-1 Run ID: IM160302-10A4 Cleanup: NONE

Basis: Dry Weight File Name: 045SMPL\_

Analyst: Brent A. Stanfield Sample Aliquot: 1.027 g

Final Volume: 100 ml Result Units: MG/KG Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	RptLimit/ LOQ/LOD	MDL/DL	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	10	14000	5.5	1.7		
7440-36-0	ANTIMONY	10	0.34	0.033	0.018		N*
7440-38-2	ARSENIC	10	10	0.22	0.036		EN
7440-39-3	BARIUM	10	130	0.11	0.064		
7440-41-7	BERYLLIUM	10	0.81	0.055	0.015		
7440-43-9	CADMIUM	10	0.36	0.033	0.018		N*
7440-70-2	CALCIUM	10	3600	110	10		EN
7440-47-3	CHROMIUM	10	30	1.1	0.078		Е
7440-48-4	COBALT	10	11	0.11	0.057		
7440-50-8	COPPER	10	19	1.1	0.27		
7439-89-6	IRON	10	28000	11	3.7		
7439-92-1	LEAD	10	16	0.055	0.021		N
7439-95-4	MAGNESIUM	10	6200	11	4		
7439-96-5	MANGANESE	10	510	0.22	0.067		
7440-02-0	NICKEL	10	31	0.55	0.28		
7440-09-7	POTASSIUM	10	5100	110	19		
7782-49-2	SELENIUM	10	1.5	0.11	0.04		*
7440-22-4	SILVER	10	0.053	0.011	0.0056		
7440-23-5	SODIUM	10	190	110	18		
7440-28-0	THALLIUM	10	0.39	0.022	0.0044		EN
7440-62-2	VANADIUM	10	47	0.11	0.048		Е
7440-66-6	ZINC	10	80	2.2	0.46		

Data Package ID: im1602355-1

Date Printed: Monday, March 07, 2016

# Method SW6020A Sample Results

Lab Name: ALS Environmental -- FC

Work Order Number: 1602355

Client Name: Tetra Tech MM, Inc.

ClientProject ID: 103P4384 Brandeis-Bardin Campus

Field ID: TT-BP-RBRA-01

Lab ID: 1602355-2

Analysis ReqCode: arsenic

Sample Matrix: SOIL % Moisture: 17.9 Date Collected: 18-Feb-16

Date Extracted: 29-Feb-16

Date Analyzed: 02-Mar-16

Prep Method: SW3050 Rev B

Prep Batch: IP160229-1

QCBatchID: IP160229-1-1 Run ID: IM160302-10A4 Cleanup: NONE

Basis: Dry Weight File Name: 051SMPL\_

Analyst: Brent A. Stanfield
Sample Aliquot: 1.04 g
Final Volume: 100 ml
Result Units: MG/KG

Clean DF:

**CASNO** MDL/DL **Target Analyte Dilution** Result RptLimit/ Result **EPA Factor** LOQ/LOD Qualifier Qualifier ALUMINUM 10 7429-90-5 13000 5.9 1.8 ANTIMONY 7440-36-0 10 0.21 0.035 0.02 **ARSENIC** 10 5.9 7440-38-2 0.23 0.038 BARIUM 10 7440-39-3 100 0.12 0.068 **BERYLLIUM** 7440-41-7 10 0.65 0.059 0.016 CADMIUM 10 0.035 7440-43-9 0.27 0.02 7440-70-2 CALCIUM 10 3700 120 11 **CHROMIUM** 10 7440-47-3 24 1.2 0.084 COBALT 10 7440-48-4 0.12 0.061 8.4 7440-50-8 **COPPER** 10 12 1.2 0.29 **IRON** 10 24000 7439-89-6 12 3.9 LEAD 10 7439-92-1 12 0.059 0.022 10 7439-95-4 MAGNESIUM 5000 12 4.3 MANGANESE 10 7439-96-5 380 0.23 0.072 7440-02-0 NICKEL 10 13 0.59 0.3 **POTASSIUM** 10 4000 7440-09-7 120 21 **SELENIUM** 10 7782-49-2 1.3 0.12 0.043 7440-22-4 SII VFR 10 0.021 0.012 0.006 SODIUM 10 7440-23-5 190 120 19 **THALLIUM** 10 7440-28-0 0.32 0.023 0.0047 7440-62-2 VANADIUM 10 52 0.12 0.052 7440-66-6 ZINC 10 62 2.3 0.49

Data Package ID: im1602355-1

Date Printed: Monday, March 07, 2016 ALS Environmental -- FC

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# Method SW6020A **Sample Results**

Lab Name: ALS Environmental -- FC

Work Order Number: 1602355

Client Name: Tetra Tech MM, Inc.

ClientProject ID: 103P4384 Brandeis-Bardin Campus

Field ID: TT-BP-DRAIN-01 **Lab ID:** 1602355-3

Sample Matrix: SOIL % Moisture: 28.1 Date Collected: 18-Feb-16

Date Extracted: 29-Feb-16 Date Analyzed: 02-Mar-16 Prep Method: SW3050 Rev B

Analysis ReqCode: arsenic

Prep Batch: IP160229-1 QCBatchID: IP160229-1-1

Run ID: IM160302-10A4 Cleanup: NONE Basis: Dry Weight

File Name: 054SMPL\_

Analyst: Brent A. Stanfield Sample Aliquot: 1.067 g 100 ml

**Final Volume:** Result Units: MG/KG Clean DF:

CASNO	Target Analyte	Dilution Factor	Result	RptLimit/ LOQ/LOD	MDL/DL	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	10	14000	6.5	2		
7440-36-0	ANTIMONY	10	0.17	0.039	0.022		
7440-38-2	ARSENIC	10	6.1	0.26	0.043		
7440-39-3	BARIUM	10	87	0.13	0.076		
7440-41-7	BERYLLIUM	10	0.54	0.065	0.018		
7440-43-9	CADMIUM	10	0.21	0.039	0.022		
7440-70-2	CALCIUM	10	22000	130	12		
7440-47-3	CHROMIUM	10	34	1.3	0.093		
7440-48-4	COBALT	10	9.1	0.13	0.068		
7440-50-8	COPPER	10	13	1.3	0.32		
7439-89-6	IRON	10	29000	13	4.4		
7439-92-1	LEAD	10	10	0.065	0.025		
7439-95-4	MAGNESIUM	10	10000	13	4.8		
7439-96-5	MANGANESE	10	470	0.26	0.08		
7440-02-0	NICKEL	10	14	0.65	0.33		
7440-09-7	POTASSIUM	10	3300	130	23		
7782-49-2	SELENIUM	10	1	0.13	0.048		
7440-22-4	SILVER	10	0.03	0.013	0.0066		
7440-23-5	SODIUM	10	310	130	22		
7440-28-0	THALLIUM	10	0.24	0.026	0.0052		
7440-62-2	VANADIUM	10	74	0.13	0.058		
7440-66-6	ZINC	10	71	2.6	0.55		

Data Package ID: im1602355-1

Date Printed: Monday, March 07, 2016

**ALS Environmental -- FC** 

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### Method SW6020A Sample Results

Lab Name: ALS Environmental -- FC

Work Order Number: 1602355

Client Name: Tetra Tech MM, Inc.

ClientProject ID: 103P4384 Brandeis-Bardin Campus

Field ID: TT-SEDBG1-01

**Lab ID:** 1602355-4

Sample Matrix: SOIL % Moisture: 6.9 Date Collected: 18-Feb-16

Date Extracted: 29-Feb-16
Date Analyzed: 02-Mar-16
Prep Method: SW3050 Rev B

Analysis ReqCode: arsenic

Prep Batch: IP160229-1 QCBatchID: IP160229-1-1

Run ID: IM160302-10A4 Cleanup: NONE Basis: Dry Weight

File Name: 055SMPL\_

Analyst: Brent A. Stanfield
Sample Aliquot: 1.018 g
Final Volume: 100 ml
Result Units: MG/KG

Clean DF:

**CASNO** MDL/DL **Target Analyte Dilution** Result RptLimit/ Result **EPA Factor** LOQ/LOD Qualifier Qualifier ALUMINUM 10 7429-90-5 4800 5.3 1.6 **ANTIMONY** 7440-36-0 10 0.081 0.032 0.018 **ARSENIC** 10 7440-38-2 0.21 0.035 BARIUM 10 36 7440-39-3 0.11 0.061 **BERYLLIUM** 7440-41-7 10 0.21 0.053 0.014 CADMIUM 10 0.064 0.032 7440-43-9 0.018 7440-70-2 CALCIUM 10 2900 110 9.6 **CHROMIUM** 10 7440-47-3 6.7 1.1 0.076 COBALT 10 7440-48-4 2.9 0.11 0.055 7440-50-8 **COPPER** 10 4 1.1 0.26 **IRON** 10 9700 7439-89-6 11 3.6 LEAD 10 7439-92-1 4.3 0.053 0.02 MAGNESIUM 10 7439-95-4 2500 11 3.9 MANGANESE 10 7439-96-5 160 0.21 0.065 7440-02-0 NICKEL 10 5.4 0.53 0.27 **POTASSIUM** 10 1600 7440-09-7 110 19 **SELENIUM** 10 7782-49-2 0.55 0.11 0.039 7440-22-4 SII VFR 10 0.013 0.011 0.0054 SODIUM 10 7440-23-5 120 110 18 **THALLIUM** 10 7440-28-0 0.021 0.13 0.0042 7440-62-2 VANADIUM 10 17 0.11 0.047 7440-66-6 ZINC 10 31 2.1 0.44

Data Package ID: im1602355-1

Date Printed: Monday, March 07, 2016

**ALS Environmental -- FC** 

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#### Method SW6020A **Sample Results**

Lab Name: ALS Environmental -- FC

Work Order Number: 1602355

Client Name: Tetra Tech MM, Inc.

ClientProject ID: 103P4384 Brandeis-Bardin Campus

Field ID: TT-SD1-01 Lab ID: 1602355-5

Sample Matrix: SOIL % Moisture: 11.0 Date Collected: 18-Feb-16

Date Extracted: 29-Feb-16 Date Analyzed: 02-Mar-16 Prep Method: SW3050 Rev B

Analysis ReqCode: arsenic

Prep Batch: IP160229-1 QCBatchID: IP160229-1-1 Run ID: IM160302-10A4 Cleanup: NONE Basis: Dry Weight

Sample Aliquot: 1.069 g **Final Volume:** 100 ml Result Units: MG/KG Clean DF: File Name: 056SMPL\_

Analyst: Brent A. Stanfield

CASNO	Target Analyte	Dilution Factor	Result	RptLimit/ LOQ/LOD	MDL/DL	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	10	8700	5.3	1.6		
7440-36-0	ANTIMONY	10	0.12	0.032	0.018		
7440-38-2	ARSENIC	10	4.7	0.21	0.034		
7440-39-3	BARIUM	10	61	0.11	0.061		
7440-41-7	BERYLLIUM	10	0.5	0.053	0.014		
7440-43-9	CADMIUM	10	0.058	0.032	0.018		
7440-70-2	CALCIUM	10	2800	110	9.6		
7440-47-3	CHROMIUM	10	13	1.1	0.075		
7440-48-4	COBALT	10	7.6	0.11	0.055		
7440-50-8	COPPER	10	10	1.1	0.26		
7439-89-6	IRON	10	20000	11	3.5		
7439-92-1	LEAD	10	8.4	0.053	0.02		
7439-95-4	MAGNESIUM	10	4600	11	3.8		
7439-96-5	MANGANESE	10	340	0.21	0.065		
7440-02-0	NICKEL	10	9.2	0.53	0.27		
7440-09-7	POTASSIUM	10	3000	110	18		
7782-49-2	SELENIUM	10	0.83	0.11	0.039		
7440-22-4	SILVER	10	0.028	0.011	0.0053		
7440-23-5	SODIUM	10	120	110	17		
7440-28-0	THALLIUM	10	0.24	0.021	0.0042		
7440-62-2	VANADIUM	10	34	0.11	0.046		
7440-66-6	ZINC	10	59	2.1	0.44		

Data Package ID: im1602355-1

Date Printed: Monday, March 07, 2016

**ALS Environmental -- FC** 

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# Method SW6020A Sample Results

Lab Name: ALS Environmental -- FC

Work Order Number: 1602355

Client Name: Tetra Tech MM, Inc.

ClientProject ID: 103P4384 Brandeis-Bardin Campus

Field ID: TT-SD2-01

Lab ID: 1602355-6

Sample Matrix: SOIL % Moisture: 9.3 Date Collected: 18-Feb-16

Date Extracted: 29-Feb-16

Date Analyzed: 02-Mar-16

Prep Method: SW 3050 Rev B

Analysis ReqCode: arsenic

Prep Batch: IP160229-1 QCBatchID: IP160229-1-1

Run ID: IM160302-10A4 Cleanup: NONE Basis: Dry Weight File Name: 057SMPL\_ Analyst: Brent A. Stanfield
Sample Aliquot: 1.031 g
Final Volume: 100 ml
Result Units: MG/KG

y Weight Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	RptLimit/ LOQ/LOD	MDL/DL	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	10	5100	5.3	1.7		
7440-36-0	ANTIMONY	10	0.086	0.032	0.018		
7440-38-2	ARSENIC	10	3.1	0.21	0.035		
7440-39-3	BARIUM	10	37	0.11	0.062		
7440-41-7	BERYLLIUM	10	0.27	0.053	0.014		
7440-43-9	CADMIUM	10	0.08	0.032	0.018		
7440-70-2	CALCIUM	10	1900	110	9.7		
7440-47-3	CHROMIUM	10	7.7	1.1	0.077		
7440-48-4	COBALT	10	4	0.11	0.056		
7440-50-8	COPPER	10	4.9	1.1	0.26		
7439-89-6	IRON	10	12000	11	3.6		
7439-92-1	LEAD	10	5	0.053	0.02		
7439-95-4	MAGNESIUM	10	2300	11	3.9		
7439-96-5	MANGANESE	10	160	0.21	0.066		
7440-02-0	NICKEL	10	5	0.53	0.27		
7440-09-7	POTASSIUM	10	1800	110	19		
7782-49-2	SELENIUM	10	0.43	0.11	0.039		
7440-22-4	SILVER	10	0.0054	0.011	0.0054	U	
7440-23-5	SODIUM	10	80	110	18	J	
7440-28-0	THALLIUM	10	0.14	0.021	0.0043		
7440-62-2	VANADIUM	10	20	0.11	0.047		
7440-66-6	ZINC	10	33	2.1	0.45		

Data Package ID: im1602355-1

Date Printed: Monday, March 07, 2016 ALS Environmental -- FC

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# Method SW6020A Sample Results

Lab Name: ALS Environmental -- FC

Work Order Number: 1602355

Client Name: Tetra Tech MM, Inc.

ClientProject ID: 103P4384 Brandeis-Bardin Campus

Field ID: TT-ED1-01

Lab ID: 1602355-7

Sample Matrix: SOIL % Moisture: 15.8 Date Collected: 18-Feb-16

Date Extracted: 29-Feb-16
Date Analyzed: 02-Mar-16
Prep Method: SW 3050 Rev B

Analysis ReqCode: arsenic

Prep Batch: IP160229-1

QCBatchID: IP160229-1-1

Run ID: IM160302-10A4

Cleanup: NONE
Basis: Dry Weight
File Name: 058SMPL\_

Analyst: Brent A. Stanfield
Sample Aliquot: 1.05 g
Final Volume: 100 ml
Result Units: MG/KG

Result Units: MG/KG
Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	RptLimit/ LOQ/LOD	MDL/DL	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	10	3700	5.7	1.8		
7440-36-0	ANTIMONY	10	0.035	0.034	0.019		
7440-38-2	ARSENIC	10	2.2	0.23	0.037		
7440-39-3	BARIUM	10	29	0.11	0.066		
7440-41-7	BERYLLIUM	10	0.22	0.057	0.015		
7440-43-9	CADMIUM	10	0.036	0.034	0.019		
7440-70-2	CALCIUM	10	2500	110	10		
7440-47-3	CHROMIUM	10	4.9	1.1	0.081		
7440-48-4	COBALT	10	2.6	0.11	0.059		
7440-50-8	COPPER	10	3.2	1.1	0.28		
7439-89-6	IRON	10	8400	11	3.8		
7439-92-1	LEAD	10	3.4	0.057	0.021		
7439-95-4	MAGNESIUM	10	1800	11	4.1		
7439-96-5	MANGANESE	10	150	0.23	0.07		
7440-02-0	NICKEL	10	2.8	0.57	0.29		
7440-09-7	POTASSIUM	10	1300	110	20		
7782-49-2	SELENIUM	10	0.54	0.11	0.041		
7440-22-4	SILVER	10	0.061	0.011	0.0058		
7440-23-5	SODIUM	10	150	110	19		
7440-28-0	THALLIUM	10	0.11	0.023	0.0045		
7440-62-2	VANADIUM	10	13	0.11	0.05		
7440-66-6	ZINC	10	24	2.3	0.48		

Data Package ID: im1602355-1

Date Printed: Monday, March 07, 2016 ALS Environmental -- FC

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# Method SW6020A Sample Results

Lab Name: ALS Environmental -- FC

Work Order Number: 1602355

Client Name: Tetra Tech MM, Inc.

ClientProject ID: 103P4384 Brandeis-Bardin Campus

Field ID: TT-ED2-01

Lab ID: 1602355-8

Sample Matrix: SOIL % Moisture: 9.3 Date Collected: 18-Feb-16

Date Extracted: 29-Feb-16

Date Analyzed: 02-Mar-16

Prep Batch: IP160229-1

QCBatchID: IP160229-1-1 Run ID: IM160302-10A4 Cleanup: NONE

Basis: Dry Weight File Name: 059SMPL\_

Analyst: Brent A. Stanfield
Sample Aliquot: 1.056 g
Final Volume: 100 ml
Result Units: MG/KG
Clean DF: 1

Analysis ReqCode: arsenic

Prep Method: SW 3050 Rev B File Name: 059SM

CASNO	Target Analyte	Dilution Factor	Result	RptLimit/ LOQ/LOD	MDL/DL	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	10	6300	5.2	1.6		
7440-36-0	ANTIMONY	10	0.11	0.031	0.018		
7440-38-2	ARSENIC	10	2.7	0.21	0.034		
7440-39-3	BARIUM	10	57	0.1	0.061		
7440-41-7	BERYLLIUM	10	0.32	0.052	0.014		
7440-43-9	CADMIUM	10	0.13	0.031	0.017		
7440-70-2	CALCIUM	10	2300	100	9.5		
7440-47-3	CHROMIUM	10	8.9	1	0.075		
7440-48-4	COBALT	10	3.9	0.1	0.054		
7440-50-8	COPPER	10	6.3	1	0.26		
7439-89-6	IRON	10	12000	10	3.5		
7439-92-1	LEAD	10	8.9	0.052	0.02		
7439-95-4	MAGNESIUM	10	3100	10	3.8		
7439-96-5	MANGANESE	10	220	0.21	0.064		
7440-02-0	NICKEL	10	6.3	0.52	0.27		
7440-09-7	POTASSIUM	10	2300	100	18		
7782-49-2	SELENIUM	10	0.4	0.1	0.038		
7440-22-4	SILVER	10	0.058	0.01	0.0053		
7440-23-5	SODIUM	10	160	100	17		
7440-28-0	THALLIUM	10	0.18	0.021	0.0042		
7440-62-2	VANADIUM	10	21	0.1	0.046		
7440-66-6	ZINC	10	43	2.1	0.44		

Data Package ID: im1602355-1

#### Method SW6020A **Sample Results**

Lab Name: ALS Environmental -- FC

Work Order Number: 1602355

Client Name: Tetra Tech MM, Inc.

ClientProject ID: 103P4384 Brandeis-Bardin Campus

Field ID: TT-ED3-01 Lab ID: 1602355-9

Sample Matrix: SOIL % Moisture: 20.2

Date Collected: 18-Feb-16 Date Extracted: 29-Feb-16 Date Analyzed: 02-Mar-16

Prep Method: SW3050 Rev B

Analysis ReqCode: arsenic

Prep Batch: IP160229-1 QCBatchID: IP160229-1-1 Run ID: IM160302-10A4 Cleanup: NONE

Basis: Dry Weight File Name: 060SMPL\_

Analyst: Brent A. Stanfield Sample Aliquot: 1.036 g 100 ml

**Final Volume:** Result Units: MG/KG Clean DF:

CASNO	Target Analyte	Dilution Factor	Result	RptLimit/ LOQ/LOD	MDL/DL	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	10	5600	6	1.9		
7440-36-0	ANTIMONY	10	0.15	0.036	0.02		
7440-38-2	ARSENIC	10	3	0.24	0.04		
7440-39-3	BARIUM	10	41	0.12	0.07		
7440-41-7	BERYLLIUM	10	0.28	0.06	0.016		
7440-43-9	CADMIUM	10	0.091	0.036	0.02		
7440-70-2	CALCIUM	10	4300	120	11		
7440-47-3	CHROMIUM	10	9.6	1.2	0.087		
7440-48-4	COBALT	10	4.3	0.12	0.063		
7440-50-8	COPPER	10	10	1.2	0.3		
7439-89-6	IRON	10	12000	12	4.1		
7439-92-1	LEAD	10	6.1	0.06	0.023		
7439-95-4	MAGNESIUM	10	3100	12	4.4		
7439-96-5	MANGANESE	10	200	0.24	0.074		
7440-02-0	NICKEL	10	7	0.6	0.31		
7440-09-7	POTASSIUM	10	2300	120	21		
7782-49-2	SELENIUM	10	0.35	0.12	0.044		
7440-22-4	SILVER	10	0.066	0.012	0.0062		
7440-23-5	SODIUM	10	120	120	20	J	
7440-28-0	THALLIUM	10	0.14	0.024	0.0049		
7440-62-2	VANADIUM	10	22	0.12	0.053		
7440-66-6	ZINC	10	40	2.4	0.51		

Data Package ID: im1602355-1

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# Method SW6020A Sample Results

Lab Name: ALS Environmental -- FC

Work Order Number: 1602355

Client Name: Tetra Tech MM, Inc.

ClientProject ID: 103P4384 Brandeis-Bardin Campus

Field ID: TT-BBCSED-01

Lab ID: 1602355-10

Analysis ReqCode: arsenic

Sample Matrix: SOIL % Moisture: 3.6 Date Collected: 18-Feb-16

Date Extracted: 29-Feb-16
Date Analyzed: 02-Mar-16
Prep Method: SW 3050 Rev B

Prep Batch: IP160229-1

QCBatchID: IP160229-1-1 Run ID: IM160302-10A4 Cleanup: NONE Basis: Dry Weight

File Name: 061SMPL\_

Analyst: Brent A. Stanfield
Sample Aliquot: 1.007 g
Final Volume: 100 ml

Result Units: MG/KG Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	RptLimit/ LOQ/LOD	MDL/DL	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	10	2400	5.1	1.6		
7440-36-0	ANTIMONY	10	0.077	0.031	0.017		
7440-38-2	ARSENIC	10	1.3	0.21	0.034		
7440-39-3	BARIUM	10	16	0.1	0.06		
7440-41-7	BERYLLIUM	10	0.13	0.051	0.014		
7440-43-9	CADMIUM	10	0.017	0.031	0.017	U	
7440-70-2	CALCIUM	10	840	100	9.4		
7440-47-3	CHROMIUM	10	3.7	1	0.074		
7440-48-4	COBALT	10	1.7	0.1	0.054		
7440-50-8	COPPER	10	2.6	1	0.25		
7439-89-6	IRON	10	5700	10	3.5		
7439-92-1	LEAD	10	2.7	0.051	0.019		
7439-95-4	MAGNESIUM	10	1100	10	3.8		
7439-96-5	MANGANESE	10	65	0.21	0.063		
7440-02-0	NICKEL	10	2.3	0.51	0.26		
7440-09-7	POTASSIUM	10	960	100	18		
7782-49-2	SELENIUM	10	0.64	0.1	0.038		
7440-22-4	SILVER	10	0.022	0.01	0.0052		
7440-23-5	SODIUM	10	120	100	17		
7440-28-0	THALLIUM	10	0.077	0.021	0.0041		
7440-62-2	VANADIUM	10	8.6	0.1	0.046		
7440-66-6	ZINC	10	16	2.1	0.43		

Data Package ID: im1602355-1

Date Printed: Monday, March 07, 2016 ALS Environmental -- FC

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# Method SW6020A Sample Results

Lab Name: ALS Environmental -- FC

Work Order Number: 1602355

Client Name: Tetra Tech MM, Inc.

ClientProject ID: 103P4384 Brandeis-Bardin Campus

Field ID: TT-PPG-01

Lab ID: 1602355-11

Sample Matrix: SOIL % Moisture: 5.5 Date Collected: 18-Feb-16

Date Extracted: 29-Feb-16 Date Analyzed: 02-Mar-16 Prep Method: SW 3050 Rev B Prep Batch: IP160229-1 QCBatchID: IP160229-1-1

File Name: 062SMPL\_

Run ID: IM160302-10A4
Cleanup: NONE
Basis: Dry Weight

Analyst: Brent A. Stanfield
Sample Aliquot: 1.028 g
Final Volume: 100 ml
Result Units: MG/KG
Clean DF: 1

Analysis ReqCode: arsenic

CASNO	Target Analyte	Dilution Factor	Result	RptLimit/ LOQ/LOD	MDL/DL	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	10	2600	5.1	1.6		
7440-36-0	ANTIMONY	10	0.082	0.031	0.017		
7440-38-2	ARSENIC	10	1.4	0.21	0.034		
7440-39-3	BARIUM	10	29	0.1	0.06		
7440-41-7	BERYLLIUM	10	0.11	0.051	0.014		
7440-43-9	CADMIUM	10	0.031	0.031	0.017	J	
7440-70-2	CALCIUM	10	5400	100	9.4		
7440-47-3	CHROMIUM	10	6	1	0.074		
7440-48-4	COBALT	10	1.9	0.1	0.054		
7440-50-8	COPPER	10	3.7	1	0.25		
7439-89-6	IRON	10	5500	10	3.5		
7439-92-1	LEAD	10	2.3	0.051	0.019		
7439-95-4	MAGNESIUM	10	1300	10	3.8		
7439-96-5	MANGANESE	10	81	0.21	0.063		
7440-02-0	NICKEL	10	3.5	0.51	0.26		
7440-09-7	POTASSIUM	10	750	100	18		
7782-49-2	SELENIUM	10	0.38	0.1	0.038		
7440-22-4	SILVER	10	0.0052	0.01	0.0052	U	
7440-23-5	SODIUM	10	150	100	17		
7440-28-0	THALLIUM	10	0.053	0.021	0.0041		
7440-62-2	VANADIUM	10	13	0.1	0.046		
7440-66-6	ZINC	10	13	2.1	0.43		

Data Package ID: im1602355-1

Date Printed: Monday, March 07, 2016

**ALS Environmental -- FC** 

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## Method SW6020A Sample Results

Lab Name: ALS Environmental -- FC

Work Order Number: 1602355

Client Name: Tetra Tech MM, Inc.

ClientProject ID: 103P4384 Brandeis-Bardin Campus

**Field ID:** TT-CAB-01 **Lab ID:** 1602355-12

Sample Matrix: SOIL % Moisture: 12.8 Date Collected: 18-Feb-16

Date Extracted: 29-Feb-16
Date Analyzed: 02-Mar-16
Prep Method: SW3050 Rev B

Analysis ReqCode: arsenic

Prep Batch: IP160229-1

QCBatchID: IP160229-1-1

Run ID: IM160302-10A4

Cleanup: NONE

Basis: Dry Weight

File Name: 063SMPL\_

Analyst: Brent A. Stanfield
Sample Aliquot: 1.018 g
Final Volume: 100 ml
Result Units: MG/KG
Clean DF: 1

**CASNO** MDL/DL **Target Analyte Dilution** Result RptLimit/ Result **EPA Factor** LOQ/LOD Qualifier Qualifier ALUMINUM 10 7429-90-5 13000 5.6 1.8 **ANTIMONY** 7440-36-0 10 0.28 0.034 0.019 **ARSENIC** 10 5.1 7440-38-2 0.23 0.037 BARIUM 10 7440-39-3 120 0.11 0.065 **BERYLLIUM** 7440-41-7 10 0.59 0.056 0.015 CADMIUM 10 0.48 7440-43-9 0.034 0.019 7440-70-2 CALCIUM 10 8400 110 10 **CHROMIUM** 10 22 7440-47-3 1.1 0.081 COBALT 10 7440-48-4 11 0.11 0.059 7440-50-8 **COPPER** 10 34 1.1 0.28 **IRON** 10 24000 7439-89-6 11 3.8 LEAD 10 7439-92-1 31 0.056 0.021 MAGNESIUM 10 7439-95-4 6500 11 4.1 MANGANESE 10 7439-96-5 450 0.23 0.069 7440-02-0 NICKEL 10 18 0.56 0.29 **POTASSIUM** 10 5100 7440-09-7 110 20 **SELENIUM** 10 7782-49-2 0.78 0.11 0.041 7440-22-4 SII VFR 10 0.095 0.011 0.0057 SODIUM 10 7440-23-5 160 110 19 **THALLIUM** 10 7440-28-0 0.023 0.28 0.0045 7440-62-2 VANADIUM 10 50 0.11 0.05 7440-66-6 ZINC 10 150 2.3 0.47

Data Package ID: im1602355-1

Date Printed: Monday, March 07, 2016 ALS Environmental -- FC

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#### Method SW6020A **Sample Results**

Lab Name: ALS Environmental -- FC

Work Order Number: 1602355

Client Name: Tetra Tech MM, Inc.

ClientProject ID: 103P4384 Brandeis-Bardin Campus

Field ID: TT-GF-01 Lab ID: 1602355-13

Analysis ReqCode: arsenic

Sample Matrix: SOIL % Moisture: 18.4 Date Collected: 16-Feb-16

Date Extracted: 29-Feb-16 Date Analyzed: 02-Mar-16

Prep Method: SW3050 Rev B

Prep Batch: IP160229-1

QCBatchID: IP160229-1-1 Run ID: IM160302-10A4

Cleanup: NONE Basis: Dry Weight File Name: 066SMPL\_

Analyst: Brent A. Stanfield Sample Aliquot: 1.051 g

**Final Volume:** 100 ml Result Units: MG/KG Clean DF:

CASNO	Target Analyte	Dilution Factor	Result	RptLimit/ LOQ/LOD	MDL/DL	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	10	9600	5.8	1.8		
7440-36-0	ANTIMONY	10	0.18	0.035	0.02		
7440-38-2	ARSENIC	10	3.7	0.23	0.038		
7440-39-3	BARIUM	10	75	0.12	0.068		
7440-41-7	BERYLLIUM	10	0.5	0.058	0.016		
7440-43-9	CADMIUM	10	0.23	0.035	0.019		
7440-70-2	CALCIUM	10	4100	120	11		
7440-47-3	CHROMIUM	10	15	1.2	0.083		
7440-48-4	COBALT	10	6.4	0.12	0.061		
7440-50-8	COPPER	10	11	1.2	0.29		
7439-89-6	IRON	10	20000	12	3.9		
7439-92-1	LEAD	10	11	0.058	0.022		
7439-95-4	MAGNESIUM	10	5000	12	4.3		
7439-96-5	MANGANESE	10	320	0.23	0.072		
7440-02-0	NICKEL	10	11	0.58	0.3		
7440-09-7	POTASSIUM	10	4400	120	21		
7782-49-2	SELENIUM	10	0.97	0.12	0.043		
7440-22-4	SILVER	10	0.047	0.012	0.0059		
7440-23-5	SODIUM	10	370	120	19		
7440-28-0	THALLIUM	10	0.26	0.023	0.0047	_	
7440-62-2	VANADIUM	10	34	0.12	0.052		
7440-66-6	ZINC	10	71	2.3	0.49		

Data Package ID: im1602355-1

**ALS Environmental -- FC** Date Printed: Monday, March 07, 2016

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# Method SW6020A Sample Results

Lab Name: ALS Environmental -- FC

Work Order Number: 1602355

Client Name: Tetra Tech MM, Inc.

ClientProject ID: 103P4384 Brandeis-Bardin Campus

Field ID: TT-GF-02 Lab ID: 1602355-14 Sample Matrix: SOIL % Moisture: 21.1 Date Collected: 18-Feb-16

Date Collected: 18-Feb-16

Date Extracted: 29-Feb-16

Date Analyzed: 02-Mar-16

Analysis ReqCode: arsenic Prep Method: SW 3050 Rev B

Prep Batch: IP160229-1

QCBatchID: IP160229-1-1 Run ID: IM160302-10A4 Cleanup: NONE

Basis: Dry Weight
File Name: 067SMPL\_

Analyst: Brent A. Stanfield
Sample Aliquot: 1.048 g

Final Volume: 100 ml Result Units: MG/KG Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	RptLimit/ LOQ/LOD	MDL/DL	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	10	9300	6	1.9		
7440-36-0	ANTIMONY	10	0.14	0.036	0.02		
7440-38-2	ARSENIC	10	4.5	0.24	0.04		
7440-39-3	BARIUM	10	75	0.12	0.07		
7440-41-7	BERYLLIUM	10	0.51	0.06	0.016		
7440-43-9	CADMIUM	10	0.17	0.036	0.02		
7440-70-2	CALCIUM	10	4300	120	11		
7440-47-3	CHROMIUM	10	15	1.2	0.087		
7440-48-4	COBALT	10	6.3	0.12	0.063		
7440-50-8	COPPER	10	11	1.2	0.3		
7439-89-6	IRON	10	19000	12	4.1		
7439-92-1	LEAD	10	11	0.06	0.023		
7439-95-4	MAGNESIUM	10	4900	12	4.4		
7439-96-5	MANGANESE	10	310	0.24	0.074		
7440-02-0	NICKEL	10	11	0.6	0.31		
7440-09-7	POTASSIUM	10	4200	120	21		
7782-49-2	SELENIUM	10	0.94	0.12	0.044		
7440-22-4	SILVER	10	0.03	0.012	0.0062		
7440-23-5	SODIUM	10	340	120	20	_	_
7440-28-0	THALLIUM	10	0.26	0.024	0.0049		
7440-62-2	VANADIUM	10	34	0.12	0.053		
7440-66-6	ZINC	10	76	2.4	0.51		

Data Package ID: im1602355-1

Date Printed: Monday, March 07, 2016 ALS Environmental -- FC

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## Method SW6020A Sample Results

Lab Name: ALS Environmental -- FC

Work Order Number: 1602355

Client Name: Tetra Tech MM, Inc.

ClientProject ID: 103P4384 Brandeis-Bardin Campus

Field ID: TT-OSF-01

Lab ID: 1602355-15

Analysis ReqCode: arsenic

Sample Matrix: SOIL % Moisture: 20.9 Date Collected: 18-Feb-16

Date Extracted: 29-Feb-16
Date Analyzed: 02-Mar-16
Prep Method: SW3050 Rev B

Prep Batch: IP160229-1

QCBatchID: IP160229-1-1 Run ID: IM160302-10A4 Cleanup: NONE

**Basis:** Dry Weight **File Name:** 068SMPL\_

Analyst: Brent A. Stanfield
Sample Aliquot: 1.013 g
Final Volume: 100 ml
Result Units: MG/KG

Clean DF:

**CASNO** MDL/DL **Target Analyte Dilution** Result RptLimit/ Result **EPA Factor** LOQ/LOD Qualifier Qualifier ALUMINUM 10 7429-90-5 12000 6.2 1.9 **ANTIMONY** 7440-36-0 10 0.21 0.037 0.021 **ARSENIC** 10 4.9 7440-38-2 0.25 0.041 BARIUM 10 7440-39-3 90 0.12 0.072 **BERYLLIUM** 7440-41-7 10 0.49 0.062 0.017 CADMIUM 10 0.57 0.037 7440-43-9 0.021 7440-70-2 CALCIUM 10 5000 120 **CHROMIUM** 10 21 7440-47-3 1.2 0.089 COBALT 10 7440-48-4 10 0.12 0.065 7440-50-8 **COPPER** 10 27 1.2 0.31 **IRON** 10 23000 7439-89-6 12 4.2 LEAD 10 7439-92-1 17 0.062 0.023 MAGNESIUM 10 7439-95-4 6300 12 4.6 MANGANESE 10 7439-96-5 480 0.25 0.077 7440-02-0 NICKEL 10 16 0.62 0.32 **POTASSIUM** 10 4400 7440-09-7 120 22 **SELENIUM** 10 0.046 7782-49-2 1 0.12 7440-22-4 SII VFR 10 0.1 0.012 0.0064 SODIUM 10 7440-23-5 520 120 21 **THALLIUM** 10 7440-28-0 0.25 0.025 0.005 7440-62-2 VANADIUM 10 46 0.12 0.055 7440-66-6 ZINC 10 100 2.5 0.53

Data Package ID: im1602355-1

Date Printed: Monday, March 07, 2016 ALS Environmental -- FC

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## Method SW6020A Sample Results

Lab Name: ALS Environmental -- FC

Work Order Number: 1602355

Client Name: Tetra Tech MM, Inc.

ClientProject ID: 103P4384 Brandeis-Bardin Campus

Field ID: TT-BBF-01

Lab ID: 1602355-16

Sample Matrix: SOIL % Moisture: 7.4 Date Collected: 18-Fe

Date Collected: 18-Feb-16 Date Extracted: 29-Feb-16 Date Analyzed: 02-Mar-16

Analysis ReqCode: arsenic Prep Method: SW3050 Rev B

Prep Batch: IP160229-1

QCBatchID: IP160229-1-1 Run ID: IM160302-10A4

Cleanup: NONE
Basis: Dry Weight
File Name: 069SMPL\_

Analyst: Brent A. Stanfield Sample Aliquot: 1.039 g

Final Volume: 100 ml Result Units: MG/KG Clean DF: 1

**CASNO** MDL/DL Result **Target Analyte Dilution** Result RptLimit/ **EPA Factor** LOQ/LOD Qualifier Qualifier ALUMINUM 10 7429-90-5 7500 5.2 1.6 **ANTIMONY** 7440-36-0 10 0.15 0.031 0.017 **ARSENIC** 10 5.8 7440-38-2 0.21 0.034 BARIUM 10 170 7440-39-3 0.1 0.06 **BERYLLIUM** 7440-41-7 10 0.24 0.052 0.014 CADMIUM 10 0.064 7440-43-9 0.031 0.017 7440-70-2 CALCIUM 10 4900 100 9.5 7440-47-3 **CHROMIUM** 10 7.6 1 0.074 COBALT 10 7440-48-4 3.2 0.1 0.054 7440-50-8 **COPPER** 10 6.7 1 0.25 **IRON** 10 9700 10 7439-89-6 3.5 LEAD 10 7439-92-1 7.7 0.052 0.02 MAGNESIUM 10 7439-95-4 2400 10 3.8 MANGANESE 10 7439-96-5 250 0.21 0.064 7440-02-0 NICKEL 10 3.2 0.52 0.26 **POTASSIUM** 10 1800 7440-09-7 100 18 **SELENIUM** 10 7782-49-2 0.32 0.1 0.038 7440-22-4 SII VFR 10 0.023 0.01 0.0053 SODIUM 10 7440-23-5 410 100 17 **THALLIUM** 10 7440-28-0 0.021 0.15 0.0042 7440-62-2 VANADIUM 10 28 0.1 0.046 7440-66-6 ZINC 10 23 2.1 0.44

Data Package ID: im1602355-1

Date Printed: Monday, March 07, 2016 ALS Environmental -- FC

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## Method SW6020A Sample Results

Lab Name: ALS Environmental -- FC

Work Order Number: 1602355

Client Name: Tetra Tech MM, Inc.

ClientProject ID: 103P4384 Brandeis-Bardin Campus

Field ID: TT-BB1-01

Lab ID: 1602355-17

Sample Matrix: SOIL % Moisture: 8.4 Date Collected: 18-Feb-16

Date Extracted: 29-Feb-16
Date Analyzed: 02-Mar-16
Prep Method: SW 3050 Rev B

Analysis ReqCode: arsenic

Prep Batch: IP160229-1

QCBatchID: IP160229-1-1

Run ID: IM160302-10A4

Fi
Cleanur: NONE

R

Cleanup: NONE
Basis: Dry Weight
File Name: 070SMPL\_

Analyst: Brent A. Stanfield
Sample Aliquot: 1.015 g
Final Volume: 100 ml
Result Units: MG/KG
Clean DF: 1

**CASNO** MDL/DL **Target Analyte Dilution** Result RptLimit/ Result **EPA Factor** LOQ/LOD Qualifier Qualifier ALUMINUM 10 7429-90-5 4600 5.4 1.7 **ANTIMONY** 7440-36-0 10 0.18 0.032 0.018 **ARSENIC** 10 3.5 7440-38-2 0.22 0.035 BARIUM 10 7440-39-3 39 0.11 0.063 **BERYLLIUM** 7440-41-7 10 0.3 0.054 0.015 CADMIUM 10 0.099 0.032 7440-43-9 0.018 7440-70-2 CALCIUM 10 2100 110 9.8 7440-47-3 **CHROMIUM** 10 6.8 1.1 0.077 COBALT 10 7440-48-4 3.2 0.11 0.056 7440-50-8 **COPPER** 10 5.7 1.1 0.26 **IRON** 10 11000 7439-89-6 11 3.6 LEAD 10 7439-92-1 7.6 0.054 0.02 MAGNESIUM 10 7439-95-4 1900 11 3.9 MANGANESE 10 7439-96-5 170 0.22 0.066 7440-02-0 NICKEL 10 5.1 0.54 0.27 **POTASSIUM** 10 1800 7440-09-7 110 19 **SELENIUM** 10 7782-49-2 1.9 0.11 0.039 7440-22-4 SII VFR 10 0.0065 0.011 0.0055 SODIUM 10 7440-23-5 120 110 18 **THALLIUM** 10 7440-28-0 0.022 0.11 0.0043 7440-62-2 VANADIUM 10 19 0.11 0.048 7440-66-6 ZINC 10 38 2.2 0.45

Data Package ID: im1602355-1

Date Printed: Monday, March 07, 2016 ALS Environmental -- FC

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## Method SW6020A Sample Results

Lab Name: ALS Environmental -- FC

Work Order Number: 1602355

Client Name: Tetra Tech MM, Inc.

ClientProject ID: 103P4384 Brandeis-Bardin Campus

Field ID: TT-HC-01

Lab ID: 1602355-18

Analysis ReqCode: arsenic

Sample Matrix: SOIL % Moisture: 11.6 Date Collected: 18-Feb-16

Date Extracted: 29-Feb-16
Date Analyzed: 02-Mar-16
Prep Method: SW3050 Rev B

Prep Batch: IP160229-1 QCBatchID: IP160229-1-1

Run ID: IM160302-1-1
Run ID: IM160302-10A4
Cleanup: NONE
Basis: Dry Weight

File Name: 071SMPL\_

Analyst: Brent A. Stanfield
Sample Aliquot: 1.064 g
Final Volume: 100 ml
Result Units: MG/KG
Clean DF: 1

**CASNO** MDL/DL **Target Analyte Dilution** Result RptLimit/ Result **EPA Factor** LOQ/LOD Qualifier Qualifier ALUMINUM 10 7429-90-5 5700 5.3 1.7 **ANTIMONY** 7440-36-0 10 0.18 0.032 0.018 **ARSENIC** 10 3.1 7440-38-2 0.21 0.035 BARIUM 10 87 7440-39-3 0.11 0.062 **BERYLLIUM** 7440-41-7 10 0.23 0.053 0.014 CADMIUM 10 0.34 0.032 7440-43-9 0.018 7440-70-2 CALCIUM 10 14000 110 9.7 **CHROMIUM** 10 11 7440-47-3 1.1 0.076 COBALT 10 7440-48-4 4.4 0.11 0.055 7440-50-8 **COPPER** 10 11 1.1 0.26 **IRON** 10 10000 7439-89-6 11 3.6 LEAD 10 7439-92-1 5.2 0.053 0.02 MAGNESIUM 10 7439-95-4 3000 11 3.9 MANGANESE 10 7439-96-5 180 0.21 0.065 7440-02-0 NICKEL 10 11 0.53 0.27 **POTASSIUM** 10 4900 7440-09-7 110 19 **SELENIUM** 10 7782-49-2 0.76 0.11 0.039 7440-22-4 SII VFR 10 0.035 0.011 0.0054 SODIUM 10 7440-23-5 990 110 18 **THALLIUM** 10 7440-28-0 0.021 0.1 0.0043 7440-62-2 VANADIUM 10 25 0.11 0.047 7440-66-6 ZINC 10 35 2.1 0.45

Data Package ID: im1602355-1

Date Printed: Monday, March 07, 2016 ALS Environmental -- FC

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#### Method SW6020A **Sample Results**

Lab Name: ALS Environmental -- FC

Work Order Number: 1602355

Client Name: Tetra Tech MM, Inc.

ClientProject ID: 103P4384 Brandeis-Bardin Campus

Field ID: TT-GGP-01 Lab ID: 1602355-19

Sample Matrix: SOIL % Moisture: 5.3 Date Collected: 18-Feb-16

Date Extracted: 29-Feb-16 Date Analyzed: 02-Mar-16

Analysis ReqCode: arsenic

Prep Batch: IP160229-1 QCBatchID: IP160229-1-1 Run ID: IM160302-10A4 Cleanup: NONE Basis: Dry Weight

Prep Method: SW3050 Rev B File Name: 072SMPL\_

Analyst: Brent A. Stanfield Sample Aliquot: 1.025 g **Final Volume:** 100 ml Result Units: MG/KG Clean DF:

CASNO	Target Analyte	Dilution Factor	Result	RptLimit/ LOQ/LOD	MDL/DL	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	10	1200	5.2	1.6		
7440-36-0	ANTIMONY	10	0.038	0.031	0.017		
7440-38-2	ARSENIC	10	0.85	0.21	0.034		
7440-39-3	BARIUM	10	9.4	0.1	0.06		
7440-41-7	BERYLLIUM	10	0.026	0.052	0.014	J	
7440-43-9	CADMIUM	10	0.03	0.031	0.017	J	
7440-70-2	CALCIUM	10	5300	100	9.4		
7440-47-3	CHROMIUM	10	3.3	1	0.074		
7440-48-4	COBALT	10	0.93	0.1	0.054		
7440-50-8	COPPER	10	1.5	1	0.25		
7439-89-6	IRON	10	2800	10	3.5		
7439-92-1	LEAD	10	0.62	0.052	0.019		
7439-95-4	MAGNESIUM	10	510	10	3.8		
7439-96-5	MANGANESE	10	39	0.21	0.063		
7440-02-0	NICKEL	10	1.8	0.52	0.26		
7440-09-7	POTASSIUM	10	310	100	18		
7782-49-2	SELENIUM	10	0.44	0.1	0.038		
7440-22-4	SILVER	10	0.0052	0.01	0.0052	U	
7440-23-5	SODIUM	10	100	100	17		
7440-28-0	THALLIUM	10	0.024	0.021	0.0041		
7440-62-2	VANADIUM	10	6.1	0.1	0.046		
7440-66-6	ZINC	10	4.8	2.1	0.43		

Data Package ID: im1602355-1

**ALS Environmental -- FC** Date Printed: Monday, March 07, 2016

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### **Total MERCURY**

#### Method SW7471A

#### **Sample Results**

Lab Name: ALS Environmental -- FC
Client Name: Tetra Tech MM, Inc.

Client Project ID: 103P4384 Brandeis-Bardin Campus

Work Order Number: 1602355 Final Volume: 100 ml
Reporting Basis: Dry Weight Matrix: SOIL
Analyst: Nathan A. Quatier Result Units: MG/KG

Client Sample ID	Lab ID	Date Collected	Date Prepared	Date Analyzed	Percent Moisture	Dilution Factor	Result	RptLimit/ LOQ/LOD	MDL/DL	Flag	Sample Aliquot
TT-LR-RBRA-01	1602355-1	2/16/2016	2/29/2016	02/29/2016	11.09	1	0.027	0.037	0.004	J	0.607 g
TT-BP-RBRA-01	1602355-2	2/18/2016	2/29/2016	02/29/2016	17.88	1	0.023	0.037	0.004	J	0.658 g
TT-BP-DRAIN-01	1602355-3	2/18/2016	2/29/2016	02/29/2016	28.09	1	0.021	0.045	0.0049	J	0.615 g
TT-SEDBG1-01	1602355-4	2/18/2016	2/29/2016	02/29/2016	6.934	1	0.0055	0.033	0.0035	J	0.657 g
TT-SD1-01	1602355-5	2/18/2016	2/29/2016	02/29/2016	10.97	1	0.0081	0.036	0.0039	J	0.623 g
TT-SD2-01	1602355-6	2/18/2016	2/29/2016	02/29/2016	9.297	1	0.0071	0.036	0.0038	J	0.621 g
TT-ED1-01	1602355-7	2/18/2016	2/29/2016	02/29/2016	15.77	1	0.0057	0.036	0.0039	J	0.665 g
TT-ED2-01	1602355-8	2/18/2016	2/29/2016	02/29/2016	9.292	1	0.011	0.035	0.0038	J	0.625 g
TT-ED3-01	1602355-9	2/18/2016	2/29/2016	02/29/2016	20.16	1	0.011	0.039	0.0042	J	0.649 g
TT-BBCSED-01	1602355-10	2/18/2016	2/29/2016	02/29/2016	3.554	1	0.0034	0.032	0.0034	U	0.653 g
TT-PPG-01	1602355-11	2/18/2016	2/29/2016	02/29/2016	5.527	1	0.0081	0.034	0.0037	J	0.615 g
TT-CAB-01	1602355-12	2/18/2016	2/29/2016	02/29/2016	12.75	1	0.038	0.033	0.0036		0.693 g
TT-GF-01	1602355-13	2/16/2016	2/29/2016	02/29/2016	18.40	1	0.017	0.039	0.0042	J	0.631 g
TT-GF-02	1602355-14	2/18/2016	2/29/2016	02/29/2016	21.09	1	0.016	0.037	0.004	J	0.677 g
TT-OSF-01	1602355-15	2/18/2016	2/29/2016	02/29/2016	20.88	1	0.043	0.038	0.0041		0.658 g
TT-BBF-01	1602355-16	2/18/2016	2/29/2016	02/29/2016	7.381	1	0.011	0.036	0.0038	J	0.608 g
TT-BB1-01	1602355-17	2/18/2016	2/29/2016	02/29/2016	8.431	1	0.014	0.034	0.0036	J	0.65 g
TT-HC-01	1602355-18	2/18/2016	2/29/2016	02/29/2016	11.59	1	0.02	0.035	0.0038	J	0.647 g

#### **Comments:**

1. ND or U = Not Detected at or above the client requested detection limit.

Data Package ID: hg1602355-1

Date Printed: Monday, March 07, 2016 ALS Environmental -- FC

LIMS Version: 6.806

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### **Total MERCURY**

#### Method SW7471A

#### **Sample Results**

Lab Name: ALS Environmental -- FC Client Name: Tetra Tech MM, Inc.

Client Project ID: 103P4384 Brandeis-Bardin Campus

Work Order Number: 1602355 Final Volume: 100 ml
Reporting Basis: Dry Weight Matrix: SOIL
Analyst: Nathan A. Quatier Result Units: MG/KG

Client Sample ID	Lab ID	Date Collected	Date Prepared	Date Analyzed	Percent Moisture	Dilution Factor	Result	RptLimit/ LOQ/LOD	MDL/DL	Flag	Sample Aliquot
TT-GGP-01	1602355-19	2/18/2016	2/29/2016	02/29/2016	5.346	1	0.0084	0.033	0.0036	J	0.637 g

#### **Comments:**

1. ND or U = Not Detected at or above the client requested detection limit.

Data Package ID: hg1602355-1

Date Printed: Monday, March 07, 2016 ALS Environmental -- FC

LIMS Version: 6.806

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#### Method SW6020A Method Blank

Lab Name: ALS Environmental -- FC

Work Order Number: 1602355

Client Name: Tetra Tech MM, Inc.

ClientProject ID: 103P4384 Brandeis-Bardin Campus

Lab ID: IP160229-1MB

Sample Matrix: SOIL % Moisture: N/A Date Collected: N/A

Date Extracted: 29-Feb-16

Date Analyzed: 02-Mar-16

Prep Batch: IP160229-1 Sample Aliquot:
QCBatchID: IP160229-1-1 Final Volume:
Run ID: IM160302-10A4 Result Units:

Cleanup: NONE
Basis: N/A

File Name: 042SMPL\_

Final Volume: 100 ml Result Units: MG/KG Clean DF: 1

1 g

CASNO	Target Analyte	DF	Result	RptLimit/ LOQ/LOD	MDL/DL	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	10	2.4	5	1.6	J	
7440-36-0	ANTIMONY	10	0.017	0.03	0.017	U	
7440-38-2	ARSENIC	10	0.033	0.2	0.033	U	
7440-39-3	BARIUM	10	0.058	0.1	0.058	U	
7440-41-7	BERYLLIUM	10	-0.017	0.05	0.014	J	
7440-43-9	CADMIUM	10	0.017	0.03	0.017	U	
7440-70-2	CALCIUM	10	9.1	100	9.1	U	
7440-47-3	CHROMIUM	10	0.12	1	0.072	J	
7440-48-4	COBALT	10	0.052	0.1	0.052	U	
7440-50-8	COPPER	10	0.24	1	0.24	U	
7439-89-6	IRON	10	3.4	10	3.4	U	
7439-92-1	LEAD	10	0.019	0.05	0.019	U	
7439-95-4	MAGNESIUM	10	3.7	10	3.7	U	
7439-96-5	MANGANESE	10	0.062	0.2	0.062	U	
7440-02-0	NICKEL	10	-0.33	0.5	0.25	J	
7440-09-7	POTASSIUM	10	18	100	18	U	
7782-49-2	SELENIUM	10	0.037	0.1	0.037	U	
7440-22-4	SILVER	10	-0.006	0.01	0.0051	J	
7440-23-5	SODIUM	10	43	100	17	J	
7440-28-0	THALLIUM	10	0.004	0.02	0.004	U	_
7440-62-2	VANADIUM	10	0.044	0.1	0.044	U	
7440-66-6	ZINC	10	1.3	2	0.42	J	

Data Package ID: im1602355-1

#### Method SW6020A **Laboratory Control Sample**

Lab Name: ALS Environmental -- FC

Work Order Number: 1602355

Client Name: Tetra Tech MM, Inc.

ClientProject ID: 103P4384 Brandeis-Bardin Campus

Lab ID: IP160229-1LCS

Sample Matrix: SOIL % Moisture: N/A Date Collected: N/A

Date Extracted: 02/29/2016 **Date Analyzed:** 03/02/2016 Prep Method: SW3050B

Prep Batch: IP160229-1 Sample Aliquot: QCBatchID: IP160229-1-1

Run ID: IM160302-10A4 Cleanup: NONE Basis: N/A

**Final Volume:** 100 ml Result Units: MG/KG Clean DF:

1 g

File Name: 044SMPL\_

CASNO	Target Analyte	Spike Added	LCS Result	Reporting Limit	Result Qualifier	LCS % Rec.	Control Limits
7429-90-5	ALUMINUM	500	497	5		99	80 - 120%
7440-36-0	ANTIMONY	3	3.08	0.03		103	80 - 120%
7440-38-2	ARSENIC	10	10.5	0.2		105	80 - 120%
7440-39-3	BARIUM	10	10.8	0.1		108	80 - 120%
7440-41-7	BERYLLIUM	5	5.34	0.05		107	80 - 120%
7440-43-9	CADMIUM	3	3.35	0.03		112	80 - 120%
7440-70-2	CALCIUM	1000	1120	100		112	80 - 120%
7440-47-3	CHROMIUM	50	51.2	1		102	80 - 120%
7440-48-4	COBALT	10	10.5	0.1		105	80 - 120%
7440-50-8	COPPER	100	107	1		107	80 - 120%
7439-89-6	IRON	500	505	10		101	80 - 120%
7439-92-1	LEAD	5	5.43	0.05		109	80 - 120%
7439-95-4	MAGNESIUM	1000	1020	10		102	80 - 120%
7439-96-5	MANGANESE	10	10.5	0.2		105	80 - 120%
7440-02-0	NICKEL	50	52.4	0.5		105	80 - 120%
7440-09-7	POTASSIUM	500	515	100		103	80 - 120%
7782-49-2	SELENIUM	10	10.9	0.1		109	80 - 120%
7440-22-4	SILVER	1	1.1	0.01		110	80 - 120%
7440-23-5	SODIUM	1000	1110	100		111	80 - 120%
7440-28-0	THALLIUM	0.2	0.229	0.02		115	80 - 120%
7440-62-2	VANADIUM	10	10.7	0.1		107	80 - 120%
7440-66-6	ZINC	200	225	2		112	80 - 120%

Data Package ID: im1602355-1

## Method SW6020A Matrix Spike And Matrix Spike Duplicate

Lab Name: ALS Environmental -- FC

Work Order Number: 1602355

Client Name: Tetra Tech MM, Inc.

ClientProject ID: 103P4384 Brandeis-Bardin Campus

Field ID: TT-LR-RBRA-01
LabID: 1602355-1MS

Sample Matrix: SOIL % Moisture: 11.1 Date Collected: 16-Feb-16

Date Extracted: 29-Feb-16

Date Analyzed: 02-Mar-16

Prep Method: SW 3050 Rev B

Prep Batch: IP160229-1 QCBatchID: IP160229-1-1 Run ID: IM160302-10A4

Cleanup: NONE
Basis: Dry Weight

Sample Aliquot: 1.022 g
Final Volume: 100 ml
Result Units: MG/KG
File Name: 048SMPL\_

CASNO	Target Analyte	Sample Result	Samp Qual	MS Result	MS Qual	Reporting Limit	Spike Added	MS % Rec.	Control Limits
7429-90-5	ALUMINUM	14000		18900		5.5	550	862	75 - 125%
7440-36-0	ANTIMONY	0.34		1.57	N	0.033	3.3	37	75 - 125%
7440-38-2	ARSENIC	10		24.5	N	0.22	11	130	75 - 125%
7440-39-3	BARIUM	130		168		0.11	11	338	75 - 125%
7440-41-7	BERYLLIUM	0.81		7.26		0.055	5.5	117	75 - 125%
7440-43-9	CADMIUM	0.36		4.68	N	0.033	3.3	131	75 - 125%
7440-70-2	CALCIUM	3600		5410	N	110	1100	161	75 - 125%
7440-47-3	CHROMIUM	30		96.1		1.1	55	120	75 - 125%
7440-48-4	COBALT	11		24.9		0.11	11	122	75 - 125%
7440-50-8	COPPER	19		148		1.1	110	118	75 - 125%
7439-89-6	IRON	28000		33100		11	550	959	75 - 125%
7439-92-1	LEAD	16		23.9	N	0.055	5.5	147	75 - 125%
7439-95-4	MAGNESIUM	6200		8610		11	1100	218	75 - 125%
7439-96-5	MANGANESE	510		574		0.22	11	546	75 - 125%
7440-02-0	NICKEL	31		96.3		0.55	55	119	75 - 125%
7440-09-7	POTASSIUM	5100		6340		110	550	233	75 - 125%
7782-49-2	SELENIUM	1.5		14.2		0.11	11	115	75 - 125%
7440-22-4	SILVER	0.053		1.35		0.011	1.1	118	75 - 125%
7440-23-5	SODIUM	190		1480		110	1100	116	75 - 125%
7440-28-0	THALLIUM	0.39		0.719	N	0.022	0.22	149	75 - 125%
7440-62-2	VANADIUM	47		77.9		0.11	11	280	75 - 125%
7440-66-6	ZINC	80		348		2.2	220	122	75 - 125%

Data Package ID: im1602355-1

#### Method SW6020A Matrix Spike And Matrix Spike Duplicate

Lab Name: ALS Environmental -- FC

Work Order Number: 1602355

Client Name: Tetra Tech MM, Inc.

ClientProject ID: 103P4384 Brandeis-Bardin Campus

Field ID: TT-LR-RBRA-01 **LabID:** 1602355-1MSD

Sample Matrix: SOIL % Moisture: 11.1 Date Collected: 16-Feb-16

Date Extracted: 29-Feb-16 Date Analyzed: 02-Mar-16

Prep Method: SW3050 Rev B

Prep Batch: IP160229-1 QCBatchID: IP160229-1-1 Run ID: IM160302-10A4

> Cleanup: NONE Basis: Dry Weight

Sample Aliquot: 1.022 g **Final Volume:** 100 ml Result Units: MG/KG

File Name: 049SMPL\_

CASNO	Target Analyte	MSD Result	MSD Qual	Spike Added	MSD % Rec.	Reporting Limit	RPD Limit	RPD
7429-90-5	ALUMINUM	18300		550	757	5.5	20	3
7440-36-0	ANTIMONY	1.48	N	3.3	34	0.033	20	6
7440-38-2	ARSENIC	24.2	N	11	127	0.22	20	1
7440-39-3	BARIUM	157		11	237	0.11	20	7
7440-41-7	BERYLLIUM	6.9		5.5	111	0.055	20	5
7440-43-9	CADMIUM	4.3		3.3	119	0.033	20	8
7440-70-2	CALCIUM	5330	N	1100	154	110	20	2
7440-47-3	CHROMIUM	93.2		55	114	1.1	20	3
7440-48-4	COBALT	24.5		11	119	0.11	20	2
7440-50-8	COPPER	144		110	114	1.1	20	3
7439-89-6	IRON	31400		550	637	11	20	5
7439-92-1	LEAD	23.1	N	5.5	133	0.055	20	3
7439-95-4	MAGNESIUM	8100		1100	172	11	20	6
7439-96-5	MANGANESE	607		11	847	0.22	20	6
7440-02-0	NICKEL	93.9		55	115	0.55	20	2
7440-09-7	POTASSIUM	6130		550	196	110	20	3
7782-49-2	SELENIUM	11.2	*	11	88	0.11	20	23
7440-22-4	SILVER	1.22		1.1	106	0.011	20	11
7440-23-5	SODIUM	1510		1100	119	110	20	2
7440-28-0	THALLIUM	0.659	_	0.22	122	0.022	20	9
7440-62-2	VANADIUM	69.1	_	11	201	0.11	20	12
7440-66-6	ZINC	342		220	119	2.2	20	2

Data Package ID: im1602355-1

# Method SW6020 Analytical Spike Sample Recovery

Lab Name: ALS Environmental -- FC

Work Order Number: 1602355

Client Name: Tetra Tech MM, Inc.

ClientProject ID: 103P4384 Brandeis-Bardin Campus

**Field ID:** TT-LR-RBRA-01 **LabID:** 1602355-1A

Run ID: IM160302-10A4

Date Analyzed: 3/2/2016

Result Units: mg/l

Target Analyte	Sample Result	Samp Qual	PS Result	PS Qual	Spike Added	PS % Rec.	Control Limits
ANTIMONY	0.000312		0.00344		0.003	104	75 - 125%
ARSENIC	0.00929		0.0215		0.01	122	75 - 125%
CADMIUM	0.000329		0.00365		0.003	111	75 - 125%
CALCIUM	3.32		5.87	N	2	127	75 - 125%
LEAD	0.0144		0.0204		0.005	120	75 - 125%
THALLIUM	0.000356		0.000600		0.00020	122	75 - 125%

Data Package ID: im1602355-1

#### Method SW6020 Duplicate Sample Results

Lab Name: ALS Environmental -- FC

Work Order Number: 1602355

Client Name: Tetra Tech MM, Inc.

ClientProject ID: 103P4384 Brandeis-Bardin Campus

**Field ID:** TT-LR-RBRA-01 **Lab ID:** 1602355-1D

Sample Matrix: SOIL % Moisture: 11.1

**Date Collected:** 02/16/2016 **Date Extracted:** 02/29/2016 **Date Analyzed:** 03/02/2016 Prep Batch: IP160229-1 Sar QCBatchID: IP160229-1-1 F Run ID: IM160302-10A4

Cleanup: NONE
Basis: Dry Weight
File Name: 047SMPL\_

Sample Aliquot: 1.025 g
Final Volume: 100 ml
Result Units: MG/KG
Clean DF: 1

CASNO	Target Analyte	Sample Result	Samp Qual	Duplicate Result	Dup Qual	Reporting Limit	Dilution Factor	RPD	RPD Limit
7429-90-5	ALUMINUM	14000		14300		5.49	10	1	20
7440-36-0	ANTIMONY	0.34		0.476	*	0.0329	10	33	20
7440-38-2	ARSENIC	10		11.1		0.219	10	8	20
7440-39-3	BARIUM	130		134		0.11	10	2	20
7440-41-7	BERYLLIUM	0.81		0.815		0.0549	10	1	20
7440-43-9	CADMIUM	0.36		0.27	*	0.0329	10	29	20
7440-70-2	CALCIUM	3600		3710		110	10	2	20
7440-47-3	CHROMIUM	30		31		1.1	10	2	20
7440-48-4	COBALT	11		11.2		0.11	10	2	20
7440-50-8	COPPER	19		18.1		1.1	10	2	20
7439-89-6	IRON	28000		31200		11	10	11	20
7439-92-1	LEAD	16		16.5		0.0549	10	4	20
7439-95-4	MAGNESIUM	6200		6340		11	10	2	20
7439-96-5	MANGANESE	510		530		0.219	10	3	20
7440-02-0	NICKEL	31		30.7		0.549	10	0	20
7440-09-7	POTASSIUM	5100		5010		110	10	1	20
7782-49-2	SELENIUM	1.5		0.966	*	0.11	10	42	20
7440-22-4	SILVER	0.053		0.056		0.011	10		20
7440-23-5	SODIUM	190		156		110	10		20
7440-28-0	THALLIUM	0.39		0.38		0.0219	10	3	20
7440-62-2	VANADIUM	47		56.6		0.11	10	18	20
7440-66-6	ZINC	80		85.4		2.19	10	7	20

Data Package ID: im1602355-1

Date Printed: Monday, March 07, 2016

**ALS Environmental -- FC** 

Page 1 of 2

#### Method SW6020 Serial Dilution

Lab Name: ALS Environmental -- FC

Work Order Number: 1602355

Client Name: Tetra Tech MM, Inc.

ClientProject ID: 103P4384 Brandeis-Bardin Campus

Field ID: TT-LR-RBRA-01

Lab ID: 1602355-1L

Run ID: IM160302-10A4

Date Analyzed: 02-Mar-16

Result Units: mg/l

CASNO	Target Analyte	Sample Result	Samp Qual	SD Result	SD Qual	EPA Qualifier	%D
7429-90-5	ALUMINUM	12.9		13.8			7
7440-36-0	ANTIMONY	0.000312		0.000425	J		
7440-38-2	ARSENIC	0.00929		0.0106		Е	14
7440-39-3	BARIUM	0.120		0.129			8
7440-41-7	BERYLLIUM	0.000737		0.000700	J		5
7440-43-9	CADMIUM	0.000329		0.000430	J		
7440-70-2	CALCIUM	3.32		3.75		Е	13
7440-47-3	CHROMIUM	0.0276		0.0308		Е	11
7440-48-4	COBALT	0.0104		0.0114			9
7440-50-8	COPPER	0.0169		0.0182	J		8
7439-89-6	IRON	25.4		27.3			7
7439-92-1	LEAD	0.0144		0.0158			10
7439-95-4	MAGNESIUM	5.67		6.08			7
7439-96-5	MANGANESE	0.469		0.501			7
7440-02-0	NICKEL	0.0280		0.0279			0
7440-09-7	POTASSIUM	4.62		4.98			8
7782-49-2	SELENIUM	0.00135		0.00100	J		
7440-22-4	SILVER	0.0000480		0.0000550	J		
7440-23-5	SODIUM	0.177		0.316	J		
7440-28-0	THALLIUM	0.000356		0.000400	J	E	12
7440-62-2	VANADIUM	0.0430	_	0.0493		E	15
7440-66-6	ZINC	0.0728		0.0782			7

Data Package ID: im1602355-1

#### Method SW7471A Method Blank

Lab Name: ALS Environmental -- FC

Work Order Number: 1602355

Client Name: Tetra Tech MM, Inc.

ClientProject ID: 103P4384 Brandeis-Bardin Campus

Lab ID: HG160229-1MB

Sample Matrix: SOILPrep Batch: HG160229-1Sample Aliquot:0.6 g% Moisture: N/AQCBatchID: HG160229-1-1Final Volume:100 mlDate Collected: N/ARun ID: HG160229-2A2Result Units: MG/KGDate Extracted: 29-Feb-16Cleanup: NONEClean DF:1

Date Analyzed: 29-Feb-16 Basis: N/A

File Name: HG160229-2

CASNO	Target Analyte	DF	Result	RptLimit/ LOQ/LOD	MDL/DL	Result Qualifier	EPA Qualifier
7439-97-6	MERCURY	1	0.0036	0.033	0.0036	U	

Data Package ID: HG1602355-1

# Method SW7471A Laboratory Control Sample

Lab Name: ALS Environmental -- FC

Work Order Number: 1602355

Client Name: Tetra Tech MM, Inc.

ClientProject ID: 103P4384 Brandeis-Bardin Campus

Lab ID: HG160229-1LCS

Sample Matrix: SOILPrep Batch: HG160229-1Sample Aliquot:0.6 g% Moisture: N/AQCBatchID: HG160229-1-1Final Volume:100 mlDate Collected: N/ARun ID: HG160229-2A2Result Units: MG/KGDate Extracted: 02/29/2016Cleanup: NONEClean DF:1

Date Analyzed: 02/29/2016 Basis: N/A
Prep Method: METHOD File Name: HG160229-2

CASNO	Target Analyte	Spike Added	LCS Result	Reporting Limit	Result Qualifier	LCS % Rec.	Control Limits
7439-97-6	MERCURY	0.167	0.17	0.0333		102	80 - 120%

Data Package ID: hg1602355-1

#### Method SW7471A **Matrix Spike And Matrix Spike Duplicate**

Lab Name: ALS Environmental -- FC

Work Order Number: 1602355

Client Name: Tetra Tech MM, Inc.

ClientProject ID: 103P4384 Brandeis-Bardin Campus

Field ID: TT-LR-RBRA-01 **LabID:** 1602355-1MS

Sample Matrix: SOIL % Moisture: 11.1 Date Collected: 16-Feb-16 Date Extracted: 29-Feb-16

Date Analyzed: 29-Feb-16 Prep Method: METHOD

Prep Batch: HG160229-1 QCBatchID: HG160229-1-1 Run ID: HG160229-2A2 Cleanup: NONE

Basis: Dry Weight

Sample Aliquot: 0.609 g **Final Volume:** 100 ml Result Units: MG/KG File Name: HG160229-2

CASNO	Target Analyte	Sample Result	Samp Qual	MS Result	MS Qual	Reporting Limit	Spike Added	MS % Rec.	Control Limits
7439-97-6	MERCURY	0.027	J	0.406		0.0369	0.369	103	80 - 120%

Field ID: TT-LR-RBRA-01 LabID: 1602355-1MSD

Sample Matrix: SOIL % Moisture: 11.1 Date Collected: 16-Feb-16 Date Extracted: 29-Feb-16 Date Analyzed: 29-Feb-16

Prep Batch: HG160229-1 QCBatchID: HG160229-1-1 Run ID: HG160229-2A2 Cleanup: NONE Basis: Dry Weight Prep Method: METHOD

Sample Aliquot: 0.606 g **Final Volume:** 100 ml Result Units: MG/KG File Name: HG160229-2

CASNO	Target Analyte	MSD Result	MSD Qual	Spike Added	MSD % Rec.	Reporting Limit	RPD Limit	RPD
7439-97-6 N	MERCURY	0.405		0.371	102	0.0371	20	0

Data Package ID: hg1602355-1

# Method SW7471 Duplicate Sample Results

Lab Name: ALS Environmental -- FC

Work Order Number: 1602355

Client Name: Tetra Tech MM, Inc.

ClientProject ID: 103P4384 Brandeis-Bardin Campus

Field ID: TT-LR-RBRA-01

Lab ID: 1602355-1D

Sample Matrix: SOIL

% Moisture: 11.1

% Moisture: 11.1

Date Collected: 02/16/2016

Date Extracted: 02/29/2016

**Date Extracted:** 02/29/2016 **Date Analyzed:** 02/29/2016

Prep Batch: HG160229-1 QCBatchID: HG160229-1-1

Run ID: HG160229-2A2 Cleanup: NONE

Basis: Dry Weight
File Name: HG160229-2

Sample Aliquot: 0.607 g Final Volume: 100 ml

Result Units: MG/KG
Clean DF: 1

CASNO	Target Analyte	Sample Result	Samp Qual	Duplicate Result	Dup Qual	Reporting Limit	Dilution Factor	RPD	RPD Limit
7439-97-6	MERCURY	0.027	J	0.0275	J	0.0371	1		20

Data Package ID: hg1602355-1



ALS Environmental ALS Group USA, Corp 1317 South 13th Avenue Kelso, WA 98626

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F: +1 360 636 1068 www.alsglobal.com

March 04, 2016

**Analytical Report for Service Request No:** K1601959

Amy Wolf ALS Fort Collins 225 Commerce Drive Fort Collins, CO 80524

RE: Brandeis-Bardin Campus / 103P4384

Dear Amy,

Enclosed are the results of the sample(s) submitted to our laboratory February 26, 2016 For your reference, these analyses have been assigned our service request number **K1601959**.

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3376. You may also contact me via email at gregory.salata@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Gregory Salata, Ph.D.

**Client Services** 

Manager



ALS Environmental ALS Group USA, Corp 1317 South 13th Avenue Kelso, WA 98626

T: +1 360 577 7222 F: +1 360 636 1068 www.alsglobal.com

### **Table of Contents**

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#### Acronyms

ASTM American Society for Testing and Materials

A2LA American Association for Laboratory Accreditation

CARB California Air Resources Board

CAS Number Chemical Abstract Service registry Number

CFC Chlorofluorocarbon
CFU Colony-Forming Unit

DEC Department of Environmental Conservation

DEQ Department of Environmental Quality

DHS Department of Health Services

DOE Department of Ecology
DOH Department of Health

EPA U. S. Environmental Protection Agency

ELAP Environmental Laboratory Accreditation Program

GC Gas Chromatography

GC/MS Gas Chromatography/Mass Spectrometry

LOD Limit of Detection
LOQ Limit of Quantitation

LUFT Leaking Underground Fuel Tank

M Modified

MCL Maximum Contaminant Level is the highest permissible concentration of a substance

allowed in drinking water as established by the USEPA.

MDL Method Detection Limit
MPN Most Probable Number
MRL Method Reporting Limit

NA Not Applicable
NC Not Calculated

NCASI National Council of the Paper Industry for Air and Stream Improvement

ND Not Detected

NIOSH National Institute for Occupational Safety and Health

PQL Practical Quantitation Limit

RCRA Resource Conservation and Recovery Act

SIM Selected Ion Monitoring

TPH Total Petroleum Hydrocarbons

tr Trace level is the concentration of an analyte that is less than the PQL but greater than or

equal to the MDL.

#### **Inorganic Data Qualifiers**

- \* The result is an outlier. See case narrative.
- # The control limit criteria is not applicable. See case narrative.
- B The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
- F. The result is an estimate amount because the value exceeded the instrument calibration range.
- J The result is an estimated value.
- U The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
  DOD-QSM 4.2 definition: Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
- i The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
- X See case narrative.
- Q See case narrative. One or more quality control criteria was outside the limits.
- H The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

#### **Metals Data Qualifiers**

- # The control limit criteria is not applicable. See case narrative.
- J The result is an estimated value.
- E The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
- M The duplicate injection precision was not met.
- N The Matrix Spike sample recovery is not within control limits. See case narrative.
- S The reported value was determined by the Method of Standard Additions (MSA).
- U The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. DOD-QSM 4.2 definition: Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
- W The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
- i The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
- X See case narrative.
- + The correlation coefficient for the MSA is less than 0.995.
- Q See case narrative. One or more quality control criteria was outside the limits.

#### **Organic Data Qualifiers**

- \* The result is an outlier. See case narrative.
- # The control limit criteria is not applicable. See case narrative.
- A A tentatively identified compound, a suspected aldol-condensation product.
- B The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
- C The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
- D The reported result is from a dilution.
- E The result is an estimated value.
- J The result is an estimated value.
- N The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
- P The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
- U The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
  DOD-QSM 4.2 definition: Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
- i The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
- X See case narrative.
- Q See case narrative. One or more quality control criteria was outside the limits.

#### **Additional Petroleum Hydrocarbon Specific Qualifiers**

- L The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
- H The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
- O The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
- Y The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
- Z The chromatographic fingerprint does not resemble a petroleum product.

### ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEC UST	http://dec.alaska.gov/applications/eh/ehllabreports/USTLabs.aspx	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L14-51
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	Not available	_
Idaho DHW	http://www.healthandwelfare.idaho.gov/Health/Labs/CertificationDrinkingWaterLabs/tabid/1833/Default.aspx	-
ISO 17025	http://www.pjlabs.com/	L14-50
Louisiana DEQ	http://www.deq.louisiana.gov/portal/DIVISIONS/PublicParticipationandPermitSupport/LouisianaLaboratoryAccreditationProgram.aspx	03016
Maine DHS	Not available	WA01276
Michigan DEQ	http://www.michigan.gov/deq/0,1607,7-135-3307_4131_4156,00.html	9949
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Montana DPHHS	http://www.dphhs.mt.gov/publichealth/	CERT0047
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/oqa/	WA005
North Carolina DWQ	http://www.dwqlab.org/	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/envserv/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wisconsin DNR	http://dnr.wi.gov/	998386840
Wyoming (EPA Region 8)	http://www.epa.gov/region8/water/dwhome/wyomingdi.html	_
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.

Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.



## **Chain of Custody**

ALS Environmental—Kelso Laboratory 1317 South 13th Avenue, Kelso, WA 98626 Phone (360)577-7222 Fax (360)636-1068 www.alsglobal.com



#### **ALS Environmental**

Chain-of-Custody

LABID 1/1601999

225 Commerce Drive, Fort Collins, Colorado 80524

TF: (800) 443-1511 w PH: (970) 490-1511 w FX: (970) 490-1522

DATE 2/25/2016 PAGE 1 of

PROJECT NAME	Brandeis-Bardin Campus	E-MAIL	amy.wolf@alsglobal.com		T	URNAF	sour	ND ON	RUSH-One Week		ek	ום	SPO	SAL	Ву	Lab	or	Ret	urn to	Clien	t			
PROJECT No.	103P4384	PHONE	970-490-1	511																				1
REPORT TO	Amy Wolf	FAX	970-490-1	522			<u></u> 4								}									
COMPANY	ALS Environmental						Method 314														. 1			ı
ADDRESS	225 Commerce Drive, Fort Collins,	Colorado 80524					Met																	
Lab ID	Field ID	Matrix	Sample Date	Sample Time	# Btis	QC	Perchlorate																	_
	TT-LR-RBRA-01	SOIL	02/16/2016	15:35			X								<u> </u>									
	TT-BP-RBRA-01	SOIL	02/18/2016	14:30			X																	
	TT-BP-DRAIN-01	SOIL	02/18/2016	15:30			Х																	
	TT-SEDBG1-01	SOIL	02/18/2016	16:55			х																	
	TT-SD1-01	SOIL	02/18/2016	11:30			х																	7
	TT-SD2-01	SOIL	02/18/2016	18:40			х																	7
	TT-ED1-01	SOIL	02/18/2016	17:30			х																	
	TT-ED2-01	SOIL	02/18/2016	17:40			х																	
	TT-ED3-01	SOIL	02/18/2016	18:25			Х																	
	TT-BBCSED-01	SOIL	02/18/2016	18:50			Х																	]
	TT-PPG-01	SOIL	02/18/2016	17:50			Х																	
	TT-CAB-01	SOIL	02/18/2016	19:30			х																	
	TT-GF-01	SOIL	02/16/2016	18:35			х																	
	TT-GF-02	SOIL	02/18/2016	18:35			х																	
	TT-OSF-01	SOIL	02/18/2016	19:00			Х																	]
	TT-BBF-01	SOIL	02/18/2016	18:05			х																	
	TT-BB1-01	SOIL	02/18/2016	17:55			Х																	
	TT-HC-01	SOIL	02/18/2016	18:10			х																	
	TT-GGP-01	SOIL	02/18/2016	18:10			Х																	
COMMENTS	ALS FC SDG 1602355																							1

COMMENTS ALS FC SDG 1602355

Standard level 2 report.

Excel spreadsheet EDD.

	SIGNATURE	PRINTED NAME	DATE	TIME	COMPANY
Relinquished By	<b>SA-</b> A	Swi Mally	07-25-2016	1605	AIS FC
Received By	3 0	Les Kennedy	2 26/16	(000	ALS
Relinquished By			· · · · · · · · · · · · · · · · · · ·		
Received By					



### Cooler Receipt and Preservation Form

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Client <u>ACS</u>	Fort Co	llins			Sei	vice Req	uest <i>K16</i>	$-\mathcal{O}\mathcal{I}$	459			
Received: 2	126/16	Opened:_	2/26/1	<u>6</u>	By: <i>Ц</i>		Unloaded	: <b>_</b> 2,	126/16	By:	Ш	
Samples wer	e received via?	Mail	Fed Ex	UPS	DHL	PDX	Courier	Han	d Delivered	d		
-	e received in: (c	circle)	Cooler)	Box	Envelope	Oti	her				NA	
3. Were custod	y seals on coole	ers?	NA (Y	N	If yes,	how man	y and whe	re?	1 front		***************************************	
If present, w	ere custody seal	ls intact?	Ŷ	N-	lfp	resent, we	ere they sig	gned and	dated?		$\bigcirc$	N
	ected, Raw	Corrected	Corr.	Thermon	neter Co	oler/COC	AND DESCRIPTION OF THE CONTINUE		Tracking	Number		ALA -
-0.8 -0.	r Temp   Temp Blant	K Temp Blank	Factor +0.2	363			(NA)	10154	1 4213	843		NA Filed
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				······································								
4. Packing mat	erial: Inserts	Raggies	Rubble Wri	(a) Cal P	acks We	Ice Dr	y Ice Si	eeves				
<del>-</del>	y papers proper				acks we	ne joi.	y ne si	eeves _		NA	G	N
	es arrive in good	•		•	in the table	below.				NA	$\tilde{\Diamond}$	N
	ple labels comp		•							NA	$\bigcirc$	N
	le labels and tag		-			liscrepan	cies in the	table on	page 2.	NA	$(\widetilde{Y})$	N
9. Were approp	oriate bottles/con	ntainers and	l volumes rec	eived for t	the tests ind	icated?				NA	$(\hat{Y})$	N
10. Were the pl	I-preserved bott	tles (see SM(	O GEN SOP) 1	eceived at	the approp	riate pH?	Indicate i	in the tal	ble below	NÀ	) Y	N
11. Were VOA	vials received v	without head	lspace? <i>Indi</i>	cate in the	table below	·.				(NA)	Y	N
12. Was C12/R	es negative?									(NA)	Y	N
											15 0 335 15 0 1 1 2 1	
Samp	le ID on Bottle		S	ample ID o	n COC				Identified by			
	***************************************		-		V.A.							
w statisticanife		Bottle	Count Ou	t of Head-			l v	/olume	Reagent L	ot .		1975546
San	nple ID			mp space	Broke pl	Rea		added	Numbe		nitials	Time
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Notes, Discrep	ancies, & Res	olutions:				Kliffs &					•	
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			-			*****						
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## **Total Solids**

ALS Environmental—Kelso Laboratory 1317 South 13th Avenue, Kelso, WA 98626 Phone (360)577-7222 Fax (360)636-1068 www.alsglobal.com

Analytical Report

Client: ALS Environmental - Fort Collins

**Project:** Brandeis-Bardin Campus/103P4384

Sample Matrix: Soil

**Analysis Method:** 160.3 Modified

**Prep Method:** None

**Service Request:** K1601959

**Date Collected:** 02/16/16 - 02/18/16

**Date Received:** 02/26/16

Units: PercentBasis: As Received

Solids, Total

Sample Name	Lab Code	Result	MRL	Dil.	Date Analyzed	Q
Sample Name	Lab Code	Result	WIKL	DII.	Analyzeu	Q
TT-LR-RBRA-01	K1601959-001	90.0	-	1	02/29/16 14:16	
TT-BP-RBRA-01	K1601959-002	82.9	-	1	02/29/16 14:16	
TT-BP-DRAIN-01	K1601959-003	71.2	-	1	02/29/16 14:16	
TT-SEDBG1-01	K1601959-004	93.0	-	1	02/29/16 14:16	
TT-SD1-01	K1601959-005	87.7	-	1	02/29/16 14:16	
TT-SD2-01	K1601959-006	93.1	-	1	02/29/16 14:16	
TT-ED1-01	K1601959-007	81.0	-	1	02/29/16 14:16	
TT-ED2-01	K1601959-008	91.4	-	1	02/29/16 14:16	
TT-ED3-01	K1601959-009	82.9	-	1	02/29/16 14:16	
TT-BBCSED-01	K1601959-010	96.0	-	1	02/29/16 14:16	
TT-PPG-01	K1601959-011	94.6	-	1	02/29/16 14:16	
TT-CAB-01	K1601959-012	87.4	-	1	02/29/16 14:16	
TT-GF-01	K1601959-013	81.0	-	1	02/29/16 14:16	
TT-GF-02	K1601959-014	84.3	-	1	02/29/16 14:16	
TT-OSF-01	K1601959-015	77.9	-	1	02/29/16 14:16	
TT-BBF-01	K1601959-016	92.6	-	1	02/29/16 14:16	
TT-BB1-01	K1601959-017	92.5	-	1	02/29/16 14:16	
TT-HC-01	K1601959-018	88.0	-	1	02/29/16 14:16	
TT-GGP-01	K1601959-019	95.0	-	1	02/29/16 14:16	

QA/QC Report

Service Request: K1601959

Client: ALS Environmental - Fort Collins

Project Brandeis-Bardin Campus/103P4384 **Date Collected:**02/16/16 - 02/18/16

Sample Matrix: Soil Date Received:02/26/16

Analysis Method: 160.3 Modified Units: Percent

Prep Method: None Basis: As Received

#### Replicate Sample Summary Inorganic Parameters

C I N	1101		Sample	Duplicate			RPD	Date
Sample Name:	Lab Code:	MRL	Result	Result	Average	RPD	Limit	Analyzed
TT-LR-RBRA-01	K1601959-001DUP	-	90.0	89.8	89.9	<1	20	02/29/16
TT-PPG-01	K1601959-011DUP	_	94.6	94.3	94.5	<1	20	02/29/16

Results flagged with an asterisk (\*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Printed 03/03/16 1:14:11 PM Superset Reference:16-0000366577 rev 00



## General Chemistry

ALS Environmental—Kelso Laboratory 1317 South 13th Avenue, Kelso, WA 98626 Phone (360)577-7222 Fax (360)636-1068 www.alsglobal.com

#### Analytical Report

Client: ALS Environmental - Fort Collins

**Project:** Brandeis-Bardin Campus/103P4384

Sample Matrix: Soil

**Analysis Method:** 314.0 **Prep Method:** ALS SOP

Service Request: K1601959

**Date Collected:** 02/16/16 - 02/18/16

**Date Received:** 02/26/16

Units: ug/Kg
Basis: Dry

#### Perchlorate

Sample Name	Lab Code	Result	MRL	Dil.	Date Analyzed	Date Extracted	Q
TT-LR-RBRA-01	K1601959-001	ND U	22	1	03/01/16 12:46	3/1/16	
TT-BP-RBRA-01	K1601959-002	ND U	20	1	03/01/16 12:58	3/1/16	
TT-BP-DRAIN-01	K1601959-003	ND U	27	1	03/01/16 13:11	3/1/16	
TT-SEDBG1-01	K1601959-004	ND U	22	1	03/01/16 13:23	3/1/16	
TT-SD1-01	K1601959-005	ND U	23	1	03/01/16 13:36	3/1/16	
TT-SD2-01	K1601959-006	ND U	21	1	03/01/16 13:48	3/1/16	
TT-ED1-01	K1601959-007	ND U	24	1	03/01/16 14:01	3/1/16	
TT-ED2-01	K1601959-008	ND U	20	1	03/01/16 14:13	3/1/16	
TT-ED3-01	K1601959-009	ND U	22	1	03/01/16 14:25	3/1/16	
TT-BBCSED-01	K1601959-010	ND U	20	1	03/01/16 14:38	3/1/16	
TT-PPG-01	K1601959-011	ND U	20	1	03/01/16 15:15	3/1/16	
TT-CAB-01	K1601959-012	ND U	21	1	03/01/16 15:28	3/1/16	
TT-GF-01	K1601959-013	ND U	22	1	03/01/16 15:40	3/1/16	
TT-GF-02	K1601959-014	ND U	20	1	03/01/16 15:52	3/1/16	
TT-OSF-01	K1601959-015	ND U	22	1	03/01/16 16:05	3/1/16	
TT-BBF-01	K1601959-016	ND U	21	1	03/01/16 16:17	3/1/16	
TT-BB1-01	K1601959-017	ND U	20	1	03/01/16 16:30	3/1/16	
TT-HC-01	K1601959-018	ND U	21	1	03/01/16 16:42	3/1/16	
TT-GGP-01	K1601959-019	ND U	20	1	03/01/16 16:54	3/1/16	
Method Blank	K1601959-MB	ND U	20	1	03/01/16 10:25	3/1/16	

QA/QC Report

Client:ALS Environmental - Fort CollinsService Request:K1601959Project:Brandeis-Bardin Campus/103P4384Date Analyzed:03/01/16Sample Matrix:SoilDate Extracted:03/01/16

**Duplicate Lab Control Sample Summary General Chemistry Parameters** 

Analysis Method:314.0Units:ug/KgPrep Method:ALS SOPBasis:Dry

**Analysis Lot:** 486458

Lab Control Sample K1601959-LCS

Duplicate Lab Control Sample K1601959-DLCS

% Rec **Analyte Name** Result **Spike Amount** % Rec Result **Spike Amount** % Rec Limits **RPD Limit RPD** Perchlorate 13.3 15 92 13.3 15 92 72-133 20 <1

# ATTACHMENT H PROUCL STATISTICAL ANALYSIS OUTPUT

ProUCL Output Results for Two-Sample Hypothesis Testing
BBC Main Camp Gamma Exposure Rate Measurements vs. Background Soil Gamma Exposure Rate Measurements

	A B C	D	E	F	G	Н	I	J	K	L		
1	t-Test	Sample 1 vs	s Sample 2 (	Comparison	for Uncenso	red Full Dat	a Sets with	out NDs				
2												
3	User Selected Options											
4	·	3/7/2016 10	:11:41 AM									
5		proucl.xls										
6	Full Precision	OFF										
7	Confidence Coefficient	95%										
8	Substantial Difference (S)	0.000										
9	Selected Null Hypothesis	Sample 1 M	lean <= Sam	ple 2 Mean (	Form 1)							
10	Alternative Hypothesis	Sample 1 M	lean > the Sa	ample 2 Mear	n							
11												
12												
	Sample 1 Data: BBC								-			
13	Sample 2 Data: LR RBRA BG											
14												
15												
16	Pow Statistics											
17		.av Jiausut	Sample 1					1				
18	Number of Valid Obs	24624										
19												
20	Number of Distinct Obs		18491	410								
21		Minimum	8.204	13.54								
22		Maximum	22.37	18.36								
23		Mean	14.33	15.79								
24		Median	14.28	15.8								
25		SD	1.559	0.877								
26	S	E of Mean	0.00993	0.0427								
27			1	1								
28	Sample 1 vs Sa	mple 2 Two	o-Sample t-T	est					-			
29												
	H0: Mean of Sample 1 - Mean of Sar	nple 2 <= 0										
31			t-Test	Critical								
	Method	DF	Value	t (0.05)	P-Value				+			
JZ	Pooled (Equal Variance)	25044	-19.131	1.645	1.000				-			
55	Welch-Satterthwaite (Unequal Varian	467.9	-33.227	1.648	1.000				+			
57	Pooled SD 1.550								+			
აა	Conclusion with Alpha = 0.050								+			
30	Student t (Pooled) Test: Do Not Reje	ect HO Conc	clude Sample	1 <= Sampl	e 2				+			
37	Welch-Satterthwaite Test: Do Not Re		•	•					1			
38	TTOIN-Oattorniwalte 165t. DO NOL No	Jour 110, CO	noidue Saili	,,, , , = Jaili	PIC Z				1			
39												
40	Maria de Armanda de Ar	'annalle - 1631	Janlan :									
41	l est of E	quality of V	ariances									
42			2.43	Т								
43	Variance of											
44	Variance of											
45												
46	Numerator DF Denomir			t Value	P-Value							
47	24623 42	<u></u>	3.1	163	0.000							
	Conclusion with Alpha = 0.05											
49	Two variances are not equal			-								
50												
						1	II.	1	<u>-</u>			

	Α	В	С	D	E	F	G	Н	l	J	K	L
1		Wild	coxon-Mann-\	Whitney San	nple 1 vs Sa	mple 2 Com	parison Test	for Uncenso	or Full Data	Sets without	NDs	
2												
3			ected Options									
4	Dat	te/Time of C	•	3/7/2016 10:	14:39 AM							
5				proucl.xls								
6				OFF								
7				95%								
8				0.000								
9	Se	Selected Null Hypothesis Sample 1 Mean/Median <= Sample 2 Mean/Med										
10	Alternative Hypothesis Sample 1 Mean/Median > Sample 2 Mean/Media											
11												
12												
13	Sample 1 Data: BBC											
14	Sample 2 Data: LR RBRA BG											
15												
16			F	Raw Statistic								
17					Sample 1	Sample 2						
18			er of Valid Obs		24624	422						
19	Number of Distinct O				18491	410						
20				Minimum	8.204	13.54						
21				Maximum	22.37	18.36						
22				Mean	14.33	15.79						
23				Median	14.28	15.8						
24				SD	1.559	0.877						
25			SE	E of Mean	0.00993	0.0427						
26												
27			Wilcoxon-Ma	nn-Whitney	(WMW) Tes	st						
28												
29	H0: Mean/N	Median of Sa	ample 1 <= M	ean/Median	of Sample 2	2						
30												
31			mple 1 Rank									
32		S	tandardized V		-21.04							
33				Mean (U)								
34				U) - Adj ties								
35	Ap	-	J-Stat Critical \		1.645							
36		P	-Value (Adjus	ted for Ties)	1							
37												
38												
39												
40	P-Value	>= alpha (0.	.05)									
41												
				·								_

	A B C	D	E	F	G	Н	I	J	K	L	
1	t-Test	Sample 1 vs	s Sample 2 (	Comparison	for Uncenso	red Full Dat	a Sets with	out NDs			
2											
3	User Selected Options										
4	'	3/7/2016 10	ı:18:13 AM								
5		proucl.xls									
6	Full Precision	OFF									
7	Confidence Coefficient	95%									
8	Substantial Difference (S)	0.000									
9	Selected Null Hypothesis	Sample 1 M	lean <= Sam	ple 2 Mean (	Form 1)						
10	Alternative Hypothesis	Sample 1 M	lean > the Sa	mple 2 Mea	n						
11											
12											
	Sample 1 Data: BBC										
	Sample 2 Date: PD DDDA PG										
14											
15											
16	Pour Statistics										
17			Sample 1					1	<del>                                     </del>		
18	Number of Valid Obs		24624	Sample 2 458							
19						1	<u> </u>				
20	Number of Distinct Obs		18491	457							
21		Minimum	8.204	13.07							
22		Maximum	22.37	21.88							
23		Mean	14.33	17.47							
24		Median	14.28	17.46							
25		SD	1.559 0.00993	1.492							
26	SI										
27				*							
28	Sample 1 vs Sa	mple 2 Two	o-Sample t-T	est							
29											
	H0: Mean of Sample 1 - Mean of Sar	nple 2 <= 0									
31			t-Test	Critical					1		
	Method	DF	Value	t (0.05)	P-Value						
	Pooled (Equal Variance)	25080	-42.669	1.645	1.000				+		
55	Welch-Satterthwaite (Unequal Varian	475.8	-44.526	1.648	1.000				+		
57	Pooled SD 1.558			1					1		
აა	Conclusion with Alpha = 0.050										
30	Student t (Pooled) Test: Do Not Reje	ct H0. Conc	lude Sample	1 <= Samnl	e 2				1		
37	Welch-Satterthwaite Test: Do Not Re			-					+		
38					.F.O _				1	<u> </u>	
39									1	<u> </u>	
40	Toot of E	quality of V	/arianoss						1		
41	T est of E	quality Of V	anances						1	<u> </u>	
42	M 6	Commis 4	2.43	T							
43	Variance of					1					
44	Variance of										
45											
46	Numerator DF Denomin			t Value	P-Value						
47	24623 45	7	1.0	092	0.199						
48	Conclusion with Alpha = 0.05										
49	Two variances appear to be equal				-						
50											
				-			*		- de la companya de l		

	Α	В	С	D	E	F	G	Н		J	K	L
1		Wild	coxon-Mann-\	Whitney San	nple 1 vs Sa	mple 2 Com	parison Test	for Uncenso	or Full Data	Sets without	NDs	
2												
3			ected Options									
4	Dat	te/Time of C	-	3/7/2016 11:	55:46 AM							
5				proucl.xls								
6				OFF								
7				95%								
8				0.000								
9	Se	elected Null	Hypothesis	ean/Median	Mean/Media	an (Form 1)						
10	Alternative Hypothesis Sample 1 Mean/Median > Sample 2 Mean/Media											
11												
12												
13	Sample 1 D	ata: BBC										
14	Sample 2 D	ata: BP RB	RA BG									
15												
16			F	Raw Statistic	S							
17					Sample 1	Sample 2						
18		Numbe	er of Valid Obs	ervations	24624	458						
19	Number of Distinct O			servations	18491	457						
20				Minimum	8.204	13.07						
21				Maximum	22.37	21.88						
22				Mean	14.33	17.47						
23				Median	14.28	17.46						
24				SD	1.559	1.492						
25			SE	E of Mean	0.00993	0.0697						
26												
27			Wilcoxon-Ma	nn-Whitney	(WMW) Tes	st						
28												
29	H0: Mean/N	ledian of Sa	ample 1 <= M	ean/Median	of Sample 2	2						
30												
31		Sa	mple 1 Rank	Sum W-Stat	3.040E+8							
32		S	tandardized V		-31.34							
33	_			Mean (U)								
34				U) - Adj ties	153536							
35	Ар	-	J-Stat Critical \		1.645							
36		Р	-Value (Adjus	ted for Ties)	1							
37												
38												
39												
40	P-Value	>= alpha (0.	.05)									
41												

ProUCL Output Results for Two-Sample Hypothesis Testing
Main Drainage Gamma Exposure Rate Measurements vs. Background Sediment Gamma Exposure Rate Measurements

	A B C	D	E	F	G	Н		J	K	L		
1	t-Test	Sample 1 vs	s Sample 2 (	Comparison	for Uncenso	red Full Dat	a Sets with	out NDs				
2												
3	User Selected Options											
4	·	3/7/2016 2:5	55:49 PM									
5		proucl.xls										
6	Full Precision	OFF										
7	Confidence Coefficient	95%										
8	Substantial Difference (S)	0.000										
9	Selected Null Hypothesis	Sample 1 M	lean <= Sam	ple 2 Mean (	Form 1)							
10	Alternative Hypothesis	Sample 1 M	lean > the Sa	mple 2 Mea	n							
11	-											
12												
	Sample 1 Data: Main Drainage											
	Sample 2 Data: EDBG											
14												
15												
16	Pay Statistics											
17	•		Sample 1									
18	Number of Valid Obs	servations	1681	Sample 2 3030								
19	Number of Distinct Obs											
20	Number of Distinct Obs	Minimum	1641 12.18	2888 15.98								
21												
22		Maximum	20.47	27.72								
23		Mean	17.22	21.49								
24		Median	17.3	21.45								
25	SD 1.207 1.447											
26	Si	E of Mean	0.0294	0.0263								
27				"								
28	Sample 1 vs Sa	mple 2 Two	o-Sample t-T	est								
29												
30	H0: Mean of Sample 1 - Mean of Sar	nple 2 <= 0										
31			t-Test	Critical								
	Method	DF	Value	t (0.05)	P-Value							
	Pooled (Equal Variance)	4709	-102.840	1.645	1.000							
	Welch-Satterthwaite (Unequal Varian	4011.4	-108.258	1.645	1.000							
<b>U</b> T	Pooled SD 1.366		I .	<u>I</u>	I .							
	Conclusion with Alpha = 0.050											
37	Student t (Pooled) Test: Do Not Reje	ct H0, Conc	lude Sample	e 1 <= Sampl	e 2							
	Welch-Satterthwaite Test: Do Not Re		•	-								
38		- , -			-							
39												
40	Test of F	quality of V	ariances									
41	1001011	q-=y 01 ¥										
42	Variance of	Sample 1	1 <i>1</i> 57									
43	Variance of Sample 1 1.457  Variance of Sample 2 2.092											
44	vandrice or	Janipie Z	2.032									
45	Numerator DF Denomir	otor DC	ГТ	t Value	D Value							
46		P-Value										
47	3029 16	RN	1.4	136	0.000							
48	Conclusion with Alpha = 0.05											
49	Two variances are not equal											
50												

	Α	В	С	D	E	F	G	Н	l	J	K	L
1		Wild	coxon-Mann-\	Whitney Sam	ple 1 vs Sa	mple 2 Com	parison Test	for Uncenso	or Full Data	Sets without	NDs	
2				1								
3			ected Options									
4	Dat	te/Time of C	-	3/7/2016 3:0	3:56 PM							
5				proucl.xls								
6				OFF								
7		Confidence		95%								
8				0.000								
9	Selected Null Hypothesis Sample 1 Mean/Median <= Sample 2 Mean/Medi											
10	Alternative Hypothesis Sample 1 Mean/Median > Sample 2 Mean/Media											
11												
12												
13	Sample 1 D		rainage									
14	Sample 2 D	ata: EDBG										
15												
16	Raw Statistics											
17					Sample 1	Sample 2						
18	Number of Valid C			servations	1681	3030						
19		Number of Distinct O			1641	2888						
20				Minimum	12.18	15.98						
21				Maximum	20.47	27.72						
22				Mean	17.22	21.49						
23				Median	17.3	21.45						
24				SD	1.207	1.447						
25			SE	E of Mean	0.0294	0.0263						
26												
27			Wilcoxon-Ma	nn-Whitney	(WMW) Te	st						
28												
	H0: Mean/N	dedian of Sa	ample 1 <= M	ean/Median	of Sample 2	2						
30												
31			mple 1 Rank									
32		S	tandardized V		-55.86							
33				Mean (U)								
34			· ·	(U) - Adj ties	44722							
35	Ар		-Stat Critical		1.645							
36		Р	-Value (Adjus	ted for Ties)	1							
37												
38												
39												
40	P-Value :	>= alpha (0.	.05)									
41												

	A B C	D	Е	F	G	Н	]	J	K	L	
1	t-Test	Sample 1 vs	s Sample 2 (	Comparison	for Uncenso	red Full Dat	ta Sets with	out NDs			
2											
3	User Selected Options										
4	•	3/7/2016 3:0	06:26 PM								
5		proucl.xls									
6	Full Precision	OFF									
7	Confidence Coefficient	95%									
8	Substantial Difference (S)	0.000									
9	Selected Null Hypothesis	Sample 1 M	ean <= Sam	ple 2 Mean (	Form 1)						
10	Alternative Hypothesis	Sample 1 M	ean > the Sa	ample 2 Mea	n						
11											
12											
13	Sample 1 Data: Main Drainage										
	Sample 2 Data: BP Drainage BG										
14											
15											
16	Pour Statistics										
17		.a. Jiansuc	Sample 1								
18	Number of Valid Obs	1681									
19											
20	Number of Distinct Obs										
21		Minimum	12.18	20.07							
22		Maximum	20.47	38.56							
23		Mean	17.22	28.9							
24		Median	17.3	28.75							
25		SD	1.207	4.626							
26	SI	E of Mean	0.0294	0.384							
27				1	1						
28	Sample 1 vs Sa	ample 2 Two	o-Sample t-T	est							
29											
30	H0: Mean of Sample 1 - Mean of Sar	nple 2 <= 0									
	•	•	t-Test	Critical							
31	Method	DF	Value	t (0.05)	P-Value						
32	Pooled (Equal Variance)	1824	-77.519	1.646	1.000						
33	Welch-Satterthwaite (Unequal Varian	145.7	-30.319	1.655	1.000						
34	Pooled SD 1.741	170.7	-50.513	1.000	1.000						
35							1				
36	Conclusion with Alpha = 0.050	ot LIO O	Jude C '	1 0- '	o 2		1				
37	Student t (Pooled) Test: Do Not Reje		-								
38	Welch-Satterthwaite Test: Do Not Re	eject HU, Co	nciude Samp	oie i <= Sam	ipie 2		1				
39							1				
40											
41	Test of E	quality of V	ariances								
42											
43	Variance of		1.457								
44	Variance of										
45			1	1	1						
46	Numerator DF Denomir	nator DF	F-Tes	t Value	P-Value		1				
47	144 16	80	14.	688	0.000						
48	Conclusion with Alpha = 0.05		<u> </u>		<u>l</u>		1				
	Two variances are not equal										
49											
50											

	Α	В	С	D	E	F	G	Н		J	K	L
1		Wild	coxon-Mann-\	Whitney Sam	iple 1 vs Sa	ample 2 Com	parison Test	for Uncenso	or Full Data	Sets without	NDs	
2												
3			ected Options									
4	Dat	te/Time of C	-	3/7/2016 3:0	8:22 PM							
5				proucl.xls								
6				OFF								
7				95%								
8				0.000								
9	Se	elected Null	Hypothesis	Sample 1 Me	ean/Median	<= Sample 2	Mean/Media	an (Form 1)				
10		Alternative	Hypothesis	Sample 1 Me	ean/Median	> Sample 2 I	Mean/Mediar	า				
11												
12												
13	Sample 1 D	ata: Main D	rainage									
14	Sample 2 D	ata: BP Dra	ainage BG									
15												
16			F	Raw Statistic	S							
17					Sample 1	Sample 2						
18		Numbe	er of Valid Obs	ervations	1681	145						
19		Number o	of Distinct Obs	ervations	1641	145						
20				Minimum	12.18	20.07						
21			I	Maximum	20.47	38.56						
22				Mean	17.22	28.9						
23				Median	17.3	28.75						
24				SD	1.207	4.626						
25			SE	of Mean	0.0294	0.384						
26							1					
27			Wilcoxon-Ma	nn-Whitney	(WMW) Te	st						
28												
29	H0: Mean/N	Median of Sa	ample 1 <= M	ean/Median	of Sample 2	2						
30												
31		Sa	mple 1 Rank	Sum W-Stat	1413726							
32		S	tandardized V		-20.01							
33				Mean (U)								
34			•	U) - Adj ties	6092							
35	Ар	Approximate U-Stat Critical Value (0.05) 1.645										
36		Р	-Value (Adjus	ted for Ties)	1							
37												
38	Conclusion	with Alpha	= 0.05									
39		-	onclude Sam	ple 1 <= San	nple 2							
40	P-Value	>= alpha (0.	.05)									
41												

ProJICL Quitnut Posults for Two Sample Hypothesis Tosting	
ProUCL Output Results for Two-Sample Hypothesis Testing  South Drainage Gamma Exposure Rate Measurements vs. Background Sediment  Gamma Exposure Rate Measurements	
Gamma Exposure Nate Weasurements	

	A B C	D	Е	F	G	Н		J	K	L
1	t-Test	Sample 1 vs	s Sample 2 (	Comparison	for Uncenso	red Full Dat	a Sets without	out NDs		
2										
3	User Selected Options									
4	·	3/7/2016 3:4	18:20 PM							
5	From File	proucl.xls								
6	Full Precision	OFF								
7	Confidence Coefficient	95%								
8	Substantial Difference (S)	0.000								
9	Selected Null Hypothesis	Sample 1 M	lean <= Sam	ple 2 Mean (	Form 1)					
10	Alternative Hypothesis	Sample 1 M	lean > the Sa	mple 2 Mea	n					
11										
12										
	Sample 1 Data: South Drainage									
13	Sample 2 Data: EDBG									
14									-	
15										
16		aw Statistic	es .						+	
17		.am JialisiiC	Sample 1	Sample 2					1	
18	Number of Valid Obs	nonuction -	4330	3030					<u> </u>	
19									1	
20	Number of Distinct Obs		4052	2888 15.98						
21		Minimum	13.32					1		
22		Maximum	22.01							
23		Mean	17.64							
24		Median	17.66							
25		SD	1.213	1.447						
26	S	E of Mean	0.0184	0.0263						
27										
28	Sample 1 vs Sa	ample 2 Two	o-Sample t-T	est						
29										
	H0: Mean of Sample 1 - Mean of Sar	nple 2 <= 0								
31			t-Test	Critical						
	Method	DF	Value	t (0.05)	P-Value				+	
JZ	Pooled (Equal Variance)	7358	-123.637	1.645	1.000					
55	Welch-Satterthwaite (Unequal Varian	5765.8	-119.884	1.645	1.000				-	
57	Pooled SD 1.314								+	
33	Conclusion with Alpha = 0.050								+	
30	Student t (Pooled) Test: Do Not Reje	ect HO Cond	lude Sample	1 <= Sampl	e 2				+	
37	Welch-Satterthwaite Test: Do Not Re		-						1	
38	VVOICH-Gatterthwaite 165t. DO NOU Re	Ject 110, C0	noiuue Saili	Jie i >= Sall	ihie c				<del> </del>	
39									<del> </del>	
40	Maria de Armanda de Ar	'annallen (C) (	laulan :							
41	Test of E	quality of V	ariances						1	
42									1	
43	Variance of	-	1.471							
44	Variance of	Sample 2	2.092							
45										
46	Numerator DF Denomir			t Value	P-Value					
47	3029 43.	29	1.4	123	0.000					
	Conclusion with Alpha = 0.05									
49	Two variances are not equal								1	
50									†	
55						<u>I</u>	1		_1	

	Α	В	С	D	E	F	G	Н		J	K	L
1		Wild	coxon-Mann-\	Whitney San	iple 1 vs Sa	imple 2 Com	parison Test	for Uncenso	or Full Data	Sets without	NDs	
2												
3			ected Options									
4	Dat	te/Time of C		3/7/2016 3:5	1:40 PM							
5			From File	proucl.xls								
6			III Precision	OFF								
7				95%								
8				0.000								
9	Se	elected Null	Hypothesis	Sample 1 M	ean/Median	<= Sample 2	Mean/Media	n (Form 1)				
10		Alternative	Hypothesis	Sample 1 Me	ean/Median	> Sample 2 I	Mean/Mediar	1				
11												
12												
13		ata: South										
14	Sample 2 D	ata: EDBG										
15												
16			F	Raw Statistic	S							
17					Sample 1	Sample 2						
18		Numbe	er of Valid Obs	servations	4330	3030						
19		Number o	of Distinct Obs	servations	4052	2888						
20				Minimum	13.32	15.98						
21				Maximum	22.01	27.72						
22				Mean	17.64	21.49						
23				Median	17.66	21.45						
24				SD	1.213	1.447						
25			SI	E of Mean	0.0184	0.0263						
26												
27			Wilcoxon-Ma	nn-Whitney	(WMW) Te	st						
28												
29	H0: Mean/N	ledian of Sa	ample 1 <= M	ean/Median	of Sample 2	2						
30												
31			mple 1 Rank									
32		S	tandardized V		-70.28							
33				Mean (U)								
34				U) - Adj ties	89710							
35	Approximate U-Stat Critical Value (0.05) 1.645											
36		Р	-Value (Adjus	ted for Ties)	1							
37												
38	Conclusion	=										
39		-	onclude Sam	ple 1 <= Sar	nple 2							
40	P-Value	>= alpha (0.	.05)									
41												

	A B C	D	E	F	G	Н		J	K	L
1	t-Test	Sample 1 vs	s Sample 2 (	Comparison	for Uncenso	red Full Dat	a Sets with	out NDs		
2										
3	User Selected Options									
4	'	3/7/2016 3:5	52:54 PM							
5		proucl.xls								
6		OFF								
7	Confidence Coefficient	95%								
8	Substantial Difference (S)	0.000								
9	Selected Null Hypothesis	Sample 1 M	lean <= Sam	ple 2 Mean (	Form 1)					
10	Alternative Hypothesis	Sample 1 M	lean > the Sa	mple 2 Mear	า					
11										
12										
	Sample 1 Data: South Drainage									
	Sample 2 Data: BP Drainage BG									
15										
16										
17	R	aw Statistic	 S							
18	-		Sample 1	Sample 2						
19	Number of Valid Obs	servations	4330	145						
	Number of Distinct Obs	servations	4052	145						
20		Minimum	13.32	20.07						
21		Maximum	22.01							
22		Mean	17.64							
23		Median	17.66							
24		SD	1.213	28.75 4.626						
25	91	E of Mean	0.0184	0.384						
26			0.0104	0.304						
27	Sample 1 vs Sa	manla O Turr	- Comple t T	'aat						
28	Sample i vs Sa	imple 2 1 wc	)-Sample t- I	est						
29										
30	H0: Mean of Sample 1 - Mean of Sar	nple 2 <= 0			T.					
31			t-Test	Critical						
JΖ	Method	DF	Value	t (0.05)	P-Value					
33	Pooled (Equal Variance)	4473	-91.742	1.645	1.000					
JT	Welch-Satterthwaite (Unequal Varian	144.7	-29.271	1.655	1.000					
აა	Pooled SD 1.453									
36	Conclusion with Alpha = 0.050									
37	Student t (Pooled) Test: Do Not Reje		-	-						
38	Welch-Satterthwaite Test: Do Not Re	eject H0, Co	nclude Samp	ole 1 <= Sam	ple 2					
39										
40				-	-					
41	Test of E	quality of V	ariances							
42										
43	Variance of	Sample 1	1.471							
44	Variance of	Sample 2	21.4							
45			1	1	1					
46	Numerator DF Denomin	nator DF	F-Tes	t Value	P-Value					
47	144 432	29	14.	546	0.000					
	Conclusion with Alpha = 0.05		1		1					
49	Two variances are not equal									
50	·									
JU						<u> </u>				

	Α	В	С	D	Е	F	G	Н		J	K	L
1		Wild	coxon-Mann-	Whitney San	nple 1 vs Sa	ample 2 Com	parison Test	for Uncenso	or Full Data	Sets without	NDs	
2				ı								
3			ected Options									
4	Dat	te/Time of C	•	3/7/2016 3:5	3:36 PM							
5				proucl.xls								
6			III Precision	OFF								
7		Confidence		95%								
8		Substantial		0.000								
9	Se	elected Null	Hypothesis	Sample 1 M	ean/Median	<= Sample 2	Mean/Media	n (Form 1)				
10		Alternative	Hypothesis	Sample 1 M	ean/Median	> Sample 2	Mean/Mediar	1				
11												
12												
13	Sample 1 D	ata: South I	Drainage									
14	Sample 2 D	ata: BP Dra	inage BG									
15												
16			F	Raw Statistic	S							
17					Sample 1	Sample 2						
18		Numbe	er of Valid Obs	servations	4330	145						
19		Number o	of Distinct Obs	servations	4052	145						
20				Minimum	13.32	20.07						
21				Maximum	22.01	38.56						
22				Mean	17.64	28.9						
23				Median	17.66	28.75						
24				SD	1.213	4.626						
25			SI	E of Mean	0.0184	0.384						
26						1	1					
27			Wilcoxon-Ma	nn-Whitney	(WMW) Te	st						
28												
29	H0: Mean/N	/ledian of Sa	ample 1 <= M	ean/Median	of Sample 2	2						
30												
31		Sa	mple 1 Rank	Sum W-Stat	9376753							
32		St	tandardized V	VMW U-Stat	-20.5							
33				Mean (U)	313925							
34			SD(	(U) - Adj ties	15303							
35	Ар	proximate U	-Stat Critical	Value (0.05)	1.645							
36		P.	-Value (Adjus	ted for Ties)	1							
37						- I	l .					
38	Conclusion	with Alpha	= 0.05									
39	Do Not R	Reject H0, Co	onclude Sam	ple 1 <= San	nple 2							
40	P-Value	>= alpha (0.	.05)									
41												

ProUCL Output Results for Two-Sample Hypothesis Testing
Eastern Drainage Gamma Exposure Rate Measurements vs. Background Sediment Gamma Exposure Rate Measurements

	A B C	D	Е	F	G	Н		J	K	L
1	t-Test	Sample 1 vs	s Sample 2 (	Comparison	for Uncenso	red Full Dat	ta Sets with	out NDs		
2										
3	User Selected Options									
4	·	3/7/2016 3:5	56:35 PM							
5		proucl.xls								
6		OFF								
7	Confidence Coefficient	95%								
8	Substantial Difference (S)	0.000								
9	Selected Null Hypothesis	Sample 1 M	ean <= Sam	ple 2 Mean (	Form 1)					
10	Alternative Hypothesis	Sample 1 M	ean > the Sa	ample 2 Mea	n					
11										
12										
13	Sample 1 Data: East Drainage									
14	Sample 2 Data: EDBG									
15										
16										
17	R	aw Statistic								
18			Sample 1	Sample 2						
19	Number of Valid Obs	servations	7684	3030						
20	Number of Distinct Obs	servations	7107	2888						
21		Minimum	11.05	15.98						
22		Maximum	25.47							
23		Mean	19.17							
24		Median	19.14							
25		SD	1.739	1.447						
26	S	E of Mean	0.0198	0.0263						
27			1		l					
28	Sample 1 vs Sa	mple 2 Two	-Sample t-T	est						
29										
30	H0: Mean of Sample 1 - Mean of Sar	nple 2 <= 0								
31			t-Test	Critical						
32	Method	DF	Value	t (0.05)	P-Value					
	Pooled (Equal Variance)	10712	-65.097	1.645	1.000					
	Welch-Satterthwaite (Unequal Varian	6619.5	-70.475	1.645	1.000					
	Pooled SD 1.662									
	Conclusion with Alpha = 0.050									
37	Student t (Pooled) Test: Do Not Reje		-	-						
38	Welch-Satterthwaite Test: Do Not Re	eject H0, Co	nclude Samp	ple 1 <= Sam	ple 2					
39										
40										
41	Test of E	quality of V	ariances							
42										
43	Variance of	•	3.026							
44	Variance of	Sample 2	2.092							
45			•							
46	Numerator DF Denomir		F-Tes	t Value	P-Value					
47	7683 30.	29	1.4	446	0.000					
	Conclusion with Alpha = 0.05		•							
49	Two variances are not equal									
50										

	Α	В	С	D	E	F	G	Н		J	K	L
1		Wild	coxon-Mann-\	Whitney San	iple 1 vs Sa	ample 2 Com	parison Test	for Uncenso	or Full Data	Sets without	NDs	
2												
3			ected Options									
4	Dat	te/Time of C	•	3/7/2016 3:5	7:49 PM							
5				proucl.xls								
6				OFF								
7				95%								
8				0.000								
9	Se	elected Null	Hypothesis	Sample 1 M	ean/Median	<= Sample 2	Mean/Media	an (Form 1)				
10		Alternative	Hypothesis	Sample 1 M	ean/Median	> Sample 2 I	Mean/Mediar	1				
11												
12												
13		oata: East D										
14	Sample 2 D	ata: EDBG										
15												
16			F	Raw Statistic								
17					Sample 1	Sample 2						
18		Numbe	er of Valid Obs	ervations	7684	3030						
19		Number o	of Distinct Obs	servations	7107	2888						
20				Minimum	11.05	15.98						
21				Maximum	25.47	27.72						
22				Mean	19.17	21.49						
23				Median	19.14	21.45						
24				SD	1.739	1.447						
25			SE	of Mean	0.0198	0.0263						
26												
27			Wilcoxon-Ma	nn-Whitney	(WMW) Te	st						
28												
29	H0: Mean/N	Median of Sa	ample 1 <= M	ean/Median	of Sample 2	2						
30												
31		Sa	mple 1 Rank	Sum W-Stat	33025461							
32		S	tandardized V		-56.47							
33				Mean (U)								
34			SD(	U) - Adj ties	144185							
35	Ар	proximate U	J-Stat Critical \	Value (0.05)	1.645							
36		P	-Value (Adjus	ted for Ties)	1							
37						•						
38	Conclusion	with Alpha	= 0.05									
39	Do Not R	Reject H0, C	onclude Sam	ple 1 <= Sar	nple 2							
40	P-Value	>= alpha (0.	.05)									
41												
	-											

	A B C	D	Е	F	G		Н			J	K	L
1	t-Test	Sample 1 vs	s Sample 2 (	Comparison	for Uncenso	red F	ull Dat	ta Sets v	withou	t NDs		
2												
3	User Selected Options											
4	·	3/7/2016 3:5	58:32 PM									
5	From File	proucl.xls										
6	Full Precision	OFF										
7	Confidence Coefficient	95%										
8	Substantial Difference (S)	0.000										
9	Selected Null Hypothesis	Sample 1 M	ean <= Sam	ple 2 Mean (	Form 1)							
10	Alternative Hypothesis	Sample 1 M	ean > the Sa	mple 2 Mea	n							
11												
12	Sample 1 Data: East Drainage											
13	Sample 2 Data: BP Drainage BG											
14	odinple 2 Sudi Si Sidinage Sa											
15											+	
16		Raw Statistic	•								1	
17	<b>r</b>	ww Statistic	Sample 1	Sample 2							1	
18	Number of Valid Ob	000/ctic	7684	145	1						1	
19												
20	Number of Distinct Ob		7107	145								
21		Minimum	11.05	20.07 38.56								
22		Maximum	25.47									
23		Mean	19.17									
24		Median	19.14	28.75								
25		SD	1.739	4.626								
26	S	E of Mean	0.0198	0.384								
27					1							
28	Sample 1 vs Sa	ample 2 Two	-Sample t-T	est								
29												
	H0: Mean of Sample 1 - Mean of Sa	mple 2 <= 0										
31			t-Test	Critical								
	Method	DF	Value	t (0.05)	P-Value							
	Pooled (Equal Variance)	7827	-63.288	1.645	1.000							
	Welch-Satterthwaite (Unequal Varian	144.8	-25.295	1.655	1.000						1	
	Pooled SD 1.834				1							
	Conclusion with Alpha = 0.050										+	
37	Student t (Pooled) Test: Do Not Reje	ect H0, Cond	lude Sample	1 <= Sampl	e 2						+	
38	Welch-Satterthwaite Test: Do Not R		•	•								
		·	<u>'</u>									
39											+	
40	Test of F	Equality of V	ariances								+	
41	. 331 01 1							+				
42	Variance of	Sample 1	3.026								+	
43	Variance of	•	21.4									
44	variance of	32pi0 2									1	
45	Numerator DF Denomin	nator DF	F-Tee	t Value	P-Value						1	
46		83		)72	0.000						1	
47	Conclusion with Alpha = 0.05		7.0	,, <u>c</u>	0.000							
40											1	
49	Two variances are not equal											
50												

	Α	В	С	D	Е	F	G	Н		J	K	L
1		Wild	coxon-Mann-\	Whitney San	nple 1 vs Sa	mple 2 Com	parison Test	for Uncenso	or Full Data	Sets without	NDs	
2				1								
3			ected Options									
4	Dat	te/Time of C	•	3/7/2016 3:5	9:20 PM							
5				proucl.xls								
6				OFF								
7		Confidence		95%								
8		Substantial		0.000								
9	Se	elected Null	Hypothesis	Sample 1 M	ean/Median	<= Sample 2	Mean/Media	n (Form 1)				
10		Alternative	Hypothesis	Sample 1 Me	ean/Median	> Sample 2 I	Mean/Mediar	1				
11												
12												
13		ata: East D										
14	Sample 2 D	ata: BP Dra	inage BG									
15												
16			F	Raw Statistic	S							
17					Sample 1	Sample 2						
18		Numbe	er of Valid Obs	servations	7684	145						
19		Number o	of Distinct Obs	servations	7107	145						
20				Minimum	11.05	20.07						
21				Maximum	25.47	38.56						
22				Mean	19.17	28.9						
23				Median	19.14	28.75						
24				SD	1.739	4.626						
25			SI	E of Mean	0.0198	0.384						
26						1						
27			Wilcoxon-Ma	nn-Whitney	(WMW) Te	st						
28												
29	H0: Mean/N	/ledian of Sa	ample 1 <= M	ean/Median	of Sample 2	2						
30												
31		Sa	mple 1 Rank	Sum W-Stat								
32		St	tandardized V	VMW U-Stat	-20.23							
33				Mean (U)	557090							
34			SD(	(U) - Adj ties	26963							
35	Ар	proximate U	-Stat Critical	Value (0.05)	1.645							
36		P.	-Value (Adjus	ted for Ties)	1							
37						1	t.					
	Conclusion	with Alpha	= 0.05									
39	Do Not R	Reject H0, Co	onclude Sam	ple 1 <= San	nple 2							
40	P-Value	>= alpha (0.	.05)									
41												
										ı		<u>.                                    </u>

# APPENDIX B RISK-BASED SCREENING LEVELS



Table A-1. DTSC-Recommended Screening Levels for Soil

					Toxicity Factors fo	or the DTSC-SL	s		Screening Levels for Res ence Concentration Cancer Endpoint Cancer Endpoint Noncancer					idential Soil (mg/kg	)					Screen	ning Levels for Commerci	ial/Industrial Soil (	mg/kg)		
	-	Oral S SFo	lope Factor	Inhalation IUR	Unit Risk		ce Dose - Oral	Reference Co RfC or REL	oncentration	Cancer I	Endpoint	Cancer E	ndpoint	Noncancer	Endpoint	Noncancer	Endpoint	Cancer E	Indpoint	Cancer E	ndpoint	Noncancer I	Endpoint	Noncancer	Endpoint
Analyte	CAS#	(mg/kg-d) <sup>-1</sup>	Source	(μg/m <sup>3</sup> ) <sup>-1</sup>	Source	RfDo (mg/kg-d)	Ref.	(μg/m <sup>3</sup> )	Source	USEPA RSL <sub>Combined</sub>	$DTSC\text{-}SL_{Combined}$	Final Value	Source	USEPA RSL <sub>Combined</sub>	$DTSC\text{-}SL_{Combined}$	Final Value	Source	USEPA RSL <sub>Combined</sub>	$DTSC\text{-}SL_{Combined}$	Final Value	Source	USEPA RSL <sub>Combined</sub>	$DTSC\text{-}SL_{Combined}$	Final Value	Source
USEPA RSL Analytes		( 8 8 7		4.6 /		( 0 0 )		4.0																	
Acrylamide	79-06-1	4.5E+00	ОЕННА	1.3E-03	OEHHA	2.0E-03	IRIS	6.0E+00	IRIS	2.4E-01	2.6E-02	2.6E-02	DTSC	1.3E+02	1.2E+02	1.3E+02	USEPA	4.6E+00	3.3E-01	3.3E-01	DTSC	1.6E+03	1.1E+03	1.6E+03	USEPA
Acrylonitrile Arsenic, Inorganic	107-13-1 7440-38-2	1.0E+00 9.5E+00	OEHHA OEHHA PHG	2.9E-04 3.3E-03	OEHHA OEHHA	4.0E-02 3.5E-06	ATSDR OEHHA	2.0E+00 1.5E-02	IRIS OEHHA	2.6E-01 6.8E-01	6.8E-02 6.7E-02	6.8E-02 6.7E-02	DTSC DTSC	1.6E+01 3.5E+01	4.0E+01 2.5E-01	1.6E+01 2.5F=01	USEPA DTSC	1.1E+00 3.0E+00	3.0E-01 2.5E-01	3.0E-01 2.5E-01	DTSC DTSC	6.8E+01 4.8E+02	1.7E+02 3.0E+00	6.8E+01 3.0E+00	USEPA DTSC
Benzaldehyde	100-52-7	7.5E100		3.3E-03		1.0E-01	IRIS	4.0E+02	Route	0.0L-01	0.7E-02	0.72-02		7.8E+03	4.3E+03	7.8E+03	USEPA	3.0E100	2.32-01			1.2E+05	3.0E+04	3.0E+04	DTSC
Benzene	71-43-2	1.0E-01	OEHHA	2.9E-05	OEHHA	4.0E-03	IRIS	3.0E+00	OEHHA	1.2E+00	3.3E-01	3.3E-01	DTSC	8.3E+01	1.1E+01	1.1E+01	DTSC	5.1E+00	1.4E+00	1.4E+00	DTSC	4.3E+02	4.7E+01	4.7E+01	DTSC
Benzenethiol	108-98-5	 5 0F : 02	OFILIA 	 1 4E 01		1.0E-03	PPRTV	4.0E+00	Route	5 2E 04	2.25.04	 5 2F 04	LICEDA	7.8E+01	4.0E+01	7.8E+01	USEPA	1.05.03	2.0F.02	2.0F.02	DTCC	1.2E+03	2.7E+02	2.7E+02	DTSC
Benzidine Beryllium and compounds	92-87-5 7440-41-7	5.0E+02	OEHHA	1.4E-01 2.4E-03	OEHHA IRIS	3.0E-03 2.0E-04	IRIS OEHHA PHG	7.0E-03	OEHHA	5.3E-04 1.6E+03	2.3E-04 1.6E+03	5.3E-04 1.6E+03	USEPA USEPA	1.9E+02 1.6E+02	1.8E+02 1.5E+01	1.9E+02 1.5E+01	USEPA DTSC	1.0E-02 6.9E+03	3.0E-03 6.9E+03	3.0E-03 6.9E+03	DTSC USEPA	2.5E+03 2.3E+03	1.6E+03 2.1E+02	2.5E+03 2.1E+02	USEPA DTSC
Bromodichloromethane	75-27-4	6.2E-02	IRIS	3.7E-05	OEHHA	2.0E-02	IRIS	8.0E+01	Route	3.0E-01	2.9E-01	3.0E-01	USEPA	1.6E+03	2.8E+02	2.8E+02	DTSC	1.3E+00	1.3E+00	1.3E+00	USEPA	2.3E+04	1.3E+03	1.3E+03	DTSC
Bromoform	75-25-2	7.9E-03	IRIS	1.1E-06	IRIS	2.0E-02	IRIS	8.0E+01	Route	2.0E+01	1.8E+01	2.0E+01	USEPA	1.6E+03	5.4E+02	1.6E+03	USEPA	8.7E+01	8.0E+01	8.7E+01	USEPA	2.3E+04	3.0E+03	3.0E+03	DTSC
Butadiene, 1,3- Butanol, N-	106-99-0 71-36-3	6.0E-01	ОЕННА	1.7E-04	OEHHA	1.0E-01	IRIS	2.0E+00 4.0E+02	IRIS Route	5.8E-02	1.4E-02	1.4E-02	DTSC	1.8E+00 7.8E+03	1.8E+00 4.8E+03	1.8E+00 7.8E+03	USEPA	2.6E-01	6.2E-02	6.2E-02	DTSC	7.7E+00 1.2E+05	7.7E+00 3.7E+04	7.7E+00 3.7E+04	USEPA DTSC
Butylbenzene, n-	104-51-8					5.0E-02	PPRTV	2.0E+02	Route					3.9E+03	1.2E+03	1.2E+03	DTSC					5.8E+04	6.4E+03	6.4E+03	DTSC
Butylbenzene, sec-	135-98-8					1.0E-01	Screening PPRTV	4.0E+02	Route					7.8E+03	2.2E+03	2.2E+03	DTSC					1.2E+05	1.2E+04	1.2E+04	DTSC
Butylbenzene, tert-	98-06-6					1.0E-01	Screening PPRTV	4.0E+02	Route	 2 IF. 02				7.8E+03	2.2E+03	2.2E+03	DTSC					1.2E+05	1.2E+04	1.2E+04	DTSC
Cadmium (Diet) Carbon Tetrachloride	7440-43-9 (diet) 56-23-5	1.5E-01	OEHHA	1.8E-03 4.2E-05	IRIS OEHHA	6.3E-06 4.0E-03	OEHHA PHG IRIS	1.0E-02 1.0E+02	ATSDR IRIS	2.1E+03 6.6E-01	9.1E+02 9.9E-02	2.1E+03 9.9E-02	USEPA DTSC	7.1E+01 1.0E+02	5.2E+00 5.2E+01	5.2E+00 1.0E+02	DTSC USEPA	9.3E+03 2.9E+00	4.0E+03 4.3E-01	9.3E+03 4.3E-01	USEPA DTSC	9.8E+02 5.8E+02	7.3E+00 2.5E+02	7.3E+00 5.8E+02	DTSC USEPA
Chlordane	12789-03-6	1.3E+00	OEHHA	3.4E-04	OEHHA	5.0E-04	IRIS	7.0E-01	IRIS	1.7E+00	4.3E-01	4.3E-01	DTSC	3.4E+01	3.2E+01	3.4E+01	USEPA	7.5E+00	1.5E+00	1.5E+00	DTSC	4.2E+02	3.2E+02	4.2E+02	USEPA
Chloro-2-methylaniline, 4-	95-69-2	2.7E-01	OEHHA	7.7E-05	OEHHA	3.0E-03	Screening PPRTV	-	-	5.4E+00	1.9E+00	5.4E+00	USEPA	1.9E+02	1.8E+02	1.9E+02	USEPA	2.3E+01	5.5E+00	5.5E+00	DTSC	2.5E+03	1.6E+03	2.5E+03	USEPA
Chloroacetaldehyde, 2-	107-20-0	2.7E-01	Screening PPRTV	6.8E-05	Route					2.6E+00	5.4E-01	5.4E-01	DTSC					1.2E+01	2.4E+00	2.4E+00	DTSC				
Chlorobutane, 1-	109-69-3					4.0E-02	PPRTV	1.6E+02	Route					3.1E+03	2.7E+02	2.7E+02	DTSC					4.7E+04	1.2E+03	1.2E+03	DTSC
Chlorotoluene, o- Chlorotoluene, p-	95-49-8 106-43-4		-			2.0E-02 2.0E-02	IRIS Screening PPRTV	8.0E+01 8.0E+01	Route		-		-	1.6E+03 1.6E+03	4.8E+02 4.4E+02	4.8E+02 4.4E+02	DTSC DTSC			-	-	2.3E+04 2.3E+04	2.6E+03 2.3E+03	2.6E+03 2.3E+03	DTSC
Chromium(III), Insoluble Salts	16065-83-1					1.5E+00	IRIS							1.2E+05	3.6E+04	3.6E+04	DTSC			-		1.8E+06	1.7E+05	1.7E+05	DTSC
Crotonaldehyde, trans-	123-73-9	1.9E+00	HEAST	4.8E-04	Route	1.0E-03	PPRTV	4.0E+00	Route	3.7E-01	8.7E-02	8.7E-02	DTSC	7.8E+01	4.0E+01	7.8E+01	USEPA	1.7E+00	3.8E-01	3.8E-01	DTSC	1.2E+03	2.6E+02	2.6E+02	DTSC
Cyanides	460.10.5					1.05.02	Inte	4.05.00	D					7.00.01	4.50.00	4 FF - 00	DTCC					1.20.02	2.05 - 01	2.05.01	DTSC
~Cyanogen ~Cyanogen Bromide	460-19-5 506-68-3	-	-			1.0E-03 9.0E-02	IRIS IRIS	4.0E+00 3.6E+02	Route		-			7.8E+01 7.0E+03	4.5E+00 3.1E+02	4.5E+00 3.1E+02	DTSC			-		1.2E+03 1.1E+05	2.0E+01 1.3E+03	2.0E+01 1.3E+03	DTSC
~Cyanogen Bronide ~Cyanogen Chloride	506-77-4	-	-	-	-	5.0E-02	IRIS	2.0E+02	Route	-	-	_		3.9E+03	3.3E+02	3.1E+02 3.3E+02	DTSC	-	-	-		5.8E+04	1.5E+03	1.5E+03	DTSC
~Potassium Silver Cyanide	506-61-6					5.0E-03	IRIS							3.9E+02	2.3E+02	3.9E+02	USEPA					5.8E+03	1.5E+03	1.5E+03	DTSC
~Silver Cyanide	506-64-9	=	-	-		1.0E-01	IRIS		-	-	-	-		7.8E+03	4.5E+03	7.8E+03	USEPA	-	-	-	-	1.2E+05	2.9E+04	2.9E+04	DTSC
Dibromobenzene, 1,3-	108-36-1					4.0E-04 1.0E-02	screening PPRTV	1.6E+00 4.0E+01	Route					3.1E+01 7.8E+02	1.6E+01 4.3E+02	3.1E+01 7.8E+02	USEPA USEPA					4.7E+02 1.2E+04	1.1E+02 2.9E+03	1.1E+02 2.9E+03	DTSC
Dibromobenzene, 1,4- Dibromochloromethane	124-48-1	8.4E-02	IRIS	2.1E-05	Route	2.0E-02	IRIS IRIS	4.0E+01 8.0E+01	Route	8.3E+00	9.5E-01	9.5E-01	DTSC	1.6E+03	4.7E+02	4.7E+02	DTSC	3.9E+01	4.2E+00	4.2E+00	DTSC	2.3E+04	2.5E+03	2.5E+03	DTSC
Dibromoethane, 1,2-	106-93-4	2.0E+00	IRIS	6.0E-04	IRIS	9.0E-03	IRIS	8.0E-01	ОЕННА	3.7E-02	1.2E-01	3.7E-02	USEPA	7.4E+01	7.2E+00	7.2E+00	DTSC	1.6E-01	5.7E-01	1.6E-01	USEPA	3.3E+02	3.1E+01	3.1E+01	DTSC
Dichlorobenzidine, 3,3'-	91-94-1	1.2E+00	ОЕННА	3.4E-04	OEHHA		-			1.2E+00	4.4E-01	1.2E+00	USEPA					5.1E+00	1.2E+00	1.2E+00	DTSC	-			
Dichloroethane, 1,1-	75-34-3	5.7E-03	ОЕННА	1.6E-06	OEHHA	2.0E-01	PPRTV	8.0E+02	Route	3.6E+00	3.6E+00	3.6E+00	USEPA	1.6E+04	1.6E+03	1.6E+03	DTSC	1.6E+01	1.6E+01	1.6E+01	USEPA	2.3E+05	7.2E+03	7.2E+03	DTSC
Dichloroethylene, 1,2-cis- Dichloroethylene, 1,2-trans-	156-59-2		-			2.0E-03 2.0E-02	IRIS IRIS	8.0E+00 8.0E+01	Route	**	-			1.6E+02 1.6E+03	1.9E+01 1.3E+02	1.9E+01 1.3E+02	DTSC DTSC					2.3E+03 2.3E+04	8.6E+01 6.0E+02	8.6E+01 6.0E+02	DTSC DTSC
Dichloropropane, 1,3-	142-28-9					2.0E-02	PPRTV	8.0E+01	Route		-			1.6E+03	4.2E+02	4.2E+02	DTSC	-				2.3E+04	2.2E+03	2.2E+03	DTSC
Dichloropropene, 1,3-	542-75-6	9.1E-02	OEHHA	1.6E-05	OEHHA	3.0E-02	IRIS	2.0E+01	IRIS	1.9E+00	5.8E-01	5.8E-01	DTSC	7.3E+01	7.3E+01	7.3E+01	USEPA	8.3E+00	2.6E+00	2.6E+00	DTSC	3.1E+02	3.1E+02	3.1E+02	USEPA
Dimethylaniline, N,N-	121-69-7					2.0E-03	IRIS	8.0E+00	Route					1.6E+02	9.8E+01	1.6E+02	USEPA					2.3E+03	7.5E+02	7.5E+02	DTSC
Epichlorohydrin	106-89-8 75-00-3	8.0E-02 4.7E-03	OEHHA OEHHA NSRL	2.3E-05	OEHHA	6.0E-03	PPRTV	1.0E+00 1.0E+04	IRIS	2.7E+01	1.8E+00	1.8E+00 3.1E+00	DTSC DTSC	1.9E+01 1.4E+04	5.3E+01 4.1E+04	1.9E+01 1.4E+04	USEPA	1.2E+02	8.2E+00	8.2E+00 1.3E+01	DTSC	8.3E+01 5.7E+04	2.4E+02	8.3E+01 5.7E+04	USEPA USEPA
Ethyl Chloride (Chloroethane) Ethyl Ether	60-29-7	4./E-03	OERRA NSKL	1.2E-06	Route	2.0E-01	IRIS	8.0E+02	IRIS Route		3.1E+00	3.1E+00		1.4E+04 1.6E+04	2.3E+03	2.3E+03	DTSC		1.3E+01	1.3E+01	DTSC 	2.3E+05	1.7E+05 1.1E+04	1.1E+04	DTSC
Furans																									
~Furan	110-00-9					1.0E-03	IRIS	4.0E+00	Route					7.3E+01	9.6E+00	9.6E+00	DTSC					1.0E+03	4.4E+01	4.4E+01	DTSC
Hexachlorobutadiene Hexachlorocyclohexane, Technical	87-68-3 608-73-1	7.8E-02 4.0E+00	IRIS OEHHA	2.2E-05 1.1E-03	IRIS OEHHA	1.0E-03	PPRTV	4.0E+00	Route	1.2E+00 3.0E-01	1.2E+00 1.3E-01	1.2E+00 3.0E-01	USEPA	7.8E+01	2.9E+01	7.8E+01	USEPA	5.3E+00 1.3E+00	5.3E+00 3.7E-01	5.3E+00 3.7E-01	USEPA DTSC	1.2E+03	1.6E+02	1.6E+02	DTSC
Isobutyl Alcohol	78-83-1	4.0E+00	OLIIIA	1.1E-03	OLIIIA	3.0E-01	IRIS	1.2E+03	Route	3.012-01	1.3E-01	3.012-01	USEI A	2.3E+04	1.4E+04	2.3E+04	USEPA	1.5E+00	5.715-01	3.7E-01		3.5E+05	1.1E+05	1.1E+05	DTSC
Lead Compounds																						0.02.00			
~Lead subacetate	1335-32-6	3.8E-02	ОЕННА	1.1E-05	OEHHA					6.4E+01	1.4E+01	1.4E+01	DTSC					2.7E+02	3.9E+01	3.9E+01	DTSC				
~Tetraethyl Lead Lewisite	78-00-2 541-25-3					1.0E-07 5.0E-06	IRIS PPRTV	4.0E-04 2.0E-02	Route					7.8E-03 3.9E-01	7.3E-04 2.3E-01	7.3E-04 3.9E-01	DTSC USEPA					1.2E-01 5.8E+00	3.3E-03 1.6E+00	3.3E-03 1.6E+00	DTSC
Manganese (Non-diet)	7439-96-5 (non-diet)		-			2.4E-02	non-diet; IRIS	9.0E-02	OEHHA		-			1.8E+03	1.1E+03	1.8E+03	USEPA					2.6E+04	6.9E+03	6.9E+03	DTSC
Mercury Compounds																									
~Mercuric Chloride (and other Mercury salts)	7487-94-7		-			1.6E-04	OEHHA	3.0E-02	OEHHA					2.3E+01	8.8E+00	2.3E+01	USEPA					3.5E+02	6.9E+01	6.9E+01	DTSC
~Mercury (elemental)	7439-97-6 79-20-9					1.6E-04 1.0E+00	OEHHA	3.0E-02 4.0E+03	OEHHA					1.1E+01 7.8E+04	1.0E+00 2.4E+04	1.0E+00 2.4E+04	DTSC					4.6E+01 1.2E+06	4.5E+00 1.3E+05	4.5E+00 1.3E+05	DTSC
Methyl Acetate  Methylene Chloride	75-09-2	1.4E-02	OEHHA	1.0E-06	OEHHA	6.0E-03	Screening PPRTV IRIS	6.0E+02	Route	5.7E+01	1.9E+00	1.9E+00	DTSC	3.5E+02	3.1E+02	3.5E+02	USEPA	1.0E+03	2.4E+01	2.4E+01	DTSC	3.2E+03	2.5E+03	3.2E+03	USEPA
Methylene-bis(2-chloroaniline), 4,4'-	101-14-4	1.5E+00	ОЕННА	4.3E-04	OEHHA	2.0E-03	PPRTV			1.2E+00	7.8E-02	7.8E-02	DTSC	1.3E+02	1.2E+02	1.3E+02	USEPA	2.3E+01	9.9E-01	9.9E-01	DTSC	1.6E+03	1.1E+03	1.6E+03	USEPA
Methylstyrene, Alpha-	98-83-9					7.0E-02	HEAST	2.8E+02	Route					5.5E+03	2.2E+03	5.5E+03	USEPA					8.2E+04	1.3E+04	1.3E+04	DTSC
Mineral oils	8012-95-1 12054-48-7	-		2.6E-04	OEIIIIA	3.0E+00 1.1E-02	PPRTV	1.2E+04 1.4E-02	Route OEHHA	1.5E+04	1.5F : 04	1.50.04	USEPA	2.3E+05 8.2E+02	1.6E+04 4.9E+02	1.6E+04 8.2E+02	DTSC	6.4E+04	6.4E+04	6.4E+04	USEPA	3.5E+06 1.1E+04	7.2E+04	7.2E+04	DTSC
Nickel Hydroxide Nickel Oxide	1313-99-1	-		2.6E-04 2.6E-04	OEHHA OEHHA	1.1E-02 1.1E-02	OEHHA OEHHA	2.0E-02	ОЕННА	1.5E+04 1.5E+04	1.5E+04 1.5E+04	1.5E+04 1.5E+04	USEPA	8.4E+02	4.9E+02 4.9E+02	8.4E+02	USEPA USEPA	6.4E+04	6.4E+04 6.4E+04	6.4E+04 6.4E+04	USEPA	1.1E+04 1.2E+04	3.1E+03 3.1E+03	3.1E+03 3.1E+03	DTSC
Nickel Refinery Dust	Nickel refinery dust	9.1E-01	OEHHA	2.6E-04	OEHHA	1.1E-02	OEHHA	1.4E-02	OEHHA	1.6E+04	4.2E-01	4.2E-01	DTSC	8.2E+02	4.9E+02	8.2E+02	USEPA	6.9E+04	8.9E-01	8.9E-01	DTSC	1.1E+04	3.1E+03	3.1E+03	DTSC
Nickel Soluble Salts	7440-02-0	-		2.6E-04	ОЕННА	1.1E-02	ОЕННА	1.4E-02	ОЕННА	1.5E+04	1.5E+04	1.5E+04	USEPA	1.5E+03	4.9E+02	4.9E+02	DTSC	6.4E+04	6.4E+04	6.4E+04	USEPA	2.2E+04	3.1E+03	3.1E+03	DTSC
Nickel Subsulfide	12035-72-2 76-01-7	1.7E+00 9.0E-02	OEHHA PPRTV	4.9E-04	OEHHA	1.1E-02	ОЕННА	1.4E-02	ОЕННА	4.1E-01 7.7E+00	2.3E-01	4.1E-01	USEPA	8.2E+02	4.9E+02	8.2E+02	USEPA	1.9E+00 3.6E+01	4.8E-01	4.8E-01	DTSC	1.1E+04	3.1E+03	3.1E+03	DTSC
Pentachloroethane Phosphorus, White	7723-14-0	9.0E-02	PPRTV 	2.3E-05	Route	2.0E-05	IRIS	8.0E-02	Route	7./E+00	1.1E+00	1.1E+00	DTSC 	1.6E+00	4.3E-01	4.3E-01	DTSC	3.6E+01	4.6E+00	4.6E+00	DTSC	2.3E+01	2.2E+00	2.2E+00	DTSC
Phthalates	7,25-14-0					2.02-03	IND	0.0L-02	Noute					1.02100		1.52-01	2.50					2.32101	2.22100	2.22100	2.30
~Dimethylterephthalate	120-61-6		-			1.0E-01	IRIS	4.0E+02	Route					7.8E+03	4.2E+03	7.8E+03	USEPA					1.2E+05	2.9E+04	2.9E+04	DTSC
Silver	7440-22-4					5.0E-03	IRIS	1.07. 02		200.00	2.05.00	2.05.00	LICED :	3.9E+02	2.3E+02	3.9E+02	USEPA	0.07.00		 0 OF 00	TIOTE :	5.8E+03	1.5E+03	1.5E+03	DTSC
Tetrachloroethane, 1,1,1,2- Tetrachloroethane, 1,1,2,2-	630-20-6 79-34-5	2.6E-02 2.0E-01	IRIS IRIS	7.4E-06 5.8E-05	IRIS OEHHA	3.0E-02 2.0E-02	IRIS IRIS	1.2E+02 8.0E+01	Route Route	2.0E+00 6.1E-01	2.0E+00 5.8E-01	2.0E+00 6.1E-01	USEPA	2.3E+03 1.6E+03	5.5E+02 7.0E+02	5.5E+02 1.6E+03	DTSC USEPA	8.9E+00 2.7E+00	8.9E+00 2.6E+00	8.9E+00 2.7E+00	USEPA USEPA	3.5E+04 2.3E+04	2.8E+03 4.4E+03	2.8E+03 4.4E+03	DTSC
Tetrachloroethylene	127-18-4	5.4E-01	OEHHA PHG	5.9E-06	OEHHA	6.0E-03	IRIS	4.0E+01	IRIS	2.4E+01	6.0E-01	6.0E-01	DTSC	8.2E+01	7.0E+02 7.3E+01	8.2E+01	USEPA	1.0E+02	2.7E+00	2.7E+00 2.7E+00	DTSC	3.9E+02	3.5E+02	3.9E+02	USEPA
Toluene	108-88-3	-				8.0E-02	IRIS	3.0E+02	OEHHA			-	-	4.9E+03	1.1E+03	1.1E+03	DTSC					4.7E+04	5.4E+03	5.4E+03	DTSC
Tri-n-butyltin	688-73-3	-	-	-	-	3.0E-04	PPRTV	1.2E+00	Route	-	-	-		2.3E+01	3.6E+00	3.6E+00	DTSC	-	-	-		3.5E+02	1.7E+01	1.7E+01	DTSC
Trichlorobenzene, 1,2,3- Trichloroethane, 1,1,1-	87-61-6 71-55-6	-		-		8.0E-04 2.0E+00	Screening PPRTV IRIS	3.2E+00 1.0E+03	Route OEHHA		-	-		6.3E+01 8.2E+03	4.0E+01 1.7E+03	6.3E+01 1.7E+03	USEPA DTSC	-	-			9.3E+02 3.6E+04	3.1E+02 7.3E+03	3.1E+02 7.3E+03	DTSC DTSC
Trichlorofluoromethane	75-69-4	-				3.0E-01	IRIS	1.0E+03 1.2E+03	Route	-			-	2.3E+04	1.7E+03 1.2E+03	1.7E+03 1.2E+03	DTSC	-				3.5E+05	7.3E+03 5.4E+03	5.4E+03	DTSC
Trichlorophenol, 2,4,6-	88-06-2	7.0E-02	ОЕННА	2.0E-05	ОЕННА	1.0E-03	PPRTV			4.9E+01	7.5E+00	7.5E+00	DTSC	6.3E+01	6.1E+01	6.3E+01	USEPA	2.1E+02	2.1E+01	2.1E+01	DTSC	8.2E+02	5.3E+02	8.2E+02	USEPA
Trichloropropane, 1,1,2-	598-77-6					5.0E-03	IRIS	2.0E+01	Route					3.9E+02	1.8E+02	3.9E+02	USEPA					5.8E+03	1.1E+03	1.1E+03	DTSC
Trichloropropane, 1,2,3-	96-18-4	3.0E+01	IRIS	7.5E-03	Route	4.0E-03	IRIS	3.0E-01	IRIS	5.1E-03	1.5E-03	1.5E-03	DTSC	4.9E+00	4.9E+00	4.9E+00	USEPA	1.1E-01	2.1E-02	2.1E-02	DTSC	2.1E+01	2.1E+01	2.1E+01	USEPA
Trimethylpentene, 2,4,4-	108-67-8 25167-70-8	-	-			1.0E-02 1.0E-02	Screening PPRTV Screening PPRTV	4.0E+01 4.0E+01	Route			-	-	7.8E+02 7.8E+02	2.1E+02 4.0E+01	2.1E+02 4.0E+01	DTSC					1.2E+04 1.2E+04	1.1E+03 1.7E+02	1.1E+03 1.7E+02	DTSC
Trimethylpentene, 2,4,4- Vanadium and Compounds	7440-62-2	-	-	-	-	5.0E-03	RSL	4.0E+01 1.0E-01	ATSDR	-	-	-	-	7.8E+02 3.9E+02	4.0E+01 1.9E+02	4.0E+01 3.9E+02	USEPA	-	-	-		5.8E+03	1.7E+02 1.0E+03	1.7E+02 1.0E+03	DTSC
Vinyl Chloride	75-01-4	2.7E-01	ОЕННА	7.8E-05	OEHHA	3.0E-03	IRIS	1.0E+02	IRIS	5.9E-02	8.8E-03	8.8E-03	DTSC	7.0E+01	7.0E+01	7.0E+01	USEPA	1.7E+00	1.5E-01	1.5E-01	DTSC	3.8E+02	3.8E+02	3.8E+02	USEPA
Additional Analytes																									
Beryllium Sulfate	13510-49-1		-	8.6E-01	OEHHA	2.0E-04	OEHHA PHG	7.0E-03	ОЕННА	1.6E+03	4.4E+00	4.4E+00	DTSC	1.6E+02	1.5E+01	1.5E+01	DTSC	6.9E+03	1.9E+01	1.9E+01	DTSC	2.3E+03	2.1E+02	2.1E+02	DTSC
Dichlorobenzene, 1,3- Methylcyclohexane	541-73-1 108-87-2	-	-			3.0E-02	DTSC J&E	1.2E+02 6.0E+03	Route Cyclohexane	-	-	-		-	2.4E+02 5.5E+03	2.4E+02 5.5E+03	DTSC					-	1.1E+03 2.3E+04	1.1E+03 2.3E+04	DTSC
				-	-		-	0.0E+03	Сустопехапе	-	-			-	J.JE+03	J.JE+03	DISC	-					2.3E±04	2.J£†04	DISC

"--" = no value

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Table A-2a. Screening Levels for Residential Soil: Comparison of USEPA RSL and DTSC-SL Values

		USEPA RSL for Residential Soil (mg/kg)								DTSC-SL for Residential Soil (mg/kg)						
	Herna ner		r Endpoint	LICEDA POT	Heept per		ncer Endpoint	LICEDA POL	DTCC CT		Cancer Endpoint	DTCC CI	D/Dec et		ncancer Endpoint	DIEC CI
EPA RSL Analytes	USEPA RSL <sub>ing</sub>	USEPA RSL <sub>D</sub>	USEPA RSL <sub>inh</sub>	USEPA RSL <sub>Combined</sub>	USEPA RSL <sub>ing</sub>	USEPA RSL <sub>D</sub>	USEPA RSL <sub>inh</sub>	USEPA RSL <sub>Combined</sub>	DTSC-SL <sub>ing</sub>	DTSC-SL <sub>D</sub>	DTSC-SL <sub>inh</sub>	DTSC-SL <sub>Combined</sub>	DTSC-SL <sub>ing</sub>	DTSC-SL <sub>D</sub>	DTSC-SL <sub>inh</sub>	DTSC-SL <sub>Combined</sub>
Acrylamide	3.06E-01	1.19E+00	1.38E+04	2.44E-01	1.56E+02	6.59E+02	8.51E+06	1.26E+02	3.40E-02	1.12E-01	1.06E+03	2.61E-02	1.56E+02	5.39E+02	8.51E+06	1.21E+02
Acrylonitrile	1.29E+00		3.22E-01	2.57E-01	3.13E+03		1.63E+01	1.62E+01	6.95E-01		7.55E-02	6.81E-02	3.13E+03		4.06E+01	4.01E+01
Arsenic, Inorganic	7.72E-01	5.49E+00	8.88E+02	6.77E-01	3.91E+01	3.30E+02	2.13E+04	3.49E+01	7.32E-02	7.59E-01	1.16E+03	6.67E-02	2.74E-01	3.15E+00	2.13E+04	2.52E-01
Benzaldehyde					7.82E+03			7.82E+03					7.82E+03		9.51E+03	4.29E+03
Benzene Benzenethiol	1.26E+01		1.29E+00	1.17E+00	3.13E+02 7.82E+01		1.12E+02	8.26E+01 7.82E+01	6.95E+00		3.47E-01	3.31E-01	3.13E+02 7.82E+01		1.12E+01 8.21E+01	1.08E+01 4.00E+01
Benzidine	6.66E-04	2.59E-03	2.06E+01	5.30E-04	2.35E+02	9.89E+02		1.90E+02	3.06E-04	1.01E-03	9.85E+00	2.35E-04	2.35E+02	8.09E+02	6.21E+01	1.82E+02
Beryllium and compounds			1.59E+03	1.59E+03	1.56E+02		2.84E+04	1.56E+02			1.59E+03	1.59E+03	1.56E+01	5.39E+02	9.93E+03	1.52E+01
Bromodichloromethane	1.12E+01		3.05E-01	2.97E-01	1.56E+03			1.56E+03	5.35E+00		3.05E-01	2.89E-01	1.56E+03		3.35E+02	2.76E+02
Bromoform	8.80E+01		2.51E+01	1.95E+01	1.56E+03			1.56E+03	6.32E+01		2.51E+01	1.80E+01	1.56E+03		8.21E+02	5.38E+02
Butadiene, 1,3-	2.04E-01		8.18E-02	5.85E-02			1.82E+00	1.82E+00	1.16E+00		1.44E-02	1.43E-02			1.82E+00	1.82E+00
Butanol, N- Butylbenzene, n-					7.82E+03 3.91E+03			7.82E+03 3.91E+03				-	7.82E+03 3.91E+03		1.27E+04 1.72E+03	4.83E+03 1.20E+03
Butylbenzene, sec-					7.82E+03			7.82E+03					7.82E+03		3.11E+03	2.22E+03
Butylbenzene, tert-					7.82E+03			7.82E+03					7.82E+03		3.12E+03	2.23E+03
Cadmium (Diet)			2.12E+03	2.12E+03	7.82E+01	8.24E+02	1.42E+04	7.11E+01			9.09E+02	9.09E+02	5.26E+00	1.24E+03	1.42E+04	5.23E+00
Carbon Tetrachloride	9.93E+00		7.07E-01	6.60E-01	3.13E+02		1.58E+02	1.05E+02	4.63E+00		1.01E-01	9.89E-02	3.13E+02		6.31E+01	5.25E+01
Chlordane	1.99E+00	1.77E+01	2.57E+01	1.67E+00	3.91E+01	4.12E+02	6.68E+02	3.39E+01	5.35E-01	3.33E+00	7.55E+00	4.34E-01	3.91E+01	2.70E+02	6.68E+02	3.25E+01
Chloro-2-methylaniline, 4-	6.95E+00 2.57E+00	2.47E+01	4.96E+04	5.43E+00 2.57E+00	2.35E+02	9.89E+02		1.90E+02	2.57E+00 2.57E+00	8.01E+00	4.96E+04 6.84E-01	1.95E+00 5.41E-01	2.35E+02	8.09E+02		1.82E+02
Chloroacetaldehyde, 2- Chlorobutane, 1-	2.57E+00			2.57E+00	3.13E+03			3.13E+03	2.57E+00		0.84E-01	5.41E-01	3.13E+03		2.97E+02	2.71E+02
Chlorotoluene, o-	-				1.56E+03			1.56E+03					1.56E+03		6.87E+02	4.77E+02
Chlorotoluene, p-					1.56E+03			1.56E+03					1.56E+03		6.17E+02	4.42E+02
hromium(III), Insoluble Salts		-			1.17E+05			1.17E+05					1.17E+05	5.26E+04		3.63E+04
Protonaldehyde, trans-	3.66E-01			3.66E-01	7.82E+01			7.82E+01	3.66E-01		1.13E-01	8.65E-02	7.82E+01		8.00E+01	3.95E+01
yanides Cyanogen					7.82E+01	_		7.82E+01		_			7.82E+01		4.81E+00	4.53E+00
Cyanogen Bromide					7.04E+03			7.04E+03					7.04E+03		3.25E+02	4.53E+00 3.10E+02
Cyanogen Chloride	-				3.91E+03			3.91E+03		-		_	3.91E+03		3.66E+02	3.35E+02
Potassium Silver Cyanide	-				3.91E+02		-	3.91E+02	-			-	3.91E+02	5.39E+02	-	2.27E+02
Silver Cyanide					7.82E+03			7.82E+03		-		-	7.82E+03	1.08E+04		4.53E+03
ibromobenzene, 1,3-					3.13E+01			3.13E+01				-	3.13E+01		3.27E+01	1.60E+01
bibromobenzene, 1,4- bibromochloromethane	8.28E+00			8.28E+00	7.82E+02 1.56E+03			7.82E+02 1.56E+03	8.28E+00		1.08E+00	9.53E-01	7.82E+02 1.56E+03		9.31E+02 6.72E+02	4.25E+02 4.70E+02
ibromoethane, 1,2-	3.48E-01		4.10E-02	3.67E-02	7.04E+02		8.23E+01	7.37E+01	1.93E-01		3.47E-01	1.24E-01	7.04E+02		7.31E+00	7.24E+00
ichlorobenzidine, 3,3'-	1.54E+00	5.49E+00	1.12E+04	1.21E+00					5.79E-01	1.80E+00	1.12E+04	4.38E-01				
richloroethane, 1,1-	1.22E+02		3.71E+00	3.60E+00	1.56E+04			1.56E+04	1.22E+02		3.71E+00	3.60E+00	1.56E+04		1.76E+03	1.58E+03
ichloroethylene, 1,2-cis-					1.56E+02			1.56E+02					1.56E+02		2.11E+01	1.86E+01
ichloroethylene, 1,2-trans-					1.56E+03			1.56E+03					1.56E+03		1.48E+02	1.35E+02
ichloropropane, 1,3-	6.95E+00		2.53E+00	1.85E+00	1.56E+03 2.35E+03		7.52E+01	1.56E+03 7.28E+01	7.64E+00		6.32E-01	5.84E-01	1.56E+03 2.35E+03		5.72E+02 7.52E+01	4.19E+02 7.28E+01
ichloropropene, 1,3- imethylaniline, N,N-	0.95E+00		2.33E+00	1.83E+00	1.56E+02		7.32E+01	1.56E+02	7.04E+00		0.32E-01	J.04E-01	1.56E+02		2.64E+02	9.83E+01
pichlorohydrin	7.02E+01		4.48E+01	2.74E+01	4.69E+02		2.00E+01	1.92E+01	8.69E+00		2.34E+00	1.84E+00	4.69E+02		5.99E+01	5.31E+01
thyl Chloride (Chloroethane)							1.37E+04	1.37E+04	1.48E+02		3.13E+00	3.07E+00			4.10E+04	4.10E+04
thyl Ether					1.56E+04			1.56E+04					1.56E+04		2.64E+03	2.26E+03
Furans					7.025 .01	1.105.02		7 20F - 01					7.02F . 01	0.005.02	1.115.01	0.505.00
-Furan Hexachlorobutadiene	8.91E+00		1.40E+00	1.21E+00	7.82E+01 7.82E+01	1.10E+03		7.30E+01 7.82E+01	8.91E+00		1.40E+00	1.21E+00	7.82E+01 7.82E+01	8.99E+02	1.11E+01 4.56E+01	9.59E+00 2.88E+01
Hexachlorocyclohexane, Technical	3.86E-01	1.37E+00	7.48E+03	3.01E-01	7.02E+01			7.02E+01	1.74E-01	5.41E-01	3.47E+03	1.32E-01	7.02E+01		4.50E+01	2.00E+01
sobutyl Alcohol					2.35E+04			2.35E+04					2.35E+04		3.57E+04	1.42E+04
ead Compounds																
Lead subacetate	8.18E+01	2.91E+02	3.18E+05	6.38E+01					1.83E+01	5.69E+01	3.47E+05	1.38E+01				
Tetraethyl Lead					7.82E-03			7.82E-03					7.82E-03		8.06E-04	7.31E-04
ewisite Manganese (Non-diet)					3.91E-01 1.88E+03		7.09E+04	3.91E-01 1.83E+03					3.91E-01 1.88E+03	2.59E+03	5.40E-01 1.28E+05	2.27E-01 1.08E+03
Mercury Compounds					1.001.003		7.09ET04	1.03LT03					1.001.703	2.39LT03	1.20ET03	1.06E+03
Mercuric Chloride (and other Mercury salts)					2.35E+01		4.25E+05	2.35E+01					1.25E+01	3.02E+01	4.25E+04	8.85E+00
Mercury (elemental)							1.10E+01	1.10E+01					1.25E+01	4.32E+02	1.10E+00	1.01E+00
lethyl Acetate					7.82E+04			7.82E+04					7.82E+04		3.43E+04	2.39E+04
lethylene Chloride	7.66E+01	5.07E .00	2.25E+02	5.71E+01	4.69E+02	 ( 50E : 02	1.39E+03	3.51E+02	1.09E+01	2.205.01	2.25E+00	1.87E+00	4.69E+02	5 20E - 02	9.27E+02	3.12E+02
lethylene-bis(2-chloroaniline), 4,4'- lethylstyrene, Alpha-	1.53E+00	5.97E+00	3.21E+03	1.22E+00	1.56E+02 5.48E+03	6.59E+02		1.26E+02 5.48E+03	1.02E-01	3.36E-01	3.21E+03	7.83E-02	1.56E+02 5.48E+03	5.39E+02	3.79E+03	1.21E+02 2.24E+03
lineral oils					2.35E+05			2.35E+05		-			2.35E+05		3.79E+03 1.74E+04	2.24E+03 1.62E+04
lickel Hydroxide	-		1.47E+04	1.47E+04	8.60E+02		1.98E+04	8.25E+02		-	1.47E+04	1.47E+04	8.60E+02	1.19E+03	1.99E+04	4.87E+02
ickel Oxide	-		1.47E+04	1.47E+04	8.60E+02		2.84E+04	8.35E+02			1.47E+04	1.47E+04	8.60E+02	1.19E+03	2.84E+04	4.90E+02
ckel Refinery Dust			1.59E+04	1.59E+04	8.60E+02		1.98E+04	8.25E+02	7.64E-01	9.51E-01	1.47E+04	4.24E-01	8.60E+02	1.19E+03	1.99E+04	4.87E+02
ickel Soluble Salts	4.005.01		1.47E+04	1.47E+04	1.56E+03		1.28E+05	1.55E+03	4.00E.01	5 00E 01	1.47E+04	1.47E+04	8.60E+02	1.19E+03	1.99E+04	4.87E+02
ickel Subsulfide entachloroethane	4.09E-01 7.72E+00		7.95E+03	4.09E-01 7.72E+00	8.60E+02		1.98E+04	8.25E+02	4.09E-01 7.72E+00	5.09E-01	7.79E+03 1.22E+00	2.27E-01 1.05E+00	8.60E+02	1.19E+03	1.99E+04	4.87E+02
nosphorus, White	7.72E+00			7.72E+00	1.56E+00			1.56E+00	7.72E+00		1.22E+00	1.05E+00	1.56E+00		5.84E-01	4.25E-01
hthalates					102.00			2.2.22.00					102.00			
Dimethylterephthalate	-				7.82E+03			7.82E+03				-	7.82E+03		9.03E+03	4.19E+03
lver					3.91E+02			3.91E+02					3.91E+02	5.39E+02		2.27E+02
etrachloroethane, 1,1,1,2-	2.67E+01		2.18E+00	2.02E+00	2.35E+03		-	2.35E+03	2.67E+01		2.18E+00	2.02E+00	2.35E+03		7.20E+02	5.51E+02
etrachloroethane, 1,1,2,2- etrachloroethylene	3.48E+00 3.31E+02	-	7.42E-01 2.57E+01	6.11E-01 2.38E+01	1.56E+03 4.69E+02		9.92E+01	1.56E+03 8.19E+01	2.57E+00 1.29E+00		7.42E-01 1.13E+00	5.76E-01 6.02E-01	1.56E+03 4.69E+02		1.28E+03 8.68E+01	7.04E+02 7.33E+01
bluene	3.31E+02		2.5/E+01	2.38E+01	4.69E+02 6.26E+03		9.92E+01 2.27E+04	4.90E+03	1.29E+00		1.13E+00	6.02E-01	4.69E+02 6.26E+03		8.68E+01 1.36E+03	1.12E+03
ri-n-butyltin	-				2.35E+01		2.27E+04	2.35E+01					2.35E+01		4.26E+00	3.61E+00
richlorobenzene, 1,2,3-					6.26E+01			6.26E+01					6.26E+01		1.09E+02	3.98E+01
richloroethane, 1,1,1-	-				1.56E+05		8.70E+03	8.24E+03				-	1.56E+05		1.74E+03	1.72E+03
richlorofluoromethane					2.35E+04			2.35E+04			<del>-</del>		2.35E+04		1.31E+03	1.24E+03
richlorophenol, 2,4,6-	6.32E+01	2.25E+02	1.23E+06	4.93E+01	7.82E+01	3.30E+02		6.32E+01	9.93E+00	3.09E+01	1.91E+05	7.52E+00	7.82E+01	2.70E+02	2.105.02	6.06E+01
richloropropane, 1,1,2-	5 10E 03			5 10E 03	3.91E+02 3.13E+02		4 98E : 00	3.91E+02	5 10E 03		2 15E 03	1.51E.03	3.91E+02		3.18E+02 4.98E+00	1.75E+02 4.91E+00
richloropropane, 1,2,3- rimethylbenzene, 1,3,5-	5.10E-03			5.10E-03	3.13E+02 7.82E+02		4.98E+00	4.91E+00 7.82E+02	5.10E-03		2.15E-03	1.51E-03	3.13E+02 7.82E+02		4.98E+00 2.80E+02	4.91E+00 2.06E+02
					7.82E+02 7.82E+02			7.82E+02 7.82E+02				-	7.82E+02 7.82E+02		4.22E+01	4.00E+01
rimethylpentene. 2.4.4-					3.94E+02		1.42E+05	3.93E+02				_	3.94E+02	3.53E+02	1.42E+05	1.86E+02
rimethylpentene, 2,4,4- anadium and Compounds											9.13E-03	8.81E-03	2.35E+02	5.552.102	1.01E+02	7.05E+01
anadium and Compounds	9.40E-02		1.62E-01	5.95E-02	2.35E+02		1.01E+02	7.05E+01	2.51E-01		9.13E-03	8.81E-03	2.35E+02		1.01E+02	7.03E101
anadium and Compounds inyl Chloride tional Analytes	9.40E-02								2.51E-01							
anadium and Compounds inyl Chloride	9.40E-02		1.62E-01 1.59E+03	5.95E-02 1.59E+03	2.35E+02 1.56E+02		1.01E+02 2.84E+04	7.05E+01 1.56E+02	2.51E-01		4.44E+00	4.44E+00	1.56E+01 2.35E+03	5.39E+02	9.93E+03 2.73E+02	1.52E+01 2.44E+02

Table A-2b. Screening Levels for Commercial/Industrial Soil: Comparison of USEPA RSL and DTSC-SL Values

				USEPA RSL for Commercial/Industrial Soil (mg/kg)					_			DTSC-SL for Commercial/Industrial Soil (mg/kg)				
nalyte	USEPA RSLing		ancer Endpoint	USEPA RSL <sub>Combined</sub>	USEPA RSLing	Non USEPA RSL <sub>D</sub>	cancer Endpoint	USEPA RSL <sub>Combined</sub>	DTSC-SL <sub>ine</sub>	DTSC-SL <sub>D</sub>	ancer Endpoint DTSC-SL <sub>inh</sub>	DTSC-SL <sub>Combined</sub>	DTSC-SLi <sub>no</sub>	DTSC-SL <sub>D</sub>	DTSC-SL <sub>inh</sub>	Noncancer Endpoint
EPA RSL Analytes	USEPA RSLing	USEPA RSL <sub>D</sub>	USEPA RSL <sub>inh</sub>	USEPA RSL <sub>Combined</sub>	USEPA KSLing	USEPA RSL <sub>D</sub>	USEPA KSL <sub>inh</sub>	USEPA RSL <sub>Combined</sub>	D1SC-SLing	DISC-SL <sub>D</sub>	D1SC-SL <sub>inh</sub>	D1SC-SL <sub>Combined</sub>	D1SC-SLing	DISC-SL <sub>D</sub>	DISC-SL <sub>inh</sub>	DTSC-SL <sub>Combined</sub>
Acrylamide	6.54E+00	1.55E+01	1.67E+05	4.60E+00	2.34E+03	5.52E+03	3.57E+07	1.64E+03	7.27E-01	6.02E-01	1.28E+04	3.29E-01	2.34E+03	1.94E+03	3.57E+07	1.06E+03
Acrylonitrile	6.06E+00		1.41E+00	1.14E+00	4.67E+04	J.J2E+03	6.83E+01	6.82E+01	3.27E+00	0.02E-01	3.30E-01	2.99E-01	4.67E+04	1.94E+03	1.71E+02	1.70E+03
Arsenic, Inorganic	3.63E+00	1.72E+01	3.88E+03	3.00E+00	5.84E+02	2.76E+03	8.93E+04	4.79E+02	3.44E-01	9.51E-01	5.05E+03	2.53E-01	4.09E+00	1.13E+01	8.94E+04	3.00E+00
Benzaldehyde					1.17E+05			1.17E+05				-	1.17E+05		3.99E+04	2.98E+04
Benzene	5.95E+01		5.64E+00	5.15E+00	4.67E+03		4.71E+02	4.28E+02	3.27E+01		1.52E+00	1.45E+00	4.67E+03		4.71E+01	4.66E+01
Benzenethiol					1.17E+03			1.17E+03					1.17E+03		3.45E+02	2.66E+02
Benzidine	1.42E-02	3.36E-02	2.49E+02	9.99E-03	3.50E+03	8.28E+03		2.46E+03	6.54E-03	5.42E-03	1.19E+02	2.96E-03	3.50E+03	2.90E+03		1.59E+03
Beryllium and compounds			6.95E+03	6.95E+03	2.34E+03		1.19E+05	2.29E+03			6.95E+03	6.95E+03	2.34E+02	1.94E+03	4.17E+04	2.07E+02
Bromodichloromethane	5.27E+01		1.33E+00	1.30E+00	2.34E+04			2.34E+04	2.52E+01		1.33E+00	1.27E+00	2.34E+04		1.41E+03	1.33E+03
Bromoform	4.14E+02		1.10E+02	8.67E+01	2.34E+04			2.34E+04	2.97E+02		1.10E+02	8.01E+01	2.34E+04		3.45E+03	3.00E+03
Butadiene, 1,3-	9.62E-01		3.58E-01	2.61E-01	1.150.05		7.66E+00	7.66E+00	5.45E+00		6.31E-02	6.24E-02	1.170.05		7.66E+00	7.66E+00
Butanol, N- Butylbenzene, n-					1.17E+05 5.84E+04			1.17E+05 5.84E+04					1.17E+05 5.84E+04		5.32E+04 7.23E+03	3.65E+04 6.44E+03
Butylbenzene, sec-					1.17E+05			1.17E+05					1.17E+05		1.31E+04	1.17E+04
Butylbenzene, tert-					1.17E+05			1.17E+05					1.17E+05		1.31E+04	1.18E+04
Cadmium (Diet)			9.26E+03	9.26E+03	1.17E+03	6.90E+03	5.95E+04	9.82E+02			3.97E+03	3.97E+03	7.36E+00	6.10E+02	5.96E+04	7.27E+00
Carbon Tetrachloride	4.67E+01		3.09E+00	2.90E+00	4.67E+03		6.62E+02	5.80E+02	2.18E+01		4.41E-01	4.33E-01	4.67E+03		2.65E+02	2.51E+02
Chlordane	9.34E+00	5.52E+01	1.12E+02	7.46E+00	5.84E+02	3.45E+03	2.80E+03	4.24E+02	2.52E+00	4.17E+00	3.30E+01	1.50E+00	5.84E+02	9.68E+02	2.80E+03	3.22E+02
Chloro-2-methylaniline, 4-	3.27E+01	7.73E+01	2.17E+05	2.30E+01	3.50E+03	8.28E+03		2.46E+03	1.21E+01	1.00E+01	2.17E+05	5.49E+00	3.50E+03	2.90E+03		1.59E+03
Chloroacetaldehyde, 2-	1.21E+01		-	1.21E+01	-	-		-	1.21E+01		2.99E+00	2.40E+00				
Chlorobutane, 1-					4.67E+04			4.67E+04					4.67E+04		1.25E+03	1.21E+03
Chlorotoluene, o-					2.34E+04			2.34E+04					2.34E+04		2.89E+03	2.57E+03
Chlorotoluene, p-					2.34E+04			2.34E+04			-		2.34E+04		2.59E+03	2.33E+03
Chromium(III), Insoluble Salts					1.75E+06			1.75E+06					1.75E+06	1.89E+05		1.70E+05
Crotonaldehyde, trans-	1.72E+00			1.72E+00	1.17E+03			1.17E+03	1.72E+00		4.95E-01	3.85E-01	1.17E+03		3.36E+02	2.61E+02
Cyanides					1 17E - 02			1.17E+02					1 170 - 02		2.025+01	1.000,01
-Cyanogen Bromide					1.17E+03 1.05E+05			1.17E+03 1.05E+05					1.17E+03 1.05E+05		2.02E+01 1.36E+03	1.98E+01 1.35E+03
-Cyanogen Bromide -Cyanogen Chloride					1.05E+05 5.84E+04			1.05E+05 5.84E+04					5.84E+04		1.56E+03 1.54E+03	1.55E+03 1.50E+03
-Potassium Silver Cyanide					5.84E+04 5.84E+03			5.84E+04 5.84E+03					5.84E+04 5.84E+03	1.94E+03	1.54E+05	1.45E+03
-Silver Cyanide					1.17E+05			1.17E+05					1.17E+05	3.87E+04		2.91E+04
Dibromobenzene, 1,3-					4.67E+02	_		4.67E+02		_	-		4.67E+02	3.07E104	1.37E+02	1.06E+02
Dibromobenzene, 1,4-					1.17E+04			1.17E+04					1.17E+04		3.91E+03	2.93E+03
Dibromochloromethane	3.89E+01			3.89E+01	2.34E+04			2.34E+04	3.89E+01		4.71E+00	4.20E+00	2.34E+04		2.82E+03	2.52E+03
Dibromoethane, 1,2-	1.64E+00		1.79E-01	1.61E-01	1.05E+04		3.46E+02	3.35E+02	9.08E-01		1.51E+00	5.68E-01	1.05E+04		3.07E+01	3.06E+01
Dichlorobenzidine, 3,3'-	7.27E+00	1.72E+01	4.90E+04	5.11E+00					2.73E+00	2.26E+00	4.91E+04	1.24E+00				
Dichloroethane, 1,1-	5.74E+02		1.62E+01	1.57E+01	2.34E+05			2.34E+05	5.74E+02		1.62E+01	1.57E+01	2.34E+05		7.40E+03	7.17E+03
Dichloroethylene, 1,2-cis-					2.34E+03			2.34E+03					2.34E+03		8.88E+01	8.55E+01
Dichloroethylene, 1,2-trans-					2.34E+04			2.34E+04					2.34E+04		6.20E+02	6.04E+02
Dichloropropane, 1,3-					2.34E+04			2.34E+04					2.34E+04		2.40E+03	2.18E+03
Dichloropropene, 1,3-	3.27E+01		1.11E+01	8.26E+00	3.50E+04		3.16E+02	3.13E+02	3.59E+01		2.76E+00	2.57E+00	3.50E+04		3.16E+02	3.13E+02
Dimethylaniline, N,N-	3.30E+02		 1.96E+02	1.23E+02	2.34E+03 7.01E+03		8.39E+01	2.34E+03 8.29E+01	4.09E+01		1.02E+01	8.17E+00	2.34E+03 7.01E+03		1.11E+03 2.52E+02	7.53E+02 2.43E+02
Epichlorohydrin Ethyl Chloride (Chloroethane)	5.50E+02		1.96E+02	1.23E+02	7.01E+05		5.74E+04	5.74E+04	6.96E+02		1.02E+01 1.37E+01	8.17E+00 1.34E+01	7.01E+03		1.72E+05	2.43E+02 1.72E+05
Ethyl Ether					2.34E+05		3.74E+04	2.34E+05	0.90E+02		1.57E+01	1.54E+01	2.34E+05		1.11E+04	1.06E+04
Furans				-	2.542105			2.542105					2.542105		1.1112104	1.00E104
-Furan					1.17E+03	9.20E+03		1.04E+03					1.17E+03	3.23E+03	4.65E+01	4.41E+01
Hexachlorobutadiene	4.19E+01		6.10E+00	5.32E+00	1.17E+03	-		1.17E+03	4.19E+01		6.10E+00	5.32E+00	1.17E+03		1.92E+02	1.65E+02
Hexachlorocyclohexane, Technical	1.82E+00	4.29E+00	3.27E+04	1.28E+00					8.18E-01	6.78E-01	1.52E+04	3.71E-01				
Isobutyl Alcohol					3.50E+05			3.50E+05					3.50E+05		1.50E+05	1.05E+05
Lead Compounds																
~Lead subacetate	3.85E+02	9.09E+02	1.39E+06	2.70E+02					8.61E+01	7.13E+01	1.52E+06	3.90E+01				
-Tetraethyl Lead				-	1.17E-01			1.17E-01					1.17E-01		3.39E-03	3.29E-03
Lewisite					5.84E+00		2.000.05	5.84E+00					5.84E+00	9.29E+03	2.27E+00	1.63E+00
Manganese (Non-diet)					2.80E+04	-	2.98E+05	2.56E+04				-	2.80E+04	9.29E+03	5.36E+05	6.89E+03
Mercury Compounds  ~Mercuric Chloride (and other Mercury salts)					3.50E+02		1.79E+06	3.50E+02					1.87E+02	1.08E+02	1.79E+05	6.86E+01
-Mercury (elemental)					3.30E+02		4.62E+01	4.62E+01					1.87E+02	1.55E+03	4.62E+00	4.50E+00
Methyl Acetate					1.17E+06		4.02E101	1.17E+06					1.17E+06	1.55E105	1.44E+05	1.28E+05
Methylene Chloride	1.64E+03		2.72E+03	1.02E+03	7.01E+03	_	5.84E+03	3.18E+03	2.34E+02	-	2.72E+01	2.44E+01	7.01E+03		3.89E+03	2.50E+03
Methylene-bis(2-chloroaniline), 4,4'-	3.27E+01	7.73E+01	3.88E+04	2.30E+01	2.34E+03	5.52E+03		1.64E+03	2.18E+00	1.81E+00	3.88E+04	9.88E-01	2.34E+03	1.94E+03	J.67E103	1.06E+03
Methylstyrene, Alpha-					8.18E+04	-		8.18E+04					8.18E+04		1.59E+04	1.33E+04
Mineral oils	_				3.50E+06	_		3.50E+06		_			3.50E+06	_	7.32E+04	7.17E+04
Nickel Hydroxide			6.41E+04	6.41E+04	1.28E+04		8.34E+04	1.11E+04			6.42E+04	6.42E+04	1.28E+04	4.26E+03	8.34E+04	3.08E+03
lickel Oxide			6.41E+04	6.41E+04	1.28E+04		1.19E+05	1.16E+04			6.42E+04	6.42E+04	1.28E+04	4.26E+03	1.19E+05	3.12E+03
lickel Refinery Dust			6.95E+04	6.95E+04	1.28E+04		8.34E+04	1.11E+04	3.59E+00	1.19E+00	6.42E+04	8.95E-01	1.28E+04	4.26E+03	8.34E+04	3.08E+03
Vickel Soluble Salts	1.025.00		6.41E+04	6.41E+04	2.34E+04		5.36E+05	2.24E+04	1.025 .00		6.42E+04	6.42E+04	1.28E+04	4.26E+03	8.34E+04	3.08E+03
Vickel Subsulfide	1.92E+00		3.47E+04	1.92E+00	1.28E+04		8.34E+04	1.11E+04	1.92E+00	6.38E-01	3.40E+04	4.79E-01	1.28E+04	4.26E+03	8.34E+04	3.08E+03
Pentachloroethane Phosphorus, White	3.63E+01			3.63E+01	2.34E+01	-		2.34E+01	3.63E+01		5.33E+00	4.65E+00	2.34E+01		2.45E+00	2.22E+00
Phthalates					2.34E+U1			2.34E±01					2.34E±01		2.43E+00	2.22E+00
-Dimethylterephthalate					1.17E+05			1.17E+05					1.17E+05		3.79E+04	2.86E+04
ilver					5.84E+03			5.84E+03					5.84E+03	1.94E+03	3.79E+04	1.45E+03
Tetrachloroethane, 1,1,1,2-	1.26E+02		9.54E+00	8.87E+00	3.50E+04			3.50E+04	1.26E+02		9.54E+00	8.87E+00	3.50E+04	1.94E+03	3.02E+03	2.78E+03
etrachloroethane, 1,1,2,2-	1.64E+01		3.24E+00	2.70E+00	2.34E+04			2.34E+04	1.21E+01		3.24E+00	2.56E+00	2.34E+04		5.37E+03	4.37E+03
etrachloroethylene	1.56E+03		1.12E+02	1.05E+02	7.01E+03		4.17E+02	3.93E+02	6.06E+00		4.94E+00	2.72E+00	7.01E+03		3.65E+02	3.47E+02
oluene	-				9.34E+04		9.52E+04	4.72E+04	-				9.34E+04		5.71E+03	5.38E+03
ri-n-butyltin				-	3.50E+02			3.50E+02				-	3.50E+02		1.79E+01	1.70E+01
richlorobenzene, 1,2,3-					9.34E+02	_		9.34E+02		_			9.34E+02		4.58E+02	3.07E+02
richloroethane, 1,1,1-					2.34E+06		3.66E+04	3.60E+04					2.34E+06		7.31E+03	7.29E+03
richlorofluoromethane					3.50E+05			3.50E+05					3.50E+05		5.50E+03	5.41E+03
richlorophenol, 2,4,6-	2.97E+02	7.02E+02	5.38E+06	2.09E+02	1.17E+03	2.76E+03		8.21E+02	4.67E+01	3.87E+01	8.34E+05	2.12E+01	1.17E+03	9.68E+02		5.29E+02
richloropropane, 1,1,2-					5.84E+03	-		5.84E+03		-			5.84E+03		1.34E+03	1.09E+03
richloropropane, 1,2,3-	1.09E-01			1.09E-01	4.67E+03		2.09E+01	2.08E+01	1.09E-01		2.60E-02	2.10E-02	4.67E+03		2.09E+01	2.08E+01
rimethylbenzene, 1,3,5-	-	-			1.17E+04	-		1.17E+04		-	-		1.17E+04		1.17E+03	1.07E+03
rimethylpentene, 2,4,4-					1.17E+04			1.17E+04					1.17E+04		1.77E+02	1.75E+02
/anadium and Compounds					5.89E+03		5.95E+05	5.83E+03					5.89E+03	1.27E+03	5.96E+05	1.04E+03
/inyl Chloride	4.54E+00		2.69E+00	1.69E+00	3.50E+03		4.23E+02	3.78E+02	1.21E+01		1.52E-01	1.50E-01	3.50E+03		4.23E+02	3.78E+02
itional Analytes			40en	4.04D			4.400	4.405			4.047	1.047		4.04=		
Beryllium Sulfate			6.95E+03	6.95E+03	2.34E+03		1.19E+05	2.29E+03			1.94E+01	1.94E+01	2.34E+02	1.94E+03	4.17E+04	2.07E+02
ichlorobenzene, 1,3-													3.50E+04		1.14E+03	1.11E+03
Methylcyclohexane															2.33E+04	2.33E+04

Table A-3a. USEPA RSLs and DTSC-SLs for a Residential Receptor Exposed to Soil via Incidental Ingestion

DTSC Value

Units

Equations

Variable USEPA Value

Definition

Accylonation	Age-dependent Adjustment Factor, 0-2	ADAF <sub>0-2</sub>	10	10	yrs	Carcinogens:						
Margine   Marg	Age-dependent Adjustment Factor, 2-6	$ADAF_{2-6}$	3	3	yrs	(P)SI	$TR \times (AT_c \times 365 \ day/y)$	ear)				
Margine   Marg	Age-dependent Adjustment Factor, 6-16	$ADAF_{6-16}$	3	3	yrs	$(K)SL_{ing} - SF \times F$	$c_F \times (\frac{ED_c \times IRS_c}{ED_a \times IR} + \frac{ED_a \times IR}{ED_a \times IR})$	$\frac{S_a}{S_a}$ \ $\times$ CF \ $\times$ RRA				
Contemp   Process   Proc	Age-dependent Adjustment Factor, 16-26	$ADAF_{16-26}$	1	1	yrs	51 <sub>0</sub> × E	$BW_c$ $BW_a$	) ~ CI o ~ RBII				
Section   Sect	Averaging Time, carcinogens	$AT_c$	70	70	yrs	Mutagens:						
Property P	Averaging Time, noncarcinogens, adult	$AT_{nc,a}$	20	20	yrs	(P)SI	$TR \times 0$	$(AT_c \times 365  days/yea)$	ar)			
Property P	Averaging Time, noncarcinogens, child	$AT_{nc,c}$	6	6	yrs	$(R)$ $SL_{ing}$ $=$	$/$ $ED_{0-2} \times IRS_c \times ADA$	$F_{0-2} + ED_{2-6} \times IRS_0$	$c \times ADAF_{2-6} + $			
Property P	Body Weight, adult	$BW_a$	80	80	kg	$SF_{\circ} \times E$	$E_r \times \left( \begin{array}{ccc} BW_c \\ DD \end{array} \right)$	' BV	$\frac{W_c}{\sqrt{CE_0}}$	RBA		
Property P	Body Weight, child	$BW_c$	15	15	kg		$ED_{6-16} \times IRS_a \times ADAI$	$\frac{E_{6-16}}{E_{6-16}} + \frac{ED_{16-26} \times IK}{ED_{16-26} \times IK}$	$RS_a \times ADAF_{16-26}$			
Propose Deputs and all color	Carcinogenic adjustment factor, ingestion	$CAF_O$	0.804	0.804	dimensionless		$\backslash BW_a$	1	$BW_a$ /			
Propose Depute Control 25	Conversion Factor	$CF_o$	1E-06	1E-06	kg/mg	Trichloroethene:		_				
Page	Exposure Duration, child 0-2		2	2	yrs	(R)SL:=			$TR \times (AT_c \times 365 \text{ days/year})$	)		
Append   Propagation   Append   Appen	Exposure Duration, child 2-6		4	•	yrs	(N)32 <sub>ling</sub>	( ,		$\left(\begin{array}{c}ED_{0-2}\end{array}\right)$	$\times IRS_c \times ADAF_{0-2} + ED_{2-6} \times IRS_c \times ADAF_{0-1} + ED_{2-6} \times ADAF_{0-1}$	$\times IRS_c \times ADAF_{2-6} + $	
Append   Propagation   Append   Appen	1				yrs	$SF_o \times E$	$EF_r \times CF_o \times RBA \times (CAF_o \times SCAF_o)$	$\frac{ED_c \times IRS_c}{DM} + \frac{ED_a \times IRS_c}{DM}$	$\left(\frac{IRS_a}{V}\right) + \left(MAF_o \times \left(\frac{IRS_a}{IRS_a}\right)\right)$	BW <sub>C</sub>	$BW_c$	
Append   Propagation   Append   Appen	*				yrs			DVV <sub>C</sub> DVV	$\begin{pmatrix} ED_{6-16} \end{pmatrix}$	$\frac{\times IR3_a \times ADAP_{6-16}}{RW} + \frac{ED_{16-2}}{RW}$	$\frac{16 \times IR3_a \times ADAr_{16-26}}{RW}$	
Specimen Suppose, procession   15	1	-			yrs		(		L \	$bw_a$	<i>bw<sub>a</sub></i> / 1)	
Separation   Se	*	-	-		-	•	,	T D				
State   Sta	1					$(R)SL_{ing} = \frac{1}{R}$	/ 177	I K				
State   Sta	1	a				, my	$\int EF_r \times \left(\frac{ED_c \times IRS_c}{DM} + \frac{ED_a \times IRS_c}{DM}\right)$	$\frac{IKS_a}{I}$ × $CF_o$	OC V CE			
State   Sta	` ` ′	·				$SF_o \times$	- BVV BVV	$\left(\frac{IR}{I}\right) + \left(\frac{IR}{I}\right)$	$\frac{RW}{RW} \times RBA$			
State   Sta		-				·	$AT_c \times 365 \frac{aays}{vear}$	<i>.</i>	-''c /			
Regional Servening Lavel Larged   Regional Servening Larged   Regional Servenin	1				1	·	yeur	/	1			
$\frac{1}{1}$ $$	II .			*								
Page		$(R)SL_{Ing}$	deriv	ved herein		Noncarcinogens:	$\langle a \rangle \langle a \rangle \langle a \rangle$	D'	TSC Cadmium - noncarcinogenio	THO	$\times (AT \times 365 \frac{day}{}) \times$	RW/
Page	1		chemic	cal-specific		$(R)SI = \frac{IRQ \times (RI_{no})}{IRQ \times (RI_{no})}$	$\frac{1}{year}$ $\times BW_c$			Shina adult cd =	(Alnc,26-yr adult \ 303 year)	wa
Page			1	1		$(R)_{SL_{ing}}$ $=$ $EF_{-} \times ED_{-} \times \frac{1}{2}$	$\frac{1}{RR} \times IRS_{-} \times CF_{-} \times RBA$			$EF_r \times E$	$ED_{26-vr,adult} \times IRS_a \times \frac{1}{DED} \times CF_a$	$\times$ RBA
Name	Target Risk	TR	1.0E-06	1.0E-06		· Nj	$D_o \cdots D_o \cdots$			•	$a R D_0$	
Marty   Mart					Residential U	USEPA RSL <sub>ing</sub>				Residential DTSC	-SL <sub>ing</sub>	
SEPE ASI, Analytics	II .		PRA	SF.	Cancer	RfD.	Nonconcon	DDA	SF	Cancar	RfD.	Noncancer
Accylonation			KDA	020		0	Noncancer	KDA	DI 0	Cancer	1420	Toncancer
Acyseiic, Inorganic   1	Analyte	Mutagen?										
According	Analyte USEPA RSL Analytes	Mutagen?										
Bernachdhyde	USEPA RSL Analytes	Ü		(mg/kg-day) <sup>-1</sup>	(mg/kg)	(mg/kg-day)	(mg/kg)		(mg/kg-day) <sup>-1</sup>	(mg/kg)	(mg/kg-day)	(mg/kg)
Benzenethio    1	USEPA RSL Analytes Acrylamide	Ü	(dimensionless)	(mg/kg-day) <sup>-1</sup> 5.00E-01	(mg/kg) 3.06E-01	(mg/kg-day) 2.00E-03	(mg/kg) 1.56E+02		(mg/kg-day) <sup>-1</sup> 4.50E+00	(mg/kg) 3.40E-02	(mg/kg-day) 2.00E-03	(mg/kg) 1.56E+02
Benzenethio    1	USEPA RSL Analytes  Acrylamide  Acrylonitrile	Ü	(dimensionless)  1 1	(mg/kg-day) <sup>-1</sup> 5.00E-01 5.40E-01	(mg/kg) 3.06E-01 1.29E+00	2.00E-03 4.00E-02	(mg/kg) 1.56E+02 3.13E+03		(mg/kg-day) <sup>-1</sup> 4.50E+00 1.00E+00	(mg/kg) 3.40E-02 6.95E-01	(mg/kg-day) 2.00E-03 4.00E-02	(mg/kg) 1.56E+02 3.13E+03
Benzenethiol	USEPA RSL Analytes  Acrylamide  Acrylonitrile  Arsenic, Inorganic	Ü	1 1 0.6	(mg/kg-day) <sup>-1</sup> 5.00E-01 5.40E-01 1.50E+00	3.06E-01 1.29E+00 7.72E-01	2.00E-03 4.00E-02 3.00E-04	(mg/kg) 1.56E+02 3.13E+03 3.91E+01		(mg/kg-day) <sup>-1</sup> 4.50E+00 1.00E+00 9.50E+00	3.40E-02 6.95E-01 7.32E-02	(mg/kg-day)  2.00E-03  4.00E-02  3.50E-06	(mg/kg) 1.56E+02 3.13E+03 2.74E-01
Benzidine   M	USEPA RSL Analytes Acrylamide Acrylonitrile Arsenic, Inorganic Benzaldehyde	Ü	(dimensionless)  1 1 0.6	(mg/kg-day) <sup>-1</sup> 5.00E-01 5.40E-01 1.50E+00 No Toxicity Value	3.06E-01 1.29E+00 7.72E-01	2.00E-03 4.00E-02 3.00E-04 1.00E-01	1.56E+02 3.13E+03 3.91E+01 7.82E+03		(mg/kg-day) <sup>-1</sup> 4.50E+00 1.00E+00 9.50E+00 No Toxicity Value	3.40E-02 6.95E-01 7.32E-02	(mg/kg-day)  2.00E-03  4.00E-02  3.50E-06  1.00E-01	(mg/kg) 1.56E+02 3.13E+03 2.74E-01 7.82E+03
Beryllium and compounds	USEPA RSL Analytes  Acrylamide  Acrylonitrile  Arsenic, Inorganic  Benzaldehyde  Benzene	Ü	(dimensionless)  1 1 0.6	(mg/kg-day) <sup>-1</sup> 5.00E-01  5.40E-01  1.50E+00  No Toxicity Value  5.50E-02	(mg/kg)  3.06E-01 1.29E+00 7.72E-01 1.26E+01	(mg/kg-day)  2.00E-03  4.00E-02  3.00E-04  1.00E-01  4.00E-03	1.56E+02 3.13E+03 3.91E+01 7.82E+03 3.13E+02		(mg/kg-day) <sup>-1</sup> 4.50E+00 1.00E+00 9.50E+00 No Toxicity Value 1.00E-01	(mg/kg)  3.40E-02 6.95E-01 7.32E-02 6.95E+00	(mg/kg-day)  2.00E-03  4.00E-02  3.50E-06  1.00E-01  4.00E-03	(mg/kg) 1.56E+02 3.13E+03 2.74E-01 7.82E+03 3.13E+02
Bromodichloromethane	USEPA RSL Analytes  Acrylamide  Acrylonitrile  Arsenic, Inorganic  Benzaldehyde  Benzene  Benzenethiol	M	(dimensionless)  1 1 0.6 1 1	(mg/kg-day) <sup>-1</sup> 5.00E-01  5.40E-01  1.50E+00  No Toxicity Value  5.50E-02  No Toxicity Value	(mg/kg)  3.06E-01 1.29E+00 7.72E-01 1.26E+01	(mg/kg-day)  2.00E-03  4.00E-02  3.00E-04  1.00E-01  4.00E-03  1.00E-03	(mg/kg)  1.56E+02 3.13E+03 3.91E+01 7.82E+03 3.13E+02 7.82E+01		(mg/kg-day) <sup>-1</sup> 4.50E+00  1.00E+00  9.50E+00  No Toxicity Value  1.00E-01  No Toxicity Value	(mg/kg)  3.40E-02 6.95E-01 7.32E-02 6.95E+00	(mg/kg-day)  2.00E-03  4.00E-02  3.50E-06  1.00E-01  4.00E-03  1.00E-03	(mg/kg) 1.56E+02 3.13E+03 2.74E-01 7.82E+03 3.13E+02 7.82E+01
Bromform	USEPA RSL Analytes  Acrylamide  Acrylonitrile  Arsenic, Inorganic  Benzaldehyde  Benzene  Benzenethiol  Benzidine	M	(dimensionless)  1 1 0.6 1 1 1	(mg/kg-day) <sup>-1</sup> 5.00E-01 5.40E-01 1.50E+00 No Toxicity Value 5.50E-02 No Toxicity Value 2.30E+02	(mg/kg)  3.06E-01 1.29E+00 7.72E-01 1.26E+01 6.66E-04	(mg/kg-day)  2.00E-03  4.00E-02  3.00E-04  1.00E-01  4.00E-03  1.00E-03  3.00E-03	(mg/kg)  1.56E+02 3.13E+03 3.91E+01 7.82E+03 3.13E+02 7.82E+01 2.35E+02		(mg/kg-day) <sup>-1</sup> 4.50E+00  1.00E+00  9.50E+00  No Toxicity Value  1.00E-01  No Toxicity Value  5.00E+02	(mg/kg)  3.40E-02 6.95E-01 7.32E-02 6.95E+00 3.06E-04	(mg/kg-day)  2.00E-03  4.00E-02  3.50E-06  1.00E-01  4.00E-03  1.00E-03  3.00E-03	(mg/kg)  1.56E+02 3.13E+03 2.74E-01 7.82E+03 3.13E+02 7.82E+01 2.35E+02
Butadiene, 1,3-	USEPA RSL Analytes  Acrylamide Acrylonitrile Arsenic, Inorganic Benzaldehyde Benzene Benzenethiol Benzidine Beryllium and compounds	M	(dimensionless)  1 1 0.6 1 1 1 1 1 1 1 1	(mg/kg-day) <sup>-1</sup> 5.00E-01 5.40E-01 1.50E+00 No Toxicity Value 5.50E-02 No Toxicity Value 2.30E+02 No Toxicity Value	(mg/kg)  3.06E-01 1.29E+00 7.72E-01 1.26E+01 6.66E-04	(mg/kg-day)  2.00E-03  4.00E-02  3.00E-04  1.00E-01  4.00E-03  1.00E-03  3.00E-03  2.00E-03	(mg/kg)  1.56E+02 3.13E+03 3.91E+01 7.82E+03 3.13E+02 7.82E+01 2.35E+02 1.56E+02		(mg/kg-day) <sup>-1</sup> 4.50E+00  1.00E+00  9.50E+00  No Toxicity Value  1.00E-01  No Toxicity Value  5.00E+02  No Toxicity Value	(mg/kg)  3.40E-02 6.95E-01 7.32E-02 6.95E+00 3.06E-04	(mg/kg-day)  2.00E-03  4.00E-02  3.50E-06  1.00E-01  4.00E-03  1.00E-03  3.00E-03  2.00E-04	(mg/kg)  1.56E+02 3.13E+03 2.74E-01 7.82E+03 3.13E+02 7.82E+01 2.35E+02 1.56E+01
Butshol, N-   1 No Toxicity Value   -   1.00E-01   7.82E+03   1 No Toxicity Value   -   1.00E-01   7.82E+03   1 No Toxicity Value   -   5.00E-02   3.91E+03   1 No Toxicity Value   -   1.00E-01   7.82E+03   1.00E-02   1.56E+03   1 No Toxicity Value   -   1.00E-01   7.82E+03   1.00E-02   1.56E+03   1 No Toxicity Value   -   1.00E-01   1.7EE+05   1.00E-	USEPA RSL Analytes  Acrylamide  Acrylonitrile  Arsenic, Inorganic  Benzaldehyde  Benzene  Benzenethiol  Benzidine  Beryllium and compounds  Bromodichloromethane	M	(dimensionless)  1 1 0.6 1 1 1 1 1 1 1 1 1 1	(mg/kg-day) <sup>-1</sup> 5.00E-01 5.40E-01 1.50E+00 No Toxicity Value 5.50E-02 No Toxicity Value 2.30E+02 No Toxicity Value 6.20E-02	(mg/kg)  3.06E-01 1.29E+00 7.72E-01 1.26E+01 6.66E-04 1.12E+01	(mg/kg-day)  2.00E-03  4.00E-02  3.00E-04  1.00E-01  4.00E-03  1.00E-03  3.00E-03  2.00E-03  2.00E-02	(mg/kg)  1.56E+02 3.13E+03 3.91E+01 7.82E+03 3.13E+02 7.82E+01 2.35E+02 1.56E+02 1.56E+03		(mg/kg-day) <sup>-1</sup> 4.50E+00  1.00E+00  9.50E+00  No Toxicity Value  1.00E-01  No Toxicity Value  5.00E+02  No Toxicity Value  1.30E-01	(mg/kg)  3.40E-02 6.95E-01 7.32E-02 6.95E+00 3.06E-04 5.35E+00	(mg/kg-day)  2.00E-03  4.00E-02  3.50E-06  1.00E-01  4.00E-03  1.00E-03  3.00E-03  2.00E-04  2.00E-02	(mg/kg)  1.56E+02 3.13E+03 2.74E-01 7.82E+03 3.13E+02 7.82E+01 2.35E+02 1.56E+01 1.56E+03
Butylbenzene, n-	USEPA RSL Analytes  Acrylamide Acrylonitrile Arsenic, Inorganic Benzaldehyde Benzene Benzenethiol Benzidine Beryllium and compounds Bromodichloromethane Bromoform	M	(dimensionless)  1 1 0.6 1 1 1 1 1 1 1 1 1 1	(mg/kg-day) <sup>-1</sup> 5.00E-01  5.40E-01  1.50E+00  No Toxicity Value  5.50E-02  No Toxicity Value  2.30E+02  No Toxicity Value  6.20E-02  7.90E-03	(mg/kg)  3.06E-01 1.29E+00 7.72E-01 1.26E+01 6.66E-04 1.12E+01 8.80E+01	(mg/kg-day)  2.00E-03  4.00E-02  3.00E-04  1.00E-01  4.00E-03  1.00E-03  2.00E-03  2.00E-03  2.00E-02  2.00E-02	(mg/kg)  1.56E+02 3.13E+03 3.91E+01 7.82E+03 3.13E+02 7.82E+01 2.35E+02 1.56E+02 1.56E+03		(mg/kg-day) <sup>-1</sup> 4.50E+00 1.00E+00 9.50E+00 No Toxicity Value 1.00E-01 No Toxicity Value 5.00E+02 No Toxicity Value 1.30E-01 1.10E-02	(mg/kg)  3.40E-02 6.95E-01 7.32E-02 6.95E+00 3.06E-04 5.35E+00 6.32E+01	(mg/kg-day)  2.00E-03  4.00E-02  3.50E-06  1.00E-01  4.00E-03  1.00E-03  2.00E-04  2.00E-02  2.00E-02	(mg/kg)  1.56E+02 3.13E+03 2.74E-01 7.82E+03 3.13E+02 7.82E+01 2.35E+02 1.56E+01 1.56E+03
Butylbenzene, sec-   1 No Toxicity Value	USEPA RSL Analytes  Acrylamide  Acrylonitrile  Arsenic, Inorganic  Benzaldehyde  Benzene  Benzenethiol  Benzidine  Beryllium and compounds  Bromodichloromethane  Bromoform  Butadiene, 1,3-	M	(dimensionless)  1 1 0.6 1 1 1 1 1 1 1 1 1 1 1 1 1 1	(mg/kg-day) <sup>-1</sup> 5.00E-01  5.40E-01  1.50E+00  No Toxicity Value  5.50E-02  No Toxicity Value  2.30E+02  No Toxicity Value  6.20E-02  7.90E-03  3.40E+00	(mg/kg)  3.06E-01 1.29E+00 7.72E-01 1.26E+01 6.66E-04 1.12E+01 8.80E+01 2.04E-01	(mg/kg-day)  2.00E-03 4.00E-02 3.00E-04 1.00E-01 4.00E-03 1.00E-03 2.00E-03 2.00E-03 2.00E-02 2.00E-02 No Toxicity Value	(mg/kg)  1.56E+02 3.13E+03 3.91E+01 7.82E+03 3.13E+02 7.82E+01 2.35E+02 1.56E+02 1.56E+03 1.56E+03		(mg/kg-day) <sup>-1</sup> 4.50E+00 1.00E+00 9.50E+00 No Toxicity Value 1.00E-01 No Toxicity Value 5.00E+02 No Toxicity Value 1.30E-01 1.10E-02 6.00E-01	(mg/kg)  3.40E-02 6.95E-01 7.32E-02 6.95E+00 3.06E-04 5.35E+00 6.32E+01 1.16E+00	(mg/kg-day)  2.00E-03  4.00E-02  3.50E-06  1.00E-01  4.00E-03  1.00E-03  3.00E-03  2.00E-04  2.00E-02  2.00E-02  No Toxicity Value	(mg/kg)  1.56E+02 3.13E+03 2.74E-01 7.82E+03 3.13E+02 7.82E+01 2.35E+02 1.56E+01 1.56E+03 1.56E+03
Butylbenzene, tert-         1         No Toxicity Value          1.00E-01         7.82E+03         1         No Toxicity Value          1.00E-03         7.82E+03         1         No Toxicity Value          1.00E-03         7.82E+03           Cadmium (Diet)         1         No Toxicity Value          1.00E-03         7.82E+03         1         No Toxicity Value          6.30E-06         5.26E+00           Carbon Tetrachloride         1         7.00E-02         9.93E+00         4.00E-03         3.13E+02         1         1.50E-01         4.63E+00         4.00E-03         3.13E+02           Chlordane         1         3.50E-01         1.99E+00         5.00E-04         3.91E+01         1         1.50E+00         5.35E-01         5.00E-04         3.91E+01           Chlordane         1         1.00E-01         6.95E+00         3.00E-03         2.35E+02         1         2.70E-01         2.57E+00         3.00E-03         2.35E+02           Chlorodetalehyde, 2-         1         2.70E-01         2.57E+00         No Toxicity Value          1         2.70E-01         2.57E+00         No Toxicity Value          4.00E-02         3.13E+03           Chlorodotuene, 0-         1 </th <th>USEPA RSL Analytes  Acrylamide  Acrylonitrile  Arsenic, Inorganic  Benzaldehyde  Benzene  Benzenethiol  Benzidine  Beryllium and compounds  Bromodichloromethane  Bromoform  Butadiene, 1,3-  Butanol, N-</th> <th>M</th> <th>(dimensionless)  1 1 0.6 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1</th> <th>(mg/kg-day)<sup>-1</sup>  5.00E-01  5.40E-01  1.50E+00  No Toxicity Value  5.50E-02  No Toxicity Value  2.30E+02  No Toxicity Value  6.20E-02  7.90E-03  3.40E+00  No Toxicity Value</th> <th>(mg/kg)  3.06E-01 1.29E+00 7.72E-01 1.26E+01 6.66E-04 1.12E+01 8.80E+01 2.04E-01</th> <th>(mg/kg-day)  2.00E-03 4.00E-02 3.00E-04 1.00E-01 4.00E-03 1.00E-03 2.00E-03 2.00E-03 2.00E-02 No Toxicity Value 1.00E-01</th> <th>(mg/kg)  1.56E+02 3.13E+03 3.91E+01 7.82E+03 3.13E+02 7.82E+01 2.35E+02 1.56E+02 1.56E+03 7.82E+03</th> <th></th> <th>(mg/kg-day)<sup>-1</sup>  4.50E+00 1.00E+00 9.50E+00 No Toxicity Value 1.00E-01 No Toxicity Value 5.00E+02 No Toxicity Value 1.30E-01 1.10E-02 6.00E-01 No Toxicity Value</th> <th>(mg/kg)  3.40E-02 6.95E-01 7.32E-02 6.95E+00 3.06E-04 5.35E+00 6.32E+01 1.16E+00</th> <th>(mg/kg-day)  2.00E-03  4.00E-02  3.50E-06  1.00E-01  4.00E-03  1.00E-03  2.00E-03  2.00E-04  2.00E-02  2.00E-02  No Toxicity Value  1.00E-01</th> <th>(mg/kg)  1.56E+02 3.13E+03 2.74E-01 7.82E+03 3.13E+02 7.82E+01 2.35E+02 1.56E+01 1.56E+03 7.82E+03</th>	USEPA RSL Analytes  Acrylamide  Acrylonitrile  Arsenic, Inorganic  Benzaldehyde  Benzene  Benzenethiol  Benzidine  Beryllium and compounds  Bromodichloromethane  Bromoform  Butadiene, 1,3-  Butanol, N-	M	(dimensionless)  1 1 0.6 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	(mg/kg-day) <sup>-1</sup> 5.00E-01  5.40E-01  1.50E+00  No Toxicity Value  5.50E-02  No Toxicity Value  2.30E+02  No Toxicity Value  6.20E-02  7.90E-03  3.40E+00  No Toxicity Value	(mg/kg)  3.06E-01 1.29E+00 7.72E-01 1.26E+01 6.66E-04 1.12E+01 8.80E+01 2.04E-01	(mg/kg-day)  2.00E-03 4.00E-02 3.00E-04 1.00E-01 4.00E-03 1.00E-03 2.00E-03 2.00E-03 2.00E-02 No Toxicity Value 1.00E-01	(mg/kg)  1.56E+02 3.13E+03 3.91E+01 7.82E+03 3.13E+02 7.82E+01 2.35E+02 1.56E+02 1.56E+03 7.82E+03		(mg/kg-day) <sup>-1</sup> 4.50E+00 1.00E+00 9.50E+00 No Toxicity Value 1.00E-01 No Toxicity Value 5.00E+02 No Toxicity Value 1.30E-01 1.10E-02 6.00E-01 No Toxicity Value	(mg/kg)  3.40E-02 6.95E-01 7.32E-02 6.95E+00 3.06E-04 5.35E+00 6.32E+01 1.16E+00	(mg/kg-day)  2.00E-03  4.00E-02  3.50E-06  1.00E-01  4.00E-03  1.00E-03  2.00E-03  2.00E-04  2.00E-02  2.00E-02  No Toxicity Value  1.00E-01	(mg/kg)  1.56E+02 3.13E+03 2.74E-01 7.82E+03 3.13E+02 7.82E+01 2.35E+02 1.56E+01 1.56E+03 7.82E+03
Cadmium (Diet)         1         No Toxicity Value          1.00E-03         7.82E+01         1         No Toxicity Value          6.30E-06         5.26E+00           Carbon Tetrachloride         1         7.00E-02         9.93E+00         4.00E-03         3.13E+02         1         1.50E-01         4.63E+00         4.00E-03         3.13E+02           Chlordane         1         3.50E-01         1.99E+00         5.00E-04         3.91E+01         1         1.30E+00         5.35E-01         5.00E-04         3.91E+01           Chloro-2-methylanlline, 4         1         1.00E-01         6.95E+00         3.00E-03         2.35E+02         1         2.70E-01         2.57E+00         3.00E-03         2.35E+02           Chloroacetaldehyde, 2-         1         2.70E-01         2.57E+00         No Toxicity Value          1         2.70E-01         2.57E+00         No Toxicity Value            Chlorobutane, 1-         1         No Toxicity Value          4.00E-02         3.13E+03         1         No Toxicity Value          4.00E-02         3.13E+03           Chlorotoluene, 0-         1         No Toxicity Value          2.00E-02         1.56E+03         1         No Toxicity Value <th>USEPA RSL Analytes  Acrylamide  Acrylonitrile  Arsenic, Inorganic  Benzaldehyde  Benzene  Benzenethiol  Benzidine  Beryllium and compounds  Bromodichloromethane  Bromoform  Butadiene, 1,3-  Butanol, N-</th> <th>M</th> <th>(dimensionless)  1 1 0.6 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1</th> <th>(mg/kg-day)<sup>-1</sup>  5.00E-01  5.40E-01  1.50E+00  No Toxicity Value  5.50E-02  No Toxicity Value  2.30E+02  No Toxicity Value  6.20E-02  7.90E-03  3.40E+00  No Toxicity Value</th> <th>(mg/kg)  3.06E-01 1.29E+00 7.72E-01 1.26E+01 6.66E-04 1.12E+01 8.80E+01 2.04E-01</th> <th>(mg/kg-day)  2.00E-03 4.00E-02 3.00E-04 1.00E-01 4.00E-03 1.00E-03 2.00E-03 2.00E-03 2.00E-02 No Toxicity Value 1.00E-01 5.00E-02</th> <th>(mg/kg)  1.56E+02 3.13E+03 3.91E+01 7.82E+03 3.13E+02 7.82E+01 2.35E+02 1.56E+03 1.56E+03 7.82E+03 3.91E+03</th> <th></th> <th>(mg/kg-day)<sup>-1</sup>  4.50E+00 1.00E+00 9.50E+00 No Toxicity Value 1.00E-01 No Toxicity Value 5.00E+02 No Toxicity Value 1.30E-01 1.10E-02 6.00E-01 No Toxicity Value No Toxicity Value</th> <th>(mg/kg)  3.40E-02 6.95E-01 7.32E-02 6.95E+00 3.06E-04 5.35E+00 6.32E+01 1.16E+00</th> <th>(mg/kg-day)  2.00E-03  4.00E-02  3.50E-06  1.00E-01  4.00E-03  1.00E-03  2.00E-04  2.00E-02  No Toxicity Value  1.00E-01  5.00E-02</th> <th>(mg/kg)  1.56E+02 3.13E+03 2.74E-01 7.82E+03 3.13E+02 7.82E+01 2.35E+02 1.56E+01 1.56E+03 7.82E+03 3.91E+03</th>	USEPA RSL Analytes  Acrylamide  Acrylonitrile  Arsenic, Inorganic  Benzaldehyde  Benzene  Benzenethiol  Benzidine  Beryllium and compounds  Bromodichloromethane  Bromoform  Butadiene, 1,3-  Butanol, N-	M	(dimensionless)  1 1 0.6 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	(mg/kg-day) <sup>-1</sup> 5.00E-01  5.40E-01  1.50E+00  No Toxicity Value  5.50E-02  No Toxicity Value  2.30E+02  No Toxicity Value  6.20E-02  7.90E-03  3.40E+00  No Toxicity Value	(mg/kg)  3.06E-01 1.29E+00 7.72E-01 1.26E+01 6.66E-04 1.12E+01 8.80E+01 2.04E-01	(mg/kg-day)  2.00E-03 4.00E-02 3.00E-04 1.00E-01 4.00E-03 1.00E-03 2.00E-03 2.00E-03 2.00E-02 No Toxicity Value 1.00E-01 5.00E-02	(mg/kg)  1.56E+02 3.13E+03 3.91E+01 7.82E+03 3.13E+02 7.82E+01 2.35E+02 1.56E+03 1.56E+03 7.82E+03 3.91E+03		(mg/kg-day) <sup>-1</sup> 4.50E+00 1.00E+00 9.50E+00 No Toxicity Value 1.00E-01 No Toxicity Value 5.00E+02 No Toxicity Value 1.30E-01 1.10E-02 6.00E-01 No Toxicity Value No Toxicity Value	(mg/kg)  3.40E-02 6.95E-01 7.32E-02 6.95E+00 3.06E-04 5.35E+00 6.32E+01 1.16E+00	(mg/kg-day)  2.00E-03  4.00E-02  3.50E-06  1.00E-01  4.00E-03  1.00E-03  2.00E-04  2.00E-02  No Toxicity Value  1.00E-01  5.00E-02	(mg/kg)  1.56E+02 3.13E+03 2.74E-01 7.82E+03 3.13E+02 7.82E+01 2.35E+02 1.56E+01 1.56E+03 7.82E+03 3.91E+03
Carbon Tetrachloride         1         7.00E-02         9.93E+00         4.00E-03         3.13E+02         1         1.50E-01         4.63E+00         4.00E-03         3.13E+02           Chlordane         1         3.50E-01         1.99E+00         5.00E-04         3.91E+01         1         1.30E+00         5.35E-01         5.00E-04         3.91E+01           Chloro-2-methylaniline, 4-         1         1.00E-01         6.95E+00         3.00E-03         2.35E+02         1         2.70E-01         2.57E+00         3.00E-03         2.35E+02           Chloroacetaldehyde, 2-         1         2.70E-01         2.57E+00         No Toxicity Value          1         No Toxicity Value          1         2.70E-01         2.57E+00         No Toxicity Value          Chlorobutane, 1-         1         No Toxicity Value          4.00E-02         3.13E+03         1         No Toxicity Value          4.00E-02         3.13E+03           Chlorotoluene, o-         1         No Toxicity Value          2.00E-02         1.56E+03         1         No Toxicity Value          2.00E-02         1.56E+03           Chlorotoluene, p-         1         No Toxicity Value          2.00E-02         1.56E+0	USEPA RSL Analytes  Acrylamide  Acrylonitrile  Arsenic, Inorganic  Benzaldehyde  Benzene  Benzenethiol  Benzidine  Beryllium and compounds  Bromodichloromethane  Bromoform  Butadiene, 1,3-  Butanol, N-  Butylbenzene, n-	M	(dimensionless)  1 1 0.6 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	(mg/kg-day) <sup>-1</sup> 5.00E-01 5.40E-01 1.50E+00 No Toxicity Value 5.50E-02 No Toxicity Value 2.30E+02 No Toxicity Value 6.20E-02 7.90E-03 3.40E+00 No Toxicity Value No Toxicity Value	(mg/kg)  3.06E-01 1.29E+00 7.72E-01 1.26E+01 6.66E-04 1.12E+01 8.80E+01 2.04E-01	(mg/kg-day)  2.00E-03 4.00E-02 3.00E-04 1.00E-01 4.00E-03 1.00E-03 2.00E-03 2.00E-03 2.00E-02 2.00E-02 No Toxicity Value 1.00E-01 5.00E-02 1.00E-01	(mg/kg)  1.56E+02 3.13E+03 3.91E+01 7.82E+03 3.13E+02 7.82E+01 2.35E+02 1.56E+03 1.56E+03 7.82E+03 3.91E+03		(mg/kg-day) <sup>-1</sup> 4.50E+00 1.00E+00 9.50E+00 No Toxicity Value 1.00E-01 No Toxicity Value 5.00E+02 No Toxicity Value 1.30E-01 1.10E-02 6.00E-01 No Toxicity Value No Toxicity Value	(mg/kg)  3.40E-02 6.95E-01 7.32E-02 6.95E+00 3.06E-04 5.35E+00 6.32E+01 1.16E+00	(mg/kg-day)  2.00E-03  4.00E-02  3.50E-06  1.00E-01  4.00E-03  1.00E-03  2.00E-04  2.00E-02  No Toxicity Value  1.00E-01  5.00E-02	(mg/kg)  1.56E+02 3.13E+03 2.74E-01 7.82E+03 3.13E+02 7.82E+01 2.35E+02 1.56E+01 1.56E+03 7.82E+03 3.91E+03 7.82E+03
Chlordane         1         3.50E-01         1.99E+00         5.00E-04         3.91E+01         1         1.30E+00         5.35E-01         5.00E-04         3.91E+01           Chloro-2-methylaniline, 4-         1         1.00E-01         6.95E+00         3.00E-03         2.35E+02         1         2.70E-01         2.57E+00         3.00E-03         2.35E+02           Chloroacetaldehyde, 2-         1         2.70E-01         2.57E+00         No Toxicity Value          1         2.70E-01         2.57E+00         No Toxicity Value            Chlorobutane, 1-         1         No Toxicity Value          4.00E-02         3.13E+03         1         No Toxicity Value          4.00E-02         3.13E+03           Chlorotoluene, o-         1         No Toxicity Value          2.00E-02         1.56E+03         1         No Toxicity Value          2.00E-02         1.56E+03           Chlorotoluene, p-         1         No Toxicity Value          2.00E-02         1.56E+03         1         No Toxicity Value          2.00E-02         1.56E+03           Chromium(III), Insoluble Salts         1         No Toxicity Value          1.50E+00         1.17E+05         1         N	USEPA RSL Analytes  Acrylamide  Acrylonitrile  Arsenic, Inorganic  Benzaldehyde  Benzene  Benzenethiol  Benzidine  Beryllium and compounds  Bromodichloromethane  Bromoform  Butadiene, 1,3-  Butanol, N-  Butylbenzene, n-  Butylbenzene, sec-	M	(dimensionless)  1 1 0.6 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	(mg/kg-day) <sup>-1</sup> 5.00E-01 5.40E-01 1.50E+00 No Toxicity Value 5.50E-02 No Toxicity Value 2.30E+02 No Toxicity Value 6.20E-02 7.90E-03 3.40E+00 No Toxicity Value No Toxicity Value	(mg/kg)  3.06E-01 1.29E+00 7.72E-01 1.26E+01 6.66E-04 1.12E+01 8.80E+01 2.04E-01	(mg/kg-day)  2.00E-03 4.00E-02 3.00E-04 1.00E-01 4.00E-03 1.00E-03 2.00E-03 2.00E-03 2.00E-02 2.00E-02 No Toxicity Value 1.00E-01 5.00E-02 1.00E-01	(mg/kg)  1.56E+02 3.13E+03 3.91E+01 7.82E+03 3.13E+02 7.82E+01 2.35E+02 1.56E+02 1.56E+03 7.82E+03 3.91E+03 7.82E+03		(mg/kg-day) <sup>-1</sup> 4.50E+00 1.00E+00 9.50E+00 No Toxicity Value 1.00E-01 No Toxicity Value 5.00E+02 No Toxicity Value 1.30E-01 1.10E-02 6.00E-01 No Toxicity Value No Toxicity Value	(mg/kg)  3.40E-02 6.95E-01 7.32E-02 6.95E+00 3.06E-04 5.35E+00 6.32E+01 1.16E+00	(mg/kg-day)  2.00E-03 4.00E-02 3.50E-06 1.00E-01 4.00E-03 1.00E-03 2.00E-04 2.00E-02 2.00E-02 No Toxicity Value 1.00E-01 5.00E-02 1.00E-01	(mg/kg)  1.56E+02 3.13E+03 2.74E-01 7.82E+03 3.13E+02 7.82E+01 2.35E+02 1.56E+01 1.56E+03 7.82E+03 3.91E+03 7.82E+03
Chloro-2-methylaniline, 4-         1         1.00E-01         6.95E+00         3.00E-03         2.35E+02         1         2.70E-01         2.57E+00         3.00E-03         2.35E+02           Chloroacetaldehyde, 2-         1         2.70E-01         2.57E+00         No Toxicity Value            Chlorobutane, 1-         1         No Toxicity Value          4.00E-02         3.13E+03         1         No Toxicity Value          4.00E-02         3.13E+03           Chlorotoluene, o-         1         No Toxicity Value          2.00E-02         1.56E+03         1         No Toxicity Value          2.00E-02         1.56E+03           Chlorotoluene, p-         1         No Toxicity Value          2.00E-02         1.56E+03         1         No Toxicity Value          2.00E-02         1.56E+03           Chromium(III), Insoluble Salts         1         No Toxicity Value          1.50E+00         1.17E+05         1         No Toxicity Value          1.50E+00         1.17E+05	USEPA RSL Analytes  Acrylamide  Acrylonitrile  Arsenic, Inorganic  Benzaldehyde  Benzene  Benzenethiol  Benzidine  Beryllium and compounds  Bromodichloromethane  Bromoform  Butadiene, 1,3-  Butanol, N-  Butylbenzene, n-  Butylbenzene, sec-  Butylbenzene, tert-	M	(dimensionless)  1 1 0.6 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	(mg/kg-day) <sup>-1</sup> 5.00E-01 5.40E-01 1.50E+00 No Toxicity Value 5.50E-02 No Toxicity Value 2.30E+02 No Toxicity Value 6.20E-02 7.90E-03 3.40E+00 No Toxicity Value No Toxicity Value No Toxicity Value	(mg/kg)  3.06E-01 1.29E+00 7.72E-01 1.26E+01 6.66E-04 1.12E+01 8.80E+01 2.04E-01	(mg/kg-day)  2.00E-03 4.00E-02 3.00E-04 1.00E-01 4.00E-03 1.00E-03 2.00E-03 2.00E-03 2.00E-02 No Toxicity Value 1.00E-01 5.00E-02 1.00E-01 1.00E-01	(mg/kg)  1.56E+02 3.13E+03 3.91E+01 7.82E+03 3.13E+02 7.82E+01 2.35E+02 1.56E+02 1.56E+03 1.56E+03 7.82E+03 3.91E+03 7.82E+03 7.82E+03		(mg/kg-day) <sup>-1</sup> 4.50E+00 1.00E+00 9.50E+00 No Toxicity Value 1.00E-01 No Toxicity Value 5.00E+02 No Toxicity Value 1.30E-01 1.10E-02 6.00E-01 No Toxicity Value No Toxicity Value	(mg/kg)  3.40E-02 6.95E-01 7.32E-02 6.95E+00 3.06E-04 5.35E+00 6.32E+01 1.16E+00	(mg/kg-day)  2.00E-03  4.00E-02  3.50E-06  1.00E-01  4.00E-03  1.00E-03  2.00E-04  2.00E-02  2.00E-02  No Toxicity Value  1.00E-01  5.00E-02  1.00E-01	(mg/kg)  1.56E+02 3.13E+03 2.74E-01 7.82E+03 3.13E+02 7.82E+01 2.35E+02 1.56E+01 1.56E+03 7.82E+03 3.91E+03 7.82E+03 7.82E+03 7.82E+03
Chloro-2-methylaniline, 4-         1         1.00E-01         6.95E+00         3.00E-03         2.35E+02         1         2.70E-01         2.57E+00         3.00E-03         2.35E+02           Chloroacetaldehyde, 2-         1         2.70E-01         2.57E+00         No Toxicity Value            Chlorobutane, 1-         1         No Toxicity Value          4.00E-02         3.13E+03         1         No Toxicity Value          4.00E-02         3.13E+03           Chlorotoluene, o-         1         No Toxicity Value          2.00E-02         1.56E+03         1         No Toxicity Value          2.00E-02         1.56E+03           Chlorotoluene, p-         1         No Toxicity Value          2.00E-02         1.56E+03         1         No Toxicity Value          2.00E-02         1.56E+03           Chromium(III), Insoluble Salts         1         No Toxicity Value          1.50E+00         1.17E+05         1         No Toxicity Value          1.50E+00         1.17E+05	USEPA RSL Analytes  Acrylamide  Acrylonitrile  Arsenic, Inorganic  Benzaldehyde  Benzene  Benzenethiol  Benzidine  Beryllium and compounds  Bromodichloromethane  Bromoform  Butadiene, 1,3-  Butanol, N-  Butylbenzene, n-  Butylbenzene, sec-  Butylbenzene, tert-  Cadmium (Diet)	M	(dimensionless)  1 1 0.6 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	(mg/kg-day)-1  5.00E-01  5.40E-01  1.50E+00  No Toxicity Value  5.50E-02  No Toxicity Value  2.30E+02  No Toxicity Value  6.20E-02  7.90E-03  3.40E+00  No Toxicity Value	(mg/kg)  3.06E-01 1.29E+00 7.72E-01 1.26E+01 6.66E-04 1.12E+01 8.80E+01 2.04E-01	(mg/kg-day)  2.00E-03 4.00E-02 3.00E-04 1.00E-01 4.00E-03 1.00E-03 2.00E-03 2.00E-02 2.00E-02 No Toxicity Value 1.00E-01 5.00E-02 1.00E-01 1.00E-01 1.00E-01	(mg/kg)  1.56E+02 3.13E+03 3.91E+01 7.82E+03 3.13E+02 7.82E+01 2.35E+02 1.56E+02 1.56E+03 1.56E+03 7.82E+03 3.91E+03 7.82E+03 7.82E+03 7.82E+03 7.82E+03		(mg/kg-day) <sup>-1</sup> 4.50E+00 1.00E+00 9.50E+00 No Toxicity Value 1.00E-01 No Toxicity Value 5.00E+02 No Toxicity Value 1.30E-01 1.10E-02 6.00E-01 No Toxicity Value No Toxicity Value	(mg/kg)  3.40E-02 6.95E-01 7.32E-02 6.95E+00 3.06E-04 5.35E+00 6.32E+01 1.16E+00	(mg/kg-day)  2.00E-03  4.00E-02  3.50E-06  1.00E-01  4.00E-03  1.00E-03  2.00E-04  2.00E-02  2.00E-02  No Toxicity Value  1.00E-01  5.00E-02  1.00E-01  1.00E-01  6.30E-06	(mg/kg)  1.56E+02 3.13E+03 2.74E-01 7.82E+03 3.13E+02 7.82E+01 2.35E+02 1.56E+01 1.56E+03 7.82E+03 3.91E+03 7.82E+03 7.82E+03 5.26E+00
Chloroacetaldehyde, 2-         1         2.70E-01         2.57E+00         No Toxicity Value          1         2.70E-01         2.57E+00         No Toxicity Value            Chlorobutane, 1-         1         No Toxicity Value          4.00E-02         3.13E+03         1         No Toxicity Value          4.00E-02         3.13E+03           Chlorotoluene, o-         1         No Toxicity Value          2.00E-02         1.56E+03         1         No Toxicity Value          2.00E-02         1.56E+03           Chlorotoluene, p-         1         No Toxicity Value          2.00E-02         1.56E+03         1         No Toxicity Value          2.00E-02         1.56E+03           Chromium(III), Insoluble Salts         1         No Toxicity Value          1.50E+00         1.17E+05         1         No Toxicity Value          1.50E+00         1.17E+05	USEPA RSL Analytes  Acrylamide Acrylonitrile Arsenic, Inorganic Benzaldehyde Benzene Benzenethiol Benzidine Beryllium and compounds Bromodichloromethane Bromoform Butadiene, 1,3- Butanol, N- Butylbenzene, n- Butylbenzene, sec- Butylbenzene, tert- Cadmium (Diet) Carbon Tetrachloride	M	(dimensionless)  1 1 0.6 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	(mg/kg-day)-1  5.00E-01  5.40E-01  1.50E+00  No Toxicity Value  5.50E-02  No Toxicity Value  2.30E+02  No Toxicity Value  6.20E-02  7.90E-03  3.40E+00  No Toxicity Value	(mg/kg)  3.06E-01 1.29E+00 7.72E-01 1.26E+01 6.66E-04 1.12E+01 8.80E+01 2.04E-01 9.93E+00	(mg/kg-day)  2.00E-03  4.00E-02  3.00E-04  1.00E-01  4.00E-03  1.00E-03  2.00E-03  2.00E-02  2.00E-02  No Toxicity Value  1.00E-01  5.00E-02  1.00E-01  1.00E-01  1.00E-01  1.00E-03  4.00E-03	(mg/kg)  1.56E+02 3.13E+03 3.91E+01 7.82E+03 3.13E+02 7.82E+01 2.35E+02 1.56E+02 1.56E+03 1.56E+03 7.82E+03 3.91E+03 7.82E+03 7.82E+03 7.82E+03 3.13E+02		(mg/kg-day) <sup>-1</sup> 4.50E+00 1.00E+00 9.50E+00 No Toxicity Value 1.00E-01 No Toxicity Value 5.00E+02 No Toxicity Value 1.30E-01 1.10E-02 6.00E-01 No Toxicity Value	(mg/kg)  3.40E-02 6.95E-01 7.32E-02 6.95E+00 3.06E-04 5.35E+00 6.32E+01 1.16E+00 4.63E+00	(mg/kg-day)  2.00E-03  4.00E-02  3.50E-06  1.00E-01  4.00E-03  1.00E-03  3.00E-03  2.00E-04  2.00E-02  No Toxicity Value  1.00E-01  5.00E-02  1.00E-01  1.00E-01  6.30E-06  4.00E-03	(mg/kg)  1.56E+02 3.13E+03 2.74E-01 7.82E+03 3.13E+02 7.82E+01 2.35E+02 1.56E+01 1.56E+03 7.82E+03 3.91E+03 7.82E+03 7.82E+03 5.26E+00 3.13E+02
Chlorobutane, 1-         1         No Toxicity Value          4.00E-02         3.13E+03         1         No Toxicity Value          4.00E-02         3.13E+03           Chlorotoluene, o-         1         No Toxicity Value          2.00E-02         1.56E+03         1         No Toxicity Value          2.00E-02         1.56E+03           Chlorotoluene, p-         1         No Toxicity Value          2.00E-02         1.56E+03         1         No Toxicity Value          2.00E-02         1.56E+03           Chromium(III), Insoluble Salts         1         No Toxicity Value          1.50E+00         1.17E+05         1         No Toxicity Value          1.50E+00         1.17E+05	USEPA RSL Analytes  Acrylamide Acrylonitrile Arsenic, Inorganic Benzaldehyde Benzene Benzenethiol Benzidine Beryllium and compounds Bromodichloromethane Bromoform Butadiene, 1,3- Butanol, N- Butylbenzene, n- Butylbenzene, sec- Butylbenzene, tert- Cadmium (Diet) Carbon Tetrachloride Chlordane	M	(dimensionless)  1 1 0.6 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	(mg/kg-day) <sup>-1</sup> 5.00E-01 5.40E-01 1.50E+00 No Toxicity Value 5.50E-02 No Toxicity Value 2.30E+02 No Toxicity Value 6.20E-02 7.90E-03 3.40E+00 No Toxicity Value 3.50E-01	(mg/kg)  3.06E-01 1.29E+00 7.72E-01 1.26E+01 6.66E-04 1.12E+01 8.80E+01 2.04E-01 9.93E+00 1.99E+00	(mg/kg-day)  2.00E-03  4.00E-02  3.00E-04  1.00E-01  4.00E-03  1.00E-03  2.00E-03  2.00E-02  2.00E-02  No Toxicity Value  1.00E-01  5.00E-02  1.00E-01  1.00E-01  1.00E-03  4.00E-03  5.00E-03	(mg/kg)  1.56E+02 3.13E+03 3.91E+01 7.82E+03 3.13E+02 7.82E+01 2.35E+02 1.56E+03 1.56E+03 7.82E+03 3.91E+03 7.82E+03 7.82E+01 3.13E+02 3.91E+01		(mg/kg-day) <sup>-1</sup> 4.50E+00 1.00E+00 9.50E+00 No Toxicity Value 1.00E-01 No Toxicity Value 5.00E+02 No Toxicity Value 1.30E-01 1.10E-02 6.00E-01 No Toxicity Value 1.50E-01 1.30E+00	(mg/kg)  3.40E-02 6.95E-01 7.32E-02 6.95E+00 3.06E-04 5.35E+00 6.32E+01 1.16E+00 4.63E+00 5.35E-01	(mg/kg-day)  2.00E-03  4.00E-02  3.50E-06  1.00E-01  4.00E-03  1.00E-03  3.00E-03  2.00E-04  2.00E-02  No Toxicity Value  1.00E-01  5.00E-02  1.00E-01  1.00E-01  6.30E-06  4.00E-03  5.00E-04	(mg/kg)  1.56E+02 3.13E+03 2.74E-01 7.82E+03 3.13E+02 7.82E+01 2.35E+02 1.56E+01 1.56E+03 7.82E+03 3.91E+03 7.82E+03 5.26E+00 3.13E+02 3.91E+01
Chlorotoluene, o-         1         No Toxicity Value          2.00E-02         1.56E+03         1         No Toxicity Value          2.00E-02         1.56E+03           Chlorotoluene, p-         1         No Toxicity Value          2.00E-02         1.56E+03         1         No Toxicity Value          2.00E-02         1.56E+03           Chromium(III), Insoluble Salts         1         No Toxicity Value          1.50E+00         1.17E+05         1         No Toxicity Value          1.50E+00         1.17E+05	USEPA RSL Analytes  Acrylamide Acrylonitrile Arsenic, Inorganic Benzaldehyde Benzene Benzenethiol Benzidine Beryllium and compounds Bromodichloromethane Bromoform Butadiene, 1,3- Butanol, N- Butylbenzene, n- Butylbenzene, sec- Butylbenzene, tert- Cadmium (Diet) Carbon Tetrachloride Chloro-2-methylaniline, 4-	M	(dimensionless)  1 1 0.6 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	(mg/kg-day) <sup>-1</sup> 5.00E-01 5.40E-01 1.50E+00 No Toxicity Value 5.50E-02 No Toxicity Value 2.30E+02 No Toxicity Value 6.20E-02 7.90E-03 3.40E+00 No Toxicity Value 7.00E-02 3.50E-01 1.00E-01	(mg/kg)  3.06E-01 1.29E+00 7.72E-01 1.26E+01 6.66E-04 1.12E+01 8.80E+01 2.04E-01 9.93E+00 1.99E+00 6.95E+00	(mg/kg-day)  2.00E-03  4.00E-02  3.00E-04  1.00E-01  4.00E-03  1.00E-03  2.00E-03  2.00E-02  2.00E-02  No Toxicity Value  1.00E-01  5.00E-02  1.00E-01  1.00E-01  1.00E-01  1.00E-03  4.00E-03  5.00E-04  3.00E-04	(mg/kg)  1.56E+02 3.13E+03 3.91E+01 7.82E+03 3.13E+02 7.82E+01 2.35E+02 1.56E+03 1.56E+03 7.82E+03 3.91E+03 7.82E+03 7.82E+03 7.82E+03 3.91E+03 7.82E+01 3.13E+02 3.91E+01 2.35E+02		(mg/kg-day) <sup>-1</sup> 4.50E+00 1.00E+00 9.50E+00 No Toxicity Value 1.00E-01 No Toxicity Value 5.00E+02 No Toxicity Value 1.30E-01 1.10E-02 6.00E-01 No Toxicity Value 1.50E-01 1.30E+00 2.70E-01	(mg/kg)  3.40E-02 6.95E-01 7.32E-02 6.95E+00 3.06E-04 5.35E+00 6.32E+01 1.16E+00 4.63E+00 5.35E-01 2.57E+00	(mg/kg-day)  2.00E-03  4.00E-02  3.50E-06  1.00E-01  4.00E-03  1.00E-03  3.00E-03  2.00E-04  2.00E-02  No Toxicity Value  1.00E-01  5.00E-02  1.00E-01  1.00E-01  6.30E-06  4.00E-03  5.00E-04  3.00E-04  3.00E-03	(mg/kg)  1.56E+02 3.13E+03 2.74E-01 7.82E+03 3.13E+02 7.82E+01 2.35E+02 1.56E+01 1.56E+03 7.82E+03 3.91E+03 7.82E+03 7.82E+03 7.82E+03 3.91E+04 3.13E+02 3.91E+01 2.35E+02
Chlorotoluene, p-         1         No Toxicity Value          2.00E-02         1.56E+03         1         No Toxicity Value          2.00E-02         1.56E+03           Chromium(III), Insoluble Salts         1         No Toxicity Value          1.50E+00         1.17E+05         1         No Toxicity Value          1.50E+00         1.17E+05	USEPA RSL Analytes  Acrylamide  Acrylonitrile  Arsenic, Inorganic  Benzaldehyde  Benzene  Benzenethiol  Benzidine  Beryllium and compounds  Bromodichloromethane  Bromoform  Butadiene, 1,3-  Butanol, N-  Butylbenzene, n-  Butylbenzene, sec-  Butylbenzene, tert-  Cadmium (Diet)  Carbon Tetrachloride  Chloro-2-methylaniline, 4-  Chloroacetaldehyde, 2-	M	(dimensionless)  1 1 0.6 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	(mg/kg-day) <sup>-1</sup> 5.00E-01 5.40E-01 1.50E+00 No Toxicity Value 5.50E-02 No Toxicity Value 2.30E+02 No Toxicity Value 6.20E-02 7.90E-03 3.40E+00 No Toxicity Value 1.00E-02 3.50E-01 1.00E-01 2.70E-01	(mg/kg)  3.06E-01 1.29E+00 7.72E-01 1.26E+01 6.66E-04 1.12E+01 8.80E+01 2.04E-01 9.93E+00 1.99E+00 6.95E+00 2.57E+00	(mg/kg-day)  2.00E-03 4.00E-02 3.00E-04 1.00E-01 4.00E-03 1.00E-03 2.00E-03 2.00E-02 No Toxicity Value 1.00E-01 1.00E-01 1.00E-01 1.00E-01 1.00E-01 1.00E-03 4.00E-03 5.00E-04 3.00E-03 No Toxicity Value	(mg/kg)  1.56E+02 3.13E+03 3.91E+01 7.82E+03 3.13E+02 7.82E+01 2.35E+02 1.56E+03 1.56E+03 7.82E+03 3.91E+03 7.82E+03 7.82E+03 7.82E+01 3.13E+02 3.91E+01 2.35E+02		(mg/kg-day) <sup>-1</sup> 4.50E+00 1.00E+00 9.50E+00 No Toxicity Value 1.00E-01 No Toxicity Value 5.00E+02 No Toxicity Value 1.30E-01 1.10E-02 6.00E-01 No Toxicity Value 1.50E-01 1.30E+00 2.70E-01	(mg/kg)  3.40E-02 6.95E-01 7.32E-02 6.95E+00 3.06E-04 5.35E+00 6.32E+01 1.16E+00 4.63E+00 5.35E-01 2.57E+00	(mg/kg-day)  2.00E-03  4.00E-02  3.50E-06  1.00E-01  4.00E-03  1.00E-03  3.00E-03  2.00E-04  2.00E-02  No Toxicity Value  1.00E-01  5.00E-02  1.00E-01  1.00E-01  6.30E-06  4.00E-03  5.00E-04  3.00E-03  No Toxicity Value	(mg/kg)  1.56E+02 3.13E+03 2.74E-01 7.82E+03 3.13E+02 7.82E+01 2.35E+02 1.56E+03 1.56E+03 7.82E+03 3.91E+03 7.82E+03 5.26E+00 3.13E+02 3.91E+01 2.35E+02
Chromium(III), Insoluble Salts 1 No Toxicity Value 1.50E+00 1.17E+05 1 No Toxicity Value 1.50E+00 1.17E+05	USEPA RSL Analytes  Acrylamide  Acrylonitrile  Arsenic, Inorganic  Benzaldehyde  Benzene  Benzenethiol  Benzidine  Beryllium and compounds  Bromodichloromethane  Bromoform  Butadiene, 1,3-  Butanol, N-  Butylbenzene, n-  Butylbenzene, sec-  Butylbenzene, tert-  Cadmium (Diet)  Carbon Tetrachloride  Chloro-2-methylaniline, 4-  Chloroacetaldehyde, 2-  Chlorobutane, 1-	M	(dimensionless)  1 1 0.6 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	(mg/kg-day) <sup>-1</sup> 5.00E-01 5.40E-01 1.50E+00 No Toxicity Value 5.50E-02 No Toxicity Value 2.30E+02 No Toxicity Value 6.20E-02 7.90E-03 3.40E+00 No Toxicity Value 1.00E-02 3.50E-01 1.00E-01 2.70E-01 No Toxicity Value	(mg/kg)  3.06E-01 1.29E+00 7.72E-01 1.26E+01 6.66E-04 1.12E+01 8.80E+01 2.04E-01 9.93E+00 1.99E+00 6.95E+00 2.57E+00	(mg/kg-day)  2.00E-03 4.00E-02 3.00E-04 1.00E-01 4.00E-03 1.00E-03 2.00E-03 2.00E-02 2.00E-02 No Toxicity Value 1.00E-01 1.00E-01 1.00E-01 1.00E-01 1.00E-03 4.00E-03 5.00E-04 3.00E-03 No Toxicity Value	(mg/kg)  1.56E+02 3.13E+03 3.91E+01 7.82E+03 3.13E+02 7.82E+01 2.35E+02 1.56E+03 1.56E+03 7.82E+03 3.91E+03 7.82E+03 7.82E+01 3.13E+02 3.91E+01 2.35E+02		(mg/kg-day) <sup>-1</sup> 4.50E+00 1.00E+00 9.50E+00 No Toxicity Value 1.00E-01 No Toxicity Value 5.00E+02 No Toxicity Value 1.30E-01 1.10E-02 6.00E-01 No Toxicity Value 1.50E-01 1.30E+00 2.70E-01 2.70E-01 No Toxicity Value	(mg/kg)  3.40E-02 6.95E-01 7.32E-02 6.95E+00 3.06E-04 5.35E+00 6.32E+01 1.16E+00 4.63E+00 5.35E-01 2.57E+00 2.57E+00	(mg/kg-day)  2.00E-03  4.00E-02  3.50E-06  1.00E-01  4.00E-03  1.00E-03  3.00E-03  2.00E-04  2.00E-02  No Toxicity Value  1.00E-01  5.00E-02  1.00E-01  6.30E-06  4.00E-03  5.00E-04  3.00E-03  No Toxicity Value	(mg/kg)  1.56E+02 3.13E+03 2.74E-01 7.82E+03 3.13E+02 7.82E+01 2.35E+02 1.56E+03 1.56E+03 7.82E+03 3.91E+03 7.82E+03 5.26E+00 3.13E+02 3.91E+01 2.35E+02 3.13E+02
	USEPA RSL Analytes  Acrylamide  Acrylonitrile  Arsenic, Inorganic  Benzaldehyde  Benzene  Benzenethiol  Benzidine  Beryllium and compounds  Bromodichloromethane  Bromoform  Butadiene, 1,3- Butanol, N- Butylbenzene, n- Butylbenzene, sec- Butylbenzene, tert- Cadmium (Diet)  Carbon Tetrachloride  Chloro-2-methylaniline, 4- Chloroacetaldehyde, 2- Chlorobutane, 1- Chlorotoluene, o-	M	(dimensionless)  1 1 0.6 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	(mg/kg-day)-1  5.00E-01  5.40E-01  1.50E+00  No Toxicity Value  5.50E-02  No Toxicity Value  2.30E+02  No Toxicity Value  6.20E-02  7.90E-03  3.40E+00  No Toxicity Value  7.00E-02  3.50E-01  1.00E-01  2.70E-01  No Toxicity Value  No Toxicity Value	(mg/kg)  3.06E-01 1.29E+00 7.72E-01 1.26E+01 6.66E-04 1.12E+01 8.80E+01 2.04E-01 9.93E+00 1.99E+00 6.95E+00 2.57E+00	(mg/kg-day)  2.00E-03 4.00E-02 3.00E-04 1.00E-01 4.00E-03 1.00E-03 2.00E-03 2.00E-02 2.00E-02 No Toxicity Value 1.00E-01 1.00E-01 1.00E-01 1.00E-01 1.00E-03 4.00E-03 5.00E-04 3.00E-03 No Toxicity Value	(mg/kg)  1.56E+02 3.13E+03 3.91E+01 7.82E+03 3.13E+02 7.82E+01 2.35E+02 1.56E+03 1.56E+03 7.82E+03 3.91E+03 7.82E+01 3.13E+02 3.91E+01 2.35E+02 3.13E+02 3.13E+02 3.13E+03 1.56E+03		(mg/kg-day) <sup>-1</sup> 4.50E+00 1.00E+00 9.50E+00 No Toxicity Value 1.00E-01 No Toxicity Value 5.00E+02 No Toxicity Value 1.30E-01 1.10E-02 6.00E-01 No Toxicity Value 1.50E-01 1.30E+00 2.70E-01 No Toxicity Value No Toxicity Value	(mg/kg)  3.40E-02 6.95E-01 7.32E-02 6.95E+00 3.06E-04 5.35E+00 6.32E+01 1.16E+00 4.63E+00 5.35E-01 2.57E+00	(mg/kg-day)  2.00E-03  4.00E-02  3.50E-06  1.00E-01  4.00E-03  1.00E-03  2.00E-04  2.00E-02  2.00E-02  No Toxicity Value  1.00E-01  5.00E-02  1.00E-01  6.30E-06  4.00E-03  5.00E-04  3.00E-03  No Toxicity Value	(mg/kg)  1.56E+02 3.13E+03 2.74E-01 7.82E+03 3.13E+02 7.82E+01 2.35E+02 1.56E+03 1.56E+03 7.82E+03 3.91E+03 7.82E+03 5.26E+00 3.13E+02 3.91E+01 2.35E+02 3.13E+02 3.13E+03 1.56E+03
1 - 1.000.00 - 2.60.01 = 1 - 1.000.00 = 2.60.01 = 1.000.00 = 2.60.01 = 1.000.00 = 2.60.01	USEPA RSL Analytes  Acrylamide  Acrylonitrile  Arsenic, Inorganic  Benzaldehyde  Benzene  Benzenethiol  Benzidine  Beryllium and compounds  Bromodichloromethane  Bromoform  Butadiene, 1,3-  Butanol, N-  Butylbenzene, n-  Butylbenzene, sec-  Butylbenzene, tert-  Cadmium (Diet)  Carbon Tetrachloride  Chloroacetaldehyde, 2-  Chlorobutane, 1-  Chlorotoluene, o-  Chlorotoluene, p-	M	(dimensionless)	(mg/kg-day)-1  5.00E-01  5.40E-01  1.50E+00  No Toxicity Value  5.50E-02  No Toxicity Value  2.30E+02  No Toxicity Value  6.20E-02  7.90E-03  3.40E+00  No Toxicity Value  7.00E-02  3.50E-01  1.00E-01  2.70E-01  No Toxicity Value  No Toxicity Value	(mg/kg)  3.06E-01 1.29E+00 7.72E-01 1.26E+01 6.66E-04 1.12E+01 8.80E+01 2.04E-01 9.93E+00 1.99E+00 6.95E+00 2.57E+00	(mg/kg-day)  2.00E-03 4.00E-02 3.00E-04 1.00E-01 4.00E-03 1.00E-03 2.00E-03 2.00E-02 2.00E-02 No Toxicity Value 1.00E-01 1.00E-01 1.00E-01 1.00E-01 1.00E-03 4.00E-03 5.00E-04 3.00E-03 No Toxicity Value 4.00E-02 2.00E-02 2.00E-02	(mg/kg)  1.56E+02 3.13E+03 3.91E+01 7.82E+03 3.13E+02 7.82E+01 2.35E+02 1.56E+03 1.56E+03 7.82E+03 3.91E+03 7.82E+01 3.13E+02 3.91E+01 2.35E+02 3.13E+02 3.13E+03 1.56E+03 1.56E+03		(mg/kg-day) <sup>-1</sup> 4.50E+00 1.00E+00 9.50E+00 No Toxicity Value 1.00E-01 No Toxicity Value 5.00E+02 No Toxicity Value 1.30E-01 1.10E-02 6.00E-01 No Toxicity Value 1.50E-01 1.30E+00 2.70E-01 No Toxicity Value No Toxicity Value	(mg/kg)  3.40E-02 6.95E-01 7.32E-02 6.95E+00 3.06E-04 5.35E+00 6.32E+01 1.16E+00 4.63E+00 5.35E-01 2.57E+00 2.57E+00	(mg/kg-day)  2.00E-03  4.00E-02  3.50E-06  1.00E-01  4.00E-03  1.00E-03  2.00E-04  2.00E-02  2.00E-02  No Toxicity Value  1.00E-01  5.00E-02  1.00E-01  6.30E-06  4.00E-03  5.00E-04  3.00E-03  No Toxicity Value	(mg/kg)  1.56E+02 3.13E+03 2.74E-01 7.82E+03 3.13E+02 7.82E+01 2.35E+02 1.56E+03 1.56E+03 7.82E+03 3.91E+03 7.82E+03 5.26E+00 3.13E+02 3.91E+01 2.35E+02 3.13E+03 1.56E+03 1.56E+03
Crotonaldehyde, trans- 1 1.90E+00 3.66E-01 1.00E-03 7.82E+01 1 1.90E+00 3.66E-01 1.00E-03 7.82E+01	USEPA RSL Analytes  Acrylamide  Acrylonitrile  Arsenic, Inorganic  Benzaldehyde  Benzene  Benzenethiol  Benzidine  Beryllium and compounds  Bromodichloromethane  Bromoform  Butadiene, 1,3-  Butanol, N-  Butylbenzene, n-  Butylbenzene, sec-  Butylbenzene, tert-  Cadmium (Diet)  Carbon Tetrachloride  Chloro-2-methylaniline, 4-  Chloroacetaldehyde, 2-  Chlorobutane, 1-  Chlorotoluene, o-  Chlorotoluene, p-  Chromium(III), Insoluble Salts	M	(dimensionless)	(mg/kg-day)-1  5.00E-01  5.40E-01  1.50E+00  No Toxicity Value  5.50E-02  No Toxicity Value  2.30E+02  No Toxicity Value  6.20E-02  7.90E-03  3.40E+00  No Toxicity Value  7.00E-02  3.50E-01  1.00E-01  2.70E-01  No Toxicity Value  No Toxicity Value  No Toxicity Value  No Toxicity Value	(mg/kg)  3.06E-01 1.29E+00 7.72E-01 1.26E+01 6.66E-04 1.12E+01 8.80E+01 2.04E-01 9.93E+00 1.99E+00 6.95E+00 2.57E+00	(mg/kg-day)  2.00E-03 4.00E-02 3.00E-04 1.00E-01 4.00E-03 1.00E-03 2.00E-03 2.00E-02 2.00E-02 No Toxicity Value 1.00E-01 1.00E-01 1.00E-01 1.00E-01 1.00E-03 4.00E-03 5.00E-04 3.00E-03 No Toxicity Value 4.00E-02 2.00E-02 2.00E-02	(mg/kg)  1.56E+02 3.13E+03 3.91E+01 7.82E+03 3.13E+02 7.82E+01 2.35E+02 1.56E+03 1.56E+03 7.82E+03 7.82E+03 7.82E+01 3.13E+03 7.82E+01 3.13E+02 3.91E+01 2.35E+02 3.13E+03 1.56E+03 1.56E+03 1.56E+03 1.56E+03 1.56E+03		(mg/kg-day) <sup>-1</sup> 4.50E+00 1.00E+00 9.50E+00 No Toxicity Value 1.00E-01 No Toxicity Value 5.00E+02 No Toxicity Value 1.30E-01 1.10E-02 6.00E-01 No Toxicity Value 1.50E-01 1.30E+00 2.70E-01 2.70E-01 No Toxicity Value No Toxicity Value No Toxicity Value	(mg/kg)  3.40E-02 6.95E-01 7.32E-02 6.95E+00 3.06E-04 5.35E+00 6.32E+01 1.16E+00 4.63E+00 5.35E-01 2.57E+00 2.57E+00	(mg/kg-day)  2.00E-03  4.00E-02  3.50E-06  1.00E-01  4.00E-03  1.00E-03  3.00E-03  2.00E-04  2.00E-02  No Toxicity Value  1.00E-01  5.00E-02  1.00E-01  6.30E-06  4.00E-03  5.00E-04  3.00E-03  No Toxicity Value  4.00E-03  5.00E-04  3.00E-03  No Toxicity Value	(mg/kg)  1.56E+02 3.13E+03 2.74E-01 7.82E+03 3.13E+02 7.82E+01 2.35E+02 1.56E+03 1.56E+03 7.82E+03 3.91E+03 7.82E+03 5.26E+00 3.13E+02 3.91E+01 2.35E+02 3.13E+03 1.56E+03 1.56E+03 1.56E+03 1.56E+03 1.56E+03 1.56E+03

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Table A-3a. USEPA RSLs and DTSC-SLs for a Residential Receptor Exposed to Soil via Incidental Ingestion

USEPA Value

Variable

Definition

DTSC Value

Units

Equations

	Variable	USEPA Value	DTSC Value	Units	Equations						
Age-dependent Adjustment Factor, 0-2	ADAF <sub>0-2</sub>	10	10	yrs	Carcinogens:	TD V (AT V 265 day)	aar)				
Age-dependent Adjustment Factor, 2-6	ADAF <sub>2-6</sub>	3	3	yrs	$(R)SL_{ing} =$	$TR \times (AT_c \times 365 \ day/y)$ $EF_r \times \left(\frac{ED_c \times IRS_c}{BW} + \frac{ED_a \times IR}{BW}\right)$	eur)				
Age-dependent Adjustment Factor, 6-16	$ADAF_{6-16}$	3	3	yrs	$SF_o \times$	$EF_r \times \left(\frac{ED_c \times IKS_c}{RW} + \frac{ED_a \times IK}{RW}\right)$	$\left(\frac{S_a}{a}\right) \times CF_o \times RBA$				
Age-dependent Adjustment Factor, 16-26	$ADAF_{16-26}$	1	1	yrs		$\langle bv_c bv_a \rangle$	,				
Averaging Time, carcinogens	AT <sub>c</sub>	70	70	yrs	Mutagens:	TDV	$(AT_c \times 365  days/yec)$	)			
Averaging Time, noncarcinogens, adult	$AT_{nc,a}$	20	20	yrs	$(R)SL_{ing} =$	$\begin{array}{c} IR \times \\ EE_r \times \left( \frac{ED_{0-2} \times IRS_c \times ADA}{BW_c} \right. \\ \left. \frac{ED_{6-16} \times IRS_a \times ADA}{BW_a} \right. \end{array}$	$(AI_c \times 305 uuys/yeu$	ur)	_		
Averaging Time, noncarcinogens, child	$AT_{nc,c}$	6	6	yrs	( ) ing	$\int \frac{ED_{0-2} \times IRS_c \times ADA}{DM}$	$\frac{BF_{0-2}}{DI} + \frac{ED_{2-6} \times IRS_0}{DI}$	$\frac{1}{47} \times \frac{ADAF_{2-6}}{47} + $			
Body Weight, adult	$BW_a$	80	80	kg	$SF_o \times$	$\langle EF_r \times   FD \rangle \langle IPS \rangle \langle ADA \rangle$	E EN VIE	$\times CF_o \times RI$	BA		
Body Weight, child	BW <sub>c</sub>	15	15	kg		$\sqrt{\frac{ED_{6-16} \times IRS_a \times ADA}{RW_a}}$	$\frac{16-16}{1} + \frac{10016-26 \times 100}{1000000000000000000000000000000000$	$BW_a$			
Carcinogenic adjustment factor, ingestion	CAFo	0.804	0.804	dimensionless		\ Zma	•	,			
Conversion Factor	CF <sub>o</sub>	1E-06	1E-06	kg/mg	Trichloroethene:		,	$TR \times (AT_c \times 365  days/year)$			
Exposure Duration, child 0-2	$ED_{0-2}$	2	2	yrs	$(R)SL_{ing} =$				IDC × ADAE ED	VIDC VADAE	
Exposure Duration, child 2-6	$ED_{2-6}$	4	4	yrs		(,	ED ~ IDC ED ~	$DC \setminus \frac{ED_{0-2} \times ED_{0-2} \times ED$	$\frac{IKS_c \times ADAF_{0-2}}{RW} + \frac{ED_{2-6}}{RW}$	$\frac{\times RS_c \times ADAF_{2-6}}{RW}$ +	
Exposure Duration, child 6-16	ED <sub>6-16</sub>	10	10	yrs	$SF_o >$	$\times EF_r \times CF_o \times RBA \times \left\{ \left( CAF_o \times \right. \right. \right.$	$\frac{ED_c \times INS_c}{BW_c} + \frac{ED_a \times INS_c}{BW_c}$	$\left(\frac{IKS_a}{I_o}\right) + \left(\frac{MAF_o}{I_o} \times \left(\frac{IKS_a}{I_o}\right)\right) + \left(\frac{IKS_a}{I_o}\right)$	$RS \times ADAF_{c} = ED_{c}$	$2 \times IRS \times ADAF_{cons}$	
Exposure Duration, adult 16-26	ED <sub>16-26</sub>	10	10	yrs		(`	DIIC DII	$\frac{a}{a}$ $\frac{2D_{6-16} \times 1}{a}$	$\frac{RO_a \times RDRR_{6-16}}{BW_a} + \frac{ED_{16-1}}{BW_{6-16}}$	$\frac{26 \times 1103a \times 110711_{16-26}}{BW_{\sigma}}$	
Exposure Duration, adult	ED <sub>a</sub>	20	20	yrs	V. 1011 :1			L	- ·· u	- · · u / 1/	
Exposure Duration, child	$ED_c$	5	6	yrs	Vinyl Chloride:		TR				
Exposure Frequency, resident	EF <sub>r</sub>	350	350	days/yr	$(R)SL_{ing} =$	[/ (ED v IDC ED v	IDC \				
Soil Ingestion Rate (adult)	IRS <sub>a</sub>	100	100	mg/day		$\int EF_r \times \left(\frac{ED_c \times IRS_c}{RW} + \frac{ED_a \times IRS_c}{RW}\right)$	$(IRS_a) \times CF_o \setminus (ID)$	S × CF \			
Soil Ingestion Rate (child)	IRS <sub>c</sub>	200	200	mg/day	$SF_o \times$	$\langle    \frac{DW_C}{dav_c} = \frac{DW}{dav_c}$	$\left(\frac{r_a}{s}\right) + \left(\frac{r_K}{s}\right)$	$\frac{S_c \times SI_o}{BW_c}$ $\times RBA$			
Mutagenic adjustment factor, ingestion	MAF <sub>O</sub>	0.202	0.202	dimensionless		$ \left\{ \left( \frac{EF_r \times \left( \frac{ED_c \times IRS_c}{BW_c} + \frac{ED_a \times ED_a}{BW_c} \right)}{AT_c \times 365 \frac{days}{year}} \right) \right\} $	<del>.</del> / `	/			
Relative Bioavailability	RBA		cal-specific	dimensionless		je	/	,			
Oral Reference Dose	RfD <sub>O</sub>		cal-specific	(mg/kg-day)				TO G G			
(Regional) Screening Level, ingestion	$(R)SL_{Ing}$		ed herein	mg/kg	Noncarcinogens:	$r \sim 365 \frac{day}{}$	D'	TSC Cadmium - noncarcinogenic:	THO	$0 \times (AT_{\text{max}} \times 365 \frac{day}{}) \times B$	W_
Oral Slope Factor	$SF_O$	chemic	cal-specific	(mg/kg-day) <sup>-1</sup>	$(R)SI = \frac{IIIQ \times (AI)}{II}$	$\frac{1}{nc,c} \wedge 303 \frac{1}{year} \wedge BW_c$			Shina adult cd =	$(111nc,26-yr adult \times 303 year) \times D$	
Target Hazard Quotient	THQ	1	1	dimensionless	$(R)SL_{ing} - EF_{-} \times ED_{-} \times EF_{-} \times ED_{-} \times ED_{-$	$\frac{T_{nc,c} \times 365 \frac{day}{year} \times BW_c}{\frac{1}{RfD} \times IRS_c \times CF_o \times RBA}$			$EF_r \times \mathcal{E}$	$0 \times \left(AT_{nc,26-yr\ adult} \times 365 \frac{ddy}{year}\right) \times B$ $ED_{26-yr\ adult} \times IRS_a \times \frac{1}{16D} \times CF_o \times CF_$	RBA
Target Risk	TR	1.0E-06	1.0E-06	dimensionless	217 226	$RfD_o$ · · · · · · · · · · · · · · · · · · ·			,	$u RfD_0$	
				Residential	USEPA RSL <sub>ing</sub>				Residential DTSC	C-SL <sub>ing</sub>	
	_	RBA	SFo	Cancer	$RfD_o$	Noncancer	RBA	$SF_o$	Cancer	$RfD_o$	Noncancer
Analyte	Mutagen?	(dimensionless)	(mg/kg-day)-1	(mg/kg)	(mg/kg-day)	(mg/kg)	(dimensionless)	(mg/kg-day) <sup>-1</sup>	(mg/kg)	(mg/kg-day)	(mg/kg)
Cyanides											
~Cyanogen		1	No Toxicity Value		1.00E-03	7.82E+01	1	No Toxicity Value		1.00E-03	7.82E+01
~Cyanogen Bromide		1	No Toxicity Value		9.00E-02	7.04E+03	1	No Toxicity Value		9.00E-02	7.04E+03
~Cyanogen Chloride		1	•					110 Toxicity Value			
~Cyanogen Chioride		1			5 OOE O2	2 01E ± 02	1	No Torrigity Volus		5 OOF 02	
Dotoccium Cilvar Cvanida		1	No Toxicity Value		5.00E-02	3.91E+03	1	No Toxicity Value		5.00E-02	3.91E+03
~Potassium Silver Cyanide		1	No Toxicity Value		5.00E-03	3.91E+02	1	No Toxicity Value		5.00E-03	3.91E+02
~Silver Cyanide		1	No Toxicity Value No Toxicity Value		5.00E-03 1.00E-01	3.91E+02 7.82E+03	1 1 1	No Toxicity Value No Toxicity Value		5.00E-03 1.00E-01	3.91E+02 7.82E+03
~Silver Cyanide Dibromobenzene, 1,3-		1	No Toxicity Value No Toxicity Value No Toxicity Value		5.00E-03 1.00E-01 4.00E-04	3.91E+02 7.82E+03 3.13E+01	1 1 1	No Toxicity Value No Toxicity Value No Toxicity Value		5.00E-03 1.00E-01 4.00E-04	3.91E+02 7.82E+03 3.13E+01
~Silver Cyanide Dibromobenzene, 1,3- Dibromobenzene, 1,4-		1 1 1	No Toxicity Value No Toxicity Value No Toxicity Value No Toxicity Value	  	5.00E-03 1.00E-01 4.00E-04 1.00E-02	3.91E+02 7.82E+03 3.13E+01 7.82E+02	1 1 1 1	No Toxicity Value No Toxicity Value No Toxicity Value No Toxicity Value	  	5.00E-03 1.00E-01 4.00E-04 1.00E-02	3.91E+02 7.82E+03 3.13E+01 7.82E+02
~Silver Cyanide Dibromobenzene, 1,3-		1	No Toxicity Value No Toxicity Value No Toxicity Value	  	5.00E-03 1.00E-01 4.00E-04	3.91E+02 7.82E+03 3.13E+01	1 1 1 1 1	No Toxicity Value No Toxicity Value No Toxicity Value		5.00E-03 1.00E-01 4.00E-04	3.91E+02 7.82E+03 3.13E+01
~Silver Cyanide Dibromobenzene, 1,3- Dibromobenzene, 1,4-		1 1 1	No Toxicity Value No Toxicity Value No Toxicity Value No Toxicity Value	  	5.00E-03 1.00E-01 4.00E-04 1.00E-02	3.91E+02 7.82E+03 3.13E+01 7.82E+02	1 1 1 1 1 1	No Toxicity Value No Toxicity Value No Toxicity Value No Toxicity Value	  	5.00E-03 1.00E-01 4.00E-04 1.00E-02	3.91E+02 7.82E+03 3.13E+01 7.82E+02
~Silver Cyanide Dibromobenzene, 1,3- Dibromobenzene, 1,4- Dibromochloromethane		1 1 1 1	No Toxicity Value No Toxicity Value No Toxicity Value No Toxicity Value 8.40E-02	   8.28E+00	5.00E-03 1.00E-01 4.00E-04 1.00E-02 2.00E-02	3.91E+02 7.82E+03 3.13E+01 7.82E+02 1.56E+03	1 1 1 1 1 1 1 1	No Toxicity Value No Toxicity Value No Toxicity Value No Toxicity Value 8.40E-02	   8.28E+00	5.00E-03 1.00E-01 4.00E-04 1.00E-02 2.00E-02	3.91E+02 7.82E+03 3.13E+01 7.82E+02 1.56E+03
~Silver Cyanide Dibromobenzene, 1,3- Dibromobenzene, 1,4- Dibromochloromethane Dibromoethane, 1,2-		1 1 1 1	No Toxicity Value No Toxicity Value No Toxicity Value No Toxicity Value 8.40E-02 2.00E+00	   8.28E+00 3.48E-01	5.00E-03 1.00E-01 4.00E-04 1.00E-02 2.00E-02 9.00E-03	3.91E+02 7.82E+03 3.13E+01 7.82E+02 1.56E+03 7.04E+02	1 1 1 1 1 1 1 1	No Toxicity Value No Toxicity Value No Toxicity Value No Toxicity Value 8.40E-02 3.60E+00	   8.28E+00 1.93E-01	5.00E-03 1.00E-01 4.00E-04 1.00E-02 2.00E-02 9.00E-03	3.91E+02 7.82E+03 3.13E+01 7.82E+02 1.56E+03 7.04E+02
~Silver Cyanide Dibromobenzene, 1,3- Dibromobenzene, 1,4- Dibromochloromethane Dibromoethane, 1,2- Dichlorobenzidine, 3,3'-		1 1 1 1	No Toxicity Value No Toxicity Value No Toxicity Value No Toxicity Value 8.40E-02 2.00E+00 4.50E-01	   8.28E+00 3.48E-01 1.54E+00	5.00E-03 1.00E-01 4.00E-04 1.00E-02 2.00E-02 9.00E-03 No Toxicity Value	3.91E+02 7.82E+03 3.13E+01 7.82E+02 1.56E+03 7.04E+02	1 1 1 1 1 1 1 1 1	No Toxicity Value No Toxicity Value No Toxicity Value No Toxicity Value 8.40E-02 3.60E+00 1.20E+00 5.70E-03	   8.28E+00 1.93E-01 5.79E-01	5.00E-03 1.00E-01 4.00E-04 1.00E-02 2.00E-02 9.00E-03 No Toxicity Value	3.91E+02 7.82E+03 3.13E+01 7.82E+02 1.56E+03 7.04E+02
~Silver Cyanide Dibromobenzene, 1,3- Dibromobenzene, 1,4- Dibromochloromethane Dibromoethane, 1,2- Dichlorobenzidine, 3,3'- Dichloroethane, 1,1- Dichloroethylene, 1,2-cis-		1 1 1 1	No Toxicity Value No Toxicity Value No Toxicity Value No Toxicity Value 8.40E-02 2.00E+00 4.50E-01 5.70E-03 No Toxicity Value	  8.28E+00 3.48E-01 1.54E+00 1.22E+02	5.00E-03 1.00E-01 4.00E-04 1.00E-02 2.00E-02 9.00E-03 No Toxicity Value 2.00E-01 2.00E-03	3.91E+02 7.82E+03 3.13E+01 7.82E+02 1.56E+03 7.04E+02  1.56E+04 1.56E+02	1 1 1 1 1 1 1 1 1 1	No Toxicity Value 8.40E-02 3.60E+00 1.20E+00	  8.28E+00 1.93E-01 5.79E-01 1.22E+02	5.00E-03 1.00E-01 4.00E-04 1.00E-02 2.00E-02 9.00E-03 No Toxicity Value 2.00E-01 2.00E-03	3.91E+02 7.82E+03 3.13E+01 7.82E+02 1.56E+03 7.04E+02  1.56E+04 1.56E+02
~Silver Cyanide Dibromobenzene, 1,3- Dibromobenzene, 1,4- Dibromochloromethane Dibromoethane, 1,2- Dichlorobenzidine, 3,3'- Dichloroethylene, 1,2-cis- Dichloroethylene, 1,2-trans-		1 1 1 1 1 1 1 1 1	No Toxicity Value No Toxicity Value No Toxicity Value No Toxicity Value 8.40E-02 2.00E+00 4.50E-01 5.70E-03 No Toxicity Value No Toxicity Value	8.28E+00 3.48E-01 1.54E+00 1.22E+02	5.00E-03 1.00E-01 4.00E-04 1.00E-02 2.00E-02 9.00E-03 No Toxicity Value 2.00E-01 2.00E-03 2.00E-02	3.91E+02 7.82E+03 3.13E+01 7.82E+02 1.56E+03 7.04E+02  1.56E+04 1.56E+02 1.56E+03	1 1 1 1 1 1 1 1 1 1 1	No Toxicity Value No Toxicity Value No Toxicity Value No Toxicity Value 8.40E-02 3.60E+00 1.20E+00 5.70E-03 No Toxicity Value No Toxicity Value	  8.28E+00 1.93E-01 5.79E-01 1.22E+02	5.00E-03 1.00E-01 4.00E-04 1.00E-02 2.00E-02 9.00E-03 No Toxicity Value 2.00E-01 2.00E-03 2.00E-03	3.91E+02 7.82E+03 3.13E+01 7.82E+02 1.56E+03 7.04E+02  1.56E+04 1.56E+02 1.56E+03
~Silver Cyanide Dibromobenzene, 1,3- Dibromobenzene, 1,4- Dibromochloromethane Dibromoethane, 1,2- Dichloroethane, 1,1- Dichloroethylene, 1,2-cis- Dichloroethylene, 1,2-trans- Dichloropropane, 1,3-		1 1 1 1 1 1 1 1 1 1	No Toxicity Value No Toxicity Value No Toxicity Value No Toxicity Value 8.40E-02 2.00E+00 4.50E-01 5.70E-03 No Toxicity Value No Toxicity Value No Toxicity Value	  8.28E+00 3.48E-01 1.54E+00 1.22E+02 	5.00E-03 1.00E-01 4.00E-04 1.00E-02 2.00E-02 9.00E-03 No Toxicity Value 2.00E-01 2.00E-03 2.00E-02 2.00E-02	3.91E+02 7.82E+03 3.13E+01 7.82E+02 1.56E+03 7.04E+02 1.56E+04 1.56E+02 1.56E+03 1.56E+03	1 1 1 1 1 1 1 1 1 1 1 1	No Toxicity Value No Toxicity Value No Toxicity Value No Toxicity Value 8.40E-02 3.60E+00 1.20E+00 5.70E-03 No Toxicity Value No Toxicity Value No Toxicity Value	  8.28E+00 1.93E-01 5.79E-01 1.22E+02 	5.00E-03 1.00E-01 4.00E-04 1.00E-02 2.00E-02 9.00E-03 No Toxicity Value 2.00E-01 2.00E-03 2.00E-02 2.00E-02	3.91E+02 7.82E+03 3.13E+01 7.82E+02 1.56E+03 7.04E+02  1.56E+04 1.56E+02 1.56E+03 1.56E+03
~Silver Cyanide Dibromobenzene, 1,3- Dibromobenzene, 1,4- Dibromochloromethane Dibromoethane, 1,2- Dichlorobenzidine, 3,3'- Dichloroethylene, 1,2-cis- Dichloroethylene, 1,2-trans- Dichloropropane, 1,3- Dichloropropene, 1,3-		1 1 1 1 1 1 1 1 1 1 1	No Toxicity Value No Toxicity Value No Toxicity Value No Toxicity Value 8.40E-02 2.00E+00 4.50E-01 5.70E-03 No Toxicity Value No Toxicity Value No Toxicity Value 1.00E-01	8.28E+00 3.48E-01 1.54E+00 1.22E+02 	5.00E-03 1.00E-01 4.00E-04 1.00E-02 2.00E-02 9.00E-03 No Toxicity Value 2.00E-01 2.00E-03 2.00E-02 2.00E-02 3.00E-02	3.91E+02 7.82E+03 3.13E+01 7.82E+02 1.56E+03 7.04E+02 1.56E+04 1.56E+02 1.56E+03 1.56E+03 2.35E+03	1 1 1 1 1 1 1 1 1 1 1 1 1	No Toxicity Value No Toxicity Value No Toxicity Value No Toxicity Value 8.40E-02 3.60E+00 1.20E+00 5.70E-03 No Toxicity Value No Toxicity Value No Toxicity Value 9.10E-02		5.00E-03 1.00E-01 4.00E-04 1.00E-02 2.00E-02 9.00E-03 No Toxicity Value 2.00E-01 2.00E-03 2.00E-02 2.00E-02 3.00E-02	3.91E+02 7.82E+03 3.13E+01 7.82E+02 1.56E+03 7.04E+02  1.56E+04 1.56E+02 1.56E+03 1.56E+03 2.35E+03
~Silver Cyanide Dibromobenzene, 1,3- Dibromobenzene, 1,4- Dibromochloromethane Dibromoethane, 1,2- Dichlorobenzidine, 3,3'- Dichloroethylene, 1,2-cis- Dichloroethylene, 1,2-trans- Dichloropropane, 1,3- Dichloropropene, 1,3- Dimethylaniline, N,N-		1 1 1 1 1 1 1 1 1 1 1 1	No Toxicity Value No Toxicity Value No Toxicity Value No Toxicity Value 8.40E-02 2.00E+00 4.50E-01 5.70E-03 No Toxicity Value No Toxicity Value No Toxicity Value 1.00E-01 No Toxicity Value	8.28E+00 3.48E-01 1.54E+00 1.22E+02   6.95E+00	5.00E-03 1.00E-01 4.00E-04 1.00E-02 2.00E-02 9.00E-03 No Toxicity Value 2.00E-01 2.00E-03 2.00E-02 2.00E-02 3.00E-02 2.00E-02	3.91E+02 7.82E+03 3.13E+01 7.82E+02 1.56E+03 7.04E+02 1.56E+04 1.56E+02 1.56E+03 2.35E+03 1.56E+03	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	No Toxicity Value No Toxicity Value No Toxicity Value No Toxicity Value 8.40E-02 3.60E+00 1.20E+00 5.70E-03 No Toxicity Value No Toxicity Value No Toxicity Value No Toxicity Value 9.10E-02 No Toxicity Value		5.00E-03 1.00E-01 4.00E-04 1.00E-02 2.00E-02 9.00E-03 No Toxicity Value 2.00E-01 2.00E-03 2.00E-02 2.00E-02 3.00E-02 2.00E-02 3.00E-02 2.00E-03	3.91E+02 7.82E+03 3.13E+01 7.82E+02 1.56E+03 7.04E+02 1.56E+04 1.56E+02 1.56E+03 2.35E+03 1.56E+03
~Silver Cyanide Dibromobenzene, 1,3- Dibromobenzene, 1,4- Dibromochloromethane Dibromoethane, 1,2- Dichlorobenzidine, 3,3'- Dichloroethane, 1,1- Dichloroethylene, 1,2-cis- Dichloroethylene, 1,2-trans- Dichloropropane, 1,3- Dichloropropene, 1,3- Dimethylaniline, N,N- Epichlorohydrin		1 1 1 1 1 1 1 1 1 1 1 1 1 1	No Toxicity Value No Toxicity Value No Toxicity Value No Toxicity Value 8.40E-02 2.00E+00 4.50E-01 5.70E-03 No Toxicity Value No Toxicity Value No Toxicity Value 1.00E-01 No Toxicity Value 9.90E-03	8.28E+00 3.48E-01 1.54E+00 1.22E+02   6.95E+00  7.02E+01	5.00E-03 1.00E-01 4.00E-04 1.00E-02 2.00E-02 9.00E-03 No Toxicity Value 2.00E-01 2.00E-03 2.00E-02 2.00E-02 3.00E-02 2.00E-03 6.00E-03	3.91E+02 7.82E+03 3.13E+01 7.82E+02 1.56E+03 7.04E+02  1.56E+04 1.56E+02 1.56E+03 2.35E+03 1.56E+02 4.69E+02	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	No Toxicity Value No Toxicity Value No Toxicity Value No Toxicity Value 8.40E-02 3.60E+00 1.20E+00 5.70E-03 No Toxicity Value No Toxicity Value No Toxicity Value No Toxicity Value 9.10E-02 No Toxicity Value 8.00E-02		5.00E-03  1.00E-01  4.00E-04  1.00E-02  2.00E-02  9.00E-03  No Toxicity Value  2.00E-01  2.00E-03  2.00E-02  2.00E-02  2.00E-02  2.00E-02  3.00E-02  2.00E-03  6.00E-03	3.91E+02 7.82E+03 3.13E+01 7.82E+02 1.56E+03 7.04E+02 1.56E+04 1.56E+02 1.56E+03 2.35E+03 1.56E+03 4.69E+02
~Silver Cyanide Dibromobenzene, 1,3- Dibromobenzene, 1,4- Dibromochloromethane Dibromochloromethane Dibromochloromethane, 1,2- Dichlorobenzidine, 3,3'- Dichloroethane, 1,1- Dichloroethylene, 1,2-cis- Dichloroethylene, 1,2-trans- Dichloropropane, 1,3- Dichloropropane, 1,3- Dimethylaniline, N,N- Epichlorohydrin Ethyl Chloride (Chloroethane)		1 1 1 1 1 1 1 1 1 1 1 1	No Toxicity Value No Toxicity Value No Toxicity Value No Toxicity Value 8.40E-02 2.00E+00 4.50E-01 5.70E-03 No Toxicity Value No Toxicity Value No Toxicity Value 1.00E-01 No Toxicity Value 9.90E-03 No Toxicity Value	8.28E+00 3.48E-01 1.54E+00 1.22E+02   6.95E+00	5.00E-03 1.00E-01 4.00E-04 1.00E-02 2.00E-02 9.00E-03 No Toxicity Value 2.00E-01 2.00E-03 2.00E-02 2.00E-02 3.00E-02 2.00E-03 6.00E-03 No Toxicity Value	3.91E+02 7.82E+03 3.13E+01 7.82E+02 1.56E+03 7.04E+02 1.56E+04 1.56E+03 1.56E+03 2.35E+03 1.56E+02 4.69E+02	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	No Toxicity Value No Toxicity Value No Toxicity Value No Toxicity Value 8.40E-02 3.60E+00 1.20E+00 5.70E-03 No Toxicity Value No Toxicity Value No Toxicity Value No Toxicity Value 9.10E-02 No Toxicity Value 8.00E-02 4.70E-03		5.00E-03  1.00E-01  4.00E-04  1.00E-02  2.00E-02  9.00E-03  No Toxicity Value  2.00E-01  2.00E-03  2.00E-02  2.00E-02  3.00E-02  2.00E-03  6.00E-03  No Toxicity Value	3.91E+02 7.82E+03 3.13E+01 7.82E+02 1.56E+03 7.04E+02 1.56E+04 1.56E+03 1.56E+03 2.35E+03 1.56E+02 4.69E+02
~Silver Cyanide Dibromobenzene, 1,3- Dibromobenzene, 1,4- Dibromochloromethane Dibromoethane, 1,2- Dichlorobenzidine, 3,3'- Dichloroethane, 1,1- Dichloroethylene, 1,2-cis- Dichloroethylene, 1,2-trans- Dichloropropane, 1,3- Dichloropropene, 1,3- Dimethylaniline, N,N- Epichlorohydrin		1 1 1 1 1 1 1 1 1 1 1 1 1 1	No Toxicity Value No Toxicity Value No Toxicity Value No Toxicity Value 8.40E-02 2.00E+00 4.50E-01 5.70E-03 No Toxicity Value No Toxicity Value No Toxicity Value 1.00E-01 No Toxicity Value 9.90E-03	8.28E+00 3.48E-01 1.54E+00 1.22E+02   6.95E+00  7.02E+01	5.00E-03 1.00E-01 4.00E-04 1.00E-02 2.00E-02 9.00E-03 No Toxicity Value 2.00E-01 2.00E-03 2.00E-02 2.00E-02 3.00E-02 2.00E-03 6.00E-03	3.91E+02 7.82E+03 3.13E+01 7.82E+02 1.56E+03 7.04E+02  1.56E+04 1.56E+02 1.56E+03 2.35E+03 1.56E+02 4.69E+02	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	No Toxicity Value No Toxicity Value No Toxicity Value No Toxicity Value 8.40E-02 3.60E+00 1.20E+00 5.70E-03 No Toxicity Value No Toxicity Value No Toxicity Value No Toxicity Value 9.10E-02 No Toxicity Value 8.00E-02		5.00E-03  1.00E-01  4.00E-04  1.00E-02  2.00E-02  9.00E-03  No Toxicity Value  2.00E-01  2.00E-03  2.00E-02  2.00E-02  2.00E-02  2.00E-02  3.00E-02  2.00E-03  6.00E-03	3.91E+02 7.82E+03 3.13E+01 7.82E+02 1.56E+03 7.04E+02 1.56E+04 1.56E+02 1.56E+03 2.35E+03 1.56E+03 4.69E+02
~Silver Cyanide Dibromobenzene, 1,3- Dibromobenzene, 1,4- Dibromochloromethane Dibromochloromethane Dibromochloromethane, 1,2- Dichlorobenzidine, 3,3'- Dichloroethane, 1,1- Dichloroethylene, 1,2-cis- Dichloroethylene, 1,2-trans- Dichloropropane, 1,3- Dichloropropane, 1,3- Dimethylaniline, N,N- Epichlorohydrin Ethyl Chloride (Chloroethane)		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	No Toxicity Value No Toxicity Value No Toxicity Value No Toxicity Value 8.40E-02 2.00E+00 4.50E-01 5.70E-03 No Toxicity Value No Toxicity Value No Toxicity Value 1.00E-01 No Toxicity Value 9.90E-03 No Toxicity Value	8.28E+00 3.48E-01 1.54E+00 1.22E+02 6.95E+00 7.02E+01	5.00E-03 1.00E-01 4.00E-04 1.00E-02 2.00E-02 9.00E-03 No Toxicity Value 2.00E-01 2.00E-03 2.00E-02 2.00E-02 3.00E-02 2.00E-03 6.00E-03 No Toxicity Value	3.91E+02 7.82E+03 3.13E+01 7.82E+02 1.56E+03 7.04E+02 1.56E+04 1.56E+03 1.56E+03 2.35E+03 1.56E+02 4.69E+02	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	No Toxicity Value No Toxicity Value No Toxicity Value No Toxicity Value 8.40E-02 3.60E+00 1.20E+00 5.70E-03 No Toxicity Value No Toxicity Value No Toxicity Value No Toxicity Value 9.10E-02 No Toxicity Value 8.00E-02 4.70E-03		5.00E-03  1.00E-01  4.00E-04  1.00E-02  2.00E-02  9.00E-03  No Toxicity Value  2.00E-01  2.00E-03  2.00E-02  2.00E-02  3.00E-02  2.00E-03  6.00E-03  No Toxicity Value	3.91E+02 7.82E+03 3.13E+01 7.82E+02 1.56E+03 7.04E+02 1.56E+04 1.56E+03 1.56E+03 2.35E+03 1.56E+02 4.69E+02
~Silver Cyanide Dibromobenzene, 1,3- Dibromobenzene, 1,4- Dibromochloromethane Dibromochloromethane Dibromochloromethane, 1,2- Dichlorobenzidine, 3,3'- Dichloroethane, 1,1- Dichloroethylene, 1,2-cis- Dichloroethylene, 1,2-trans- Dichloropropane, 1,3- Dichloropropene, 1,3- Dimethylaniline, N,N- Epichlorohydrin Ethyl Chloride (Chloroethane) Ethyl Ether		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	No Toxicity Value No Toxicity Value No Toxicity Value No Toxicity Value 8.40E-02 2.00E+00 4.50E-01 5.70E-03 No Toxicity Value No Toxicity Value No Toxicity Value 1.00E-01 No Toxicity Value 9.90E-03 No Toxicity Value	8.28E+00 3.48E-01 1.54E+00 1.22E+02 6.95E+00 7.02E+01	5.00E-03 1.00E-01 4.00E-04 1.00E-02 2.00E-02 9.00E-03 No Toxicity Value 2.00E-01 2.00E-03 2.00E-02 2.00E-02 3.00E-02 2.00E-03 6.00E-03 No Toxicity Value	3.91E+02 7.82E+03 3.13E+01 7.82E+02 1.56E+03 7.04E+02 1.56E+04 1.56E+03 1.56E+03 2.35E+03 1.56E+02 4.69E+02	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	No Toxicity Value No Toxicity Value No Toxicity Value No Toxicity Value 8.40E-02 3.60E+00 1.20E+00 5.70E-03 No Toxicity Value No Toxicity Value No Toxicity Value No Toxicity Value 9.10E-02 No Toxicity Value 8.00E-02 4.70E-03		5.00E-03  1.00E-01  4.00E-04  1.00E-02  2.00E-02  9.00E-03  No Toxicity Value  2.00E-01  2.00E-03  2.00E-02  2.00E-02  3.00E-02  2.00E-03  6.00E-03  No Toxicity Value	3.91E+02 7.82E+03 3.13E+01 7.82E+02 1.56E+03 7.04E+02 1.56E+04 1.56E+03 1.56E+03 2.35E+03 1.56E+02 4.69E+02
~Silver Cyanide Dibromobenzene, 1,3- Dibromobenzene, 1,4- Dibromochloromethane Dibromochloromethane Dibromochloromethane, 1,2- Dichlorobenzidine, 3,3'- Dichloroethane, 1,1- Dichloroethylene, 1,2-cis- Dichloroethylene, 1,2-trans- Dichloropropane, 1,3- Dichloropropene, 1,3- Dimethylaniline, N,N- Epichlorohydrin Ethyl Chloride (Chloroethane) Ethyl Ether Furans		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	No Toxicity Value No Toxicity Value No Toxicity Value No Toxicity Value 8.40E-02 2.00E+00 4.50E-01 5.70E-03 No Toxicity Value No Toxicity Value No Toxicity Value 1.00E-01 No Toxicity Value 9.90E-03 No Toxicity Value No Toxicity Value	8.28E+00 3.48E-01 1.54E+00 1.22E+02 6.95E+00 7.02E+01	5.00E-03 1.00E-01 4.00E-04 1.00E-02 2.00E-02 9.00E-03 No Toxicity Value 2.00E-01 2.00E-03 2.00E-02 2.00E-02 3.00E-02 2.00E-03 6.00E-03 No Toxicity Value	3.91E+02 7.82E+03 3.13E+01 7.82E+02 1.56E+03 7.04E+02 1.56E+04 1.56E+03 1.56E+03 2.35E+03 1.56E+02 4.69E+02 1.56E+04	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	No Toxicity Value No Toxicity Value No Toxicity Value No Toxicity Value 8.40E-02 3.60E+00 1.20E+00 5.70E-03 No Toxicity Value No Toxicity Value No Toxicity Value No Toxicity Value 9.10E-02 No Toxicity Value 8.00E-02 4.70E-03 No Toxicity Value		5.00E-03  1.00E-01  4.00E-04  1.00E-02  2.00E-02  9.00E-03  No Toxicity Value  2.00E-01  2.00E-02  2.00E-02  2.00E-02  3.00E-02  2.00E-03  6.00E-03  No Toxicity Value	3.91E+02 7.82E+03 3.13E+01 7.82E+02 1.56E+03 7.04E+02 1.56E+04 1.56E+03 1.56E+03 2.35E+03 1.56E+02 4.69E+02 1.56E+04
~Silver Cyanide Dibromobenzene, 1,3- Dibromobenzene, 1,4- Dibromochloromethane Dibromochloromethane Dibromoethane, 1,2- Dichlorobenzidine, 3,3'- Dichloroethane, 1,1- Dichloroethylene, 1,2-cis- Dichloroethylene, 1,2-trans- Dichloropropane, 1,3- Dichloropropane, 1,3- Dichloropropene, 1,3- Epichlorohydrin Ethyl Chloride (Chloroethane) Ethyl Ether Furans ~Furan Hexachlorobutadiene		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	No Toxicity Value No Toxicity Value No Toxicity Value No Toxicity Value 8.40E-02 2.00E+00 4.50E-01 5.70E-03 No Toxicity Value No Toxicity Value No Toxicity Value 1.00E-01 No Toxicity Value 9.90E-03 No Toxicity Value No Toxicity Value No Toxicity Value	8.28E+00 3.48E-01 1.54E+00 1.22E+02 6.95E+00 7.02E+01 8.91E+00	5.00E-03 1.00E-01 4.00E-04 1.00E-02 2.00E-02 9.00E-03 No Toxicity Value 2.00E-01 2.00E-03 2.00E-02 2.00E-02 3.00E-02 2.00E-03 6.00E-03 No Toxicity Value	3.91E+02 7.82E+03 3.13E+01 7.82E+02 1.56E+03 7.04E+02 1.56E+04 1.56E+03 1.56E+03 2.35E+03 1.56E+02 4.69E+02 1.56E+04 7.82E+01	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	No Toxicity Value No Toxicity Value No Toxicity Value No Toxicity Value 8.40E-02 3.60E+00 1.20E+00 5.70E-03 No Toxicity Value No Toxicity Value No Toxicity Value 9.10E-02 No Toxicity Value 8.00E-02 4.70E-03 No Toxicity Value		5.00E-03 1.00E-01 4.00E-04 1.00E-02 2.00E-02 9.00E-03 No Toxicity Value 2.00E-01 2.00E-03 2.00E-02 2.00E-02 3.00E-02 2.00E-03 6.00E-03 No Toxicity Value	3.91E+02 7.82E+03 3.13E+01 7.82E+02 1.56E+03 7.04E+02 1.56E+04 1.56E+03 1.56E+03 2.35E+03 1.56E+02 4.69E+02 1.56E+04 7.82E+01 7.82E+01
~Silver Cyanide Dibromobenzene, 1,3- Dibromobenzene, 1,4- Dibromochloromethane Dibromochloromethane Dibromoethane, 1,2- Dichlorobenzidine, 3,3'- Dichloroethylene, 1,2-cis- Dichloroethylene, 1,2-trans- Dichloropropane, 1,3- Dichloropropene, 1,3- Dichlorohydrin Ethyl Chloride (Chloroethane) Ethyl Ether Furans ~Furan Hexachlorobutadiene Hexachlorocyclohexane, Technical		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	No Toxicity Value No Toxicity Value No Toxicity Value No Toxicity Value 8.40E-02 2.00E+00 4.50E-01 5.70E-03 No Toxicity Value No Toxicity Value No Toxicity Value 1.00E-01 No Toxicity Value 9.90E-03 No Toxicity Value No Toxicity Value 7.80E-02 1.80E+00	8.28E+00 3.48E-01 1.54E+00 1.22E+02 6.95E+00 7.02E+01 8.91E+00 3.86E-01	5.00E-03 1.00E-01 4.00E-04 1.00E-02 2.00E-02 9.00E-03 No Toxicity Value 2.00E-01 2.00E-03 2.00E-02 2.00E-02 3.00E-02 2.00E-03 6.00E-03 No Toxicity Value 2.00E-01	3.91E+02 7.82E+03 3.13E+01 7.82E+02 1.56E+03 7.04E+02 1.56E+04 1.56E+03 1.56E+03 2.35E+03 1.56E+02 4.69E+02 1.56E+04 7.82E+01		No Toxicity Value No Toxicity Value No Toxicity Value No Toxicity Value 8.40E-02 3.60E+00 1.20E+00 5.70E-03 No Toxicity Value No Toxicity Value No Toxicity Value Vo Toxicity Value 9.10E-02 No Toxicity Value 8.00E-02 4.70E-03 No Toxicity Value 8.00E-02 4.70E-03 No Toxicity Value		5.00E-03  1.00E-01  4.00E-04  1.00E-02  2.00E-02  9.00E-03  No Toxicity Value  2.00E-01  2.00E-02  2.00E-02  3.00E-02  2.00E-02  3.00E-02  2.00E-03  6.00E-03  No Toxicity Value  2.00E-01	3.91E+02 7.82E+03 3.13E+01 7.82E+02 1.56E+03 7.04E+02 1.56E+04 1.56E+03 1.56E+03 2.35E+03 1.56E+02 4.69E+02 1.56E+04 7.82E+01 7.82E+01
~Silver Cyanide Dibromobenzene, 1,3- Dibromobenzene, 1,4- Dibromochloromethane Dibromochloromethane Dibromochloromethane, 1,2- Dichlorobenzidine, 3,3'- Dichloroethylene, 1,2-cis- Dichloroethylene, 1,2-trans- Dichloropropane, 1,3- Dichloropropene, 1,3- Dichlorohydrin Ethyl Chloride (Chloroethane) Ethyl Ether Furans ~Furan Hexachlorobutadiene Hexachlorocyclohexane, Technical Isobutyl Alcohol		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	No Toxicity Value No Toxicity Value No Toxicity Value No Toxicity Value 8.40E-02 2.00E+00 4.50E-01 5.70E-03 No Toxicity Value No Toxicity Value No Toxicity Value 1.00E-01 No Toxicity Value 9.90E-03 No Toxicity Value No Toxicity Value No Toxicity Value	8.28E+00 3.48E-01 1.54E+00 1.22E+02 6.95E+00 7.02E+01 8.91E+00	5.00E-03 1.00E-01 4.00E-04 1.00E-02 2.00E-02 9.00E-03 No Toxicity Value 2.00E-01 2.00E-03 2.00E-02 2.00E-02 3.00E-02 2.00E-03 6.00E-03 No Toxicity Value	3.91E+02 7.82E+03 3.13E+01 7.82E+02 1.56E+03 7.04E+02 1.56E+04 1.56E+03 1.56E+03 2.35E+03 1.56E+02 4.69E+02 1.56E+04 7.82E+01	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	No Toxicity Value No Toxicity Value No Toxicity Value No Toxicity Value 8.40E-02 3.60E+00 1.20E+00 5.70E-03 No Toxicity Value No Toxicity Value No Toxicity Value 9.10E-02 No Toxicity Value 8.00E-02 4.70E-03 No Toxicity Value		5.00E-03 1.00E-01 4.00E-04 1.00E-02 2.00E-02 9.00E-03 No Toxicity Value 2.00E-01 2.00E-03 2.00E-02 2.00E-02 3.00E-02 2.00E-03 6.00E-03 No Toxicity Value	3.91E+02 7.82E+03 3.13E+01 7.82E+02 1.56E+03 7.04E+02 1.56E+04 1.56E+03 1.56E+03 2.35E+03 1.56E+02 4.69E+02 1.56E+04 7.82E+01 7.82E+01
~Silver Cyanide Dibromobenzene, 1,3- Dibromobenzene, 1,4- Dibromochloromethane Dibromoethane, 1,2- Dichlorobenzidine, 3,3'- Dichloroethylene, 1,2-cis- Dichloroethylene, 1,2-trans- Dichloropropane, 1,3- Dichloropropene, 1,3- Dichlorohydrin Ethyl Chloride (Chloroethane) Ethyl Ether Furans ~Furan Hexachlorobutadiene Hexachlorocyclohexane, Technical Isobutyl Alcohol Lead Compounds		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	No Toxicity Value No Toxicity Value No Toxicity Value No Toxicity Value 8.40E-02 2.00E+00 4.50E-01 5.70E-03 No Toxicity Value No Toxicity Value No Toxicity Value 1.00E-01 No Toxicity Value 9.90E-03 No Toxicity Value No Toxicity Value No Toxicity Value 1.00E-01 No Toxicity Value 9.90E-03 No Toxicity Value	8.28E+00 3.48E-01 1.54E+00 1.22E+02 6.95E+00 7.02E+01 8.91E+00 3.86E-01	5.00E-03 1.00E-01 4.00E-04 1.00E-02 2.00E-02 9.00E-03 No Toxicity Value 2.00E-01 2.00E-02 2.00E-02 2.00E-02 3.00E-02 2.00E-03 6.00E-03 No Toxicity Value 2.00E-01 1.00E-03 1.00E-03 No Toxicity Value 3.00E-01	3.91E+02 7.82E+03 3.13E+01 7.82E+02 1.56E+03 7.04E+02 1.56E+04 1.56E+03 1.56E+03 2.35E+03 1.56E+02 4.69E+02 1.56E+04 7.82E+01 7.82E+01 2.35E+04		No Toxicity Value No Toxicity Value No Toxicity Value No Toxicity Value 8.40E-02 3.60E+00 1.20E+00 5.70E-03 No Toxicity Value No Toxicity Value No Toxicity Value No Toxicity Value 9.10E-02 No Toxicity Value 8.00E-02 4.70E-03 No Toxicity Value No Toxicity Value		5.00E-03  1.00E-01  4.00E-04  1.00E-02  2.00E-02  9.00E-03  No Toxicity Value  2.00E-01  2.00E-02  2.00E-02  2.00E-02  2.00E-02  3.00E-02  2.00E-03  6.00E-03  No Toxicity Value  2.00E-01	3.91E+02 7.82E+03 3.13E+01 7.82E+02 1.56E+03 7.04E+02 1.56E+03 1.56E+03 2.35E+03 1.56E+02 4.69E+02 1.56E+04 7.82E+01 7.82E+01 7.82E+01 2.35E+04
~Silver Cyanide Dibromobenzene, 1,3- Dibromobenzene, 1,4- Dibromochloromethane Dibromoethane, 1,2- Dichlorobenzidine, 3,3'- Dichloroethane, 1,1- Dichloroethylene, 1,2-cis- Dichloropropane, 1,3- Dichloropropane, 1,3- Dichloropropane, 1,3- Epichlorohydrin Ethyl Chloride (Chloroethane) Ethyl Ether Furans ~Furan Hexachlorobutadiene Hexachlorocyclohexane, Technical Isobutyl Alcohol Lead Compounds ~Lead subacetate		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	No Toxicity Value No Toxicity Value No Toxicity Value No Toxicity Value 8.40E-02 2.00E+00 4.50E-01 5.70E-03 No Toxicity Value No Toxicity Value No Toxicity Value 1.00E-01 No Toxicity Value 9.90E-03 No Toxicity Value No Toxicity Value No Toxicity Value 1.00E-01 No Toxicity Value 9.90E-03 No Toxicity Value No Toxicity Value No Toxicity Value No Toxicity Value 7.80E-02 1.80E+00 No Toxicity Value	8.28E+00 3.48E-01 1.54E+00 1.22E+02 6.95E+00 7.02E+01 8.91E+00 3.86E-01 8.18E+01	5.00E-03 1.00E-01 4.00E-04 1.00E-02 2.00E-02 9.00E-03 No Toxicity Value 2.00E-01 2.00E-03 2.00E-02 2.00E-02 3.00E-02 2.00E-03 6.00E-03 No Toxicity Value 2.00E-01 1.00E-03 1.00E-03 No Toxicity Value	3.91E+02 7.82E+03 3.13E+01 7.82E+02 1.56E+03 7.04E+02 1.56E+04 1.56E+03 1.56E+03 2.35E+03 1.56E+02 4.69E+02 1.56E+04 7.82E+01 7.82E+01 2.35E+04	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	No Toxicity Value No Toxicity Value No Toxicity Value No Toxicity Value 8.40E-02 3.60E+00 1.20E+00 5.70E-03 No Toxicity Value No Toxicity Value No Toxicity Value No Toxicity Value 9.10E-02 No Toxicity Value 8.00E-02 4.70E-03 No Toxicity Value No Toxicity Value 8.00E-02 4.70E-03 No Toxicity Value 7.80E-02 4.00E+00 No Toxicity Value		5.00E-03  1.00E-01  4.00E-04  1.00E-02  2.00E-02  9.00E-03  No Toxicity Value  2.00E-01  2.00E-02  2.00E-02  2.00E-02  2.00E-02  2.00E-02  3.00E-02  2.00E-03  6.00E-03  No Toxicity Value  2.00E-01  1.00E-03  No Toxicity Value  3.00E-01  No Toxicity Value	3.91E+02 7.82E+03 3.13E+01 7.82E+02 1.56E+03 7.04E+02 1.56E+03 1.56E+03 2.35E+03 1.56E+02 4.69E+02 1.56E+04 7.82E+01 7.82E+01 7.82E+01 2.35E+04
~Silver Cyanide Dibromobenzene, 1,3- Dibromobenzene, 1,4- Dibromochloromethane Dibromoethane, 1,2- Dichlorobenzidine, 3,3'- Dichloroethylene, 1,2-cis- Dichloroethylene, 1,2-trans- Dichloropropane, 1,3- Dichloropropene, 1,3- Dichlorohydrin Ethyl Chloride (Chloroethane) Ethyl Ether Furans ~Furan Hexachlorobutadiene Hexachlorocyclohexane, Technical Isobutyl Alcohol Lead Compounds		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	No Toxicity Value No Toxicity Value No Toxicity Value No Toxicity Value 8.40E-02 2.00E+00 4.50E-01 5.70E-03 No Toxicity Value No Toxicity Value No Toxicity Value 1.00E-01 No Toxicity Value 9.90E-03 No Toxicity Value No Toxicity Value No Toxicity Value 1.00E-01 No Toxicity Value 9.90E-03 No Toxicity Value	8.28E+00 3.48E-01 1.54E+00 1.22E+02 6.95E+00 7.02E+01 8.91E+00 3.86E-01	5.00E-03 1.00E-01 4.00E-04 1.00E-02 2.00E-02 9.00E-03 No Toxicity Value 2.00E-01 2.00E-02 2.00E-02 2.00E-02 3.00E-02 2.00E-03 6.00E-03 No Toxicity Value 2.00E-01 1.00E-03 1.00E-03 No Toxicity Value 3.00E-01	3.91E+02 7.82E+03 3.13E+01 7.82E+02 1.56E+03 7.04E+02 1.56E+04 1.56E+03 1.56E+03 2.35E+03 1.56E+02 4.69E+02 1.56E+04 7.82E+01 7.82E+01 2.35E+04	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	No Toxicity Value No Toxicity Value No Toxicity Value No Toxicity Value 8.40E-02 3.60E+00 1.20E+00 5.70E-03 No Toxicity Value No Toxicity Value No Toxicity Value No Toxicity Value 9.10E-02 No Toxicity Value 8.00E-02 4.70E-03 No Toxicity Value No Toxicity Value		5.00E-03  1.00E-01  4.00E-04  1.00E-02  2.00E-02  9.00E-03  No Toxicity Value  2.00E-01  2.00E-02  2.00E-02  2.00E-02  2.00E-02  3.00E-02  2.00E-03  6.00E-03  No Toxicity Value  2.00E-01	3.91E+02 7.82E+03 3.13E+01 7.82E+02 1.56E+03 7.04E+02 1.56E+03 1.56E+03 2.35E+03 1.56E+02 4.69E+02 1.56E+04 7.82E+01 7.82E+01 7.82E+01 2.35E+04

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Table A-3a. USEPA RSLs and DTSC-SLs for a Residential Receptor Exposed to Soil via Incidental Ingestion

USEPA Value

Variable

Definition

DTSC Value

Units

Equations

Age-dependent Adjustment Factor, 0-2	ADAF <sub>0-2</sub>	10	10	yrs	Carcinogens:						
Age-dependent Adjustment Factor, 2-6	$ADAF_{2-6}$	3	3	yrs	(P) CI	$TR \times (AT_c \times 365 \ day/y) \times EF_r \times \left(\frac{ED_c \times IRS_c}{RW} + \frac{ED_a \times IR}{RW}\right)$	ear)				
Age-dependent Adjustment Factor, 6-16	$ADAF_{6-16}$	3	3	yrs	$(R)SL_{ing} = \frac{CF}{CF}$	$_{CEF} \times (ED_c \times IRS_c \perp ED_a \times II$	$\frac{2S_a}{\sqrt{S_a}}$				
Age-dependent Adjustment Factor, 16-26	ADAF <sub>16-26</sub>	1	1	yrs	31 <sub>0</sub> /	$BW_c$ $BW_c$ $BW_a$	$-$ ) $\wedge CI_0 \wedge KDH$				
Averaging Time, carcinogens	$AT_c$	70	70	yrs	Mutagens:						
Averaging Time, noncarcinogens, adult	$AT_{nc,a}$	20	20	yrs	(P)SI	$TR \times$	$(AT_c \times 365 \ days/yea$	ar)			
Averaging Time, noncarcinogens, child	$AT_{nc,c}$	6	6	yrs	$(K)SL_{ing}-$	$\times EF_r \times \left(\frac{ED_{0-2} \times IRS_c \times ADA}{BW_c} \right)$ $\frac{ED_{6-16} \times IRS_a \times ADA}{BW_a}$	$AF_{0-2} \perp ED_{2-6} \times IRS_c$	$\times ADAF_{2-6}$	<del></del>		
Body Weight, adult	$\mathbf{BW}_{\mathrm{a}}$	80	80	kg	SF.	$\times EF_{-} \times $	' BW	$V_c$ $\times CF \times$	RRA		
Body Weight, child	$BW_c$	15	15	kg	310	$ED_{6-16} \times IRS_a \times ADA$	$\frac{F_{6-16}}{F_{6-16}} + \frac{ED_{16-26} \times IR}{F_{6-16}}$	$RS_a \times ADAF_{16-26}$			
Carcinogenic adjustment factor, ingestion	$CAF_{O}$	0.804	0.804	dimensionless		$\backslash BW_a$		$BW_a$ /			
Conversion Factor	$CF_o$	1E-06	1E-06	kg/mg	Trichloroethene:						
Exposure Duration, child 0-2	$ED_{0-2}$	2	2	yrs	$(R)SL_{ing} =$		7	$TR \times (AT_c \times 365 \ days/year)$	1		
Exposure Duration, child 2-6	$ED_{2-6}$	4	4	yrs	$(R)SL_{ing}=$	$\times$ EF <sub>r</sub> $\times$ CF <sub>o</sub> $\times$ RBA $\times$ $\left\{ \left( CAF_o \times CAF_o $		$\int ED_{0-2}$	$\times IRS_c \times ADAF_{0-2} + ED_{2-6}$	$\times IRS_c \times ADAF_{2-6} + $	
Exposure Duration, child 6-16	$ED_{6-16}$	10	10	yrs	SF <sub>0</sub> :	$\times$ EF. $\times$ CF. $\times$ RBA $\times$ $(CAF. \times$	$ED_c \times IRS_c + ED_a \times IRS_c$	$\frac{IRS_a}{T}$ + $MAF_a \times 1$	$BW_c$	$BW_c$	
Exposure Duration, adult 16-26	ED <sub>16-26</sub>	10	10	yrs		(3.1.6)	$BW_c$ . $BW_c$	$\frac{ED_{6-16}}{}$	$\frac{\langle IRS_a \times ADAF_{6-16} + ED_{16-2} \rangle}{\langle IRS_a \times ADAF_{6-16} \rangle}$	$\frac{1}{26} \times IRS_a \times ADAF_{16-26}$	
Exposure Duration, adult	$ED_a$	20	20	yrs		(		L \	$BW_a$	$BW_a$ / ])	
Exposure Duration, child	$ED_c$	6	6	yrs	Vinyl Chloride:						
Exposure Frequency, resident	$EF_r$	350	350	days/yr	$(R)SL_{i} = -$		TR				
Soil Ingestion Rate (adult)	$IRS_a$	100	100	mg/day	(R)SE <sub>ing</sub> —	$\times \left[ \left( \frac{EF_r \times \left( \frac{ED_c \times IRS_c}{BW_c} + \frac{ED_a}{BW_c} \right)}{AT_c \times 365 \frac{day}{year}} \right) \right]$	$(IRS_a) \times CF$	]			
Soil Ingestion Rate (child)	$IRS_c$	200	200	mg/day	$SF_{\alpha}$	$\times \left[ \left( \frac{BW_c}{W_c} \right) \right] = \frac{BV_c}{V_c}$	$\left(\frac{V_a}{IR}\right) + \left(\frac{IR}{IR}\right)$	$\left \frac{S_c \times CF_o}{RW}\right  \times RBA$			
Mutagenic adjustment factor, ingestion	$MAF_O$	0.202	0.202	dimensionless	- 0	$AT_c \times 365 \frac{day}{vag}$	] \	$BW_c$			
Relative Bioavailability	RBA	chemi	cal-specific	dimensionless		L\ year	/	J			
Oral Reference Dose	$RfD_{O}$	chemi	cal-specific	(mg/kg-day) <sup>-1</sup>							
(Regional) Screening Level, ingestion	$(R)SL_{Ing}$	deriv	ved herein	mg/kg	Noncarcinogens:	day \	Di	TSC Cadmium - noncarcinogenic	:	(am acr day)	DV/
Oral Slope Factor	$SF_O$	chemi	cal-specific	(mg/kg-day) <sup>-1</sup>	$THQ \times (A$	$\frac{T_{nc,c} \times 365 \frac{day}{year} \times BW_c}{\frac{1}{RfD} \times IRS_c \times CF_o \times RBA}$			THQ	$\times \left(AT_{nc,26-yr\ adult} \times 365 \frac{ady}{year}\right) \times E$ $ED_{26-yr\ adult} \times IRS_a \times \frac{1}{16D} \times CF_0$	$BW_a$
Target Hazard Quotient	THQ	1	1	dimensionless	$(R)SL_{ing} = {}$	1 , , , , , , , , , , , , , , , , , , ,			$SL_{ing-adult,Cd} = {}$	ED VIDE V 1	DD 4
Target Risk	TR	1.0E-06	1.0E-06	dimensionless	$EF_r \times ED_c \times$	$\overline{RfD_o} \times IRS_c \times CF_o \times RBA$			$EF_r \times I$	$ED_{26-yr\ adult} \times IRS_a \times \overline{RfD_o} \times CF_o$	× KBA
				Residential 1	USEPA RSL <sub>ing</sub>				Residential DTSC	-SI	
	_	RBA	SFo	Cancer	RfD <sub>o</sub>	Noncancer	RBA	SF <sub>o</sub>	Cancer	RfD <sub>o</sub>	Noncancer
Analyte	Mutagan?	(dimensionless)	(mg/kg-day) <sup>-1</sup>	(mg/kg)	(mg/kg-day)	(mg/kg)	(dimensionless)	(mg/kg-day) <sup>-1</sup>	(mg/kg)	(mg/kg-day)	(mg/kg)
Manganese (Non-diet)	uugen:	(timensioniess)			2.40E-02	1.88E+03	(umensioness)			2.40E-02	1.88E+03
			No Toxicity Value		7.40E-07						1 88E±03
· · · · · · · · · · · · · · · · · · ·		<u> </u>	110 Toxicity value		2.102.02	1.66E+03	1	No Toxicity Value		2.401 02	1.002103
Mercury Compounds		1	•				1	,			
Mercury Compounds ~Mercuric Chloride (and other Mercury sal	t	1	No Toxicity Value		3.00E-04	2.35E+01	1	No Toxicity Value		1.60E-04	1.25E+01
Mercury Compounds	t	1 1	•				1 1	,			
Mercury Compounds ~Mercuric Chloride (and other Mercury sal	t	1 1 1	No Toxicity Value		3.00E-04	2.35E+01	1 1 1	No Toxicity Value		1.60E-04	1.25E+01
Mercury Compounds  ~Mercuric Chloride (and other Mercury sal  ~Mercury (elemental)	t M	1 1 1 1	No Toxicity Value		3.00E-04 not a soil COPC	2.35E+01 	1 1 1 1	No Toxicity Value No Toxicity Value		1.60E-04 1.60E-04	1.25E+01 1.25E+01
Mercury Compounds  ~Mercuric Chloride (and other Mercury sal  ~Mercury (elemental)  Methyl Acetate			No Toxicity Value No Toxicity Value No Toxicity Value	  	3.00E-04 not a soil COPC 1.00E+00	2.35E+01  7.82E+04	1 1 1 1 1	No Toxicity Value No Toxicity Value No Toxicity Value	  	1.60E-04 1.60E-04 1.00E+00	1.25E+01 1.25E+01 7.82E+04
Mercury Compounds Mercuric Chloride (and other Mercury sal Mercury (elemental)  Methyl Acetate  Methylene Chloride  Methylene-bis(2-chloroaniline), 4,4'-	M	1	No Toxicity Value No Toxicity Value No Toxicity Value 2.00E-03	   7.66E+01	3.00E-04 not a soil COPC 1.00E+00 6.00E-03	2.35E+01  7.82E+04 4.69E+02	1	No Toxicity Value No Toxicity Value No Toxicity Value 1.40E-02	   1.09E+01	1.60E-04 1.60E-04 1.00E+00 6.00E-03	1.25E+01 1.25E+01 7.82E+04 4.69E+02
Mercury Compounds  ~Mercuric Chloride (and other Mercury sal  ~Mercury (elemental)  Methyl Acetate  Methylene Chloride  Methylene-bis(2-chloroaniline), 4,4'-  Methylstyrene, Alpha-	M	1	No Toxicity Value No Toxicity Value No Toxicity Value 2.00E-03 1.00E-01 No Toxicity Value	  7.66E+01 1.53E+00	3.00E-04 not a soil COPC 1.00E+00 6.00E-03 2.00E-03 7.00E-02	2.35E+01  7.82E+04 4.69E+02 1.56E+02 5.48E+03	1	No Toxicity Value No Toxicity Value No Toxicity Value 1.40E-02 1.50E+00 No Toxicity Value	  1.09E+01 1.02E-01	1.60E-04 1.60E-04 1.00E+00 6.00E-03 2.00E-03 7.00E-02	1.25E+01 1.25E+01 7.82E+04 4.69E+02 1.56E+02 5.48E+03
Mercury Compounds  ~Mercuric Chloride (and other Mercury sal  ~Mercury (elemental)  Methyl Acetate  Methylene Chloride  Methylene-bis(2-chloroaniline), 4,4'-  Methylstyrene, Alpha-  Mineral oils	M	1 1 1 1	No Toxicity Value No Toxicity Value No Toxicity Value 2.00E-03 1.00E-01 No Toxicity Value No Toxicity Value	  7.66E+01 1.53E+00	3.00E-04 not a soil COPC 1.00E+00 6.00E-03 2.00E-03 7.00E-02 3.00E+00	2.35E+01  7.82E+04 4.69E+02 1.56E+02 5.48E+03 2.35E+05	1	No Toxicity Value No Toxicity Value No Toxicity Value 1.40E-02 1.50E+00 No Toxicity Value No Toxicity Value	  1.09E+01 1.02E-01	1.60E-04 1.60E-04 1.00E+00 6.00E-03 2.00E-03 7.00E-02 3.00E+00	1.25E+01 1.25E+01 7.82E+04 4.69E+02 1.56E+02 5.48E+03 2.35E+05
Mercury Compounds  ~Mercuric Chloride (and other Mercury sal  ~Mercury (elemental)  Methyl Acetate  Methylene Chloride  Methylene-bis(2-chloroaniline), 4,4'-  Methylstyrene, Alpha-  Mineral oils  Nickel Hydroxide	M	1 1 1 1	No Toxicity Value No Toxicity Value No Toxicity Value 2.00E-03 1.00E-01 No Toxicity Value No Toxicity Value No Toxicity Value	  7.66E+01 1.53E+00 	3.00E-04 not a soil COPC 1.00E+00 6.00E-03 2.00E-03 7.00E-02 3.00E+00 1.10E-02	2.35E+01  7.82E+04 4.69E+02 1.56E+02 5.48E+03 2.35E+05 8.60E+02	1	No Toxicity Value No Toxicity Value No Toxicity Value 1.40E-02 1.50E+00 No Toxicity Value No Toxicity Value No Toxicity Value	  1.09E+01 1.02E-01  	1.60E-04 1.60E-04 1.00E+00 6.00E-03 2.00E-03 7.00E-02 3.00E+00 1.10E-02	1.25E+01 1.25E+01 7.82E+04 4.69E+02 1.56E+02 5.48E+03 2.35E+05 8.60E+02
Mercury Compounds  ~Mercuric Chloride (and other Mercury sal  ~Mercury (elemental)  Methyl Acetate  Methylene Chloride  Methylene-bis(2-chloroaniline), 4,4'-  Methylstyrene, Alpha-  Mineral oils  Nickel Hydroxide  Nickel Oxide	M	1 1 1 1	No Toxicity Value No Toxicity Value No Toxicity Value 2.00E-03 1.00E-01 No Toxicity Value No Toxicity Value No Toxicity Value No Toxicity Value	  7.66E+01 1.53E+00  	3.00E-04 not a soil COPC 1.00E+00 6.00E-03 2.00E-03 7.00E-02 3.00E+00 1.10E-02 1.10E-02	2.35E+01  7.82E+04 4.69E+02 1.56E+02 5.48E+03 2.35E+05 8.60E+02 8.60E+02	1	No Toxicity Value No Toxicity Value No Toxicity Value 1.40E-02 1.50E+00 No Toxicity Value No Toxicity Value No Toxicity Value No Toxicity Value	  1.09E+01 1.02E-01  	1.60E-04 1.60E-04 1.00E+00 6.00E-03 2.00E-03 7.00E-02 3.00E+00 1.10E-02 1.10E-02	1.25E+01 1.25E+01 7.82E+04 4.69E+02 1.56E+02 5.48E+03 2.35E+05 8.60E+02 8.60E+02
Mercury Compounds  ~Mercuric Chloride (and other Mercury sal  ~Mercury (elemental)  Methyl Acetate  Methylene Chloride  Methylene-bis(2-chloroaniline), 4,4'-  Methylstyrene, Alpha-  Mineral oils  Nickel Hydroxide  Nickel Oxide  Nickel Refinery Dust	M	1 1 1 1	No Toxicity Value No Toxicity Value No Toxicity Value 2.00E-03 1.00E-01 No Toxicity Value	  7.66E+01 1.53E+00  	3.00E-04 not a soil COPC 1.00E+00 6.00E-03 2.00E-03 7.00E-02 3.00E+00 1.10E-02 1.10E-02 1.10E-02	2.35E+01  7.82E+04 4.69E+02 1.56E+02 5.48E+03 2.35E+05 8.60E+02 8.60E+02 8.60E+02	1	No Toxicity Value No Toxicity Value No Toxicity Value 1.40E-02 1.50E+00 No Toxicity Value 9.10E-01	  1.09E+01 1.02E-01    7.64E-01	1.60E-04 1.60E-04 1.00E+00 6.00E-03 2.00E-03 7.00E-02 3.00E+00 1.10E-02 1.10E-02 1.10E-02	1.25E+01 1.25E+01 7.82E+04 4.69E+02 1.56E+02 5.48E+03 2.35E+05 8.60E+02 8.60E+02 8.60E+02
Mercury Compounds  ~Mercuric Chloride (and other Mercury sal  ~Mercury (elemental)  Methyl Acetate  Methylene Chloride  Methylene-bis(2-chloroaniline), 4,4'-  Methylstyrene, Alpha-  Mineral oils  Nickel Hydroxide  Nickel Oxide  Nickel Refinery Dust  Nickel Soluble Salts	M	1 1 1 1	No Toxicity Value No Toxicity Value No Toxicity Value 2.00E-03 1.00E-01 No Toxicity Value	  7.66E+01 1.53E+00   	3.00E-04 not a soil COPC 1.00E+00 6.00E-03 2.00E-03 7.00E-02 3.00E+00 1.10E-02 1.10E-02 1.10E-02 2.00E-02	2.35E+01  7.82E+04 4.69E+02 1.56E+02 5.48E+03 2.35E+05 8.60E+02 8.60E+02 8.60E+02 1.56E+03	1	No Toxicity Value No Toxicity Value No Toxicity Value 1.40E-02 1.50E+00 No Toxicity Value 9.10E-01 No Toxicity Value	1.09E+01 1.02E-01 7.64E-01	1.60E-04 1.60E-04 1.00E+00 6.00E-03 2.00E-03 7.00E-02 3.00E+00 1.10E-02 1.10E-02 1.10E-02 1.10E-02	1.25E+01 1.25E+01 7.82E+04 4.69E+02 1.56E+02 5.48E+03 2.35E+05 8.60E+02 8.60E+02 8.60E+02 8.60E+02
Mercury Compounds Mercuric Chloride (and other Mercury sal Mercury (elemental)  Methyl Acetate  Methylene Chloride  Methylene-bis(2-chloroaniline), 4,4'-  Methylstyrene, Alpha-  Mineral oils  Nickel Hydroxide  Nickel Refinery Dust  Nickel Soluble Salts  Nickel Subsulfide	M	1 1 1 1	No Toxicity Value No Toxicity Value No Toxicity Value 2.00E-03 1.00E-01 No Toxicity Value	  7.66E+01 1.53E+00     4.09E-01	3.00E-04 not a soil COPC 1.00E+00 6.00E-03 2.00E-03 7.00E-02 3.00E+00 1.10E-02 1.10E-02 2.00E-02 1.10E-02 1.10E-02	2.35E+01 7.82E+04 4.69E+02 1.56E+02 5.48E+03 2.35E+05 8.60E+02 8.60E+02 1.56E+03 8.60E+02	1	No Toxicity Value No Toxicity Value No Toxicity Value 1.40E-02 1.50E+00 No Toxicity Value 9.10E-01 No Toxicity Value 1.70E+00	1.09E+01 1.02E-01 7.64E-01 4.09E-01	1.60E-04 1.60E-04 1.00E+00 6.00E-03 2.00E-03 7.00E-02 3.00E+00 1.10E-02 1.10E-02 1.10E-02 1.10E-02 1.10E-02	1.25E+01 1.25E+01 7.82E+04 4.69E+02 1.56E+02 5.48E+03 2.35E+05 8.60E+02 8.60E+02 8.60E+02 8.60E+02 8.60E+02
Mercury Compounds Mercuric Chloride (and other Mercury sal Mercury (elemental)  Methyl Acetate  Methylene Chloride  Methylene-bis(2-chloroaniline), 4,4'-  Methylstyrene, Alpha-  Mineral oils  Nickel Hydroxide  Nickel Goxide  Nickel Refinery Dust  Nickel Soluble Salts  Nickel Subsulfide  Pentachloroethane	M	1 1 1 1 1 1 1 1 1	No Toxicity Value No Toxicity Value No Toxicity Value 2.00E-03 1.00E-01 No Toxicity Value 1.70E+00 9.00E-02	  7.66E+01 1.53E+00   	3.00E-04 not a soil COPC 1.00E+00 6.00E-03 2.00E-03 7.00E-02 3.00E+00 1.10E-02 1.10E-02 2.00E-02 1.10E-02 1.10E-02 No Toxicity Value	2.35E+01 7.82E+04 4.69E+02 1.56E+02 5.48E+03 2.35E+05 8.60E+02 8.60E+02 1.56E+03 8.60E+02	1	No Toxicity Value No Toxicity Value No Toxicity Value 1.40E-02 1.50E+00 No Toxicity Value 1.70E+00 9.00E-02	1.09E+01 1.02E-01 7.64E-01	1.60E-04 1.60E-04 1.00E+00 6.00E-03 2.00E-03 7.00E-02 3.00E+00 1.10E-02 1.10E-02 1.10E-02 1.10E-02 1.10E-02 No Toxicity Value	1.25E+01 1.25E+01 7.82E+04 4.69E+02 1.56E+02 5.48E+03 2.35E+05 8.60E+02 8.60E+02 8.60E+02 8.60E+02
Mercury Compounds Mercuric Chloride (and other Mercury sal Mercury (elemental)  Methyl Acetate  Methylene Chloride  Methylene-bis(2-chloroaniline), 4,4'-  Methylstyrene, Alpha-  Mineral oils  Nickel Hydroxide  Nickel Oxide  Nickel Refinery Dust  Nickel Soluble Salts  Nickel Subsulfide  Pentachloroethane  Phosphorus, White	M	1 1 1 1	No Toxicity Value No Toxicity Value No Toxicity Value 2.00E-03 1.00E-01 No Toxicity Value	  7.66E+01 1.53E+00     4.09E-01	3.00E-04 not a soil COPC 1.00E+00 6.00E-03 2.00E-03 7.00E-02 3.00E+00 1.10E-02 1.10E-02 2.00E-02 1.10E-02 1.10E-02	2.35E+01 7.82E+04 4.69E+02 1.56E+02 5.48E+03 2.35E+05 8.60E+02 8.60E+02 1.56E+03 8.60E+02	1	No Toxicity Value No Toxicity Value No Toxicity Value 1.40E-02 1.50E+00 No Toxicity Value 9.10E-01 No Toxicity Value 1.70E+00	1.09E+01 1.02E-01 7.64E-01 4.09E-01	1.60E-04 1.60E-04 1.00E+00 6.00E-03 2.00E-03 7.00E-02 3.00E+00 1.10E-02 1.10E-02 1.10E-02 1.10E-02 1.10E-02	1.25E+01 1.25E+01 7.82E+04 4.69E+02 1.56E+02 5.48E+03 2.35E+05 8.60E+02 8.60E+02 8.60E+02 8.60E+02 8.60E+02
Mercury Compounds Mercuric Chloride (and other Mercury sal Mercury (elemental)  Methyl Acetate  Methylene Chloride  Methylene-bis(2-chloroaniline), 4,4'-  Methylstyrene, Alpha-  Mineral oils  Nickel Hydroxide  Nickel Goxide  Nickel Refinery Dust  Nickel Soluble Salts  Nickel Subsulfide  Pentachloroethane	M	1 1 1 1 1 1 1 1 1	No Toxicity Value No Toxicity Value No Toxicity Value 2.00E-03 1.00E-01 No Toxicity Value 1.70E+00 9.00E-02	  7.66E+01 1.53E+00     4.09E-01 7.72E+00	3.00E-04 not a soil COPC 1.00E+00 6.00E-03 2.00E-03 7.00E-02 3.00E+00 1.10E-02 1.10E-02 2.00E-02 1.10E-02 1.10E-02 No Toxicity Value	2.35E+01 7.82E+04 4.69E+02 1.56E+02 5.48E+03 2.35E+05 8.60E+02 8.60E+02 1.56E+03 8.60E+02	1	No Toxicity Value No Toxicity Value No Toxicity Value 1.40E-02 1.50E+00 No Toxicity Value 1.70E+00 9.00E-02	1.09E+01 1.02E-01 7.64E-01 4.09E-01	1.60E-04 1.60E-04 1.00E+00 6.00E-03 2.00E-03 7.00E-02 3.00E+00 1.10E-02 1.10E-02 1.10E-02 1.10E-02 1.10E-02 No Toxicity Value	1.25E+01 1.25E+01 7.82E+04 4.69E+02 1.56E+02 5.48E+03 2.35E+05 8.60E+02 8.60E+02 8.60E+02 8.60E+02
Mercury Compounds Mercuric Chloride (and other Mercury sal Mercury (elemental)  Methyl Acetate  Methylene Chloride  Methylene-bis(2-chloroaniline), 4,4'-  Methylstyrene, Alpha-  Mineral oils  Nickel Hydroxide  Nickel Oxide  Nickel Refinery Dust  Nickel Soluble Salts  Nickel Subsulfide  Pentachloroethane  Phosphorus, White	M	1 1 1 1 1 1 1 1 1	No Toxicity Value No Toxicity Value No Toxicity Value 2.00E-03 1.00E-01 No Toxicity Value 1.70E+00 9.00E-02	  7.66E+01 1.53E+00     4.09E-01 7.72E+00	3.00E-04 not a soil COPC 1.00E+00 6.00E-03 2.00E-03 7.00E-02 3.00E+00 1.10E-02 1.10E-02 2.00E-02 1.10E-02 1.10E-02 No Toxicity Value	2.35E+01 7.82E+04 4.69E+02 1.56E+02 5.48E+03 2.35E+05 8.60E+02 8.60E+02 1.56E+03 8.60E+02	1	No Toxicity Value No Toxicity Value No Toxicity Value 1.40E-02 1.50E+00 No Toxicity Value 1.70E+00 9.00E-02	1.09E+01 1.02E-01 7.64E-01 4.09E-01	1.60E-04 1.60E-04 1.00E+00 6.00E-03 2.00E-03 7.00E-02 3.00E+00 1.10E-02 1.10E-02 1.10E-02 1.10E-02 1.10E-02 No Toxicity Value	1.25E+01 1.25E+01 7.82E+04 4.69E+02 1.56E+02 5.48E+03 2.35E+05 8.60E+02 8.60E+02 8.60E+02 8.60E+02
Mercury Compounds Mercuric Chloride (and other Mercury sal Mercury (elemental)  Methyl Acetate  Methylene Chloride  Methylene-bis(2-chloroaniline), 4,4'-  Methylstyrene, Alpha-  Mineral oils  Nickel Hydroxide  Nickel Oxide  Nickel Refinery Dust  Nickel Soluble Salts  Nickel Subsulfide  Pentachloroethane  Phosphorus, White  Phthalates	M	1 1 1 1 1 1 1 1 1	No Toxicity Value No Toxicity Value No Toxicity Value 2.00E-03 1.00E-01 No Toxicity Value 1.70E+00 9.00E-02 No Toxicity Value	7.66E+01 1.53E+00 4.09E-01 7.72E+00	3.00E-04 not a soil COPC 1.00E+00 6.00E-03 2.00E-03 7.00E-02 3.00E+00 1.10E-02 1.10E-02 1.10E-02 2.00E-02 1.10E-02 No Toxicity Value 2.00E-05	2.35E+01 7.82E+04 4.69E+02 1.56E+02 5.48E+03 2.35E+05 8.60E+02 8.60E+02 1.56E+03 8.60E+02 1.56E+00	1	No Toxicity Value No Toxicity Value No Toxicity Value 1.40E-02 1.50E+00 No Toxicity Value 9.10E-01 No Toxicity Value 1.70E+00 9.00E-02 No Toxicity Value	1.09E+01 1.02E-01 7.64E-01 4.09E-01 7.72E+00	1.60E-04 1.60E-04 1.00E+00 6.00E-03 2.00E-03 7.00E-02 3.00E+00 1.10E-02 1.10E-02 1.10E-02 1.10E-02 1.10E-02 No Toxicity Value 2.00E-05	1.25E+01 1.25E+01 7.82E+04 4.69E+02 1.56E+02 5.48E+03 2.35E+05 8.60E+02 8.60E+02 8.60E+02 8.60E+02 1.56E+00
Mercury Compounds  -Mercuric Chloride (and other Mercury sal  -Mercury (elemental)  Methyl Acetate  Methylene Chloride  Methylene-bis(2-chloroaniline), 4,4'-  Methylstyrene, Alpha-  Mineral oils  Nickel Hydroxide  Nickel Oxide  Nickel Refinery Dust  Nickel Soluble Salts  Nickel Subsulfide  Pentachloroethane  Phosphorus, White  Phthalates  -Dimethylterephthalate	M	1 1 1 1 1 1 1 1 1	No Toxicity Value No Toxicity Value No Toxicity Value 2.00E-03 1.00E-01 No Toxicity Value 1.70E+00 9.00E-02 No Toxicity Value	7.66E+01 1.53E+00 4.09E-01 7.72E+00	3.00E-04 not a soil COPC 1.00E+00 6.00E-03 2.00E-03 7.00E-02 3.00E+00 1.10E-02 1.10E-02 1.10E-02 2.00E-02 1.10E-02 No Toxicity Value 2.00E-05	2.35E+01 7.82E+04 4.69E+02 1.56E+02 5.48E+03 2.35E+05 8.60E+02 8.60E+02 1.56E+03 8.60E+02 1.56E+00 7.82E+03	1	No Toxicity Value No Toxicity Value No Toxicity Value 1.40E-02 1.50E+00 No Toxicity Value 9.10E-01 No Toxicity Value 1.70E+00 9.00E-02 No Toxicity Value	1.09E+01 1.02E-01 7.64E-01 4.09E-01 7.72E+00	1.60E-04 1.60E-04 1.00E+00 6.00E-03 2.00E-03 7.00E-02 3.00E+00 1.10E-02 1.10E-02 1.10E-02 1.10E-02 No Toxicity Value 2.00E-05	1.25E+01 1.25E+01 7.82E+04 4.69E+02 1.56E+02 5.48E+03 2.35E+05 8.60E+02 8.60E+02 8.60E+02 8.60E+02 1.56E+00 7.82E+03
Mercury Compounds Mercuric Chloride (and other Mercury sal Mercury (elemental)  Methyl Acetate  Methylene Chloride  Methylene-bis(2-chloroaniline), 4,4'-  Methylstyrene, Alpha-  Mineral oils  Nickel Hydroxide  Nickel Oxide  Nickel Soluble Salts  Nickel Subsulfide  Pentachloroethane  Phosphorus, White  Phthalates Dimethylterephthalate  Silver  Tetrachloroethane, 1,1,1,2-	M	1 1 1 1 1 1 1 1 1	No Toxicity Value No Toxicity Value No Toxicity Value 2.00E-03 1.00E-01 No Toxicity Value 1.70E+00 9.00E-02 No Toxicity Value No Toxicity Value	7.66E+01 1.53E+00 4.09E-01 7.72E+00	3.00E-04 not a soil COPC 1.00E+00 6.00E-03 2.00E-03 7.00E-02 3.00E+00 1.10E-02 1.10E-02 1.10E-02 2.00E-02 1.10E-02 No Toxicity Value 2.00E-05	2.35E+01 7.82E+04 4.69E+02 1.56E+02 5.48E+03 2.35E+05 8.60E+02 8.60E+02 1.56E+03 8.60E+02 1.56E+00 7.82E+03 3.91E+02	1	No Toxicity Value No Toxicity Value No Toxicity Value 1.40E-02 1.50E+00 No Toxicity Value 9.10E-01 No Toxicity Value 1.70E+00 9.00E-02 No Toxicity Value No Toxicity Value	1.09E+01 1.02E-01 7.64E-01 4.09E-01 7.72E+00	1.60E-04 1.60E-04 1.00E+00 6.00E-03 2.00E-03 7.00E-02 3.00E+00 1.10E-02 1.10E-02 1.10E-02 1.10E-02 1.10E-02 1.10E-05 No Toxicity Value 2.00E-05	1.25E+01 1.25E+01 7.82E+04 4.69E+02 1.56E+02 5.48E+03 2.35E+05 8.60E+02 8.60E+02 8.60E+02 8.60E+02 1.56E+00 7.82E+03 3.91E+02
Mercury Compounds  -Mercuric Chloride (and other Mercury sal  -Mercury (elemental)  Methyl Acetate  Methylene Chloride  Methylene-bis(2-chloroaniline), 4,4'-  Methylstyrene, Alpha-  Mineral oils  Nickel Hydroxide  Nickel Goxide  Nickel Soluble Salts  Nickel Soluble Salts  Nickel Subsulfide  Pentachloroethane  Phosphorus, White  Phthalates  -Dimethylterephthalate  Silver  Tetrachloroethane, 1,1,1,2-  Tetrachloroethane, 1,1,2,2-	M	1 1 1 1 1 1 1 1 1 1 1 1 1	No Toxicity Value No Toxicity Value No Toxicity Value 2.00E-03 1.00E-01 No Toxicity Value 1.70E+00 9.00E-02 No Toxicity Value No Toxicity Value Vo Toxicity Value No Toxicity Value No Toxicity Value No Toxicity Value 2.60E-02 2.00E-01		3.00E-04 not a soil COPC 1.00E+00 6.00E-03 2.00E-03 7.00E-02 3.00E+00 1.10E-02 1.10E-02 2.00E-02 1.10E-02 No Toxicity Value 2.00E-05 1.00E-01 5.00E-03 3.00E-02 2.00E-02	2.35E+01	1	No Toxicity Value No Toxicity Value No Toxicity Value 1.40E-02 1.50E+00 No Toxicity Value 9.10E-01 No Toxicity Value 1.70E+00 9.00E-02 No Toxicity Value No Toxicity Value 2.60E-02 2.70E-01	1.09E+01 1.02E-01 7.64E-01 4.09E-01 7.72E+00 2.67E+01 2.57E+00	1.60E-04 1.60E-04 1.00E+00 6.00E-03 2.00E-03 7.00E-02 3.00E+00 1.10E-02 1.10E-02 1.10E-02 1.10E-02 1.10E-02 1.10E-02 1.10E-02 1.0E-05  1.00E-01 5.00E-03 3.00E-02 2.00E-02	1.25E+01 1.25E+01 7.82E+04 4.69E+02 1.56E+02 5.48E+03 2.35E+05 8.60E+02 8.60E+02 8.60E+02 8.60E+02 1.56E+00 7.82E+03 3.91E+02 2.35E+03 1.56E+03
Mercury Compounds Mercuric Chloride (and other Mercury sal Mercury (elemental)  Methyl Acetate  Methylene Chloride  Methylene-bis(2-chloroaniline), 4,4'-  Methylstyrene, Alpha-  Mineral oils  Nickel Hydroxide  Nickel Goxide  Nickel Soluble Salts  Nickel Soluble Salts  Nickel Subsulfide  Pentachloroethane  Phosphorus, White  Phthalates Dimethylterephthalate  Silver  Tetrachloroethane, 1,1,2-  Tetrachloroethylene	M	1 1 1 1 1 1 1 1 1 1 1 1 1	No Toxicity Value No Toxicity Value No Toxicity Value 2.00E-03 1.00E-01 No Toxicity Value 1.70E+00 9.00E-02 No Toxicity Value No Toxicity Value 2.60E-02 2.00E-01 2.10E-03		3.00E-04 not a soil COPC 1.00E+00 6.00E-03 2.00E-03 7.00E-02 3.00E+00 1.10E-02 1.10E-02 2.00E-02 1.10E-02 No Toxicity Value 2.00E-05 1.00E-01 5.00E-03 3.00E-02 2.00E-02 6.00E-03	2.35E+01 7.82E+04 4.69E+02 1.56E+02 5.48E+03 2.35E+05 8.60E+02 8.60E+02 1.56E+03 8.60E+02 1.56E+00 7.82E+03 3.91E+02 2.35E+03 1.56E+03 4.69E+02	1	No Toxicity Value No Toxicity Value No Toxicity Value 1.40E-02 1.50E+00 No Toxicity Value 9.10E-01 No Toxicity Value 1.70E+00 9.00E-02 No Toxicity Value No Toxicity Value 2.60E-02 2.70E-01 5.40E-01	1.09E+01 1.02E-01 7.64E-01 4.09E-01 7.72E+00 2.67E+01 2.57E+00 1.29E+00	1.60E-04 1.60E-04 1.00E+00 6.00E-03 2.00E-03 7.00E-02 3.00E+00 1.10E-02 1.10E-02 1.10E-02 1.10E-02 1.10E-02 1.10E-02 1.10E-02 1.0E-01 5.00E-05	1.25E+01 1.25E+01 7.82E+04 4.69E+02 1.56E+02 5.48E+03 2.35E+05 8.60E+02 8.60E+02 8.60E+02 8.60E+02 1.56E+00 7.82E+03 3.91E+02 2.35E+03 1.56E+03 4.69E+02
Mercury Compounds Mercuric Chloride (and other Mercury sal Mercury (elemental)  Methyl Acetate  Methylene Chloride  Methylene-bis(2-chloroaniline), 4,4'-  Methylstyrene, Alpha-  Mineral oils  Nickel Hydroxide  Nickel Goxide  Nickel Soluble Salts  Nickel Soluble Salts  Nickel Subsulfide  Pentachloroethane  Phosphorus, White  Phthalates Dimethylterephthalate  Silver  Tetrachloroethane, 1,1,1,2-  Tetrachloroethylene  Toluene	M	1 1 1 1 1 1 1 1 1 1 1 1 1	No Toxicity Value No Toxicity Value No Toxicity Value 2.00E-03 1.00E-01 No Toxicity Value 1.70E+00 9.00E-02 No Toxicity Value No Toxicity Value 2.60E-02 2.00E-01 2.10E-03 No Toxicity Value		3.00E-04 not a soil COPC 1.00E+00 6.00E-03 2.00E-03 7.00E-02 3.00E+00 1.10E-02 1.10E-02 2.00E-02 1.10E-02 No Toxicity Value 2.00E-05 1.00E-01 5.00E-03 3.00E-02 2.00E-02 6.00E-03 8.00E-02	2.35E+01 7.82E+04 4.69E+02 1.56E+02 5.48E+03 2.35E+05 8.60E+02 8.60E+02 1.56E+03 8.60E+02 1.56E+00 7.82E+03 3.91E+02 2.35E+03 1.56E+03 4.69E+02 6.26E+03	1	No Toxicity Value No Toxicity Value No Toxicity Value 1.40E-02 1.50E+00 No Toxicity Value 9.10E-01 No Toxicity Value 1.70E+00 9.00E-02 No Toxicity Value No Toxicity Value No Toxicity Value Source Value No Toxicity Value No Toxicity Value No Toxicity Value 1.60E-02 2.70E-01 5.40E-01 No Toxicity Value	1.09E+01 1.02E-01	1.60E-04 1.60E-04 1.00E+00 6.00E-03 2.00E-03 7.00E-02 3.00E+00 1.10E-02 1.10E-02 1.10E-02 1.10E-02 1.10E-02 1.10E-02 1.10E-02 1.0E-03 3.00E-01 5.00E-03 3.00E-02 6.00E-03 8.00E-02	1.25E+01 1.25E+01 7.82E+04 4.69E+02 1.56E+02 5.48E+03 2.35E+05 8.60E+02 8.60E+02 8.60E+02 8.60E+02 1.56E+00 7.82E+03 3.91E+02 2.35E+03 1.56E+03 4.69E+02 6.26E+03
Mercury Compounds Mercuric Chloride (and other Mercury sal Mercury (elemental)  Methyl Acetate  Methylene Chloride  Methylene-bis(2-chloroaniline), 4,4'-  Methylstyrene, Alpha-  Mineral oils  Nickel Hydroxide  Nickel Soluble Salts  Nickel Soluble Salts  Nickel Soluble Salts  Nickel Subsulfide  Pentachloroethane  Phosphorus, White  Phthalates Dimethylterephthalate  Silver  Tetrachloroethane, 1,1,2,2-  Tetrachloroethylene  Toluene  Tri-n-butyltin	M	1 1 1 1 1 1 1 1 1 1 1 1 1	No Toxicity Value No Toxicity Value No Toxicity Value 2.00E-03 1.00E-01 No Toxicity Value 1.70E+00 9.00E-02 No Toxicity Value No Toxicity Value 2.60E-02 2.00E-01 2.10E-03 No Toxicity Value No Toxicity Value		3.00E-04 not a soil COPC 1.00E+00 6.00E-03 2.00E-03 7.00E-02 3.00E+00 1.10E-02 1.10E-02 2.00E-02 1.10E-02 No Toxicity Value 2.00E-05 1.00E-01 5.00E-03 3.00E-02 2.00E-02 3.00E-02 3.00E-02 3.00E-02 3.00E-02 3.00E-03 8.00E-02 3.00E-04	2.35E+01 7.82E+04 4.69E+02 1.56E+02 5.48E+03 2.35E+05 8.60E+02 8.60E+02 1.56E+03 8.60E+02 1.56E+00 7.82E+03 3.91E+02 2.35E+03 1.56E+03 4.69E+02 6.26E+03 2.35E+01	1	No Toxicity Value No Toxicity Value No Toxicity Value 1.40E-02 1.50E+00 No Toxicity Value 1.70E+00 9.00E-02 No Toxicity Value No Toxicity Value 1.70E+00 9.00E-02 No Toxicity Value 2.60E-02 2.70E-01 5.40E-01 No Toxicity Value No Toxicity Value	1.09E+01 1.02E-01 7.64E-01 4.09E-01 7.72E+00 2.67E+01 2.57E+00 1.29E+00	1.60E-04 1.60E-04 1.00E+00 6.00E-03 2.00E-03 7.00E-02 3.00E+00 1.10E-02 1.10E-02 1.10E-02 1.10E-02 1.10E-02 1.10E-02 1.10E-02 1.0E-02 1.0E-02 0.00E-05	1.25E+01 1.25E+01 7.82E+04 4.69E+02 1.56E+02 5.48E+03 2.35E+05 8.60E+02 8.60E+02 8.60E+02 1.56E+00 7.82E+03 3.91E+02 2.35E+03 1.56E+03 4.69E+02 6.26E+03 2.35E+01
Mercury Compounds  -Mercuric Chloride (and other Mercury sal  -Mercury (elemental)  Methyl Acetate  Methylene Chloride  Methylene-bis(2-chloroaniline), 4,4'-  Methylstyrene, Alpha-  Mineral oils  Nickel Hydroxide  Nickel Oxide  Nickel Soluble Salts  Nickel Subsulfide  Pentachloroethane  Phosphorus, White  Phthalates  -Dimethylterephthalate  Silver  Tetrachloroethane, 1,1,2,2-  Tetrachloroethylene  Toluene  Tri-n-butyltin  Trichlorobenzene, 1,2,3-	M		No Toxicity Value No Toxicity Value No Toxicity Value 2.00E-03 1.00E-01 No Toxicity Value 1.70E+00 9.00E-02 No Toxicity Value 2.60E-02 2.00E-01 2.10E-03 No Toxicity Value No Toxicity Value No Toxicity Value		3.00E-04 not a soil COPC 1.00E+00 6.00E-03 2.00E-03 7.00E-02 3.00E+00 1.10E-02 1.10E-02 1.10E-02 2.00E-02 No Toxicity Value 2.00E-05  1.00E-01 5.00E-03 3.00E-02 2.00E-02 6.00E-03 8.00E-02 3.00E-04 8.00E-04	2.35E+01 7.82E+04 4.69E+02 1.56E+02 5.48E+03 2.35E+05 8.60E+02 8.60E+02 1.56E+03 8.60E+02 1.56E+03 3.91E+02 2.35E+03 1.56E+03 4.69E+02 6.26E+03 2.35E+01 6.26E+01	1	No Toxicity Value No Toxicity Value No Toxicity Value 1.40E-02 1.50E+00 No Toxicity Value 9.10E-01 No Toxicity Value 1.70E+00 9.00E-02 No Toxicity Value 2.60E-02 2.70E-01 5.40E-01 No Toxicity Value No Toxicity Value	1.09E+01 1.02E-01 7.64E-01 4.09E-01 7.72E+00 2.67E+01 2.57E+00 1.29E+00	1.60E-04 1.60E-04 1.00E+00 6.00E-03 2.00E-03 7.00E-02 3.00E+00 1.10E-02 1.10E-02 1.10E-02 1.10E-02 No Toxicity Value 2.00E-05  1.00E-01 5.00E-03 3.00E-02 2.00E-02 6.00E-03 8.00E-02 3.00E-04 8.00E-04	1.25E+01 1.25E+01 7.82E+04 4.69E+02 1.56E+02 5.48E+03 2.35E+05 8.60E+02 8.60E+02 8.60E+02 1.56E+00  7.82E+03 3.91E+02 2.35E+03 1.56E+03 4.69E+02 6.26E+01 6.26E+01
Mercury Compounds  -Mercuric Chloride (and other Mercury sal  -Mercury (elemental)  Methyl Acetate  Methylene Chloride  Methylene-bis(2-chloroaniline), 4,4'-  Methylstyrene, Alpha-  Mineral oils  Nickel Hydroxide  Nickel Oxide  Nickel Soluble Salts  Nickel Subsulfide  Pentachloroethane  Phosphorus, White  Phthalates  -Dimethylterephthalate  Silver  Tetrachloroethane, 1,1,2,2-  Tetrachloroethylene  Toluene  Tri-n-butyltin  Trichloroethane, 1,2,3-  Trichloroethane, 1,1,1-	M		No Toxicity Value No Toxicity Value No Toxicity Value 2.00E-03 1.00E-01 No Toxicity Value 1.70E+00 9.00E-02 No Toxicity Value 2.60E-02 2.00E-01 2.10E-03 No Toxicity Value No Toxicity Value No Toxicity Value No Toxicity Value		3.00E-04 not a soil COPC 1.00E+00 6.00E-03 2.00E-03 7.00E-02 3.00E+00 1.10E-02 1.10E-02 1.10E-02 2.00E-02 No Toxicity Value 2.00E-05  1.00E-01 5.00E-03 3.00E-02 2.00E-02 6.00E-03 8.00E-02 3.00E-04 8.00E-04 2.00E+00	2.35E+01 7.82E+04 4.69E+02 1.56E+02 5.48E+03 2.35E+05 8.60E+02 8.60E+02 1.56E+03 8.60E+02 1.56E+03 3.91E+02 2.35E+03 1.56E+03 4.69E+02 6.26E+03 2.35E+01 6.26E+01 1.56E+05		No Toxicity Value No Toxicity Value No Toxicity Value 1.40E-02 1.50E+00 No Toxicity Value 9.10E-01 No Toxicity Value 1.70E+00 9.00E-02 No Toxicity Value No Toxicity Value No Toxicity Value No Toxicity Value Vo Toxicity Value 1.70E+00 9.00E-01 No Toxicity Value No Toxicity Value No Toxicity Value 2.60E-02 2.70E-01 5.40E-01 No Toxicity Value	1.09E+01 1.02E-01 7.64E-01 4.09E-01 7.72E+00 2.67E+01 2.57E+00 1.29E+00	1.60E-04 1.60E-04 1.00E+00 6.00E-03 2.00E-03 7.00E-02 3.00E+00 1.10E-02 1.10E-02 1.10E-02 1.10E-02 1.10E-02 1.10E-02 1.0E-03 3.00E-05	1.25E+01 1.25E+01 7.82E+04 4.69E+02 1.56E+02 5.48E+03 2.35E+05 8.60E+02 8.60E+02 8.60E+02 1.56E+00  7.82E+03 3.91E+02 2.35E+03 1.56E+03 4.69E+02 6.26E+03 2.35E+01 6.26E+01 1.56E+05
Mercury Compounds  -Mercuric Chloride (and other Mercury sal  -Mercury (elemental)  Methyl Acetate  Methylene Chloride  Methylene-bis(2-chloroaniline), 4,4'-  Methylstyrene, Alpha-  Mineral oils  Nickel Hydroxide  Nickel Oxide  Nickel Soluble Salts  Nickel Subsulfide  Pentachloroethane  Phosphorus, White  Phthalates  -Dimethylterephthalate  Silver  Tetrachloroethane, 1,1,1,2-  Tetrachloroethane, 1,1,2,2-  Tetrachloroethylene  Toluene  Tri-n-butyltin  Trichloroethane, 1,1,1-  Trichlorofluoromethane	M		No Toxicity Value No Toxicity Value No Toxicity Value 2.00E-03 1.00E-01 No Toxicity Value 1.70E+00 9.00E-02 No Toxicity Value 2.60E-02 2.00E-01 2.10E-03 No Toxicity Value		3.00E-04 not a soil COPC 1.00E+00 6.00E-03 2.00E-03 7.00E-02 3.00E+00 1.10E-02 1.10E-02 1.10E-02 2.00E-02 1.10E-02 No Toxicity Value 2.00E-05  1.00E-01 5.00E-03 3.00E-02 2.00E-02 6.00E-03 8.00E-04 8.00E-04 2.00E+00 3.00E-01	2.35E+01	1	No Toxicity Value No Toxicity Value 1.40E-02 1.50E+00 No Toxicity Value 1.70E+00 9.00E-02 No Toxicity Value 2.60E-02 2.70E-01 5.40E-01 No Toxicity Value	1.09E+01 1.02E-01 7.64E-01 4.09E-01 7.72E+00 2.67E+01 2.57E+00 1.29E+00	1.60E-04 1.60E-04 1.00E+00 6.00E-03 2.00E-03 7.00E-02 3.00E+00 1.10E-02 1.10E-02 1.10E-02 1.10E-02 1.10E-02 1.10E-02 1.0E-02 1.0E-02 1.0E-02 3.00E-05	1.25E+01 1.25E+01 7.82E+04 4.69E+02 1.56E+02 5.48E+03 2.35E+05 8.60E+02 8.60E+02 8.60E+02 8.60E+02 1.56E+00  7.82E+03 3.91E+02 2.35E+03 1.56E+03 4.69E+02 6.26E+01 1.56E+05 2.35E+04
Mercury Compounds  -Mercuric Chloride (and other Mercury sal  -Mercury (elemental)  Methyl Acetate  Methylene Chloride  Methylene-bis(2-chloroaniline), 4,4'-  Methylstyrene, Alpha-  Mineral oils  Nickel Hydroxide  Nickel Oxide  Nickel Soluble Salts  Nickel Subsulfide  Pentachloroethane  Phosphorus, White  Phthalates  -Dimethylterephthalate  Silver  Tetrachloroethane, 1,1,2,2-  Tetrachloroethylene  Toluene  Tri-n-butyltin  Trichlorobenzene, 1,2,3-  Trichloroethane, 1,1,1-	M		No Toxicity Value No Toxicity Value No Toxicity Value 2.00E-03 1.00E-01 No Toxicity Value 1.70E+00 9.00E-02 No Toxicity Value 2.60E-02 2.00E-01 2.10E-03 No Toxicity Value No Toxicity Value No Toxicity Value No Toxicity Value		3.00E-04 not a soil COPC 1.00E+00 6.00E-03 2.00E-03 7.00E-02 3.00E+00 1.10E-02 1.10E-02 1.10E-02 2.00E-02 No Toxicity Value 2.00E-05  1.00E-01 5.00E-03 3.00E-02 2.00E-02 6.00E-03 8.00E-02 3.00E-04 8.00E-04 2.00E+00	2.35E+01 7.82E+04 4.69E+02 1.56E+02 5.48E+03 2.35E+05 8.60E+02 8.60E+02 1.56E+03 8.60E+02 1.56E+03 3.91E+02 2.35E+03 1.56E+03 4.69E+02 6.26E+03 2.35E+01 6.26E+01 1.56E+05		No Toxicity Value No Toxicity Value No Toxicity Value 1.40E-02 1.50E+00 No Toxicity Value 9.10E-01 No Toxicity Value 1.70E+00 9.00E-02 No Toxicity Value No Toxicity Value No Toxicity Value No Toxicity Value Vo Toxicity Value 1.70E+00 9.00E-01 No Toxicity Value No Toxicity Value No Toxicity Value 2.60E-02 2.70E-01 5.40E-01 No Toxicity Value	1.09E+01 1.02E-01 7.64E-01 4.09E-01 7.72E+00 2.67E+01 2.57E+00 1.29E+00	1.60E-04 1.60E-04 1.00E+00 6.00E-03 2.00E-03 7.00E-02 3.00E+00 1.10E-02 1.10E-02 1.10E-02 1.10E-02 1.10E-02 1.10E-02 1.0E-03 3.00E-05	1.25E+01 1.25E+01 7.82E+04 4.69E+02 1.56E+02 5.48E+03 2.35E+05 8.60E+02 8.60E+02 8.60E+02 1.56E+00  7.82E+03 3.91E+02 2.35E+03 1.56E+03 4.69E+02 6.26E+03 2.35E+01 6.26E+01 1.56E+05
Mercury Compounds Mercuric Chloride (and other Mercury sal Mercury (elemental)  Methyl Acetate  Methylene Chloride  Methylene-bis(2-chloroaniline), 4,4'-  Methylstyrene, Alpha-  Mineral oils  Nickel Hydroxide  Nickel Oxide  Nickel Soluble Salts  Nickel Subsulfide  Pentachloroethane  Phosphorus, White  Phthalates Dimethylterephthalate  Silver  Tetrachloroethane, 1,1,1,2-  Tetrachloroethane, 1,1,2,2-  Tetrachloroethylene  Toluene  Tri-n-butyltin  Trichloroethane, 1,1,1-  Trichlorofluoromethane	M		No Toxicity Value No Toxicity Value No Toxicity Value 2.00E-03 1.00E-01 No Toxicity Value 1.70E+00 9.00E-02 No Toxicity Value 2.60E-02 2.00E-01 2.10E-03 No Toxicity Value		3.00E-04 not a soil COPC 1.00E+00 6.00E-03 2.00E-03 7.00E-02 3.00E+00 1.10E-02 1.10E-02 1.10E-02 2.00E-02 1.10E-02 No Toxicity Value 2.00E-05  1.00E-01 5.00E-03 3.00E-02 2.00E-02 6.00E-03 8.00E-04 8.00E-04 2.00E+00 3.00E-01	2.35E+01	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	No Toxicity Value No Toxicity Value 1.40E-02 1.50E+00 No Toxicity Value 1.70E+00 9.00E-02 No Toxicity Value 2.60E-02 2.70E-01 5.40E-01 No Toxicity Value	1.09E+01 1.02E-01 7.64E-01 4.09E-01 7.72E+00 2.67E+01 2.57E+00 1.29E+00	1.60E-04 1.60E-04 1.00E+00 6.00E-03 2.00E-03 7.00E-02 3.00E+00 1.10E-02 1.10E-02 1.10E-02 1.10E-02 1.10E-02 1.10E-02 1.0E-02 1.0E-02 1.0E-02 3.00E-05	1.25E+01 1.25E+01 7.82E+04 4.69E+02 1.56E+02 5.48E+03 2.35E+05 8.60E+02 8.60E+02 8.60E+02 8.60E+02 1.56E+00  7.82E+03 3.91E+02 2.35E+03 1.56E+03 4.69E+02 6.26E+01 1.56E+05 2.35E+04

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Table A-3a. USEPA RSLs and DTSC-SLs for a Residential Receptor Exposed to Soil via Incidental Ingestion

				1 abie A-3a	a. USEPA RSLs and DTSC-SLs	101 a Residential Receptor I	Axposed to Son Via I	incluental fligestion			
Definition	Variable	USEPA Value	DTSC Value	Units	Equations				•		-
Age-dependent Adjustment Factor, 0-2	$ADAF_{0-2}$	10	10	yrs	Carcinogens:						
Age-dependent Adjustment Factor, 2-6	$ADAF_{2-6}$	3	3	yrs	$(R)SL_{im} = -$	$TR \times (AT_c \times 365 \ day/3)$ $\times EF_r \times \left(\frac{ED_c \times IRS_c}{RW} + \frac{ED_a \times IR}{RW}\right)$	rear)				
Age-dependent Adjustment Factor, 6-16	$ADAF_{6-16}$	3	3	yrs	$(R)SD_{ing} = SF_{\circ} >$	$\langle EE_{a} \times (\frac{ED_{c} \times IRS_{c}}{SVA} + \frac{ED_{a} \times IR}{SVA}) \rangle$	$\frac{RS_a}{RS_a}$ × CF <sub>a</sub> × RBA				
Age-dependent Adjustment Factor, 16-26	$ADAF_{16-26}$	1	1	yrs		$BW_c$ $BW_a$	) 010 11211				
Averaging Time, carcinogens	$AT_c$	70	70	yrs	Mutagens:						
Averaging Time, noncarcinogens, adult	$AT_{nc,a}$	20	20	yrs	(P) CI	$TR \times$	$(AT_c \times 365 \ days/ye)$	ar)			
Averaging Time, noncarcinogens, child	$AT_{nc,c}$	6	6	yrs	$(R)$ 3 $L_{ing}$ –	$\langle EF_r \times \begin{pmatrix} \frac{ED_{0-2} \times IRS_c \times AD_c}{BW_c} \\ \frac{ED_{6-16} \times IRS_a \times AD_c}{BW_a} \end{pmatrix}$	$4F_{0-2} + ED_{2-6} \times IRS$	$_{c} \times ADAF_{2-6} + $			
Body Weight, adult	$\mathbf{BW}_{\mathrm{a}}$	80	80	kg	SF. >	$\langle EE_{-} \times   BW_{c} \rangle$	' BI	$V_c$ $\times CF \times$	RRA		
Body Weight, child	$BW_c$	15	15	kg	510 /	$ED_{6-16} \times IRS_a \times ADA$	$\frac{F_{6-16}}{+} + \frac{ED_{16-26} \times II}{}$	$RS_a \times ADAF_{16-26}$	ND11		
Carcinogenic adjustment factor, ingestion	$CAF_{O}$	0.804	0.804	dimensionless		$\backslash BW_a$		$BW_a$ /			
Conversion Factor	$CF_o$	1E-06	1E-06	kg/mg	Trichloroethene:						
Exposure Duration, child 0-2	$ED_{0-2}$	2	2	yrs	(D)CI =-			$TR \times (AT_c \times 365 \ days/year)$			
Exposure Duration, child 2-6	ED <sub>2-6</sub>	4	4	yrs	$(R)SL_{ing} =$	(		[ / ED <sub>0-2</sub>	$\times IRS_c \times ADAF_{0-2} \perp ED_{2-6} \times$	$(IRS_c \times ADAF_{2-6} \downarrow )$	
Exposure Duration, child 6-16	ED <sub>6-16</sub>	10	10	yrs	ÇF \	$\times$ EF <sub>r</sub> $\times$ CF <sub>o</sub> $\times$ RBA $\times$ $\left\{ \left( CAF_o \times CF_o \times CF_$	$ED_c \times IRS_c + ED_a \times$	$\frac{IRS_a}{}$ + ${MAF}$ ×	$BW_c$	$BW_c$ $\longrightarrow$ $\top$	
Exposure Duration, adult 16-26	ED <sub>16-26</sub>	10	10	yrs	31 <sub>0</sub> /	CHI <sub>0</sub> A	$BW_c$ ' $BV$	$V_a$ $J' \mid I'' I'' \circ \land \setminus ED_{6-16} >$	$\frac{\langle IRS_a \times ADAF_{6-16} + ED_{16-26} \rangle}{\langle IRS_a \times ADAF_{6-16} \rangle}$	$\times IRS_a \times ADAF_{16-26}$	
Exposure Duration, adult	$ED_a$	20	20	yrs		(		L \	$BW_a$	$BW_a$ /])	
Exposure Duration, child	$ED_c$	6	6	yrs	Vinyl Chloride:						
Exposure Frequency, resident	$EF_r$	350	350	days/yr	(D)CI		TR				
Soil Ingestion Rate (adult)	IRS <sub>a</sub>	100	100	mg/day	$(R)SL_{ing} =$	$[/_{EE} , (ED_c \times IRS_c , ED_a)]$	(IRS <sub>a</sub> ) cr \	1			
Soil Ingestion Rate (child)	$IRS_c$	200	200	mg/day	SE >	$ \left\{ \left( \frac{EF_r \times \left( \frac{ED_c \times IRS_c}{BW_c} + \frac{ED_a}{B} \right)}{AT_c \times 365 \frac{day}{yea}} \right) \right\} $	(IR)	$2S_c \times CF_o$			
Mutagenic adjustment factor, ingestion	$MAF_{O}$	0.202	0.202	dimensionless	31 <sub>0</sub> /	$AT \times 365 \frac{day}{day}$	$\underline{s}$	$BW_c$ ) $\wedge KBA$			
Relative Bioavailability	RBA	chemic	cal-specific	dimensionless		[\ mc × 303 yea	r /	J			
Oral Reference Dose	$RfD_0$	chemic	cal-specific	(mg/kg-day) <sup>-1</sup>							
(Regional) Screening Level, ingestion	(R)SL <sub>Ing</sub>		red herein	mg/kg	Noncarcinogens:	d\	D	TSC Cadmium - noncarcinogenic	:	day	
Oral Slope Factor	SFO		cal-specific	(mg/kg-day) <sup>-1</sup>	$THQ \times (A')$	$\frac{T_{nc,c} \times 365 \frac{day}{year} \times BW_c}{\frac{1}{RFD} \times IRS_c \times CF_o \times RBA}$	_		THQ >	$\times \left(AT_{nc,26-yr\ adult} \times 365 \frac{aay}{year}\right) \times \frac{1}{D_{26-yr\ adult}} \times IRS_a \times \frac{1}{RfD} \times CF_o$	$BW_a$
Target Hazard Quotient	THQ	1	ai-specific 1	dimensionless	$(R)SL_{ing} = -$	1 yeur)			$SL_{ing-adult,Cd} =$	1	
Target Risk	TR	1.0E-06	1.0E-06	dimensionless	$EF_r \times ED_c \times$	$\frac{1}{RfD} \times IRS_c \times CF_o \times RBA$			$EF_r \times EI$	$D_{26-yr\ adult} \times IRS_a \times \frac{1}{RfD_a} \times CF_0$	$\times RBA$
		1.02 00	1.02 00		USEPA RSL <sub>ing</sub>	~·, ~ 0			Residential DTSC-S	<i>)</i> - <i>0</i>	
		RBA	SFo	Cancer	RfD <sub>o</sub>	Noncancer	RBA	SF <sub>0</sub>	Cancer	RfD <sub>o</sub>	Noncancer
nalyte	Mutagen?	(dimensionless)	(mg/kg-day) <sup>-1</sup>	(mg/kg)	(mg/kg-day)	(mg/kg)	(dimensionless)	(mg/kg-day) <sup>-1</sup>	(mg/kg)	(mg/kg-day)	(mg/kg)
Trichloropropane, 1,2,3-	M	1	3.00E+01	5.10E-03	4.00E-03	3.13E+02	1	3.00E+01	5.10E-03	4.00E-03	3.13E+02
	IVI	1			4.00E-03 1.00E-02		1			4.00E-03 1.00E-02	
Trimethylbenzene, 1,3,5-		1	No Toxicity Value			7.82E+02	1	No Toxicity Value			7.82E+02
Trimethylpentene, 2,4,4-		1	No Toxicity Value		1.00E-02	7.82E+02	1	No Toxicity Value		1.00E-02	7.82E+02
Vanadium and Compounds		1	No Toxicity Value		5.04E-03	3.94E+02	1	No Toxicity Value		5.04E-03	3.94E+02
Vinyl Chloride	M (VC)	1	7.20E-01	9.40E-02	3.00E-03	2.35E+02	1	2.70E-01	2.51E-01	3.00E-03	2.35E+02
dditional Analytes											

1.56E+02

No Toxicity Value

No Toxicity Value

No Toxicity Value

2.00E-04

3.00E-02

No Toxicity Value

1.56E+01

2.35E+03

--

2.00E-03

No Toxicity Value

No Toxicity Value

Beryllium Sulfate

Dichlorobenzene, 1,3-

Methylcyclohexane

No Toxicity Value

No Toxicity Value

No Toxicity Value

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<sup>&</sup>quot;--" = no value

Table A-3b. USEPA RSLs and DTSC-SLs for a Commercial/Industrial Receptor Exposed to Soil via Incidental Ingestion

Definition	Variable	USEPA Value	DTSC Value		Equations					
Averaging Time, carcinogens	$AT_c$	70	70	yrs	-					
Averaging Time, noncarcinogens, worker	$AT_{nc,w}$	25	25	yrs	Carcinogens:		davs			
Body Weight, adult	BW <sub>a</sub>	80	80	kg	2 3.2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	TR	$\frac{\times AT_c \times 365 \frac{days}{year}}{D_w \times SF_0 \times IRS_w}$	$\times BW_a$		
Conversion Factor	CF <sub>o</sub>	1E-06	1E-06	kg/mg	(R)	$SL_{ing} = \frac{1}{FF \times F}$	D × CE × IDC ×	V CE V DRA		
COPC Concentration in Soil	$C_{soil}$	chemical-sp				$EI_W \wedge E$	$D_W \wedge S \Gamma_0 \wedge I \Lambda S_W \rangle$	$\times Cr_0 \times KDH$		
		•		mg/kg						
Exposure Duration, worker	$\mathrm{ED}_{\mathrm{w}}$	25	25	yrs						
Exposure Frequency, worker	$EF_{\mathrm{w}}$	250	250	days/yr						
Fraction Contaminated Soil Ingested, worker	$\mathrm{FI}_{\mathrm{w}}$	1.0	1.0	dimensionless	Noncarcinogens:	THO	$ \times AT_{nc,w} \times 365 \frac{da}{ye} $ $D_w \times \frac{1}{RfD_o} \times IRS_w $	lys , DIA		
Soil Ingestion Rate, worker	$IRS_{ m w}$	100	100	mg/day	(n)	VCI —	$\times AI_{nc,w} \times 303 \frac{1}{ye}$	ear × bw <sub>a</sub>		
Relative Bioavailability	RBA	chemical-sp	pecific	dimensionless	( <i>R</i> )	$SL_{ing} = {EE \times E}$	n v 1 v Inc	V CE V DDA		
Oral Reference Dose	$RfD_{O}$	chemical-sp	ecific	mg/kg-day		$EF_W \times E$	$D_W \times \overline{RfD_O} \times IRS_W$	$X CF_0 \times KBA$		
(Regional) Screening Level, ingestion	$(R)SL_{ing}$	derived he	erein	mg/kg						
Oral Slope Factor	$SF_{O}$	chemical-sp	ecific	(mg/kg-day) <sup>-1</sup>						
Target Hazard Quotient	THQ	1	1	dimensionless						
Target Risk	TR	1.0E-06	1.0E-06	dimensionless						
Turget Nusk				ISEPA RSL <sub>ing</sub>			Common	cial/Industrial D	TCC CI	
	RBA	SF <sub>o</sub>	Cancer	RfD <sub>0</sub>	Noncancer	RBA	SF <sub>0</sub>	Cancer	RfD <sub>0</sub>	Noncancer
Analyta	(dimensionless)					(dimensionless)				
Analyte	(aimensioniess)	(mg/kg-day) <sup>-1</sup>	(mg/kg)	(mg/kg-day)	(mg/kg)	(aimensioniess)	(mg/kg-day) <sup>-1</sup>	(mg/kg)	(mg/kg-day)	(mg/kg)
USEPA RSL Analytes	1	5.00E-01	C 5 4E + 00	2.00E-03	2.34E+03	1	4.50E+00	7.27E-01	2.00E-03	2.34E+03
Acrylamide Acrylonitrile	1 1	5.40E-01	6.54E+00 6.06E+00	4.00E-03	4.67E+04	1	1.00E+00	3.27E+00	4.00E-02	4.67E+04
•	0.6	1.50E+00		3.00E-02	5.84E+02	1 1	9.50E+00		3.50E-06	4.07E+04 4.09E+00
Arsenic, Inorganic	0.0		3.63E+00	1.00E-01	1.17E+05	1		3.44E-01	1.00E-01	1.17E+05
Benzaldehyde Benzene	1	No Toxicity Value 5.50E-02	5.95E+01	4.00E-03	4.67E+03	1	No Toxicity Value 1.00E-01	3.27E+01	4.00E-03	4.67E+03
Benzenethiol	1	No Toxicity Value	J.93E+01	1.00E-03	1.17E+03	1	No Toxicity Value	3.27E+01	1.00E-03	1.17E+03
Benzidine	1	2.30E+02	1.42E-02	3.00E-03	3.50E+03	1	5.00E+02	6.54E-03	3.00E-03	3.50E+03
Beryllium and compounds	1	No Toxicity Value		2.00E-03	2.34E+03	1	No Toxicity Value		2.00E-04	2.34E+02
Bromodichloromethane	1	6.20E-02	5.27E+01	2.00E-02	2.34E+04	1	1.30E-01	2.52E+01	2.00E-02	2.34E+04
Bromoform	1	7.90E-03	4.14E+02	2.00E-02	2.34E+04	1	1.10E-02	2.97E+02	2.00E-02	2.34E+04
Butadiene, 1,3-	1	3.40E+00	9.62E-01	No Toxicity Value		1	6.00E-01	5.45E+00	No Toxicity Value	
Butanol, N-	1	No Toxicity Value		1.00E-01	1.17E+05	1	No Toxicity Value		1.00E-01	1.17E+05
Butylbenzene, n-	1	No Toxicity Value		5.00E-02	5.84E+04	1	No Toxicity Value		5.00E-02	5.84E+04
Butylbenzene, sec-	1	No Toxicity Value		1.00E-01	1.17E+05	1	No Toxicity Value		1.00E-01	1.17E+05
Butylbenzene, tert-	1	No Toxicity Value		1.00E-01	1.17E+05	1	No Toxicity Value		1.00E-01	1.17E+05
Cadmium (Diet)	1	No Toxicity Value		1.00E-03	1.17E+03	1	No Toxicity Value		6.30E-06	7.36E+00
Carbon Tetrachloride	1	7.00E-02	4.67E+01	4.00E-03	4.67E+03	1	1.50E-01	2.18E+01	4.00E-03	4.67E+03
Chlordane	1	3.50E-01	9.34E+00	5.00E-04	5.84E+02	1	1.30E+00	2.52E+00	5.00E-04	5.84E+02
Chloro-2-methylaniline, 4-	1	1.00E-01	3.27E+01	3.00E-03	3.50E+03	1	2.70E-01	1.21E+01	3.00E-03	3.50E+03
Chloroacetaldehyde, 2-	1	2.70E-01	1.21E+01	No Toxicity Value		1	2.70E-01	1.21E+01	No Toxicity Value	
Chlorobutane, 1-	1	No Toxicity Value		4.00E-02	4.67E+04	1	No Toxicity Value		4.00E-02	4.67E+04
Chlorotoluene, o-	1	No Toxicity Value		2.00E-02	2.34E+04	1	No Toxicity Value		2.00E-02	2.34E+04
Chlorotoluene, p-	1	No Toxicity Value		2.00E-02	2.34E+04	1	No Toxicity Value		2.00E-02	2.34E+04
Chromium(III), Insoluble Salts	1	No Toxicity Value		1.50E+00	1.75E+06	1	No Toxicity Value		1.50E+00	1.75E+06
Crotonaldehyde, trans-	1	1.90E+00	1.72E+00	1.00E-03	1.17E+03	1	1.90E+00	1.72E+00	1.00E-03	1.17E+03
Cyanides										
~Cyanogen	1	No Toxicity Value		1.00E-03	1.17E+03	1	No Toxicity Value		1.00E-03	1.17E+03
~Cyanogen Bromide	1	No Toxicity Value		9.00E-02	1.05E+05	1	No Toxicity Value		9.00E-02	1.05E+05
~Cyanogen Chloride	1	No Toxicity Value		5.00E-02	5.84E+04	1	No Toxicity Value		5.00E-02	5.84E+04
~Potassium Silver Cyanide	1	No Toxicity Value		5.00E-03	5.84E+03	1	No Toxicity Value		5.00E-03	5.84E+03
~Silver Cyanide	1	No Toxicity Value		1.00E-01	1.17E+05	1	No Toxicity Value		1.00E-01	1.17E+05

Table A-3b. USEPA RSLs and DTSC-SLs for a Commercial/Industrial Receptor Exposed to Soil via Incidental Ingestion

Definition	Variable	USEPA Value	DTSC Value		Equations					
Averaging Time, carcinogens	$AT_c$	70	70	yrs						
Averaging Time, noncarcinogens, worker	$AT_{nc,w}$	25	25	yrs	Carcinogens:		days			
Body Weight, adult	$BW_a$	80	80	kg		TR	$\times AT_c \times 365 \frac{\alpha ays}{vear}$	$\times BW_a$		
Conversion Factor	CF <sub>o</sub>	1E-06	1E-06	kg/mg	(R	$SL_{ing} = \frac{1}{EE \times E}$	$\frac{\times AT_c \times 365 \frac{days}{year}}{D_w \times SF_0 \times IRS_w}$	$\times CF_{\circ} \times RBA$		
COPC Concentration in Soil	$C_{\mathrm{soil}}$	chemical-sp		mg/kg		DI <sub>W</sub> × D	D <sub>W</sub> × DI <sub>U</sub> × IIIO <sub>W</sub> ·	. 010 / 11211		
Exposure Duration, worker	$\mathrm{ED}_{\mathrm{w}}$	25	25	yrs						
Exposure Frequency, worker	$EF_{w}$	250	250	days/yr						
				• •	N		_			
Fraction Contaminated Soil Ingested, worker	$FI_{w}$	1.0	1.0	dimensionless	Noncarcinogens:	THO	$\times AT_{max} \times 365 \frac{da}{da}$	$\frac{ays}{s} \times BW_{a}$		
Soil Ingestion Rate, worker	$IRS_{w}$	100	100	mg/day	(R	)\$1.: =	$\frac{\times AT_{nc,w} \times 365 \frac{dc}{ye}}{D_w \times \frac{1}{RfD_o} \times IRS_w}$	ear ^ Bwa		
Relative Bioavailability	RBA	chemical-sp		dimensionless	(11)	$FE_{} \times F_{}$	$D_{xx} \times \frac{1}{1} \times IRS_{xx}$	$\times$ CF. $\times$ RRA		
Oral Reference Dose	$RfD_O$	chemical-sp		mg/kg-day		$B_{I_W} \times B_I$	$^{o}$ $^{o}$ $^{o}$ $^{o}$ $^{o}$ $^{o}$ $^{o}$ $^{o}$	$\gamma \times Gr_0 \times RDH$		
(Regional) Screening Level, ingestion	$(R)SL_{ing}$	derived he	erein	mg/kg						
Oral Slope Factor	$SF_O$	chemical-sp	ecific	(mg/kg-day) <sup>-1</sup>						
Target Hazard Quotient	THQ	1	1	dimensionless						
Target Risk	TR	1.0E-06	1.0E-06	dimensionless						
		Commercia	l/Industrial I	USEPA RSL <sub>ing</sub>			Commer	cial/Industrial D	TSC-SI	
	RBA	SF <sub>0</sub>	Cancer	RfD <sub>0</sub>	Noncancer	RBA	SF <sub>0</sub>	Cancer	RfD <sub>0</sub>	Noncancer
		*		_			_		-	
Analyte	(dimensionless)	(mg/kg-day) <sup>-1</sup>	(mg/kg)	(mg/kg-day)	(mg/kg)	(dimensionless)	(mg/kg-day) <sup>-1</sup>	(mg/kg)	(mg/kg-day)	(mg/kg)
Dibromobenzene, 1,3-	1	No Toxicity Value		4.00E-04	4.67E+02	1	No Toxicity Value		4.00E-04	4.67E+02
Dibromobenzene, 1,4-	1	No Toxicity Value		1.00E-02	1.17E+04	1	No Toxicity Value		1.00E-02	1.17E+04
Dibromochloromethane	1	8.40E-02	3.89E+01	2.00E-02	2.34E+04	1	8.40E-02	3.89E+01	2.00E-02	2.34E+04
Dibromoethane, 1,2-	1	2.00E+00	1.64E+00	9.00E-03	1.05E+04	1	3.60E+00	9.08E-01	9.00E-03	1.05E+04
Dichlorobenzidine, 3,3'-	1	4.50E-01	7.27E+00	No Toxicity Value		1	1.20E+00	2.73E+00	No Toxicity Value	
Dichloroethane, 1,1-	1	5.70E-03	5.74E+02	2.00E-01	2.34E+05	1	5.70E-03	5.74E+02	2.00E-01	2.34E+05
Dichloroethylene, 1,2-cis-	1	No Toxicity Value		2.00E-03	2.34E+03	1	No Toxicity Value		2.00E-03	2.34E+03
Dichloroethylene, 1,2-trans-	1	No Toxicity Value		2.00E-02	2.34E+04	1	No Toxicity Value		2.00E-02	2.34E+04
Dichloropropane, 1,3-	1	No Toxicity Value		2.00E-02	2.34E+04	1	No Toxicity Value		2.00E-02	2.34E+04
Dichloropropene, 1,3-	1	1.00E-01	3.27E+01	3.00E-02	3.50E+04	1	9.10E-02	3.59E+01	3.00E-02	3.50E+04
Dimethylaniline, N,N-	<u>l</u>	No Toxicity Value		2.00E-03	2.34E+03	<u>l</u>	No Toxicity Value		2.00E-03	2.34E+03
Epichlorohydrin	<u>l</u>	9.90E-03	3.30E+02	6.00E-03	7.01E+03	<u>l</u>	8.00E-02	4.09E+01	6.00E-03	7.01E+03
Ethyl Chloride (Chloroethane)	<u>l</u>	No Toxicity Value		No Toxicity Value		<u>l</u>	4.70E-03	6.96E+02	No Toxicity Value	
Ethyl Ether	1	No Toxicity Value		2.00E-01	2.34E+05	1	No Toxicity Value		2.00E-01	2.34E+05
Furans	1	No To-:-:-:		1.000.02	1 17E : 02	1	No Toricita V.1		1.00E.02	1 17E : 02
~Furan	<u>l</u>	No Toxicity Value	4 10E+01	1.00E-03	1.17E+03	<u>l</u>	No Toxicity Value	4 10E+01	1.00E-03	1.17E+03
Hexachloroputadiene Hexachloroputadiene Technical	1	7.80E-02	4.19E+01	1.00E-03	1.17E+03	1 1	7.80E-02	4.19E+01	1.00E-03	1.17E+03
Hexachlorocyclohexane, Technical Isobutyl Alcohol	1	1.80E+00 No Toxicity Value	1.82E+00	No Toxicity Value 3.00E-01	3.50E+05	1	4.00E+00 No Toxicity Value	8.18E-01	No Toxicity Value 3.00E-01	3.50E+05
Lead Compounds	1	ino roxicity value		3.UUE-U1	3.JUE+U3	1	ino roxicity value		3.UUE-U1	3.30E+03
~Lead compounds ~Lead subacetate	1	8.50E-03	3.85E+02	No Toxicity Value		1	3.80E-02	8.61E+01	No Toxicity Value	
~Lead subacetate  ~Tetraethyl Lead	1	No Toxicity Value	3.83E+02	1.00E-07	1.17E-01	1	No Toxicity Value	8.01E+01 	1.00E-07	1.17E-01
Lewisite	1	No Toxicity Value		5.00E-06	5.84E+00	<u> </u>	No Toxicity Value		5.00E-06	5.84E+00
Manganese (Non-diet)	1	No Toxicity Value		2.40E-02	2.80E+04	1	No Toxicity Value		2.40E-02	2.80E+04
Mercury Compounds	1	110 TOXICITY VALUE		2.40E-02	2.00ET04	1	140 TOAICILY VAIUE	<del></del>	2. <del>T</del> 0E-02	2.00LT04
~Mercuric Chloride (and other Mercury salts)	1	No Toxicity Value		3.00E-04	3.50E+02	1	No Toxicity Value		1.60E-04	1.87E+02
~Mercury (elemental)	1	No Toxicity Value		not a soil COPC	3.30E+02	1	No Toxicity Value		1.60E-04	1.87E+02
Methyl Acetate	1	No Toxicity Value		1.00E+00	1.17E+06	1	No Toxicity Value		1.00E+00	1.17E+06
Methylene Chloride	1	2.00E-03	1.64E+03	6.00E-03	7.01E+03	1	1.40E-02	2.34E+02	6.00E-03	7.01E+03
Methylene-bis(2-chloroaniline), 4,4'-	1	1.00E-01	3.27E+01	2.00E-03	2.34E+03	1	1.50E+00	2.18E+02	2.00E-03	2.34E+03
Methylstyrene, Alpha-	1	No Toxicity Value	J.27E+01	7.00E-02	8.18E+04	1	No Toxicity Value	2.16E+00	7.00E-02	8.18E+04
Mineral oils	1	No Toxicity Value		3.00E+00	3.50E+06	1	No Toxicity Value	<del></del>	3.00E+00	3.50E+06
Triniciui Oils	1	110 TOAICHY VAIUC		3.00L100	3.30L   00	1	110 TOXICITY VALUE		3.00L100	3.30L   00

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Table A-3b. USEPA RSLs and DTSC-SLs for a Commercial/Industrial Receptor Exposed to Soil via Incidental Ingestion

Definition	Variable	USEPA Value	DTSC Value		Equations					
Averaging Time, carcinogens	$AT_c$	70	70	yrs						
Averaging Time, noncarcinogens, worker	$AT_{nc,w}$	25	25	yrs	Carcinogens:		days			
Body Weight, adult	$BW_a$	80	80	kg	C	TR	$2 \times AT_c \times 365 \frac{aays}{vear}$	$\times BW_a$		
Conversion Factor	CF <sub>o</sub>	1E-06	1E-06	kg/mg	(R)	$SL_{ing} = \frac{1}{FF \times F}$	$2 \times AT_c \times 365 \frac{days}{year}$ $2D_w \times SF_o \times IRS_w > 365 \frac{days}{year}$	CE Y RRA		
COPC Concentration in Soil	$C_{\text{soil}}$	chemical-sp				$L_{W} \wedge L$	$D_W \times SI_0 \times IIIS_W \times$	CI <sub>0</sub> × RDA		
ll .		-		mg/kg						
Exposure Duration, worker	$\mathrm{ED_{w}}$	25	25	yrs						
Exposure Frequency, worker	$EF_{\mathrm{w}}$	250	250	days/yr						
Fraction Contaminated Soil Ingested, worker	$\mathrm{FI}_{\mathrm{w}}$	1.0	1.0	dimensionless	Noncarcinogens:	T110	V AT V 2CE da	iys , <sub>DIA</sub>		
Soil Ingestion Rate, worker	$IRS_{w}$	100	100	mg/day	(D)	IHQ	$\frac{0 \times AT_{nc,w} \times 365 \frac{da}{ye}}{D_w \times \frac{1}{RfD_o} \times IRS_w}$	$\frac{1}{ar} \times BW_a$		
Relative Bioavailability	RBA	chemical-sp	pecific	dimensionless	(R)	$SL_{ing} = \frac{1}{1}$	1 ,,,,	<i>a</i>	-	
Oral Reference Dose	$RfD_{O}$	chemical-sp	pecific	mg/kg-day		$EF_W \times E$	$D_w \times \frac{RfD_0}{RfD_0} \times IRS_w$	$\times CF_o \times RBA$		
(Regional) Screening Level, ingestion	$(R)SL_{ing}$	derived he	erein	mg/kg			, 0			
Oral Slope Factor	SF <sub>O</sub>	chemical-sp		(mg/kg-day) <sup>-1</sup>						
1	-	tileiilicai-s <sub>l</sub>	1	dimensionless						
Target Hazard Quotient	THQ	1.0E-06	1.0E-06	dimensionless						
Target Risk	TR									
		Commercia	l/Industrial U	SEPA RSL <sub>ing</sub>			Commerc	cial/Industrial l	OTSC-SL <sub>ing</sub>	
	RBA	$SF_o$	Cancer	$\mathbf{RfD}_{o}$	Noncancer	RBA	$SF_o$	Cancer	$\mathbf{RfD}_{o}$	Noncancer
Analyte	(dimensionless)	(mg/kg-day) <sup>-1</sup>	(mg/kg)	(mg/kg-day)	(mg/kg)	(dimensionless)	(mg/kg-day) <sup>-1</sup>	(mg/kg)	(mg/kg-day)	(mg/kg)
Nickel Hydroxide	1	No Toxicity Value		1.10E-02	1.28E+04	1	No Toxicity Value		1.10E-02	1.28E+04
Nickel Oxide	1	No Toxicity Value		1.10E-02	1.28E+04	1	No Toxicity Value		1.10E-02	1.28E+04
Nickel Refinery Dust	1	No Toxicity Value		1.10E-02	1.28E+04	1	9.10E-01	3.59E+00	1.10E-02	1.28E+04
Nickel Soluble Salts	1	No Toxicity Value		2.00E-02	2.34E+04	1	No Toxicity Value		1.10E-02	1.28E+04
Nickel Subsulfide	1	1.70E+00	1.92E+00	1.10E-02	1.28E+04	1	1.70E+00	1.92E+00	1.10E-02	1.28E+04
Pentachloroethane	1	9.00E-02	3.63E+01	No Toxicity Value		1	9.00E-02	3.63E+01	No Toxicity Value	
Phosphorus, White	1	No Toxicity Value		2.00E-05	2.34E+01	1	No Toxicity Value		2.00E-05	2.34E+01
Phthalates		•					•			
~Dimethylterephthalate	1	No Toxicity Value		1.00E-01	1.17E+05	1	No Toxicity Value		1.00E-01	1.17E+05
Silver	1	No Toxicity Value		5.00E-03	5.84E+03	1	No Toxicity Value		5.00E-03	5.84E+03
Tetrachloroethane, 1,1,1,2-	1	2.60E-02	1.26E+02	3.00E-02	3.50E+04	1	2.60E-02	1.26E+02	3.00E-02	3.50E+04
Tetrachloroethane, 1,1,2,2-	1	2.00E-01	1.64E+01	2.00E-02	2.34E+04	1	2.70E-01	1.21E+01	2.00E-02	2.34E+04
Tetrachloroethylene	1	2.10E-03	1.56E+03	6.00E-03	7.01E+03	1	5.40E-01	6.06E+00	6.00E-03	7.01E+03
Toluene	1	No Toxicity Value		8.00E-02	9.34E+04	1	No Toxicity Value		8.00E-02	9.34E+04
Tri-n-butyltin	1	No Toxicity Value		3.00E-04	3.50E+02	1	No Toxicity Value		3.00E-04	3.50E+02
Trichlorobenzene, 1,2,3-	1	No Toxicity Value		8.00E-04	9.34E+02	1	No Toxicity Value		8.00E-04	9.34E+02
Trichloroethane, 1,1,1-	1	No Toxicity Value		2.00E+00	2.34E+06	1	No Toxicity Value		2.00E+00	2.34E+06
Trichlorofluoromethane	1	No Toxicity Value		3.00E-01	3.50E+05	1	No Toxicity Value		3.00E-01	3.50E+05
Trichlorophenol, 2,4,6-	1	1.10E-02	2.97E+02	1.00E-03	1.17E+03	1	7.00E-02	4.67E+01	1.00E-03	1.17E+03
Trichloropropane, 1,1,2-	1	No Toxicity Value		5.00E-03	5.84E+03	1	No Toxicity Value		5.00E-03	5.84E+03
Trichloropropane, 1,2,3-	1	3.00E+01	1.09E-01	4.00E-03	4.67E+03	1	3.00E+01	1.09E-01	4.00E-03	4.67E+03
Trimethylbenzene, 1,3,5-	1	No Toxicity Value		1.00E-02	1.17E+04	1	No Toxicity Value		1.00E-02	1.17E+04
Trimethylpentene, 2,4,4-	1	No Toxicity Value		1.00E-02	1.17E+04	1	No Toxicity Value		1.00E-02	1.17E+04
Vanadium and Compounds	1	No Toxicity Value		5.04E-03	5.89E+03	1	No Toxicity Value		5.04E-03	5.89E+03
Vinyl Chloride	1	7.20E-01	4.54E+00	3.00E-03	3.50E+03	1	2.70E-01	1.21E+01	3.00E-03	3.50E+03
Additional Analytes										
Beryllium Sulfate	1	No Toxicity Value		2.00E-03	2.34E+03	1	No Toxicity Value		2.00E-04	2.34E+02
Dichlorobenzene, 1,3-	1	No Toxicity Value		No Toxicity Value		1	No Toxicity Value		3.00E-02	3.50E+04
Methylcyclohexane	1	No Toxicity Value		No Toxicity Value		1	No Toxicity Value		No Toxicity Value	

<sup>&</sup>quot;--" = no value

Table A-4a. USEPA RSLs and DTSC-SLs for a Residential Receptor Exposed to Soil via Dermal Contact

Equations:

Description

Variable USEPA Value DTSC Value Units

Dermal Soil Absorption Factor <sup>la</sup> Age-dependent Adjustment Factor, 0-2	\a												
Age-dependent Adjustment Factor, 0-2	$ABS_d^{\setminus a}$	chemica	al-specific	unitless	Carcinogens:								
	$ADAF_{0-2}$	10	10	yrs	$(R)SI_{-}=$	$TR \times (AT_c \times 365 dc)$ $V_r \times EC_r \times \left(\frac{ED_c \times SA_c \times AF_c}{RW}\right)$	lay/year)						
Age-dependent Adjustment Factor, 2-6	$ADAF_{2-6}$	3	3	yrs	$SF_a \times EF_a \times E$	$L \times EC_{-} \times \left(\frac{ED_c \times SA_c \times AF_c}{SVC}\right)$	$+\frac{ED_a \times SA_a \times AF_a}{PM} \times AB$	$SS_d \times CF_d$					
Age-dependent Adjustment Factor, 6-16	$ADAF_{6-16}$	3	3	yrs	21 u - 27 · · 2.	$BW_c$	$BW_a$	-u ·· -u					
Age-dependent Adjustment Factor, 16-26	$ADAF_{16-26}$	1	1	yrs	Mutagens:								
Soil-to-Skin Adherence Factor, adult	$AF_a$	0.07	0.07	mg/cm <sup>2</sup> -day	$(R)SL_D =$		$TR \times (AT_c \times 365 \ days/ye)$						
Soil-to-Skin Adherence Factor, child	$AF_c$	0.2	0.2	mg/cm <sup>2</sup> -day	$(R)SL_D =$	$V_r \times EC_r \times \begin{pmatrix} \frac{ED_{0-2} \times AF_c \times}{B} \\ \frac{ED_{6-16} \times AF_a \times S}{BV} \end{pmatrix}$	$SA_c \times ADAF_{0-2} + ED_{2-6}$	$\times AF_c \times SA_c \times AB$	$DAF_{2-6}$ $\downarrow$				
Averaging Time, Carcinogens	$AT_c$	70	70	yrs	$SF_A \times EF_a \times E$	$V_{-} \times EC_{-} \times \Big _{} = B$	$SW_c$	$BW_c$	' \ x	$ABS_d \times CF_d$			
Averaging Time, noncarcinogens, adult	AT <sub>nc.a</sub>	20	20	vrs	214 217 2	$ED_{6-16} \times AF_a \times S$	$\frac{SA_a \times ADAF_{6-16}}{M} + \frac{ED_{16-16}}{M}$	$_{26} \times AF_a \times SA_a \times$	$ADAF_{16-26}$	1120 a · · or a			
Averaging Time, noncarcinogens, child	$AT_{nc,c}$	6	6	yrs		\ BV	$N_a$	$BW_a$	/				
Body Weight, adult	$BW_a$	80	80	kg	Trichloroethene:								
Body Weight, child	$BW_c$	15	15	kg				T	$R \times (AT_c \times 365 d)$	lavs (vear)			
Carcinogenic adjustment factor	$CAF_{O}$	0.804	0.804	dimensionless	$(R)SL_D =$	(		-	г х (пге х ооо и	/ FD × FF ×	$\Delta F \times S \Delta \times \Delta D \Delta F = F D$	$\vee$ FF $\vee$ $\Delta$ F $\vee$ $\Delta$ A $\vee$ $\Delta$ D $\Delta$ F	\ 1\
Conversion Factor	$CF_d$	1E-06	1E-06	kg/mg		(r	$(ED \times EE \times SA \times AF)$	$ED \times EE \times SA$	$1 \times AF_{-} \setminus 1$	$\int \frac{ED_{0-2} \times EI_r \times}{}$	$\frac{AF_c \times SA_c \times ADAF_{0-2}}{BW_c} + \frac{ED_2}{AF_a \times SA_a \times ADAF_{6-16}} + \frac{ED_{16}}{BW_c}$	$\frac{BW_c}{B}$	2-6 + \ )
Fraction of EV in Contact with Soil, resident	$EC_r$	1	1	unitless	$SF_d \times EV_r \times E$	$C_r \times ABS_d \times CF_d \times \{   CAF_O \times \} \}$	$\left(\frac{BW_c}{BW_c}\right)$	$+\frac{BB_a \times BB_r \times BB_r}{BW_a}$	$\frac{ a  \times  a }{ a } +  MA $	$ F_0 \times  $ $ED_{\epsilon-1\epsilon} \times EF_{\epsilon} \times A$	$AF_{\alpha} \times SA_{\alpha} \times ADAF_{\epsilon-1\epsilon} = ED_{1\epsilon}$	$E_{e-3e} \times EF_{rr} \times AF_{rr} \times SA_{rr} \times AD_{rr}$	$AF_{16-26}$   }
Exposure Duration, child 0-2	$ED_{0-2}$	2	2	yrs		('	` ' '	u	′¹ [	\	$\frac{a}{BW_a}$	$BW_a$	<del></del>
Exposure Duration, child 2-6	$ED_{2-6}$	4	4	yrs					-	•			, =-
Exposure Duration, child 6-16	$ED_{6-16}$	10	10	yrs	Vinyl Chloride:								
Exposure Duration, adult 16-26	ED <sub>16-26</sub>	10	10	yrs	(R)SI		TR						
Exposure Duration, adult	$ED_a$	20	20	yrs	(N JSLD —	$/_{EE} \sim (ED_c \times SA_c \times A)$	$\overline{F_c} \perp ED_a \times SA_a \times AF_a \setminus$	ARS. V CE		<u> </u>			
Exposure Duration, child	$ED_c$	6	6	yrs	$SE_2 \times EV_2 \times EV_3$	$C_r \times \left[ \left( \frac{EF_r \times \left( \frac{ED_c \times SA_c \times A_c}{BW_c} \right)}{\frac{BW_c}{BW_c}} \right) \right]$	$+ \frac{BW_a}{}) \times$	ADSd A Crd	$(SA_c \times AF_c \times ABS)$	$S_d \times CF_d$			
Exposure Frequency, resident	$EF_r$	350	350	days/yr	ord A Bir A B		$AT_c \times 365 \frac{days}{days}$	Ι''	$BW_c$	7			
Event Frequency, resident	$EV_r$	1	1	events/day		L\	year	/		J			
Mutagenic adjustment factor	MAFo	0.202	0.202	dimensionless									
Reference Dose Adjusted for GI Absorption	$RfD_d$		ıl-specific	mg/kg-day									
(Regional) Screening Level, dermal	$(R)SL_D$		d herein	mg/kg	Noncarcinogens:		DTSC Cadmi	um - noncarcinogen	ic:				
Exposed Body Surface Area, adult	$SA_a$	6032	6032	cm <sup>2</sup>	mr.	ov(AT 2205 day)	147			THOWAT	265 day \ 2011		
Exposed Body Surface Area, child	$SA_c$	2373	2900	cm <sup>2</sup>	(P) SI =	$Q \times \left(AT_{nc,c} \times 365 \frac{aay}{year}\right) \times BI$ $\frac{1}{fD_r} \times EV_r \times EC_r \times SA_c \times AF_c$	VV <sub>C</sub>	CI		$HQ \times AI_{nc,26-yr adult}$	$ \times 365 \frac{day}{year} \times BW_a $ $EC_r \times SA_a \times AF_a \times ABS_d \times CA$		
Oral Slope Factor Adjusted for GI Absorption	$SF_d$	chemica	al-specific	(mg/kg-day) <sup>-1</sup>	$(K)SL_D = {}$ $EF \times ED \times =$	$\frac{1}{1} \times FV \times FC \times SA \times AF$	$\times$ ARS, $\times$ CF,	3LD-adult,0	$EF \times ED_{ox}$	$\frac{1}{1} \times FV \times V$	$EC \times SA \times AF \times ARS \times C$	<del></del>	
Target Hazard Quotient	THQ	1	1	dimensionless	$E_{ir} \wedge E_{ic} \wedge R_{j}$	$fD_d \sim 2 v_r \times 2 \sigma_r \times \sigma n_c \times n_c$	NIBBa N GI a		D17 1 D 26-	$yr$ $aault \cap RfD_d \cap Drr \cap P$	zor Nona Nina Nina Ninoa Noi	· a	
Target Risk	TR	1.0E-06	1.0E-06	dimensionless									
Target Risk	TR	1.0E-06	1.0E-06	dimensionless	Residential USEPA RS	ь					Residential DTSC-SL <sub>D</sub>		
Target Risk	TR _	1.0E-06  ABS <sub>d</sub> \a	1.0E-06  GI Absorption		Residential USEPA RS Cancer	EL <sub>D</sub> RfD <sub>d</sub>	Noncancer	ABS <sub>d</sub> \a	GI Absorption	$\mathrm{SF}_{\mathrm{d}}$	Residential DTSC-SL <sub>D</sub> Cancer	$\mathrm{RfD}_{\mathrm{d}}$	Noncancer
	TR - - Mutagen?					ь	Noncancer (mg/kg)	ABS <sub>d</sub> \a (unitless)	GI Absorption (unitless)	$\mathbf{SF_d}$ $(\mathbf{mg/kg\text{-}day)}^{-1}$	ь	$\mathbf{RfD_d}$ (mg/kg-day)	Noncancer (mg/kg)
Analyte	_	$ABS_d^{\setminus a}$	GI Absorption	n SF <sub>d</sub>	Cancer	RfD <sub>d</sub>		u u	-	- ,	Cancer		
Analyte USEPA RSL Analytes Acrylamide	_	$ABS_d^{\setminus a}$	GI Absorption	n SF <sub>d</sub>	Cancer	RfD <sub>d</sub>		u u	-	- ,	Cancer		
Analyte USEPA RSL Analytes	Mutagen?	ABS <sub>d</sub> \\a\text{unitless}	GI Absorption (unitless)	n SF <sub>d</sub> (mg/kg-day) <sup>-1</sup>	Cancer (mg/kg)	RfD <sub>d</sub> (mg/kg-day)	(mg/kg)	(unitless)	(unitless)	(mg/kg-day) <sup>-1</sup>	Cancer (mg/kg)	(mg/kg-day)	(mg/kg)
Analyte USEPA RSL Analytes Acrylamide Acrylonitrile	Mutagen?	ABS <sub>d</sub> \\alpha (unitless)	GI Absorption (unitless)	n SF <sub>d</sub> (mg/kg-day) <sup>-1</sup>	Cancer (mg/kg) 1.19E+00	RfD <sub>d</sub> (mg/kg-day) 2.00E-03	(mg/kg) 6.59E+02	(unitless) 1.00E-01	(unitless) 1.00E+00	(mg/kg-day) <sup>-1</sup> 4.50E+00	Cancer (mg/kg) 1.12E-01	(mg/kg-day) 2.00E-03	(mg/kg) 5.39E+02
Analyte  USEPA RSL Analytes  Acrylamide  Acrylonitrile  Arsenic, Inorganic	Mutagen?	ABS <sub>d</sub> \(\(\text{unitless}\)\) 1.00E-01	GI Absorption (unitless) 1.00E+00 1.00E+00 1.00E+00	n SF <sub>d</sub> (mg/kg-day) <sup>-1</sup> 5.00E-01 5.40E-01	Cancer (mg/kg) 1.19E+00	RfD <sub>d</sub> (mg/kg-day) 2.00E-03 4.00E-02 3.00E-04	(mg/kg) 6.59E+02	(unitless)  1.00E-01	1.00E+00 1.00E+00 1.00E+00	(mg/kg-day) <sup>-1</sup> 4.50E+00 1.00E+00	Cancer (mg/kg) 1.12E-01	2.00E-03 4.00E-02 3.50E-06	(mg/kg) 5.39E+02 
Analyte USEPA RSL Analytes Acrylamide Acrylonitrile Arsenic, Inorganic Benzaldehyde	Mutagen?	ABS <sub>d</sub> <sup>la</sup> (unitless)  1.00E-01 3.00E-02	1.00E+00 1.00E+00 1.00E+00 1.00E+00	5.00E-01 5.40E-01 1.50E+00	Cancer (mg/kg) 1.19E+00  5.49E+00	RfD <sub>d</sub> (mg/kg-day) 2.00E-03 4.00E-02 3.00E-04 1.00E-01	(mg/kg)  6.59E+02   3.30E+02	1.00E-01 3.00E-02	1.00E+00 1.00E+00 1.00E+00 1.00E+00	(mg/kg-day) <sup>-1</sup> 4.50E+00 1.00E+00 9.50E+00	Cancer (mg/kg)  1.12E-01 7.59E-01	2.00E-03 4.00E-02 3.50E-06 1.00E-01	5.39E+02  3.15E+00
Analyte USEPA RSL Analytes Acrylamide Acrylonitrile Arsenic, Inorganic Benzaldehyde Benzene	Mutagen?	ABS <sub>d</sub> \(\text{ia}\) (unitless)  1.00E-01 3.00E-02	GI Absorption (unitless) 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00	5.00E-01 5.40E-01 1.50E+00  5.50E-02	Cancer (mg/kg) 1.19E+00  5.49E+00 	2.00E-03 4.00E-02 3.00E-04 1.00E-01 4.00E-03	(mg/kg)  6.59E+02   3.30E+02	1.00E-01 3.00E-02	1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00	(mg/kg-day) <sup>-1</sup> 4.50E+00 1.00E+00 9.50E+00 - 1.00E-01	Cancer (mg/kg)  1.12E-01 7.59E-01	2.00E-03 4.00E-02 3.50E-06 1.00E-01 4.00E-03	5.39E+02 3.15E+00
Analyte USEPA RSL Analytes Acrylamide Acrylonitrile Arsenic, Inorganic Benzaldehyde Benzene Benzenethiol	Mutagen?	ABS <sub>d</sub> \(\text{ia}\) (unitless)  1.00E-01 3.00E-02	GI Absorption (unitless) 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00	5.00E-01 5.40E-01 1.50E+00  5.50E-02	Cancer (mg/kg)  1.19E+00 5.49E+00	RfD <sub>d</sub> (mg/kg-day) 2.00E-03 4.00E-02 3.00E-04 1.00E-01 4.00E-03 1.00E-03	(mg/kg)  6.59E+02   3.30E+02	1.00E-01 3.00E-02	1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00	(mg/kg-day) <sup>-1</sup> 4.50E+00 1.00E+00 9.50E+00 1.00E-01	Cancer (mg/kg)  1.12E-01 7.59E-01	(mg/kg-day)  2.00E-03  4.00E-02  3.50E-06  1.00E-01  4.00E-03  1.00E-03	5.39E+02 3.15E+00
Analyte USEPA RSL Analytes Acrylamide Acrylonitrile Arsenic, Inorganic Benzaldehyde Benzene Benzenethiol Benzidine	Mutagen?	ABS <sub>d</sub> <sup>la</sup> (unitless)  1.00E-01  3.00E-02  1.00E-01	1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00	5.00E-01 5.40E-01 1.50E+00  5.50E-02  2.30E+02	Cancer (mg/kg)  1.19E+00 5.49E+00 2.59E-03	RfD <sub>d</sub> (mg/kg-day) 2.00E-03 4.00E-02 3.00E-04 1.00E-01 4.00E-03 1.00E-03 3.00E-03	(mg/kg)  6.59E+02  3.30E+02  9.89E+02	1.00E-01 3.00E-02 1.00E-01	1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00	(mg/kg-day) <sup>-1</sup> 4.50E+00 1.00E+00 9.50E+00 1.00E-01 5.00E+02	Cancer (mg/kg)  1.12E-01 7.59E-01 1.01E-03	(mg/kg-day)  2.00E-03  4.00E-02  3.50E-06  1.00E-01  4.00E-03  1.00E-03  3.00E-03	(mg/kg)  5.39E+02 3.15E+00 8.09E+02
Analyte  USEPA RSL Analytes  Acrylamide  Acrylonitrile  Arsenic, Inorganic  Benzaldehyde  Benzene  Benzenethiol  Benzidine  Beryllium and compounds	Mutagen?	ABS <sub>d</sub> la (unitless)  1.00E-01 3.00E-02 1.00E-01	1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 7.00E-03	5.00E-01 5.40E-01 1.50E+00  5.50E-02  2.30E+02	Cancer (mg/kg)  1.19E+00 5.49E+00 2.59E-03	RfD <sub>d</sub> (mg/kg-day)  2.00E-03  4.00E-02  3.00E-04  1.00E-01  4.00E-03  1.00E-03  3.00E-03  1.40E-05	(mg/kg)  6.59E+02  - 3.30E+02  9.89E+02	1.00E-01 3.00E-02 1.00E-01 1.00E-02	1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00	(mg/kg-day) <sup>-1</sup> 4.50E+00  1.00E+00  9.50E+00   1.00E-01   5.00E+02	Cancer (mg/kg)  1.12E-01 7.59E-01 1.01E-03	(mg/kg-day)  2.00E-03  4.00E-02  3.50E-06  1.00E-01  4.00E-03  1.00E-03  3.00E-03  2.00E-04	(mg/kg)  5.39E+02 3.15E+00 8.09E+02 5.39E+02
Analyte USEPA RSL Analytes Acrylamide Acrylonitrile Arsenic, Inorganic Benzaldehyde Benzene Benzenethiol Benzidine Beryllium and compounds Bromodichloromethane	Mutagen?	ABS <sub>d</sub> <sup>la</sup> (unitless)  1.00E-01  3.00E-02  1.00E-01	1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 7.00E-03 1.00E+00	5.00E-01 5.40E-01 1.50E+00  5.50E-02  6.20E-02	Cancer (mg/kg)  1.19E+00 5.49E+00 2.59E-03	RfD <sub>d</sub> (mg/kg-day)  2.00E-03  4.00E-02  3.00E-04  1.00E-01  4.00E-03  1.00E-03  3.00E-03  1.40E-05  2.00E-02	(mg/kg)  6.59E+02  3.30E+02  9.89E+02	1.00E-01 3.00E-02 1.00E-01	1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00	(mg/kg-day) <sup>-1</sup> 4.50E+00  1.00E+00  9.50E+00  - 1.00E-01  - 5.00E+02  - 1.30E-01	Cancer (mg/kg)  1.12E-01 7.59E-01 1.01E-03	(mg/kg-day)  2.00E-03  4.00E-02  3.50E-06  1.00E-01  4.00E-03  1.00E-03  3.00E-03  2.00E-04  2.00E-02	(mg/kg)  5.39E+02 3.15E+00 8.09E+02
Analyte  USEPA RSL Analytes  Acrylamide  Acrylonitrile  Arsenic, Inorganic  Benzaldehyde  Benzene  Benzenethiol  Benzidine  Beryllium and compounds	Mutagen?	ABS <sub>d</sub> la (unitless)  1.00E-01 3.00E-02 1.00E-01	1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 7.00E-03	5.00E-01 5.40E-01 1.50E+00  5.50E-02  2.30E+02  6.20E-02 7.90E-03	Cancer (mg/kg)  1.19E+00 5.49E+00 2.59E-03	RfD <sub>d</sub> (mg/kg-day)  2.00E-03  4.00E-02  3.00E-04  1.00E-01  4.00E-03  1.00E-03  3.00E-03  1.40E-05	(mg/kg)  6.59E+02  - 3.30E+02  9.89E+02	1.00E-01 3.00E-02 1.00E-01 1.00E-02	1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00	(mg/kg-day) <sup>-1</sup> 4.50E+00  1.00E+00  9.50E+00  - 1.00E-01  - 5.00E+02  - 1.30E-01  1.10E-02	Cancer (mg/kg)  1.12E-01 7.59E-01 1.01E-03	(mg/kg-day)  2.00E-03  4.00E-02  3.50E-06  1.00E-01  4.00E-03  1.00E-03  3.00E-03  2.00E-04	(mg/kg)  5.39E+02 3.15E+00 8.09E+02 5.39E+02
Analyte USEPA RSL Analytes Acrylamide Acrylonitrile Arsenic, Inorganic Benzaldehyde Benzene Benzenethiol Benzidine Beryllium and compounds Bromodichloromethane	Mutagen?	ABS <sub>d</sub> <sup>la</sup> (unitless)  1.00E-01 3.00E-02 1.00E-01	1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 7.00E-03 1.00E+00	5.00E-01 5.40E-01 1.50E+00  5.50E-02  6.20E-02	Cancer (mg/kg)  1.19E+00 5.49E+00 2.59E-03	RfD <sub>d</sub> (mg/kg-day)  2.00E-03  4.00E-02  3.00E-04  1.00E-01  4.00E-03  1.00E-03  3.00E-03  1.40E-05  2.00E-02	(mg/kg)  6.59E+02  3.30E+02  9.89E+02	1.00E-01 3.00E-02 1.00E-01 1.00E-02	1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00	(mg/kg-day) <sup>-1</sup> 4.50E+00  1.00E+00  9.50E+00  - 1.00E-01  - 5.00E+02  - 1.30E-01	Cancer (mg/kg)  1.12E-01 7.59E-01 1.01E-03	(mg/kg-day)  2.00E-03  4.00E-02  3.50E-06  1.00E-01  4.00E-03  1.00E-03  3.00E-03  2.00E-04  2.00E-02	(mg/kg)  5.39E+02 3.15E+00 8.09E+02 5.39E+02
Analyte USEPA RSL Analytes Acrylamide Acrylonitrile Arsenic, Inorganic Benzaldehyde Benzene Benzenethiol Benzidine Beryllium and compounds Bromodichloromethane Bromoform	Mutagen?	ABS <sub>d</sub> <sup>la</sup> (unitless)  1.00E-01 3.00E-02 1.00E-01	1.00E+00	5.00E-01 5.40E-01 1.50E+00  5.50E-02  2.30E+02  6.20E-02 7.90E-03	Cancer (mg/kg)  1.19E+00 5.49E+00 2.59E-03	RfD <sub>d</sub> (mg/kg-day)  2.00E-03  4.00E-02  3.00E-04  1.00E-01  4.00E-03  1.00E-03  3.00E-03  1.40E-05  2.00E-02  2.00E-02	(mg/kg)  6.59E+02  3.30E+02  9.89E+02	1.00E-01 3.00E-02 1.00E-01 1.00E-02	1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00	(mg/kg-day) <sup>-1</sup> 4.50E+00  1.00E+00  9.50E+00  - 1.00E-01  - 5.00E+02  - 1.30E-01  1.10E-02	Cancer (mg/kg)  1.12E-01 7.59E-01 1.01E-03	(mg/kg-day)  2.00E-03  4.00E-02  3.50E-06  1.00E-01  4.00E-03  1.00E-03  3.00E-03  2.00E-04  2.00E-02  2.00E-02	(mg/kg)  5.39E+02 3.15E+00 8.09E+02 5.39E+02
Analyte USEPA RSL Analytes Acrylamide Acrylonitrile Arsenic, Inorganic Benzaldehyde Benzene Benzenethiol Benzidine Beryllium and compounds Bromodichloromethane Bromoform Butadiene, 1,3-	Mutagen?	ABS <sub>d</sub> \a (unitless)  1.00E-01 3.00E-02 1.00E-01	GI Absorption (unitless)  1.00E+00	5.00E-01 5.00E-01 5.40E-01 1.50E+00  5.50E-02  2.30E+02  6.20E-02 7.90E-03 3.40E+00	Cancer (mg/kg)  1.19E+00 5.49E+00 2.59E-03	RfD <sub>d</sub> (mg/kg-day)  2.00E-03  4.00E-02  3.00E-04  1.00E-01  4.00E-03  1.00E-03  3.00E-03  1.40E-05  2.00E-02  2.00E-02	(mg/kg)  6.59E+02  3.30E+02  9.89E+02	1.00E-01 3.00E-02 1.00E-01 1.00E-02	1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00	(mg/kg-day) <sup>-1</sup> 4.50E+00  1.00E+00  9.50E+00  - 1.00E-01  - 5.00E+02  - 1.30E-01  1.10E-02  6.00E-01	Cancer (mg/kg)  1.12E-01 7.59E-01 1.01E-03	(mg/kg-day)  2.00E-03  4.00E-02  3.50E-06  1.00E-01  4.00E-03  1.00E-03  3.00E-03  2.00E-04  2.00E-02  2.00E-02	(mg/kg)  5.39E+02 3.15E+00 8.09E+02 5.39E+02
Analyte  USEPA RSL Analytes  Acrylamide  Acrylonitrile  Arsenic, Inorganic  Benzaldehyde  Benzene  Benzenethiol  Benzidine  Beryllium and compounds  Bromodichloromethane  Bromoform  Butadiene, 1,3-  Butanol, N-	Mutagen?	ABS <sub>d</sub> \text{\text{a}} (unitless)  1.00E-01 3.00E-02 1.00E-01	1.00E+00	5.00E-01 5.40E-01 1.50E+00 5.50E-02 2.30E+02 6.20E-02 7.90E-03 3.40E+00	Cancer (mg/kg)  1.19E+00 5.49E+00 2.59E-03	RfD <sub>d</sub> (mg/kg-day)  2.00E-03  4.00E-02  3.00E-04  1.00E-01  4.00E-03  1.00E-03  3.00E-03  1.40E-05  2.00E-02  2.00E-02   1.00E-01	(mg/kg)  6.59E+02  3.30E+02  9.89E+02	1.00E-01 3.00E-02 1.00E-01 1.00E-02	1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00	(mg/kg-day) <sup>-1</sup> 4.50E+00 1.00E+00 9.50E+00 - 1.00E-01 - 5.00E+02 - 1.30E-01 1.10E-02 6.00E-01 -	Cancer (mg/kg)  1.12E-01 7.59E-01 1.01E-03	(mg/kg-day)  2.00E-03  4.00E-02  3.50E-06  1.00E-01  4.00E-03  1.00E-03  3.00E-03  2.00E-04  2.00E-02  2.00E-02   1.00E-01	(mg/kg)  5.39E+02 3.15E+00 8.09E+02 5.39E+02
Analyte  JSEPA RSL Analytes  Acrylamide  Acrylonitrile  Arsenic, Inorganic  Benzaldehyde  Benzene  Benzenethiol  Benzidine  Beryllium and compounds  Bromodichloromethane  Bromoform  Butadiene, 1,3-  Butanol, N-  Butylbenzene, n-  Butylbenzene, sec-	Mutagen?	ABS <sub>d</sub> \ta (unitless)  1.00E-01 3.00E-02 1.00E-01	1.00E+00	5.00E-01 5.40E-01 1.50E+00 5.50E-02 2.30E+02 6.20E-02 7.90E-03 3.40E+00	Cancer (mg/kg)  1.19E+00 5.49E+00 2.59E-03	RfD <sub>d</sub> (mg/kg-day)  2.00E-03  4.00E-02  3.00E-04  1.00E-01  4.00E-03  1.00E-03  3.00E-03  1.40E-05  2.00E-02  2.00E-02   1.00E-01  5.00E-02  1.00E-01	(mg/kg)  6.59E+02  3.30E+02  9.89E+02	1.00E-01 3.00E-02 1.00E-01 1.00E-02	1.00E+00	(mg/kg-day) <sup>-1</sup> 4.50E+00 1.00E+00 9.50E+00 1.00E-01 5.00E+02 1.30E-01 1.10E-02 6.00E-01	Cancer (mg/kg)  1.12E-01 7.59E-01 1.01E-03	(mg/kg-day)  2.00E-03  4.00E-02  3.50E-06  1.00E-01  4.00E-03  1.00E-03  2.00E-04  2.00E-02  2.00E-02  1.00E-01  5.00E-02  1.00E-01	(mg/kg)  5.39E+02 3.15E+00 8.09E+02 5.39E+02
Analyte  USEPA RSL Analytes  Acrylamide  Acrylonitrile  Arsenic, Inorganic  Benzaldehyde  Benzene  Benzenethiol  Benzidine  Beryllium and compounds  Bromodichloromethane  Bromoform  Butadiene, 1,3- Butanol, N- Butylbenzene, n- Butylbenzene, sec- Butylbenzene, tert-	Mutagen?	ABS <sub>d</sub> \ta (unitless)  1.00E-01 3.00E-02 1.00E-01	1.00E+00	5.00E-01 5.40E-01 1.50E+00 5.50E-02 2.30E+02 6.20E-02 7.90E-03 3.40E+00	Cancer (mg/kg)  1.19E+00 5.49E+00 2.59E-03	RfD <sub>d</sub> (mg/kg-day)  2.00E-03  4.00E-02  3.00E-04  1.00E-01  4.00E-03  1.00E-03  3.00E-03  1.40E-05  2.00E-02  2.00E-02   1.00E-01  5.00E-02  1.00E-01	(mg/kg)  6.59E+02  3.30E+02  9.89E+02	1.00E-01 3.00E-02 1.00E-01 1.00E-02	1.00E+00	(mg/kg-day) <sup>-1</sup> 4.50E+00 1.00E+00 9.50E+00 1.00E-01 5.00E+02 1.30E-01 1.10E-02 6.00E-01	Cancer (mg/kg)  1.12E-01 7.59E-01 1.01E-03	(mg/kg-day)  2.00E-03  4.00E-02  3.50E-06  1.00E-01  4.00E-03  1.00E-03  2.00E-04  2.00E-02  2.00E-02  1.00E-01  5.00E-02  1.00E-01  1.00E-01	(mg/kg)  5.39E+02 3.15E+00 8.09E+02 5.39E+02
Analyte  JSEPA RSL Analytes  Acrylamide  Acrylonitrile  Arsenic, Inorganic  Benzaldehyde  Benzene  Benzenethiol  Benzidine  Beryllium and compounds  Bromodichloromethane  Bromoform  Butadiene, 1,3- Butanol, N- Butylbenzene, n- Butylbenzene, sec- Butylbenzene, tert- Cadmium (Diet)	Mutagen?	ABS <sub>d</sub> \ta (unitless)  1.00E-01 3.00E-02 1.00E-01 1.00E-01 1.00E-03	1.00E+00	5.00E-01 5.40E-01 1.50E+00 5.50E-02 2.30E+02 6.20E-02 7.90E-03 3.40E+00	Cancer (mg/kg)  1.19E+00 5.49E+00 2.59E-03	RfD <sub>d</sub> (mg/kg-day)  2.00E-03  4.00E-02  3.00E-04  1.00E-01  4.00E-03  1.00E-03  3.00E-03  1.40E-05  2.00E-02  2.00E-02  1.00E-01  5.00E-02  1.00E-01  1.00E-01  2.50E-05	(mg/kg)  6.59E+02  3.30E+02  9.89E+02  8.24E+02	1.00E-01 3.00E-02 1.00E-01 1.00E-02 1.00E-03	1.00E+00	(mg/kg-day) <sup>-1</sup> 4.50E+00 1.00E+00 9.50E+00 1.00E-01 5.00E+02 1.30E-01 1.10E-02 6.00E-01	Cancer (mg/kg)  1.12E-01 7.59E-01 1.01E-03	(mg/kg-day)  2.00E-03  4.00E-02  3.50E-06  1.00E-01  4.00E-03  1.00E-03  2.00E-04  2.00E-02  2.00E-02  1.00E-01  5.00E-02  1.00E-01  1.00E-01  6.30E-06	(mg/kg)  5.39E+02 3.15E+00 8.09E+02 5.39E+02 1.24E+03
Analyte  JSEPA RSL Analytes  Acrylamide  Acrylonitrile  Arsenic, Inorganic  Benzaldehyde  Benzene  Benzenethiol  Benzidine  Beryllium and compounds  Bromodichloromethane  Bromoform  Butadiene, 1,3-  Butanol, N-  Butylbenzene, n-  Butylbenzene, sec-  Butylbenzene, tert-  Cadmium (Diet)  Carbon Tetrachloride	Mutagen?	ABS <sub>d</sub> \ta (unitless)  1.00E-01 3.00E-02 1.00E-01 1.00E-01 1.00E-03	1.00E+00	5.00E-01 5.40E-01 1.50E+00 5.50E-02 2.30E+02 6.20E-02 7.90E-03 3.40E+00 7.00E-02	Cancer (mg/kg)  1.19E+00 5.49E+00 2.59E-03	RfD <sub>d</sub> (mg/kg-day)  2.00E-03  4.00E-02  3.00E-04  1.00E-01  4.00E-03  1.00E-03  1.40E-05  2.00E-02  2.00E-02   1.00E-01  5.00E-02  1.00E-01  1.00E-01  2.50E-05  4.00E-03	(mg/kg)  6.59E+02  3.30E+02  9.89E+02  8.24E+02	1.00E-01 3.00E-02 1.00E-01 1.00E-02 1.00E-03	1.00E+00	(mg/kg-day) <sup>-1</sup> 4.50E+00 1.00E+00 9.50E+00 1.00E-01 5.00E+02 1.30E-01 1.10E-02 6.00E-01 1.50E-01	Cancer (mg/kg)  1.12E-01 7.59E-01 1.01E-03	(mg/kg-day)  2.00E-03  4.00E-02  3.50E-06  1.00E-01  4.00E-03  1.00E-03  2.00E-04  2.00E-02  2.00E-02  1.00E-01  5.00E-02  1.00E-01  1.00E-01  6.30E-06  4.00E-03	(mg/kg)  5.39E+02 3.15E+00 8.09E+02 5.39E+02 1.24E+03
Analyte  USEPA RSL Analytes  Acrylamide  Acrylonitrile  Arsenic, Inorganic  Benzaldehyde  Benzene  Benzenethiol  Benzidine  Beryllium and compounds  Bromodichloromethane  Bromoform  Butadiene, 1,3-  Butanol, N-  Butylbenzene, n-  Butylbenzene, sec-  Butylbenzene, tert-  Cadmium (Diet)  Carbon Tetrachloride  Chlordane	Mutagen?	ABS <sub>d</sub> \ta (unitless)  1.00E-01 3.00E-02 1.00E-01 1.00E-01 1.00E-03 4.00E-02	1.00E+00	5.00E-01 5.40E-01 1.50E+00 5.50E-02 2.30E+02 6.20E-02 7.90E-03 3.40E+00 7.00E-02 3.50E-01	Cancer (mg/kg)  1.19E+00 5.49E+00 2.59E-03 1.77E+01	RfD <sub>d</sub> (mg/kg-day)  2.00E-03  4.00E-02  3.00E-04  1.00E-01  4.00E-03  1.00E-03  1.40E-05  2.00E-02  2.00E-02   1.00E-01  5.00E-02  1.00E-01  1.00E-01  2.50E-05  4.00E-03  5.00E-04	(mg/kg)  6.59E+02  3.30E+02  9.89E+02  8.24E+02  4.12E+02	1.00E-01 3.00E-02 1.00E-01 1.00E-02 1.00E-03 5.00E-02	1.00E+00	(mg/kg-day) <sup>-1</sup> 4.50E+00 1.00E+00 9.50E+00 1.00E-01 5.00E+02 1.30E-01 1.10E-02 6.00E-01 1.50E-01 1.30E+00	Cancer (mg/kg)  1.12E-01 7.59E-01 1.01E-03	(mg/kg-day)  2.00E-03  4.00E-02  3.50E-06  1.00E-01  4.00E-03  1.00E-03  2.00E-04  2.00E-02  2.00E-02  1.00E-01  5.00E-02  1.00E-01  6.30E-06  4.00E-03  5.00E-04	(mg/kg)  5.39E+02 3.15E+00 8.09E+02 5.39E+02 1.24E+03 2.70E+02
Analyte  USEPA RSL Analytes  Acrylamide  Acrylonitrile  Arsenic, Inorganic  Benzaldehyde  Benzene  Benzenethiol  Benzidine  Beryllium and compounds  Bromodichloromethane  Bromoform  Butadiene, 1,3-  Butanol, N-  Butylbenzene, n-  Butylbenzene, sec-  Butylbenzene, tert-  Cadmium (Diet)  Carbon Tetrachloride  Chloro-2-methylaniline, 4-	Mutagen?	ABS <sub>d</sub> \ta (unitless)  1.00E-01 3.00E-02 1.00E-01 1.00E-01 1.00E-03	1.00E+00	5.00E-01 5.40E-01 1.50E+00 5.50E-02 2.30E+02 6.20E-02 7.90E-03 3.40E+00 7.00E-02 3.50E-01 1.00E-01	Cancer (mg/kg)  1.19E+00 5.49E+00 2.59E-03	RfD <sub>d</sub> (mg/kg-day)  2.00E-03  4.00E-02  3.00E-04  1.00E-01  4.00E-03  1.00E-03  1.40E-05  2.00E-02  2.00E-02   1.00E-01  5.00E-02  1.00E-01  1.00E-01  2.50E-05  4.00E-03	(mg/kg)  6.59E+02  3.30E+02  9.89E+02  8.24E+02	1.00E-01 3.00E-02 1.00E-01 1.00E-02 1.00E-03	1.00E+00	(mg/kg-day) <sup>-1</sup> 4.50E+00 1.00E+00 9.50E+00 1.00E-01 5.00E+02 1.30E-01 1.10E-02 6.00E-01 1.50E-01 1.30E+00 2.70E-01	Cancer (mg/kg)  1.12E-01 7.59E-01 1.01E-03	(mg/kg-day)  2.00E-03  4.00E-02  3.50E-06  1.00E-01  4.00E-03  1.00E-03  2.00E-04  2.00E-02  2.00E-02  1.00E-01  5.00E-02  1.00E-01  1.00E-01  6.30E-06  4.00E-03	(mg/kg)  5.39E+02 3.15E+00 8.09E+02 5.39E+02 1.24E+03
Analyte  JSEPA RSL Analytes  Acrylamide  Acrylonitrile  Arsenic, Inorganic  Benzaldehyde  Benzene  Benzenethiol  Benzidine  Beryllium and compounds  Bromodichloromethane  Bromoform  Butadiene, 1,3-  Butanol, N-  Butylbenzene, n-  Butylbenzene, sec-  Butylbenzene, tert-  Cadmium (Diet)  Carbon Tetrachloride  Chlordane	Mutagen?	ABS <sub>d</sub> \ta (unitless)  1.00E-01 3.00E-02 1.00E-01 1.00E-01 1.00E-03 4.00E-02	1.00E+00	5.00E-01 5.40E-01 1.50E+00 5.50E-02 2.30E+02 6.20E-02 7.90E-03 3.40E+00 7.00E-02 3.50E-01	Cancer (mg/kg)  1.19E+00 5.49E+00 2.59E-03 1.77E+01	RfD <sub>d</sub> (mg/kg-day)  2.00E-03  4.00E-02  3.00E-04  1.00E-01  4.00E-03  1.00E-03  1.40E-05  2.00E-02  2.00E-02   1.00E-01  5.00E-02  1.00E-01  1.00E-01  2.50E-05  4.00E-03  5.00E-04	(mg/kg)  6.59E+02  3.30E+02  9.89E+02  8.24E+02  4.12E+02	1.00E-01 3.00E-02 1.00E-01 1.00E-02 1.00E-03 5.00E-02	1.00E+00	(mg/kg-day) <sup>-1</sup> 4.50E+00 1.00E+00 9.50E+00 1.00E-01 5.00E+02 1.30E-01 1.10E-02 6.00E-01 1.50E-01 1.30E+00	Cancer (mg/kg)  1.12E-01 7.59E-01 1.01E-03	(mg/kg-day)  2.00E-03  4.00E-02  3.50E-06  1.00E-01  4.00E-03  1.00E-03  2.00E-04  2.00E-02  2.00E-02  1.00E-01  5.00E-02  1.00E-01  6.30E-06  4.00E-03  5.00E-04	(mg/kg)  5.39E+02 3.15E+00 8.09E+02 5.39E+02 1.24E+03 2.70E+02
Analyte  USEPA RSL Analytes  Acrylamide  Acrylonitrile  Arsenic, Inorganic  Benzaldehyde  Benzene  Benzenethiol  Benzidine  Beryllium and compounds  Bromodichloromethane  Bromoform  Butadiene, 1,3-  Butanol, N-  Butylbenzene, n-  Butylbenzene, sec-  Butylbenzene, tert-  Cadmium (Diet)  Carbon Tetrachloride  Chloro-2-methylaniline, 4-	Mutagen?	ABS <sub>d</sub> \(\text{a}\) (unitless)  1.00E-01 3.00E-02 1.00E-01 1.00E-03 4.00E-02 1.00E-01	1.00E+00	5.00E-01 5.40E-01 1.50E+00 5.50E-02 2.30E+02 6.20E-02 7.90E-03 3.40E+00 7.00E-02 3.50E-01 1.00E-01	Cancer (mg/kg)  1.19E+00  5.49E+00  2.59E-03  1.77E+01 2.47E+01	RfD <sub>d</sub> (mg/kg-day)  2.00E-03  4.00E-02  3.00E-04  1.00E-01  4.00E-03  1.00E-03  1.40E-05  2.00E-02  2.00E-02   1.00E-01  5.00E-02  1.00E-01  2.50E-05  4.00E-03  5.00E-04  3.00E-03	(mg/kg)  6.59E+02  3.30E+02  9.89E+02  8.24E+02 4.12E+02 9.89E+02	1.00E-01 3.00E-02 1.00E-01 1.00E-02 1.00E-03 5.00E-02 1.00E-01	1.00E+00	(mg/kg-day) <sup>-1</sup> 4.50E+00 1.00E+00 9.50E+00 1.00E-01 5.00E+02 1.30E-01 1.10E-02 6.00E-01 1.50E-01 1.30E+00 2.70E-01	Cancer (mg/kg)  1.12E-01 7.59E-01 1.01E-03	(mg/kg-day)  2.00E-03  4.00E-02  3.50E-06  1.00E-01  4.00E-03  1.00E-03  3.00E-03  2.00E-04  2.00E-02   1.00E-01  5.00E-02  1.00E-01  6.30E-06  4.00E-03  5.00E-04  3.00E-04	(mg/kg)  5.39E+02 3.15E+00 8.09E+02 5.39E+02 1.24E+03 2.70E+02 8.09E+02
Analyte  USEPA RSL Analytes  Acrylamide  Acrylonitrile  Arsenic, Inorganic  Benzaldehyde  Benzene  Benzenethiol  Benzidine  Beryllium and compounds  Bromodichloromethane  Bromoform  Butadiene, 1,3-  Butanol, N-  Butylbenzene, n-  Butylbenzene, sec-  Butylbenzene, tert- Cadmium (Diet)  Carbon Tetrachloride  Chloro-2-methylaniline, 4-  Chloroacetaldehyde, 2-	Mutagen?	ABS <sub>d</sub> \(\text{a}\) (unitless)  1.00E-01 3.00E-02 1.00E-01 1.00E-03 4.00E-02 1.00E-01	1.00E+00	5.00E-01 5.40E-01 1.50E+00 5.50E-02 2.30E+02 6.20E-02 7.90E-03 3.40E+00 7.00E-02 3.50E-01 1.00E-01 2.70E-01	Cancer (mg/kg)  1.19E+00  5.49E+00  2.59E-03  1.77E+01 2.47E+01	RfD <sub>d</sub> (mg/kg-day)  2.00E-03  4.00E-02  3.00E-04  1.00E-01  4.00E-03  1.00E-03  1.40E-05  2.00E-02  2.00E-02   1.00E-01  5.00E-02  1.00E-01  1.00E-01  2.50E-05  4.00E-03  5.00E-04  3.00E-03	(mg/kg)  6.59E+02  3.30E+02  9.89E+02  8.24E+02  4.12E+02 9.89E+02	1.00E-01 3.00E-02 1.00E-01 1.00E-02 1.00E-03 5.00E-02 1.00E-01	1.00E+00	(mg/kg-day) <sup>-1</sup> 4.50E+00 1.00E+00 9.50E+00 1.00E-01 5.00E+02 1.30E-01 1.10E-02 6.00E-01 1.50E-01 1.30E+00 2.70E-01 2.70E-01	Cancer (mg/kg)  1.12E-01 7.59E-01 1.01E-03	(mg/kg-day)  2.00E-03  4.00E-02  3.50E-06  1.00E-01  4.00E-03  1.00E-03  2.00E-04  2.00E-02  2.00E-02  1.00E-01  5.00E-02  1.00E-01  6.30E-06  4.00E-03  5.00E-04  3.00E-03	(mg/kg)  5.39E+02 3.15E+00 8.09E+02 5.39E+02 1.24E+03 2.70E+02 8.09E+02
Analyte  USEPA RSL Analytes  Acrylamide  Acrylonitrile  Arsenic, Inorganic  Benzaldehyde  Benzene  Benzenethiol  Benzidine  Beryllium and compounds  Bromodichloromethane  Bromoform  Butadiene, 1,3-  Butanol, N-  Butylbenzene, n-  Butylbenzene, sec-  Butylbenzene, tert-  Cadmium (Diet)  Carbon Tetrachloride  Chlorodane  Chloro-2-methylaniline, 4-  Chloroacetaldehyde, 2-  Chlorobutane, 1-	Mutagen?	ABS <sub>d</sub> \a (unitless)  1.00E-01 3.00E-02 1.00E-01 1.00E-01 1.00E-03 4.00E-02 1.00E-01	GI Absorption (unitless)  1.00E+00	5.00E-01 5.40E-01 1.50E+00 5.50E-02 2.30E+02 6.20E-02 7.90E-03 3.40E+00 7.00E-02 3.50E-01 1.00E-01 2.70E-01	Cancer (mg/kg)  1.19E+00  5.49E+00  2.59E-03  1.77E+01 2.47E+01	RfD <sub>d</sub> (mg/kg-day)  2.00E-03  4.00E-02  3.00E-04  1.00E-01  4.00E-03  1.00E-03  3.00E-03  1.40E-05  2.00E-02  2.00E-02   1.00E-01  5.00E-02  1.00E-01  1.00E-01  2.50E-05  4.00E-03  5.00E-04  3.00E-03   4.00E-03	(mg/kg)  6.59E+02  3.30E+02  9.89E+02  8.24E+02 4.12E+02 9.89E+02	1.00E-01 3.00E-02 1.00E-01 1.00E-02 1.00E-03 5.00E-02 1.00E-01	(unitless)  1.00E+00	(mg/kg-day) <sup>-1</sup> 4.50E+00 1.00E+00 9.50E+00 1.00E-01 5.00E+02 1.30E-01 1.10E-02 6.00E-01 1.50E-01 1.30E+00 2.70E-01	Cancer (mg/kg)  1.12E-01 7.59E-01 1.01E-03	(mg/kg-day)  2.00E-03  4.00E-02  3.50E-06  1.00E-01  4.00E-03  1.00E-03  3.00E-03  2.00E-04  2.00E-02  1.00E-01  5.00E-02  1.00E-01  1.00E-01  6.30E-06  4.00E-03  5.00E-04  3.00E-03   4.00E-03	(mg/kg)  5.39E+02 3.15E+00 8.09E+02 5.39E+02 1.24E+03 2.70E+02 8.09E+02
Analyte  USEPA RSL Analytes  Acrylamide  Acrylonitrile  Arsenic, Inorganic  Benzaldehyde  Benzene  Benzenethiol  Benzidine  Beryllium and compounds  Bromodichloromethane  Bromoform  Butadiene, 1,3-  Butanol, N-  Butylbenzene, n-  Butylbenzene, sec-  Butylbenzene, tert-  Cadmium (Diet)  Carbon Tetrachloride  Chloro-2-methylaniline, 4-  Chloroacetaldehyde, 2-  Chlorobutane, 1-  Chlorotoluene, o-	Mutagen?	ABS <sub>d</sub> \a (unitless)  1.00E-01 3.00E-02 1.00E-01 1.00E-01 1.00E-03 4.00E-02 1.00E-01	GI Absorption (unitless)  1.00E+00	1 SF <sub>d</sub> (mg/kg-day) <sup>-1</sup> 5.00E-01  5.40E-01  1.50E+00   5.50E-02   2.30E+02  7.90E-03  3.40E+00    7.00E-02  3.50E-01  1.00E-01  2.70E-01	Cancer (mg/kg)  1.19E+00 5.49E+00 2.59E-03 1.77E+01 2.47E+01	RfD <sub>d</sub> (mg/kg-day)  2.00E-03  4.00E-02  3.00E-04  1.00E-01  4.00E-03  1.00E-03  1.40E-05  2.00E-02  2.00E-02   1.00E-01  5.00E-02  1.00E-01  2.50E-05  4.00E-03  5.00E-04  3.00E-03   4.00E-03   4.00E-02  2.00E-02	(mg/kg)  6.59E+02  3.30E+02  9.89E+02  8.24E+02 4.12E+02 9.89E+02	1.00E-01 3.00E-02 1.00E-01 1.00E-02 1.00E-03 5.00E-02 1.00E-01	(unitless)  1.00E+00	(mg/kg-day) <sup>-1</sup> 4.50E+00 1.00E+00 9.50E+00 1.00E-01 5.00E+02 1.30E-01 1.10E-02 6.00E-01 1.50E-01 1.30E+00 2.70E-01	Cancer (mg/kg)  1.12E-01 7.59E-01 1.01E-03 3.33E+00 8.01E+00	(mg/kg-day)  2.00E-03  4.00E-02  3.50E-06  1.00E-01  4.00E-03  1.00E-03  2.00E-04  2.00E-02  1.00E-01  5.00E-02  1.00E-01  1.00E-01  6.30E-06  4.00E-03  5.00E-04  3.00E-03	(mg/kg)  5.39E+02  3.15E+00  8.09E+02  5.39E+02  1.24E+03 2.70E+02  8.09E+02

..\2016-01 Soil Documentation - Dermal - Residential

Table A-4a. USEPA RSLs and DTSC-SLs for a Residential Receptor Exposed to Soil via Dermal Contact

Variable USEPA Value DTSC Value Units

chemical-specific

unitless

Carcinogens:

 $ABS_d^{\setminus a}$ 

Description

Dermal Soil Absorption Factor\a

			unitiess	Carcinogens:								
$ADAF_{0-2}$	10	10	yrs	(R)SI -=	$TR \times (AT_c \times 365 d)$ $V_r \times EC_r \times \left(\frac{ED_c \times SA_c \times AF_c}{BW_c}\right)$	ay/year)						
$ADAF_{2-6}$	3	3	yrs	$SF_a \times EF_a \times EV$	$L \times EC_{-} \times \left(\frac{ED_c \times SA_c \times AF_c}{SVC}\right)$	$+\frac{ED_a \times SA_a \times AF_a}{PM} \times AF_a$	$3S_a \times CF_a$					
$ADAF_{6-16}$	3	3	yrs	or a · · or r	$W_c$	$BW_a$	io a · · · or a					
$ADAF_{16-26}$	1	1	yrs	Mutagens:								
$AF_a$	0.07	0.07	mg/cm <sup>2</sup> -day	(D)CI -								
$AF_c$	0.2	0.2	mg/cm <sup>2</sup> -day	$(K)SL_D =$	$/$ $ED_{0-2} \times AF_c \times$	$SA_c \times ADAF_{0-2} + ED_{2-6}$	$\times AF_c \times SA_c \times AI$	$DAF_{2-6}$ $\downarrow$				
AT.	70	70	vrs	$SF_{a} \times EF_{a} \times E$	$V_{-} \times EC_{-} \times \Big _{-} = B$	$W_c$	$BW_c$	' \ x A	$ABS_{3} \times CF_{3}$			
-	20		-	or a N Big N B	$ED_{6-16} \times AF_a \times S$	$SA_a \times ADAF_{6-16} + ED_{16-16}$	$_{26} \times AF_a \times SA_a \times$	$ADAF_{16-26}$	120a × 01 a			
	6	6	yrs		\ BV	$v_a$	$BW_a$	/				
$BW_a$	80	80	kg	Trichloroethene:								
$BW_c$	15	15	kg				T	$^{\circ}R \times (AT \times 365 da)$	ave (vear)			
$CAF_{O}$	0.804	0.804	dimensionless	$(R)SL_D =$				r × (11° × 303 ac		AF × SA × ADAF FD ×	$FE \lor AE \lor CA \lor ADAI$	7 \ 1\
$CF_d$	1E-06	1E-06	kg/mg		(r	$(ED \times EF \times SA \times AF)$	$ED \times EE \times SA$	$A \times AF \setminus 1$	$\int \frac{LD_{0-2} \times LI_r \times I}{r}$	$\frac{BW_c}{BW_c} + \frac{BD_{2-6} \times BDH_{0-2}}{BW_c}$	$BW_c$	<del>2-6</del> + \  \
$EC_r$	1	1	unitless	$SF_d \times EV_r \times EC$	$C_r \times ABS_d \times CF_d \times \{   CAF_o \times   CAF_o \times  $	$\left(\frac{BW_c}{BW_c}\right)$	$+\frac{BW_a}{BW_a}$	$\left \frac{1a^{1/11}a}{a}\right  + \left MAF\right $	$F_0 \times \left  ED_{6-16} \times EF_r \times A\right $	$F_a \times SA_a \times ADAF_{6-16}$ $ED_{16-26}$	$\times$ EF <sub>r</sub> $\times$ AF <sub>a</sub> $\times$ SA <sub>a</sub> $\times$ AD	$AF_{16-26}$ $  $
$ED_{0-2}$	2	2	yrs		(-			77	\	$\frac{u}{BW_a}$ + $\frac{10 \cdot 20}{BW_a}$	$BW_a$	<del></del>
$ED_{2-6}$	4	4	yrs									
$ED_{6-16}$	10	10	yrs	Vinyl Chloride:								
$ED_{16-26}$	10	10	yrs	$(R)SI_n = $		TR						
$ED_a$	20	20	yrs	(11,500)	$\int_{EE_{c}} \times (ED_{c} \times SA_{c} \times A)$	$\frac{F_c}{F_c} + \frac{ED_a \times SA_a \times AF_a}{F_a}$	$ABS_d \times CF$		an.]			
$ED_c$	6	6	yrs	$SF_d \times EV_r \times EO$	$C_r \times \left[ \left( \frac{BW_c}{a} \right) \right]$	' BW <sub>a</sub> )^	+	$(SA_c \times AF_c \times ABS_c)$	$d \times CF_d$			
-	350	350		u ·	· [	$AT_c \times 365 \frac{aays}{vcar}$	Ι.,	$W_c$	4			
	1	1	•		L\	yeur	/		J			
u				Noncarainagans		DTSC Codmi	ium noncoroinogoni	io				
			2	Noncarchiogens.		D13C Cadilli	ium - noncaremogem	ic.				
_				тн	$0 \times (AT) \times 365 \frac{day}{}) \times BI$	A7		T	$HO \times (AT \dots \times Y)$	$365 \frac{day}{}$		
$SA_c$	2373	2900	cm <sup>2</sup>	$(R)SL_{D} = -$	$Q \wedge (H_{nc,c} \wedge 303 \text{ year}) \wedge D$	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	SLD adult o	-a =	IIQ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	year) ^ bwa		
$SF_d$	chemica	al-specific	(mg/kg-day) <sup>-1</sup>	$EF_r \times ED_c \times \frac{1}{R}$	$\frac{1}{ED} \times EV_r \times EC_r \times SA_c \times AF_c$	$\times ABS_d \times CF_d$	o 2D-aaatt,c	$EF_r \times ED_{26-v}$	$r_{adult} \times \frac{1}{DED} \times EV_r \times E$	$C_r \times SA_a \times AF_a \times ABS_d \times CF_d$		
THQ	1	1	dimensionless	, c Rj	$\nu_d$	u u		. 20-y	κjν <sub>d</sub> '			
TR	1.0E-06	1.0E-06	dimensionless	<b>B</b> 11	*					D 11 0 15500 ==		
_	. – c. la	QT.11	~~		В		( le	GT 11	OF.		D (Tr	
	u	-	1		_			•	1			Noncance
Mutagen?	(unitless)	(unitless)	(mg/kg-day)	(mg/kg)	(mg/kg-day)	(mg/kg)	(unitless)	(unitless)	(mg/kg-day)	(mg/kg)	(mg/kg-day)	(mg/kg)
		1.00E+00			1.00E-03			1.00E+00		<del></del>	1.00E-03	
					9.00E-02			1.00E+00			9.00E-02	
		1.00E+00										
		1.00E+00 1.00E+00			5.00E-02			1.00E+00		<del></del>	5.00E-02	
				<del>-</del> 	5.00E-02 2.00E-04	 		1.00E+00 4.00E-02		 	5.00E-02 2.00E-04	
		1.00E+00										5.39E+02 1.08E+04
		1.00E+00 4.00E-02			2.00E-04	-	 1.00E-02	4.00E-02	-		2.00E-04	5.39E+02
	  	1.00E+00 4.00E-02 4.00E-02 1.00E+00			2.00E-04 4.00E-03 4.00E-04	-	1.00E-02 1.00E-02	4.00E-02 4.00E-02 1.00E+00			2.00E-04 4.00E-03 4.00E-04	5.39E+02 1.08E+04
	  	1.00E+00 4.00E-02 4.00E-02 1.00E+00 1.00E+00	  	  	2.00E-04 4.00E-03 4.00E-04 1.00E-02	  	1.00E-02 1.00E-02	4.00E-02 4.00E-02 1.00E+00 1.00E+00	  	  	2.00E-04 4.00E-03 4.00E-04 1.00E-02	5.39E+02 1.08E+04
	   	1.00E+00 4.00E-02 4.00E-02 1.00E+00 1.00E+00 1.00E+00	   8.40E-02	   	2.00E-04 4.00E-03 4.00E-04 1.00E-02 2.00E-02	   	1.00E-02 1.00E-02  	4.00E-02 4.00E-02 1.00E+00 1.00E+00 1.00E+00	    8.40E-02	   	2.00E-04 4.00E-03 4.00E-04 1.00E-02 2.00E-02	5.39E+02 1.08E+04  
	    	1.00E+00 4.00E-02 4.00E-02 1.00E+00 1.00E+00 1.00E+00 1.00E+00	   8.40E-02 2.00E+00	    	2.00E-04 4.00E-03 4.00E-04 1.00E-02 2.00E-02 9.00E-03	   	1.00E-02 1.00E-02  	4.00E-02 4.00E-02 1.00E+00 1.00E+00 1.00E+00 1.00E+00	   8.40E-02 3.60E+00	   	2.00E-04 4.00E-03 4.00E-04 1.00E-02 2.00E-02 9.00E-03	5.39E+02 1.08E+04   
	    1.00E-01	1.00E+00 4.00E-02 4.00E-02 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00	  8.40E-02 2.00E+00 4.50E-01	    5.49E+00	2.00E-04 4.00E-03 4.00E-04 1.00E-02 2.00E-02 9.00E-03	    	 1.00E-02 1.00E-02    1.00E-01	4.00E-02 4.00E-02 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00	   8.40E-02 3.60E+00 1.20E+00	     1.80E+00	2.00E-04 4.00E-03 4.00E-04 1.00E-02 2.00E-02 9.00E-03	5.39E+02 1.08E+02
	     1.00E-01	1.00E+00 4.00E-02 4.00E-02 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00	8.40E-02 2.00E+00 4.50E-01 5.70E-03	    5.49E+00	2.00E-04 4.00E-03 4.00E-04 1.00E-02 2.00E-02 9.00E-03  2.00E-01	    	 1.00E-02 1.00E-02    1.00E-01	4.00E-02 4.00E-02 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00	  8.40E-02 3.60E+00 1.20E+00 5.70E-03	    1.80E+00	2.00E-04 4.00E-03 4.00E-04 1.00E-02 2.00E-02 9.00E-03  2.00E-01	5.39E+02 1.08E+02
	    1.00E-01	1.00E+00 4.00E-02 4.00E-02 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00	8.40E-02 2.00E+00 4.50E-01 5.70E-03	    5.49E+00	2.00E-04 4.00E-03 4.00E-04 1.00E-02 2.00E-02 9.00E-03  2.00E-01 2.00E-03	    	 1.00E-02 1.00E-02    1.00E-01	4.00E-02 4.00E-02 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00	  8.40E-02 3.60E+00 1.20E+00 5.70E-03	     1.80E+00	2.00E-04 4.00E-03 4.00E-04 1.00E-02 2.00E-02 9.00E-03  2.00E-01 2.00E-03	5.39E+0/ 1.08E+0/     
	     1.00E-01	1.00E+00 4.00E-02 4.00E-02 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00	8.40E-02 2.00E+00 4.50E-01 5.70E-03	    5.49E+00	2.00E-04 4.00E-03 4.00E-04 1.00E-02 2.00E-02 9.00E-03  2.00E-01 2.00E-03 2.00E-02	    	 1.00E-02 1.00E-02    1.00E-01	4.00E-02 4.00E-02 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00	  8.40E-02 3.60E+00 1.20E+00 5.70E-03	    1.80E+00	2.00E-04 4.00E-03 4.00E-04 1.00E-02 2.00E-02 9.00E-03  2.00E-01 2.00E-03 2.00E-03	5.39E+02 1.08E+04     
	    1.00E-01	1.00E+00 4.00E-02 4.00E-02 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00	8.40E-02 2.00E+00 4.50E-01 5.70E-03	    5.49E+00	2.00E-04 4.00E-03 4.00E-04 1.00E-02 2.00E-02 9.00E-03  2.00E-01 2.00E-03	    	 1.00E-02 1.00E-02    1.00E-01	4.00E-02 4.00E-02 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00	  8.40E-02 3.60E+00 1.20E+00 5.70E-03	    1.80E+00	2.00E-04 4.00E-03 4.00E-04 1.00E-02 2.00E-02 9.00E-03  2.00E-01 2.00E-03	5.39E+0. 1.08E+0
	    1.00E-01	1.00E+00 4.00E-02 4.00E-02 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00	  8.40E-02 2.00E+00 4.50E-01 5.70E-03	    5.49E+00	2.00E-04 4.00E-03 4.00E-04 1.00E-02 2.00E-02 9.00E-03  2.00E-01 2.00E-03 2.00E-02	     	1.00E-02 1.00E-02    1.00E-01	4.00E-02 4.00E-02 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00	  8.40E-02 3.60E+00 1.20E+00 5.70E-03	    1.80E+00	2.00E-04 4.00E-03 4.00E-04 1.00E-02 2.00E-02 9.00E-03  2.00E-01 2.00E-03 2.00E-03	5.39E+02 1.08E+02
	    1.00E-01	1.00E+00 4.00E-02 4.00E-02 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00		    5.49E+00	2.00E-04 4.00E-03 4.00E-04 1.00E-02 2.00E-02 9.00E-03  2.00E-01 2.00E-03 2.00E-02 2.00E-02	       	1.00E-02 1.00E-02 1.00E-01	4.00E-02 4.00E-02 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00	  8.40E-02 3.60E+00 1.20E+00 5.70E-03  	1.80E+00	2.00E-04 4.00E-03 4.00E-04 1.00E-02 2.00E-02 9.00E-03  2.00E-01 2.00E-03 2.00E-02 2.00E-02	5.39E+02 1.08E+02
	    1.00E-01	1.00E+00 4.00E-02 4.00E-02 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00	8.40E-02 2.00E+00 4.50E-01 5.70E-03	    5.49E+00   	2.00E-04 4.00E-03 4.00E-04 1.00E-02 2.00E-02 9.00E-03 2.00E-01 2.00E-03 2.00E-02 3.00E-02	       	1.00E-02 1.00E-02 1.00E-01	4.00E-02 4.00E-02 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00	8.40E-02 3.60E+00 1.20E+00 5.70E-03	1.80E+00	2.00E-04 4.00E-03 4.00E-04 1.00E-02 2.00E-02 9.00E-03  2.00E-01 2.00E-03 2.00E-02 2.00E-02 3.00E-02	5.39E+02 1.08E+04
	    1.00E-01   	1.00E+00 4.00E-02 4.00E-02 1.00E+00	8.40E-02 2.00E+00 4.50E-01 5.70E-03  1.00E-01	5.49E+00	2.00E-04 4.00E-03 4.00E-04 1.00E-02 2.00E-02 9.00E-03 2.00E-01 2.00E-03 2.00E-02 2.00E-02 3.00E-02 2.00E-02		1.00E-02 1.00E-02 1.00E-01	4.00E-02 4.00E-02 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00		1.80E+00	2.00E-04 4.00E-03 4.00E-04 1.00E-02 2.00E-02 9.00E-03 2.00E-01 2.00E-03 2.00E-02 2.00E-02 3.00E-02 2.00E-03	5.39E+0/ 1.08E+0/ 
	1.00E-01	1.00E+00 4.00E-02 4.00E-02 1.00E+00		    5.49E+00	2.00E-04 4.00E-03 4.00E-04 1.00E-02 2.00E-02 9.00E-03 2.00E-01 2.00E-03 2.00E-02 2.00E-02 3.00E-02 2.00E-03 6.00E-03		1.00E-02 1.00E-02 1.00E-01	4.00E-02 4.00E-02 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00			2.00E-04 4.00E-03 4.00E-04 1.00E-02 2.00E-02 9.00E-03 2.00E-01 2.00E-03 2.00E-02 3.00E-02 2.00E-03 6.00E-03	5.39E+0 1.08E+0
	    1.00E-01   	1.00E+00 4.00E-02 4.00E-02 1.00E+00	8.40E-02 2.00E+00 4.50E-01 5.70E-03  1.00E-01  9.90E-03	    5.49E+00   	2.00E-04 4.00E-03 4.00E-04 1.00E-02 2.00E-02 9.00E-03 2.00E-01 2.00E-03 2.00E-02 3.00E-02 2.00E-02 3.00E-02 6.00E-03		1.00E-02 1.00E-02 1.00E-01	4.00E-02 4.00E-02 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00		1.80E+00	2.00E-04 4.00E-03 4.00E-04 1.00E-02 2.00E-02 9.00E-03 2.00E-01 2.00E-03 2.00E-02 3.00E-02 2.00E-03 6.00E-03	5.39E+02 1.08E+02
	1.00E-01	1.00E+00 4.00E-02 4.00E-02 1.00E+00		5.49E+00	2.00E-04 4.00E-03 4.00E-04 1.00E-02 2.00E-02 9.00E-03 2.00E-01 2.00E-02 2.00E-02 3.00E-02 2.00E-03 6.00E-03 2.00E-03		1.00E-02 1.00E-02 1.00E-01	4.00E-02 4.00E-02 1.00E+00			2.00E-04 4.00E-03 4.00E-04 1.00E-02 2.00E-02 9.00E-03 2.00E-01 2.00E-03 2.00E-02 2.00E-02 3.00E-02 2.00E-03 6.00E-03 2.00E-01	5.39E+0/ 1.08E+0/ 
	1.00E-01	1.00E+00 4.00E-02 4.00E-02 1.00E+00		5.49E+00	2.00E-04 4.00E-03 4.00E-04 1.00E-02 2.00E-02 9.00E-03 2.00E-01 2.00E-02 2.00E-02 3.00E-02 2.00E-03 6.00E-03 2.00E-01		1.00E-02 1.00E-02 1.00E-01	4.00E-02 4.00E-02 1.00E+00		1.80E+00	2.00E-04 4.00E-03 4.00E-04 1.00E-02 2.00E-02 9.00E-03 2.00E-01 2.00E-03 2.00E-02 2.00E-02 3.00E-02 2.00E-03 6.00E-03 2.00E-01	5.39E+02 1.08E+04
	1.00E-01	1.00E+00 4.00E-02 4.00E-02 1.00E+00		5.49E+00	2.00E-04 4.00E-03 4.00E-04 1.00E-02 2.00E-02 9.00E-03 2.00E-01 2.00E-02 2.00E-02 3.00E-02 2.00E-03 6.00E-03 2.00E-03		1.00E-02 1.00E-02 1.00E-01	4.00E-02 4.00E-02 1.00E+00			2.00E-04 4.00E-03 4.00E-04 1.00E-02 2.00E-02 9.00E-03 2.00E-01 2.00E-03 2.00E-02 2.00E-02 3.00E-02 2.00E-03 6.00E-03 2.00E-01	5.39E+02 1.08E+04
-	ADAF <sub>16-26</sub> AF <sub>a</sub> AF <sub>c</sub> AT <sub>c</sub> AT <sub>nc,a</sub> AT <sub>nc,c</sub> BW <sub>a</sub> BW <sub>c</sub> CAF <sub>0</sub> CF <sub>d</sub> EC <sub>r</sub> ED <sub>0-2</sub> ED <sub>2-6</sub> ED <sub>6-16</sub> ED <sub>16-26</sub> ED <sub>a</sub> ED <sub>c</sub> EF <sub>r</sub> EV <sub>r</sub> MAF <sub>0</sub> RfD <sub>d</sub> (R)SL <sub>D</sub> SA <sub>a</sub> SA <sub>c</sub> SF <sub>d</sub> THQ	ADAF <sub>16-26</sub> 1  AF <sub>a</sub> 0.07  AF <sub>c</sub> 0.2  AT <sub>c</sub> 70  AT <sub>nc.a</sub> 20  AT <sub>nc.c</sub> 6  BW <sub>a</sub> 80  BW <sub>c</sub> 15  CAF <sub>0</sub> 0.804  CF <sub>d</sub> 1E-06  EC <sub>r</sub> 1  ED <sub>0-2</sub> 2  ED <sub>2-6</sub> 4  ED <sub>6-16</sub> 10  ED <sub>16-26</sub> 10  ED <sub>a</sub> 20  ED <sub>c</sub> 6  EF <sub>r</sub> 350  EV <sub>r</sub> 1  MAF <sub>0</sub> 0.202  RfD <sub>d</sub> chemica  (R)SL <sub>D</sub> derive  SA <sub>a</sub> 6032  SA <sub>c</sub> 2373  SF <sub>d</sub> chemica  THQ 1  TR 1.0E-06   Mutagen?	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$

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Table A-4a. USEPA RSLs and DTSC-SLs for a Residential Receptor Exposed to Soil via Dermal Contact

Variable USEPA Value DTSC Value Units

chemical-specific

unitless

Carcinogens:

Description

Dermal Soil Absorption Factor\a

Dermal Soil Absorption Factor	$ABS_d^{\setminus a}$	chemical	-specific	unitless	Carcinogens:								
Age-dependent Adjustment Factor, 0-2	$ADAF_{0-2}$	10	10	yrs	(P)SI =	$TR \times (AT_c \times 365 d)$ $EV_r \times EC_r \times \left(\frac{ED_c \times SA_c \times AF_c}{BW_c}\right)$	lay/year)						
Age-dependent Adjustment Factor, 2-6	ADAF <sub>2-6</sub>	3	3	yrs	$(R)SL_D = \frac{SF \times FF \times I}{SF \times FF \times I}$	$FV \times FC \times (ED_c \times SA_c \times AF_c)$	$\pm ED_a \times SA_a \times AF_a \setminus AB$	25. × CF.					
Age-dependent Adjustment Factor, 6-16	$ADAF_{6-16}$	3	3	yrs	$Si_d \wedge Li_r \wedge i$	$BW_c$	$BW_a$	$d \wedge C d$					
Age-dependent Adjustment Factor, 16-26	$ADAF_{16-26}$	1	1	yrs	Mutagens:								
Soil-to-Skin Adherence Factor, adult	$AF_a$	0.07	0.07	mg/cm <sup>2</sup> -day		1	$TR \times (AT_c \times 365  days/ye)$	ar)					
Soil-to-Skin Adherence Factor, child	AF <sub>c</sub>	0.2	0.2	mg/cm <sup>2</sup> -day	$(R)SL_D =$				DAF <sub>2-6</sub>				
	· ·				a= ==	$EV_r \times EC_r \times \begin{pmatrix} \frac{ED_{0-2} \times AF_c \times B}{B} \\ \frac{ED_{6-16} \times AF_a \times B}{BV} \end{pmatrix}$	$\frac{18W_{c}}{18W_{c}} + \frac{1822-6}{18W_{c}}$	$BW_c$	+	4D0 0F			
Averaging Time, Carcinogens	AT <sub>c</sub>	70	70	yrs	$SF_d \times EF_r \times I$	$EV_r \times EC_r \times  ED_{6-16} \times AF_a \times  ED_{6-16}$	$SA_a \times ADAF_{6-16}$ , $ED_{16-3}$	$_{26} \times AF_a \times SA_a \times$	$\langle ADAF_{16-26} \mid \times \rangle$	$ABS_d \times CF_d$			
Averaging Time, noncarcinogens, adult	$AT_{nc,a}$	20	20	yrs		BV	$W_a$ + $\frac{10}{10}$ +	$BW_a$	10 20				
Averaging Time, noncarcinogens, child Body Weight, adult	$AT_{nc,c}$ $BW_a$	6 80	6 80	yrs kg	Trichloroethene:								
• •	u			_	Themoroculene.								
Body Weight, child	$BW_c$	15	15	kg	(D) CI —			7	$TR \times (AT_c \times 365 d)$	ays/year)			
Carcinogenic adjustment factor	CAF <sub>O</sub>	0.804	0.804	dimensionless	$(R)SL_D =$	(			ſ	$/$ $ED_{0-2} \times EF_r \times$	$\frac{AF_c \times SA_c \times ADAF_{0-2}}{BW_c} + \frac{ED_{2-6}}{BW_{a}} + \frac{ED_{1-6}}{BW_{a}} + \frac{ED_{1-6}}{BW_{a}} + \frac{ED_{1-6}}{BW_{a}}$	$\times$ EF <sub>r</sub> $\times$ AF <sub>c</sub> $\times$ SA <sub>c</sub> $\times$ ADAF	$\overline{G}_{2-6}$ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
Conversion Factor	$CF_d$	1E-06	1E-06	kg/mg	CF. V FV V	$EC \times ABS \times CE \times )$	$(ED_c \times EF_r \times SA_c \times AF_c)$	$ED_a \times EF_r \times S$	$(A_a \times AF_a)$	F \	$BW_c$	$BW_c$	
Fraction of EV in Contact with Soil, resident	$EC_r$	1	1	unitless	$SI_d \wedge Ev_r \wedge I$	ECT ADS A CITA A CARO	$BW_c$	$BW_a$		$ED_{6-16} \times EF_r \times A$	$1F_a \times SA_a \times ADAF_{6-16} + ED_{16-2}$	$_{26} \times EF_r \times AF_a \times SA_a \times AD$	$AF_{16-26}$
Exposure Duration, child 0-2	$ED_{0-2}$	2	2	yrs		(			Ĺ	\	$BW_a$	$BW_a$	/])
Exposure Duration, child 2-6	$ED_{2-6}$	4	4	yrs									
Exposure Duration, child 6-16	$ED_{6-16}$	10	10	yrs	Vinyl Chloride:								
Exposure Duration, adult 16-26	$ED_{16-26}$	10	10	yrs	$(R)SL_{P} =$		TR						
Exposure Duration, adult	$ED_a$	20	20	yrs	(11)020	$\left[ \left\langle EF \times \left( ED_c \times SA_c \times A \right) \right\rangle \right]$	$\frac{ F_c }{ F_c } + \frac{ED_a \times SA_a \times AF_a}{ F_c } $	$ARS_A \times CF_A$		]			
Exposure Duration, child	$ED_c$	6	6	yrs	$SF_d \times EV \times I$	$EC_r \times \left[ \left( \frac{EF_r \times \left( \frac{ED_c \times SA_c \times A}{BW_c} \right)}{\frac{BW_c}{BW_c}} \right) \right]$	' BW <sub>a</sub> / ) ^		$(SA_c \times AF_c \times ABS)$	$\frac{1}{d} \times CF_d$			
Exposure Frequency, resident	$EF_r$	350	350	days/yr	or a n Bop n	/ []	$AT_c \times 365 \frac{days}{days}$	Ι,	$BW_c$	/			
Event Frequency, resident	$EV_r$	1	1	events/day		L\	year	/		J			
Mutagenic adjustment factor	$MAF_O$	0.202	0.202	dimensionless									
Reference Dose Adjusted for GI Absorption	$RfD_d$	chemical	-specific	mg/kg-day									
(Regional) Screening Level, dermal	$(R)SL_D$	derived	herein	mg/kg	Noncarcinogens:		DTSC Cadmir	um - noncarcinoger	nic:				
Exposed Body Surface Area, adult	$SA_a$	6032	6032	cm <sup>2</sup>		( day)				1	day\		
E	$SA_c$	2373	2900	cm <sup>2</sup>	T.	$HQ \times \left(AT_{nc,c} \times 365 \frac{aay}{year}\right) \times B^{-1}$ $\frac{1}{RfD_{c}} \times EV_{r} \times EC_{r} \times SA_{c} \times AF_{c}$	$W_c$		T	$'HQ \times (AT_{nc,26-yr\ adult})$	$\frac{\times 365 \frac{aay}{year} \times BW_a}{EC_r \times SA_a \times AF_a \times ABS_d \times CF_d}$		
Exposed Body Surface Area, child				(/1 1)-1	$(R)SL_D = \frac{1}{R}$	1		$SL_{D-adult,}$	$_{,cd} = {}$	. 1	EC CA AE AEC CE		
Exposed Body Surface Area, child  Oral Slope Factor Adjusted for GLAbsorption	SF.	chemical	-specific						EF X ED.	Y —— Y HV Y I			
Oral Slope Factor Adjusted for GI Absorption	$SF_d$	chemical	-specific 1	(mg/kg-day) <sup>1</sup>	$EF_r \times ED_c \times \frac{1}{2}$	$\frac{1}{RfD_d} \times EV_r \times EC_r \times SA_c \times AF_c$	$\times ABS_d \times CF_d$		E17 × ED 26-3	r adult ^ RfD <sub>d</sub> ^ LVr ^ L	$EC_r \times SH_a \times AF_a \times ABS_d \times CF_d$		
Oral Slope Factor Adjusted for GI Absorption Target Hazard Quotient	THQ	1	1	dimensionless	$EF_r \times ED_c \times \frac{1}{2}$	$\frac{1}{RfD_d} \times EV_r \times EC_r \times SA_c \times AF_c$	$\times ABS_d \times CF_d$		21 r × 2226-3	$r$ adult $\land RfD_d \land L^{v_r} \land L^{v_r}$	$EC_r \wedge SA_a \wedge AF_a \wedge ABS_d \wedge CF_d$		
Oral Slope Factor Adjusted for GI Absorption		chemical 1 1.0E-06	-specific 1 1.0E-06			N) D <sub>d</sub>	$\times$ ABS <sub>d</sub> $\times$ CF <sub>d</sub>		B17 × BD26-3	$r$ adult $^{\wedge}$ $RfD_d$ $^{\wedge}$ $^{\vee}r$ $^{\wedge}$ $^{\vee}r$			
Oral Slope Factor Adjusted for GI Absorption Target Hazard Quotient	THQ	1 1.0E-06	1 1.0E-06	dimensionless dimensionless	Residential USEPA R	RSL <sub>D</sub>				N) D <sub>d</sub>	Residential DTSC-SL <sub>D</sub>		Nonconcer
Oral Slope Factor Adjusted for GI Absorption Target Hazard Quotient Target Risk	THQ TR	1 1.0E-06 ABS <sub>d</sub> \a	1 1.0E-06	dimensionless dimensionless  SF <sub>d</sub>	Residential USEPA R Cancer	$RSL_D$ $RfD_d$	Noncancer	ABS <sub>d</sub> \a	GI Absorption	SF <sub>d</sub>	Residential DTSC-SL <sub>D</sub> Cancer	$RfD_d$	Noncancer (me/kg)
Oral Slope Factor Adjusted for GI Absorption Target Hazard Quotient Target Risk  Analyte	THQ	1 1.0E-06	1 1.0E-06	dimensionless dimensionless	Residential USEPA R	RSL <sub>D</sub>				N) D <sub>d</sub>	Residential DTSC-SL <sub>D</sub>		Noncancer (mg/kg)
Oral Slope Factor Adjusted for GI Absorption Target Hazard Quotient Target Risk	THQ TR	1 1.0E-06 ABS <sub>d</sub> \a	1 1.0E-06	dimensionless dimensionless  SF <sub>d</sub>	Residential USEPA R Cancer	$RSL_D$ $RfD_d$	Noncancer	ABS <sub>d</sub> \a	GI Absorption	SF <sub>d</sub>	Residential DTSC-SL <sub>D</sub> Cancer	$RfD_d$	
Oral Slope Factor Adjusted for GI Absorption Target Hazard Quotient Target Risk  Analyte	THQ TR	1 1.0E-06 ABS <sub>d</sub> \a	1 1.0E-06	dimensionless dimensionless  SF <sub>d</sub>	Residential USEPA R Cancer	$RSL_D$ $RfD_d$	Noncancer	ABS <sub>d</sub> \a	GI Absorption	SF <sub>d</sub>	Residential DTSC-SL <sub>D</sub> Cancer	$RfD_d$	
Oral Slope Factor Adjusted for GI Absorption Target Hazard Quotient Target Risk  Analyte Lead Compounds	THQ TR	1 1.0E-06 ABS <sub>d</sub> \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	1 1.0E-06 GI Absorption (unitless)	dimensionless dimensionless  SF <sub>d</sub> (mg/kg-day) <sup>-1</sup>	Residential USEPA R Cancer (mg/kg)	RSL <sub>D</sub> RfD <sub>d</sub> (mg/kg-day)	Noncancer (mg/kg)	ABS <sub>d</sub> la (unitless)	GI Absorption (unitless)	SF <sub>d</sub> (mg/kg-day) <sup>-1</sup>	Residential DTSC-SL <sub>D</sub> Cancer (mg/kg)	<b>RfD</b> <sub>d</sub> (mg/kg-day)	(mg/kg)
Oral Slope Factor Adjusted for GI Absorption Target Hazard Quotient Target Risk  Analyte  Lead Compounds ~Lead subacetate	THQ TR	1 1.0E-06 ABS <sub>d</sub> \a (unitless) 1.00E-01	1 1.0E-06 GI Absorption (unitless)	dimensionless dimensionless  SF <sub>d</sub> (mg/kg-day) <sup>-1</sup> 8.50E-03	Residential USEPA R Cancer (mg/kg) 2.91E+02	RSL <sub>D</sub> RfD <sub>d</sub> (mg/kg-day)	Noncancer (mg/kg)	ABS <sub>d</sub> <sup>la</sup> (unitless)	GI Absorption (unitless)	SF <sub>d</sub> (mg/kg-day) <sup>-1</sup> 3.80E-02	Residential DTSC-SL <sub>D</sub> Cancer (mg/kg)  5.69E+01	RfD <sub>d</sub> (mg/kg-day)	(mg/kg)
Oral Slope Factor Adjusted for GI Absorption Target Hazard Quotient Target Risk  Analyte  Lead Compounds ~Lead subacetate ~Tetraethyl Lead Lewisite	THQ TR	1 1.0E-06 ABS <sub>d</sub> \(\frac{1}{2}\) (unitless) 1.00E-01	1 1.0E-06 GI Absorption (unitless) 1.00E+00 1.00E+00 1.00E+00	dimensionless dimensionless  SF <sub>d</sub> (mg/kg-day) <sup>-1</sup> 8.50E-03	Residential USEPA R Cancer (mg/kg) 2.91E+02	RSL <sub>D</sub> RfD <sub>d</sub> (mg/kg-day)   1.00E-07	Noncancer (mg/kg)	ABS <sub>d</sub> <sup>la</sup> (unitless)  1.00E-01	GI Absorption (unitless)  1.00E+00 1.00E+00 1.00E+00	SF <sub>d</sub> (mg/kg-day) <sup>-1</sup> 3.80E-02	Residential DTSC-SL <sub>D</sub> Cancer (mg/kg)  5.69E+01	RfD <sub>d</sub> (mg/kg-day) 1.00E-07	(mg/kg)
Oral Slope Factor Adjusted for GI Absorption Target Hazard Quotient Target Risk  Analyte  Lead Compounds  ~Lead subacetate  ~Tetraethyl Lead Lewisite  Manganese (Non-diet)	THQ TR	1 1.0E-06 ABS <sub>d</sub> \a (unitless) 1.00E-01	1 1.0E-06 GI Absorption (unitless) 1.00E+00 1.00E+00	dimensionless dimensionless  SF <sub>d</sub> (mg/kg-day) <sup>-1</sup> 8.50E-03	Residential USEPA R Cancer (mg/kg) 2.91E+02	RSL <sub>D</sub> RfD <sub>d</sub> (mg/kg-day)   1.00E-07  5.00E-06	Noncancer (mg/kg)	ABS <sub>d</sub> <sup>la</sup> (unitless)	GI Absorption (unitless)  1.00E+00 1.00E+00	SF <sub>d</sub> (mg/kg-day) <sup>-1</sup> 3.80E-02	Residential DTSC-SL <sub>D</sub> Cancer (mg/kg)  5.69E+01	RfD <sub>d</sub> (mg/kg-day)  1.00E-07 5.00E-06	(mg/kg)
Oral Slope Factor Adjusted for GI Absorption Target Hazard Quotient Target Risk  Analyte  Lead Compounds ~Lead subacetate ~Tetraethyl Lead Lewisite  Manganese (Non-diet) Mercury Compounds	THQ TR	1 1.0E-06 ABS <sub>d</sub> \ta (unitless) 1.00E-01 	1 1.0E-06 GI Absorption (unitless) 1.00E+00 1.00E+00 1.00E+00 4.00E-02	dimensionless dimensionless  SF <sub>d</sub> (mg/kg-day) <sup>-1</sup> 8.50E-03	Residential USEPA R Cancer (mg/kg)  2.91E+02	RSL <sub>D</sub> RfD <sub>d</sub> (mg/kg-day)   1.00E-07  5.00E-06  9.60E-04	Noncancer (mg/kg)	ABS <sub>d</sub> <sup>ja</sup> (unitless)  1.00E-01  1.00E-02	GI Absorption (unitless) 1.00E+00 1.00E+00 1.00E+00 4.00E-02	SF <sub>d</sub> (mg/kg-day) <sup>-1</sup> 3.80E-02	Residential DTSC-SL <sub>D</sub> Cancer (mg/kg)  5.69E+01	RfD <sub>d</sub> (mg/kg-day)  1.00E-07 5.00E-06 9.60E-04	   2.59E+03
Oral Slope Factor Adjusted for GI Absorption Target Hazard Quotient Target Risk  Analyte  Lead Compounds ~Lead subacetate ~Tetraethyl Lead Lewisite  Manganese (Non-diet) Mercury Compounds ~Mercuric Chloride (and other Mercury salts)	THQ TR	1 1.0E-06 ABS <sub>d</sub> \ta (unitless) 1.00E-01	1 1.0E-06 GI Absorption (unitless) 1.00E+00 1.00E+00 4.00E-02 7.00E-02	dimensionless dimensionless  SF <sub>d</sub> (mg/kg-day) <sup>-1</sup> 8.50E-03	Residential USEPA R Cancer (mg/kg)  2.91E+02	RSL <sub>D</sub> RfD <sub>d</sub> (mg/kg-day)   1.00E-07  5.00E-06  9.60E-04  2.10E-05	Noncancer (mg/kg)	ABS <sub>d</sub> <sup>la</sup> (unitless)  1.00E-01 1.00E-02	GI Absorption (unitless) 1.00E+00 1.00E+00 1.00E+00 4.00E-02	SF <sub>d</sub> (mg/kg-day) <sup>-1</sup> 3.80E-02	Residential DTSC-SL <sub>D</sub> Cancer (mg/kg)  5.69E+01	RfD <sub>d</sub> (mg/kg-day)  1.00E-07 5.00E-06 9.60E-04	(mg/kg) 2.59E+03 3.02E+01
Oral Slope Factor Adjusted for GI Absorption Target Hazard Quotient Target Risk  Analyte  Lead Compounds  ~Lead subacetate  ~Tetraethyl Lead Lewisite  Manganese (Non-diet) Mercury Compounds  ~Mercuric Chloride (and other Mercury salts)  ~Mercury (elemental)	THQ TR	1 1.0E-06 ABS <sub>d</sub> \ta (unitless) 1.00E-01 	1 1.0E-06 GI Absorption (unitless) 1.00E+00 1.00E+00 4.00E-02 7.00E-02 1.00E+00	dimensionless dimensionless  SF <sub>d</sub> (mg/kg-day) <sup>-1</sup> 8.50E-03	Residential USEPA R Cancer (mg/kg)  2.91E+02	RSL <sub>D</sub> RfD <sub>d</sub> (mg/kg-day)   1.00E-07  5.00E-06  9.60E-04  2.10E-05	Noncancer (mg/kg)	ABS <sub>d</sub> <sup>ja</sup> (unitless)  1.00E-01  1.00E-02	GI Absorption (unitless)  1.00E+00 1.00E+00 1.00E+00 4.00E-02  7.00E-02 1.00E+00	SF <sub>d</sub> (mg/kg-day) <sup>-1</sup> 3.80E-02	Residential DTSC-SL <sub>D</sub> Cancer (mg/kg)  5.69E+01	RfD <sub>d</sub> (mg/kg-day)  1.00E-07 5.00E-06 9.60E-04  1.12E-05 1.60E-04	   2.59E+03
Oral Slope Factor Adjusted for GI Absorption Target Hazard Quotient Target Risk  Analyte  Lead Compounds ~Lead subacetate ~Tetraethyl Lead Lewisite  Manganese (Non-diet) Mercury Compounds ~Mercuric Chloride (and other Mercury salts)	THQ TR	1 1.0E-06 ABS <sub>d</sub> \ta (unitless) 1.00E-01	1 1.0E-06 GI Absorption (unitless) 1.00E+00 1.00E+00 4.00E-02 7.00E-02	dimensionless dimensionless  SF <sub>d</sub> (mg/kg-day) <sup>-1</sup> 8.50E-03	Residential USEPA R Cancer (mg/kg)  2.91E+02	RSL <sub>D</sub> RfD <sub>d</sub> (mg/kg-day)   1.00E-07  5.00E-06  9.60E-04  2.10E-05	Noncancer (mg/kg)	ABS <sub>d</sub> <sup>la</sup> (unitless)  1.00E-01 1.00E-02	GI Absorption (unitless) 1.00E+00 1.00E+00 1.00E+00 4.00E-02	SF <sub>d</sub> (mg/kg-day) <sup>-1</sup> 3.80E-02	Residential DTSC-SL <sub>D</sub> Cancer (mg/kg)  5.69E+01	RfD <sub>d</sub> (mg/kg-day)  1.00E-07 5.00E-06 9.60E-04	(mg/kg) 2.59E+03 3.02E+01
Oral Slope Factor Adjusted for GI Absorption Target Hazard Quotient Target Risk  Analyte  Lead Compounds  ~Lead subacetate  ~Tetraethyl Lead  Lewisite  Manganese (Non-diet)  Mercury Compounds  ~Mercuric Chloride (and other Mercury salts)  ~Mercury (elemental)	THQ TR	1 1.0E-06 ABS <sub>d</sub> \ta (unitless) 1.00E-01	1 1.0E-06 GI Absorption (unitless) 1.00E+00 1.00E+00 4.00E-02 7.00E-02 1.00E+00	dimensionless dimensionless  SF <sub>d</sub> (mg/kg-day) <sup>-1</sup> 8.50E-03	Residential USEPA F Cancer (mg/kg)  2.91E+02	RSL <sub>D</sub> RfD <sub>d</sub> (mg/kg-day)   1.00E-07  5.00E-06  9.60E-04  2.10E-05	Noncancer (mg/kg)	ABS <sub>d</sub> <sup>la</sup> (unitless)  1.00E-01 1.00E-02  1.00E-02	GI Absorption (unitless)  1.00E+00 1.00E+00 1.00E+00 4.00E-02  7.00E-02 1.00E+00	SF <sub>d</sub> (mg/kg-day) <sup>-1</sup> 3.80E-02	Residential DTSC-SL <sub>D</sub> Cancer (mg/kg)  5.69E+01	RfD <sub>d</sub> (mg/kg-day)  1.00E-07 5.00E-06 9.60E-04  1.12E-05 1.60E-04	(mg/kg) 2.59E+03 3.02E+01
Oral Slope Factor Adjusted for GI Absorption Target Hazard Quotient Target Risk  Analyte  Lead Compounds  ~Lead subacetate  ~Tetraethyl Lead Lewisite  Manganese (Non-diet) Mercury Compounds  ~Mercuric Chloride (and other Mercury salts)  ~Mercury (elemental)  Methyl Acetate	THQ TR — Mutagen?	1 1.0E-06 ABS <sub>d</sub> \ta (unitless) 1.00E-01  	1 1.0E-06 GI Absorption (unitless) 1.00E+00 1.00E+00 4.00E-02 7.00E-02 1.00E+00 1.00E+00	dimensionless dimensionless  SF <sub>d</sub> (mg/kg-day) <sup>-1</sup> 8.50E-03	Residential USEPA F Cancer (mg/kg)  2.91E+02	RSL <sub>D</sub> RfD <sub>d</sub> (mg/kg-day)  1.00E-07 5.00E-06 9.60E-04  2.10E-05 1.00E+00	Noncancer (mg/kg)	ABS <sub>d</sub> <sup>la</sup> (unitless)  1.00E-01 1.00E-02  1.00E-02	GI Absorption (unitless)  1.00E+00 1.00E+00 1.00E+00 4.00E-02  7.00E-02 1.00E+00 1.00E+00	SF <sub>d</sub> (mg/kg-day) <sup>-1</sup> 3.80E-02	Residential DTSC-SL <sub>D</sub> Cancer (mg/kg)  5.69E+01	RfD <sub>d</sub> (mg/kg-day)  1.00E-07 5.00E-06 9.60E-04  1.12E-05 1.60E-04 1.00E+00	(mg/kg)  2.59E+03  3.02E+01 4.32E+02
Oral Slope Factor Adjusted for GI Absorption Target Hazard Quotient Target Risk  Analyte  Lead Compounds  ~Lead subacetate  ~Tetraethyl Lead  Lewisite  Manganese (Non-diet)  Mercury Compounds  ~Mercuric Chloride (and other Mercury salts)  ~Mercury (elemental)  Methyl Acetate  Methylene-bis(2-chloroaniline), 4,4'-	THQ TR  Mutagen?	1 1.0E-06 ABS <sub>d</sub> \ta (unitless) 1.00E-01   	1 1.0E-06  GI Absorption (unitless)  1.00E+00 1.00E+00 4.00E-02  7.00E-02 1.00E+00 1.00E+00 1.00E+00 1.00E+00	dimensionless dimensionless dimensionless  SF <sub>d</sub> (mg/kg-day) <sup>-1</sup> 8.50E-03  2.00E-03	Residential USEPA F Cancer (mg/kg)  2.91E+02 5.97E+00	RSL <sub>D</sub> RfD <sub>d</sub> (mg/kg-day)  1.00E-07 5.00E-06 9.60E-04  2.10E-05 1.00E+00 6.00E-03 2.00E-03	Noncancer (mg/kg)  6.59E+02	1.00E-02 1.00E-02	GI Absorption (unitless)  1.00E+00 1.00E+00 1.00E+00 4.00E-02  7.00E-02 1.00E+00 1.00E+00 1.00E+00	SF <sub>d</sub> (mg/kg-day) <sup>-1</sup> 3.80E-02 1.40E-02	Residential DTSC-SL <sub>D</sub> Cancer (mg/kg)  5.69E+01 3.36E-01	RfD <sub>d</sub> (mg/kg-day)  1.00E-07 5.00E-06 9.60E-04  1.12E-05 1.60E-04 1.00E+00 6.00E-03 2.00E-03	(mg/kg)  2.59E+03  3.02E+01 4.32E+02
Oral Slope Factor Adjusted for GI Absorption Target Hazard Quotient Target Risk  Analyte  Lead Compounds  ~Lead subacetate  ~Tetraethyl Lead Lewisite  Manganese (Non-diet)  Mercury Compounds  ~Mercury Compounds  ~Mercury Chloride (and other Mercury salts)  ~Mercury (elemental)  Methyl Acetate  Methylene Chloride  Methylene-bis(2-chloroaniline), 4,4'-  Methylstyrene, Alpha-	THQ TR  Mutagen?	1 1.0E-06  ABS <sub>d</sub> \text{\text{la}} (unitless)  1.00E-01 1.00E-01	1 1.0E-06  GI Absorption (unitless)  1.00E+00 1.00E+00 4.00E-02  7.00E-02 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00	dimensionless dimensionless dimensionless  SF <sub>d</sub> (mg/kg-day) <sup>-1</sup> 8.50E-03  2.00E-03 1.00E-01	Residential USEPA R Cancer (mg/kg)  2.91E+02 5.97E+00	RSL <sub>D</sub> RfD <sub>d</sub> (mg/kg-day)  1.00E-07 5.00E-06 9.60E-04  2.10E-05 1.00E+00 6.00E-03 2.00E-03 7.00E-02	Noncancer (mg/kg)  6.59E+02	1.00E-01 1.00E-02 1.00E-02 1.00E-01 1.00E-01 1.00E-01	7.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00	SF <sub>d</sub> (mg/kg-day) <sup>-1</sup> 3.80E-02  1.40E-02 1.50E+00	Residential DTSC-SL <sub>D</sub>     Cancer   (mg/kg)	RfD <sub>d</sub> (mg/kg-day)  1.00E-07 5.00E-06 9.60E-04  1.12E-05 1.60E-04 1.00E+00 6.00E-03 2.00E-03 7.00E-02	(mg/kg)  2.59E+03  3.02E+01  4.32E+02  5.39E+02
Oral Slope Factor Adjusted for GI Absorption Target Hazard Quotient Target Risk  Analyte  Lead Compounds ~Lead subacetate ~Tetraethyl Lead Lewisite  Manganese (Non-diet)  Mercury Compounds ~Mercury Chloride (and other Mercury salts)  ~Mercury (elemental)  Methyl Acetate  Methylene-Chloride  Methylene-bis(2-chloroaniline), 4,4¹-  Methylstyrene, Alpha- Mineral oils	THQ TR  Mutagen?	1 1.0E-06  ABS <sub>d</sub> \text{\text{la}} (unitless)  1.00E-01 1.00E-01 1.00E-01	1 1.0E-06  GI Absorption (unitless)  1.00E+00 1.00E+00 4.00E-02  7.00E-02 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00	dimensionless di	Residential USEPA R Cancer (mg/kg)  2.91E+02 5.97E+00	RSL <sub>D</sub> RfD <sub>d</sub> (mg/kg-day)  1.00E-07 5.00E-06 9.60E-04  2.10E-05 1.00E+00 6.00E-03 2.00E-03 7.00E-02 3.00E+00	Noncancer (mg/kg)  6.59E+02	1.00E-02 1.00E-02 1.00E-02 1.00E-01 1.00E-02	7.00E+00 1.00E+00 4.00E-02 7.00E-02 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00	SF <sub>d</sub> (mg/kg-day) <sup>-1</sup> 3.80E-02  1.40E-02 1.50E+00	Residential DTSC-SL <sub>D</sub>     Cancer   (mg/kg)       5.69E+01	RfD <sub>d</sub> (mg/kg-day)  1.00E-07 5.00E-06 9.60E-04  1.12E-05 1.60E-04 1.00E+00 6.00E-03 2.00E-03 7.00E-02 3.00E+00	(mg/kg)  2.59E+03  3.02E+01  4.32E+02  5.39E+02
Oral Slope Factor Adjusted for GI Absorption Target Hazard Quotient Target Risk  Analyte  Lead Compounds ~Lead subacetate ~Tetraethyl Lead Lewisite  Manganese (Non-diet)  Mercury Compounds ~Mercury Compounds ~Mercury Chloride (and other Mercury salts) ~Mercury (elemental)  Methyl Acetate  Methylene Chloride Methylene-bis(2-chloroaniline), 4,4'- Methylstyrene, Alpha- Mineral oils Nickel Hydroxide	THQ TR  Mutagen?	1 1.0E-06  ABS <sub>d</sub> \text{\text{in}} (unitless)  1.00E-01 1.00E-01	1 1.0E-06  GI Absorption (unitless)  1.00E+00 1.00E+00 4.00E-02  7.00E-02 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 4.00E-02	dimensionless di	Residential USEPA R Cancer (mg/kg)  2.91E+02 5.97E+00	RSL <sub>D</sub> RfD <sub>d</sub> (mg/kg-day)  1.00E-07 5.00E-06 9.60E-04  2.10E-05 1.00E+00 6.00E-03 2.00E-03 7.00E-02 3.00E+00 4.40E-04	Noncancer (mg/kg)  6.59E+02	1.00E-01 1.00E-02 1.00E-02 1.00E-01 1.00E-02 1.00E-01 1.00E-01	7.00E+00 1.00E+00 4.00E-02 7.00E-02 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00	SF <sub>d</sub> (mg/kg-day) <sup>-1</sup> 3.80E-02  1.40E-02 1.50E+00	Residential DTSC-SL <sub>D</sub>     Cancer   (mg/kg)       5.69E+01	RfD <sub>d</sub> (mg/kg-day)  1.00E-07 5.00E-06 9.60E-04  1.12E-05 1.60E-04 1.00E+00 6.00E-03 2.00E-03 7.00E-02 3.00E+00 4.40E-04	(mg/kg)  2.59E+03  3.02E+01 4.32E+02 5.39E+02 1.19E+03
Oral Slope Factor Adjusted for GI Absorption Target Hazard Quotient Target Risk  Analyte  Lead Compounds ~Lead subacetate ~Tetraethyl Lead Lewisite  Manganese (Non-diet)  Mercury Compounds ~Mercuric Chloride (and other Mercury salts) ~Mercury (elemental)  Methyl Acetate  Methylene Chloride Methylene-bis(2-chloroaniline), 4,4'- Methylstyrene, Alpha- Mineral oils	THQ TR  Mutagen?	1 1.0E-06  ABS <sub>d</sub> \text{\text{la}} (unitless)  1.00E-01 1.00E-01 1.00E-01	1 1.0E-06  GI Absorption (unitless)  1.00E+00 1.00E+00 1.00E+00 4.00E-02  7.00E-02 1.00E+00 1.00E+00 1.00E+00 1.00E+00 4.00E-02 4.00E-02	dimensionless di	Residential USEPA R Cancer (mg/kg)  2.91E+02 5.97E+00	RSL <sub>D</sub> RfD <sub>d</sub> (mg/kg-day)  1.00E-07 5.00E-06 9.60E-04  2.10E-05 1.00E+00 6.00E-03 2.00E-03 7.00E-02 3.00E+00 4.40E-04	Noncancer (mg/kg)  6.59E+02	1.00E-01 1.00E-02 1.00E-02 1.00E-01 1.00E-02 1.00E-02 1.00E-01 1.00E-02 1.00E-02	7.00E+00 1.00E+00 1.00E+00 1.00E+00 4.00E-02 7.00E-02 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 4.00E-02 4.00E-02	SF <sub>d</sub> (mg/kg-day) <sup>-1</sup> 3.80E-02  1.40E-02 1.50E+00	Residential DTSC-SL <sub>D</sub> Cancer (mg/kg)  5.69E+01 3.36E-01	RfD <sub>d</sub> (mg/kg-day)  1.00E-07 5.00E-06 9.60E-04  1.12E-05 1.60E-04 1.00E+00 6.00E-03 2.00E-03 7.00E-02 3.00E+00 4.40E-04 4.40E-04	(mg/kg)  2.59E+03  3.02E+01 4.32E+02 5.39E+02 1.19E+03 1.19E+03
Oral Slope Factor Adjusted for GI Absorption Target Hazard Quotient Target Risk  Analyte  Lead Compounds ~Lead subacetate ~Tetraethyl Lead Lewisite  Manganese (Non-diet)  Mercury Compounds ~Mercuric Chloride (and other Mercury salts) ~Mercury (elemental)  Methyl Acetate  Methylene-bis(2-chloroaniline), 4,4'-  Methylstyrene, Alpha- Mineral oils Nickel Hydroxide	THQ TR  Mutagen?	1 1.0E-06  ABS <sub>d</sub> \text{\text{in}} (unitless)  1.00E-01 1.00E-01	1 1.0E-06  GI Absorption (unitless)  1.00E+00 1.00E+00 4.00E-02  7.00E-02 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 4.00E-02	dimensionless di	Residential USEPA R Cancer (mg/kg)  2.91E+02 5.97E+00	RSL <sub>D</sub> RfD <sub>d</sub> (mg/kg-day)  1.00E-07 5.00E-06 9.60E-04  2.10E-05 1.00E+00 6.00E-03 2.00E-03 7.00E-02 3.00E+00 4.40E-04	Noncancer (mg/kg)  6.59E+02	1.00E-01 1.00E-02 1.00E-02 1.00E-01 1.00E-02 1.00E-01 1.00E-01	7.00E+00 1.00E+00 4.00E-02 7.00E-02 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00	SF <sub>d</sub> (mg/kg-day) <sup>-1</sup> 3.80E-02  1.40E-02 1.50E+00	Residential DTSC-SL <sub>D</sub>     Cancer   (mg/kg)       5.69E+01	RfD <sub>d</sub> (mg/kg-day)  1.00E-07 5.00E-06 9.60E-04  1.12E-05 1.60E-04 1.00E+00 6.00E-03 2.00E-03 7.00E-02 3.00E+00 4.40E-04	(mg/kg)  2.59E+03  3.02E+01 4.32E+02 5.39E+02 1.19E+03
Oral Slope Factor Adjusted for GI Absorption Target Hazard Quotient Target Risk  Analyte  Lead Compounds  ~Lead subacetate  ~Tetraethyl Lead Lewisite  Manganese (Non-diet)  Mercury Compounds  ~Mercuric Chloride (and other Mercury salts)  ~Mercury (elemental)  Methyl Acetate  Methylene-bis(2-chloroaniline), 4,4'-  Methylstyrene, Alpha-  Mineral oils  Nickel Hydroxide  Nickel Oxide	THQ TR  Mutagen?	1 1.0E-06  ABS <sub>d</sub> \text{\text{in}} (unitless)  1.00E-01 1.00E-01	1 1.0E-06  GI Absorption (unitless)  1.00E+00 1.00E+00 1.00E+00 4.00E-02  7.00E-02 1.00E+00 1.00E+00 1.00E+00 1.00E+00 4.00E-02 4.00E-02	### dimensionless dimensionless dimensionless dimensionless ### ### ### ### ### ### ### ### ###	Residential USEPA R Cancer (mg/kg)  2.91E+02 5.97E+00	RSL <sub>D</sub> RfD <sub>d</sub> (mg/kg-day)  1.00E-07 5.00E-06 9.60E-04  2.10E-05 1.00E+00 6.00E-03 2.00E-03 7.00E-02 3.00E+00 4.40E-04	Noncancer (mg/kg)  6.59E+02	1.00E-01 1.00E-02 1.00E-02 1.00E-01 1.00E-02 1.00E-02 1.00E-01 1.00E-02 1.00E-02	7.00E+00 1.00E+00 1.00E+00 1.00E+00 4.00E-02 7.00E-02 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 4.00E-02 4.00E-02	SF <sub>d</sub> (mg/kg-day) <sup>-1</sup> 3.80E-02  1.40E-02 1.50E+00	Residential DTSC-SL <sub>D</sub> Cancer (mg/kg)  5.69E+01 3.36E-01	RfD <sub>d</sub> (mg/kg-day)  1.00E-07 5.00E-06 9.60E-04  1.12E-05 1.60E-04 1.00E+00 6.00E-03 2.00E-03 7.00E-02 3.00E+00 4.40E-04 4.40E-04	(mg/kg)  2.59E+03  3.02E+01 4.32E+02 5.39E+02 1.19E+03 1.19E+03
Oral Slope Factor Adjusted for GI Absorption Target Hazard Quotient Target Risk  Analyte  Lead Compounds ~Lead subacetate ~Tetraethyl Lead Lewisite  Manganese (Non-diet)  Mercury Compounds ~Mercury Chloride (and other Mercury salts) ~Mercury (elemental)  Methyl Acetate  Methylene Chloride Methylene-bis(2-chloroaniline), 4,4'- Methylstyrene, Alpha- Mineral oils  Nickel Hydroxide Nickel Oxide Nickel Refinery Dust	THQ TR  Mutagen?	1 1.0E-06  ABS <sub>d</sub> \text{\text{\text{la}}} (unitless)  1.00E-01 1.00E-01 1.00E-01	1 1.0E-06  GI Absorption (unitless)  1.00E+00 1.00E+00 4.00E-02  7.00E-02 1.00E+00 1.00E+00 1.00E+00 1.00E+00 4.00E-02  4.00E-02 4.00E-02 4.00E-02 4.00E-02	### dimensionless dimensionless dimensionless dimensionless ### ### ### ### ### ### ### ### ###	Residential USEPA R Cancer (mg/kg)  2.91E+02 5.97E+00	RSL <sub>D</sub> RfD <sub>d</sub> (mg/kg-day)  1.00E-07 5.00E-06 9.60E-04  2.10E-05 1.00E+00 6.00E-03 2.00E-03 7.00E-02 3.00E+00 4.40E-04 4.40E-04 4.40E-04 8.00E-04	Noncancer (mg/kg)  6.59E+02	1.00E-01	GI Absorption (unitless)  1.00E+00 1.00E+00 1.00E+00 4.00E-02  7.00E-02 1.00E+00 1.00E+00 1.00E+00 1.00E+00 4.00E-02 4.00E-02 4.00E-02 4.00E-02 4.00E-02	SF <sub>d</sub> (mg/kg-day) <sup>-1</sup> 3.80E-02  1.40E-02 1.50E+00 2.28E+01	Residential DTSC-SL <sub>D</sub>   Cancer (mg/kg)     5.69E+01	RfD <sub>d</sub> (mg/kg-day)  1.00E-07 5.00E-06 9.60E-04  1.12E-05 1.60E-04 1.00E+00 6.00E-03 2.00E-03 7.00E-02 3.00E+00 4.40E-04 4.40E-04 4.40E-04	(mg/kg)  2.59E+03  3.02E+01 4.32E+02 5.39E+02 1.19E+03 1.19E+03 1.19E+03 1.19E+03
Oral Slope Factor Adjusted for GI Absorption Target Hazard Quotient Target Risk  Analyte  Lead Compounds  ~Lead subacetate  ~Tetraethyl Lead Lewisite  Manganese (Non-diet)  Mercury Compounds  ~Mercuric Chloride (and other Mercury salts)  ~Mercury (elemental)  Methyl Acetate  Methylene Chloride  Methylene-bis(2-chloroaniline), 4,4'-  Methylstyrene, Alpha- Mineral oils  Nickel Hydroxide  Nickel Oxide  Nickel Refinery Dust  Nickel Soluble Salts  Nickel Subsulfide	THQ TR  Mutagen?	1 1.0E-06  ABS <sub>d</sub> <sup>la</sup> (unitless)  1.00E-01 1.00E-01 1.00E-01	1 1.0E-06  GI Absorption (unitless)  1.00E+00 1.00E+00 1.00E+00 4.00E-02  7.00E-02 1.00E+00 1.00E+00 1.00E+00 1.00E+00 4.00E-02 4.00E-02 4.00E-02 4.00E-02 4.00E-02 4.00E-02	dimensionless di	Residential USEPA R Cancer (mg/kg)  2.91E+02 5.97E+00	RfD <sub>d</sub> (mg/kg-day)  1.00E-07 5.00E-06 9.60E-04  2.10E-05 1.00E+00 6.00E-03 2.00E-03 7.00E-02 3.00E+00 4.40E-04 4.40E-04 8.00E-04 4.40E-04	Noncancer (mg/kg)	1.00E-02	GI Absorption (unitless)  1.00E+00 1.00E+00 1.00E+00 4.00E-02  7.00E-02 1.00E+00 1.00E+00 1.00E+00 1.00E+00 4.00E-02 4.00E-02 4.00E-02 4.00E-02 4.00E-02 4.00E-02 4.00E-02	SF <sub>d</sub> (mg/kg-day) <sup>-1</sup> 3.80E-02  1.40E-02 1.50E+00 2.28E+01 4.25E+01	Residential DTSC-SL <sub>D</sub> Cancer (mg/kg)  5.69E+01  3.36E-01 9.51E-01 5.09E-01	RfD <sub>d</sub> (mg/kg-day)  1.00E-07 5.00E-06 9.60E-04  1.12E-05 1.60E-04 1.00E+00 6.00E-03 2.00E-03 7.00E-02 3.00E+00 4.40E-04 4.40E-04 4.40E-04 4.40E-04	(mg/kg)  2.59E+03  3.02E+01 4.32E+02 5.39E+02 1.19E+03 1.19E+03 1.19E+03 1.19E+03 1.19E+03
Oral Slope Factor Adjusted for GI Absorption Target Hazard Quotient Target Risk  Analyte  Lead Compounds ~Lead subacetate ~Tetraethyl Lead Lewisite  Manganese (Non-diet) Mercury Compounds ~Mercury Compounds ~Mercuric Chloride (and other Mercury salts) ~Mercury (elemental)  Methyl Acetate  Methylene Chloride Methylene-bis(2-chloroaniline), 4,4'- Methylstyrene, Alpha- Mineral oils Nickel Hydroxide Nickel Oxide Nickel Refinery Dust Nickel Soluble Salts Nickel Subsulfide Pentachloroethane	THQ TR  Mutagen?	1 1.0E-06  ABS <sub>d</sub> <sup>la</sup> (unitless)  1.00E-01 1.00E-01	1 1.0E-06  GI Absorption (unitless)  1.00E+00 1.00E+00 1.00E+00 4.00E-02  7.00E-02 1.00E+00 1.00E+00 1.00E+00 1.00E+00 4.00E-02 4.00E-02 4.00E-02 4.00E-02 4.00E-02 1.00E+00	dimensionless di	Residential USEPA R Cancer (mg/kg)  2.91E+02  5.97E+00	RfD <sub>d</sub> (mg/kg-day)  1.00E-07 5.00E-06 9.60E-04  2.10E-05 1.00E+00 6.00E-03 2.00E-03 7.00E-02 3.00E+00 4.40E-04 4.40E-04 4.40E-04 4.40E-04	Noncancer (mg/kg)	1.00E-02	GI Absorption (unitless)  1.00E+00 1.00E+00 1.00E+00 4.00E-02  7.00E-02 1.00E+00 1.00E+00 1.00E+00 1.00E+00 4.00E-02 4.00E-02 4.00E-02 4.00E-02 4.00E-02 4.00E-02 1.00E+00	SF <sub>d</sub> (mg/kg-day) <sup>-1</sup> 3.80E-02 1.40E-02 1.50E+00 2.28E+01 4.25E+01 9.00E-02	Residential DTSC-SL <sub>D</sub> Cancer (mg/kg)  5.69E+01  3.36E-01 9.51E-01 5.09E-01	RfD <sub>d</sub> (mg/kg-day)  1.00E-07 5.00E-06 9.60E-04  1.12E-05 1.60E-04 1.00E+00 6.00E-03 2.00E-03 7.00E-02 3.00E+00 4.40E-04 4.40E-04 4.40E-04	(mg/kg)  2.59E+03  3.02E+01 4.32E+02 5.39E+02 1.19E+03 1.19E+03 1.19E+03 1.19E+03 1.19E+03
Oral Slope Factor Adjusted for GI Absorption Target Hazard Quotient Target Risk  Analyte  Lead Compounds ~Lead subacetate ~Tetraethyl Lead Lewisite  Manganese (Non-diet)  Mercury Compounds ~Mercuric Chloride (and other Mercury salts) ~Mercury (elemental)  Methyl Acetate  Methylene Chloride  Methylstyrene, Alpha- Mineral oils  Nickel Hydroxide  Nickel Oxide  Nickel Soluble Salts  Nickel Subsulfide Pentachloroethane Phosphorus, White	THQ TR  Mutagen?	1 1.0E-06  ABS <sub>d</sub> <sup>la</sup> (unitless)  1.00E-01 1.00E-01 1.00E-01	1 1.0E-06  GI Absorption (unitless)  1.00E+00 1.00E+00 1.00E+00 4.00E-02  7.00E-02 1.00E+00 1.00E+00 1.00E+00 1.00E+00 4.00E-02 4.00E-02 4.00E-02 4.00E-02 4.00E-02 4.00E-02	dimensionless di	Residential USEPA R Cancer (mg/kg)  2.91E+02 5.97E+00	RfD <sub>d</sub> (mg/kg-day)  1.00E-07 5.00E-06 9.60E-04  2.10E-05 1.00E+00 6.00E-03 2.00E-03 7.00E-02 3.00E+00 4.40E-04 4.40E-04 8.00E-04 4.40E-04	Noncancer (mg/kg)	1.00E-02	GI Absorption (unitless)  1.00E+00 1.00E+00 1.00E+00 4.00E-02  7.00E-02 1.00E+00 1.00E+00 1.00E+00 1.00E+00 4.00E-02 4.00E-02 4.00E-02 4.00E-02 4.00E-02 4.00E-02 4.00E-02	SF <sub>d</sub> (mg/kg-day) <sup>-1</sup> 3.80E-02  1.40E-02 1.50E+00 2.28E+01 4.25E+01	Residential DTSC-SL <sub>D</sub> Cancer (mg/kg)  5.69E+01  3.36E-01 9.51E-01 5.09E-01	RfD <sub>d</sub> (mg/kg-day)  1.00E-07 5.00E-06 9.60E-04  1.12E-05 1.60E-04 1.00E+00 6.00E-03 2.00E-03 7.00E-02 3.00E+00 4.40E-04 4.40E-04 4.40E-04 4.40E-04	(mg/kg)  2.59E+03  3.02E+01 4.32E+02 5.39E+02 1.19E+03 1.19E+03 1.19E+03 1.19E+03 1.19E+03
Oral Slope Factor Adjusted for GI Absorption Target Hazard Quotient Target Risk  Analyte  Lead Compounds ~Lead subacetate ~Tetraethyl Lead Lewisite  Manganese (Non-diet) Mercury Compounds ~Mercuric Chloride (and other Mercury salts) ~Mercury (elemental) Methyl Acetate Methylene Chloride Methylene-bis(2-chloroaniline), 4,4'- Methylstyrene, Alpha- Mineral oils Nickel Hydroxide Nickel Oxide Nickel Soluble Salts Nickel Soluble Salts Nickel Subsulfide Pentachloroethane Phosphorus, White Phthalates	THQ TR  Mutagen?	1 1.0E-06  ABS <sub>d</sub> <sup>la</sup> (unitless)  1.00E-01 1.00E-01	1 1.0E-06  GI Absorption (unitless)  1.00E+00 1.00E+00 1.00E+00 4.00E-02  7.00E-02 1.00E+00 1.00E+00 1.00E+00 1.00E+00 4.00E-02 4.00E-02 4.00E-02 4.00E-02 1.00E+00 1.00E+00 1.00E+00	dimensionless di	Residential USEPA R Cancer (mg/kg)  2.91E+02  5.97E+00	RfD <sub>d</sub> (mg/kg-day)  1.00E-07 5.00E-06 9.60E-04  2.10E-05 1.00E+00 6.00E-03 2.00E-03 7.00E-02 3.00E+00 4.40E-04 4.40E-04 4.40E-04 2.00E-05	Noncancer (mg/kg)	1.00E-02	GI Absorption (unitless)  1.00E+00 1.00E+00 1.00E+00 4.00E-02  7.00E-02 1.00E+00 1.00E+00 1.00E+00 1.00E+00 4.00E-02 4.00E-02 4.00E-02 4.00E-02 4.00E-02 1.00E+00 1.00E+00 1.00E+00	SF <sub>d</sub> (mg/kg-day) <sup>-1</sup> 3.80E-02 1.40E-02 1.50E+00 2.28E+01 4.25E+01 9.00E-02	Residential DTSC-SL <sub>D</sub> Cancer (mg/kg)  5.69E+01  3.36E-01 9.51E-01 5.09E-01	RfD <sub>d</sub> (mg/kg-day)  1.00E-07 5.00E-06 9.60E-04  1.12E-05 1.60E-04 1.00E+00 6.00E-03 2.00E-03 7.00E-02 3.00E+00 4.40E-04 4.40E-04 4.40E-04 2.00E-05	(mg/kg)  2.59E+03  3.02E+01 4.32E+02 5.39E+02 1.19E+03 1.19E+03 1.19E+03 1.19E+03 1.19E+03
Oral Slope Factor Adjusted for GI Absorption Target Hazard Quotient Target Risk  Analyte  Lead Compounds ~Lead subacetate ~Tetraethyl Lead Lewisite  Manganese (Non-diet) Mercury Compounds ~Mercury Compounds ~Mercuric Chloride (and other Mercury salts) ~Mercury (elemental)  Methyl Acetate  Methylene Chloride Methylene-bis(2-chloroaniline), 4,4'- Methylstyrene, Alpha- Mineral oils Nickel Hydroxide Nickel Oxide Nickel Oxide Nickel Soluble Salts Nickel Subsulfide Pentachloroethane Phosphorus, White	THQ TR  Mutagen?	1 1.0E-06  ABS <sub>d</sub> <sup>la</sup> (unitless)  1.00E-01 1.00E-01	1 1.0E-06  GI Absorption (unitless)  1.00E+00 1.00E+00 1.00E+00 4.00E-02  7.00E-02 1.00E+00 1.00E+00 1.00E+00 1.00E+00 4.00E-02 4.00E-02 4.00E-02 4.00E-02 4.00E-02 1.00E+00	dimensionless di	Residential USEPA R Cancer (mg/kg)  2.91E+02  5.97E+00	RfD <sub>d</sub> (mg/kg-day)  1.00E-07 5.00E-06 9.60E-04  2.10E-05 1.00E+00 6.00E-03 2.00E-03 7.00E-02 3.00E+00 4.40E-04 4.40E-04 4.40E-04 4.40E-04	Noncancer (mg/kg)	1.00E-02	GI Absorption (unitless)  1.00E+00 1.00E+00 1.00E+00 4.00E-02  7.00E-02 1.00E+00 1.00E+00 1.00E+00 1.00E+00 4.00E-02 4.00E-02 4.00E-02 4.00E-02 4.00E-02 4.00E-02 1.00E+00	SF <sub>d</sub> (mg/kg-day) <sup>-1</sup> 3.80E-02 1.40E-02 1.50E+00 2.28E+01 4.25E+01 9.00E-02	Residential DTSC-SL <sub>D</sub> Cancer (mg/kg)  5.69E+01  3.36E-01 9.51E-01 5.09E-01	RfD <sub>d</sub> (mg/kg-day)  1.00E-07 5.00E-06 9.60E-04  1.12E-05 1.60E-04 1.00E+00 6.00E-03 2.00E-03 7.00E-02 3.00E+00 4.40E-04 4.40E-04 4.40E-04	(mg/kg)  2.59E+03  3.02E+01 4.32E+02 5.39E+02 1.19E+03 1.19E+03 1.19E+03 1.19E+03 1.19E+03
Oral Slope Factor Adjusted for GI Absorption Target Hazard Quotient Target Risk  Analyte  Lead Compounds ~Lead subacetate ~Tetraethyl Lead Lewisite  Manganese (Non-diet) Mercury Compounds ~Mercuric Chloride (and other Mercury salts) ~Mercury (elemental) Methyl Acetate Methylene Chloride Methylene-bis(2-chloroaniline), 4,4'- Methylstyrene, Alpha- Mineral oils Nickel Hydroxide Nickel Oxide Nickel Soluble Salts Nickel Soluble Salts Nickel Subsulfide Pentachloroethane Phosphorus, White Phthalates	THQ TR  Mutagen?	1 1.0E-06  ABS <sub>d</sub> \ (unitless)  1.00E-01  1.00E-01	1 1.0E-06  GI Absorption (unitless)  1.00E+00 1.00E+00 1.00E+00 4.00E-02  7.00E-02 1.00E+00 1.00E+00 1.00E+00 1.00E+00 4.00E-02 4.00E-02 4.00E-02 4.00E-02 1.00E+00 1.00E+00 1.00E+00	dimensionless di	Residential USEPA F Cancer (mg/kg)  2.91E+02 5.97E+00	RfD <sub>d</sub> (mg/kg-day)  1.00E-07 5.00E-06 9.60E-04  2.10E-05 1.00E+00 6.00E-03 2.00E-03 7.00E-02 3.00E+00 4.40E-04 4.40E-04 4.40E-04 2.00E-05	Noncancer (mg/kg)  6.59E+02	1.00E-02	GI Absorption (unitless)  1.00E+00 1.00E+00 1.00E+00 4.00E-02  7.00E-02 1.00E+00 1.00E+00 1.00E+00 1.00E+00 4.00E-02 4.00E-02 4.00E-02 4.00E-02 4.00E-02 1.00E+00 1.00E+00 1.00E+00	SF <sub>d</sub> (mg/kg-day) <sup>-1</sup> 3.80E-02 1.40E-02 1.50E+00 2.28E+01 4.25E+01 9.00E-02	Residential DTSC-SL <sub>D</sub> Cancer (mg/kg)  5.69E+01  3.36E-01 9.51E-01 5.09E-01	RfD <sub>d</sub> (mg/kg-day)  1.00E-07 5.00E-06 9.60E-04  1.12E-05 1.60E-04 1.00E+00 6.00E-03 2.00E-03 7.00E-02 3.00E+00 4.40E-04 4.40E-04 4.40E-04 2.00E-05	(mg/kg)  2.59E+03  3.02E+01 4.32E+02 5.39E+02 1.19E+03 1.19E+03 1.19E+03 1.19E+03
Oral Slope Factor Adjusted for GI Absorption Target Hazard Quotient Target Risk  Analyte  Lead Compounds  ~Lead subacetate  ~Tetraethyl Lead  Lewisite  Manganese (Non-diet)  Mercury Compounds  ~Mercury Compounds  ~Mercury Celemental)  Methyl Acetate  Methylene Chloride (and other Mercury salts)  ~Methylene Chloride  Methylene-bis(2-chloroaniline), 4,4'-  Methylstyrene, Alpha-  Mineral oils  Nickel Hydroxide  Nickel Goxide  Nickel Soluble Salts  Nickel Soluble Salts  Nickel Subsulfide  Pentachloroethane  Phosphorus, White  Phthalates  ~Dimethylterephthalate	THQ TR  Mutagen?	1 1.0E-06  ABS <sub>d</sub> \ (unitless)  1.00E-01  1.00E-01  1.00E-01	1 1.0E-06  GI Absorption (unitless)  1.00E+00 1.00E+00 1.00E+00 4.00E-02  7.00E-02 1.00E+00 1.00E+00 1.00E+00 1.00E+00 4.00E-02 4.00E-02 4.00E-02 4.00E-02 1.00E+00 1.00E+00 1.00E+00	dimensionless di	Residential USEPA F Cancer (mg/kg)  2.91E+02 5.97E+00	RSL <sub>D</sub> RfD <sub>d</sub> (mg/kg-day)  1.00E-07 5.00E-06 9.60E-04  2.10E-05 1.00E+00 6.00E-03 2.00E-03 7.00E-02 3.00E+00 4.40E-04 4.40E-04 4.40E-04 2.00E-05	Noncancer (mg/kg)  6.59E+02	1.00E-02	GI Absorption (unitless)  1.00E+00 1.00E+00 1.00E+00 4.00E-02  7.00E-02 1.00E+00 1.00E+00 1.00E+00 1.00E+00 4.00E-02 4.00E-02 4.00E-02 4.00E-02 1.00E+00 1.00E+00 1.00E+00 1.00E+00	SF <sub>d</sub> (mg/kg-day) <sup>-1</sup> 3.80E-02 1.40E-02 1.50E+00 2.28E+01 4.25E+01 9.00E-02	Residential DTSC-SL <sub>D</sub> Cancer (mg/kg)  5.69E+01 3.36E-01 9.51E-01 5.09E-01	RfD <sub>d</sub> (mg/kg-day)  1.00E-07 5.00E-06 9.60E-04  1.12E-05 1.60E-04 1.00E+00 6.00E-03 2.00E-03 7.00E-02 3.00E+00 4.40E-04 4.40E-04 4.40E-04 2.00E-05	(mg/kg)  2.59E+03  3.02E+01 4.32E+02 5.39E+02 1.19E+03 1.19E+03 1.19E+03 1.19E+03
Oral Slope Factor Adjusted for GI Absorption Target Hazard Quotient Target Risk  Analyte  Lead Compounds ~Lead subacetate ~Tetraethyl Lead Lewisite  Manganese (Non-diet)  Mercury Compounds ~Mercury Compounds ~Mercury Chloride (and other Mercury salts)  ~Mercury (elemental)  Methyl Acetate  Methylene-bis(2-chloroaniline), 4,4'-  Methylstyrene, Alpha- Mineral oils  Nickel Hydroxide  Nickel Oxide  Nickel Soluble Salts  Nickel Subsulfide  Pentachloroethane  Phosphorus, White  Phthalates ~Dimethylterephthalate  Silver  Tetrachloroethane, 1,1,1,2-	THQ TR  Mutagen?	1 1.0E-06  ABS <sub>d</sub> \text{\text{in}} (unitless)  1.00E-01 1.00E-01	1 1.0E-06  GI Absorption (unitless)  1.00E+00 1.00E+00 1.00E+00 4.00E-02 1.00E+00 1.00E+00 1.00E+00 1.00E+00 4.00E-02 4.00E-02 4.00E-02 4.00E-02 1.00E+00 4.00E-02 1.00E+00 4.00E-02 1.00E+00 1.00E+00	dimensionless di	Residential USEPA F Cancer (mg/kg)  2.91E+02 5.97E+00	RfD <sub>d</sub> (mg/kg-day)  1.00E-07 5.00E-06 9.60E-04  2.10E-05 1.00E+00 6.00E-03 2.00E-03 7.00E-02 3.00E+00 4.40E-04 4.40E-04 4.40E-04 4.40E-04 2.00E-05  1.00E-01 2.00E-04 3.00E-02	Noncancer (mg/kg)  6.59E+02	1.00E-02	GI Absorption (unitless)  1.00E+00 1.00E+00 1.00E+00 4.00E-02  7.00E-02 1.00E+00 1.00E+00 1.00E+00 1.00E+00 4.00E-02 4.00E-02 4.00E-02 4.00E-02 4.00E-02 1.00E+00 1.00E+00 1.00E+00 1.00E+00	SF <sub>d</sub> (mg/kg-day) <sup>-1</sup> 3.80E-02 1.40E-02 1.50E+00 2.28E+01 4.25E+01 9.00E-02 2.60E-02	Residential DTSC-SL <sub>D</sub> Cancer (mg/kg)  5.69E+01 3.36E-01 9.51E-01 5.09E-01	RfD <sub>d</sub> (mg/kg-day)  1.00E-07 5.00E-06 9.60E-04  1.12E-05 1.60E-04 1.00E+00 6.00E-03 2.00E-03 7.00E-02 3.00E+00 4.40E-04 4.40E-04 4.40E-04 4.40E-04 2.00E-05  1.00E-01 2.00E-04 3.00E-02	(mg/kg)  2.59E+03  3.02E+01  4.32E+02 5.39E+02 1.19E+03 1.19E+03 1.19E+03 1.19E+03 5.39E+02 5.39E+02
Oral Slope Factor Adjusted for GI Absorption Target Hazard Quotient Target Risk  Analyte  Lead Compounds  ~Lead subacetate  ~Tetraethyl Lead Lewisite  Manganese (Non-diet)  Mercury Compounds  ~Mercury Compounds  ~Mercury Celemental)  Methyl Acetate  Methylene Chloride (and other Mercury salts)  ~Methylene Chloride Methylene, Alpha- Mineral oils  Nickel Hydroxide  Nickel Goxide  Nickel Soluble Salts  Nickel Subsulfide  Pentachloroethane  Phosphorus, White  Phthalates  ~Dimethylterephthalate  Silver	THQ TR  Mutagen?	1 1.0E-06  ABS <sub>d</sub> \text{\text{in}} (unitless)  1.00E-01 1.00E-01	1 1.0E-06  GI Absorption (unitless)  1.00E+00 1.00E+00 1.00E+00 4.00E-02 7.00E-02 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 4.00E-02 4.00E-02 4.00E-02 4.00E-02 1.00E+00 1.00E+00 1.00E+00 1.00E+00	dimensionless di	Residential USEPA F Cancer (mg/kg)  2.91E+02 5.97E+00	RSL <sub>D</sub> RfD <sub>d</sub> (mg/kg-day)  1.00E-07 5.00E-06 9.60E-04  2.10E-05 1.00E+00 6.00E-03 2.00E-03 7.00E-02 3.00E+00 4.40E-04 4.40E-04 4.40E-04 2.00E-05  1.00E-01 2.00E-01	Noncancer (mg/kg)  6.59E+02	ABS <sub>d</sub> <sup>la</sup> (unitless)  1.00E-01 1.00E-02 1.00E-02 1.00E-01 1.00E-02 1.00E-02 1.00E-02 1.00E-02 1.00E-02 1.00E-02 1.00E-02 1.00E-02 1.00E-02	GI Absorption (unitless)  1.00E+00 1.00E+00 1.00E+00 4.00E-02  7.00E-02 1.00E+00 1.00E+00 1.00E+00 1.00E+00 4.00E-02 4.00E-02 4.00E-02 4.00E-02 4.00E-02 1.00E+00 1.00E+00 1.00E+00 1.00E+00	SF <sub>d</sub> (mg/kg-day) <sup>-1</sup> 3.80E-02 1.40E-02 1.50E+00 2.28E+01 4.25E+01 9.00E-02	Residential DTSC-SL <sub>D</sub> Cancer (mg/kg)  5.69E+01  3.36E-01 9.51E-01 5.09E-01	RfD <sub>d</sub> (mg/kg-day)  1.00E-07 5.00E-06 9.60E-04  1.12E-05 1.60E-04 1.00E+00 6.00E-03 2.00E-03 7.00E-02 3.00E+00 4.40E-04 4.40E-04 4.40E-04 2.00E-05  1.00E-01 2.00E-01	(mg/kg)  2.59E+03  3.02E+01  4.32E+02  5.39E+02  1.19E+03 1.19E+03 1.19E+03 1.19E+03 5.39E+02

..\2016-01 Soil Documentation - Dermal - Residential

Table A-4a. USEPA RSI's and DTSC-SI's for a Residential Recentor Exposed to Soil via Dermal Contact

Description	Variable	USEPA Value	DTSC Value	Units	Equations:								
Dermal Soil Absorption Factor\(^a\)	ABS <sub>d</sub> \a		l-specific	unitless	Carcinogens:								
*	u	10	1-specific 10		Carcinogens.	$TR \times (AT_c \times 365 d)$	lay (year)						
Age-dependent Adjustment Factor, 0-2	ADAF <sub>0-2</sub> ADAF <sub>2-6</sub>	10	3	yrs	$(R)SL_D =$	$(FD \times SA \times AF)$	FD × SA × AF \						
Age-dependent Adjustment Factor, 2-6 Age-dependent Adjustment Factor, 6-16	2.0	3	3	yrs	$SF_d \times EF_r \times E$	$V_r \times EC_r \times \left(\frac{ED_c \times SA_c \times AF_c}{BW_c}\right)$	$+\frac{ED_a \times SH_a \times HI_a}{BW_a}$ $\times$ Al	$BS_d \times CF_d$					
Age-dependent Adjustment Factor, 6-16 Age-dependent Adjustment Factor, 16-26	$ADAF_{6-16}$ $ADAF_{16-26}$	3 1	1	yrs yrs	Mutagens:	(	- ·· u /						
Soil-to-Skin Adherence Factor, adult		0.07	0.07	mg/cm <sup>2</sup> -day	wittagens.		$TR \times (AT_c \times 365  days/ye)$	ar)					
	AF <sub>a</sub>			mg/cm <sup>2</sup> -day	$(R)SL_D =$				DAF \				
Soil-to-Skin Adherence Factor, child	$AF_c$	0.2	0.2			$V_r \times EC_r \times \begin{pmatrix} \frac{ED_{0-2} \times AF_c \times ED_{0-2} \times AF_c \times ED_{0-16} \times AF_a \times ED_{0-16} \times E$	$\frac{SN_c \wedge NDNr_{0-2}}{SW_c} + \frac{ED_{2-6}}{SW_c}$	$BW_c$	<del>DAI'2-6</del> +				
Averaging Time, Carcinogens	AT <sub>c</sub>	70	70	yrs	$SF_d \times EF_r \times E$	$V_r \times EC_r \times \Big _{ED_{6-16} \times AF_a \times AF_a}$	$SA_a \times ADAF_{6-16}$ . $ED_{16-16}$	$_{-26} \times AF_a \times SA_a \times$	$ADAF_{16-26}$ $\times$	$ABS_d \times CF_d$			
Averaging Time, noncarcinogens, adult	$AT_{nc,a}$	20 6	20 6	yrs		$\sqrt{\frac{B}{B}}$	$W_a$ + $\frac{10}{W_a}$	$BW_a$	10 20				
Averaging Time, noncarcinogens, child Body Weight, adult	$AT_{nc,c}$ $BW_a$	80	80	yrs kg	Trichloroethene:								
Body Weight, child	$BW_c$	15	15	kg	Tremoroculeic.								
	· ·	0.804	0.804	dimensionless	$(R)SL_D =$			T	$R \times (AT_c \times 365 dc)$				
Carcinogenic adjustment factor  Conversion Factor	CAF <sub>O</sub> CF <sub>d</sub>	0.804 1E-06	0.804 1E-06	kg/mg	( ) 2	(,	(ED EE 64 :=			$\int ED_{0-2} \times EF_r \times F_r$	$\frac{AF_c \times SA_c \times ADAF_{0-2}}{BW} + \frac{ED_{2-}}{BW}$	$_{-6} \times EF_r \times AF_c \times SA_c \times ADAP$	$\frac{7}{2-6} + 1$
Fraction of EV in Contact with Soil, resident	EC <sub>r</sub>	112-00	112-00	unitless	$SF_d \times EV_r \times E$	$C_r \times ABS_d \times CF_d \times \left\{ \left[ CAF_o \times \right] \right\} $	$\left(\frac{ED_c \times EF_r \times SA_c \times AF_c}{DW}\right)$	$+\frac{ED_a \times EF_r \times SA}{DW}$	$\left \frac{1_a \times AF_a}{MA}\right $	F <sub>0</sub> ×   ED SEE 4	BW <sub>C</sub> '	BW <sub>C</sub>	
Exposure Duration, child 0-2	$EC_r$ $ED_{0-2}$	2.	2	yrs			\ DW <sub>C</sub>	bvv <sub>a</sub>	/]	$\sum_{ED_{6-16} \times EF_r \times A}$	$\frac{F_a \times SA_a \times ADAF_{6-16}}{RW} + \frac{ED_{16}}{RW}$	$\frac{1}{6-26} \times EF_r \times AF_a \times SA_a \times AD_b}{RW}$	$\frac{AF_{16-26}}{}$
Exposure Duration, child 2-6	$ED_{0-2}$ $ED_{2-6}$	4	4	yrs		(			L	\	, va	Dwa	/ 1/
Exposure Duration, child 6-16	ED <sub>6-16</sub>	10	10	yrs	Vinyl Chloride:								
Exposure Duration, adult 16-26	ED <sub>16-26</sub>	10	10	yrs	(D) G		TR						
Exposure Duration, adult	ED <sub>3</sub>	20	20	yrs	$(R)SL_D =$	$[/_{PP} (ED_c \times SA_c \times A)]$	$AF_c = ED_a \times SA_a \times AF_a$	400 00		1			
Exposure Duration, child	ED <sub>c</sub>	6	6	yrs	CE VEUVE	$C_r \times \left[ \left( \frac{EF_r \times \left( \frac{ED_c \times SA_c \times A}{BW_c} \right)}{\frac{BW_c}{BW_c}} \right) \right]$	$\frac{-c}{BW_a} + \frac{a}{BW_a} \times \frac{a}{BW_a}$	$ABS_d \times CF_d$	$(SA_c \times AF_c \times ABS_c)$ $BW_c$	$_{d} \times CF_{d} \setminus$			
Exposure Frequency, resident	$EF_r$	350	350	days/yr	$SF_d \times EV_r \times E$		$AT_{-} \times 365 \frac{days}{}$		$BW_c$	<del></del> )			
Event Frequency, resident	$EV_r$	1	1	events/day		1\	vear	/		<b>I</b>			
				e vents/ day		L \	<i>you.</i>	,					
0 0	$MAF_{O}$	0.202	0.202	dimensionless			<i>yeu.</i>	,		,			
Refererenc Dose Adjusted for GI Absorption	$RfD_d$	chemica	l-specific	dimensionless mg/kg-day			<i>y</i>			J			
Refererenc Dose Adjusted for GI Absorption (Regional) Screening Level, dermal	$RfD_d$ $(R)SL_D$	chemica derived	l-specific d herein	dimensionless mg/kg-day mg/kg	Noncarcinogens:		<i>y</i>	ium - noncarcinogen	ic:	,			
Reference Dose Adjusted for GI Absorption Regional) Screening Level, dermal	$RfD_d$	chemica	l-specific	dimensionless mg/kg-day mg/kg cm <sup>2</sup>	<u> </u>	$10 \times (AT \times 26E  day) \times B$	DTSC Cadm	· ·		JUO X (AT	. 265 day \ \ PW		
Refererenc Dose Adjusted for GI Absorption Regional) Screening Level, dermal Exposed Body Surface Area, adult	$RfD_d$ $(R)SL_D$	chemica derived	l-specific d herein	dimensionless mg/kg-day mg/kg	<u> </u>	$IQ \times \left(AT_{nc,c} \times 365 \frac{day}{year}\right) \times B$	DTSC Cadm	· ·		$HQ \times \left(AT_{nc,26-yr\ adult}\right)$	$365 \frac{day}{year} \times BW_a$	_	
Mutagenic adjustment factor Refererenc Dose Adjusted for GI Absorption (Regional) Screening Level, dermal Exposed Body Surface Area, adult Exposed Body Surface Area, child Oral Slope Factor Adjusted for GI Absorption	$RfD_d$ $(R)SL_D$ $SA_a$	chemica derived 6032 2373	l-specific d herein 6032	dimensionless mg/kg-day mg/kg cm <sup>2</sup>	<u> </u>	$IQ \times \left(AT_{nc,c} \times 365 \frac{day}{year}\right) \times B$ $\frac{1}{CD} \times EV_{r} \times EC_{r} \times SA_{c} \times AF_{c}$	DTSC Cadm	· ·		$HQ \times \left(AT_{nc,26-yr\ adult} \times \frac{1}{1000} \times EV. \times EV.$	$365 \frac{day}{year} \times BW_a$ $C_C \times SA_C \times AF_C \times ABS_C \times CF$	<del>-</del>	
Refererenc Dose Adjusted for GI Absorption Regional) Screening Level, dermal Exposed Body Surface Area, adult Exposed Body Surface Area, child Oral Slope Factor Adjusted for GI Absorption	$RfD_d$ $(R)SL_D$ $SA_a$ $SA_c$	chemica derived 6032 2373	l-specific d herein 6032 2900	dimensionless mg/kg-day mg/kg cm <sup>2</sup> cm <sup>2</sup>	<u> </u>	$IQ \times \left(AT_{nc,c} \times 365 \frac{day}{year}\right) \times B$ $\frac{1}{fD_d} \times EV_r \times EC_r \times SA_c \times AF_c$	DTSC Cadm	· ·		$HQ \times \left(AT_{nc,26-yr\ adult} \times \frac{1}{RfD_d} \times EV_r \times E\right)$	$365 \frac{day}{year} \times BW_a$ $C_C \times SA_a \times AF_a \times ABS_d \times CF$	$\overline{f}_d$	
Refererenc Dose Adjusted for GI Absorption (Regional) Screening Level, dermal Exposed Body Surface Area, adult Exposed Body Surface Area, child Oral Slope Factor Adjusted for GI Absorption Farget Hazard Quotient	$RfD_d \\ (R)SL_D \\ SA_a \\ SA_c \\ SF_d$	chemica derived 6032 2373	l-specific d herein 6032 2900	dimensionless mg/kg-day mg/kg cm <sup>2</sup> cm <sup>2</sup> (mg/kg-day) <sup>-1</sup>	$(R)SL_D = \frac{TE}{EF_r \times ED_c \times \frac{1}{R}}$	) Da	DTSC Cadm	· ·		$HQ \times \left(AT_{nc,26-yr\ adult} \times \frac{1}{RfD_d} \times EV_r \times E\right)$		$\overline{f}_d$	
Refererenc Dose Adjusted for GI Absorption Regional) Screening Level, dermal Exposed Body Surface Area, adult Exposed Body Surface Area, child Oral Slope Factor Adjusted for GI Absorption Carget Hazard Quotient	$\begin{aligned} & \text{RfD}_{\text{d}} \\ & (\text{R}) \text{SL}_{\text{D}} \\ & \text{SA}_{\text{a}} \\ & \text{SA}_{\text{c}} \\ & \text{SF}_{\text{d}} \\ & \text{THQ} \end{aligned}$	chemica derived 6032 2373 chemica 1 1.0E-06	1-specific d herein 6032 2900 1-specific 1 1.0E-06	dimensionless mg/kg-day mg/kg cm <sup>2</sup> cm <sup>2</sup> (mg/kg-day) <sup>-1</sup> dimensionless dimensionless	$(R)SL_D = \frac{TE}{EF_r \times ED_c \times \frac{1}{R}}$ Residential USEPA RS	SL <sub>D</sub>	DTSC Cadm $\frac{W_c}{\times ABS_d \times CF_d}$	$SL_{D-adult,0}$	$T_{cd} = \frac{T}{EF_r \times ED_{26-y}}$	N) D <sub>d</sub>	Residential DTSC- $SL_D$		
efererenc Dose Adjusted for GI Absorption Regional) Screening Level, dermal xposed Body Surface Area, adult xposed Body Surface Area, child bral Slope Factor Adjusted for GI Absorption arget Hazard Quotient	$\begin{aligned} & \text{RfD}_{\text{d}} \\ & (\text{R}) \text{SL}_{\text{D}} \\ & \text{SA}_{\text{a}} \\ & \text{SA}_{\text{c}} \\ & \text{SF}_{\text{d}} \\ & \text{THQ} \end{aligned}$	chemica derived 6032 2373 chemica 1	l-specific d herein 6032 2900 l-specific	dimensionless mg/kg-day mg/kg cm <sup>2</sup> cm <sup>2</sup> (mg/kg-day) <sup>-1</sup> dimensionless dimensionless	$(R)SL_D = \frac{TE}{EF_r \times ED_c \times \frac{1}{R}}$	SL <sub>D</sub> RfD <sub>d</sub>	DTSC Cadm $W_c$ $\times ABS_d \times CF_d$ Noncancer	SL <sub>D-adult,0</sub> ABS <sub>d</sub> <sup>la</sup>	$T_{cd} = \frac{T}{EF_r \times ED_{26-y}}$ GI Absorption	$HQ \times \left(AT_{nc,26-yr\ adult} \times \frac{1}{RfD_d} \times EV_r \times E\right)$ $SF_d$		RfD <sub>d</sub>	Noncancer
Refererenc Dose Adjusted for GI Absorption Regional) Screening Level, dermal Exposed Body Surface Area, adult Exposed Body Surface Area, child Oral Slope Factor Adjusted for GI Absorption Farget Hazard Quotient Farget Risk	$\begin{aligned} & \text{RfD}_{\text{d}} \\ & (\text{R}) \text{SL}_{\text{D}} \\ & \text{SA}_{\text{a}} \\ & \text{SA}_{\text{c}} \\ & \text{SF}_{\text{d}} \\ & \text{THQ} \end{aligned}$	chemica derived 6032 2373 chemica 1 1.0E-06	1-specific d herein 6032 2900 1-specific 1 1.0E-06	dimensionless mg/kg-day mg/kg cm <sup>2</sup> cm <sup>2</sup> (mg/kg-day) <sup>-1</sup> dimensionless dimensionless	$(R)SL_D = \frac{TE}{EF_r \times ED_c \times \frac{1}{R}}$ Residential USEPA RS	SL <sub>D</sub>	DTSC Cadm $\frac{W_c}{\times ABS_d \times CF_d}$	$SL_{D-adult,0}$	$T_{cd} = \frac{T}{EF_r \times ED_{26-y}}$	N) D <sub>d</sub>	Residential DTSC- $SL_D$		Noncancer (mg/kg)
Refererenc Dose Adjusted for GI Absorption (Regional) Screening Level, dermal Exposed Body Surface Area, adult Exposed Body Surface Area, child Oral Slope Factor Adjusted for GI Absorption Farget Hazard Quotient Farget Risk	RfD <sub>d</sub> (R)SL <sub>D</sub> SA <sub>a</sub> SA <sub>c</sub> SF <sub>d</sub> THQ TR	chemica derived 6032 2373 chemica 1 1.0E-06	l-specific d herein 6032 2900 l-specific 1 1.0E-06	dimensionless mg/kg-day mg/kg cm² cm² (mg/kg-day)¹¹ dimensionless dimensionless	$(R)SL_D = \frac{TH}{EF_r \times ED_c \times \frac{1}{R}}$ Residential USEPA RS	SL <sub>D</sub> RfD <sub>d</sub>	DTSC Cadm $W_c$ $\times ABS_d \times CF_d$ Noncancer	SL <sub>D-adult,0</sub> ABS <sub>d</sub> <sup>la</sup>	$T_{cd} = \frac{T}{EF_r \times ED_{26-y}}$ GI Absorption	SF <sub>d</sub>	Residential DTSC-SL <sub>D</sub> Cancer	RfD <sub>d</sub>	
Refererenc Dose Adjusted for GI Absorption (Regional) Screening Level, dermal Exposed Body Surface Area, adult Exposed Body Surface Area, child	RfD <sub>d</sub> (R)SL <sub>D</sub> SA <sub>a</sub> SA <sub>c</sub> SF <sub>d</sub> THQ TR	chemica derived 6032 2373 chemica 1 1.0E-06  ABS <sub>d</sub> \(^{\alpha}\) (unitless)	l-specific d herein 6032 2900 l-specific 1 1.0E-06  GI Absorption (unitless)	dimensionless mg/kg-day mg/kg cm² cm² (mg/kg-day)¹¹ dimensionless dimensionless	$(R)SL_D = \frac{TH}{EF_r \times ED_c \times \frac{1}{R}}$ Residential USEPA RS	$SL_{D}$ $RfD_{d}$ $(mg/kg-day)$	DTSC Cadm $W_{c}$ $\times ABS_{d} \times CF_{d}$ Noncancer $\text{(mg/kg)}$	$SL_{D-adult,O}$ ABS <sub>d</sub> <sup>la</sup> (unitless)	$E_{rd} = \frac{T}{EF_r \times ED_{26-y}}$ GI Absorption (unitless)	$\mathbf{SF_d}$ $(\text{mg/kg-day})^{-1}$	Residential DTSC-SL <sub>D</sub> Cancer (mg/kg)	<b>RfD</b> <sub>d</sub> (mg/kg-day)	(mg/kg)
Refererenc Dose Adjusted for GI Absorption Regional) Screening Level, dermal Exposed Body Surface Area, adult Exposed Body Surface Area, child Oral Slope Factor Adjusted for GI Absorption Carget Hazard Quotient Carget Risk  Alyte Coluene Cri-n-butyltin	RfD <sub>d</sub> (R)SL <sub>D</sub> SA <sub>a</sub> SA <sub>c</sub> SF <sub>d</sub> THQ TR	chemica derived 6032 2373 chemica 1 1.0E-06  ABS <sub>d</sub> \(^1a\) (unitless)	l-specific d herein 6032 2900 l-specific 1 1.0E-06  GI Absorption (unitless) 1.00E+00	dimensionless mg/kg-day mg/kg cm² cm² (mg/kg-day)¹¹ dimensionless dimensionless	$(R)SL_D = \frac{TE}{EF_r \times ED_c \times \frac{1}{R}}$ Residential USEPA RS Cancer $(mg/kg)$	SL <sub>D</sub> RfD <sub>d</sub> (mg/kg-day)  8.00E-02	DTSC Cadm $W_c$ $\times$ $ABS_d \times CF_d$ Noncancer $(mg/kg)$	SL <sub>D-adult,0</sub> ABS <sub>d</sub> <sup> a</sup> (unitless)	$E_{cd} = \frac{T}{EF_r \times ED_{26-y}}$ <b>GI Absorption</b> (unitless) $1.00E+00$	SF <sub>d</sub> (mg/kg-day) <sup>-1</sup>	Residential DTSC-SL <sub>D</sub> Cancer (mg/kg)	RfD <sub>d</sub> (mg/kg-day) 8.00E-02	(mg/kg)
Refererenc Dose Adjusted for GI Absorption Regional) Screening Level, dermal Exposed Body Surface Area, adult Exposed Body Surface Area, child Dral Slope Factor Adjusted for GI Absorption Parget Hazard Quotient Parget Risk  Reference Column  Particular Column	RfD <sub>d</sub> (R)SL <sub>D</sub> SA <sub>a</sub> SA <sub>c</sub> SF <sub>d</sub> THQ TR	chemica derived 6032 2373 chemica 1 1.0E-06  ABS <sub>d</sub> \(^1a\) (unitless)	1-specific d herein 6032 2900 1-specific 1 1.0E-06 GI Absorption (unitless) 1.00E+00 1.00E+00	dimensionless mg/kg-day mg/kg cm² cm² (mg/kg-day)¹¹ dimensionless dimensionless	$(R)SL_D = \frac{TE}{EF_r \times ED_c \times \frac{1}{R}}$ Residential USEPA RS Cancer (mg/kg)	SL <sub>D</sub> RfD <sub>d</sub> (mg/kg-day)  8.00E-02  3.00E-04	DTSC Cadm $W_c$ $\times$ $ABS_d \times CF_d$ Noncancer $(mg/kg)$	SL <sub>D-adult,0</sub> ABS <sub>d</sub> <sup> a</sup> (unitless)	$F_{cd} = \frac{T}{EF_r \times ED_{26-y}}$ <b>GI Absorption</b> (unitless) $\frac{1.00E+00}{1.00E+00}$	SF <sub>d</sub> (mg/kg-day) <sup>-1</sup>	Residential DTSC-SL <sub>D</sub> Cancer (mg/kg)	RfD <sub>d</sub> (mg/kg-day) 8.00E-02 3.00E-04	(mg/kg)
Refererenc Dose Adjusted for GI Absorption Regional) Screening Level, dermal Exposed Body Surface Area, adult Exposed Body Surface Area, child Dral Slope Factor Adjusted for GI Absorption Parget Hazard Quotient Parget Risk  Reference Cri-n-butyltin Crichlorobenzene, 1,2,3- Crichloroethane, 1,1,1-	RfD <sub>d</sub> (R)SL <sub>D</sub> SA <sub>a</sub> SA <sub>c</sub> SF <sub>d</sub> THQ TR	chemica derived 6032 2373 chemica 1 1.0E-06 ABS <sub>d</sub> \langle (unitless)	1-specific d herein 6032 2900 1-specific 1 1.0E-06 GI Absorption (unitless) 1.00E+00 1.00E+00 1.00E+00	dimensionless mg/kg-day mg/kg cm² cm² (mg/kg-day)¹¹ dimensionless dimensionless	$(R)SL_D = \frac{TE}{EF_r \times ED_c \times \frac{1}{R}}$ Residential USEPA RS Cancer (mg/kg)	RfD <sub>d</sub> (mg/kg-day)  8.00E-02 3.00E-04 8.00E-04	DTSC Cadm $W_c$ $\times$ $ABS_d \times CF_d$ Noncancer $(mg/kg)$	SL <sub>D-adult,0</sub> ABS <sub>d</sub> <sup>la</sup> (unitless)	$F_{cd} = \frac{T}{EF_r \times ED_{26-y}}$ GI Absorption (unitless)  1.00E+00 1.00E+00 1.00E+00 1.00E+00	SF <sub>d</sub> (mg/kg-day) <sup>-1</sup>	Residential DTSC-SL <sub>D</sub> Cancer (mg/kg)	RfD <sub>d</sub> (mg/kg-day) 8.00E-02 3.00E-04 8.00E-04	(mg/kg)
Refererenc Dose Adjusted for GI Absorption Regional) Screening Level, dermal Exposed Body Surface Area, adult Exposed Body Surface Area, child Oral Slope Factor Adjusted for GI Absorption Garget Hazard Quotient Garget Risk  Relyte  Coluene Cri-n-butyltin Crichlorobenzene, 1,2,3- Crichlorofluoromethane	RfD <sub>d</sub> (R)SL <sub>D</sub> SA <sub>a</sub> SA <sub>c</sub> SF <sub>d</sub> THQ TR	chemica derived 6032 2373 chemica 1 1.0E-06 ABS <sub>d</sub> \(\frac{1}{a}\) (unitless)	l-specific d herein 6032 2900 l-specific 1 1.0E-06 GI Absorption (unitless) 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00	dimensionless mg/kg-day mg/kg cm² cm² (mg/kg-day)¹¹ dimensionless dimensionless  n SF <sub>d</sub> (mg/kg-day)¹¹	$(R)SL_D = \frac{TH}{EF_r \times ED_c \times \overline{R}}$ Residential USEPA RS Cancer (mg/kg)	RfD <sub>d</sub> (mg/kg-day)  8.00E-02  3.00E-04  8.00E-04  2.00E+00  3.00E-01	DTSC Cadm  W <sub>c</sub> × ABS <sub>d</sub> × CF <sub>d</sub> Noncancer (mg/kg)	SL <sub>D-adult,0</sub> ABS <sub>d</sub> <sup>la</sup> (unitless)	$\frac{GI \text{ Absorption}}{EF_r \times ED_{26-y}}$ $\frac{GI \text{ Absorption}}{(\text{unitless})}$ $\frac{1.00E+00}{1.00E+00}$ $\frac{1.00E+00}{1.00E+00}$ $\frac{1.00E+00}{1.00E+00}$	SF <sub>d</sub> (mg/kg-day) <sup>-1</sup>	Residential DTSC-SL <sub>D</sub> Cancer (mg/kg)	RfD <sub>d</sub> (mg/kg-day) 8.00E-02 3.00E-04 8.00E-04 2.00E+00 3.00E-01	(mg/kg)
Refererenc Dose Adjusted for GI Absorption Regional) Screening Level, dermal Exposed Body Surface Area, adult Exposed Body Surface Area, child Oral Slope Factor Adjusted for GI Absorption Garget Hazard Quotient Garget Risk  Adyte  Coluene  Crichlorobenzene, 1,2,3- Crichlorofluoromethane Crichlorophenol, 2,4,6-	RfD <sub>d</sub> (R)SL <sub>D</sub> SA <sub>a</sub> SA <sub>c</sub> SF <sub>d</sub> THQ TR	chemica derived 6032 2373 chemica 1 1.0E-06 ABS <sub>d</sub> la (unitless) 1.00E-01	1-specific d herein 6032 2900 1-specific 1 1.0E-06 GI Absorption (unitless) 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00	dimensionless mg/kg-day mg/kg cm² cm² (mg/kg-day)¹¹ dimensionless dimensionless	$(R)SL_D = \frac{TH}{EF_r \times ED_c \times \frac{1}{R}}$ Residential USEPA RS Cancer (mg/kg) 2.25E+02	RfD <sub>d</sub> (mg/kg-day)  8.00E-02  3.00E-04  8.00E-04  2.00E+00  3.00E-01  1.00E-03	DTSC Cadm $W_c$ $\times$ $ABS_d \times CF_d$ Noncancer $(mg/kg)$ 3.30E+02	ABS <sub>d</sub> <sup>la</sup> (unitless)  1.00E-01	$F_{cd} = \frac{T}{EF_r \times ED_{26-y}}$ <b>GI Absorption</b> (unitless) $\frac{1.00E+00}{1.00E+00}$ $\frac{1.00E+00}{1.00E+00}$ $\frac{1.00E+00}{1.00E+00}$ $\frac{1.00E+00}{1.00E+00}$	SF <sub>d</sub> (mg/kg-day) <sup>-1</sup> 7.00E-02	Residential DTSC-SL <sub>D</sub> Cancer (mg/kg)  3.09E+01	RfD <sub>d</sub> (mg/kg-day) 8.00E-02 3.00E-04 8.00E-04 2.00E+00 3.00E-01 1.00E-03	(mg/kg) 2.70E+02
Refererenc Dose Adjusted for GI Absorption Regional) Screening Level, dermal Exposed Body Surface Area, adult Exposed Body Surface Area, child Dral Slope Factor Adjusted for GI Absorption Farget Hazard Quotient Farget Risk  Alyte Foluene Fri-n-butyltin Frichlorobenzene, 1,2,3- Frichloroethane, 1,1,1- Frichlorofluoromethane Frichlorophenol, 2,4,6- Frichloropropane, 1,1,2-	RfD <sub>d</sub> (R)SL <sub>D</sub> SA <sub>a</sub> SA <sub>c</sub> SF <sub>d</sub> THQ TR  Mutagen?	chemica derived 6032 2373 chemica 1 1.0E-06 ABS <sub>d</sub> (unitless) 1.00E-01	1-specific d herein 6032 2900 1-specific 1 1.0E-06	dimensionless mg/kg-day mg/kg cm² cm² (mg/kg-day)¹¹ dimensionless dimensionless	$(R)SL_D = \frac{TH}{EF_r \times ED_c \times \frac{1}{R}}$ Residential USEPA RS Cancer (mg/kg)  2.25E+02	RfD <sub>d</sub> (mg/kg-day)  8.00E-02 3.00E-04 8.00E-04 2.00E+00 3.00E-01 1.00E-03 5.00E-03	DTSC Cadm  W <sub>c</sub> × ABS <sub>d</sub> × CF <sub>d</sub> Noncancer (mg/kg)  3.30E+02	SL <sub>D-adult,0</sub> ABS <sub>d</sub> <sup>ja</sup> (unitless)  1.00E-01	$F_{rd} = \frac{T}{EF_r \times ED_{26-y}}$ GI Absorption (unitless) $\frac{1.00E+00}{1.00E+00}$ $\frac{1.00E+00}{1.00E+00}$ $\frac{1.00E+00}{1.00E+00}$ $\frac{1.00E+00}{1.00E+00}$	SF <sub>d</sub> (mg/kg-day) <sup>-1</sup> 7.00E-02	Residential DTSC-SL <sub>D</sub> Cancer (mg/kg)  3.09E+01	RfD <sub>d</sub> (mg/kg-day) 8.00E-02 3.00E-04 8.00E-04 2.00E+00 3.00E-01 1.00E-03 5.00E-03	(mg/kg) 2.70E+02
Refererenc Dose Adjusted for GI Absorption (Regional) Screening Level, dermal Exposed Body Surface Area, adult Exposed Body Surface Area, child Oral Slope Factor Adjusted for GI Absorption Target Hazard Quotient Target Risk  alyte Toluene Tri-n-butyltin Trichlorobenzene, 1,2,3- Trichlorofluoromethane Trichlorophenol, 2,4,6- Trichloropropane, 1,1,2- Trichloropropane, 1,2,3-	RfD <sub>d</sub> (R)SL <sub>D</sub> SA <sub>a</sub> SA <sub>c</sub> SF <sub>d</sub> THQ TR	chemica derived 6032 2373 chemica 1 1.0E-06 ABS <sub>d</sub> (unitless) 1.00E-01	1-specific d herein 6032 2900 1-specific 1 1.0E-06	dimensionless mg/kg-day mg/kg cm² cm² (mg/kg-day)¹¹ dimensionless dimensionless	$(R)SL_D = \frac{TH}{EF_r \times ED_c \times \frac{1}{R}}$ Residential USEPA RS Cancer (mg/kg)  2.25E+02	RfD <sub>d</sub> (mg/kg-day)  8.00E-02  3.00E-04  8.00E-04  2.00E+00  3.00E-01  1.00E-03  5.00E-03  4.00E-03	DTSC Cadm $W_c$ $\times$ $ABS_d \times CF_d$ Noncancer $(mg/kg)$ 3.30E+02	SL <sub>D-adult,0</sub> ABS <sub>d</sub> <sup>ja</sup> (unitless)  1.00E-01	$F_{rd} = \frac{T}{EF_r \times ED_{26-y}}$ GI Absorption (unitless) $\frac{1.00E+00}{1.00E+00}$ $\frac{1.00E+00}{1.00E+00}$ $\frac{1.00E+00}{1.00E+00}$ $\frac{1.00E+00}{1.00E+00}$ $\frac{1.00E+00}{1.00E+00}$	SF <sub>d</sub> (mg/kg-day) <sup>-1</sup> 7.00E-02 3.00E+01	Residential DTSC-SL <sub>D</sub> Cancer (mg/kg)  3.09E+01	RfD <sub>d</sub> (mg/kg-day) 8.00E-02 3.00E-04 8.00E-04 2.00E+00 3.00E-01 1.00E-03 5.00E-03 4.00E-03	(mg/kg) 2.70E+02
Refererenc Dose Adjusted for GI Absorption Regional) Screening Level, dermal Exposed Body Surface Area, adult Exposed Body Surface Area, child Dral Slope Factor Adjusted for GI Absorption Farget Hazard Quotient Farget Risk  Alyte Foluene Fri-n-butyltin Frichlorobenzene, 1,2,3- Frichlorofluoromethane Frichlorophenol, 2,4,6- Frichloropropane, 1,1,2- Frichloropropane, 1,2,3- Frinchloropropane, 1,2,3- Frimethylbenzene, 1,3,5-	RfD <sub>d</sub> (R)SL <sub>D</sub> SA <sub>a</sub> SA <sub>c</sub> SF <sub>d</sub> THQ TR  Mutagen?	chemica derived 6032 2373 chemica 1 1.0E-06 ABS <sub>d</sub> \a (unitless) 1.00E-01	1-specific d herein 6032 2900 1-specific 1 1.0E-06 1-specific 1 1.0E-06 1-specific 1 1.0E-06 1.00E+00	dimensionless mg/kg-day mg/kg cm² cm² (mg/kg-day)¹¹ dimensionless dimensionless	$(R)SL_D = \frac{TH}{EF_r \times ED_c \times \frac{1}{R}}$ Residential USEPA RS Cancer (mg/kg)  2.25E+02	RfD <sub>d</sub> (mg/kg-day)  8.00E-02  3.00E-04  8.00E-04  2.00E+00  3.00E-01  1.00E-03  5.00E-03  4.00E-03  1.00E-02	DTSC Cadm $W_c$ $\times$ $ABS_d \times CF_d$ Noncancer $(mg/kg)$ 3.30E+02	SL <sub>D-adult,0</sub> ABS <sub>d</sub> <sup>la</sup> (unitless)  1.00E-01	$F_{rd} = \frac{T}{EF_r \times ED_{26-y}}$ GI Absorption (unitless) $\frac{1.00E+00}{1.00E+00}$ $\frac{1.00E+00}{1.00E+00}$ $\frac{1.00E+00}{1.00E+00}$ $\frac{1.00E+00}{1.00E+00}$ $\frac{1.00E+00}{1.00E+00}$ $\frac{1.00E+00}{1.00E+00}$	SF <sub>d</sub> (mg/kg-day) <sup>-1</sup> 7.00E-02 3.00E+01	Residential DTSC-SL <sub>D</sub> Cancer (mg/kg)  3.09E+01	RfD <sub>d</sub> (mg/kg-day)  8.00E-02  3.00E-04  8.00E-04  2.00E+00  3.00E-01  1.00E-03  5.00E-03  4.00E-03  1.00E-03	(mg/kg) 2.70E+02
Refererenc Dose Adjusted for GI Absorption Regional) Screening Level, dermal Exposed Body Surface Area, adult Exposed Body Surface Area, child Oral Slope Factor Adjusted for GI Absorption Farget Hazard Quotient Farget Risk  Alyte  Foluene Fri-n-butyltin Frichlorobenzene, 1,2,3- Frichlorophenol, 2,4,6- Frichlorophenol, 2,4,6- Frichloropropane, 1,1,2- Frichloropropane, 1,2,3- Frimethylbenzene, 1,3,5- Frimethylpentene, 2,4,4-	RfD <sub>d</sub> (R)SL <sub>D</sub> SA <sub>a</sub> SA <sub>c</sub> SF <sub>d</sub> THQ TR  Mutagen?	chemica derived 6032 2373 chemica 1 1.0E-06 ABS <sub>d</sub> \a (unitless) 1.00E-01	1-specific d herein 6032 2900 1-specific 1 1.0E-06 1-specific 1 1.0E-06	dimensionless mg/kg-day mg/kg cm² cm² (mg/kg-day)¹¹ dimensionless dimensionless	$(R)SL_D = \frac{TH}{EF_r \times ED_c \times \frac{1}{R}}$ Residential USEPA RS Cancer (mg/kg)  2.25E+02	RfD <sub>d</sub> (mg/kg-day)  8.00E-02  3.00E-04  8.00E-04  2.00E+00  3.00E-01  1.00E-03  5.00E-03  4.00E-03  1.00E-02	DTSC Cadm  W <sub>c</sub> × ABS <sub>d</sub> × CF <sub>d</sub> Noncancer (mg/kg)  3.30E+02	SL <sub>D-adult,0</sub> ABS <sub>d</sub> <sup>ja</sup> (unitless)  1.00E-01	$\frac{GI \text{ Absorption}}{EF_r \times ED_{26-y}}$ $\frac{GI \text{ Absorption}}{(\text{unitless})}$ $\frac{1.00E+00}{1.00E+00}$ $\frac{1.00E+00}{1.00E+00}$ $\frac{1.00E+00}{1.00E+00}$ $\frac{1.00E+00}{1.00E+00}$ $\frac{1.00E+00}{1.00E+00}$ $\frac{1.00E+00}{1.00E+00}$	SF <sub>d</sub> (mg/kg-day) <sup>-1</sup> 7.00E-02 3.00E+01	Residential DTSC-SL <sub>D</sub> Cancer (mg/kg)  3.09E+01	RfD <sub>d</sub> (mg/kg-day)  8.00E-02  3.00E-04  8.00E-04  2.00E+00  3.00E-01  1.00E-03  5.00E-03  4.00E-03  1.00E-02  1.00E-02	(mg/kg) 2.70E+02
efererenc Dose Adjusted for GI Absorption Regional) Screening Level, dermal xposed Body Surface Area, adult xposed Body Surface Area, child ral Slope Factor Adjusted for GI Absorption arget Hazard Quotient arget Risk  lyte  oluene ri-n-butyltin richlorobenzene, 1,2,3- richlorofluoromethane richlorophenol, 2,4,6- richloropropane, 1,1,2- richloropropane, 1,2,3- rimethylbenzene, 1,2,3- rimethylbenzene, 1,3,5-	RfD <sub>d</sub> (R)SL <sub>D</sub> SA <sub>a</sub> SA <sub>c</sub> SF <sub>d</sub> THQ TR  Mutagen?	chemica derived 6032 2373 chemica 1 1.0E-06 ABS <sub>d</sub> \a (unitless) 1.00E-01	1-specific d herein 6032 2900 1-specific 1 1.0E-06 1-specific 1 1.0E-06 1-specific 1 1.0E-06 1.00E+00	dimensionless mg/kg-day mg/kg cm² cm² (mg/kg-day)¹¹ dimensionless dimensionless	$(R)SL_D = \frac{TH}{EF_r \times ED_c \times \frac{1}{R}}$ Residential USEPA RS Cancer (mg/kg)  2.25E+02	RfD <sub>d</sub> (mg/kg-day)  8.00E-02  3.00E-04  8.00E-04  2.00E+00  3.00E-01  1.00E-03  5.00E-03  4.00E-03  1.00E-02	DTSC Cadm $W_c$ $\times$ $ABS_d \times CF_d$ Noncancer $(mg/kg)$ 3.30E+02	SL <sub>D-adult,0</sub> ABS <sub>d</sub> <sup>la</sup> (unitless)  1.00E-01	$F_{rd} = \frac{T}{EF_r \times ED_{26-y}}$ GI Absorption (unitless) $\frac{1.00E+00}{1.00E+00}$ $\frac{1.00E+00}{1.00E+00}$ $\frac{1.00E+00}{1.00E+00}$ $\frac{1.00E+00}{1.00E+00}$ $\frac{1.00E+00}{1.00E+00}$ $\frac{1.00E+00}{1.00E+00}$	SF <sub>d</sub> (mg/kg-day) <sup>-1</sup> 7.00E-02 3.00E+01	Residential DTSC-SL <sub>D</sub> Cancer (mg/kg)  3.09E+01	RfD <sub>d</sub> (mg/kg-day)  8.00E-02  3.00E-04  8.00E-04  2.00E+00  3.00E-01  1.00E-03  5.00E-03  4.00E-03  1.00E-03	(mg/kg) 2.70E+02

7.20E-01

1.00E+00

7.00E-03

1.00E+00

1.00E+00

M (VC)

"--" = no value

Vinyl Chloride

Additional Analytes Beryllium Sulfate

Dichlorobenzene, 1,3-

Methylcyclohexane

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3.00E-03

1.40E-05

---

1.00E-02

1.00E+00

1.00E+00

1.00E+00

1.00E+00

2.70E-01

---

3.00E-03

2.00E-04

3.00E-02

---

5.39E+02

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<sup>&</sup>lt;sup>la</sup> Dermal Absorption Factor (ABS<sub>d</sub>) values for the USEPA RSLs are from the USEPA RSL tables; values for the DTSC-SLs are from the RSL tables and from the DTSC Preliminary Endangerment Assessment (PEA) Manual, October 2015.

Table A-4b. USEPA RSLs and DTSC-SLs for a Commercial/Industrial Receptor Exposed to Soil via Dermal Contact

Description	Variable	USEPA Value	DTSC Value	:	Equations:							
Dermal Soil Absorption Factor\a	$ABS_d^{\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ $	chemical-		unitless	•							
Soil-to-Skin Adherence Factor, worker	$AF_{\mathrm{w}}$	0.12	0.2	mg/cm <sup>2</sup> -day		Carcinogens:			days			
Averaging Time, carcinogens	$AT_{c}^{w}$	70	70	yrs				$TR \times AT_c \times$	$\frac{365 \frac{days}{year} \times B}{SF_D \times SA_w \times A}$	$^{2}W_{a}$		
Averaging Time, noncarcinogens, adult	$AT_{nc,w}$	25	25	yrs		$(R)SL_D =$	FF V FD V	, FV × FC ×	CE × CA ×	AE V ABC V	CE	
Body Weight, adult	BW <sub>a</sub>	80	80	kg			$EI_W \wedge ED_W \wedge$	LV <sub>r</sub> \ LU <sub>r</sub> \	$SP_D \wedge SP_W \wedge P$	$AI_W \wedge ADS_d \wedge$	Gr <sub>d</sub>	
Conversion Factor	$CF_d$	1E-06	1E-06	_								
	_			kg/mg								
COPC Concentration in Soil	$C_{soil}$	chemical-	specific	mg/kg	,							
Fraction of EV in Contact with Soil, worker	$EC_{w}$	1	1	unitless	1	Noncarcinogens:		$THO \times AT_{max}$	× 365 <u>days</u>	$\times BW_{\alpha}$		
Exposure Duration, worker	$\mathrm{ED}_{\mathrm{w}}$	25	25	yrs		$(R)SL_{D}=$			$x_{v,w} \times 365 \frac{days}{year}$ $\times \frac{1}{RfD_{D}} \times SA_{w}$	a		
Exposure Frequency, worker	$EF_{\mathrm{w}}$	250	250	days/yr		(11)020	EE × ED >	$\langle EV_{m} \times EC_{m} \rangle$	$(\frac{1}{2 \cdot SA}) \times SA$	$\times AF \times ABS_d$	$\times CF_d$	
Event Frequency, worker	$\mathrm{EV}_{\mathrm{w}}$	1	1	events/day			ZIW X ZZW I	. 277 . 207 /	$RfD_D$	······································	<b>01</b> a	
Oral Reference Dose Adjusted for GI Absorption	$RfD_d$	chemical-	specific	mg/kg-day								
(Regional) Screening Level, dermal	$(R)SL_D$	derived	herein	mg/kg								
Exposed Body Surface Area, worker	$SA_{\mathrm{w}}$	3527	6032	cm <sup>2</sup>								
Oral Slope Factor Adjusted for GI Absorption	$SF_d$	chemical-	specific	(mg/kg-day) <sup>-1</sup>								
Target Hazard Quotient	THQ	1	1	dimensionless								
Target Risk	TR	1.0E-06	1.0E-06	dimensionless								
				ıstrial USEPA R	CIT				Commondal/I	ndustrial DTSC	CI	
	ABS <sub>d</sub> \a	GI Absorption		Cancer	RfD <sub>d</sub>	Noncancer	ARC \a	GI Absorption		Cancer	RfD <sub>d</sub>	Noncancer
Analyta	(unitless)	(unitless)	_		_		(unitless)	(unitless)			_	
Analyte	(unitiess)	(unitiess)	(mg/kg-day)	l (mg/kg)	(mg/kg-day)	(mg/kg)	(unitiess)	(unitiess)	(mg/kg-day) <sup>-1</sup>	(mg/kg)	(mg/kg-day)	(mg/kg)
USEPA RSL Analytes	1 00E 01	1.000.00	5 00E 01	1.55E : 01	2.005.02	5 52E + 02	1 00E 01	1.000.00	4.50E+00	6 02E 01	2.005.02	1.04E+02
Acrylamide Acrylonitrile	1.00E-01	1.00E+00 1.00E+00	5.00E-01 5.40E-01	1.55E+01	2.00E-03 4.00E-02	5.52E+03	1.00E-01	1.00E+00 1.00E+00	4.50E+00 1.00E+00	6.02E-01	2.00E-03 4.00E-02	1.94E+03
Arsenic, Inorganic	3.00E-02	1.00E+00 1.00E+00	1.50E+00	1.72E+01	3.00E-02	2.76E+03	3.00E-02	1.00E+00 1.00E+00	9.50E+00	9.51E-01	3.50E-06	1.13E+01
Benzaldehyde	5.00E-02	1.00E+00	1.50E±00	1.72E+01	1.00E-01	2.70E+03	3.00E-02	1.00E+00 1.00E+00	9.30E+00	9.51E-01 	1.00E-01	1.13E+01 
Benzene		1.00E+00	5.50E-02		4.00E-03			1.00E+00 1.00E+00	1.00E-01		4.00E-03	
Benzenethiol		1.00E+00	3.30E 02		1.00E-03			1.00E+00			1.00E-03	
Benzidine	1.00E-01	1.00E+00	2.30E+02	3.36E-02	3.00E-03	8.28E+03	1.00E-01	1.00E+00	5.00E+02	5.42E-03	3.00E-03	2.90E+03
Beryllium and compounds		7.00E-03			1.40E-05		1.00E-02	1.00E+00			2.00E-04	1.94E+03
Bromodichloromethane		1.00E+00	6.20E-02		2.00E-02			1.00E+00	1.30E-01		2.00E-02	
Bromoform		1.00E+00	7.90E-03		2.00E-02			1.00E+00	1.10E-02		2.00E-02	
Butadiene, 1,3-		1.00E+00	3.40E+00					1.00E+00	6.00E-01			
Butanol, N-		1.00E+00			1.00E-01			1.00E+00			1.00E-01	
Butylbenzene, n-		1.00E+00			5.00E-02			1.00E+00			5.00E-02	
Butylbenzene, sec-		1.00E+00			1.00E-01			1.00E+00			1.00E-01	
Butylbenzene, tert-		1.00E+00			1.00E-01			1.00E+00			1.00E-01	
Cadmium (Diet)	1.00E-03	2.50E-02			2.50E-05	6.90E+03	1.00E-03	1.00E+00			6.30E-06	6.10E+02
Carbon Tetrachloride		1.00E+00	7.00E-02		4.00E-03			1.00E+00	1.50E-01		4.00E-03	
Chlordane	4.00E-02	1.00E+00	3.50E-01	5.52E+01	5.00E-04	3.45E+03	5.00E-02	1.00E+00	1.30E+00	4.17E+00	5.00E-04	9.68E+02
Chloro-2-methylaniline, 4-	1.00E-01	1.00E+00	1.00E-01	7.73E+01	3.00E-03	8.28E+03	1.00E-01	1.00E+00	2.70E-01	1.00E+01	3.00E-03	2.90E+03
Chloroacetaldehyde, 2-		1.00E+00	2.70E-01					1.00E+00	2.70E-01			
Chlorobutane, 1-		1.00E+00			4.00E-02			1.00E+00			4.00E-02	
Chlorotoluene, o-		1.00E+00			2.00E-02			1.00E+00			2.00E-02	
Chlorotoluene, p-		1.00E+00			2.00E-02			1.00E+00			2.00E-02	
Chromium(III), Insoluble Salts		1.30E-02			1.95E-02		1.00E-02	1.30E-02			1.95E-02	1.89E+05
Crotonaldehyde, trans-		1.00E+00	1.90E+00		1.00E-03			1.00E+00	1.90E+00		1.00E-03	

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Description	Variable	USEPA Value	DTSC Value		Equations:							
Dermal Soil Absorption Factor\a	$ABS_d^{\setminus a}$	chemical-s	specific	unitless								
Soil-to-Skin Adherence Factor, worker	$AF_{w}$	0.12	0.2	mg/cm <sup>2</sup> -day		Carcinogens:			days			
Averaging Time, carcinogens	$AT_c$	70	70	yrs		4-1 4-		$\frac{TR \times AT_c \times}{\times EV_r \times EC_r \times}$	$365 \frac{aays}{vear} \times B$	$^{2}W_{a}$		
Averaging Time, noncarcinogens, adult	$AT_{nc,w}$	25	25	yrs		$(R)SL_D =$	$\overline{EF \times ED}$	$\times EV_{m} \times EC_{m} \times$	$\overline{SF_D \times SA_{\cdots} \times A}$	$AE_{\cdot \cdot \cdot} \times ABS_{\cdot \cdot \cdot} \times$	$\overline{CF_d}$	
Body Weight, adult	$BW_a$	80	80	kg					or porrw	w · · · · · · · · · · · · · · · · · · ·	σ- a	
Conversion Factor	$CF_d$	1E-06	1E-06	kg/mg								
COPC Concentration in Soil	$C_{ m soil}$	chemical-s		mg/kg								
Fraction of EV in Contact with Soil, worker	EC <sub>w</sub>	1	1	unitless	]	Noncarcinogens:			days			
Exposure Duration, worker	$\mathrm{ED_{w}}$	25	25	yrs				$THQ \times AT_{nc}$	$_{,w} \times 365 \frac{aays}{vear}$	$\times BW_a$		
Exposure Frequency, worker	$EF_{w}$	250	250	days/yr		$(R)SL_D =$		$THQ \times AT_{nc}$ $\times EV_r \times EC_r \times$	1 -			
Event Frequency, worker	$EV_{w}$	1	1	events/day			$EF_w \times ED_w$	$\times EV_r \times EC_r \times$	$\frac{1}{RfD_D} \times SA_w$	$\times AF_w \times ABS_d$	$\times CF_d$	
Oral Reference Dose Adjusted for GI Absorption	$RfD_d$	chemical-s	necific	mg/kg-day					, D			
(Regional) Screening Level, dermal	$(R)SL_D$	derived l	•	mg/kg day								
				cm <sup>2</sup>								
Exposed Body Surface Area, worker	$SA_w$	3527	6032									
Oral Slope Factor Adjusted for GI Absorption	$SF_d$	chemical-s	specific	(mg/kg-day) <sup>-1</sup>								
Target Hazard Quotient	THQ	1	1	dimensionless								
Target Risk	TR	1.0E-06	1.0E-06	dimensionless								
		Con	mercial/Ind	ustrial USEPA R	SL <sub>D</sub>				Commercial/I	ndustrial DTSC	C-SL <sub>D</sub>	
	$\mathbf{ABS_d}^{\setminus \mathbf{a}}$	GI Absorption	$SF_d$	Cancer	$RfD_d$	Noncancer	$ABS_d^{\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ $	GI Absorption	$SF_d$	Cancer	$RfD_d$	Noncancer
nalyte	(unitless)	(unitless)	(mg/kg-day)	1 (mg/kg)	(mg/kg-day)	(mg/kg)	(unitless)	(unitless)	(mg/kg-day) <sup>-1</sup>	(mg/kg)	(mg/kg-day)	(mg/kg)
Cyanides												
~Cyanogen		1.00E+00			1.00E-03			1.00E+00			1.00E-03	
~Cyanogen Bromide		1.00E+00			9.00E-02			1.00E+00			9.00E-02	
~Cyanogen Chloride		1.00E+00			5.00E-02			1.00E+00			5.00E-02	
~Potassium Silver Cyanide		4.00E-02			2.00E-04		1.00E-02				2.00E-04	1.94E+03
~Silver Cyanide		4.00E-02			4.00E-03		1.00E-02				4.00E-03	3.87E+04
Dibromobenzene, 1,3-		1.00E+00			4.00E-04			1.00E+00			4.00E-04	
Dibromoblersmethers		1.00E+00	9 40E 02		1.00E-02 2.00E-02			1.00E+00	8.40E-02		1.00E-02	
Dibromochloromethane Dibromoethane, 1,2-		1.00E+00 1.00E+00	8.40E-02 2.00E+00	 	9.00E-02			1.00E+00 1.00E+00	8.40E-02 3.60E+00		2.00E-02 9.00E-03	
		1.00E+00 1.00E+00	4.50E-01	1.72E+01	9.00E-03		1.00E-01	1.00E+00	1.20E+00	2.26E+00	9.00E-03	
	1.00F-01			1.1411111			1.001	1.001	1.201 00			
Dichlorobenzidine, 3,3'-	1.00E-01				2.00E-01			1.00E+00				
Dichlorobenzidine, 3,3'- Dichloroethane, 1,1-		1.00E+00	5.70E-03		2.00E-01 2.00E-03			1.00E+00 1.00E+00	5.70E-03		2.00E-01	
Dichlorobenzidine, 3,3'- Dichloroethane, 1,1- Dichloroethylene, 1,2-cis-		1.00E+00 1.00E+00			2.00E-03			1.00E+00			2.00E-01 2.00E-03	 
Dichlorobenzidine, 3,3'- Dichloroethane, 1,1-		1.00E+00	5.70E-03 						5.70E-03		2.00E-01	

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3.00E-02

2.00E-03

6.00E-03

2.00E-01

1.00E-03

1.00E-03

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3.00E-01

1.00E-07

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9.20E+03

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1.00E+00

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3.00E-02

--

1.00E-01

1.00E-01

--

9.10E-02

--

8.00E-02

4.70E-03

--

7.80E-02

4.00E+00

--

3.80E-02

--

--

6.78E-01

7.13E+01

3.00E-02

2.00E-03

6.00E-03

--

2.00E-01

1.00E-03

1.00E-03

--

3.00E-01

1.00E-07

--

--

--

3.23E+03

--

--

1.00E+00

3.00E-02

--

--

1.00E-01

1.00E-01

--

1.00E-01

--

9.90E-03

--

--

7.80E-02

1.80E+00

8.50E-03

--

--

--

4.29E+00

9.09E+02

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Dichloropropene, 1,3-

Dimethylaniline, N,N-

Hexachlorobutadiene

Isobutyl Alcohol

Lead Compounds ~Lead subacetate

~Tetraethyl Lead

Ethyl Chloride (Chloroethane)

Hexachlorocyclohexane, Technical

Epichlorohydrin

Ethyl Ether

Furans

~Furan

Table A-4b. USEPA RSLs and DTSC-SLs for a Commercial/Industrial Receptor Exposed to Soil via Dermal Contact

Description	Variable	USEPA Value	DTSC Value	2	Equations:							
Dermal Soil Absorption Factor\a	$ABS_d^{\setminus a}$	chemical		unitless								
Soil-to-Skin Adherence Factor, worker	$AF_{\mathrm{w}}$	0.12	0.2	mg/cm <sup>2</sup> -day	(	Carcinogens:			days			
Averaging Time, carcinogens	$AT_{c}$	70	70	yrs		C		$TR \times AT_c \times$	$365 \frac{uays}{vear} \times E$	$\frac{BW_a}{AF_w \times ABS_d \times}$		
Averaging Time, noncarcinogens, adult	$AT_{nc,w}$	25	25	yrs		$(R)SL_D = -$	FF × FD >	$(FV \times FC \times$	$SF_{-} \times SA \times$	$\Delta F \times \Delta RS \times$	CF.	
Body Weight, adult	$\mathbf{BW}_{\mathbf{a}}$	80	80	kg		•	LIW X LDW /	(LV <sub>r</sub> / LU <sub>r</sub> /	JI D X JII <sub>W</sub> X	$m_W \wedge m_{\mathcal{S}_d} \wedge$	CI a	
Conversion Factor	$CF_d$	1E-06	1E-06	kg/mg								
COPC Concentration in Soil	$C_{soil}$	chemical		mg/kg								
Fraction of EV in Contact with Soil, worker	EC <sub>w</sub>	1	1	unitless	1	Noncarcinogens:			dana			
Exposure Duration, worker	$EC_{w}$ $ED_{w}$	25	25	yrs		voncaremogens.		$THQ \times AT_{nc}$	$_{vw} \times 365 \frac{uays}{vegr}$	$\times BW_a$		
Exposure Frequency, worker	$EF_{w}$	250	250	days/yr		$(R)SL_D =$			1	$\times BW_a$ $\times AF_w \times ABS_d$		
		230	1				$EF_w \times ED_w$	$\times$ EV <sub>r</sub> $\times$ EC <sub>r</sub> $\times$	$(\frac{1}{RfD_{\rm p}} \times SA_{\rm w})$	$\times AF_w \times ABS_d$	$\times CF_d$	
Event Frequency, worker	$EV_{w}$	1	•	events/day					$R_J D_D$			
Oral Reference Dose Adjusted for GI Absorption	$RfD_d$	chemical	-	mg/kg-day								
(Regional) Screening Level, dermal	$(R)SL_D$	derived		mg/kg								
Exposed Body Surface Area, worker	$SA_{w}$	3527	6032	cm <sup>2</sup>								
Oral Slope Factor Adjusted for GI Absorption	$SF_d$	chemical	l-specific	(mg/kg-day) <sup>-1</sup>								
Target Hazard Quotient	THQ	1	1	dimensionless								
Target Risk	TR	1.0E-06	1.0E-06	dimensionless								
		Co	mmercial/Ind	ustrial USEPA R	SL <sub>D</sub>				Commercial/I	ndustrial DTSC	C-SL <sub>D</sub>	
	ABS <sub>d</sub> \a	GI Absorption	n SF <sub>d</sub>	Cancer	RfD <sub>d</sub>	Noncancer	ABS <sub>d</sub> \a	GI Absorption	SF <sub>d</sub>	Cancer	RfD <sub>d</sub>	Noncancer
Analyte	(unitless)	(unitless)	(mg/kg-day)	1 (mg/kg)	(mg/kg-day)	(mg/kg)	(unitless)	(unitless)	(mg/kg-day) <sup>-1</sup>	(mg/kg)	(mg/kg-day)	(mg/kg)
Lewisite		1.00E+00			5.00E-06			1.00E+00			5.00E-06	
Manganese (Non-diet)		4.00E-02			9.60E-04		1.00E-02	4.00E-02			9.60E-04	9.29E+03
Mercury Compounds												
~Mercuric Chloride (and other Mercury salts)		7.00E-02			2.10E-05		1.00E-02	7.00E-02			1.12E-05	1.08E+02
~Mercury (elemental)		1.00E+00					1.00E-02	1.00E+00			1.60E-04	1.55E+03
Methyl Acetate		1.00E+00			1.00E+00			1.00E+00			1.00E+00	
Methylene Chloride		1.00E+00	2.00E-03		6.00E-03			1.00E+00	1.40E-02		6.00E-03	
Methylene-bis(2-chloroaniline), 4,4'-	1.00E-01	1.00E+00	1.00E-01	7.73E+01	2.00E-03	5.52E+03	1.00E-01	1.00E+00	1.50E+00	1.81E+00	2.00E-03	1.94E+03
Methylstyrene, Alpha-		1.00E+00			7.00E-02			1.00E+00			7.00E-02	
Mineral oils Nickel Hydroxide		1.00E+00 4.00E-02			3.00E+00 4.40E-04		1.00E-02	1.00E+00 4.00E-02			3.00E+00 4.40E-04	4.26E+03
Nickel Oxide		4.00E-02 4.00E-02			4.40E-04 4.40E-04		1.00E-02 1.00E-02	4.00E-02 4.00E-02			4.40E-04 4.40E-04	4.26E+03
Nickel Refinery Dust		4.00E-02			4.40E-04 4.40E-04		1.00E-02	4.00E-02 4.00E-02	2.28E+01	1.19E+00	4.40E-04 4.40E-04	4.26E+03
Nickel Soluble Salts		4.00E-02			8.00E-04		1.00E-02	4.00E-02			4.40E-04	4.26E+03
Nickel Subsulfide		4.00E-02	4.25E+01		4.40E-04		1.00E-02	4.00E-02	4.25E+01	6.38E-01	4.40E-04	4.26E+03
Pentachloroethane		1.00E+00	9.00E-02					1.00E+00	9.00E-02			
Phosphorus, White		1.00E+00			2.00E-05			1.00E+00			2.00E-05	
Phthalates												
~Dimethylterephthalate		1.00E+00			1.00E-01			1.00E+00			1.00E-01	
Silver		4.00E-02			2.00E-04		1.00E-02	4.00E-02			2.00E-04	1.94E+03
Tetrachloroethane, 1,1,1,2-		1.00E+00	2.60E-02		3.00E-02			1.00E+00	2.60E-02		3.00E-02	
Tetrachloroethane, 1,1,2,2-		1.00E+00	2.00E-01		2.00E-02			1.00E+00	2.70E-01		2.00E-02	
Tetrachloroethylene		1.00E+00	2.10E-03		6.00E-03			1.00E+00	5.40E-01		6.00E-03	
Toluene		1.00E+00			8.00E-02			1.00E+00			8.00E-02	
Tri-n-butyltin		1.00E+00			3.00E-04			1.00E+00			3.00E-04	
Trichlorobenzene, 1,2,3- Trichloroethane, 1,1,1-		1.00E+00 1.00E+00			8.00E-04 2.00E+00			1.00E+00			8.00E-04 2.00E+00	
Trichlorofluoromethane		1.00E+00 1.00E+00			3.00E+00			1.00E+00 1.00E+00			3.00E+00	
THEIROTOTHERIANE		1.00E+00			3.00E-01			1.00E+00			5.00E-01	

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Table A-4b. USEPA RSLs and DTSC-SLs for a Commercial/Industrial Receptor Exposed to Soil via Dermal Contact

Description	Variable	USEPA Value	DTSC Value	,	Equations:							
Dermal Soil Absorption Factor\a	$ABS_d^{\setminus a}$	chemical-s	specific	unitless								
Soil-to-Skin Adherence Factor, worker	$AF_{\mathrm{w}}$	0.12	0.2	mg/cm <sup>2</sup> -day	(	Carcinogens:			a davs			
Averaging Time, carcinogens	$AT_c$	70	70	yrs		(D) CI		$TR \times AT_c \times$	$\frac{365 \frac{days}{year} \times B}{SF_D \times SA_w \times A}$	$W_a$		
Averaging Time, noncarcinogens, adult	$AT_{nc,w}$	25	25	yrs		$(R)SL_D=$	$\overline{EF_w \times ED_w} >$	$\overline{EV_r \times EC_r \times}$	$\overline{SF_D \times SA_w \times A_w}$	$\overline{AF_w \times ABS_d \times}$	$\overline{CF_d}$	
Body Weight, adult	$\mathrm{BW}_\mathrm{a}$	80	80	kg					<i>y</i>	<i>w</i>	u	
Conversion Factor	$CF_d$	1E-06	1E-06	kg/mg								
COPC Concentration in Soil	$C_{soil}$	chemical-s	specific	mg/kg								
Fraction of EV in Contact with Soil, worker	$EC_{w}$	1	1	unitless	1	Noncarcinogens	:	m110 1m	ac days	DIA		
Exposure Duration, worker	$\mathrm{ED}_{\mathrm{w}}$	25	25	yrs		(D) CI		$THQ \times AT_{nc}$	$\frac{1}{RfD_D} \times SA_w$	$\times BW_a$		
Exposure Frequency, worker	$EF_{\mathrm{w}}$	250	250	days/yr		$(R)SL_D=$	EE VED	V EU V EC V	1 , , , ,	V AE V ADC	V CE	
Event Frequency, worker	$EV_{\mathrm{w}}$	1	1	events/day			$E r_W \times E D_W$	X EV <sub>r</sub> X EU <sub>r</sub> X	$RfD_D \times SA_W$	$\times Ar_W \times Abs_d$	$l \times Cr_d$	
Oral Reference Dose Adjusted for GI Absorption	$RfD_d$	chemical-s	specific	mg/kg-day								
(Regional) Screening Level, dermal	$(R)SL_D$	derived h	herein	mg/kg								
Exposed Body Surface Area, worker	$\mathrm{SA}_{\mathrm{w}}$	3527	6032	cm <sup>2</sup>								
Oral Slope Factor Adjusted for GI Absorption	$SF_d$	chemical-s	specific	(mg/kg-day) <sup>-1</sup>								
Target Hazard Quotient	THQ	1	1	dimensionless								
Target Risk	TR	1.0E-06	1.0E-06	dimensionless								
		Con	nmercial/Indu	ıstrial USEPA R	SL <sub>D</sub>				Commercial/I	ndustrial DTSC	C-SL <sub>D</sub>	
	ABS <sub>d</sub> \a	GI Absorption	$SF_d$	Cancer	$RfD_d$	Noncancer	ABS <sub>d</sub> \a	GI Absorption	$SF_d$	Cancer	$RfD_d$	Noncancer
Analyte	(unitless)	(unitless)	(mg/kg-day)	1 (mg/kg)	(mg/kg-day)	(mg/kg)	(unitless)	(unitless)	(mg/kg-day) <sup>-1</sup>	(mg/kg)	(mg/kg-day)	(mg/kg)
Trichlorophenol, 2,4,6-	1.00E-01	1.00E+00	1.10E-02	7.02E+02	1.00E-03	2.76E+03	1.00E-01	1.00E+00	7.00E-02	3.87E+01	1.00E-03	9.68E+02
Trichloropropane, 1,1,2-		1.00E+00			5.00E-03			1.00E+00			5.00E-03	
Trichloropropane, 1,2,3-		1.00E+00	3.00E+01		4.00E-03			1.00E+00	3.00E+01		4.00E-03	
Trimethylbenzene, 1,3,5-		1.00E+00			1.00E-02			1.00E+00			1.00E-02	
Trimethylpentene, 2,4,4-		1.00E+00			1.00E-02		1.005.02	1.00E+00			1.00E-02	1.075 : 02
Vanadium and Compounds		2.60E-02	7.20E.01		1.31E-04		1.00E-02	2.60E-02	2.70E.01		1.31E-04	1.27E+03
Vinyl Chloride  Additional Analytes		1.00E+00	7.20E-01		3.00E-03			1.00E+00	2.70E-01		3.00E-03	
Beryllium Sulfate		7.00E-03			1.40E-05		1.00E-02	1.00E+00			2.00E-04	1.94E+03
Dichlorobenzene, 1,3-		1.00E+00			1.40E-03		1.00E-02	1.00E+00 1.00E+00			3.00E-02	1.94L±03
Methylcyclohexane		1.00E+00						1.00E+00			5.00L-02	
		2.002.00						002				

<sup>&</sup>quot;--" = no value

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Description:	Variable	USEPA Value DTSC Valu	e Units	VF Derivation									
Unit conversion factor	CF <sub>v</sub>	1.00E+03 1.00E+03	2 2										
Apparent Diffusivity	$D_A$	derived	cm <sup>2</sup> /s		(3.1	$4 \times D_A \times T)^{1/2}$							
			cm <sup>2</sup> /s	VFs = Q	$2/C_{vol} \times \frac{1}{C}$	$\frac{4 \times D_A \times T)^{1/2}}{2 \times \rho_b \times D_A)} \times CF_v$							
Diffusivity in air	$D_{i}$	chemical-specific			(-	$(\mathcal{L}_{A}, \mathcal{L}_{A})$							
Diffusivity in water	$D_w$	chemical-specific	cm <sup>2</sup> /s										
Default organic-carbon content	F <sub>oc</sub>	0.006 0.006	g/g										
Henry's law constant	H'	chemical-specific	dimensionless										
Soil-water partition coefficient for organics: Kd=K <sub>OC</sub> ×F <sub>OC</sub>	$K_d$	chemical-specific	cm <sup>3</sup> /g	based on:									
Soil-organic carbon partition coefficient	$K_{OC}$	chemical-specific	cm <sup>3</sup> /g	[(a	10/3 p 11/ 1	0 10/3 D ) (m2]							
Total soil porosity	n	0.43 0.43		$D_{A} = \frac{[(\theta_{a})]}{[(\theta_{a})]}$	$a \nu_i H +$	$\frac{\theta_w^{10/3}D_w)/n^2}{\omega_w + \theta_a H'}$							
			$L_{porespace}/L_{soil}$ g/m <sup>2</sup> -s per kg/m <sup>3</sup>	А	$\rho_B K_d + \theta_1$	$W + \theta_a H'$							
Inverse of the mean concentration at the center	$Q/C_{vol}$	68.18 68.18	g/III -s per kg/III										
of a 0.5-acre square source in Los Angeles Dry soil bulk density	0	15 15	g/cm <sup>3</sup>										
Air-filled soil porosity	$\rho_{b}$	1.5 1.5 0.28 0.28	•										
Water-filled soil porosity	$ heta_{a}  heta_{w}$	0.28	$egin{aligned} L_{air}/L_{soil} \ L_{water}/L_{soil} \end{aligned}$										
Inhalation exposure interval, resident		8.20E+08 8.20E+08	L <sub>water</sub> /L <sub>soil</sub> seconds										
Inhalation exposure interval, worker	T <sub>resident</sub>	8.20E+08 8.20E+08											
Volatilization Factor for soil	VFs	derived	m <sup>3</sup> /kg										
Volatilization I actor for som	V13	delived	III / Kg										
			_						PA Factors			Modified Factors	
		$D_i$	D <sub>w</sub>	<u>H'</u>		K <sub>oc</sub>	$\mathbf{K_d}$	$\mathbf{D_A}$	VF <sub>resident</sub>	VF <sub>worker</sub>	$\mathbf{K_d}$ $\mathbf{D_A}$	$VF_{resident}$	VF <sub>worke</sub>
nalyte		(cm <sup>2</sup> /s) Reference	(cm <sup>2</sup> /s) Reference	(dimensionless)	Reference	(cm <sup>3</sup> /g) Reference	(cm <sup>3</sup> /g)	$(cm^2/s)$	m <sup>3</sup> /kg	m <sup>3</sup> /kg	$(cm^3/g)$ $(cm^2/s)$	m <sup>3</sup> /kg	m <sup>3</sup> /kg
SEPA RSL Analytes													
Acrylonitrile		1.14E-01 RSLs	1.23E-05 RSLs		SLs	8.51E+00 RSLs		2.19E-04	7.79E+03	7.79E+03	5.11E-02 2.19E-04	7.79E+03	7.79E+0
Benzaldehyde		7.44E-02 RSLs	9.46E-06 RSLs		SLs	1.11E+01 RSLs		2.56E-05	2.28E+04	2.28E+04	6.65E-02 2.56E-05	2.28E+04	2.28E+0
Benzene		8.95E-02 RSLs	1.03E-05 RSLs		SLs	1.46E+02 RSLs		1.03E-03	3.59E+03	3.59E+03	8.75E-01 1.03E-03	3.59E+03	3.59E+0
Benzenethiol		7.29E-02 RSLs	9.45E-06 RSLs		SLs	2.34E+02 RSLs		3.44E-05	1.97E+04	1.97E+04	1.40E+00 3.44E-05	1.97E+04	1.97E+0
Bromodichloromethane		5.63E-02 RSLs	1.07E-05 RSLs	8.67E-02 RS		3.18E+01 RSLs		8.23E-04	4.02E+03	4.02E+03	1.91E-01 8.23E-04	4.02E+03	4.02E+0
Bromoform		3.57E-02 RSLs	1.04E-05 RSLs		SLs	3.18E+01 RSLs		1.37E-04	9.84E+03	9.84E+03	1.91E-01 1.37E-04	9.84E+03	9.84E+0
Butadiene, 1,3-		1.00E-01 RSLs	1.03E-05 RSLs		SLs	3.96E+01 RSLs		1.74E-02	8.75E+02	8.75E+02	2.38E-01 1.74E-02	8.75E+02	8.75E+0
Butanol, N-		9.00E-02 RSLs	1.01E-05 RSLs		SLs	3.47E+00 RSLs		1.44E-05	3.04E+04	3.04E+04	2.08E-02 1.44E-05	3.04E+04	3.04E+0
Butylbenzene, n-		5.28E-02 RSLs	7.33E-06 RSLs		SLs SLs	1.48E+03 RSLs	8.89E+00		8.26E+03	8.26E+03	8.89E+00 1.95E-04	8.26E+03	8.26E+0
Butylbenzene, sec- Butylbenzene, tert-		5.28E-02 RSLs 5.30E-02 RSLs	7.34E-06 RSLs 7.37E-06 RSLs		SLs SLs	1.33E+03 RSLs 1.00E+03 RSLs	7.99E+00 6.01E+00		7.45E+03 7.47E+03	7.45E+03 7.47E+03	7.99E+00 2.39E-04 6.01E+00 2.38E-04	7.45E+03 7.47E+03	7.45E+0 7.47E+0
Carbon Tetrachloride		5.71E-02 RSLs	9.78E-06 RSLs		SLs	4.39E+01 RSLs		5.82E-03	1.51E+03	1.51E+03	2.63E-01 5.82E-03	1.51E+03	1.51E+0
Chlordane		2.14E-02 RSLs	5.43E-06 RSLs		SLs	3.38E+04 RSLs		1.59E-08	9.14E+05	9.14E+05	2.03E+02 1.59E-08	9.14E+05	9.14E+0
Chloroacetaldehyde, 2-		1.02E-01 RSLs	1.23E-05 RSLs		SLs	1.00E+00 RSLs		4.91E-05	1.65E+04	1.65E+04	6.00E-03 4.91E-05	1.65E+04	1.65E+(
Chlorobutane, 1-		7.84E-02 RSLs	9.33E-06 RSLs		SLs	7.22E+01 RSLs		4.20E-03	1.78E+03	1.78E+03	4.33E-01 4.20E-03	1.78E+03	1.78E+0
Chlorotoluene, o-		6.29E-02 RSLs	8.72E-06 RSLs		SLs	3.83E+02 RSLs	2.30E+00		8.23E+03	8.23E+03	2.30E+00 1.96E-04	8.23E+03	8.23E+0
Chlorotoluene, p-		6.26E-02 RSLs	8.66E-06 RSLs		SLs	3.75E+02 RSLs	2.25E+00		7.39E+03	7.39E+03	2.25E+00 2.43E-04	7.39E+03	7.39E+0
Crotonaldehyde, trans-		9.59E-02 RSLs	1.08E-05 RSLs		SLs	1.79E+00 RSLs		3.62E-05	1.92E+04	1.92E+04	1.08E-02 3.62E-05	1.92E+04	1.92E+0
Cyanides													
~Cyanogen		1.24E-01 RSLs	1.38E-05 RSLs	2.21E-01 RS	SLs	0.00E+00 RSLs	0.00E+00	1.00E-02	1.15E+03	1.15E+03	0.00E+00 1.00E-02	1.15E+03	1.15E+(
~Cyanogen Bromide		9.84E-02 RSLs	1.41E-05 RSLs		SLs	0.00E+00 RSLs	0.00E+00		8.65E+02	8.65E+02	0.00E+00 1.78E-02	8.65E+02	8.65E+0
~Cyanogen Chloride		1.21E-01 RSLs	1.42E-05 RSLs		SLs	0.00E+00 RSLs	0.00E+00		1.75E+03	1.75E+03	0.00E+00 4.32E-03	1.75E+03	1.75E+0
Dibromobenzene, 1,3-		3.12E-02 RSLs	8.55E-06 RSLs	5.07E-02 RS	SLs	3.75E+02 RSLs	2.25E+00	3.47E-05	1.96E+04	1.96E+04	2.25E+00 3.47E-05	1.96E+04	1.96E+0
Dibromobenzene, 1,4-		3.33E-02 RSLs	9.34E-06 RSLs		SLs	3.75E+02 RSLs	2.25E+00		2.23E+04	2.23E+04	2.25E+00 2.67E-05	2.23E+04	2.23E+0
Dibromochloromethane		3.66E-02 RSLs	1.06E-05 RSLs	3.20E-02 RS	SLs	3.18E+01 RSLs	1.91E-01	2.05E-04	8.06E+03	8.06E+03	1.91E-01 2.05E-04	8.06E+03	8.06E +

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3.96E+01 RSLs

3.18E+01 RSLs

3.96E+01 RSLs

3.96E+01 RSLs

7.22E+01 RSLs

7.22E+01 RSLs

7.87E+01 RSLs

9.91E+00 RSLs

2.17E+01 RSLs

9.70E+00 RSLs

2.66E-02

2.30E-01

1.67E-01

3.84E-01

3.99E-02

1.45E-01

2.32E-03

1.24E-03

4.54E-01

5.03E-02

RSLs

Dibromoethane, 1,2-

Dichloroethane, 1,1-

Dichloropropene, 1,3-

Dimethylaniline, N,N-

Epichlorohydrin

Ethyl Ether

Dichloroethylene, 1,2-cis-

Dichloroethylene, 1,2-trans-Dichloropropane, 1,3-

Ethyl Chloride (Chloroethane)

4.30E-02 RSLs

8.36E-02 RSLs

8.84E-02 RSLs

8.76E-02 RSLs

7.39E-02 RSLs

7.63E-02 RSLs

6.25E-02 RSLs

8.89E-02 RSLs

1.04E-01 RSLs

8.52E-02 RSLs

1.04E-05 RSLs

1.06E-05 RSLs

1.13E-05 RSLs

1.12E-05 RSLs

9.82E-06 RSLs

1.01E-05 RSLs

8.31E-06 RSLs

1.11E-05 RSLs

1.16E-05 RSLs

9.36E-06 RSLs

2.38E-01 1.73E-04

5.94E-02 3.63E-05

1.30E-01 7.74E-03

5.82E-02 1.33E-03

2.98E-03

2.07E-03

4.25E-03

2.83E-04

1.02E-03

1.32E-05

1.91E-01

2.38E-01

2.38E-01

4.33E-01

4.33E-01

4.72E-01

8.76E+03

2.11E+03

2.53E+03

1.77E+03

6.86E+03

3.60E+03

3.17E+04

1.91E+04

1.31E+03

3.17E+03

8.76E+03

2.11E+03

2.53E+03

1.77E+03

6.86E+03

3.60E+03

3.17E+04

1.91E+04

1.31E+03

3.17E+03

2.38E-01 1.73E-04

2.38E-01 2.07E-03

4.33E-01 2.83E-04

4.72E-01 1.32E-05

5.94E-02 3.63E-05

1.30E-01 7.74E-03

5.82E-02 1.33E-03

2.98E-03

4.25E-03

1.02E-03

1.91E-01

2.38E-01

4.33E-01

8.76E+03

2.11E+03

2.53E+03

1.77E+03

6.86E+03

3.60E+03

3.17E+04

1.91E+04

1.31E+03

3.17E+03

8.76E+03

2.11E+03

2.53E+03

1.77E+03

6.86E+03

3.60E+03

3.17E+04

1.91E+04

1.31E+03

3.17E+03

Table A-5. Derivation of Inhalation Factors for Inhalation Exposures to Volatile Organic Compounds

Description:	Variable	USEPA Valu	e DTSC Value	Units		VF Derivation											
Unit conversion factor	CF <sub>v</sub>	1.00E+03	1.00E+03	$m^2/cm^2$													
Apparent Diffusivity	$\mathrm{D}_{\mathrm{A}}$		rived	cm <sup>2</sup> /s		17.7	$= Q/C_{vol} \times \frac{(3.1)}{(2.1)}$	$4 \times D_A \times T)^{1/2}$	/2 CE								
1				cm <sup>2</sup> /s		VFS:	$= Q/C_{vol} \times {}$	$2 \times \rho_h \times D_A$	$-\times \iota_{F_v}$								
Diffusivity in air	D <sub>i</sub>		al-specific					ru A)									
Diffusivity in water	$D_w$		al-specific	cm <sup>2</sup> /s													
Default organic-carbon content	$F_{OC}$	0.006	0.006	g/g													
Henry's law constant	H'	chemica	al-specific	dimensionless													
Soil-water partition coefficient	$K_d$	chemica	al-specific	cm <sup>3</sup> /g													
for organics: Kd=K <sub>OC</sub> ×F <sub>OC</sub>						based on:											
Soil-organic carbon partition coefficient	$K_{OC}$	chemica	al-specific	cm <sup>3</sup> /g			[(A 10/3 D.H' +	$\theta^{-10/3}D$ )/n	,2]								
Total soil porosity	n	0.43	0.43	$L_{porespace}/L_{soil}$		$D_A = -$	$\frac{\left[\left(\theta_a^{10/3}D_iH' + \frac{1}{\rho_BK_d + \theta_b}\right)\right]}{\rho_BK_d + \theta_b}$	$ D_W$ )/ $R$	<u>, 1</u>								
Inverse of the mean concentration at the center	Q/C <sub>vol</sub>	68.18	68.18	g/m <sup>2</sup> -s per kg/m	3		$\rho_B \kappa_d + \theta_1$	$_{W}+\theta_{a}H$									
of a 0.5-acre square source in Los Angeles	Q/C <sub>vol</sub>	00.10	00.10	g iii s per kg iii													
Dry soil bulk density	$\rho_{\text{b}}$	1.5	1.5	g/cm <sup>3</sup>													
Air-filled soil porosity	$\theta_{a}$	0.28	0.28	L <sub>air</sub> /L <sub>soil</sub>													
Water-filled soil porosity	$\theta_{w}$	0.15	0.15	L <sub>water</sub> /L <sub>soil</sub>													
Inhalation exposure interval, resident	T <sub>resident</sub>	8.20E+08	8.20E+08	seconds													
Inhalation exposure interval, worker	Tworker	8.20E+08	8.20E+08	seconds													
Volatilization Factor for soil	VFs	de	rived	m <sup>3</sup> /kg													
											USEI	PA Factors			DTSC-M	Iodified Factors	
			$\mathbf{D_{i}}$	1	$O_{\rm w}$	H'		K	OC	K <sub>d</sub>	D <sub>A</sub>	VF <sub>resident</sub>	VF <sub>worker</sub>	K <sub>d</sub>	D <sub>A</sub>	VF <sub>resident</sub>	$VF_{worker}$
Analyte	•	$(cm^2/s)$	Reference	(cm <sup>2</sup> /s)	Reference	(dimensionless)	Reference	(cm <sup>3</sup> /g)	Reference	$(cm^3/g)$	$(cm^2/s)$	m <sup>3</sup> /kg	m <sup>3</sup> /kg	$(cm^3/g)$	$(cm^2/s)$	m <sup>3</sup> /kg	m <sup>3</sup> /kg
Furans																	
~Furan		1.03E-01		1.17E-05		2.21E-01	RSLs	8.00E+01			1.89E-03	2.65E+03	2.65E+03		1.89E-03	2.65E+03	2.65E+03
Hexachlorobutadiene		2.67E-02		7.03E-06		4.21E-01	RSLs	8.45E+02		5.07E+00		1.09E+04	1.09E+04	5.07E+00		1.09E+04	1.09E+04
Isobutyl Alcohol		8.97E-02	RSLs	1.00E-05	RSLs	4.00E-04	RSLs	2.92E+00	RSLs	1.75E-02	1.63E-05	2.85E+04	2.85E+04	1.75E-02	1.63E-05	2.85E+04	2.85E+04
Lead Compounds		2.465.02	DOL	C 40E 0C	D.C.I	2.225 01	DOI	C 40E 02	Dat	2.005.00	2.5.50.02	1.025.02	1.005.00	2.005.00	2.5.CE 02	1.025.02	1.025.02
~Tetraethyl Lead Lewisite		2.46E-02 3.28E-02		6.40E-06 9.06E-06		2.32E+01	RSLs RSLs	6.48E+02		3.89E+00 6.64E-01		1.93E+03 2.59E+04	1.93E+03 2.59E+04	3.89E+00		1.93E+03	1.93E+03 2.59E+04
Mercury Compounds		3.28E-02	KSLS	9.00E-00	KSLS	8.91E-03	KSLS	1.11E+02	KSLS	0.04E-01	1.99E-03	2.39E+04	2.39E+04	6.64E-01	1.99E-03	2.59E+04	2.39E+04
~Mercury (elemental)		3.07E-02	RSI c	6.30E-06	RSI c	3.53E-01	RSLs	0.00E+00	RSI c	5.20E+01	1.07F-05	3.52E+04	3.52E+04	5.20E+01	1.07F-05	3.52E+04	3.52E+04
Methyl Acetate		9.58E-02		1.10E-05		4.70E-03	RSLs	3.06E+00		1.84E-02		8.23E+03	8.23E+03	1.84E-02		8.23E+03	8.23E+03
Methylene Chloride		9.99E-02		1.25E-05		1.33E-01	RSLs	2.17E+01		1.30E-01		2.22E+03	2.22E+03	1.30E-01		2.22E+03	2.22E+03
Methylstyrene, Alpha-		6.29E-02		8.19E-06		1.04E-01	RSLs	6.98E+02		4.19E+00		1.30E+04	1.30E+04	4.19E+00		1.30E+04	1.30E+04
Mineral oils		3.62E-02		6.43E-06		3.35E+02	RSLs	4.82E+03		2.89E+01		1.39E+03	1.39E+03	2.89E+01		1.39E+03	1.39E+03
Pentachloroethane		3.15E-02	RSLs	8.57E-06	RSLs	7.93E-02	RSLs	1.36E+02	RSLs	8.17E-01	1.39E-04	9.78E+03	9.78E+03	8.17E-01	1.39E-04	9.78E+03	9.78E+03
Phosphorus, White		2.19E-01	RSLs	2.77E-05	RSLs	8.63E-02	RSLs	0.00E+00	RSLs	3.50E+00	2.71E-04	7.00E+03	7.00E+03	3.50E+00	2.71E-04	7.00E+03	7.00E+03
Phthalates																	
~Dimethylterephthalate		2.85E-02		6.72E-06		5.48E-03	RSLs	3.10E+01		1.86E-01		2.16E+04	2.16E+04	1.86E-01		2.16E+04	2.16E+04
Tetrachloroethane, 1,1,1,2-		4.82E-02		9.10E-06		1.02E-01	RSLs	8.60E+01		5.16E-01		5.75E+03	5.75E+03	5.16E-01		5.75E+03	5.75E+03
Tetrachloroethane, 1,1,2,2-		4.89E-02		9.29E-06		1.50E-02	RSLs	9.49E+01		5.70E-01		1.53E+04	1.53E+04	5.70E-01		1.53E+04	1.53E+04
Tetrachloroethylene		5.05E-02		9.46E-06		7.24E-01	RSLs	9.49E+01 1		5.70E-01		2.38E+03	2.38E+03	5.70E-01		2.38E+03	2.38E+03
Toluene Tri a hydritia		7.78E-02		9.20E-06		2.72E-01	RSLs	2.34E+02		1.40E+00		4.35E+03	4.35E+03	1.40E+00		4.35E+03	4.35E+03
Tri-n-butyltin Trichlorobenzene, 1,2,3-		2.15E-02 3.95E-02		5.35E-06 8.38E-06		6.22E+01 5.11E-02	RSLs RSLs	8.09E+03 1 1.38E+03 1		4.85E+01 8.30E+00		3.40E+03 3.27E+04	3.40E+03 3.27E+04	4.85E+01 8.30E+00		3.40E+03 3.27E+04	3.40E+03 3.27E+04
Trichloroethane, 1,1,1-		6.48E-02		9.60E-06		7.03E-01	RSLs	4.39E+01		2.63E-01		1.67E+03	1.67E+03	2.63E-01		1.67E+03	1.67E+03
Trichlorofluoromethane		6.54E-02		1.00E-05		3.97E+00	RSLs	4.39E+01 1		2.63E-01		1.05E+03	1.07E+03 1.05E+03	2.63E-01		1.05E+03	1.07E+03
Trichloropropane, 1,1,2-		5.72E-02		9.17E-06		1.30E-02	RSLs	9.49E+01		5.70E-01		1.53E+04	1.53E+04	5.70E-01		1.53E+04	1.53E+04
Trichloropropane, 1,2,3-		5.75E-02		9.24E-06		1.40E-02	RSLs	1.16E+02		6.95E-01		1.59E+04	1.59E+04	6.95E-01		1.59E+04	1.59E+04
Trimethylbenzene, 1,3,5-		6.02E-02		7.84E-06		3.59E-01	RSLs	6.02E+02		3.61E+00		6.70E+03	6.70E+03	3.61E+00		6.70E+03	6.70E+03
Trimethylpentene, 2,4,4-		5.95E-02		7.31E-06		3.05E+01	RSLs	2.40E+02		1.44E+00		1.01E+03	1.01E+03	1.44E+00		1.01E+03	1.01E+03
Vinyl Chloride		1.07E-01		1.20E-05		1.14E+00	RSLs	2.17E+01		1.30E-01		9.66E+02	9.66E+02	1.30E-01		9.66E+02	9.66E+02
Additional Analytes																	
Dichlorobenzene, 1,3-		6.82E-02		7.97E-06		1.08E-01	EPISuite v4.11		EPISuite v4.11	1.55E-02		2.18E+03	2.18E+03	1.55E-02		2.18E+03	2.18E+03
Methylcyclohexane		8.93E-02	estimated	1.04E-05	estimated	1.76E+01	EPISuite v4.11	2.34E+02	EPISuite v4.11	1.40E+00	1.70E-02	8.85E+02	8.85E+02	1.40E+00	1.70E-02	8.85E+02	8.85E+02

"--" = no value

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Table A-6a. USEPA RSLs and DTSC-SLs for a Residential Receptor Exposed to Compounds from Soil via Inhalation

Description	Variable	USEPA Value	DTSC Value	Units	Equations
Age-dependent Adjustment Factor, 0-2	ADAF <sub>0-2</sub>	10	10	yrs	Cancer Risk:
Age-dependent Adjustment Factor, 2-6	ADAF <sub>2-6</sub>	3	3	yrs	Carcinogens: TD. AT. 1265 day 124 hour
Age-dependent Adjustment Factor, 6-16	$ADAF_{6-16}$	3	3	yrs	$1R \times AI_c \times 365 \frac{1}{year} \times 24 \frac{1}{day}$
Age-dependent Adjustment Factor, 16-30	$ADAF_{16-30}$	1	1	yrs	Carcinogens: $ (R)SL_{inh} = \frac{TR \times AT_c \times 365 \frac{day}{year} \times 24 \frac{hour}{day}}{IUR \times CF_l \times EF_r \times \left(\frac{1}{VF_{corr} \times CP_F}\right) \times ED_r \times ET_r} $
Averaging Time, carcinogens	$AT_c$	70	70	yrs	$V_{Fresident}$ or $V_{Fresident}$ or $V_{Fresident}$ or $V_{Fresident}$
Averaging Time, noncarcinogens, child	$AT_{nc,c}$	6	6	yrs	
Averaging Time, noncarcinogens, resident	$AT_{nc,r}$	26	26	yrs	Mutagens:
Carcinogenic adjustment factor, inhalation	$CAF_{I}$	0.756	0.756	dimensionless	$TR \times \left(AT_c \times 365 \frac{adys}{vagr} \times 24 \frac{nour}{dgy}\right)$
Conversion Factor	$CF_i$	1.0E+03	1.0E+03	μg/mg	$(R)SL_{inh} = \frac{\sqrt{FD_{ext} + FD_{ext} + FD_{ext}}}{\sqrt{FD_{ext} + FD_{ext} + FD_{ext}}} $
Exposure Duration, child 0-2	$ED_{0-2}$	2	2	yrs	$(R)SL_{inh} = \frac{TR \times \left(AT_c \times 365 \frac{days}{year} \times 24 \frac{hour}{day}\right)}{EF_r \times ET_r \times CF_I \times \left(\frac{ED_{0-2} \times IUR \times ADAF_{0-2} + ED_{2-6} \times IUR \times ADAF_{2-6} +}{ED_{6-16} \times IUR \times ADAF_{6-16} + ED_{16-26} \times IUR \times ADAF_{16-26}}\right) \times \left(\frac{1}{VF_{resident} \text{ or } PEF}\right)}$
Exposure Duration, child 2-6	$ED_{2-6}$	4	4	yrs	
Exposure Duration, child 6-16	$ED_{6-16}$	10	10	yrs	$TR \times \left(AT_c \times 365 \frac{adys}{vear} \times 24 \frac{hour}{day}\right)$
Exposure Duration, adult 16-30	ED <sub>16-30</sub>	10	10	yrs $(R)SI$	$L_{inh} = \frac{\sqrt{\frac{Vear}{aay}}}{\sqrt{\frac{ED_0 \times EF_1 \times ED_0 \times EF_2 \times EF_3 \times EF_4 \times ED_0 \times EF_2 \times EF_4 \times ADAF_0 + \frac{1}{2}}}$
Exposure Duration, child	$ED_c$	6	6	yrs	$TR \times \left(AT_c \times 365 \frac{days}{year} \times 24 \frac{hour}{day}\right)$ $IUR \times \left(\frac{1}{VF_{resident} \text{ or } PEF}\right) \times CF_I \times \left\{ [CAF_I \times ED_r \times EF_r \times ET_r] + \left[MAF_I \times \left(\frac{ED_{0-2} \times EF_r \times ET_r \times ADAF_{0-2} + ED_{2-6} \times EF_r \times ET_r \times ADAF_{16-26}}{ED_{6-16} \times EF_r \times ET_r \times ADAF_{6-16} + ED_{16-26} \times EF_r \times ET_r \times ADAF_{16-26}}\right)\right]\right\}$
Exposure Duration, resident	$ED_r$	26	26	yrs	(** Testuent *** = *) (
Exposure Frequency	$EF_r$	350	350	days/yr	
Exposure Time	$ET_r$	24	24	hours/day	Vinyl Chloride: TR
Inhalation Unit-Risk Factor	IUR	chemical	-specific	$(\mu g/m^3)^{-1}$	$(R)SL_{inh} = \frac{1}{\sqrt{1 dqy}}$
Mutagenic adjustment factor, inhalation	$MAF_{I}$	0.244	0.244	dimensionless	$(R)SL_{inh} = \frac{IIR}{\left(\frac{IUR \times EF_r \times ED_r \times ET_r \times \frac{1  day}{24  hour} \times CF_I}{AT_c \times 365  \frac{day}{year} \times VF_{resident}} + \left[\frac{IUR}{VF_{resident}} \times CF_I\right]\right)}$
Particulate emission factor (non-VOCs)	PEF	1.359E+09	1.360E+09	m <sup>3</sup> /kg	$AT \times 365 \frac{day}{VF} \times VF \dots \qquad VF$
Inhalation Reference Concentration	RfC	chemical	-specific	$\mu g/m^3$	year ** resident /
(Regional) Screening Level, inhalation	$(R)SL_{inh}$	derived	herein	mg/kg	Noncancer Hazard:
Target Hazard Quotient	THQ	1	1	dimensionless	$THQ \times AT_{nc,c} \times 365 \frac{ds}{year} \times 24 \frac{ds}{day}$
Target Risk	TR	1.0E-06	1.0E-06	dimensionless	Noncancer Hazard: $(R)SL_{inh} = \frac{THQ \times AT_{nc,c} \times 365 \frac{day}{year} \times 24 \frac{hour}{day}}{EF_r \times ED_c \times ET_r \times \frac{1}{RfC} \times \left(\frac{1}{VF_{resistant}} \text{ or } \frac{PEF}{VF_{resistant}}\right) \times CF_i}$
Volatilization Factor for VOCs (Table A-5)	$VF_{resident}$	chemical	-specific	m <sup>3</sup> /kg	$EF_r \wedge ED_c \wedge EF_r \times \overline{RfC} \times (\overline{VF_{resident}} \text{ or } \overline{PEF}) \times CF_i$
					DTSC, Cadmium - noncarcinogenic hazard: $SL_{inh-Cd} = \frac{THQ \times AT_{nc,26-yr\ adult} \times 365 \frac{day}{year} \times 24 \frac{hour}{day}}{EF_r \times ED_{26-yr\ adult} \times ET_r \times \frac{1}{DFC} \times \frac{1}{DFC} \times CF_i}$

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			R	esidential USEPA R	SL <sub>inh</sub>				Residential DTSC-SI	-inh	
		VF <sub>resident</sub> or PEF	IUR	Cancer	RfC	Noncancer	VF <sub>resident</sub> or PEF	IUR	Cancer	RfC	Noncancer
Analyte	Mutagen?	m <sup>3</sup> /kg	$(\mu g/m^3)^{-1}$	(mg/kg)	$(\mu g/m^3)$	(mg/kg)	m <sup>3</sup> /kg	$(\mu g/m^3)^{-1}$	(mg/kg)	$(\mu g/m^3)$	(mg/kg)
USEPA RSL Analytes											
Acrylamide	M	1.36E+09	1.00E-04	1.38E+04	6.00E+00	8.51E+06	1.36E+09	1.30E-03	1.06E+03	6.00E+00	8.51E+06
Acrylonitrile		7.79E+03	6.80E-05	3.22E-01	2.00E+00	1.63E+01	7.79E+03	2.90E-04	7.55E-02	5.00E+00	4.06E+01
Arsenic, Inorganic		1.36E+09	4.30E-03	8.88E+02	1.50E-02	2.13E+04	1.36E+09	3.30E-03	1.16E+03	1.50E-02	2.13E+04
Benzaldehyde		2.28E+04	No Toxicity Value		No Toxicity Value		2.28E+04	No Toxicity Value		4.00E+02	9.51E+03
Benzene		3.59E+03	7.80E-06	1.29E+00	3.00E+01	1.12E+02	3.59E+03	2.90E-05	3.47E-01	3.00E+00	1.12E+01
Benzenethiol		1.97E+04	No Toxicity Value		No Toxicity Value		1.97E+04	No Toxicity Value		4.00E+00	8.21E+01
Benzidine	M	1.36E+09	6.70E-02	2.06E+01	No Toxicity Value		1.36E+09	1.40E-01	9.85E+00	No Toxicity Value	
Beryllium and compounds		1.36E+09	2.40E-03	1.59E+03	2.00E-02	2.84E+04	1.36E+09	2.40E-03	1.59E+03	7.00E-03	9.93E+03
Bromodichloromethane		4.02E+03	3.70E-05	3.05E-01	No Toxicity Value		4.02E+03	3.70E-05	3.05E-01	8.00E+01	3.35E+02
Bromoform		9.84E+03	1.10E-06	2.51E+01	No Toxicity Value		9.84E+03	1.10E-06	2.51E+01	8.00E+01	8.21E+02
Butadiene, 1,3-		8.75E+02	3.00E-05	8.18E-02	2.00E+00	1.82E+00	8.75E+02	1.70E-04	1.44E-02	2.00E+00	1.82E+00
Butanol, N-		3.04E+04	No Toxicity Value		No Toxicity Value		3.04E+04	No Toxicity Value		4.00E+02	1.27E+04
Butylbenzene, n-		8.26E+03	No Toxicity Value		No Toxicity Value		8.26E+03	No Toxicity Value		2.00E+02	1.72E+03
Butylbenzene, sec-		7.45E+03	No Toxicity Value		No Toxicity Value		7.45E+03	No Toxicity Value		4.00E+02	3.11E+03
Butylbenzene, tert-		7.47E+03	No Toxicity Value		No Toxicity Value		7.47E+03	No Toxicity Value		4.00E+02	3.12E+03
Cadmium (Diet)		1.36E+09	1.80E-03	2.12E+03	1.00E-02	1.42E+04	1.36E+09	4.20E-03	9.09E+02	1.00E-02	1.42E+04
Carbon Tetrachloride		1.51E+03	6.00E-06	7.07E-01	1.00E+02	1.58E+02	1.51E+03	4.20E-05	1.01E-01	4.00E+01	6.31E+01
Chlordane		9.14E+05	1.00E-04	2.57E+01	7.00E-01	6.68E+02	9.14E+05	3.40E-04	7.55E+00	7.00E-01	6.68E+02
Chloro-2-methylaniline, 4-		1.36E+09	7.70E-05	4.96E+04	No Toxicity Value		1.36E+09	7.70E-05	4.96E+04	No Toxicity Value	
Chloroacetaldehyde, 2-		1.65E+04	No Toxicity Value		No Toxicity Value		1.65E+04	6.75E-05	6.84E-01	No Toxicity Value	
Chlorobutane, 1-		1.78E+03	No Toxicity Value		No Toxicity Value		1.78E+03	No Toxicity Value		1.60E+02	2.97E+02
Chlorotoluene, o-		8.23E+03	No Toxicity Value		No Toxicity Value		8.23E+03	No Toxicity Value		8.00E+01	6.87E+02
Chlorotoluene, p-		7.39E+03	No Toxicity Value		No Toxicity Value		7.39E+03	No Toxicity Value		8.00E+01	6.17E+02

Table A-6a. USEPA RSLs and DTSC-SLs for a Residential Receptor Exposed to Compounds from Soil via Inhalation

Description	Variable	USEPA Value	DTSC Value	Units	Equations
Age-dependent Adjustment Factor, 0-2	ADAF <sub>0-2</sub>	10	10	yrs	Cancer Risk:
Age-dependent Adjustment Factor, 2-6	ADAF <sub>2-6</sub>	3	3	yrs	Carcinogens: TD 4T 265 day 24 hour
Age-dependent Adjustment Factor, 6-16	$ADAF_{6-16}$	3	3	yrs	$R \times AI_c \times 365 \frac{1}{year} \times 24 \frac{1}{day}$
Age-dependent Adjustment Factor, 16-30	$ADAF_{16-30}$	1	1	yrs	Carcinogens: $ (R)SL_{inh} = \frac{TR \times AT_c \times 365 \frac{day}{year} \times 24 \frac{hour}{day}}{IUR \times CF_I \times EF_r \times \left(\frac{1}{VE_{rest}}\right) \times ED_r \times ET_r} $
Averaging Time, carcinogens	$AT_c$	70	70	yrs	$VV_{resident}$ or $VV_{resident}$ or $VV_{resident}$ or $VV_{resident}$
Averaging Time, noncarcinogens, child	$AT_{nc,c}$	6	6	yrs	
Averaging Time, noncarcinogens, resident	$AT_{nc,r}$	26	26	yrs	Mutagens:
Carcinogenic adjustment factor, inhalation	$CAF_{I}$	0.756	0.756	dimensionless	$TR \times \left(AT_c \times 365 \frac{aays}{vear} \times 24 \frac{nour}{day}\right)$
Conversion Factor	$CF_i$	1.0E+03	1.0E+03	$\mu g/mg$	$(R)SL_{inh} = \frac{TR \times \left(AT_c \times 365 \frac{days}{year} \times 24 \frac{hour}{day}\right)}{EF_r \times ET_r \times CF_I \times \left(\frac{ED_{0-2} \times IUR \times ADAF_{0-2} + ED_{2-6} \times IUR \times ADAF_{2-6} +}{ED_{6-16} \times IUR \times ADAF_{6-16} + ED_{16-26} \times IUR \times ADAF_{16-26}}\right) \times \left(\frac{1}{VF_{resident} \text{ or } PEF}\right)}$
Exposure Duration, child 0-2	$ED_{0-2}$	2	2	yrs	$EF_r \times ET_r \times CF_I \times \begin{pmatrix} ED_{0-2} \times IUR \times ADAF_{0-2} + ED_{16-26} \times IUR \times ADAF_{16-26} \end{pmatrix} \times \begin{pmatrix} \frac{1}{VF_{recident}} \text{ or } PEF \end{pmatrix}$
Exposure Duration, child 2-6	ED <sub>2-6</sub>	4	4	yrs	Trichloroethene:
Exposure Duration, child 6-16	$ED_{6-16}$	10	10	yrs	$TR \times \left(AT_c \times 365 \frac{days}{year} \times 24 \frac{hour}{day}\right)$
Exposure Duration, adult 16-30	ED <sub>16-30</sub>	10	10	yrs $(R)SR$	$L_{inh} = \frac{\sqrt{ED_0 \times EE \times ET \times ADAF_0} + ED_0 \times EE \times ET \times ADAF_0}{\sqrt{ED_0 \times EE \times ET \times ADAF_0} + \sqrt{ED_0 \times EE \times ET \times ADAF_0}}$
Exposure Duration, child	$ED_c$	6	6	yrs	$L_{inh} = \frac{1R \times \left(AI_c \times 365 \frac{1}{year} \times 24 \frac{1}{day}\right)}{IUR \times \left(\frac{1}{VF_{resident} \text{ or } PEF}\right) \times CF_I \times \left\{ [CAF_I \times ED_r \times EF_r \times ET_r] + \left[MAF_I \times \left(\frac{ED_{0-2} \times EF_r \times ET_r \times ADAF_{0-2} + ED_{2-6} \times EF_r \times ET_r \times ADAF_{16-26}}{ED_{6-16} \times EF_r \times ET_r \times ADAF_{6-16} + ED_{16-26} \times EF_r \times ET_r \times ADAF_{16-26}}\right] \right\}$
Exposure Duration, resident	$ED_r$	26	26	yrs	(** resident *** 21 / (
Exposure Frequency	$EF_r$	350	350	days/yr	
Exposure Time	$ET_r$	24	24	hours/day	Vinyl Chloride: TR
Inhalation Unit-Risk Factor	IUR	chemical	-specific	$(\mu g/m^3)^{-1}$	$(R)SL_{inh} = \frac{1  day}{\sqrt{1 + 1  day}}$
Mutagenic adjustment factor, inhalation	$MAF_{I}$	0.244	0.244	dimensionless	$(R)SL_{inh} = \frac{IR}{\left(\frac{IUR \times EF_r \times ED_r \times ET_r \times \frac{1 \ day}{24 \ hour} \times CF_I}{AT_c \times 365 \frac{day}{vear} \times VF_{resident}} + \left[\frac{IUR}{VF_{resident}} \times CF_I\right]\right)}$
Particulate emission factor (non-VOCs)	PEF	1.359E+09	1.360E+09	m <sup>3</sup> /kg	$AT \times 365 \frac{day}{VF} \times VF \cdots$
Inhalation Reference Concentration	RfC	chemical	-specific	$\mu g/m^3$	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
(Regional) Screening Level, inhalation	(R)SL <sub>inh</sub>	derived	herein	mg/kg	Noncancer Hazard:
Target Hazard Quotient	THQ	1	1	dimensionless	$THQ \times AT_{nc,c} \times 365 \frac{day}{year} \times 24 \frac{day}{day}$
Target Risk	TR	1.0E-06	1.0E-06	dimensionless	Noncancer Hazard: $(R)SL_{inh} = \frac{THQ \times AT_{nc,c} \times 365 \frac{day}{year} \times 24 \frac{hour}{day}}{EF_r \times ED_c \times ET_r \times \frac{1}{RfC} \times \left(\frac{1}{VF_{resident} \text{ or } PEF}\right) \times CF_i}$
Volatilization Factor for VOCs (Table A-5)	$VF_{resident}$	chemical	-specific	m <sup>3</sup> /kg	$EF_r \times ED_c \times EI_r \times \overline{RfC} \times (\overline{VF_{resident}} \text{ or } \overline{PEF}) \times CF_i$
					DTSC, Cadmium - noncarcinogenic hazard: $SL_{inh-Cd} = \frac{THQ \times AT_{nc,26-yr\ adult} \times 365 \frac{day}{year} \times 24 \frac{hour}{day}}{EF_r \times ED_{26-yr\ adult} \times ET_r \times \frac{1}{RfC} \times \frac{1}{PEF} \times CF_i}$

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			R	esidential USEPA R	SL <sub>inh</sub>				Residential DTSC-SI	L <sub>inh</sub>	
		VF <sub>resident</sub> or PEF	IUR	Cancer	RfC	Noncancer	VF <sub>resident</sub> or PEF	IUR	Cancer	RfC	Noncancer
Analyte	Mutagen?	m <sup>3</sup> /kg	$(\mu g/m^3)^{-1}$	(mg/kg)	$(\mu g/m^3)$	(mg/kg)	m <sup>3</sup> /kg	$(\mu g/m^3)^{-1}$	(mg/kg)	$(\mu g/m^3)$	(mg/kg)
Chromium(III), Insoluble Salts		1.36E+09	No Toxicity Value		No Toxicity Value		1.36E+09	No Toxicity Value		No Toxicity Value	
Crotonaldehyde, trans-		1.92E+04	No Toxicity Value		No Toxicity Value		1.92E+04	4.75E-04	1.13E-01	4.00E+00	8.00E+01
Cyanides											
~Cyanogen		1.15E+03	No Toxicity Value		No Toxicity Value		1.15E+03	No Toxicity Value		4.00E+00	4.81E+00
~Cyanogen Bromide		8.65E+02	No Toxicity Value		No Toxicity Value		8.65E+02	No Toxicity Value		3.60E+02	3.25E+02
~Cyanogen Chloride		1.75E+03	No Toxicity Value		No Toxicity Value		1.75E+03	No Toxicity Value		2.00E+02	3.66E+02
~Potassium Silver Cyanide		1.36E+09	No Toxicity Value		No Toxicity Value		1.36E+09	No Toxicity Value		No Toxicity Value	
~Silver Cyanide		1.36E+09	No Toxicity Value		No Toxicity Value		1.36E+09	No Toxicity Value		No Toxicity Value	
Dibromobenzene, 1,3-		1.96E+04	No Toxicity Value		No Toxicity Value		1.96E+04	No Toxicity Value		1.60E+00	3.27E+01
Dibromobenzene, 1,4-		2.23E+04	No Toxicity Value		No Toxicity Value		2.23E+04	No Toxicity Value		4.00E+01	9.31E+02
Dibromochloromethane		8.06E+03	No Toxicity Value		No Toxicity Value		8.06E+03	2.10E-05	1.08E+00	8.00E+01	6.72E+02
Dibromoethane, 1,2-		8.76E+03	6.00E-04	4.10E-02	9.00E+00	8.23E+01	8.76E+03	7.10E-05	3.47E-01	8.00E-01	7.31E+00
Dichlorobenzidine, 3,3'-		1.36E+09	3.40E-04	1.12E+04	No Toxicity Value		1.36E+09	3.40E-04	1.12E+04	No Toxicity Value	
Dichloroethane, 1,1-		2.11E+03	1.60E-06	3.71E+00	No Toxicity Value		2.11E+03	1.60E-06	3.71E+00	8.00E+02	1.76E+03
Dichloroethylene, 1,2-cis-		2.53E+03	No Toxicity Value		No Toxicity Value		2.53E+03	No Toxicity Value		8.00E+00	2.11E+01
Dichloroethylene, 1,2-trans-		1.77E+03	No Toxicity Value		No Toxicity Value		1.77E+03	No Toxicity Value		8.00E+01	1.48E+02
Dichloropropane, 1,3-		6.86E+03	No Toxicity Value		No Toxicity Value		6.86E+03	No Toxicity Value		8.00E+01	5.72E+02
Dichloropropene, 1,3-		3.60E+03	4.00E-06	2.53E+00	2.00E+01	7.52E+01	3.60E+03	1.60E-05	6.32E-01	2.00E+01	7.52E+01
Dimethylaniline, N,N-		3.17E+04	No Toxicity Value		No Toxicity Value		3.17E+04	No Toxicity Value		8.00E+00	2.64E+02
Epichlorohydrin		1.91E+04	1.20E-06	4.48E+01	1.00E+00	2.00E+01	1.91E+04	2.30E-05	2.34E+00	3.00E+00	5.99E+01
Ethyl Chloride (Chloroethane)		1.31E+03	No Toxicity Value		1.00E+04	1.37E+04	1.31E+03	1.18E-06	3.13E+00	3.00E+04	4.10E+04
Ethyl Ether	<u>-</u>	3.17E+03	No Toxicity Value		No Toxicity Value		3.17E+03	No Toxicity Value		8.00E+02	2.64E+03
Furans											
~Furan		2.65E+03	No Toxicity Value		No Toxicity Value		2.65E+03	No Toxicity Value		4.00E+00	1.11E+01

Table A-6a. USEPA RSLs and DTSC-SLs for a Residential Receptor Exposed to Compounds from Soil via Inhalation

Description	Variable	USEPA Value	DTSC Value	Units	Equations
Age-dependent Adjustment Factor, 0-2	ADAF <sub>0-2</sub>	10	10	yrs	Cancer Risk:
Age-dependent Adjustment Factor, 2-6	$ADAF_{2-6}$	3	3	yrs	Carcinogens: $TP \times AT \times 365 \frac{day}{day} \times 24 \frac{hour}{day}$
Age-dependent Adjustment Factor, 6-16	$ADAF_{6-16}$	3	3	yrs	Carcinogens: $ (R)SL_{inh} = \frac{TR \times AT_c \times 365 \frac{day}{year} \times 24 \frac{hour}{day}}{IUR \times CF_l \times EF_r \times \left(\frac{1}{VF_{resistant} \text{ or } PEF}\right) \times ED_r \times ET_r} $
Age-dependent Adjustment Factor, 16-30	$ADAF_{16-30}$	1	1	yrs	$(R)^{3L_{inh}} - UIR \times CE \times FE \times \left(\frac{1}{1}\right) \times FD \times FT$
Averaging Time, carcinogens	$AT_c$	70	70	yrs	$VF_{resident}$ or $VF_{resident}$ or $VF_{resident}$
Averaging Time, noncarcinogens, child	$AT_{nc,c}$	6	6	yrs	
Averaging Time, noncarcinogens, resident	$AT_{nc,r}$	26	26	yrs	Mutagens:
Carcinogenic adjustment factor, inhalation	$CAF_{I}$	0.756	0.756	dimensionless	$TR \times \left(AT_c \times 365 \frac{avgs}{vor} \times 24 \frac{hour}{day}\right)$
Conversion Factor	$CF_i$	1.0E+03	1.0E+03	μg/mg	$(R)SL_{inh} = \frac{uay}{\sqrt{FD} \times UID \times ADAE} + FD \times UID \times ADAE + \frac{1}{2}$
Exposure Duration, child 0-2	$ED_{0-2}$	2	2	yrs	$(R)SL_{inh} = \frac{TR \times \left(AT_c \times 365 \frac{days}{year} \times 24 \frac{hour}{day}\right)}{EF_r \times ET_r \times CF_l \times \left(\frac{ED_{0-2} \times IUR \times ADAF_{0-2} + ED_{2-6} \times IUR \times ADAF_{2-6} +}{ED_{6-16} \times IUR \times ADAF_{6-16} + ED_{16-26} \times IUR \times ADAF_{16-26}}\right) \times \left(\frac{1}{VF_{resident} \text{ or } PEF}\right)}$
Exposure Duration, child 2-6	$ED_{2-6}$	4	4	yrs	
Exposure Duration, child 6-16	ED <sub>6-16</sub>	10	10	yrs	TR × $\left(AT_c \times 365 \frac{days}{year} \times 24 \frac{hour}{day}\right)$
Exposure Duration, adult 16-30	ED <sub>16-30</sub>	10	10	yrs (R).	$SL_{inh} = \frac{\sqrt{PD \times FE \times FT \times ADAE} + PD \times FE \times FT \times ADAE}{\sqrt{PD \times FE \times FT \times ADAE} + \sqrt{DAE} + \sqrt{DAE}}$
Exposure Duration, child	$ED_c$	6	6	yrs	$SL_{inh} = \frac{aay}{IUR \times \left(\frac{1}{VF_{resident} \text{ or } PEF}\right) \times CF_I \times \left\{ [CAF_I \times ED_r \times EF_r \times ET_r] + \left[MAF_I \times \left(\frac{ED_{0-2} \times EF_r \times ET_r \times ADAF_{0-2} + ED_{2-6} \times EF_r \times ET_r \times ADAF_{2-6} + ED_{16-26} \times EF_r \times ET_r \times ADAF_{16-26}\right)\right] \right\}}{CF_I \times \left\{ [CAF_I \times ED_r \times EF_r \times ET_r] + \left[MAF_I \times \left(\frac{ED_{0-2} \times EF_r \times ET_r \times ADAF_{0-2} + ED_{2-6} \times EF_r \times ET_r \times ADAF_{16-26} + ED_{16-26} \times EF_r \times ET_r \times ADAF_{16-26}\right)\right] \right\}}$
Exposure Duration, resident	$ED_r$	26	26	yrs	(** 1858aent *** 217 *** (*** (256-16 ** 217 *** 185116-26 *** 217 *** 185111 16-26 **))
Exposure Frequency	$EF_r$	350	350	days/yr	
Exposure Time	$ET_r$	24	24	hours/day	Vinyl Chloride: TR
Inhalation Unit-Risk Factor	IUR	chemical	-specific	$(\mu g/m^3)^{-1}$	$(R)SL_{inh} = \frac{1}{\sqrt{1 + day}}$
Mutagenic adjustment factor, inhalation	$MAF_{I}$	0.244	0.244	dimensionless	(R) $SL_{inh} = \frac{TR}{\left(\frac{IUR \times EF_r \times ED_r \times ET_r \times \frac{1 \ day}{24 \ hour} \times CF_l}{AT_c \times 365 \frac{day}{year} \times VF_{resident}} + \left[\frac{IUR}{VF_{resident}} \times CF_l\right]\right)}$
Particulate emission factor (non-VOCs)	PEF	1.359E+09	1.360E+09	m <sup>3</sup> /kg	$AT \times 365 \frac{day}{day} \times VF_{resident} \wedge C^{T_I}$
Inhalation Reference Concentration	RfC	chemical	-specific	$\mu g/m^3$	year \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
(Regional) Screening Level, inhalation	$(R)SL_{inh}$	derived	herein	mg/kg	Noncancer Hazard: day hour
Target Hazard Quotient	THQ	1	1	dimensionless	$THQ \times AT_{nc,c} \times 365 \frac{vear}{vear} \times 24 \frac{vear}{day}$
Target Risk	TR	1.0E-06	1.0E-06	dimensionless	Noncancer Hazard: $ (R)SL_{inh} = \frac{THQ \times AT_{nc,c} \times 365 \frac{day}{year} \times 24 \frac{hour}{day}}{EF_r \times ED_c \times ET_r \times \frac{1}{RfC} \times \left(\frac{1}{VF_{resident}} \text{ or } PEF\right) \times CF_i} $
Volatilization Factor for VOCs (Table A-5)	$VF_{resident}$	chemical	-specific	m <sup>3</sup> /kg	$EF_r \times ED_c \times ET_r \times \overline{RfC} \times (\overline{VF_{resident}} \text{ or } PEF) \times CF_i$
					DTSC, Cadmium - noncarcinogenic hazard: $SL_{inh-Cd} = \frac{THQ \times AT_{nc,26-yr\ adult} \times 365 \frac{day}{year} \times 24 \frac{hour}{day}}{EF_r \times ED_{26-yr\ adult} \times ET_r \times \frac{1}{RfC} \times \frac{1}{PEF} \times CF_i}$

								n, c	DI.		
			R	esidential USEPA R	$SL_{inh}$				Residential DTSC-SI	inh	
		VF <sub>resident</sub> or PEF	IUR	Cancer	RfC	Noncancer	VF <sub>resident</sub> or PEF	IUR	Cancer	RfC	Noncancer
Analyte	Mutagen?	m <sup>3</sup> /kg	$(\mu g/m^3)^{-1}$	(mg/kg)	$(\mu g/m^3)$	(mg/kg)	m <sup>3</sup> /kg	$(\mu g/m^3)^{-1}$	(mg/kg)	$(\mu g/m^3)$	(mg/kg)
Hexachlorobutadiene		1.09E+04	2.20E-05	1.40E+00	No Toxicity Value		1.09E+04	2.20E-05	1.40E+00	4.00E+00	4.56E+01
Hexachlorocyclohexane, Technical		1.36E+09	5.10E-04	7.48E+03	No Toxicity Value		1.36E+09	1.10E-03	3.47E+03	No Toxicity Value	
Isobutyl Alcohol		2.85E+04	No Toxicity Value		No Toxicity Value		2.85E+04	No Toxicity Value		1.20E+03	3.57E+04
Lead Compounds											
~Lead subacetate		1.36E+09	1.20E-05	3.18E+05	No Toxicity Value		1.36E+09	1.10E-05	3.47E+05	No Toxicity Value	
~Tetraethyl Lead		1.93E+03	No Toxicity Value		No Toxicity Value		1.93E+03	No Toxicity Value		4.00E-04	8.06E-04
Lewisite		2.59E+04	No Toxicity Value		No Toxicity Value		2.59E+04	No Toxicity Value		2.00E-02	5.40E-01
Manganese (Non-diet)		1.36E+09	No Toxicity Value		5.00E-02	7.09E+04	1.36E+09	No Toxicity Value		9.00E-02	1.28E+05
Mercury Compounds											
~Mercuric Chloride (and other Mercury salts)		1.36E+09	No Toxicity Value		3.00E-01	4.25E+05	1.36E+09	No Toxicity Value		3.00E-02	4.25E+04
~Mercury (elemental)		3.52E+04	No Toxicity Value		3.00E-01	1.10E+01	3.52E+04	No Toxicity Value		3.00E-02	1.10E+00
Methyl Acetate		8.23E+03	No Toxicity Value		No Toxicity Value		8.23E+03	No Toxicity Value		4.00E+03	3.43E+04
Methylene Chloride	M	2.22E+03	1.00E-08	2.25E+02	6.00E+02	1.39E+03	2.22E+03	1.00E-06	2.25E+00	4.00E+02	9.27E+02
Methylene-bis(2-chloroaniline), 4,4'-	M	1.36E+09	4.30E-04	3.21E+03	No Toxicity Value		1.36E+09	4.30E-04	3.21E+03	No Toxicity Value	
Methylstyrene, Alpha-		1.30E+04	No Toxicity Value		No Toxicity Value		1.30E+04	No Toxicity Value		2.80E+02	3.79E+03
Mineral oils		1.39E+03	No Toxicity Value		No Toxicity Value		1.39E+03	No Toxicity Value		1.20E+04	1.74E+04
Nickel Hydroxide		1.36E+09	2.60E-04	1.47E+04	1.40E-02	1.98E+04	1.36E+09	2.60E-04	1.47E+04	1.40E-02	1.99E+04
Nickel Oxide		1.36E+09	2.60E-04	1.47E+04	2.00E-02	2.84E+04	1.36E+09	2.60E-04	1.47E+04	2.00E-02	2.84E+04
Nickel Refinery Dust		1.36E+09	2.40E-04	1.59E+04	1.40E-02	1.98E+04	1.36E+09	2.60E-04	1.47E+04	1.40E-02	1.99E+04
Nickel Soluble Salts		1.36E+09	2.60E-04	1.47E+04	9.00E-02	1.28E+05	1.36E+09	2.60E-04	1.47E+04	1.40E-02	1.99E+04
Nickel Subsulfide		1.36E+09	4.80E-04	7.95E+03	1.40E-02	1.98E+04	1.36E+09	4.90E-04	7.79E+03	1.40E-02	1.99E+04
Pentachloroethane		9.78E+03	No Toxicity Value		No Toxicity Value		9.78E+03	2.25E-05	1.22E+00	No Toxicity Value	
Phosphorus, White		7.00E+03	No Toxicity Value		No Toxicity Value		7.00E+03	No Toxicity Value		8.00E-02	5.84E-01

Table A-6a. USEPA RSLs and DTSC-SLs for a Residential Receptor Exposed to Compounds from Soil via Inhalation

Description	Variable	USEPA Value	DTSC Value	Units	Equations
Age-dependent Adjustment Factor, 0-2	ADAF <sub>0-2</sub>	10	10	yrs	Cancer Risk:
Age-dependent Adjustment Factor, 2-6	$ADAF_{2-6}$	3	3	yrs	Carcinogens: TR X AT X 265 day X 24 hour
Age-dependent Adjustment Factor, 6-16	$ADAF_{6-16}$	3	3	yrs	$\frac{11(\lambda AI_c \times 303 \overline{year} \wedge 24 \overline{day})}{11(\lambda AI_c \times 303 \overline{year} \wedge 24 \overline{day})}$
Age-dependent Adjustment Factor, 16-30	$ADAF_{16-30}$	1	1	yrs	Carcinogens: $ (R)SL_{inh} = \frac{TR \times AT_c \times 365 \frac{day}{year} \times 24 \frac{hour}{day}}{IUR \times CF_I \times EF_r \times \left(\frac{1}{VF_{resident} \text{ or } PEF}\right) \times ED_r \times ET_r} $
Averaging Time, carcinogens	$AT_c$	70	70	yrs	$VF_{resident}$ or $VF_{resident}$ or $VF_{resident}$
Averaging Time, noncarcinogens, child	$AT_{nc,c}$	6	6	yrs	
Averaging Time, noncarcinogens, resident	$AT_{nc,r}$	26	26	yrs	Mutagens:
Carcinogenic adjustment factor, inhalation	$CAF_{I}$	0.756	0.756	dimensionless	$TR \times \left(AT_c \times 365 \frac{adys}{vagr} \times 24 \frac{hour}{day}\right)$
Conversion Factor	$CF_i$	1.0E+03	1.0E+03	μg/mg	$(R)SL_{inh} = \frac{uay}{\sqrt{ED \times HIP \times ADAE}} + ED \times \frac{uay}{\sqrt{ED}} + \frac{uay}{\sqrt{ED}$
Exposure Duration, child 0-2	$ED_{0-2}$	2	2	yrs	$(R)SL_{inh} = \frac{TR \times \left(AT_c \times 365 \frac{days}{year} \times 24 \frac{hour}{day}\right)}{EF_r \times ET_r \times CF_I \times \left(\frac{ED_{0-2} \times IUR \times ADAF_{0-2} + ED_{2-6} \times IUR \times ADAF_{2-6} +}{ED_{6-16} \times IUR \times ADAF_{6-16} + ED_{16-26} \times IUR \times ADAF_{16-26}}\right) \times \left(\frac{1}{VF_{resident}} \text{ or } PEF\right)}$
Exposure Duration, child 2-6	$ED_{2-6}$	4	4	yrs	Trichloroethene: $(25_{6-16} \times 101 $
Exposure Duration, child 6-16	ED <sub>6-16</sub>	10	10	yrs	$TR \times \left(AT_c \times 365 \frac{avgs}{avgs} \times 24 \frac{dour}{dour}\right)$
Exposure Duration, adult 16-30	ED <sub>16-30</sub>	10	10	yrs $(R)$	$SL_{inh} = \frac{\sqrt{FD_0 \times FF \times FT \times ADAF_0} + FD_0 \times FF \times FT \times ADAF_0}{\sqrt{FD_0 \times FF \times FT \times ADAF_0} + \frac{1}{\sqrt{FD_0 \times FF \times FT \times ADAF_0}}$
Exposure Duration, child	$ED_c$	6	6	yrs	$SL_{inh} = \frac{TR \times \left(AT_c \times 365 \frac{days}{year} \times 24 \frac{hour}{day}\right)}{IUR \times \left(\frac{1}{VF_{resident} \text{ or } PEF}\right) \times CF_I \times \left\{ [CAF_I \times ED_r \times EF_r \times ET_r] + \left[MAF_I \times \left(\frac{ED_{0-2} \times EF_r \times ET_r \times ADAF_{0-2} + ED_{2-6} \times EF_r \times ET_r \times ADAF_{16-26} + ED_{16-26} \times EF_r \times ET_r \times ADAF_{16-26} + ED_{16-26} \times EF_r \times ET_r \times ADAF_{16-26} + ED_{16-26} \times EF_r \times ET_r \times ADAF_{16-26} \right) \right] \right\}}$
Exposure Duration, resident	$ED_r$	26	26	yrs	(**Testaent 0.12.7)
Exposure Frequency	$EF_r$	350	350	days/yr	
Exposure Time	$ET_r$	24	24	hours/day	Vinyl Chloride: TR
Inhalation Unit-Risk Factor	IUR	chemica	-specific	$(\mu g/m^3)^{-1}$	$(R)SL_{inh} = \frac{1}{\sqrt{1 + day}}$
Mutagenic adjustment factor, inhalation	$MAF_{I}$	0.244	0.244	dimensionless	$(R)SL_{inh} = \frac{TR}{\left(\frac{IUR \times EF_r \times ED_r \times ET_r \times \frac{1 \ day}{24 \ hour} \times CF_I}{AT_c \times 365 \frac{day}{year} \times VF_{resident}} + \left[\frac{IUR}{VF_{resident}} \times CF_I\right]\right)}$
Particulate emission factor (non-VOCs)	PEF	1.359E+09	1.360E+09	m <sup>3</sup> /kg	$AT_c \times 365 \xrightarrow{day} \times VF_{resident} $
Inhalation Reference Concentration	RfC	chemica	-specific	$\mu g/m^3$	year / restaunt /
(Regional) Screening Level, inhalation	$(R)SL_{inh}$	derived	herein	mg/kg	Noncancer Hazard:
Target Hazard Quotient	THQ	1	1	dimensionless	$IHQ \times AI_{nc,c} \times 365 \frac{1}{year} \times 24 \frac{1}{day}$
Target Risk	TR	1.0E-06	1.0E-06	dimensionless	Noncancer Hazard: $(R)SL_{inh} = \frac{THQ \times AT_{nc,c} \times 365 \frac{day}{year} \times 24 \frac{hour}{day}}{EF_r \times ED_c \times ET_r \times \frac{1}{RfC} \times \left(\frac{1}{VF_{resident}} \text{ or } PEF\right) \times CF_i}$
Volatilization Factor for VOCs (Table A-5)	$VF_{resident}$	chemica	-specific	m <sup>3</sup> /kg	$Er_r \times ED_c \times EI_r \times \overline{RfC} \times (\overline{VF_{resident}} \text{ or } PEF) \times CF_i$
					DTSC, Cadmium - noncarcinogenic hazard: $SL_{inh-Cd} = \frac{THQ \times AT_{nc,26-yr\ adult} \times 365 \frac{day}{year} \times 24 \frac{hour}{day}}{EF_r \times ED_{26-yr\ adult} \times ET_r \times \frac{1}{RfC} \times \frac{1}{PEF} \times CF_i}$

(			P	Residential USEPA RS	$SL_{inh}$			•	Residential DTSC-SL	L <sub>inh</sub>	
		VF <sub>resident</sub> or PEF	IUR	Cancer	RfC	Noncancer	VF <sub>resident</sub> or PEF	IUR	Cancer	RfC	Noncancer
Analyte	Mutagen?	m <sup>3</sup> /kg	$(\mu g/m^3)^{-1}$	(mg/kg)	$(\mu g/m^3)$	(mg/kg)	m <sup>3</sup> /kg	$(\mu g/m^3)^{-1}$	(mg/kg)	$(\mu g/m^3)$	(mg/kg)
Phthalates											
~Dimethylterephthalate		2.16E+04	No Toxicity Value		No Toxicity Value		2.16E+04	No Toxicity Value		4.00E+02	9.03E+03
Silver		1.36E+09	No Toxicity Value		No Toxicity Value		1.36E+09	No Toxicity Value		No Toxicity Value	
Tetrachloroethane, 1,1,1,2-		5.75E+03	7.40E-06	2.18E+00	No Toxicity Value		5.75E+03	7.40E-06	2.18E+00	1.20E+02	7.20E+02
Tetrachloroethane, 1,1,2,2-		1.53E+04	5.80E-05	7.42E-01	No Toxicity Value		1.53E+04	5.80E-05	7.42E-01	8.00E+01	1.28E+03
Tetrachloroethylene		2.38E+03	2.60E-07	2.57E+01	4.00E+01	9.92E+01	2.38E+03	5.90E-06	1.13E+00	3.50E+01	8.68E+01
Toluene		4.35E+03	No Toxicity Value		5.00E+03	2.27E+04	4.35E+03	No Toxicity Value		3.00E+02	1.36E+03
Tri-n-butyltin		3.40E+03	No Toxicity Value	-	No Toxicity Value		3.40E+03	No Toxicity Value	-	1.20E+00	4.26E+00
Trichlorobenzene, 1,2,3-		3.27E+04	No Toxicity Value		No Toxicity Value		3.27E+04	No Toxicity Value		3.20E+00	1.09E+02
Trichloroethane, 1,1,1-		1.67E+03	No Toxicity Value		5.00E+03	8.70E+03	1.67E+03	No Toxicity Value		1.00E+03	1.74E+03
Trichlorofluoromethane		1.05E+03	No Toxicity Value	-	No Toxicity Value		1.05E+03	No Toxicity Value	-	1.20E+03	1.31E+03
Trichlorophenol, 2,4,6-		1.36E+09	3.10E-06	1.23E+06	No Toxicity Value		1.36E+09	2.00E-05	1.91E+05	No Toxicity Value	
Trichloropropane, 1,1,2-		1.53E+04	No Toxicity Value		No Toxicity Value		1.53E+04	No Toxicity Value		2.00E+01	3.18E+02
Trichloropropane, 1,2,3-	M	1.59E+04	No Toxicity Value	-	3.00E-01	4.98E+00	1.59E+04	7.50E-03	2.15E-03	3.00E-01	4.98E+00
Trimethylbenzene, 1,3,5-		6.70E+03	No Toxicity Value	-	No Toxicity Value		6.70E+03	No Toxicity Value		4.00E+01	2.80E+02
Trimethylpentene, 2,4,4-		1.01E+03	No Toxicity Value		No Toxicity Value		1.01E+03	No Toxicity Value		4.00E+01	4.22E+01
Vanadium and Compounds		1.36E+09	No Toxicity Value		1.00E-01	1.42E+05	1.36E+09	No Toxicity Value		1.00E-01	1.42E+05
Vinyl Chloride	M (VC)	9.66E+02	4.40E-06	1.62E-01	1.00E+02	1.01E+02	9.66E+02	7.80E-05	9.13E-03	1.00E+02	1.01E+02
Additional Analytes											
Beryllium Sulfate		1.36E+09	2.40E-03	1.59E+03	2.00E-02	2.84E+04	1.36E+09	8.60E-01	4.44E+00	7.00E-03	9.93E+03
Dichlorobenzene, 1,3-		2.18E+03	No Toxicity Value	-	No Toxicity Value		2.18E+03	No Toxicity Value	-	1.20E+02	2.73E+02
Methylcyclohexane		8.85E+02	No Toxicity Value		No Toxicity Value		8.85E+02	No Toxicity Value		6.00E+03	5.54E+03
			·		•			•			

<sup>&</sup>quot;--" = no value

	Table	e A-6b. USEPA	RSLs and D	TSC-SLs for a C	Commercial Industr	rial Receptor Expo	sed to Compounds fr	om Soil via Inl	alation		
Description	Variable	USEPA Value	DTSC Value	Units	Equations						
Averaging Time, carcinogens	$AT_c$	70	70	yrs	Carcinogen:	$TD \vee \Lambda T$	day 21 hour	r			
Averaging Time, noncarcinogens, worker	$AT_{nc,w}$	25	25	yrs	PSI		$c \times 303 \overline{\text{year}} \times 24 \overline{\text{day}}$	<del>-</del> 			
COPC Concentration in air	$C_{air}$	chemical	-specific	$\mu g/m^3$	Rounn -	- EF × ED × ET	$\frac{G_c}{G_c} \times 365 \frac{day}{year} \times 24 \frac{hour}{day} \times IUR \times CF_I \times \left( \frac{1}{VF_{work}} \right)$	1			
COPC Concentration in soil	$C_{soil}$	chemical	-specific	mg/kg		21 <sub>W</sub> · · · 22 <sub>W</sub> · · · 21 <sub>W</sub>	VF <sub>work</sub>	<sub>eer</sub> or PEF)			
Conversion Factor	$CF_i$	1.0E+03	1.0E+03	μg/mg							
Exposure Duration, worker	$\mathrm{ED}_{\mathrm{w}}$	25	25	yrs							
Exposure Frequency, worker	$\mathrm{EF}_{\mathrm{w}}$	250	250	days/yr							
Exposure Time, worker	$\mathrm{ET}_{\mathrm{w}}$	8	8	hours/day							
Inhalation Unit-Risk Factor	IUR	chemical	-specific	$(\mu g/m^3)^{-1}$	Noncarcinogen:	$THO \times A$	$T_{} \times 365 \frac{day}{day} \times 24 \frac{hot}{day}$	<u>ur</u>			
Particulate emission factor (non-VOCs)	PEF	1.359E+09	1.360E+09	m <sup>3</sup> /kg	$RSL_{inh} =$	=	year da	<u>1</u>			
Inhalation Reference Concentration	RfC	chemical	-specific	$\mu g/m^3$		$EF_w \times ED_w \times ET_w$	$T_w \times 365 \frac{day}{year} \times 24 \frac{hoo}{da} \times \frac{1}{RfC} \times CF_I \times \left(\frac{VF_{weak}}{VF_{weak}}\right)$	$\frac{1}{\text{or } PEF}$ )			
Regional screening level, inhalation	$RSL_{inh}$	chemical	-specific	$\mu g/m^3$			N) G (*1 WOTE	ter of 121)			
Target Hazard Quotient	THQ	1	1	dimensionless							
Target Risk	TR	1.0E-06	1.0E-06	dimensionless							
Volatilization Factor for VOCs (Table A-4)	$VF_{worker}$	chemical	-specific	m <sup>3</sup> /kg							
			1	JSEPA Commercia	l RSL <sub>inh</sub>			DTSC	-Modified Residentia	l RSLinh	
	_	VF <sub>worker</sub> or PEF	IUR	Cancer	RfC	Noncancer	VF <sub>worker</sub> or PEF	IUR	Cancer	RfC	Noncancer
Analyte		m³/kg	$(\mu g/m^3)^{-1}$	(mg/kg)	$(\mu g/m^3)$	(mg/kg)	m <sup>3</sup> /kg	$(\mu g/m^3)^{-1}$	(mg/kg)	$(\mu g/m^3)$	(mg/kg)
USEPA RSL Analytes											
Acrylamide		1.36E+09	1.00E-04	1.67E+05	6.00E+00	3.57E+07	1.36E+09	1.30E-03	1.28E+04	6.00E+00	3.57E+07
Acrylonitrile		7.79E+03	6.80E-05	1.41E+00	2.00E+00	6.83E+01	7.79E+03	2.90E-04	3.30E-01	5.00E+00	1.71E+02

		USE	PA Commercial	RSL <sub>inh</sub>			DTSC-M	Iodified Residen	tial RSLinh	
	VF <sub>worker</sub> or PEF	IUR	Cancer	RfC	Noncancer	VF <sub>worker</sub> or PEF	IUR	Cancer	RfC	Noncancer
Analyte	m <sup>3</sup> /kg	$(\mu g/m^3)^{-1}$	(mg/kg)	$(\mu g/m^3)$	(mg/kg)	m <sup>3</sup> /kg	$(\mu g/m^3)^{-1}$	(mg/kg)	$(\mu g/m^3)$	(mg/kg)
USEPA RSL Analytes										
Acrylamide	1.36E+09	1.00E-04	1.67E+05	6.00E+00	3.57E+07	1.36E+09	1.30E-03	1.28E+04	6.00E+00	3.57E+07
Acrylonitrile	7.79E+03	6.80E-05	1.41E+00	2.00E+00	6.83E+01	7.79E+03	2.90E-04	3.30E-01	5.00E+00	1.71E+02
Arsenic, Inorganic	1.36E+09	4.30E-03	3.88E+03	1.50E-02	8.93E+04	1.36E+09	3.30E-03	5.05E+03	1.50E-02	8.94E+04
Benzaldehyde	2.28E+04	No Toxicity Value		No Toxicity Value		2.28E+04	No Toxicity Value		4.00E+02	3.99E+04
Benzene	3.59E+03	7.80E-06	5.64E+00	3.00E+01	4.71E+02	3.59E+03	2.90E-05	1.52E+00	3.00E+00	4.71E+01
Benzenethiol	1.97E+04	No Toxicity Value		No Toxicity Value		1.97E+04	No Toxicity Value		4.00E+00	3.45E+02
Benzidine	1.36E+09	6.70E-02	2.49E+02	No Toxicity Value		1.36E+09	1.40E-01	1.19E+02	No Toxicity Value	
Beryllium and compounds	1.36E+09	2.40E-03	6.95E+03	2.00E-02	1.19E+05	1.36E+09	2.40E-03	6.95E+03	7.00E-03	4.17E+04
Bromodichloromethane	4.02E+03	3.70E-05	1.33E+00	No Toxicity Value		4.02E+03	3.70E-05	1.33E+00	8.00E+01	1.41E+03
Bromoform	9.84E+03	1.10E-06	1.10E+02	No Toxicity Value		9.84E+03	1.10E-06	1.10E+02	8.00E+01	3.45E+03
Butadiene, 1,3-	8.75E+02	3.00E-05	3.58E-01	2.00E+00	7.66E+00	8.75E+02	1.70E-04	6.31E-02	2.00E+00	7.66E+00
Butanol, N-	3.04E+04	No Toxicity Value		No Toxicity Value		3.04E+04	No Toxicity Value		4.00E+02	5.32E+04
Butylbenzene, n-	8.26E+03	No Toxicity Value		No Toxicity Value		8.26E+03	No Toxicity Value		2.00E+02	7.23E+03
Butylbenzene, sec-	7.45E+03	No Toxicity Value		No Toxicity Value		7.45E+03	No Toxicity Value		4.00E+02	1.31E+04
Butylbenzene, tert-	7.47E+03	No Toxicity Value		No Toxicity Value		7.47E+03	No Toxicity Value		4.00E+02	1.31E+04
Cadmium (Diet)	1.36E+09	1.80E-03	9.26E+03	1.00E-02	5.95E+04	1.36E+09	4.20E-03	3.97E+03	1.00E-02	5.96E+04
Carbon Tetrachloride	1.51E+03	6.00E-06	3.09E+00	1.00E+02	6.62E+02	1.51E+03	4.20E-05	4.41E-01	4.00E+01	2.65E+02
Chlordane	9.14E+05	1.00E-04	1.12E+02	7.00E-01	2.80E+03	9.14E+05	3.40E-04	3.30E+01	7.00E-01	2.80E+03
Chloro-2-methylaniline, 4-	1.36E+09	7.70E-05	2.17E+05	No Toxicity Value		1.36E+09	7.70E-05	2.17E+05	No Toxicity Value	
Chloroacetaldehyde, 2-	1.65E+04	No Toxicity Value		No Toxicity Value		1.65E+04	6.75E-05	2.99E+00	No Toxicity Value	
Chlorobutane, 1-	1.78E+03	No Toxicity Value		No Toxicity Value		1.78E+03	No Toxicity Value		1.60E+02	1.25E+03
Chlorotoluene, o-	8.23E+03	No Toxicity Value		No Toxicity Value		8.23E+03	No Toxicity Value		8.00E+01	2.89E+03
Chlorotoluene, p-	7.39E+03	No Toxicity Value		No Toxicity Value		7.39E+03	No Toxicity Value		8.00E+01	2.59E+03

Table A-6b. USEPA RSLs and DTSC-SLs for a Commercial Industrial Receptor Exposed to Compounds from Soil via Inhalation

Equations

Description

Variable USEPA Value

DTSC Value Units

Description	v arrabic	USEI A Value	DISC value	Ullits	Equations						
Averaging Time, carcinogens	$AT_c$	70	70	yrs	Carcinogen:	$TR \times AT$	$\frac{1}{c} \times 365 \frac{day}{year} \times 24 \frac{hc}{d}$ $\times IUR \times CF_I \times \left( \frac{1}{VF_{WV}} \right)$	our_			
Averaging Time, noncarcinogens, worker	$AT_{nc,w}$	25	25	yrs	$RSL_{inh} = -$		year a	$\frac{ay}{1}$			
COPC Concentration in air	$C_{air}$		al-specific	μg/m <sup>3</sup>	Ε	$F_w \times ED_w \times ET_w$	$\times IUR \times CF_I \times \left( {VF_{\cdots}} \right)$	or PEF			
COPC Concentration in soil	$C_{soil}$		al-specific	mg/kg			(* - W(	orker of 121)			
Conversion Factor	CF <sub>i</sub>	1.0E+03	1.0E+03	μg/mg							
Exposure Duration, worker	$\mathrm{ED}_{\mathrm{w}}$	25	25	yrs							
Exposure Frequency, worker	$\mathrm{EF_{w}}$	250 8	250 8	days/yr							
Exposure Time, worker	$ET_{w}$	Ü		hours/day			day l	our			
Inhalation Unit-Risk Factor	IUR		al-specific	$(\mu g/m^3)^{-1}$	Noncarcinogen:	$THQ \times A'$	$T_w \times 365 \frac{day}{year} \times 24 \frac{day}{year} \times \frac{1}{RfC} \times CF_I \times \left(\frac{1}{VF_{ver}}\right)$	dav			
Particulate emission factor (non-VOCs)	PEF	1.359E+09	1.360E+09	m <sup>3</sup> /kg	$RSL_{inh} = -$		. 1	1 \			
Inhalation Reference Concentration	RfC		al-specific	$\mu g/m^3$	E	$F_W \times ED_W \times ET_W$	$\times \overline{RfC} \times CF_I \times (\overline{VF_w})$	<sub>orker</sub> or PEF)			
Regional screening level, inhalation	$RSL_{inh}$	chemica	al-specific	μg/m³							
Target Hazard Quotient	THQ TR	1 1.0E-06	1 1.0E-06	dimensionless dimensionless							
Target Risk Volatilization Factor for VOCs (Table A-4)				m <sup>3</sup> /kg							
Volatilization Factor for VOCs (Table A-4)	$VF_{worker}$	chemica	al-specific	III /kg							
	_			SEPA Commercia		_			Iodified Residen		_
		$VF_{worker}$ or PEF		Cancer	RfC	Noncancer	VF <sub>worker</sub> or PEF		Cancer	RfC	Noncancer
Analyte		m <sup>3</sup> /kg	$(\mu g/m^3)^{-1}$	(mg/kg)	$(\mu g/m^3)$	(mg/kg)	m <sup>3</sup> /kg	$(\mu g/m^3)^{-1}$	(mg/kg)	(μg/m <sup>3</sup> )	(mg/kg)
Chromium(III), Insoluble Salts		1.36E+09	No Toxicity Value		No Toxicity Value		1.36E+09	No Toxicity Value		No Toxicity Value	
Crotonaldehyde, trans-		1.92E+04	No Toxicity Value		No Toxicity Value		1.92E+04	4.75E-04	4.95E-01	4.00E+00	3.36E+02
Cyanides											
~Cyanogen		1.15E+03	No Toxicity Value		No Toxicity Value		1.15E+03	No Toxicity Value		4.00E+00	2.02E+01
~Cyanogen Bromide		8.65E+02	No Toxicity Value		No Toxicity Value		8.65E+02	No Toxicity Value		3.60E+02	1.36E+03
~Cyanogen Chloride		1.75E+03	No Toxicity Value		No Toxicity Value		1.75E+03	No Toxicity Value		2.00E+02	1.54E+03
~Potassium Silver Cyanide		1.36E+09	No Toxicity Value		No Toxicity Value		1.36E+09	No Toxicity Value		No Toxicity Value	
~Silver Cyanide		1.36E+09	No Toxicity Value		No Toxicity Value		1.36E+09	No Toxicity Value		No Toxicity Value	
Dibromobenzene, 1,3-		1.96E+04	No Toxicity Value		No Toxicity Value		1.96E+04	No Toxicity Value		1.60E+00	1.37E+02
Dibromobenzene, 1,4-		2.23E+04	No Toxicity Value		No Toxicity Value		2.23E+04	No Toxicity Value		4.00E+01	3.91E+03
Dibromochloromethane		8.06E+03	No Toxicity Value		No Toxicity Value		8.06E+03	2.10E-05	4.71E+00	8.00E+01	2.82E+03
Dibromoethane, 1,2-		8.76E+03	6.00E-04	1.79E-01	9.00E+00	3.46E+02	8.76E+03	7.10E-05	1.51E+00	8.00E-01	3.07E+01
Dichlorobenzidine, 3,3'-		1.36E+09	3.40E-04	4.90E+04	No Toxicity Value		1.36E+09	3.40E-04	4.91E+04	No Toxicity Value	
Dichloroethane, 1,1-		2.11E+03	1.60E-06	1.62E+01	No Toxicity Value		2.11E+03	1.60E-06	1.62E+01	8.00E+02	7.40E+03
Dichloroethylene, 1,2-cis-		2.53E+03	No Toxicity Value		No Toxicity Value		2.53E+03	No Toxicity Value		8.00E+00	8.88E+01
Dichloroethylene, 1,2-trans-		1.77E+03	No Toxicity Value		No Toxicity Value		1.77E+03	No Toxicity Value		8.00E+01	6.20E+02
Dichloropropane, 1,3-		6.86E+03	No Toxicity Value		No Toxicity Value		6.86E+03	No Toxicity Value		8.00E+01	2.40E+03
Dichloropropene, 1,3-		3.60E+03	4.00E-06	1.11E+01	2.00E+01	3.16E+02	3.60E+03	1.60E-05	2.76E+00	2.00E+01	3.16E+02
Dimethylaniline, N,N-		3.17E+04	No Toxicity Value		No Toxicity Value		3.17E+04	No Toxicity Value		8.00E+00	1.11E+03
Epichlorohydrin		1.91E+04	1.20E-06	1.96E+02	1.00E+00	8.39E+01	1.91E+04	2.30E-05	1.02E+01	3.00E+00	2.52E+02
Ethyl Chloride (Chloroethane)		1.31E+03	No Toxicity Value		1.00E+04	5.74E+04	1.31E+03	1.18E-06	1.37E+01	3.00E+04	1.72E+05
Ethyl Ether			-								
Euryi Eurei		3.17E+03	No Toxicity Value		No Toxicity Value		3.17E+03	No Toxicity Value		8.00E+02	1.11E+04
Furans		3.17E+03	No Toxicity Value		No Toxicity Value		3.17E+03	No Toxicity Value		8.00E+02	1.11E+04

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Table A-6b. USEPA RSLs and DTSC-SLs for a Commercial Industrial Receptor Exposed to Compounds from Soil via Inhalation

Description	Variable	USEPA Value	DTSC Value	Units	Equations						
Averaging Time, carcinogens	$AT_c$	70		yrs	<u> </u>	TD v 47	day , , ho	our			
Averaging Time, noncarcinogens, worker	$AT_{nc,w}$	25	25	yrs	DCI	I R × AI	$_{c} \times 365 \frac{1}{year} \times 24 \frac{1}{da}$	ay			
COPC Concentration in air	$C_{air}$	chemic	al-specific	$\mu g/m^3$	$KSL_{inh} - F$	F × FD × FT	$\frac{C_c \times 365 \frac{day}{year} \times 24 \frac{ho}{do}}{\times IUR \times CF_I \times \left(\frac{VF_{ver}}{VF_{ver}}\right)}$	1			
COPC Concentration in soil	$C_{soil}$	chemic	al-specific	mg/kg	2	W N Z Z W N Z I W	$VF_{wo}$	orker or PEF)			
Conversion Factor	$CF_i$	1.0E+03	1.0E+03	$\mu g/mg$							
Exposure Duration, worker	$\mathrm{ED}_{\mathrm{w}}$	25	25	yrs							
Exposure Frequency, worker	$\mathrm{EF}_{\mathrm{w}}$	250		days/yr							
Exposure Time, worker	$\mathrm{ET}_{\mathrm{w}}$	8		hours/day							
Inhalation Unit-Risk Factor	IUR	chemic		$(\mu g/m^3)^{-1}$	Noncarcinogen:	$THQ \times A$	$\frac{T_w \times 365 \frac{day}{year} \times 24 \frac{h}{c}}{\times \frac{1}{RfC} \times CF_I \times \left(\frac{1}{VF_{wi}}\right)}$	our dan			
Particulate emission factor (non-VOCs)	PEF	1.359E+09	1.360E+09	m <sup>3</sup> /kg	$RSL_{inh} = -$		yeur (	$\frac{aay}{1}$			
Inhalation Reference Concentration	RfC	chemic	al-specific	$\mu g/m^3$	E	$F_w \times ED_w \times ET_w$	$\times \frac{1}{RfC} \times CF_I \times (\overline{VF_{}})$	$\frac{1}{\text{orker Or } PEF}$ )			
Regional screening level, inhalation	$RSL_{inh}$	chemic	al-specific	$\mu g/m^3$			11) 3 (* - W	orker /			
Target Hazard Quotient	THQ	1		dimensionless							
Target Risk	TR	1.0E-06		dimensionless							
Volatilization Factor for VOCs (Table A-4)	$VF_{\text{worker}}$	chemic	al-specific	m <sup>3</sup> /kg							
			US	SEPA Commercial	RSL <sub>inh</sub>			DTSC-M	Iodified Residen	tial RSLinh	
İ	_	VF <sub>worker</sub> or PEF	IUR	Cancer	RfC	Noncancer	VF <sub>worker</sub> or PEF	IUR	Cancer	RfC	Noncancer
Analyte		m <sup>3</sup> /kg	$(\mu g/m^3)^{-1}$	(mg/kg)	$(\mu g/m^3)$	(mg/kg)	m <sup>3</sup> /kg	$(\mu g/m^3)^{-1}$	(mg/kg)	$(\mu g/m^3)$	(mg/kg)
Hexachlorobutadiene		1.09E+04	2.20E-05	6.10E+00	No Toxicity Value		1.09E+04	2.20E-05	6.10E+00	4.00E+00	1.92E+02
Hexachlorocyclohexane, Technical		1.36E+09	5.10E-04	3.27E+04	No Toxicity Value		1.36E+09	1.10E-03	1.52E+04	No Toxicity Value	
Isobutyl Alcohol		2.85E+04	No Toxicity Value		No Toxicity Value		2.85E+04	No Toxicity Value		1.20E+03	1.50E+05
Lead Compounds			•		•						
~Lead subacetate		1.36E+09	1.20E-05	1.39E+06	No Toxicity Value		1.36E+09	1.10E-05	1.52E+06	No Toxicity Value	
~Tetraethyl Lead		1.93E+03	No Toxicity Value		No Toxicity Value		1.93E+03	No Toxicity Value		4.00E-04	3.39E-03
Lewisite		2.59E+04	No Toxicity Value		No Toxicity Value		2.59E+04	No Toxicity Value		2.00E-02	2.27E+00
Manganese (Non-diet)		1.36E+09	No Toxicity Value		5.00E-02	2.98E+05	1.36E+09	No Toxicity Value		9.00E-02	5.36E+05
Mercury Compounds			Ž					·			
~Mercuric Chloride (and other Mercury salts)		1.36E+09	No Toxicity Value		3.00E-01	1.79E+06	1.36E+09	No Toxicity Value		3.00E-02	1.79E+05
~Mercury (elemental)		3.52E+04	No Toxicity Value		3.00E-01	4.62E+01	3.52E+04	No Toxicity Value		3.00E-02	4.62E+00
Methyl Acetate		8.23E+03	No Toxicity Value		No Toxicity Value		8.23E+03	No Toxicity Value		4.00E+03	1.44E+05
Methylene Chloride		2.22E+03	1.00E-08	2.72E+03	6.00E+02	5.84E+03	2.22E+03	1.00E-06	2.72E+01	4.00E+02	3.89E+03
Methylene-bis(2-chloroaniline), 4,4'-		1.36E+09	4.30E-04	3.88E+04	No Toxicity Value		1.36E+09	4.30E-04	3.88E+04	No Toxicity Value	
Methylstyrene, Alpha-		1.30E+04	No Toxicity Value		No Toxicity Value		1.30E+04	No Toxicity Value		2.80E+02	1.59E+04
Mineral oils		1.39E+03	No Toxicity Value		No Toxicity Value		1.39E+03	No Toxicity Value		1.20E+04	7.32E+04
Nickel Hydroxide		1.36E+09	2.60E-04	6.41E+04	1.40E-02	8.34E+04	1.36E+09	2.60E-04	6.42E+04	1.40E-02	8.34E+04
Nickel Oxide		1.36E+09	2.60E-04	6.41E+04	2.00E-02	1.19E+05	1.36E+09	2.60E-04	6.42E+04	2.00E-02	1.19E+05
Nickel Oxide  Nickel Refinery Dust		1.36E+09	2.40E-04	6.95E+04	1.40E-02	8.34E+04	1.36E+09	2.60E-04	6.42E+04	1.40E-02	8.34E+04
Nickel Soluble Salts		1.36E+09	2.60E-04	6.41E+04	9.00E-02	5.36E+05	1.36E+09	2.60E-04 2.60E-04	6.42E+04 6.42E+04	1.40E-02	8.34E+04 8.34E+04
Nickel Solubie Sans Nickel Subsulfide		1.36E+09	4.80E-04	3.47E+04	1.40E-02	8.34E+04	1.36E+09	4.90E-04	3.40E+04	1.40E-02	8.34E+04 8.34E+04
Pentachloroethane		9.78E+03	No Toxicity Value		No Toxicity Value		9.78E+03	2.25E-05	5.33E+00		
		7.00E+03	· ·				7.00E+03			No Toxicity Value	2.45E±00
Phosphorus, White		7.00E+03	No Toxicity Value		No Toxicity Value		7.UUE+U3	No Toxicity Value		8.00E-02	2.45E+00

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Table A-6b. USEPA RSLs and DTSC-SLs for a Commercial Industrial Receptor Exposed to Compounds from Soil via Inhalation

Description	Variable	USEPA Value	DTSC Value	Units	Equations						
Averaging Time, carcinogens	$AT_c$	70		yrs		TD AT	y 205 day . 24 ho	ur			
Averaging Time, noncarcinogens, worker	$AT_{nc,w}$	25	25	yrs	DCI	$IR \times AI_{\alpha}$	$c \times 365 \frac{day}{year} \times 24 \frac{ho}{da}$ $\times IUR \times CF_I \times \left( \frac{VF_{wo}}{VF_{wo}} \right)$	iy			
COPC Concentration in air	$C_{air}$	chemica	ıl-specific	$\mu g/m^3$	$KSL_{inh} - F$	F × ED × ET :	$\times$ IIIR $\times$ CF, $\times$ $\left(\frac{1}{1100}\right)$	1			
COPC Concentration in soil	$C_{\mathrm{soil}}$	chemica	ıl-specific	mg/kg	L	W N DDW N DIW	$VF_{wo}$	<sub>rker</sub> or <i>PEF J</i>			
Conversion Factor	$CF_i$	1.0E+03	1.0E+03	μg/mg							
Exposure Duration, worker	$\mathrm{ED}_{\mathrm{w}}$	25	25	yrs							
Exposure Frequency, worker	$EF_{w}$	250	250	days/yr							
Exposure Time, worker	$\mathrm{ET}_{\mathrm{w}}$	8		hours/day							
Inhalation Unit-Risk Factor	IUR	chemica		$(\mu g/m^3)^{-1}$	Noncarcinogen:	$THQ \times AT$	$T_w \times 365 \frac{day}{year} \times 24 \frac{h}{c} \times \frac{1}{RfC} \times CF_I \times \left( \overline{VF_{wc}} \right)$	our			
Particulate emission factor (non-VOCs)	PEF	1.359E+09	1.360E+09	m <sup>3</sup> /kg	$RSL_{inh} = -$	<u> </u>	<u> </u>	$\frac{\iota uy}{1}$			
Inhalation Reference Concentration	RfC	chemica	ıl-specific	μg/m <sup>3</sup>	Ε	$F_w \times ED_w \times ET_w$	$\times \frac{1}{RfC} \times CF_I \times (\overline{VF_{we}})$	$\frac{1}{\text{or } PEF}$ )			
Regional screening level, inhalation	$RSL_{inh}$	chemica	ıl-specific	μg/m <sup>3</sup>			, - ( . W.	inci - /			
Target Hazard Quotient	THQ	1		dimensionless							
Target Risk	TR	1.0E-06		dimensionless							
Volatilization Factor for VOCs (Table A-4)	$VF_{worker}$	chemica	ll-specific	m <sup>3</sup> /kg							
			US	EPA Commercial	RSL <sub>inh</sub>			DTSC-M	Iodified Residen	tial RSLinh	
	_	VF <sub>worker</sub> or PEF	IUR	Cancer	RfC	Noncancer	VF <sub>worker</sub> or PEF	IUR	Cancer	RfC	Noncancer
Analyte		m <sup>3</sup> /kg	$(\mu g/m^3)^{-1}$	(mg/kg)	$(\mu g/m^3)$	(mg/kg)	m <sup>3</sup> /kg	$(\mu g/m^3)^{-1}$	(mg/kg)	$(\mu g/m^3)$	(mg/kg)
Phthalates											
~Dimethylterephthalate		2.16E+04	No Toxicity Value		No Toxicity Value		2.16E+04	No Toxicity Value		4.00E+02	3.79E+04
Silver		1.36E+09	No Toxicity Value		No Toxicity Value		1.36E+09	No Toxicity Value		No Toxicity Value	
Tetrachloroethane, 1,1,1,2-		5.75E+03	7.40E-06	9.54E+00	No Toxicity Value		5.75E+03	7.40E-06	9.54E+00	1.20E+02	3.02E+03
Tetrachloroethane, 1,1,2,2-		1.53E+04	5.80E-05	3.24E+00	No Toxicity Value		1.53E+04	5.80E-05	3.24E+00	8.00E+01	5.37E+03
Tetrachloroethylene		2.38E+03	2.60E-07	1.12E+02	4.00E+01	4.17E+02	2.38E+03	5.90E-06	4.94E+00	3.50E+01	3.65E+02
Toluene		4.35E+03	No Toxicity Value		5.00E+03	9.52E+04	4.35E+03	No Toxicity Value		3.00E+02	5.71E+03
Tri-n-butyltin		3.40E+03	No Toxicity Value		No Toxicity Value		3.40E+03	No Toxicity Value		1.20E+00	1.79E+01
Trichlorobenzene, 1,2,3-		3.27E+04	No Toxicity Value		No Toxicity Value		3.27E+04	No Toxicity Value		3.20E+00	4.58E+02
Trichloroethane, 1,1,1-		1.67E+03	No Toxicity Value		5.00E+03	3.66E+04	1.67E+03	No Toxicity Value		1.00E+03	7.31E+03
Trichlorofluoromethane		1.05E+03	No Toxicity Value		No Toxicity Value		1.05E+03	No Toxicity Value		1.20E+03	5.50E+03
Trichlorophenol, 2,4,6-		1.36E+09	3.10E-06	5.38E+06	No Toxicity Value		1.36E+09	2.00E-05	8.34E+05	No Toxicity Value	
Trichloropropane, 1,1,2-		1.53E+04	No Toxicity Value		No Toxicity Value		1.53E+04	No Toxicity Value		2.00E+01	1.34E+03
Trichloropropane, 1,2,3-		1.59E+04	No Toxicity Value		3.00E-01	2.09E+01	1.59E+04	7.50E-03	2.60E-02	3.00E-01	2.09E+01
Trimethylbenzene, 1,3,5-		6.70E+03	No Toxicity Value		No Toxicity Value		6.70E+03	No Toxicity Value		4.00E+01	1.17E+03
Trimethylpentene, 2,4,4-		1.01E+03	No Toxicity Value		No Toxicity Value		1.01E+03	No Toxicity Value		4.00E+01	1.77E+02
Vanadium and Compounds		1.36E+09	No Toxicity Value		1.00E-01	5.95E+05	1.36E+09	No Toxicity Value		1.00E-01	5.96E+05
Vinyl Chloride		9.66E+02	4.40E-06	2.69E+00	1.00E+02	4.23E+02	9.66E+02	7.80E-05	1.52E-01	1.00E+02	4.23E+02
Additional Analytes											
Beryllium Sulfate		1.36E+09	2.40E-03	6.95E+03	2.00E-02	1.19E+05	1.36E+09	8.60E-01	1.94E+01	7.00E-03	4.17E+04
Dichlorobenzene, 1,3-		2.18E+03	No Toxicity Value		No Toxicity Value		2.18E+03	No Toxicity Value		1.20E+02	1.14E+03
Methylcyclohexane		8.85E+02	No Toxicity Value		No Toxicity Value		8.85E+02	No Toxicity Value		6.00E+03	2.33E+04
			•		•			•			

<sup>&</sup>quot;--" = no value

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Table B-1. DTSC-Recommended Screening Levels for Tap Water

		Toxicity Factors for DTSC-SLs										Screening Levels for Ta	n Water (ug/L)				
			ope Factor	Inhalatio	on Unit Risk		Dose - Oral	Reference Conce	entration	Cancer E	ndpoint	Cancer E	ndpoint	Noncancer E	10.	Noncancer I	Endpoint
		SFo		IUR		RfDo		RfC or REL		USEPA RSL <sub>Combined</sub>	DTSC-SLci	Final Value	Source	USEPA RSL <sub>Combined</sub>	DTSC-SL <sub>G</sub>	Final Value	Source
Analyte	CAS#	(mg/kg-d) <sup>-1</sup>	Source	(μg/m <sup>3</sup> ) <sup>-1</sup>	Source	(mg/kg-d)	Ref.	(μg/m <sup>3</sup> )	Source	Combined	2 13 C S2Combined	Tillul value	Bource	Combined	2 15 C S2 Combined	Timui varue	Bource
USEPA RSL Analytes Acetophenone	98-86-2					1.0E-01	IRIS	4.0E+02	Route					1.9E+03	5.8E+02	5.8E+02	DTSC
Acrylamide	79-06-1	4.5E+00	ОЕННА	1.3E-03	ОЕННА	2.0E-03	IRIS	6.0E+00	IRIS	5.0E-02	5.6E-03	5.6E-03	DTSC	4.0E+01	4.0E+01	4.0E+01	USEPA
Acrylonitrile	107-13-1	1.0E+00	ОЕННА	2.9E-04	OEHHA	4.0E-02	ATSDR	2.0E+00	IRIS	5.2E-02	1.5E-02	1.5E-02	DTSC	4.1E+00	1.0E+01	4.1E+00	USEPA
Aldrin	309-00-2 7440-38-2	1.7E+01	IRIS	4.9E-03	IRIS	3.0E-05	IRIS OEHHA	1.2E-01	Route OEHHA	9.2E-04	9.2E-04	9.2E-04	USEPA	6.0E-01	1.8E-01	1.8E-01	DTSC
Arsenic, Inorganic Benzaldehyde	100-52-7	9.5E+00 	OEHHA PHG	3.3E-03	OEHHA 	3.5E-06 1.0E-01	IRIS	1.5E-02 4.0E+02	Route	5.2E-02	8.2E-03	8.2E-03	DTSC 	6.0E+00 1.9E+03	7.0E-02 5.8E+02	7.0E-02 5.8E+02	DTSC DTSC
Benzene	71-43-2	1.0E-01	OEHHA	2.9E-05	ОЕННА	4.0E-03	IRIS	3.0E+00	ОЕННА	4.5E-01	1.5E-01	1.5E-01	DTSC	3.3E+01	5.7E+00	5.7E+00	DTSC
Benzenethiol	108-98-5					1.0E-03	PPRTV	4.0E+00	Route					1.7E+01	5.6E+00	5.6E+00	DTSC
Beryllium and compounds Bis(2-chloro-1-methylethyl) ether	7440-41-7 108-60-1					2.0E-04 4.0E-02	OEHHA PHG IRIS	7.0E-03 1.6E+02	OEHHA Route					2.5E+01 7.1E+02	2.5E+00 2.3E+02	2.5E+00 2.3E+02	DTSC DTSC
Bromodichloromethane	75-27-4	1.3E-01	ОЕННА	3.7E-05	ОЕННА	2.0E-02	IRIS	8.0E+01	Route	1.3E-01	1.2E-01	1.2E-01	DTSC	3.8E+02	1.2E+02	1.2E+02	DTSC
Bromoform	75-25-2	1.1E-02	ОЕННА	1.1E-06	IRIS	2.0E-02	IRIS	8.0E+01	Route	3.3E+00	2.9E+00	2.9E+00	DTSC	3.8E+02	1.2E+02	1.2E+02	DTSC
Butanol, N- Butylbenzene, n-	71-36-3 104-51-8					1.0E-01 5.0E-02	IRIS PPRTV	4.0E+02 2.0E+02	Route Route					2.0E+03 1.0E+03	5.9E+02 2.9E+02	5.9E+02 2.9E+02	DTSC DTSC
Butylbenzene, sec-	135-98-8					1.0E-01	Screening PPRTV	4.0E+02	Route					2.0E+03	5.9E+02	5.9E+02	DTSC
Carbon Tetrachloride	56-23-5	1.5E-01	OEHHA	4.2E-05	OEHHA	4.0E-03	IRIS	4.0E+01	OEHHA	4.5E-01	1.0E-01	1.0E-01	DTSC	4.9E+01	3.6E+01	3.6E+01	DTSC
Chloral Hydrate	302-17-0					1.0E-01	IRIS	4.0E+02	Route					2.0E+03	5.9E+02	5.9E+02	DTSC
Chloroacetaldehyde, 2-	12789-03-6 107-20-0	1.3E+00 2.7E-01	OEHHA Screening PPRTV	3.4E-04 6.8E-05	OEHHA Route	5.0E-04	IRIS 	7.0E-01	IRIS 	4.5E-02 2.9E-01	1.3E-02 6.4E-02	1.3E-02 6.4E-02	DTSC DTSC	1.3E+00	1.3E+00	1.3E+00	USEPA 
Chloroethanol, 2-	107-07-3	2.7E-01				2.0E-02	PPRTV	8.0E+01	Route	2.9E-01	0.4L-02	0.4E-02		4.0E+02	1.2E+02	1.2E+02	DTSC
Chlorophenol, 2-	95-57-8					5.0E-03	IRIS	2.0E+01	Route					9.1E+01	2.9E+01	2.9E+01	DTSC
Crotonaldehyde, trans-	123-73-9	1.9E+00	HEAST	4.8E-04	Route	1.0E-03	PPRTV	4.0E+00	Route	4.0E-02	9.1E-03	9.1E-03	DTSC	2.0E+01	5.9E+00	5.9E+00	DTSC
Cyanides ~Cyanogen	460-19-5					1.0E-03	IRIS	4.0E+00	Route					2.0E+01	5.9E+00	5.9E+00	DTSC
~Cyanogen Bromide	506-68-3					9.0E-02	IRIS	3.6E+02	Route					1.8E+03	5.3E+02	5.3E+02	DTSC
~Cyanogen Chloride	506-77-4			-		5.0E-02	IRIS	2.0E+02	Route		-			1.0E+03	2.9E+02	2.9E+02	DTSC
~Thiocyanic Acid Cyclohexylamine	463-56-9 108-91-8					2.0E-04 2.0E-01	PPRTV IRIS	8.0E-01 8.0E+02	Route Route					4.0E+00 3.8E+03	1.2E+00 1.2E+03	1.2E+00 1.2E+03	DTSC DTSC
Dibromochloromethane	124-48-1	8.4E-02	IRIS	2.1E-05	Route	2.0E-01 2.0E-02	IRIS	8.0E+01	Route	8.7E-01	2.0E-01	2.0E-01	DTSC	3.8E+02	1.2E+03 1.2E+02	1.2E+03 1.2E+02	DTSC
Dibromoethane, 1,2-	106-93-4	2.0E+00	IRIS	6.0E-04	IRIS	9.0E-03	IRIS	8.0E-01	ОЕННА	7.5E-03	1.6E-02	7.5E-03	USEPA	1.7E+01	1.7E+00	1.7E+00	DTSC
Dichloroethane, 1,1-	75-34-3	5.7E-03	ОЕННА	1.6E-06	ОЕННА	2.0E-01	PPRTV	8.0E+02	Route	2.7E+00	2.7E+00	2.7E+00	USEPA	3.8E+03	1.2E+03	1.2E+03	DTSC
Dichloroethylene, 1,2-cis- Dichloroethylene, 1,2-trans-	156-59-2 156-60-5					2.0E-03 2.0E-02	IRIS IRIS	8.0E+00 8.0E+01	Route Route					3.7E+01 3.6E+02	1.2E+01 1.1E+02	1.2E+01 1.1E+02	DTSC DTSC
Dichloropropane, 1,3-	142-28-9					2.0E-02	PPRTV	8.0E+01	Route		-			3.7E+02	1.1E+02	1.1E+02	DTSC
Diethylformamide	617-84-5					1.0E-03	PPRTV	4.0E+00	Route					2.0E+01	5.9E+00	5.9E+00	DTSC
Diisopropyl Methylphosphonate Dimethylaniline, N.N-	1445-75-6 121-69-7					8.0E-02 2.0E-03	IRIS IRIS	3.2E+02 8.0E+00	Route					1.6E+03 3.5E+01	4.7E+02 1.1E+01	4.7E+02 1.1E+01	DTSC DTSC
Dithiane, 1,4-	505-29-3					1.0E-02	IRIS	4.0E+01	Route					2.0E+02	5.9E+01	5.9E+01	DTSC
Endosulfan	115-29-7					6.0E-03	IRIS	2.4E+01	Route					1.0E+02	3.3E+01	3.3E+01	DTSC
Epichlorohydrin	106-89-8	8.0E-02	ОЕННА	2.3E-05	OEHHA	6.0E-03	PPRTV	1.0E+00	IRIS	2.9E+00	1.9E-01	1.9E-01	DTSC	2.0E+00	5.9E+00	2.0E+00	USEPA
Ethyl Ether Ethylene Diamine	60-29-7 107-15-3					2.0E-01 9.0E-02	IRIS PPRTV	8.0E+02 3.6E+02	Route Route					3.9E+03 1.8E+03	1.2E+03 5.3E+02	1.2E+03 5.3E+02	DTSC DTSC
Furans						7,02								3,0,2,7,0	0.00		
~Furan	110-00-9					1.0E-03	IRIS	4.0E+00	Route		-			1.9E+01	5.8E+00	5.8E+00	DTSC
Guanidine Hexabromobenzene	113-00-8 87-82-1					1.0E-02 2.0E-03	Screening PPRTV IRIS	4.0E+01 8.0E+00	Route Route					2.0E+02 4.0E+01	5.9E+01 1.2E+01	5.9E+01 1.2E+01	DTSC DTSC
Hexachlorobenzene	118-74-1	1.8E+00	ОЕННА	5.1E-04	ОЕННА	8.0E-04	IRIS	3.2E+00	Route	9.8E-03	8.8E-03	8.8E-03	DTSC	1.6E+01	4.7E+00	4.7E+00	DTSC
Hexachlorocyclohexane, Gamma- (Lindane)	58-89-9	1.1E+00	ОЕННА	3.1E-04	ОЕННА	3.0E-04	IRIS	1.2E+00	Route	5.1E-02	1.3E-02	1.3E-02	DTSC	4.5E+00	1.6E+00	1.6E+00	DTSC
Isobutyl Alcohol	78-83-1					3.0E-01	IRIS	1.2E+03	Route					5.9E+03	1.8E+03	1.8E+03	DTSC
Lead Compounds ~Lead subacetate	1335-32-6	3.8E-02	ОЕННА	1.1E-05	ОЕННА					9.2E+00	2.1E+00	2.1E+00	DTSC				
Lewisite	541-25-3	-				5.0E-06	PPRTV	2.0E-02	Route	-	-	-		9.0E-02	2.9E-02	2.9E-02	DTSC
Mercury Compounds	7420.07.5					1.0001	OPIUL	2.00.00	Opini.					C 200 C 1	C 1E 02	C 1D 02	DTGG
~Mercury (elemental) Merphos	7439-97-6 150-50-5					1.6E-04 3.0E-05	OEHHA IRIS	3.0E-02 1.2E-01	OEHHA Route					6.3E-01 6.0E-01	6.1E-02 1.8E-01	6.1E-02 1.8E-01	DTSC DTSC
Methyl Acetate	79-20-9					1.0E+00	Screening PPRTV	4.0E+03	Route					2.0E+04	5.9E+03	5.9E+03	DTSC
Methylene Chloride	75-09-2	1.4E-02	ОЕННА	1.0E-06	ОЕННА	6.0E-03	IRIS	4.0E+02	ОЕННА	1.1E+01	9.3E-01	9.3E-01	DTSC	1.1E+02	1.0E+02	1.0E+02	DTSC
Methylene-bis(2-chloroaniline), 4,4'- Mineral oils	101-14-4 8012-95-1	1.5E+00	ОЕННА	4.3E-04	ОЕННА	2.0E-03 3.0E+00	PPRTV PPRTV	No Toxicity Value 1.2E+04	 Route	1.6E-01	1.0E-02	1.0E-02	DTSC	2.6E+01 6.0E+04	2.6E+01 1.8E+04	2.6E+01 1.8E+04	USEPA DTSC
Mirex	2385-85-5	1.8E+01	оенна	5.1E-03	ОЕННА	2.0E-04	IRIS	8.0E-01	Route	8.8E-04	8.8E-04	8.8E-04	USEPA	6.0E+04 4.0E+00	1.8E+04 1.2E+00	1.8E+04 1.2E+00	DTSC
Naled	300-76-5					2.0E-03	IRIS	8.0E+00	Route		-			4.0E+01	1.2E+01	1.2E+01	DTSC
Nitrotoluene, o-	88-72-2	2.2E-01	PPRTV	5.5E-05	Route	9.0E-04	PPRTV	3.6E+00	Route	3.1E-01	7.7E-02	7.7E-02	DTSC	1.6E+01	5.1E+00	5.1E+00	DTSC
Pentabromodiphenyl Ether Pentachloroethane	32534-81-9 76-01-7	9.0E-02	PPRTV	2.3E-05	Route	2.0E-03	IRIS 	8.0E+00	Route	6.4E-01	1.8E-01	1.8E-01	DTSC	4.0E+01	1.2E+01	1.2E+01	DTSC 
Perfluorobutane Sulfonate	375-73-5	9.0E-02		2.3E-03		2.0E-02	PPRTV	8.0E+01	Route	0.4E-01	1.8E-01 	1.0E-01 		3.8E+02	1.2E+02	1.2E+02	DTSC
Phosphorus, White	7723-14-0			-		2.0E-05	IRIS	8.0E-02	Route		-			4.0E-01	1.2E-01	1.2E-01	DTSC
Phthalates  Dimethyltorophthelate	120 61 6					1.05.01	IDIC	4.05.02	Dant.					1.00.02	5 917 102	5 OE . 00	DTCC
~Dimethylterephthalate Polychlorinated Biphenyls (PCBs)	120-61-6			-		1.0E-01	IRIS	4.0E+02	Route					1.9E+03	5.8E+02	5.8E+02	DTSC
~Aroclor 1016	12674-11-2	7.0E-02	IRIS (lowest risk)	2.0E-05	IRIS (lowest risk)	7.0E-05	IRIS	2.8E-01	Route	2.2E-01	2.2E-01	2.2E-01	USEPA	1.4E+00	4.1E-01	4.1E-01	DTSC
~Aroclor 1254	11097-69-1	2.0E+00	IRIS (high risk)	5.7E-04	IRIS (high risk)	2.0E-05	IRIS	8.0E-02	Route	7.9E-03	7.9E-03	7.9E-03	USEPA	4.0E-01	1.2E-01	1.2E-01	DTSC
~Aroclor 5460	11126-42-4 107-19-7					6.0E-04 2.0E-03	Screening PPRTV IRIS	2.4E+00 8.0E+00	Route Route					1.2E+01 4.0E+01	3.5E+00 1.2E+01	3.5E+00 1.2E+01	DTSC DTSC
Propargyl Alcohol	107-19-7					2.UE-03	IKIS	0.UE+UU	Koute					4.UE+U1	1.4E+U1	1.4E+UI	חוטכ

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Table B-1. DTSC-Recommended Screening Levels for Tap Water

					Toxicity Fa	ctors for DTSC-SLs								Screening Levels for	Tap Water (μg/L)		
		Oral Slo	pe Factor	Inhalation	Unit Risk	Reference Do	se - Oral	Reference Conc	entration	Cancer E	ndpoint	Cancer E	ndpoint	Noncancer	Endpoint	Noncancer	Endpoint
		SFo		IUR		RfDo		RfC or REL		LICEDA DOL	DTCC CI	E: 137.1	G.	LICEDA DOL	DTCC CI	F: 17/1	- G
Analyte	CAS#	(mg/kg-d) <sup>-1</sup>	Source	$(\mu g/m^3)^{-1}$	Source	(mg/kg-d)	Ref.	$(\mu g/m^3)$	Source	USEPA RSL <sub>Combined</sub>	DISC-SL <sub>Combined</sub>	Final Value	Source	USEPA RSL <sub>Combined</sub>	DISC-SL <sub>Combined</sub>	Final Value	Source
Pyridine	110-86-1					1.0E-03	IRIS	4.0E+00	Route					2.0E+01	5.9E+00	5.9E+00	DTSC
Tetrachloroethane, 1,1,2,2-	79-34-5	2.7E-01	OEHHA	5.8E-05	OEHHA	2.0E-02	IRIS	8.0E+01	Route	7.6E-02	7.0E-02	7.0E-02	DTSC	3.6E+02	1.1E+02	1.1E+02	DTSC
Tetrachloroethylene	127-18-4	5.4E-01	OEHHA PHG	5.9E-06	OEHHA	6.0E-03	IRIS	3.5E+01	OEHHA	1.1E+01	8.3E-02	8.3E-02	DTSC	4.1E+01	3.8E+01	3.8E+01	DTSC
Trichloroethane, 1,1,1-	71-55-6					2.0E+00	IRIS	1.0E+03	OEHHA					8.0E+03	2.0E+03	2.0E+03	DTSC
Trichlorofluoromethane	75-69-4	-				3.0E-01	IRIS	1.2E+03	Route					5.2E+03	1.7E+03	1.7E+03	DTSC
Trichlorophenol, 2,4,6-	88-06-2	7.0E-02	OEHHA	2.0E-05	OEHHA	1.0E-03	PPRTV	No Toxicity Value		4.0E+00	6.3E-01	6.3E-01	DTSC	1.2E+01	1.2E+01	1.2E+01	USEPA
Trichloropropane, 1,1,2-	598-77-6					5.0E-03	IRIS	2.0E+01	Route					8.8E+01	2.8E+01	2.8E+01	DTSC
Trichloropropane, 1,2,3-	96-18-4	3.0E+01	IRIS	7.5E-03	Route	4.0E-03	IRIS	3.0E-01	IRIS	7.5E-04	2.0E-04	2.0E-04	DTSC	6.2E-01	6.2E-01	6.2E-01	USEPA
Additional Analytes																	
Beryllium Sulfate	13510-49-1					2.0E-04	OEHHA PHG	7.0E-03	OEHHA					2.5E+01	2.5E+00	2.5E+00	DTSC
Dichlorobenzene, 1,3-	541-73-1					3.0E-02	DTSC J&E	1.2E+02	Route						1.5E+02	1.5E+02	DTSC
Methylcyclohexane	108-87-2					No Toxicity Value		6.0E+03	Cyclohexane						1.3E+04	1.3E+04	DTSC

"--" = no value

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Table B-2. Screening Levels for Tap Water: Comparison of USEPA RSLs and DTSC-SLs

				USEPA RS	L for Tap Water (µg	/L)			DTSC-SL for Tapwater RSL (µg/L)							
			er Endpoint				cer Endpoint				Cancer Endpoint				ncer Endpoint	
Analyte	RSL <sub>Ing</sub>	RSL <sub>D</sub>	RSL <sub>Inh</sub>	RSL <sub>Combined</sub>	RSL <sub>Ing</sub>	RSL <sub>D</sub>	RSL <sub>Inh</sub>	RSL <sub>Combined</sub>	DTSC-SL <sub>Ing</sub>	DTSC-SL <sub>D</sub>	DTSC-SL <sub>Inh</sub>	DTSC-SL <sub>Combined</sub>	DTSC-SL <sub>Ing</sub>	DTSC-SL <sub>D</sub>	DTSC-SL <sub>Inh</sub>	DTSC-SL <sub>Combined</sub>
USEPA RSL Analytes Acetophenone					2.01E+03	4.61E+04		1.92E+03	<u></u>			_	2.01E+03	4.61E+04	8.34E+02	5.82E+02
Acrylamide	5.01E-02	2.26E+01	<u></u>	5.00E-02	4.01E+01	2.10E+04		4.00E+01	5.57E-03	2.51E+00		5.55E-03	4.01E+01	2.10E+04	0.34E+02	4.00E+01
Acrylonitrile	1.44E-01	1.38E+01	8.26E-02	5.23E-02	8.02E+02	8.87E+04	4.17E+00	4.15E+00	7.79E-02	7.47E+00	1.94E-02	1.55E-02	8.02E+02	8.87E+04	1.04E+01	1.03E+01
Aldrin	4.58E-03		1.15E-03	9.17E-04	6.02E-01			6.02E-01	4.58E-03		1.15E-03	9.17E-04	6.02E-01		2.50E-01	1.77E-01
Arsenic, Inorganic	5.19E-02	9.33E+00		5.17E-02	6.02E+00	1.36E+03		5.99E+00	8.20E-03	1.47E+00		8.16E-03	7.02E-02	1.59E+01	0.245.02	6.99E-02
Benzaldehyde Benzene	1.42E+00	9.45E+00	7.20E-01	4.54E-01	2.01E+03 8.02E+01	4.91E+04 6.06E+02	6.26E+01	1.93E+03 3.32E+01	7.79E-01	5.20E+00	 1.94E-01	1.51E-01	2.01E+03 8.02E+01	4.91E+04 6.06E+02	8.34E+02 6.26E+00	5.82E+02 5.75E+00
Benzenethiol	1.42L+00	7.43E+00 	7.20L-01	4.54L-01	2.01E+01	1.03E+02	0.20E+01	1.68E+01	7.77L-01	3.20E+00	1.74L-01		2.01E+01	1.03E+02	8.34E+00	5.57E+00
Beryllium and compounds					4.01E+01	6.36E+01		2.46E+01					4.01E+00	6.36E+00		2.46E+00
Bis(2-chloro-1-methylethyl) ether					8.02E+02	6.47E+03		7.14E+02					8.02E+02	6.47E+03	3.34E+02	2.27E+02
Bromodichloromethane	1.26E+00	1.78E+01	1.52E-01	1.34E-01	4.01E+02	6.44E+03		3.78E+02	5.99E-01	8.50E+00	1.52E-01	1.19E-01	4.01E+02	6.44E+03	1.67E+02	1.16E+02
Bromoform Butanol, N-	9.86E+00	1.35E+02	5.10E+00	3.28E+00	4.01E+02 2.01E+03	6.20E+03 9.99E+04		3.77E+02 1.97E+03	7.08E+00	9.69E+01	5.10E+00	2.88E+00	4.01E+02 2.01E+03	6.20E+03 9.99E+04	1.67E+02 8.34E+02	1.16E+02 5.86E+02
Butylbenzene, n-					1.00E+03	9.99E±04		1.00E+03					1.00E+03	9.99ET04	4.17E+02	2.95E+02
Butylbenzene, sec-					2.01E+03			2.01E+03					2.01E+03		8.34E+02	5.89E+02
Carbon Tetrachloride	1.11E+00	4.15E+00	9.36E-01	4.53E-01	8.02E+01	3.39E+02	2.09E+02	4.95E+01	5.19E-01	1.94E+00	1.34E-01	1.01E-01	8.02E+01	3.39E+02	8.34E+01	3.65E+01
Chloral Hydrate					2.01E+03	1.52E+05		1.98E+03					2.01E+03	1.52E+05	8.34E+02	5.87E+02
Chloropoetaldabyda 2	2.23E-01	4 29E : 01	5.62E-02	4.48E-02	1.00E+01		1.46E+00	1.27E+00	5.99E-02	4 29E : 01	1.65E-02	1.29E-02	1.00E+01		1.46E+00	1.27E+00
Chloroacetaldehyde, 2- Chloroethanol, 2-	2.89E-01	4.38E+01		2.87E-01	4.01E+02	7.65E+04		3.99E+02	2.89E-01	4.38E+01	8.32E-02	6.45E-02	4.01E+02	7.65E+04	1.67E+02	1.18E+02
Chlorophenol, 2-					1.00E+02	1.02E+03		9.13E+01					1.00E+02	1.02E+03	4.17E+01	2.86E+01
Crotonaldehyde, trans-	4.10E-02	2.62E+00		4.04E-02	2.01E+01	1.49E+03		1.98E+01	4.10E-02	2.62E+00	1.18E-02	9.14E-03	2.01E+01	1.49E+03	8.34E+00	5.87E+00
Cyanides																
~Cyanogen					2.01E+01	5.10E+03		2.00E+01					2.01E+01	5.10E+03	8.34E+00	5.89E+00
~Cyanogen Bromide ~Cyanogen Chloride					1.80E+03 1.00E+03	1.60E+06 5.76E+05		1.80E+03 1.00E+03				<del></del>	1.80E+03 1.00E+03	1.60E+06 5.76E+05	7.51E+02 4.17E+02	5.30E+02 2.94E+02
~Cyanogen Chioride ~Thiocyanic Acid					4.01E+00	9.08E+02		3.99E+00					4.01E+00	9.08E+02	1.67E+00	2.94E+02 1.18E+00
Cyclohexylamine					4.01E+03	9.24E+04		3.84E+03					4.01E+03	9.24E+04	1.67E+03	1.16E+03
Dibromochloromethane	9.27E-01	1.37E+01		8.69E-01	4.01E+02	6.72E+03		3.78E+02	9.27E-01	1.37E+01	2.67E-01	2.04E-01	4.01E+02	6.72E+03	1.67E+02	1.16E+02
Dibromoethane, 1,2-	3.90E-02	6.86E-01	9.36E-03	7.46E-03	1.80E+02	3.60E+03	1.88E+01	1.69E+01	2.16E-02	3.81E-01	7.91E-02	1.63E-02	1.80E+02	3.60E+03	1.67E+00	1.65E+00
Dichloroethane, 1,1-	1.37E+01	1.76E+02	3.51E+00	2.75E+00	4.01E+03	5.83E+04		3.75E+03	1.37E+01	1.76E+02	3.51E+00	2.75E+00	4.01E+03	5.83E+04	1.67E+03	1.16E+03
Dichloroethylene, 1,2-cis- Dichloroethylene, 1,2-trans-					4.01E+01 4.01E+02	5.17E+02 3.64E+03		3.72E+01 3.61E+02					4.01E+01 4.01E+02	5.17E+02 3.64E+03	1.67E+01 1.67E+02	1.15E+01 1.14E+02
Dichloroperopane, 1,3-					4.01E+02 4.01E+02	4.63E+03		3.69E+02					4.01E+02 4.01E+02	4.63E+03	1.67E+02 1.67E+02	1.14E+02 1.15E+02
Diethylformamide					2.01E+01	4.24E+03		2.00E+01					2.01E+01	4.24E+03	8.34E+00	5.88E+00
Diisopropyl Methylphosphonate					1.60E+03	1.26E+05		1.58E+03					1.60E+03	1.26E+05	6.67E+02	4.70E+02
Dimethylaniline, N,N-					4.01E+01	3.04E+02		3.54E+01					4.01E+01	3.04E+02	1.67E+01	1.13E+01
Dithiane, 1,4-	-				2.01E+02	1.59E+04		1.98E+02		-			2.01E+02	1.59E+04	8.34E+01	5.87E+01
Endosulfan Epichlorohydrin	7.87E+00	7.54E+02	4.68E+00	2.92E+00	1.20E+02 1.20E+02	6.29E+02 1.30E+04	2.09E+00	1.01E+02 2.05E+00	9.74E-01	9.33E+01	2.44E-01	1.95E-01	1.20E+02 1.20E+02	6.29E+02 1.30E+04	5.01E+01 6.26E+00	3.35E+01 5.95E+00
Ethyl Ether	7.87E±00	7.54E±02	4.06E+00	2.92E+00	4.01E+03	1.97E+05	2.09E±00	3.93E+03	7.74E-01	9.55E±01	2.44E-01	1.53E-01 	4.01E+03	1.97E+05	1.67E+03	1.17E+03
Ethylene Diamine					1.80E+03			1.80E+03					1.80E+03		7.51E+02	5.30E+02
Furans																
~Furan					2.01E+01	4.75E+02		1.92E+01					2.01E+01	4.75E+02	8.34E+00	5.82E+00
Guanidine Hexabromobenzene					2.01E+02 4.01E+01	4.22E+05		2.00E+02 4.01E+01					2.01E+02 4.01E+01	4.22E+05	8.34E+01 1.67E+01	5.89E+01 1.18E+01
Hexachlorobenzene Hexachlorobenzene	4.87E-02		1.22E-02	9.76E-03	4.01E+01 1.60E+01			4.01E+01 1.60E+01	4.33E-02		1.10E-02	8.78E-03	4.01E+01 1.60E+01		6.67E+01	1.18E+01 4.71E+00
Hexachlorocyclohexane, Gamma- (Lindane)	7.08E-02	1.83E-01	not as a volatile	5.10E-02	6.02E+00	1.76E+01		4.48E+00	7.08E-02	1.83E-01	1.81E-02	1.34E-02	6.02E+00	1.76E+01	2.50E+00	1.61E+00
Isobutyl Alcohol					6.02E+03	3.60E+05		5.92E+03					6.02E+03	3.60E+05	2.50E+03	1.76E+03
Lead Compounds																
~Lead subacetate	9.17E+00			9.17E+00	1.000.01	0.05E.01		0.025.02	2.05E+00			2.05E+00	1.000.01	 0.05E.01	 4 17E 02	2.05E.02
Lewisite  Mercury Compounds					1.00E-01	9.05E-01		9.03E-02					1.00E-01	9.05E-01	4.17E-02	2.85E-02
~Mercury (elemental)							6.26E-01	6.26E-01					3.21E+00	1.63E+02	6.26E-02	6.14E-02
Merphos					6.02E-01			6.02E-01					6.02E-01		2.50E-01	1.77E-01
Methyl Acetate					2.01E+04	2.92E+06		1.99E+04					2.01E+04	2.92E+06	8.34E+03	5.88E+03
Methylene Chloride	1.25E+01	3.38E+02	2.03E+02	1.14E+01	1.20E+02	3.65E+03	1.25E+03	1.07E+02	1.79E+00	4.82E+01	2.03E+00	9.32E-01	1.20E+02	3.65E+03	8.34E+02	1.02E+02
Methylene-bis(2-chloroaniline), 4,4'-	2.51E-01	4.17E-01		1.56E-01	4.01E+01	7.51E+01		2.61E+01	1.67E-02	2.78E-02		1.04E-02	4.01E+01	7.51E+01	2.500-04	2.61E+01
Mineral oils Mirex	4.33E-03		1.10E-03	8.78E-04	6.02E+04 4.01E+00			6.02E+04 4.01E+00	4.33E-03		1.10E-03	8.78E-04	6.02E+04 4.01E+00		2.50E+04 1.67E+00	1.77E+04 1.18E+00
Naled	4.33E-03		1.10E-03	6./6E-U4	4.01E+00 4.01E+01	6.77E+03		3.99E+01	4.33E-03		1.10E-03	8.78E-04	4.01E+00 4.01E+01	6.77E+03	1.67E+00 1.67E+01	1.18E+00 1.18E+01
Nitrotoluene, o-	3.54E-01	2.67E+00		3.13E-01	1.80E+01	1.54E+02		1.62E+01	3.54E-01	2.67E+00	1.02E-01	7.70E-02	1.80E+01	1.54E+02	7.51E+00	5.13E+00
Pentabromodiphenyl Ether					4.01E+01			4.01E+01					4.01E+01		1.67E+01	1.18E+01
Pentachloroethane	8.66E-01	2.43E+00		6.39E-01					8.66E-01	2.43E+00	2.50E-01	1.79E-01				
Perfluorobutane Sulfonate					4.01E+02	8.30E+03		3.83E+02					4.01E+02	8.30E+03	1.67E+02	1.16E+02
Phosphorus, White					4.01E-01	9.08E+01		3.99E-01					4.01E-01	9.08E+01	1.67E-01	1.18E-01

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Table B-2. Screening Levels for Tap Water: Comparison of USEPA RSLs and DTSC-SLs

				USEPA RSL	for Tap Water (µg	/L)						DTSC-SL for T	Tapwater RSL (µg/L)			
	-	Cance	r Endpoint			Noncan	cer Endpoint			(	Cancer Endpoint			Nonca	ncer Endpoint	
Analyte	$RSL_{Ing}$	$RSL_D$	$RSL_{Inh}$	$RSL_{Combined}$	$RSL_{Ing}$	$RSL_D$	$RSL_{Inh}$	RSL <sub>Combined</sub>	$DTSC-SL_{Ing}$	DTSC-SL <sub>D</sub>	$DTSC-SL_{Inh}$	DTSC-SL <sub>Combined</sub>	DTSC-SL <sub>Ing</sub>	DTSC-SL <sub>D</sub>	DTSC-SL <sub>Inh</sub>	DTSC-SL <sub>Combined</sub>
Phthalates																
~Dimethylterephthalate					2.01E+03	2.67E+04		1.87E+03					2.01E+03	2.67E+04	8.34E+02	5.76E+02
Polychlorinated Biphenyls (PCBs)																
~Aroclor 1016	1.11E+00		2.81E-01	2.24E-01	1.40E+00			1.40E+00	1.11E+00		2.81E-01	2.24E-01	1.40E+00		5.84E-01	4.12E-01
~Aroclor 1254	3.90E-02		9.83E-03	7.85E-03	4.01E-01			4.01E-01	3.90E-02		9.85E-03	7.86E-03	4.01E-01		1.67E-01	1.18E-01
~Aroclor 5460					1.20E+01			1.20E+01					1.20E+01		5.01E+00	3.54E+00
Propargyl Alcohol					4.01E+01	1.19E+04		4.00E+01					4.01E+01	1.19E+04	1.67E+01	1.18E+01
Pyridine					2.01E+01	1.47E+03		1.98E+01					2.01E+01	1.47E+03	8.34E+00	5.87E+00
Tetrachloroethane, 1,1,2,2-	3.90E-01	3.12E+00	9.68E-02	7.57E-02	4.01E+02	3.64E+03		3.61E+02	2.89E-01	2.31E+00	9.68E-02	7.03E-02	4.01E+02	3.64E+03	1.67E+02	1.14E+02
Tetrachloroethylene	3.71E+01	6.26E+01	2.16E+01	1.12E+01	1.20E+02	2.30E+02	8.34E+01	4.06E+01	1.44E-01	2.43E-01	9.52E-01	8.27E-02	1.20E+02	2.30E+02	7.30E+01	3.79E+01
Trichloroethane, 1,1,1-					4.01E+04	2.50E+05	1.04E+04	8.01E+03					4.01E+04	2.50E+05	2.09E+03	1.97E+03
Trichlorofluoromethane					6.02E+03	3.61E+04		5.16E+03					6.02E+03	3.61E+04	2.50E+03	1.69E+03
Trichlorophenol, 2,4,6-	7.08E+00	9.40E+00		4.04E+00	2.01E+01	3.01E+01		1.20E+01	1.11E+00	1.48E+00		6.35E-01	2.01E+01	3.01E+01		1.20E+01
Trichloropropane, 1,1,2-					1.00E+02	7.49E+02		8.84E+01					1.00E+02	7.49E+02	4.17E+01	2.83E+01
Trichloropropane, 1,2,3-	8.35E-04	7.08E-03		7.47E-04	8.02E+01	7.66E+02	6.26E-01	6.20E-01	8.35E-04	7.08E-03	2.70E-04	1.99E-04	8.02E+01	7.66E+02	6.26E-01	6.20E-01
Additional Analytes																
Beryllium Sulfate					4.01E+01	6.36E+01		2.46E+01					4.01E+00	6.36E+00		2.46E+00
Dichlorobenzene, 1,3-													6.02E+02	8.33E+02	2.50E+02	1.46E+02
Methylcyclohexane															1.25E+04	1.25E+04

<sup>&</sup>quot;--" = no value

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Table B-3. USEPA RSLs and DTSC-SLs for a Residential Receptor Exposed to Tap Water via Ingestion

Chlordane

3.50E-01

2.23E-01

Definitions	Variable	USEPA Value	DTSC Value		Equations				
Age-dependent Adjustment Factor, 0-2	ADAF <sub>0-2</sub>	10	10	dimensionless	Cancer Risk:				
Age-dependent Adjustment Factor, 2-6	ADAF <sub>2-6</sub>	3	3	dimensionless		$TR \times AT_{ncc} \times 365$	$day/year \times CF_{O}$		
Age-dependent Adjustment Factor, 6-16	ADAF <sub>6-16</sub>	3	3	dimensionless	$(R)SL_{ing}=$	$= \frac{TR \times AT_{nc,c} \times 365}{SF_o \times EF_r \times \left(\frac{ED_c \times IRW}{RW}\right)}$	$V_{C} = ED_{\alpha} \times IRW_{\alpha}$		
Age-dependent Adjustment Factor, 16-30	ADAF <sub>16-30</sub>	1	1	dimensionless		$SF_o \times EF_r \times (\frac{-c}{BW_c})$	$\frac{E}{a} + \frac{u}{BW_a} \times FI_r$		
Averaging Time, Carcinogens	$AT_c$	70	70	yrs	Mutagens:		day		
Averaging Time, Noncarcinogens, child	$AT_{nc,c}$	6	6	yrs	(D)CI		$TR \times AT_c \times 365 \frac{day}{year} \times CF_o$ $\frac{12 \times IRW_c \times ADAF_{0-2}}{BW_c} + \frac{ED_{2-6} \times IR}{E}$ $\frac{13 \times IRW_a \times ADAF_{6-16}}{BW_a} + \frac{ED_{16-26} \times IR}{E}$		
Averaging Time, Noncarcinogens, adult	AT <sub>nc.a</sub>	20	20	yrs	$(R)SL_{ing}$	$=$ $\frac{ED_{0-}}{}$	$_2 \times IRW_c \times ADAF_{0-2} \perp ED_{2-6} \times IR$	$C_c \times ADAF_{2-6}$	
Body Weight, adult	BW <sub>a</sub>	80	80	kg		$SF_{\alpha} \times EF_{\alpha} \times$	$BW_c$	$BW_c$	
Body Weight, child	$BW_c$	15	15	kg		$+\frac{ED_{6-16}}{}$	$\times IRW_a \times ADAF_{6-16} + ED_{16-26} \times$	$\frac{IR_a \times ADAF_{16-26}}{DM}$	
Carcinogenic Adjustment Factor, oral exposure	$CAF_{O}$	0.804	0.804	dimensionless	Trichloroethene:	\	$BW_a$	$BW_a$ /	
Conversion Factor, ingestion exposure	$CF_0$	1.0E+03	1.0E+03	mg/µg	Themoroethene.		J		
Exposure Duration, child 0-2	ED <sub>0-2</sub>	2	2.	¥Irc		$TR \times$	$AT_c \times 365 \frac{day}{v_e ar} \times CF_o$		
Exposure Duration, child 0-2  Exposure Duration, child 2-6	ED <sub>0-2</sub> ED <sub>2-6</sub>	4	4	$\frac{\text{yrs}}{\text{yrs}}$ $(R)SL_{ing} =$	(	Г	$/$ FD $\sim \times$ FF $\times$ IRW $\times A$	$DAF_{a}$ $FD_{a}$ $\times$ $FF$	$\langle IR \times ADAF_{a} \rangle 1$
Exposure Duration, child 6-16	$ED_{2-6}$ $ED_{6-16}$	10	10	yrs ce v	$\int_{C} \int_{C} \int_{C} \int_{C} \left( ED_{c} \times EF_{c} \times IRW_{c} \right) = ED_{c}$	$_{a} \times EF_{r} \times IRW_{a} \setminus 1$	$\frac{BW_c}{BW_c}$	$\frac{D_{111} = 2}{E} + \frac{D_{2} = 6}{E} \times \frac{D_{1} = 7}{E}$	$\frac{\langle IR_c \times IIDIII_{2=6} \rangle}{\langle IR_c \times IIDIII_{2=6} \rangle}$
Exposure Duration, adult 16-30	ED <sub>16-30</sub>	10	10	$SF_o \times$	$ \left\{ \left[ CAF_O \times \left( \frac{ED_c \times EF_r \times IRW_c}{BW_c} + \frac{ED_c}{BW_c} \right) \right] \right\} $	$\frac{BW_a}{BW_a}$ )] + $MAF_a$	$O \times \bigcup_{\perp} ED_{6-16} \times EF_r \times IRW_a \times AI$	$DAF_{6-16} + ED_{16-26} \times EF_{10}$	$F \times IR_a \times ADAF_{16-26}$
Exposure Duration, adult Exposure Duration, adult	$ED_{16-30}$ $ED_a$	20	20	yrs			$\backslash + \frac{BW_a}{}$	† <del>***</del> *	$BW_a$ /])
Exposure Duration, child	ED <sub>c</sub>	6	6	yrs	Vinyl Chloride:				
Exposure Frequency, resident	EF <sub>r</sub>	350	350	days/yr	•		TR		
Fraction Contaminated Water Ingested, resident	$FI_r$	1.0	1.0	unitless	$(R)SL_{ing}$	= <del>/                                   </del>	$\frac{RW_c}{365 \frac{day}{vear}} + \frac{ED_a \times IRW_a}{BW_a} \times \frac{1}{CF_o} + \frac{SF_o \times IRW_a}{SF_o \times IRW_a} \times \frac{1}{SF_o \times IRW_a}$	1 \	
Water Ingestion Rate, adult	$IRW_a$	2.5	2.5	L/day		$\int SF_o \times EF_r \times \left(\frac{ED_c \times H}{BW_c}\right)$	$\left(\frac{W_c}{BW_a} + \frac{ED_a \times IRW_a}{BW_a}\right) \times \frac{1}{CF_o}$ $SF_o \times I$	$IRW_c \times \frac{1}{CF_o}$	
Water Ingestion Rate, child	$IRW_c$	0.78	0.78	L/day		AT	$\frac{day}{day} + \frac{day}{day}$	$\overline{BW_c}$	
Mutagenic Adjustment Factor, oral exposure	$MAF_O$	0.202	0.202	dimensionless		$\backslash$ $AI_c \times$	<del>year</del> <del>year</del>		
Oral Reference Dose	$RfD_O$	deri	ved herein	mg/kg-day	Noncancer Hazard:				
(Regional) Screening Level, ingestion	$(R)SL_{ing}$	chemi	ical-specific	μg/L	$THO \vee RW \vee A$	T × 365 day/yoar × C	F.		
Oral Slope Factor	$SF_O$	chemi	ical-specific	(mg/kg-day) <sup>-1</sup>	$(R)SL_{ing} = \frac{THQ \times BW_c \times A'}{EF_r \times ED_c}$	$\frac{I_{nc,c} \times 303  uuy/yeur \times 0}{1}$	<u> </u>		
Target Hazard Quotient	THQ	1	1	dimensionless	$EF_r \times ED_c$	$\times \frac{1}{RfD_o} \times IRW_c \times FI_r$			
Target Risk	TR	1.0E-06	1.0E-06	dimensionless	. I.E. W GIGDD DG	D.TEGG.			(DEGG GT. )
	-	SF <sub>O</sub>	USEPA RSL <sub>ing</sub> : Cance		ial Tap Water (USEPA RSL <sub>ing</sub> )  USEPA RSL <sub>ing</sub> : Noncancer	SF <sub>0</sub>	Screening Level for Ingestion Exposure DTSC-SL <sub>ing</sub> : Cancer	RfD <sub>O</sub>	DTSC-SL <sub>ing</sub> : Noncancer
Analyte	Mutagen?	(mg/kg-day) <sup>-1</sup>	(μg/L)	(mg/kg-day)	(μg/L)	(mg/kg-day) <sup>-1</sup>	μg/L)	(mg/kg-day)	(μg/L)
USEPA RSL Analytes	gen:	(IIIg/kg-uay)	(F8 2)	(gg aw)	(48-2)	(Ing/kg-uay)	(45.2)	(mg/ng duj)	(662)
•				1.00E-01	2.01E+02			1.00E-01	2.01E+02
Acetophenone	М	5.00E-01	5.01E-02	2.00E-03	2.01E+03	4.50E±00	5.57E-03	2.00E-03	2.01E+03 4.01E+01
Acrylamide	M				4.01E+01	4.50E+00			
Acrylonitrile		5.40E-01	1.44E-01	4.00E-02	8.02E+02	1.00E+00	7.79E-02	4.00E-02	8.02E+02
Aldrin		1.70E+01	4.58E-03	3.00E-05	6.02E-01	1.70E+01	4.58E-03	3.00E-05	6.02E-01
Arsenic, Inorganic		1.50E+00	5.19E-02	3.00E-04	6.02E+00	9.50E+00	8.20E-03	3.50E-06	7.02E-02
Benzaldehyde				1.00E-01	2.01E+03			1.00E-01	2.01E+03
Benzene		5.50E-02	1.42E+00	4.00E-03	8.02E+01	1.00E-01	7.79E-01	4.00E-03	8.02E+01
Benzenethiol				1.00E-03	2.01E+01			1.00E-03	2.01E+01
Beryllium and compounds				2.00E-03	4.01E+01			2.00E-04	4.01E+00
Bis(2-chloro-1-methylethyl) ether				4.00E-02	8.02E+02		<del></del>	4.00E-02	8.02E+02
Bromodichloromethane				4.00E 02					
		6.20E-02	1.26E+00	2.00E-02	4.01E+02	1.30E-01	5.99E-01	2.00E-02	4.01E+02
Bromoform						1.30E-01 1.10E-02			
Bromoform Butanol, N-		6.20E-02	1.26E+00	2.00E-02	4.01E+02		5.99E-01	2.00E-02	4.01E+02
		6.20E-02 7.90E-03	1.26E+00 9.86E+00	2.00E-02 2.00E-02	4.01E+02 4.01E+02	1.10E-02	5.99E-01 7.08E+00	2.00E-02 2.00E-02	4.01E+02 4.01E+02
Butanol, N-		6.20E-02 7.90E-03	1.26E+00 9.86E+00 	2.00E-02 2.00E-02 1.00E-01	4.01E+02 4.01E+02 2.01E+03	1.10E-02 	5.99E-01 7.08E+00 	2.00E-02 2.00E-02 1.00E-01	4.01E+02 4.01E+02 2.01E+03
Butanol, N- Butylbenzene, n-		6.20E-02 7.90E-03 	1.26E+00 9.86E+00 	2.00E-02 2.00E-02 1.00E-01 5.00E-02	4.01E+02 4.01E+02 2.01E+03 1.00E+03	1.10E-02  	5.99E-01 7.08E+00 	2.00E-02 2.00E-02 1.00E-01 5.00E-02	4.01E+02 4.01E+02 2.01E+03 1.00E+03
Butanol, N- Butylbenzene, n- Butylbenzene, sec-		6.20E-02 7.90E-03  	1.26E+00 9.86E+00  	2.00E-02 2.00E-02 1.00E-01 5.00E-02 1.00E-01	4.01E+02 4.01E+02 2.01E+03 1.00E+03 2.01E+03	1.10E-02  	5.99E-01 7.08E+00  	2.00E-02 2.00E-02 1.00E-01 5.00E-02 1.00E-01	4.01E+02 4.01E+02 2.01E+03 1.00E+03 2.01E+03

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1.00E+01

1.30E+00

5.99E-02

5.00E-04

1.00E+01

5.00E-04

Table B-3. USEPA RSLs and DTSC-SLs for a Residential Receptor Exposed to Tap Water via Ingestion

Definitions	Variable	USEPA Value	DTSC Value		Equations				
Age-dependent Adjustment Factor, 0-2	ADAF <sub>0-2</sub>	10	10	dimensionless	Cancer Risk:				
Age-dependent Adjustment Factor, 2-6	$ADAF_{2-6}$	3	3	dimensionless	Carcinogens:	$TR \times AT_{nc,c} \times 365 dc$	$ay/year \times CF_0$		
Age-dependent Adjustment Factor, 6-16	$ADAF_{6-16}$	3	3	dimensionless	(R)S	$L_{ing} = \frac{TR \times AT_{nc,c} \times 365 \ dc}{SF_o \times EF_r \times \left(\frac{ED_c \times IRW_c}{RW_c}\right)}$	$ED_a \times IRW_a \setminus FI$		
Age-dependent Adjustment Factor, 16-30	$ADAF_{16-30}$	1	1	dimensionless		$BW_c$	$BW_a$ ) $^{r}$		
Averaging Time, Carcinogens	$AT_c$	70	70	yrs	Mutagens:	7	TD V AT V 265 day V CE		
Averaging Time, Noncarcinogens, child	$AT_{nc,c}$	6	6	yrs	(R)S	I. =	$TR \times AT_c \times 365 \frac{day}{year} \times CF_o$		
Averaging Time, Noncarcinogens, adult	$AT_{nc,a}$	20	20	yrs	(II)	$\left\langle \frac{ED_{0-2}}{}\right\rangle$	$\times IRW_c \times ADAF_{0-2} + ED_{2-6} \times I$	$\frac{R_c \times ADAF_{2-6}}{RAC}$	
Body Weight, adult	$BW_a$	80	80	kg		$SF_o \times EF_r \times \Big _{ED}$	BW <sub>C</sub>	N ID V ADAE	
Body Weight, child	$BW_c$	15	15	kg		$L_{ing} = \frac{ED_{0-2}}{SF_0 \times EF_r \times \left( + \frac{ED_{6-16} \times EF_{6-16}	$\frac{IRW_a \times ADAF_{6-16}}{BW_c} + \frac{ED_{16-26}}{BW_c}$	$\frac{RR_a \times ADAP_{16-26}}{BW_a}$	
Carcinogenic Adjustment Factor, oral exposure	$CAF_{O}$	0.804	0.804	dimensionless	Trichloroethene:	`	2 · · a	2 · · a /	
Conversion Factor, ingestion exposure	$CF_o$	1.0E+03	1.0E+03	mg/µg			day		
Exposure Duration, child 0-2	$ED_{0-2}$	2	2	yrs			$T_c \times 365 \frac{day}{year} \times CF_o$		
Exposure Duration, child 2-6	$ED_{2-6}$	4	4	$_{\text{yrs}}^{\text{yrs}}$ $(R)SL_{ing} =$	(	ſ	$/$ $ED_{0-2} \times EF_r \times IRW_c \times$	$\overline{ADAF_{0-2}}$ , $\overline{ED_{2-6}} \times \overline{EF_r}$	$\langle IR_c \times ADAF_{2-6} \rangle \rangle$
Exposure Duration, child 6-16	$ED_{6-16}$	10	10	yrs SF ×	$\int_{CAF_{-}} \times (\frac{ED_{c} \times EF_{r} \times IRW_{c}}{CAF_{r} \times IRW_{c}})$	$ED_a \times EF_r \times IRW_a$	$\times$	+	$\overline{BW_c}$
Exposure Duration, adult 16-30	ED <sub>16-30</sub>	10	10	yrs yrs	$BW_c$	$-\frac{ED_a \times EF_r \times IRW_a}{BW_a}\Big)\Big] + \left[MAF_0 > \frac{1}{2} + \frac{1}{2} $	$+\frac{ED_{6-16}\times EF_r\times IRW_a\times A}{EW_a\times A}$	$\frac{DAF_{6-16}}{DAF_{6-16}} + \frac{ED_{16-26} \times EF_{6}}{DAF_{6-16}}$	$I_a \times IR_a \times ADAF_{16-26}$
Exposure Duration, adult	$ED_a$	20	20	yrs	(	L	$\backslash$ $BW_a$		$BW_a$ /])
Exposure Duration, child	$ED_c$	6	6	yrs	Vinyl Chloride:				
Exposure Frequency, resident	$EF_r$	350	350	days/yr	(1)(	7	TR		
Fraction Contaminated Water Ingested, resident	$FI_r$	1.0	1.0	unitless	(R)S	$L_{ing} = \frac{\left(SF_o \times EF_r \times \left(\frac{ED_c \times IRW}{BW_c}\right)\right)}{AT_c \times 36}$	$C + ED_a \times IRW_a \setminus 1$	1011/	
Water Ingestion Rate, adult	$IRW_a$	2.5	2.5	L/day		$SF_o \times EF_r \times (BW_c)$	$\frac{1}{BW_a}$ $\times \frac{1}{CF_o}$ $\times \frac{1}{CF_o}$	$\overline{CF_o}$	
Water Ingestion Rate, child	$IRW_c$	0.78	0.78	L/day		$AT_c \times 36$	$65\frac{day}{day}$	$BW_c$	
Mutagenic Adjustment Factor, oral exposure	$MAF_{O}$	0.202	0.202	dimensionless		(	year	/	
Oral Reference Dose	$RfD_0$		rived herein	mg/kg-day	Noncancer Hazard:				
(Regional) Screening Level, ingestion	(R)SL <sub>ing</sub>		mical-specific	μg/L	$THQ \times BW_0$	$\times AT_{nc,c} \times 365 \ day/year \times CF_0$			
Oral Slope Factor Target Hazard Quotient	SF <sub>O</sub> THQ	cnen 1	nical-specific	(mg/kg-day) <sup>-1</sup> dimensionless	$(R)SL_{ing} = {}$	$\frac{\times AT_{nc,c} \times 365 \ day/year \times CF_0}{ED_c \times \frac{1}{RfD_c} \times IRW_c \times FI_r}$			
Target Risk	TR	1.0E-06	1.0E-06	dimensionless	Lir	$LD_c \wedge RfD_o \wedge RW_c \wedge H_r$			
				ngestion Exposure to Resident	ial Tap Water (USEPA RSL <sub>ing</sub> )	DTSC Scr	reening Level for Ingestion Exposu	re to Residential Tap Water	(DTSC-SL <sub>ing</sub> )
	-	SFo	USEPA RSLing: Cancer	RfD <sub>O</sub>	USEPA RSL <sub>ing</sub> : Noncance	SF <sub>0</sub>	DTSC-SL <sub>ing</sub> : Cancer	RfD <sub>O</sub>	DTSC-SL <sub>ing</sub> : Noncancer
Analyte	Mutagen?	(mg/kg-day) <sup>-1</sup>	$(\mu g/L)$	(mg/kg-day)	(µg/L)	(mg/kg-day) <sup>-1</sup>	$(\mu g/L)$	(mg/kg-day)	(µg/L)
Chloroacetaldehyde, 2-		2.70E-01	2.89E-01			2.70E-01	2.89E-01		
Chloroethanol, 2-				2.00E-02	4.01E+02			2.00E-02	4.01E+02
Chlorophenol, 2-				5.00E-03	1.00E+02			5.00E-03	1.00E+02
Crotonaldehyde, trans-		1.90E+00	4.10E-02	1.00E-03	2.01E+01	1.90E+00	4.10E-02	1.00E-03	2.01E+01
Cyanides									
~Cyanogen				1.00E-03	2.01E+01			1.00E-03	2.01E+01
~Cyanogen Bromide				9.00E-02	1.80E+03			9.00E-02	1.80E+03
~Cyanogen Chloride				5.00E-02	1.00E+03			5.00E-02	1.00E+03
~Thiocyanic Acid				2.00E-04	4.01E+00			2.00E-04	4.01E+00
Cyclohexylamine				2.00E-01	4.01E+03			2.00E-01	4.01E+03
Dibromochloromethane		8.40E-02	9.27E-01	2.00E-02	4.01E+02	8.40E-02	9.27E-01	2.00E-02	4.01E+02
Dibromoethane, 1,2-		2.00E+00	3.90E-02	9.00E-03	1.80E+02	3.60E+00	2.16E-02	9.00E-03	1.80E+02
Dichloroethane, 1,1-		5.70E-03	1.37E+01	2.00E-01	4.01E+03	5.70E-03	1.37E+01	2.00E-01	4.01E+03
Dichloroethylene, 1,2-cis-		5.70E-03		2.00E-03	4.01E+03	3.70E-03	1.5/E+01 	2.00E-03	4.01E+01
Dichloroethylene, 1,2-trans-								2.00E-02	4.01E+02
Dichiologuiyiche, 1,2-uans-				7) (MIL: 117)					
Diableronronene 12			<del></del>	2.00E-02	4.01E+02		<del></del>		
Dichloropropane, 1,3- Diethylformamide		  		2.00E-02 2.00E-02 1.00E-03	4.01E+02 4.01E+02 2.01E+01	  	 	2.00E-02 2.00E-02 1.00E-03	4.01E+02 4.01E+02 2.01E+01

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1.60E+03

4.01E+01

8.00E-02

2.00E-03

1.60E+03

4.01E+01

8.00E-02

2.00E-03

Diisopropyl Methylphosphonate

Dimethylaniline, N,N-

Table B-3. USEPA RSLs and DTSC-SLs for a Residential Receptor Exposed to Tap Water via Ingestion

Definitions	Variable	USEPA Value	DTSC Value		Equations				
Age-dependent Adjustment Factor, 0-2	ADAF <sub>0-2</sub>	10	10	dimensionless	Cancer Risk:				
Age-dependent Adjustment Factor, 2-6	$ADAF_{2-6}$	3	3	dimensionless	Carcinogens:	$TR \times AT_{nc,c} \times 365 dc$	$ay/year \times CF_0$		
Age-dependent Adjustment Factor, 6-16	$ADAF_{6-16}$	3	3	dimensionless	(R)S	$L_{ing} = \frac{TR \times AT_{nc,c} \times 365 \ dc}{SF_o \times EF_r \times \left(\frac{ED_c \times IRW_c}{RW_c}\right)}$	$ED_a \times IRW_a \setminus FI$		
Age-dependent Adjustment Factor, 16-30	$ADAF_{16-30}$	1	1	dimensionless		$BW_c$	$BW_a$ ) $^{r}$		
Averaging Time, Carcinogens	$AT_c$	70	70	yrs	Mutagens:	7	TD V AT V 265 day V CE		
Averaging Time, Noncarcinogens, child	$AT_{nc,c}$	6	6	yrs	(R)	SI. =	$TR \times AT_c \times 365 \frac{day}{year} \times CF_o$		
Averaging Time, Noncarcinogens, adult	$AT_{nc,a}$	20	20	yrs	(11)	$SL_{ing} = \frac{ED_{0-2}}{SF_0 \times EF_r \times \left( + \frac{ED_{6-16} \times ED_{6-16}}{ED_{6-16} \times ED_{6-16}} \right)}$	$\times IRW_c \times ADAF_{0-2} + ED_{2-6} \times I$	$IR_c \times ADAF_{2-6}$	
Body Weight, adult	$BW_a$	80	80	kg		$SF_0 \times EF_r \times \Big _{ED}$	BW <sub>C</sub>	$BW_{c}$	
Body Weight, child	$BW_c$	15	15	kg		$+\frac{ED_{6-16} \times}{}$	$\frac{1RW_a \times ADAF_{6-16}}{RW_a} + \frac{ED_{16-26}}{RW_a}$	$\frac{\times IR_a \times ADAP_{16-26}}{RW_a}$	
Carcinogenic Adjustment Factor, oral exposure	$CAF_{O}$	0.804	0.804	dimensionless	Trichloroethene:	<b>\</b>	Bvva	bwa /	
Conversion Factor, ingestion exposure	CF <sub>o</sub>	1.0E+03	1.0E+03	mg/μg			day		
Exposure Duration, child 0-2	$ED_{0-2}$	2	2	vrs		$TR \times AT$	$T_c \times 365 \frac{day}{vear} \times CF_o$		
Exposure Duration, child 2-6	ED <sub>2-6</sub>	4	4	$_{\text{yrs}}^{\text{yrs}}$ $(R)SL_{ing} =$	(	Γ	$/$ $ED_{0-2} \times EF_r \times IRW_c \times$	$\overline{ADAF_{0-2}}$ $ED_{2-6} \times EF_r$	$\langle IR_c \times ADAF_{2-6} \rangle 1$
Exposure Duration, child 6-16	ED <sub>6-16</sub>	10	10	yrs CF ×	$\int_{CAE} \langle (ED_c \times EF_r \times IRW_c) \rangle$	$ED_a \times EF_r \times IRW_a$	$BW_c$	+ - 2-6 1	$\overline{BW_c}$ \\\
Exposure Duration, adult 16-30	ED <sub>16-30</sub>	10	10	yrs SF <sub>0</sub> ×	$\int \left[ \frac{CAP_O}{BW_c} \right]$	$+\frac{ED_a \times EF_r \times IRW_a}{BW_a}$ $\Big] + \left[ MAF_o > \frac{1}{2} \left( \frac{1}{2} $	$+ ED_{6-16} \times EF_r \times IRW_a \times F_r$	$ADAF_{6-16} + ED_{16-26} \times EF_{16-26}$	$L \times IR_a \times ADAF_{16-26}$
Exposure Duration, adult	$ED_a$	20	20	yrs	(	l	$\backslash$ ' $BW_a$	1	$BW_a$ /])
Exposure Duration, child	$ED_c$	6	6	yrs	Vinyl Chloride:				
Exposure Frequency, resident	$EF_r$	350	350	days/yr			TR		
Fraction Contaminated Water Ingested, resident	$FI_r$	1.0	1.0	unitless	(R)S	$SL_{ing} = {$	$V_{\alpha} = ED_{\alpha} \times IRW_{\alpha}$ \ 1	1 \	
Water Ingestion Rate, adult	$IRW_a$	2.5	2.5	L/day		$SL_{ing} = {\left(\frac{SF_o \times EF_r \times \left(\frac{ED_c \times IRW}{BW_c}\right)}{AT_c \times 36}\right)}$	$\left(\frac{c}{BW_a}\right) \times \frac{1}{CF_o} \left(SF_o\right)$	$\langle IRW_c \times \frac{1}{CF_o} \rangle$	
Water Ingestion Rate, child	$IRW_c$	0.78	0.78	L/day		AT × 36	$\frac{1}{1}$	$\overline{BW_c}$	
Mutagenic Adjustment Factor, oral exposure	$MAF_O$	0.202	0.202	dimensionless		$\backslash$	year	/	
Oral Reference Dose	$RfD_O$	der	rived herein	mg/kg-day	Noncancer Hazard:				
(Regional) Screening Level, ingestion	$(R)SL_{ing}$	chen	nical-specific	μg/L	$THO \times RW$	$1 \times AT_{\text{obs}} \times 365  day/year \times CF_{\text{obs}}$			
Oral Slope Factor	$SF_O$	chen	nical-specific	(mg/kg-day) <sup>-1</sup>	$(R)SL_{ing} = \frac{1}{1} \frac{1}{\sqrt{N}} \frac{N}{N}$	$\frac{1}{C} \times AT_{nc,c} \times 365 \ day/year \times CF_0}{\langle ED_c \times \frac{1}{RfD_o} \times IRW_c \times FI_r \rangle}$			
Target Hazard Quotient	THQ	1	1	dimensionless	$EF_r >$	$\langle ED_c \times \frac{1}{RfD_o} \times IRW_c \times FI_r$			
Target Risk	TR	1.0E-06	1.0E-06	dimensionless	THE WAY (USEDA DOLL)	DEGC C	· 1 16 1 4 E	4 D '1 4'17 37'4	(DECC CL)
	-	SF <sub>O</sub>	USEPA RSL <sub>ing</sub> : Cancel		ial Tap Water (USEPA RSL <sub>ing</sub> ) USEPA RSL <sub>ing</sub> : Noncance		reening Level for Ingestion Exposu DTSC-SL <sub>ing</sub> : Cancer	RfD <sub>O</sub>	DTSC-SL <sub>ing</sub> : Noncancer
Analyte	Mutagen?	(mg/kg-day) <sup>-1</sup>	(μg/L)	(mg/kg-day)	(μg/L)	1	μg/L)	(mg/kg-day)	(μg/L)
v	Mutagen:					(mg/kg-day) <sup>-1</sup>		1.00E-02	
Dithiane, 1,4-				1.00E-02	2.01E+02	<del></del>			2.01E+02
Endosulfan Enjahlorahydrin		0.00E.03	7.97E±00	6.00E-03	1.20E+02	9 00E 02	0.74E 01	6.00E-03	1.20E+02
Epichlorohydrin Ethyl Ethor		9.90E-03	7.87E+00	6.00E-03	1.20E+02	8.00E-02	9.74E-01	6.00E-03	1.20E+02
Ethylana Diamina				2.00E-01	4.01E+03			2.00E-01 9.00E-02	4.01E+03 1.80E+03
Ethylene Diamine Furans				9.00E-02	1.80E+03			9.00E-02	1.6UE+U3
				1.00E-03	2.01E+01			1.00E-03	2.01E+01
~Furan					2.01E+01	<del></del>			
Guanidine				1.00E-02	2.01E+02			1.00E-02	2.01E+02
Hexabromobenzene		1.000.00	4.07E.02	2.00E-03	4.01E+01	1.005.00	4 225 02	2.00E-03	4.01E+01
Hexachlorobenzene		1.60E+00	4.87E-02	8.00E-04	1.60E+01	1.80E+00	4.33E-02	8.00E-04	1.60E+01
Hexachlorocyclohexane, Gamma- (Lindane)		1.10E+00	7.08E-02	3.00E-04	6.02E+00	1.10E+00	7.08E-02	3.00E-04	6.02E+00
Isobutyl Alcohol				3.00E-01	6.02E+03		<u></u>	3.00E-01	6.02E+03
Lead Compounds									
~Lead subacetate		8.50E-03	9.17E+00			3.80E-02	2.05E+00		
Lewisite				5.00E-06	1.00E-01			5.00E-06	1.00E-01
Mercury Compounds									
~Mercury (elemental)								1.60E-04	3.21E+00

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6.02E-01

2.01E+04

3.00E-05

1.00E+00

6.02E-01

2.01E+04

3.00E-05

1.00E+00

Merphos

Methyl Acetate

Table B-3. USEPA RSLs and DTSC-SLs for a Residential Receptor Exposed to Tap Water via Ingestion

Definitions	Variable	USEPA Value	DTSC Value		Equations				
Age-dependent Adjustment Factor, 0-2	ADAF <sub>0-2</sub>	10	10	dimensionless	Cancer Risk:				
Age-dependent Adjustment Factor, 2-6	$ADAF_{2-6}$	3	3	dimensionless	Carcinogens:	$TR \times AT_{nc,c} \times 365  day/y$	vear $\times$ CF $_{o}$		
Age-dependent Adjustment Factor, 6-16	$ADAF_{6-16}$	3	3	dimensionless	(R <sub>2</sub>	$SL_{ing} = \frac{TR \times AT_{nc,c} \times 365 \ day/y}{SF_o \times EF_r \times \left(\frac{ED_c \times IRW_c}{RW} + \frac{ED_c}{A}\right)}$	$\overline{D_a \times IRW_a} \setminus FI$		
Age-dependent Adjustment Factor, 16-30	$ADAF_{16-30}$	1	1	dimensionless		$BW_c$	$BW_a$ ) $^{\prime}$ $^{\prime}$ $^{\prime}$ $^{\prime}$		
Averaging Time, Carcinogens	$AT_c$	70	70	yrs	Mutagens:	$ au D$ $\searrow$	$AT_c \times 365 \frac{day}{vear} \times CF_o$		
Averaging Time, Noncarcinogens, child	$AT_{nc,c}$	6	6	yrs	(R	)SL:=	$\frac{AI_c}{year} \wedge CI_0$		
Averaging Time, Noncarcinogens, adult	$AT_{nc,a}$	20	20	yrs	(11	$SL_{ing} = \frac{ED_{0-2} \times IR}{SF_o \times EF_r \times \left( \frac{ED_{0-2} \times IRV}{ED_{6-16} \times IRV} \right)}$	$\frac{W_c \times ADAF_{0-2}}{DW} + \frac{ED_{2-6} \times DW}{DW}$	$\frac{IR_c \times ADAF_{2-6}}{DM}$	
Body Weight, adult	$\mathbf{BW}_{\mathrm{a}}$	80	80	kg		$SF_o \times EF_r \times \Big _{ED} \longrightarrow IDI$	N ~ ADAF FD	$V_{C} \times ID \times ADAE$	
Body Weight, child	$BW_c$	15	15	kg		$\left( + \frac{ED_{6-16} \times IRV}{B} \right)$	$\frac{V_a \times ADAF_{6-16}}{W_a} + \frac{ED_{16-26}}{W_a}$	$\frac{X I K_a \times ADA F_{16-26}}{BW_a}$	
Carcinogenic Adjustment Factor, oral exposure	$CAF_{O}$	0.804	0.804	dimensionless	Trichloroethene:	_	·· u	- · · u /	
Conversion Factor, ingestion exposure	$CF_o$	1.0E+03	1.0E+03	mg/µg			day		
Exposure Duration, child 0-2	$ED_{0-2}$	2	2	yrs (D) CI		$TR \times AT_c \times$	$365 \frac{day}{year} \times CF_o$		
Exposure Duration, child 2-6	$ED_{2-6}$	4	4	$_{\text{yrs}}^{\text{yrs}}$ $(R)SL_{ing} =$	(	[ /	$ED_{0-2} \times EF_r \times IRW_c \times IRW_c$	$\langle ADAF_{0-2} \perp ED_{2-6} \times EF_r \rangle$	$\langle IR_c \times ADAF_{2-6} \rangle \rangle$
Exposure Duration, child 6-16	ED <sub>6-16</sub>	10	10	yrs SF. ×	$\int \left[ CAF_{o} \times \left( \frac{ED_{c} \times EF_{r} \times IRW}{ED_{c} \times EF_{r} \times IRW} \right) \right]$	$\left[\frac{E}{E} + \frac{ED_a \times EF_r \times IRW_a}{E}\right] + \left[\frac{ED_a \times EF_r \times IRW_a}{E}\right]$	$BW_c$	+	$W_c$
Exposure Duration, adult 16-30	$ED_{16-30}$	10	10	yrs	$M_c$	$\left[\frac{E}{E} + \frac{ED_a \times EF_r \times IRW_a}{BW_a}\right] + \left[MAF_o \times \left(\frac{E}{E} + \frac{ED_a \times EF_r \times IRW_a}{BW_a}\right)\right] + \left[\frac{ED_a \times EF_r \times IRW_a}{BW_a}\right]$	$+\frac{ED_{6-16}\times EF_r\times IRW_a\times}{DW}$	$\frac{ADAF_{6-16}}{ADAF_{6-16}} + \frac{ED_{16-26} \times EF_{10}}{ADAF_{6-16}}$	$X \times IR_a \times ADAF_{16-26}$
Exposure Duration, adult	$ED_a$	20	20	yrs	(	L \	$BW_a$		$BW_a$ / ])
Exposure Duration, child	$ED_c$	6	6	yrs	Vinyl Chloride:				
Exposure Frequency, resident	$EF_r$	350	350	days/yr	(D	) CI _	TR		
Fraction Contaminated Water Ingested, resident	$FI_r$	1.0	1.0	unitless	(R	$SL_{ing} = \frac{1}{\sqrt{SE \times EE \times (ED_c \times IRW_{c_1})}}$	$ED_a \times IRW_a \setminus 1$ CF	<u> </u>	
Water Ingestion Rate, adult	$IRW_a$	2.5	2.5	L/day		$\frac{\left(SF_o \times EF_r \times \left(\frac{ED_c \times IRW_c}{BW_c} + \frac{ED_c \times IRW_c}{BW_c}\right)\right)}{AT_c \times 365 \frac{d}{d}}$	$\frac{BW_a}{CF_o}$ ) $\times \frac{CF_o}{CF_o} + \frac{SF_o}{CF_o}$	$\frac{\times IRW_c \times \overline{CF_o}}{}$	
Water Ingestion Rate, child	IRW <sub>c</sub>	0.78	0.78	L/day		$AT_c \times 365 \frac{d}{dt}$	ay	$BW_c$	
Mutagenic Adjustment Factor, oral exposure	$MAF_{O}$	0.202	0.202	dimensionless		( y	eur	/	
Oral Reference Dose	$RfD_0$		ved herein	mg/kg-day	Noncancer Hazard:				
(Regional) Screening Level, ingestion	(R)SL <sub>ing</sub>		ical-specific	μg/L	$THQ \times B$	$W_c \times AT_{nc,c} \times 365  day/year \times CF_0$			
Oral Slope Factor	SF <sub>O</sub>	chemi	ical-specific	(mg/kg-day) <sup>-1</sup>	$(R)SL_{ing} = {}$	$\frac{W_c \times AT_{nc,c} \times 365 \ day/year \times CF_0}{\times ED_c \times \frac{1}{RfD_o} \times IRW_c \times FI_r}$			
Target Hazard Quotient Target Risk	THQ TR	1.0E-06	1.0E-06	dimensionless dimensionless	$EF_{\gamma}$	$\times ED_c \times \overline{RfD_o} \times IKW_c \times FI_r$			
Turget Risk	110			Ingestion Exposure to Resident	ial Tap Water (USEPA RSL:)	DTSC Screeni	ng Level for Ingestion Expos	ure to Residential Tap Water	(DTSC-SL <sub>ine</sub> )
	-	SF <sub>0</sub>	USEPA RSLing: Canco	<u> </u>	USEPA RSL <sub>ing</sub> : Noncan		DTSC-SL <sub>ing</sub> : Cancer	RfD <sub>0</sub>	DTSC-SL <sub>ing</sub> : Noncancer
Analyte	Mutagen?	(mg/kg-day) <sup>-1</sup>	(µg/L)	(mg/kg-day)	(µg/L)	(mg/kg-day) <sup>-1</sup>	$(\mu g/L)$	(mg/kg-day)	(µg/L)
Methylene Chloride	M	2.00E-03	1.25E+01	6.00E-03	1.20E+02	1.40E-02	1.79E+00	6.00E-03	1.20E+02
Methylene-bis(2-chloroaniline), 4,4'-	M	1.00E-01	2.51E-01	2.00E-03	4.01E+01	1.50E+00	1.67E-02	2.00E-03	4.01E+01
Mineral oils				3.00E+00	6.02E+04			3.00E+00	6.02E+04
Mirex		1.80E+01	4.33E-03	2.00E-04	4.01E+00	1.80E+01	4.33E-03	2.00E-04	4.01E+00
Naled				2.00E-03	4.01E+01			2.00E-03	4.01E+01
Nitrotoluene, o-		2.20E-01	3.54E-01	9.00E-04	1.80E+01	2.20E-01	3.54E-01	9.00E-04	1.80E+01
Pentabromodiphenyl Ether				2.00E-03	4.01E+01			2.00E-03	4.01E+01
Pentachloroethane		9.00E-02	8.66E-01			9.00E-02	8.66E-01		
Perfluorobutane Sulfonate				2.00E-02	4.01E+02			2.00E-02	4.01E+02
Phosphorus, White				2.00E-05	4.01E-01			2.00E-05	4.01E-01
Phthalates									
~Dimethylterephthalate				1.00E-01	2.01E+03			1.00E-01	2.01E+03
Polychlorinated Biphenyls (PCBs)									
~Aroclor 1016		7.00E-02	1.11E+00	7.00E-05	1.40E+00	7.00E-02	1.11E+00	7.00E-05	1.40E+00
~Aroclor 1254		2.00E+00	3.90E-02	2.00E-05	4.01E-01	2.00E+00	3.90E-02	2.00E-05	4.01E-01
~Aroclor 5460				6.00E-04	1.20E+01			6.00E-04	1.20E+01
				6.00E-04	1.20E+01			6.00E-04	1.20E+01

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4.01E+01

2.01E+01

4.01E+02

2.70E-01

2.89E-01

2.00E-03

1.00E-03

2.00E-02

4.01E+01

2.01E+01

4.01E+02

2.00E-03

1.00E-03

2.00E-02

Propargyl Alcohol

Tetrachloroethane, 1,1,2,2-

2.00E-01

3.90E-01

Pyridine

Table B-3. USEPA RSLs and DTSC-SLs for a Residential Receptor Exposed to Tap Water via Ingestion

Definitions	Variable	USEPA Value	DTSC Value		Equations	
Age-dependent Adjustment Factor, 0-2	ADAF <sub>0-2</sub>	10	10	dimensionless	Cancer Risk:	
Age-dependent Adjustment Factor, 2-6	$ADAF_{2-6}$	3	3	dimensionless	Carcinogens:	$TR \times AT_{nc,c} \times 365 \ day/year \times CF_0$
Age-dependent Adjustment Factor, 6-16	$ADAF_{6-16}$	3	3	dimensionless		$(R)SL_{ing} = \frac{TR \times AT_{nc,c} \times 365 \ day/year \times CF_{O}}{SF_{o} \times EF_{r} \times \left(\frac{ED_{c} \times IRW_{c}}{PW} + \frac{ED_{a} \times IRW_{a}}{PW}\right) \times FI_{r}}$
Age-dependent Adjustment Factor, 16-30	$ADAF_{16-30}$	1	1	dimensionless		$BW_c \rightarrow BW_c \rightarrow BW_a \rightarrow BW_a$
Averaging Time, Carcinogens	$AT_c$	70	70	yrs	Mutagens:	$TD \times AT \times 26T day \times CF$
Averaging Time, Noncarcinogens, child	$AT_{nc,c}$	6	6	yrs		$TR \times AT_c \times 365 \frac{day}{year} \times CF_o$
Averaging Time, Noncarcinogens, adult	$AT_{nc,a}$	20	20	yrs		$\left\langle \frac{ED_{0-2} \times IRW_c \times ADAF_{0-2}}{ED_{0-2} \times IRW_c \times ADAF_{0-2}} + \frac{ED_{2-6} \times IR_c \times ADAF_{2-6}}{ED_{0-2} \times IRW_c \times ADAF_{0-2}} \right\rangle$
Body Weight, adult	$BW_a$	80	80	kg		$(R)SL_{ing} = \frac{SF_{o} \times EF_{r} \times \left( \frac{ED_{0-2} \times IRW_{c} \times ADAF_{0-2}}{BW_{c}} + \frac{ED_{2-6} \times IR_{c} \times ADAF_{2-6}}{BW_{c}} + \frac{ED_{16-26} \times IRW_{a} \times ADAF_{6-16}}{BW_{a}} + \frac{ED_{16-26} \times IRW_{a} \times ADAF_{16-26}}{BW_{a}} \right)}{ED_{16-26} \times IRW_{a} \times ADAF_{16-26}}$
Body Weight, child	$BW_c$	15	15	kg		$\left( + \frac{ED_{6-16} \times IKW_a \times ADAI_{6-16}}{BW_a} + \frac{ED_{16-26} \times IK_a \times ADAI_{16-26}}{BW_a} \right)$
Carcinogenic Adjustment Factor, oral exposure	$CAF_{O}$	0.804	0.804	dimensionless	Trichloroethene:	
Conversion Factor, ingestion exposure	$CF_o$	1.0E+03	1.0E+03	mg/μg		day
Exposure Duration, child 0-2	$ED_{0-2}$	2	2	yrs		$TR \times AT_c \times 365 \frac{day}{year} \times CF_o$
Exposure Duration, child 2-6	$ED_{2-6}$	4	4	$\frac{yrs}{yrs}$ $(R)SL_{in}$	$g = {}$	
Exposure Duration, child 6-16	$ED_{6-16}$	10	10	yrs	$(ED_c \times EF_r \times (ED_c \times EF_r $	$\times IRW_{c} \perp ED_{a} \times EF_{r} \times IRW_{a} \setminus 1 \perp MAF_{c} \times $
Exposure Duration, adult 16-30	$ED_{16-30}$	10	10	yrs	$BW_c$	$\frac{ED_{0-2} \times EF_r \times IRW_c \times ADAF_{0-2}}{BW_a} + \frac{ED_a \times EF_r \times IRW_a}{BW_a} + \frac{ED_{a-16} \times EF_r \times IRW_c \times ADAF_{0-16}}{BW_a} + \frac{ED_{a-16} \times EF_r \times IRW_a \times ADAF_{0-16}}{BW_a} + \frac{ED_{16-26} \times EF_r \times IR_a \times ADAF_{16-26}}{BW_a} $
Exposure Duration, adult	$ED_a$	20	20	yrs	(	$[ W_a $ $BW_a $ $BW_a $ $BW_a $
Exposure Duration, child	$ED_c$	6	6	yrs	Vinyl Chloride:	
Exposure Frequency, resident	$EF_r$	350	350	days/yr		TR
Fraction Contaminated Water Ingested, resident	$FI_r$	1.0	1.0	unitless		$(R)SL_{ing} = {$
Water Ingestion Rate, adult	$IRW_a$	2.5	2.5	L/day		$\left(SF_o \times EF_r \times \left(\frac{-2C}{BW_c} + \frac{-2C}{BW_o}\right) \times \frac{-2C}{CF_o}\right) \times \frac{-2C}{CF_o}$
Water Ingestion Rate, child	$IRW_c$	0.78	0.78	L/day		$\frac{\left(SF_{o} \times EF_{r} \times \left(\frac{ED_{c} \times IRW_{c}}{BW_{c}} + \frac{ED_{a} \times IRW_{a}}{BW_{a}}\right) \times \frac{1}{CF_{o}}}{AT_{c} \times 365 \frac{day}{vocar}} + \frac{SF_{o} \times IRW_{c} \times \frac{1}{CF_{o}}}{BW_{c}}\right)}$
Mutagenic Adjustment Factor, oral exposure	$MAF_O$	0.202	0.202	dimensionless		$\sqrt{\frac{AI_c \times 303}{year}}$
Oral Reference Dose	$RfD_{O}$	deri	ved herein	mg/kg-day	Noncancer Hazard:	rd:
(Regional) Screening Level, ingestion	$(R)SL_{ing}$	chem	ical-specific	μg/L	T11/	UO V DIM V AT V 26E day/year V CE
Oral Slope Factor	$SF_{O}$	chem	ical-specific	(mg/kg-day) <sup>-1</sup>	$(R)SL_{ina} = \frac{IRQ}{R}$	$\frac{HQ \times BW_c \times AT_{nc,c} \times 365 \ day/year \times CF_0}{EF_r \times ED_c \times \frac{1}{RfD_c} \times IRW_c \times FI_r}$
Target Hazard Quotient	THQ	1	1	dimensionless		$EF_r \times ED_c \times \frac{1}{R f D} \times IRW_c \times FI_r$
Target Risk	TR	1.0E-06	1.0E-06	dimensionless		11, D <sub>0</sub>
			0	U 1	o Residential Tap Water (USEPA RS	
		$SF_O$	USEPA RSLing: Canc	er R	$fD_O$ USEPA RSL <sub>ing</sub> : No	$Noncancer \hspace{1cm} SF_O \hspace{1cm} DTSC\text{-}SL_{ing}\text{:}\hspace{1cm} Cancer \hspace{1cm} RfD_O \hspace{1cm} DTSC\text{-}SL_{ing}\text{:}\hspace{1cm} Noncancer$

		USEPA Regi	onal Screening Level for Ingestio	n Exposure to Residential	Tap Water (USEPA RSL <sub>ing</sub> )	DTSC S	creening Level for Ingestion Exposu	re to Residential Tap Water	(DTSC-SL <sub>ing</sub> )
	_	SFo	USEPA RSLing: Cancer	$RfD_0$	USEPA RSL <sub>ing</sub> : Noncancer	SFo	DTSC-SL <sub>ing</sub> : Cancer	$RfD_0$	DTSC-SL <sub>ing</sub> : Noncancer
Analyte	Mutagen?	(mg/kg-day) <sup>-1</sup>	$(\mu g/L)$	(mg/kg-day)	(µg/L)	(mg/kg-day) <sup>-1</sup>	(µg/L)	(mg/kg-day)	(µg/L)
Tetrachloroethylene		2.10E-03	3.71E+01	6.00E-03	1.20E+02	5.40E-01	1.44E-01	6.00E-03	1.20E+02
Trichloroethane, 1,1,1-				2.00E+00	4.01E+04			2.00E+00	4.01E+04
Trichlorofluoromethane				3.00E-01	6.02E+03			3.00E-01	6.02E+03
Trichlorophenol, 2,4,6-		1.10E-02	7.08E+00	1.00E-03	2.01E+01	7.00E-02	1.11E+00	1.00E-03	2.01E+01
Trichloropropane, 1,1,2-				5.00E-03	1.00E+02			5.00E-03	1.00E+02
Trichloropropane, 1,2,3-	M	3.00E+01	8.35E-04	4.00E-03	8.02E+01	3.00E+01	8.35E-04	4.00E-03	8.02E+01
Additional Analytes									
Beryllium Sulfate				2.00E-03	4.01E+01			2.00E-04	4.01E+00
Dichlorobenzene, 1,3-					==			3.00E-02	6.02E+02
Methylcyclohexane									

<sup>&</sup>quot;--" = no value

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Table B-4. Derivation of Dermally-Absorbed Dose per Event: Domestic Use of Water -- Residential Scenario

Definition	Variable U	USEPA Value	e DTSC Valu	e	Equations
Age-dependent Adjustment Factor, 0-2	ADAF <sub>0-2</sub>	10	10	dimensionless	Cancer Risk:
Age-dependent Adjustment Factor, 2-6	ADAF <sub>2-6</sub>	3	3	dimensionless	Carcinogens: $TR \times AT_c \times 365 \frac{day}{vear} \times CF_{d1}$
Age-dependent Adjustment Factor, 6-16	$ADAF_{6-16}$	3	3	dimensionless	$DA_{event,(carcinogen)} = \frac{year}{SF_D \times EF_r \times \left(\frac{EV_r \times ED_c \times SA_c}{PW} + \frac{EV_r \times ED_a \times SA_a}{PW}\right)}$
Age-dependent Adjustment Factor, 16-26	$ADAF_{16-26}$	1	1	dimensionless	$SF_D \times EF_r \times \left( \frac{1}{BW_C} + \frac{1}{BW_a} \right)$
Averaging Time, Carcinogens	$AT_c$	70	70	yrs	Mutagens:
Averaging Time, Noncarcinogens, child	$AT_{nc,c}$	6	6	yrs	$TR \times AT_c \times 365 \frac{day}{vear} \times CF_{d1}$
Averaging Time, Noncarcinogens, adult	$AT_{nc,a}$	20	20	yrs	$DA_{event,(mutagen)} = \frac{yetti}{BW_c} + \frac{EV_r \times ED_{0-2} \times SA_c \times ADAF_{0-2}}{BW_c} + \frac{EV_r \times ED_{2-6} \times SA_c \times ADAF_{2-6}}{BW_c}$
Body Weight, adult	$\mathbf{BW}_{\mathrm{a}}$	80	80	kg	$SF_d \times EF_r \times \left(\begin{array}{c c} BW_c & + & BW_c \\ \hline & BV \times ED & \times SA \times ADAE \end{array}\right)$
Body Weight, child	$BW_c$	15	15	kg	$\left( + \frac{EV_r \times ED_{6-16} \times SA_a \times ADAF_{6-16}}{RW} + \frac{EV_r \times ED_{16-26} \times SA_a \times ADAF_{16-26}}{RW} \right)$
Carcinogenic Adjustment Factor, oral exposure	$CAF_{O}$	0.804	0.804	dimensionless	Trichloroethene:
Conversion factor, dermal	$CF_{d1}$	1000	1000	μg/mg	$TR \times AT_c \times 365 \frac{day}{year} \times CF_{d1}$
COPC Absorbed Dose per Event	DA <sub>event</sub>	chemical and r	receptor-specific	μg/cm <sup>2</sup> -event	$DA_{event,(trichloroethene)} = \frac{yeta}{\left( \frac{EV_r \times ED_{0-2} \times EF_r \times SA_c \times ADAF_{0-2}}{EV_r \times ED_{2-6} \times EF_r \times SA_c \times ADAF_{2-6}} \right)}$
Exposure Duration, child 0-2	$ED_{0-2}$	2	2	yrs	$(EV_r \times EV_c \times EF_r \times SA_c + EV_r \times ED_a \times EF_r \times SA_a)$
Exposure Duration, child 2-6	$ED_{2-6}$	4	4	yrs	$   C^{AF_O} \times   $
Exposure Duration, child 6-16	$ED_{6-16}$	10	10	yrs	$\lfloor \lfloor $
Exposure Duration, adult 16-26	ED <sub>16-26</sub>	10	10	yrs	Vinyl Chloride: $TR$
Exposure Duration, adult	$ED_a$	20	20	yrs	$DA_{event,(vinyl chloride)} = \frac{1}{(eV_r \times ED_c \times SA_c \cup EV_r \times ED_a \times SA_a)}$
Exposure Duration, child	$ED_c$	6	6	yrs	$\frac{SF_D \times EF_r \times \left(\frac{EV_r \times ED_c \times SA_c}{BW_c} + \frac{EV_r \times ED_a \times SA_a}{BW_a}\right)}{\frac{AT}{AT} \times \frac{265}{B} \frac{day}{day} \times CF} + \frac{SF_D \times EV_r \times SA_c}{BW_c}$
Exposure Frequency, resident	$EF_r$	350	350	days/yr	$AT_c \times 365 \frac{day}{vear} \times CF_{d1}$
Event Frequency, resident	$EV_r$	1	1	events/day	
Mutagenic Adjustment Factor, oral exposure	$MAF_O$	0.202	0.202	dimensionless	Noncancer: $THO \times BW_0 \times AT_{reg} \times 365 \frac{day}{c} \times CF_{eq}$
Oral Reference Dose Adjusted for GI Absorption	$RfD_d$	chemica	al-specific	(mg/kg-day)	$DA_{event}$ (child noncarcinogen) = $\frac{1}{1}$
Exposed Body Surface Area, adult	$SA_a$	20900	20900	cm <sup>2</sup>	Noncancer: $DA_{event,(child,noncarcinogen)} = \frac{THQ \times BW_c \times AT_{nc,c} \times 365 \frac{day}{year} \times CF_{d1}}{\frac{1}{RfD_c} \times EV_r \times ED_c \times EF_r \times SA_c}$
Exposed Body Surface Area, child	$SA_c$	6378	6378	cm <sup>2</sup>	y - <sub>U</sub>
Oral Slope Factor Adjusted for GI Absorption	$SF_D$	chemica	al-specific	(mg/kg-day) <sup>-1</sup>	
Target Hazard Quotient	THQ	1	1	dimensionless	
Target Risk	TR	1.0E-06	1.0E-06	dimensionless	

						USEPA				DTSC-Modified							
		GI Absorption	SF <sub>D</sub>	$RfD_d$	DA <sub>event(child, noncarcinogen)</sub>	$\mathbf{DA}_{event(adult, carcinogen)}$	DA <sub>event(adult, mutagen)</sub>	DA <sub>vent,(adult, trichloroethene)</sub>	DA <sub>event(adult, vinyl chloride)</sub>	GI Absorption	SFD	$RfD_d$	DA <sub>event(child, noncarcinogen)</sub>	DA <sub>event(adult, carcinogen)</sub>	DA <sub>event(adult, mutagen)</sub>	DA <sub>vent,(adult, trichloroethene)</sub>	DA <sub>event(adult, vinvl chloride)</sub>
Analyte	Mutagen	? (dimensionless)	(mg/kg-day) <sup>-1</sup>	(mg/kg-day)	$(\mu g/cm^2 - event)$	$(\mu g/cm^2 - event)$	$(\mu g/cm^2 - event)$	$(\mu g/cm^2 - event)$	$(\mu g/cm^2 - event)$	(dimensionless)	(mg/kg-day) <sup>-1</sup>	(mg/kg-day)	$(\mu g/cm^2 - event)$	$(\mu g/cm^2 - event)$	$(\mu g/cm^2 - event)$	$(\mu g/cm^2 - event)$	$(\mu g/cm^2 - event)$
USEPA RSL Analytes																	
Acetophenone		1.00E+00		1.00E-01	2.45E-01					1.00E+00		1.00E-01	2.45E-01				
Acrylamide	M	1.00E+00	5.00E-01	2.00E-03	4.91E-03		6.07E-06	-		1.00E+00	4.50E+00	2.00E-03	4.91E-03		6.74E-07		
Acrylonitrile		1.00E+00	5.40E-01	4.00E-02	9.81E-02	1.74E-05				1.00E+00	1.00E+00	4.00E-02	9.81E-02	9.39E-06			
Aldrin		1.00E+00	1.70E+01	3.00E-05	7.36E-05	5.52E-07				1.00E+00	1.70E+01	3.00E-05	7.36E-05	5.52E-07			
Arsenic, Inorganic		1.00E+00	1.50E+00	3.00E-04	7.36E-04	6.26E-06				1.00E+00	9.50E+00	3.50E-06	8.58E-06	9.88E-07			
Benzaldehyde		1.00E+00		1.00E-01	2.45E-01					1.00E+00		1.00E-01	2.45E-01				
Benzene		1.00E+00	5.50E-02	4.00E-03	9.81E-03	1.71E-04				1.00E+00	1.00E-01	4.00E-03	9.81E-03	9.39E-05			
Benzenethiol		1.00E+00		1.00E-03	2.45E-03					1.00E+00		1.00E-03	2.45E-03				
Beryllium and compounds		7.00E-03		1.40E-05	3.43E-05	-				7.00E-03	-	1.40E-06	3.43E-06				
Bis(2-chloro-1-methylethyl) ether		1.00E+00		4.00E-02	9.81E-02					1.00E+00		4.00E-02	9.81E-02				
Bromodichloromethane		1.00E+00	6.20E-02	2.00E-02	4.91E-02	1.51E-04		-	-	1.00E+00	1.30E-01	2.00E-02	4.91E-02	7.22E-05			
Bromoform		1.00E+00	7.90E-03	2.00E-02	4.91E-02	1.19E-03		-	-	1.00E+00	1.10E-02	2.00E-02	4.91E-02	8.53E-04			
Butanol, N-		1.00E+00		1.00E-01	2.45E-01					1.00E+00		1.00E-01	2.45E-01				
Butylbenzene, n-		1.00E+00		5.00E-02	1.23E-01			-		1.00E+00		5.00E-02	1.23E-01				
Butylbenzene, sec-		1.00E+00		1.00E-01	2.45E-01					1.00E+00		1.00E-01	2.45E-01				
Carbon Tetrachloride		1.00E+00	7.00E-02	4.00E-03	9.81E-03	1.34E-04				1.00E+00	1.50E-01	4.00E-03	9.81E-03	6.26E-05			
Chloral Hydrate		1.00E+00		1.00E-01	2.45E-01					1.00E+00		1.00E-01	2.45E-01				
Chlordane		1.00E+00	3.50E-01	5.00E-04	1.23E-03	2.68E-05				1.00E+00	1.30E+00	5.00E-04	1.23E-03	7.22E-06			
Chloroacetaldehyde, 2-		1.00E+00	2.70E-01			3.48E-05				1.00E+00	2.70E-01			3.48E-05			
Chloroethanol, 2-		1.00E+00		2.00E-02	4.91E-02					1.00E+00		2.00E-02	4.91E-02				
Chlorophenol, 2-		1.00E+00		5.00E-03	1.23E-02					1.00E+00		5.00E-03	1.23E-02				
Crotonaldehyde, trans-		1.00E+00	1.90E+00	1.00E-03	2.45E-03	4.94E-06				1.00E+00	1.90E+00	1.00E-03	2.45E-03	4.94E-06			
Cyanides																	
~Cyanogen		1.00E+00		1.00E-03	2.45E-03					1.00E+00		1.00E-03	2.45E-03				
~Cyanogen Bromide		1.00E+00		9.00E-02	2.21E-01					1.00E+00		9.00E-02	2.21E-01				
~Cyanogen Chloride		1.00E+00		5.00E-02	1.23E-01					1.00E+00		5.00E-02	1.23E-01				
~Thiocyanic Acid		1.00E+00		2.00E-04	4.91E-04					1.00E+00		2.00E-04	4.91E-04				
Cyclohexylamine		1.00E+00		2.00E-01	4.91E-01					1.00E+00		2.00E-01	4.91E-01				
Dibromochloromethane		1.00E+00	8.40E-02	2.00E-02	4.91E-02	1.12E-04				1.00E+00	8.40E-02	2.00E-02	4.91E-02	1.12E-04			
Dibromoethane, 1,2-		1.00E+00	2.00E+00	9.00E-03	2.21E-02	4.69E-06		-		1.00E+00	3.60E+00	9.00E-03	2.21E-02	2.61E-06	-		
Dichloroethane, 1,1-		1.00E+00	5.70E-03	2.00E-01	4.91E-01	1.65E-03		-		1.00E+00	5.70E-03	2.00E-01	4.91E-01	1.65E-03			
Dichloroethylene, 1,2-cis-		1.00E+00		2.00E-03	4.91E-03			-		1.00E+00		2.00E-03	4.91E-03				
Dichloroethylene, 1,2-trans-		1.00E+00		2.00E-02	4.91E-02	-				1.00E+00	-	2.00E-02	4.91E-02		-		
Dichloropropane, 1,3-		1.00E+00		2.00E-02	4.91E-02	-		-	-	1.00E+00	-	2.00E-02	4.91E-02		-		
Diethylformamide		1.00E+00		1.00E-03	2.45E-03			-		1.00E+00	-	1.00E-03	2.45E-03		-		
Diisopropyl Methylphosphonate		1.00E+00		8.00E-02	1.96E-01			-	-	1.00E+00	-	8.00E-02	1.96E-01				
Dimethylaniline, N,N-		1.00E+00		2.00E-03	4.91E-03			-		1.00E+00	-	2.00E-03	4.91E-03		-		
Dithiane, 1,4-		1.00E+00		1.00E-02	2.45E-02			-		1.00E+00		1.00E-02	2.45E-02				
Endosulfan		1.00E+00		6.00E-03	1.47E-02					1.00E+00		6.00E-03	1.47E-02				
Epichlorohydrin		1.00E+00	9.90E-03	6.00E-03	1.47E-02	9.48E-04				1.00E+00	8.00E-02	6.00E-03	1.47E-02	1.17E-04	-		

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Table B-4. Derivation of Dermally-Absorbed Dose per Event: Domestic Use of Water -- Residential Scenario

Definition	Variable U	USEPA Value	DTSC Valu	e	Equations
Age-dependent Adjustment Factor, 0-2	ADAF <sub>0-2</sub>	10	10	dimensionless	Cancer Risk:
Age-dependent Adjustment Factor, 2-6	ADAF <sub>2-6</sub>	3	3	dimensionless	Carcinogens: $TR \times AT_c \times 365 \frac{day}{vear} \times CF_{d1}$
Age-dependent Adjustment Factor, 6-16	$ADAF_{6-16}$	3	3	dimensionless	$DA_{event,(carcinogen)} = \frac{yeta}{SF_D \times EF_r \times \left(\frac{EV_r \times ED_c \times SA_c}{DW} + \frac{EV_r \times ED_a \times SA_a}{DW}\right)}$
Age-dependent Adjustment Factor, 16-26	$\mathrm{ADAF}_{\mathrm{16-26}}$	1	1	dimensionless	$SF_D \times EF_\tau \times \left(\frac{-1}{BW_C} + \frac{-1}{BW_A}\right)$
Averaging Time, Carcinogens	$AT_c$	70	70	yrs	Mutagens:
Averaging Time, Noncarcinogens, child	$AT_{nc,c}$	6	6	yrs	$TR \times AT_c \times 365 \frac{day}{vear} \times CF_{d1}$
Averaging Time, Noncarcinogens, adult	$AT_{nc,a}$	20	20	yrs	$DA_{event,(mutagen)} = \frac{yeta}{EV_r \times ED_{0-2} \times SA_c \times ADAF_{0-2}} + \frac{EV_r \times ED_{2-6} \times SA_c \times ADAF_{2-6}}{BW_c}$
Body Weight, adult	$\mathbf{BW}_{\mathrm{a}}$	80	80	kg	$SF_d \times EF_r \times \left(\begin{array}{c c} \hline BW_c \\ \hline FV \times FD \\ \hline \end{array}\right) \times SA \times ADAF$
Body Weight, child	$BW_c$	15	15	kg	$+\frac{EV_r \times ED_{6-16} \times SA_a \times ADAF_{6-16}}{RW} + \frac{EV_r \times ED_{16-26} \times SA_a \times ADAF_{16-26}}{RW}$
Carcinogenic Adjustment Factor, oral exposure	$CAF_{O}$	0.804	0.804	dimensionless	Trichloroethene:
Conversion factor, dermal	$CF_{d1}$	1000	1000	μg/mg	$TR \times AT_c \times 365 \frac{day}{year} \times CF_{d1}$
COPC Absorbed Dose per Event	$DA_{event}$	chemical and r	eceptor-specific	μg/cm <sup>2</sup> -event	$DA_{event,(trichloroethene)} = \frac{C}{\left(EV_r \times ED_{0-2} \times EF_r \times SA_c \times ADAF_{0-2} + EV_r \times ED_{2-6} \times EF_r \times SA_c \times ADAF_{2-6} \right)}$
Exposure Duration, child 0-2	$ED_{0-2}$	2	2	yrs	$(EV_r \times ED_c \times EF_r \times SA_c + EV_r \times ED_a \times EF_r \times SA_a)$
Exposure Duration, child 2-6	$ED_{2-6}$	4	4	yrs	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$
Exposure Duration, child 6-16	$ED_{6-16}$	10	10	yrs	l $l$ $l$ $l$ $l$ $l$ $l$ $l$ $l$ $l$
Exposure Duration, adult 16-26	ED <sub>16-26</sub>	10	10	yrs	Vinyl Chloride: TR
Exposure Duration, adult	$ED_a$	20	20	yrs	DA –
Exposure Duration, child	$ED_c$	6	6	yrs	$\frac{DA_{event,(vinyl \ chloride)}}{\left(\frac{SF_D \times EF_r \times \left(\frac{EV_r \times ED_c \times SA_c}{BW_c} + \frac{EV_r \times ED_a \times SA_a}{BW_a}\right)}{\frac{AT}{BW_c} \times \frac{CF}{BW_c} + \frac{SF_D \times EV_r \times SA_c}{BW_c} + \frac{SF_D \times EV_r \times SA_c}{BW_c \times CF_{d1}}\right)}$
Exposure Frequency, resident	$EF_r$	350	350	days/yr	$AT_c \times 365 \frac{day}{vear} \times CF_{d1}$ $BW_c \times CF_{d1}$
Event Frequency, resident	$EV_r$	1	1	events/day	( year al )
Mutagenic Adjustment Factor, oral exposure	$MAF_O$	0.202	0.202	dimensionless	Noncancer: $THO \times BW \times AT \dots \times 365 \frac{day}{day} \times CF_{24}$
Oral Reference Dose Adjusted for GI Absorption	$RfD_d$	chemica	al-specific	(mg/kg-day)	$DA_{event}$ (child noncarcinogen) = $\frac{1}{1}$
Exposed Body Surface Area, adult	$SA_a$	20900	20900	cm <sup>2</sup>	Noncancer: $DA_{event,(child,noncarcinogen)} = \frac{THQ \times BW_c \times AT_{nc,c} \times 365 \frac{day}{year} \times CF_{d1}}{\frac{1}{RfD_D} \times EV_r \times ED_c \times EF_r \times SA_c}$
Exposed Body Surface Area, child	$SA_c$	6378	6378	cm <sup>2</sup>	·· <i>y</i> ~ <i>y</i>
Oral Slope Factor Adjusted for GI Absorption	$SF_D$	chemica	al-specific	(mg/kg-day) <sup>-1</sup>	
Target Hazard Quotient	THQ	1	1	dimensionless	
Target Risk	TR	1.0E-06	1.0E-06	dimensionless	

		USEPA								DTSC-Modified							
	•	GI Absorption	SF <sub>D</sub>	$RfD_d$	$\mathbf{DA}_{event(child,noncarcinogen)}$	DA <sub>event(adult, carcinogen)</sub>	$\mathbf{DA}_{\mathrm{event(adult,mutagen)}}$	DA <sub>vent,(adult, trichloroethene)</sub>	DA <sub>event(adult, vinyl chloride)</sub>	GI Absorption	SFD	$RfD_d$	DA <sub>event(child, noncarcinogen)</sub>	DA <sub>event(adult, carcinogen)</sub>	DA <sub>event(adult, mutagen)</sub>	DA <sub>vent,(adult, trichloroethene)</sub>	DA <sub>event(adult, vinyl chloride)</sub>
Analyte	Mutagen?	(dimensionless)	$(mg/kg-day)^{-1}$	(mg/kg-day)	$(\mu g/cm^2 - event)$	$(\mu g/cm^2 - event)$	$(\mu g/cm^2 - event)$	$(\mu g/cm^2 - event)$	$(\mu g/cm^2 - event)$	(dimensionless)	$(mg/kg-day)^{-1}$	(mg/kg-day)	$(\mu g/cm^2 - event)$	$(\mu g/cm^2 - event)$	$(\mu g/cm^2 - event)$	$(\mu g/cm^2 - event)$	$(\mu g/cm^2 - event)$
Ethyl Ether		1.00E+00		2.00E-01	4.91E-01	-			-	1.00E+00		2.00E-01	4.91E-01				
Ethylene Diamine		1.00E+00		9.00E-02	2.21E-01				-	1.00E+00		9.00E-02	2.21E-01				
Furans																	-
~Furan		1.00E+00		1.00E-03	2.45E-03					1.00E+00		1.00E-03	2.45E-03				
Guanidine		1.00E+00		1.00E-02	2.45E-02					1.00E+00		1.00E-02	2.45E-02				
Hexabromobenzene		1.00E+00		2.00E-03	4.91E-03					1.00E+00		2.00E-03	4.91E-03				
Hexachlorobenzene		1.00E+00	1.60E+00	8.00E-04	1.96E-03	5.87E-06				1.00E+00	1.80E+00	8.00E-04	1.96E-03	5.22E-06			
Hexachlorocyclohexane, Gamma- (Lindane)		1.00E+00	1.10E+00	3.00E-04	7.36E-04	8.53E-06				1.00E+00	1.10E+00	3.00E-04	7.36E-04	8.53E-06			
Isobutyl Alcohol		1.00E+00		3.00E-01	7.36E-01					1.00E+00		3.00E-01	7.36E-01				
Lead Compounds																	
~Lead subacetate		1.00E+00	8.50E-03			1.10E-03				1.00E+00	3.80E-02			2.47E-04			
Lewisite		1.00E+00		5.00E-06	1.23E-05	-				1.00E+00		5.00E-06	1.23E-05		-		
Mercury Compounds																	
~Mercury (elemental)		1.00E+00				-				1.00E+00		1.60E-04	3.92E-04		-		
Merphos		1.00E+00		3.00E-05	7.36E-05					1.00E+00		3.00E-05	7.36E-05				
Methyl Acetate		1.00E+00		1.00E+00	2.45E+00					1.00E+00		1.00E+00	2.45E+00				
Methylene Chloride	M	1.00E+00	2.00E-03	6.00E-03	1.47E-02		1.52E-03			1.00E+00	1.40E-02	6.00E-03	1.47E-02		2.17E-04		
Methylene-bis(2-chloroaniline), 4,4'-	M	1.00E+00	1.00E-01	2.00E-03	4.91E-03		3.03E-05			1.00E+00	1.50E+00	2.00E-03	4.91E-03		2.02E-06		
Mineral oils		1.00E+00		3.00E+00	7.36E+00					1.00E+00		3.00E+00	7.36E+00				
Mirex		1.00E+00	1.80E+01	2.00E-04	4.91E-04	5.22E-07				1.00E+00	1.80E+01	2.00E-04	4.91E-04	5.22E-07			
Naled		1.00E+00		2.00E-03	4.91E-03					1.00E+00		2.00E-03	4.91E-03				
Nitrotoluene, o-		1.00E+00	2.20E-01	9.00E-04	2.21E-03	4.27E-05		-		1.00E+00	2.20E-01	9.00E-04	2.21E-03	4.27E-05			
Pentabromodiphenyl Ether		1.00E+00		2.00E-03	4.91E-03					1.00E+00		2.00E-03	4.91E-03				
Pentachloroethane		1.00E+00	9.00E-02			1.04E-04			-	1.00E+00	9.00E-02			1.04E-04			
Perfluorobutane Sulfonate		1.00E+00		2.00E-02	4.91E-02					1.00E+00		2.00E-02	4.91E-02				
Phosphorus, White		1.00E+00		2.00E-05	4.91E-05					1.00E+00		2.00E-05	4.91E-05				
Phthalates																	
~Dimethylterephthalate		1.00E+00		1.00E-01	2.45E-01					1.00E+00		1.00E-01	2.45E-01				
Polychlorinated Biphenyls (PCBs)																	
~Aroclor 1016		1.00E+00	7.00E-02	7.00E-05	1.72E-04	1.34E-04				1.00E+00	7.00E-02	7.00E-05	1.72E-04	1.34E-04			
~Aroclor 1254		1.00E+00	2.00E+00	2.00E-05	4.91E-05	4.69E-06				1.00E+00	2.00E+00	2.00E-05	4.91E-05	4.69E-06			
~Aroclor 5460		1.00E+00		6.00E-04	1.47E-03					1.00E+00		6.00E-04	1.47E-03				
Propargyl Alcohol		1.00E+00		2.00E-03	4.91E-03					1.00E+00		2.00E-03	4.91E-03				
Pyridine		1.00E+00		1.00E-03	2.45E-03					1.00E+00		1.00E-03	2.45E-03				
Tetrachloroethane, 1,1,2,2-		1.00E+00	2.00E-01	2.00E-02	4.91E-02	4.69E-05				1.00E+00	2.70E-01	2.00E-02	4.91E-02	3.48E-05			
Tetrachloroethylene		1.00E+00	2.10E-03	6.00E-03	1.47E-02	4.47E-03				1.00E+00	5.40E-01	6.00E-03	1.47E-02	1.74E-05			
Trichloroethane, 1,1,1-		1.00E+00		2.00E+00	4.91E+00					1.00E+00		2.00E+00	4.91E+00				
Trichlorofluoromethane		1.00E+00		3.00E-01	7.36E-01					1.00E+00		3.00E-01	7.36E-01				
Trichlorophenol, 2,4,6-		1.00E+00	1.10E-02	1.00E-03	2.45E-03	8.53E-04				1.00E+00	7.00E-02	1.00E-03	2.45E-03	1.34E-04			
Trichloropropane, 1,1,2-		1.00E+00		5.00E-03	1.23E-02					1.00E+00		5.00E-03	1.23E-02				
Trichloropropane, 1,2,3-	M	1.00E+00	3.00E+01	4.00E-03	9.81E-03		1.01E-07			1.00E+00	3.00E+01	4.00E-03	9.81E-03		1.01E-07		

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Table B-4. Derivation of Dermally-Absorbed Dose per Event: Domestic Use of Water -- Residential Scenario

Definition	Variable	USEPA Value	e DTSC Valu	e	Equations
Age-dependent Adjustment Factor, 0-2	ADAF <sub>0-2</sub>	10	10	dimensionless	Cancer Risk:
Age-dependent Adjustment Factor, 2-6	$ADAF_{2-6}$	3	3	dimensionless	Carcinogens: $TR \times AT_c \times 365 \frac{day}{year} \times CF_{d1}$
Age-dependent Adjustment Factor, 6-16	$ADAF_{6-16}$	3	3	dimensionless	$DA_{event,(carcinogen)} = \frac{year}{SF_D \times EF_r \times \left(\frac{EV_r \times ED_c \times SA_c}{BW_c} + \frac{EV_r \times ED_a \times SA_a}{BW_a}\right)}$
Age-dependent Adjustment Factor, 16-26	$ADAF_{16-26}$	1	1	dimensionless	$SF_D \times EF_T \times \left( \frac{SF_T \times SG_C \times SF_C}{BW_C} + \frac{SF_T \times SG_C \times SF_C}{BW_A} \right)$
Averaging Time, Carcinogens	$AT_c$	70	70	yrs	Mutagens:
Averaging Time, Noncarcinogens, child	$AT_{nc,c}$	6	6	yrs	$TR \times AT_c \times 365 \frac{day}{vear} \times CF_{d1}$
Averaging Time, Noncarcinogens, adult	$AT_{nc,a}$	20	20	yrs	$DA_{event,(mutagen)} = \frac{EV_r \times ED_{0-2} \times SA_c \times ADAF_{0-2}}{BW_c} + \frac{EV_r \times ED_{2-6} \times SA_c \times ADAF_{2-6}}{BW_c}$
Body Weight, adult	$\mathbf{BW}_{\mathrm{a}}$	80	80	kg	
Body Weight, child	$BW_c$	15	15	kg	$+\frac{EV_r \times ED_{6-16} \times SA_a \times ADAF_{6-16}}{PW} + \frac{EV_r \times ED_{16-26} \times SA_a \times ADAF_{16-26}}{PW}$
Carcinogenic Adjustment Factor, oral exposure	$CAF_{O}$	0.804	0.804	dimensionless	Trichloroethene: $\backslash DW_a$ $DW_a$
Conversion factor, dermal	$CF_{d1}$	1000	1000	μg/mg	$TR \times AT_c \times 365 \frac{day}{vear} \times CF_{d1}$
COPC Absorbed Dose per Event	$DA_{event}$	chemical and r	receptor-specific	μg/cm <sup>2</sup> -event	$DA_{event,(trichloroethene)} = {\left( \underbrace{EV_r \times ED_{0-2} \times EF_r \times SA_c \times ADAF_{0-2}}_{\text{CM}} + \underbrace{EV_r \times ED_{2-6} \times EF_r \times SA_c \times ADAF_{2-6}}_{\text{CM}} \right) \right)}$
Exposure Duration, child 0-2	$ED_{0-2}$	2	2	yrs	$(EV_T \times ED_C \times EF_T \times SA_C + EV_T \times ED_a \times EF_T \times SA_a)$
Exposure Duration, child 2-6	$ED_{2-6}$	4	4	yrs	$   W_{c} \rangle   W$
Exposure Duration, child 6-16	$ED_{6-16}$	10	10	yrs	$\begin{bmatrix} & & & & & & & & & & & & & & & & & & &$
Exposure Duration, adult 16-26	ED <sub>16-26</sub>	10	10	yrs	Vinyl Chloride: TR
Exposure Duration, adult	$ED_a$	20	20	yrs	DA –
Exposure Duration, child	$ED_c$	6	6	yrs	$\frac{SF_D \times EF_r \times \left(\frac{EV_r \times ED_c \times SA_c}{BW_c} + \frac{EV_r \times ED_a \times SA_a}{BW_a}\right)}{\frac{AT}{265} \frac{day}{day} \times CF} + \frac{SF_D \times EV_r \times SA_c}{BW_c \times CF_{d1}}$
Exposure Frequency, resident	$EF_r$	350	350	days/yr	$AT_c \times 365 \frac{day}{vear} \times CF_{d1}$ $+ \frac{BW_c \times CF_{d1}}{BW_c \times CF_{d1}}$
Event Frequency, resident	$EV_r$	1	1	events/day	( year wall )
Mutagenic Adjustment Factor, oral exposure	$MAF_{O}$	0.202	0.202	dimensionless	Noncancer: $THO \times RW \times AT \longrightarrow 365 \frac{day}{c} \times CF$
Oral Reference Dose Adjusted for GI Absorption	$RfD_d$	chemica	al-specific	(mg/kg-day)	$DA_{event}$ (child noncarcinogen) = $\frac{1}{160000000000000000000000000000000000$
Exposed Body Surface Area, adult	$SA_a$	20900	20900	cm <sup>2</sup>	Noncancer: $DA_{event,(child,noncarcinogen)} = \frac{THQ \times BW_c \times AT_{nc,c} \times 365 \frac{day}{year} \times CF_{d1}}{\frac{1}{RfD_c} \times EV_r \times ED_c \times EF_r \times SA_c}$
Exposed Body Surface Area, child	$SA_c$	6378	6378	cm <sup>2</sup>	ויים ניי
Oral Slope Factor Adjusted for GI Absorption	$SF_D$	chemica	al-specific	(mg/kg-day) <sup>-1</sup>	
Target Hazard Quotient	THQ	1	1	dimensionless	
Target Risk	TR	1.0E-06	1.0E-06	dimensionless	

					USEPA			DTSC-Modified								
	GI Absorption	SF <sub>D</sub>	$RfD_d$	DA <sub>event(child, noncarcinogen)</sub>	$\mathbf{DA}_{event(adult,\ carcinogen)}$	DA <sub>event(adult, mutagen)</sub>	DA <sub>vent,(adult, trichloroethene)</sub>	DA <sub>event(adult, vinyl chloride)</sub>	GI Absorption	SFD	$RfD_d$	DA <sub>event(child, noncarcinogen)</sub>	DA <sub>event(adult, carcinogen)</sub>	$\mathbf{DA}_{\mathrm{event(adult,mutagen)}}$	DA <sub>vent,(adult, trichloroethene)</sub>	DA <sub>event(adult, vinyl chloride)</sub>
Analyte	Mutagen? (dimensionless)	$(mg/kg-day)^{-1}$	(mg/kg-day)	$(\mu g/cm^2$ -event)	(µg/cm <sup>2</sup> -event)	(µg/cm <sup>2</sup> -event)	$(\mu g/cm^2 - event)$	$(\mu g/cm^2$ -event)	(dimensionless)	$(mg/kg-day)^{-1}$	(mg/kg-day)	(µg/cm <sup>2</sup> -event)	$(\mu g/cm^2$ -event)	$(\mu g/cm^2$ -event)	$(\mu g/cm^2 - event)$	$(\mu g/cm^2$ -event)
Additional Analytes																
Beryllium Sulfate	7.00E-03		1.40E-05	3.43E-05					7.00E-03		1.40E-06	3.43E-06				
Dichlorobenzene, 1,3-	1.00E+00								1.00E+00		3.00E-02	7.36E-02				
Methylcyclohexane	1.00E+00								1.00E+00							

<sup>&</sup>quot;--" = no value

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Table B-5. USEPA RSLs and DTSC-SLs for a Residential Receptor Exposed Dermally during Domestic Use of Tap Water

Definition	Variable USEPA Value DTSC Value Units			ue Units	Intermediat	e Equations		RSL <sub>D</sub> Derivation	n Ir	norganic		Organic (if t <sub>event.lifetime</sub> ≤ t	*):	Organic (if t <sub>event,lifetime</sub> > t*):			
Relative contribution of permeability coefficients in	В		d (Equation 3)				45865 <i>LogK<sub>OW</sub></i> -0.0056118	ь	Carcinogens, Mutagens, Trichloroethene, Vinyl Chloride					3-Same (** revent, metine ** ).			
stratum corneum and viable epidermis	D	Sulculator	- (=quuion 3)		$K_p = 10^{\circ}$	2.003003±0.66	-19909F0AVOM-0.0020119	vv )	caremogens, wintag	,,emoroemene,	cinoriuc						
Correlation coefficient	h	Calculate	d (Equation 4)	dimensionless	2)				D.C. D	$0A_{event} \times CF_{d2}$	DCI	$DA_{event} \times CF_d$	2	ncı	$DA_{event} \times CF_{d2}$		
Correlation coefficient	c		d (Equation 4)	dimensionless	,	$(l_{sc})^2$			$RSL_D = \frac{1}{K_p}$	$\times t_{event,lifetime}$	$RSL_D = -$	$\int [6\tau_{event} \times t]$	enent lifetime	$RSL_D = \frac{1}{FA_r \times K_p \times \left(\frac{t_{e1}}{C}\right)}$	rent, lifetime	$1 + 3B + 3B^2$	
Conversion factor, dermal	CF <sub>d2</sub>	1000	1000	cm <sup>3</sup> /L	event —	$6D_{sc}$			r	,	2FA	$1_r \times K_p \times \sqrt{\sqrt{\frac{cvent}{c}}}$	$\frac{\pi}{\pi}$	$\Gamma \Lambda_r \wedge \Lambda_p \wedge ($	1 + B	$(1+B)^2$	
Effective diffusion coefficient, through the stratum corneun			d (Equation 2)	cm <sup>2</sup> /hr	where							`	,				
Dose absorbed per unit area per event	30		lculated	μg/cm <sup>2</sup> -event	$D_{s}$	$c = l_{sc} \times 10^{\circ}$	-2.8-0.0056 <i>MW</i> )										
Exposure Duration, adult	DA <sub>event</sub> ED <sub>a</sub>	20	20	yrs	2)												
Exposure Duration, child	$ED_a$ $ED_c$	6	6	yrs	$B = K_p \frac{\sqrt{g}}{2}$	$\overline{MW}$	(as an approximation	.)									
Fraction Absorbed, resident	FA <sub>r</sub>	Chemi	cal-specific	dimensionless	$D - K_p$	2.6	(as an approximation	1)									
Permeability coefficient from water (organics only)	K <sub>n</sub>		d (Equation 1)	cm/hr	4) If $B \le 0.6$	· t* - 2 Δτ											
Octanol:water partition coefficient	K <sub>ow</sub>		cal-specific	dimensionless					Noncarcinogen:								
Thickness of the strateum corneum	1	0.001	0.001	cm	If $B > 0.6$	$: t^* = 6\tau_{eve}$	$_{nt}\left( b-\sqrt{b^{2}-c^{2}} ight)$			norganic		Organic (if t <sub>event,child</sub> ≤ t*)		Organic (if t <sub>event,child</sub> > t*)			
Molecular weight	MW		cal-specific	g/mole	2 × (	$\frac{1+B)^2}{\pi}-c$					10	DA	× CF to	DA		× CF to	
(Regional) Screening Level, dermal	(R)SL <sub>D</sub>		ved herein	μg/L	<i>b</i> = —	${\pi}$ – c		RSL	$L_D = \frac{D \text{ Tevent, (child, right)}}{V}$	t	$\frac{d2}{dt}$ $RSL_D = -$	/ [c	igen) × Graz	$RSL_D = \frac{DH}{I}$	event,(cniia,noncarcinogen	$\frac{11 \times 3R + 3R^2}{1 + 3R + 3R^2}$	
Lag time per event	τ <sub>event</sub>		d (Equation 2)	hr/event	$c = \frac{1+3}{3 \times}$	$B + 3B^2$			$\kappa_p$ x	vevent,child	2	$FA_r \times K_p \times \left( \sqrt{\frac{6\tau_{event}}{2}} \right)$	× ι <sub>event,child</sub>	$RSL_D = \frac{DA}{FA_r \times K_p \times \left(\frac{t}{2}\right)}$	$\frac{e^{vent,cniia}}{1+B} + (2 \times \tau_{event})$	$(1+B)^2$	
Time it takes to reach steady state	t*		d (Equation 4)	hr	$c = {3 \times}$	(1 + B)						- (V	" )	`		\ / /	
Duration of event, child	t <sub>event,child</sub>	0.54	0.54	hr/event	5)												
Duration of event, adult	t <sub>event,adult</sub>	0.71	0.71	hr/event	t	$t_{event,ch} = \frac{t_{event,ch}}{t_{event,ch}}$	$\frac{ED_c + t_{event,adu}}{ED_c + ED_c}$	$_{ult} \times ED_a$									
Duration of event, adjusted lifetime	t <sub>event,lifetime</sub>	Calculate	d (Equation 4)	hr/event	event,lifetii	ne — —	$ED_c + ED_a$										
					LISEDA	DTSC-Modifie	d			USEPA	DTSC-Modified		Residential II	SEPA RSL <sub>D</sub> (µg/L)	Residential DT	SC-SL <sub>D</sub> (μg/L)	
		MW	$LogK_{OW}$	Kp <sup>a</sup>	τ <sub>event</sub>	τ <sub>event</sub>	В	c	b	t*	t*	$\mathbf{F}\mathbf{A_r}$	ixcoluctitudi U	OLI A ROLD (Hg/L)	Residential D1	SC SED (HE/E)	
Analyte	Mutagen?	(g/mole)	(dimensionless		(hr/event)	(hr/event)	(dimensionless)	(dimensionless)	(dimensionless)	(hr)	(hr)	$(dimensionless\ )$	Carcinogen	Noncarcinogen	Carcinogen	Noncarcinogen	
USEPA RSL Analytes																	
Acetophenone		120.15	1.58E+00	3.72E-03	4.95E-01	4.95E-01	1.57E-02	3.44E-01	3.13E-01	1.19E+00	1.19E+00	1		4.61E+04		4.61E+04	
Acrylamide Acrylamitrila	M	71.079 53.064	-6.70E-01 2.50E-01	2.24E-04 1.16E-03	2.63E-01 2.08E-01	2.63E-01 2.08E-01	7.27E-04 3.24E-03	3.34E-01 3.35E-01	3.04E-01 3.05E-01	6.31E-01 5.00E-01	6.31E-01 5.00E-01	1	2.26E+01 1.38E+01	2.10E+04 8.87E+04	2.51E+00 7.47E+00	2.10E+04 8.87E+04	
Acrylonitrile Aldrin		364.92	6.50E+00	1.16E-03 NRP	2.08E-01 1.16E+01	2.08E-01 1.16E+01	3.24E-03	3.35E-01 	3.05E-01	5.00E-01 	5.00E-01	1	1.38E+01 	8.8/E+04	/.4/E+00 	8.8/E+04 	
Arsenic, Inorganic		77.946		1.00E-03								1	9.33E+00	1.36E+03	1.47E+00	1.59E+01	
Benzaldehyde		106.13	1.48E+00	3.83E-03	4.13E-01	4.13E-01	1.52E-02	3.44E-01	3.13E-01	9.92E-01	9.92E-01	1		4.91E+04		4.91E+04	
Benzene		78.115	2.13E+00	1.49E-02	2.88E-01	2.88E-01	5.05E-02	3.68E-01	3.35E-01	6.91E-01	6.91E-01	1	9.45E+00	6.06E+02	5.20E+00	6.06E+02	
Benzenethiol Beryllium and compounds		110.18	2.52E+00	1.78E-02 1.00E-03	4.35E-01	4.35E-01	7.20E-02	3.83E-01	3.49E-01	1.04E+00	1.04E+00	<u> </u>		1.03E+02 6.36E+01		1.03E+02 6.36E+00	
Bis(2-chloro-1-methylethyl) ether		171.028	2.48E+00	7.64E-03	9.55E-01	9.55E-01	3.84E-02	3.59E-01	3.27E-01	2.29E+00	2.29E+00	1		6.47E+03		6.47E+03	
Bromodichloromethane		163.83	2.00E+00	4.02E-03	8.70E-01	8.70E-01	1.98E-02	3.47E-01	3.15E-01	2.09E+00	2.09E+00	1	1.78E+01	6.44E+03	8.50E+00	6.44E+03	
Bromoform		252.73	2.40E+00	2.35E-03	2.74E+00	2.74E+00	1.44E-02	3.43E-01	3.12E-01	6.57E+00	6.57E+00	1	1.35E+02	6.20E+03	9.69E+01	6.20E+03	
Butanol, N- Butylbenzene, n-		74.124	8.80E-01	2.31E-03 NRP	2.73E-01	2.73E-01 5.94E-01	7.65E-03	3.38E-01	3.08E-01	6.56E-01	6.56E-01	1		9.99E+04		9.99E+04	
Butylbenzene, n- Butylbenzene, sec-		134.22 134.22	4.38E+00 4.57E+00	NRP	5.94E-01 5.94E-01	5.94E-01 5.94E-01						1					
Carbon Tetrachloride		153.82	2.83E+00	1.63E-02	7.64E-01	7.64E-01	7.78E-02	3.87E-01	3.52E-01	1.83E+00	1.83E+00	1	4.15E+00	3.39E+02	1.94E+00	3.39E+02	
Chloral Hydrate		165.4	9.90E-01	8.41E-04	8.87E-01	8.87E-01	4.16E-03	3.36E-01	3.06E-01	2.13E+00	2.13E+00	1		1.52E+05		1.52E+05	
Chlordane		409.78	6.26E+00	NRP	2.07E+01	2.07E+01	2 225 02	2.25E.01	 2.05E-01	 ( 04F 01	 C 0.4E 0.1	0.7	4.205+01		4.205+01		
Chloroacetaldehyde, 2- Chloroethanol, 2-		78.499 80.515	9.00E-02 3.00E-02	6.52E-04 5.79E-04	2.89E-01 2.97E-01	2.89E-01 2.97E-01	2.22E-03 2.00E-03	3.35E-01 3.35E-01	3.05E-01 3.05E-01	6.94E-01 7.13E-01	6.94E-01 7.13E-01	<u>l</u>	4.38E+01	7.65E+04	4.38E+01	7.65E+04	
Chlorophenol, 2-		128.56	2.15E+00	7.99E-03	5.52E-01	5.52E-01	3.48E-02	3.57E-01	3.25E-01	1.32E+00	1.32E+00	1 1		1.02E+03	<del></del>	1.02E+03	
Crotonaldehyde, trans-		70.092	6.00E-01	1.59E-03	2.60E-01	2.60E-01	5.11E-03	3.37E-01	3.06E-01	6.23E-01	6.23E-01	1	2.62E+00	1.49E+03	2.62E+00	1.49E+03	
Cyanides					•												
~Cyanogen Promide		52.036	7.00E-02	8.90E-04	2.06E-01	2.06E-01	2.47E-03	3.35E-01	3.05E-01	4.94E-01	4.94E-01	<u>1</u> 1		5.10E+03		5.10E+03	
~Cyanogen Bromide ~Cyanogen Chloride		105.93 61.471		2.55E-04 3.94E-04								1		1.60E+06 5.76E+05	 	1.60E+06 5.76E+05	
~Thiocyanic Acid		59.09	5.80E-01	1.00E-03	2.25E-01	2.25E-01	2.96E-03	3.35E-01	3.05E-01	5.41E-01	5.41E-01	1		9.08E+02		9.08E+02	
Cyclohexylamine		99.177	1.49E+00	4.25E-03	3.78E-01	3.78E-01	1.63E-02	3.44E-01	3.13E-01	9.07E-01	9.07E-01	1		9.24E+04		9.24E+04	
Dibromochloromethane		208.28	2.16E+00	2.89E-03	1.54E+00	1.54E+00	1.61E-02	3.44E-01	3.13E-01	3.70E+00	3.70E+00	1	1.37E+01	6.72E+03	1.37E+01	6.72E+03	
Dibromoethane, 1,2- Dichloroethane, 1,1-		187.86 98.96	1.96E+00 1.79E+00	2.78E-03 6.75E-03	1.19E+00 3.77E-01	1.19E+00 3.77E-01	1.46E-02 2.58E-02	3.43E-01 3.51E-01	3.12E-01 3.19E-01	2.84E+00 9.04E-01	2.84E+00 9.04E-01	<u>1</u>	6.86E-01 1.76E+02	3.60E+03 5.83E+04	3.81E-01 1.76E+02	3.60E+03 5.83E+04	
Dichloroethylene, 1,2-cis-		96.944	1.79E+00 1.86E+00	7.71E-03	3.67E-01	3.67E-01	2.58E-02 2.92E-02	3.51E-01 3.53E-01	3.19E-01 3.21E-01	9.04E-01 8.81E-01	9.04E-01 8.81E-01	1	1./6E+02 	5.83E+04 5.17E+02	1./6E+02 	5.83E+04 5.17E+02	
Dichloroethylene, 1,2-trans-		96.944	2.09E+00	1.10E-02	3.67E-01	3.67E-01	4.15E-02	3.62E-01	3.29E-01	8.81E-01	8.81E-01	1		3.64E+03		3.64E+03	
Dichloropropane, 1,3-		112.99	2.00E+00	7.76E-03	4.51E-01	4.51E-01	3.17E-02	3.55E-01	3.23E-01	1.08E+00	1.08E+00	1		4.63E+03		4.63E+03	
Diethylformamide		101.15	5.00E-02	4.58E-04	3.88E-01	3.88E-01	1.77E-03	3.35E-01	3.04E-01	9.30E-01	9.30E-01	11		4.24E+03		4.24E+03	
Diisopropyl Methylphosphonate Dimethylaniline, N,N-		180.19	1.03E+00 2.31E+00	7.38E-04 1.12E-02	1.07E+00 5.02E-01	1.07E+00 5.02E-01	3.81E-03 4.75E-02	3.36E-01 3.66E-01	3.06E-01 3.33E-01	2.58E+00 1.20E+00	2.58E+00 1.20E+00	<u>1</u>	<del></del>	1.26E+05 3.04E+02		1.26E+05 3.04E+02	
Dimethylanlline, N,N- Dithiane, 1,4-		121.18 120.24	7.70E-01	1.12E-02 1.08E-03	4.96E-01	4.96E-01	4.75E-02 4.54E-03	3.66E-01 3.36E-01	3.33E-01 3.06E-01	1.20E+00 1.19E+00	1.20E+00 1.19E+00	1 1		3.04E+02 1.59E+04	 	3.04E+02 1.59E+04	
Endosulfan		406.93	3.83E+00	2.86E-03	2.00E+01	2.00E+01	2.22E-02	3.48E-01	3.17E-01	4.80E+01	4.80E+01	0.9		6.29E+02		6.29E+02	
Epichlorohydrin		92.526	4.50E-01	9.44E-04	3.47E-01	3.47E-01	3.49E-03	3.36E-01	3.05E-01	8.32E-01	8.32E-01	1	7.54E+02	1.30E+04	9.33E+01	1.30E+04	
Ethyl Ether		74.124	8.90E-01	2.35E-03	2.73E-01	2.73E-01	7.77E-03	3.39E-01	3.08E-01	6.56E-01	6.56E-01	1		1.97E+05		1.97E+05	
Ethylene Diamine		60.099	-2.04E+00	NRP	2.28E-01	2.28E-01						1					
Furans																	

.\2016-01 Tap Water Documentation - Dermal

Table B-5. USEPA RSLs and DTSC-SLs for a Residential Receptor Exposed Dermally during Domestic Use of Tap Water

Definition	Variable 119	SEPA Value	e DTSC Value	e Units	Intermediat	te Equations		RSL <sub>D</sub> Derivation	1 1	norganic		Organic (if t <sub>event.lifetime</sub> ≤ t	*):	Organic (if t <sub>event,lifetime</sub> > t*	·):	
Relative contribution of permeability coefficients in	В		d (Equation 3)			1	4596510gV -0005311	ь		gens, Trichloroethene,	Vinyl Chloride	S Cevent, III etime = C	,	G (event, lifetime	,	
stratum corneum and viable epidermis	ъ	Carculated	a (Equation 3)	difficusioniess	$K_p = 10^{\circ}$	-2.805063+0.664	45865 <i>LogK<sub>OW</sub></i> -0.005611	LOM W )	caremogens, with	50113, THOMOTOCHICIE,	, vinyi Cinoriuc					
Correlation coefficient	b	Calculate	d (Equation 4)	dimensionless	2)	_			D.C.I.	$OA_{event} \times CF_{d2}$	DCI	$DA_{event} \times CF_d$	2	n.c.i	$DA_{event} \times CF_{d2}$	
Correlation coefficient	c		d (Equation 4)	dimensionless	$ au_{event} =  au_{event}$	$(l_{sc})^2$			$\kappa_{SL_D} = \frac{1}{K_p}$	$\times t_{event,lifetime}$	$KSL_D = {}$	$\int [6\tau_{event} \times t]$	event.lifetime	$RSL_D = \frac{1}{FA_r \times K_p \times \left(\frac{t_{ev}}{V}\right)}$	ent,lifetime ⊥ (2 ∨ τ	$\frac{1+3B+3B^2}{1+3B+3B^2}$
Conversion factor, dermal	CF <sub>d2</sub>	1000	1000	cm <sup>3</sup> /L	event —	$6D_{sc}$			r	,	$2FA_r$	$\times K_p \times (\sqrt{-\frac{cvent}{\sqrt{cvent}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}$	$\frac{\pi}{\pi}$	$\Gamma \Lambda_r \wedge \Lambda_p \wedge ($	1 + B	$(1+B)^2$
Effective diffusion coefficient, through the stratum corneum	$D_{sc}$		d (Equation 2)	cm <sup>2</sup> /hr	where:							`	,			
, ,			d (Equation 2)	μg/cm <sup>2</sup> -event	$D_s$	$l_{sc} = l_{sc} \times 10^{(-1)}$	-2.8-0.0056 <i>MW</i> )									
Dose absorbed per unit area per event Exposure Duration, adult	$\mathrm{DA}_{\mathrm{event}}$ $\mathrm{ED}_{\mathrm{a}}$	20 Cai	iculated 20		2)											
Exposure Duration, addit Exposure Duration, child	$ED_a$ $ED_c$	6	20 6	yrs yrs	$B = K_p \frac{\sqrt{R}}{R}$	$\overline{MW}$	(as an approximation	nn)								
Fraction Absorbed, resident	ED <sub>c</sub> FA <sub>r</sub>		cal-specific	dimensionless	$D = K_p - K_p$	2.6	(as an approximatio	<i>,</i> 111 <i>)</i>								
Permeability coefficient from water (organics only)	K <sub>n</sub>		d (Equation 1)	cm/hr	1) If P < 0.4	6: $t^* = 2.4\tau_{ev}$										
Octanol:water partition coefficient	K <sub>p</sub>		cal-specific	dimensionless					Noncarcinogen:							
Thickness of the strateum corneum	1	0.001	0.001	cm	If $B > 0.6$	$5: t^* = 6\tau_{even}$	$_{nt}\left( b-\sqrt{b^{2}-c^{2}} ight)$		· ·	norganic		Organic (if t <sub>event,child</sub> ≤ t*)		Organic (if t <sub>event,child</sub> > t*):		
Molecular weight	MW		cal-specific	g/mole	, 2×(	$\frac{(1+B)^2}{\pi}-c$				· ·						· · CF
(Regional) Screening Level, dermal	(R)SL <sub>D</sub>		ed herein	μg/L	b =	$\phantom{aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa$		RSL	$D = \frac{DR_{event,(child,r)}}{V}$	noncarcinogen) ^ CF	$RSL_D = \frac{1}{2}$	Prevent,(child,noncarcing	ogen) ^ Crd2	$RSL_D = \frac{DA_C}{t}$	event,(child,noncarcinoge	$\frac{(n) \wedge Cr_{d2}}{1 + 2D + 2D2}$
Lag time per event	τ <sub>event</sub>		d (Equation 2)	hr/event	1+3	$3B + 3B^2$			$\kappa_p \times$	event,child	2.F	$FA_r \times K_p \times \left( \right) \frac{6\tau_{event}}{2}$	$\frac{\times t_{event,child}}{\pi}$	$RSL_D = \frac{DA_0}{FA_r \times K_p \times \left(\frac{t}{T}\right)}$	$\frac{event,cniia}{1+B} + (2 \times \tau_{eve})$	$(1+R)^2$
Time it takes to reach steady state	t*		d (Equation 4)	hr	$c = \frac{1+3}{3 \times}$	$\overline{(1+B)}$						. (1	<i>"</i>	`		(= 1 = ) /
Duration of event, child	t <sub>event,child</sub>	0.54	0.54	hr/event	5)											
Duration of event, adult	t <sub>event,adult</sub>	0.71	0.71	hr/event	t	$=\frac{t_{event,chi}}{}$	$\frac{ED_c + t_{event,ad}}{ED_c + ED_a}$	$_{ult} \times ED_a$								
Duration of event, adjusted lifetime	t <sub>event,lifetime</sub>	Calculated	d (Equation 4)	hr/event	event,lifetir	me —	$ED_c + ED_a$									
					USEPA	DTSC-Modified	d			USEPA	DTSC-Modified		Residential III	SEPA RSL <sub>D</sub> (μg/L)	Residential D	OTSC-SL <sub>D</sub> (µg/L)
		MW	$LogK_{OW}$	Kp <sup>a</sup>	τ <sub>event</sub>	τ <sub>event</sub>	В	c	b	t*	t*	$\mathbf{FA_r}$	Acsidential Us	NET TO THE (HE/L)	Nesidential D	INC-DED (HRIE)
Analyte	Mutagen?	(g/mole)	(dimensionless		(hr/event)	(hr/event)	(dimensionless)	(dimensionless)	(dimensionless)	(hr)	(hr)	(dimensionless)	Carcinogen	Noncarcinogen	Carcinogen	Noncarcinogen
~Furan		68.076	1.34E+00	5.05E-03	2.53E-01	2.53E-01	1.60E-02	3.44E-01	3.13E-01	6.07E-01	6.07E-01	1		4.75E+02		4.75E+02
Guanidine		59.071	-1.63E+00	6.03E-05	2.25E-01	2.25E-01	1.78E-04	3.33E-01	3.03E-01	5.41E-01	5.41E-01	1		4.22E+05		4.22E+05
Hexabromobenzene		551.49	6.07E+00	NRP	1.29E+02	1.29E+02						0.7				
Hexachlorocyclohexane, Gamma- (Lindane)		284.78 290.83	5.73E+00 3.72E+00	NRP 1.08E-02	4.14E+00 4.47E+00	4.14E+00 4.47E+00	7.11E-02	3.82E-01	3.48E-01	1.07E+01	 1.07E+01	0.9	1.83E-01	 1.76E+01	1.83E-01	1.76E+01
Isobutyl Alcohol		74.124	7.60E-01	1.92E-03	2.73E-01	2.73E-01	6.37E-03	3.38E-01	3.07E-01	6.56E-01	6.56E-01	1	1.83E-01	3.60E+05	1.63E-01	3.60E+05
Lead Compounds																
~Lead subacetate		805.67	-4.00E+00	NRP	3.42E+03	3.42E+03			-			1				
Lewisite		207.32	2.56E+00	5.41E-03	1.52E+00	1.52E+00	2.99E-02	3.54E-01	3.22E-01	3.66E+00	3.66E+00	1		9.05E-01		9.05E-01
Mercury Compounds ~Mercury (elemental)		200.59	6.20E-01	1.00E-03	1.40E+00	1.40E+00	5.45E-03	3.37E-01	3.07E-01	3.35E+00	3.35E+00	1				1.63E+02
Merphos		298.51	7.67E+00	NRP	4.94E+00	4.94E+00	5.45E-05 	3.37E-01 	3.07E-01	3.33E+00	3.33E+00	0.3				1.03E+02
Methyl Acetate		74.08	1.80E-01	7.92E-04	2.73E-01	2.73E-01	2.62E-03	3.35E-01	3.05E-01	6.56E-01	6.56E-01	1		2.92E+06		2.92E+06
Methylene Chloride	M	84.933	1.25E+00	3.54E-03	3.14E-01	3.14E-01	1.25E-02	3.42E-01	3.11E-01	7.55E-01	7.55E-01	1	3.38E+02	3.65E+03	4.82E+01	3.65E+03
Methylene-bis(2-chloroaniline), 4,4'- Mineral oils	M	267.16 170.34	3.91E+00 6.10E+00	1.97E-02 NRP	3.30E+00 9.46E-01	3.30E+00 9.46E-01	1.24E-01	4.20E-01	3.84E-01	7.91E+00	7.91E+00	0.9	4.17E-01	7.51E+01	2.78E-02	7.51E+01
Mirex Mirex		545.55	6.10E+00 6.89E+00	NRP	9.46E-01 1.19E+02	9.46E-01 1.19E+02				<u></u>	 	0.5				
Naled		380.79	1.38E+00	9.44E-05	1.43E+01	1.43E+01	7.09E-04	3.34E-01	3.04E-01	3.42E+01	3.42E+01	1		6.77E+03		6.77E+03
Nitrotoluene, o-		137.14	2.30E+00	8.99E-03	6.16E-01	6.16E-01	4.05E-02	3.61E-01	3.28E-01	1.48E+00	1.48E+00	1	2.67E+00	1.54E+02	2.67E+00	1.54E+02
Pentabromodiphenyl Ether		564.69	6.84E+00	NRP	1.53E+02	1.53E+02		2.025.01	2.505.01	2.425:00	2.425:00	0.6				
Pentachloroethane Perfluorobutane Sulfonate		202.3 300.1	3.22E+00 2.41E+00	1.58E-02 1.30E-03	1.43E+00 5.04E+00	1.43E+00 5.04E+00	8.66E-02 8.63E-03	3.93E-01 3.39E-01	3.58E-01 3.09E-01	3.43E+00 1.21E+01	3.43E+00 1.21E+01	1	2.43E+00	8.30E+03	2.43E+00	8.30E+03
Phosphorus, White		33.998	3.08E+00	1.00E-03	1.63E-01	1.63E-01	2.24E-03	3.35E-01	3.05E-01	3.91E-01	3.91E-01	1		9.08E+01		9.08E+01
Phthalates																
~Dimethylterephthalate	•	194.19	2.25E+00	3.99E-03	1.29E+00	1.29E+00	2.14E-02	3.48E-01	3.16E-01	3.09E+00	3.09E+00	1		2.67E+04		2.67E+04
Polychlorinated Biphenyls (PCBs)		540.54	5 (OF : 00	MDD	1.000 - 00	1.000 .00						0				
~Aroclor 1016 ~Aroclor 1254		549.54 326.44	5.69E+00 6.50E+00	NRP NRP	1.26E+02 7.08E+00	1.26E+02 7.08E+00						0.5			-	 
~Aroclor 5460		291.99	6.34E+00	NRP	4.54E+00	4.54E+00						0.7				
Propargyl Alcohol		56.065	-3.80E-01	4.24E-04	2.17E-01	2.17E-01	1.22E-03	3.34E-01	3.04E-01	5.20E-01	5.20E-01	1		1.19E+04		1.19E+04
Pyridine		79.102	6.50E-01	1.52E-03	2.92E-01	2.92E-01	5.21E-03	3.37E-01	3.06E-01	7.00E-01	7.00E-01	1		1.47E+03		1.47E+03
Tetrachloroethane, 1,1,2,2-		167.85	2.39E+00	6.94E-03	9.16E-01	9.16E-01	3.46E-02	3.57E-01	3.25E-01	2.20E+00	2.20E+00	1	3.12E+00	3.64E+03	2.31E+00	3.64E+03
Tetrachloroethylene Trichloroethane, 1,1,1-		165.83 133.41	3.40E+00 2.49E+00	3.34E-02 1.26E-02	8.92E-01 5.87E-01	8.92E-01 5.87E-01	1.65E-01 5.61E-02	4.51E-01 3.72E-01	4.13E-01 3.38E-01	2.14E+00 1.41E+00	2.14E+00 1.41E+00	1	6.26E+01	2.30E+02 2.50E+05	2.43E-01	2.30E+02 2.50E+05
Trichlorofluoromethane		137.37	2.53E+00	1.27E-02	6.18E-01	6.18E-01	5.75E-02	3.73E-01	3.39E-01	1.48E+00	1.41E+00 1.48E+00	1		3.61E+04		3.61E+04
Trichlorophenol, 2,4,6-		197.45	3.69E+00	3.46E-02	1.34E+00	1.34E+00	1.87E-01	4.68E-01	4.29E-01	3.22E+00	3.22E+00	1	9.40E+00	3.01E+01	1.48E+00	3.01E+01
Trichloropropane, 1,1,2-		147.43	2.43E+00	9.61E-03	7.04E-01	7.04E-01	4.49E-02	3.64E-01	3.31E-01	1.69E+00	1.69E+00	1		7.49E+02		7.49E+02
Trichloropropane, 1,2,3-	M	147.43	2.27E+00	7.52E-03	7.04E-01	7.04E-01	3.51E-02	3.57E-01	3.25E-01	1.69E+00	1.69E+00	1	7.08E-03	7.66E+02	7.08E-03	7.66E+02
Additional Analytes  Beryllium Sulfate		105.07		1.00E-03								1		6.36E+01		6.36E+00
Dichlorobenzene, 1,3-		147	3.53E+00	5.20E-02	7.00E-01	7.00E-01	2.42E-01	5.11E-01	4.72E-01	1.68E+00	1.68E+00	1		0.30E+01		8.33E+02
Methylcyclohexane		98.19	3.61E+00	1.10E-01	3.73E-01	3.73E-01	4.21E-01	6.55E-01	6.30E-01	8.95E-01	8.95E-01	1				
1 NDD N. ( 1:11 1: 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	_	1 1 ECC	15 11 1			1.2.10 TICEDA										

a NRP = Not reliably predicted; the compound's chemical properties fall outside the Effective Prediction Domain for Kp (Equations 3.9 and 3.10; USEPA, 2004a).

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<sup>&</sup>quot;--" = no value

Table B-6. USEPA RSLs and DTSC-SLs for a Residential Receptor Exposed via Inhalation to Volatile Compounds during Domestic Use of Water

Definition	Variable	USEPA Value	DTSC Value		Risk and Hazard Equations
Age-dependent Adjustment Factor, 0-2	ADAF <sub>0-2</sub>	10	10	dimensionless	Cancer Risk:
Age-dependent Adjustment Factor, 2-6	$ADAF_{2-6}$	3	3	dimensionless	Carcinogens: $TR \times AT_c \times 365 \frac{udy}{vear} \times 24 \frac{nout}{day}$
Age-dependent Adjustment Factor, 6-16	$ADAF_{6-16}$	3	3	dimensionless	Carcinogens: $RSL_{inh} = \frac{TR \times AT_c \times 365 \frac{day}{year} \times 24 \frac{hour}{day}}{IIIR \times FE_c \times FD_c \times FT_c \times VF}$
Age-dependent Adjustment Factor, 16-26	$ADAF_{16-26}$	1	1	dimensionless	
Averaging Time, carcinogens	$AT_c$	70	70	yrs	Mutagens: $TR \times AT_c \times 365 \frac{days}{days} \times 24 \frac{hour}{days}$
Averaging Time, noncarcinogens, child	$AT_{nc,c}$	6	6	yrs	$RSL_{inh} = \frac{year}{day}$
Carcinogenic Adjustment Factor, inhalation	$CAF_{I}$	0.756	0.756	dimensionless	Mutagens: $RSL_{inh} = \frac{TR \times AT_c \times 365 \frac{days}{year} \times 24 \frac{hour}{day}}{EF_r \times ET_r \times \left(\frac{ED_{0-2} \times IUR \times ADAF_{0-2} + ED_{2-6} \times IUR \times ADAF_{2-6} +}{ED_{6-16} \times IUR \times ADAF_{6-16} + ED_{16-26} \times IUR \times ADAF_{16-26}}\right) \times VF}$
Exposure Duration, child 0-2	$ED_{0-2}$	2	2	yrs	Trichloroethene:
Exposure Duration, child 2-6	$ED_{2-6}$	4	4	yrs	$TD \times AT \times 265$ day $AT \times 24$ hour
Exposure Duration, child 6-16	$ED_{6-16}$	10	10	yrs	$\frac{1R \times AI_c \times 305}{year} \times \frac{24}{day}$
Exposure Duration, adult 16-26	$ED_{16-26}$	10	10	yrs	$RSL_{inh} = \frac{TR \times AT_c \times 365 \frac{day}{year} \times 24 \frac{hour}{day}}{IUR \times ET_r \times VF \times \left\{ [CAF_I \times ED_r \times EF_r] + \left[ MAF_I \times \left( \frac{ED_{0-2} \times EF_r \times ADAF_{0-2} + ED_{2-6} \times EF_r \times ADAF_{2-6}}{+ED_{6-16} \times EF_r \times ADAF_{6-16} + ED_{16-26} \times EF_r \times ADAF_{16-26}} \right) \right] \right\}}$
Exposure Duration, child	$ED_c$	6	6	yrs	$(EBB_{1} \times EF_{1} \times EF_{1} \times EF_{1} \times ADAF_{6-16} + ED_{16-26} \times EF_{16-26} \times EF_{16-26}))$
Exposure Duration, resident	$ED_r$	26	26	yrs	
Exposure Frequency, resident	$EF_r$	350	350	days/yr	Vinyl Chloride: TR
Exposure Time, resident	$ET_r$	24	24	hours/day	$RSL_{inh} = \frac{1}{\sqrt{1 + \frac{1}{2}}}$
Mutagenic Adjustment Factor, inhalation	$MAF_{I}$	0.244	0.244	dimensionless	$RSL_{inh} = \frac{TR}{\left(\frac{IUR \times EF_r \times ED_r \times ET_r \times \frac{1 \ day}{24 \ hour} \times VF}{AT_c \times 365 \frac{days}{year}}\right) + (IUR \times VF)}$
Inhalation Reference Concentration	RfC	chemical	l-specific	$\mu g/m^3$	$\left(\frac{24\pi \omega ar}{days}\right) + (IUR \times VF)$
(Regional) Screening Level, inhalation	$(R)SL_{inh}$	derived	l herein	μg/L	$AI_c \times 365 {year}$
Target Hazard Quotient	THQ	1	1	dimensionless	Noncancer Hazard: The arm of day a hour
Target Risk	TR	1.0E-06	1.0E-06	dimensionless	$RSL_{inh} = \frac{THQ \times AT_{nc,c} \times 365 \frac{day}{year} \times 24 \frac{hour}{day}}{EF_r \times ED_c \times ET_r \times \frac{1}{RfC} \times VF}$
Inhalation Unit-Risk Factor	IUR	chemical	l-specific	$(\mu g/m^3)^{-1}$	$KSL_{inh} = \frac{1}{EE \times ED \times ET \times \frac{1}{E} \times VE}$
Volatilization Factor	VF	0.5	0.5	L/m <sup>3</sup>	Libelation Evacuum to Decidential Ten Water (ISEDA DSL.) DTSC Sevening Level for Inhelation Evacuum to Decidential Ten Water (DTSC SL.)

		USEPA Regional	Screening Level for Inhalation	n Exposure to Resider	ntial Tap Water (USEPA RSL <sub>inh</sub> )	DTSC Screening Level for Inhalation Exposure to Residential Tap Water (DTSC-SL <sub>inh</sub> )						
		IUR	USEPA RSL <sub>inh</sub> : Cancer	RfC	USEPA RSL <sub>inh</sub> : Noncancer	IUR	DTSC-SL <sub>inh</sub> : Cancer	RfC	DTSC-SL <sub>inh</sub> : Noncancer			
Analyte	Mutagen?	$(\mu g/m^3)^{-1}$	$(\mu g/L)$	$(\mu g/m^3)$	$(\mu g/L)$	$(\mu g/m^3)^{-1}$	$(\mu g/L)$	$(\mu g/m^3)$	$(\mu g/L)$			
USEPA RSL Analytes												
Acetophenone								4.00E+02	8.34E+02			
Acrylonitrile		6.80E-05	8.26E-02	2.00E+00	4.17E+00	2.90E-04	1.94E-02	5.00E+00	1.04E+01			
Aldrin		4.90E-03	1.15E-03			4.90E-03	1.15E-03	1.20E-01	2.50E-01			
Benzaldehyde								4.00E+02	8.34E+02			
Benzene		7.80E-06	7.20E-01	3.00E+01	6.26E+01	2.90E-05	1.94E-01	3.00E+00	6.26E+00			
Benzenethiol								4.00E+00	8.34E+00			
Bis(2-chloro-1-methylethyl) ether								1.60E+02	3.34E+02			
Bromodichloromethane		3.70E-05	1.52E-01			3.70E-05	1.52E-01	8.00E+01	1.67E+02			
Bromoform		1.10E-06	5.10E+00			1.10E-06	5.10E+00	8.00E+01	1.67E+02			
Butanol, N-								4.00E+02	8.34E+02			
Butylbenzene, n-								2.00E+02	4.17E+02			
Butylbenzene, sec-								4.00E+02	8.34E+02			
Carbon Tetrachloride		6.00E-06	9.36E-01	1.00E+02	2.09E+02	4.20E-05	1.34E-01	4.00E+01	8.34E+01			
Chloral Hydrate								4.00E+02	8.34E+02			
Chlordane		1.00E-04	5.62E-02	7.00E-01	1.46E+00	3.40E-04	1.65E-02	7.00E-01	1.46E+00			
Chloroacetaldehyde, 2-						6.75E-05	8.32E-02					

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Table B-6. USEPA RSLs and DTSC-SLs for a Residential Receptor Exposed via Inhalation to Volatile Compounds during Domestic Use of Water

Definition	Variable	USEPA Value	DTSC Value		Risk and Hazard Equations
Age-dependent Adjustment Factor, 0-2	ADAF <sub>0-2</sub>	10	10	dimensionless	Cancer Risk:
Age-dependent Adjustment Factor, 2-6	$ADAF_{2-6}$	3	3	dimensionless	Carcinogens: $TR \times AT_c \times 365 \frac{ddy}{vear} \times 24 \frac{ddy}{day}$
Age-dependent Adjustment Factor, 6-16	$ADAF_{6-16}$	3	3	dimensionless	Carcinogens: $RSL_{inh} = \frac{TR \times AT_c \times 365 \frac{day}{year} \times 24 \frac{hour}{day}}{IUR \times FE_c \times FD_c \times FT_c \times VF}$
Age-dependent Adjustment Factor, 16-26	$ADAF_{16-26}$	1	1	dimensionless	$IOR \wedge LI_T \wedge LD_T \wedge LI_T \wedge VI$
Averaging Time, carcinogens	$AT_c$	70	70	yrs	Mutagens: $TR \times AT_c \times 365 \frac{days}{days} \times 24 \frac{hour}{days}$
Averaging Time, noncarcinogens, child	$AT_{nc,c}$	6	6	yrs	$RSL_{inh} = \frac{year}{day}$
Carcinogenic Adjustment Factor, inhalation	$CAF_{I}$	0.756	0.756	dimensionless	Mutagens: $RSL_{inh} = \frac{TR \times AT_c \times 365 \frac{days}{year} \times 24 \frac{hour}{day}}{EF_r \times ET_r \times \left(\frac{ED_{0-2} \times IUR \times ADAF_{0-2} + ED_{2-6} \times IUR \times ADAF_{2-6} +}{ED_{6-16} \times IUR \times ADAF_{6-16} + ED_{16-26} \times IUR \times ADAF_{16-26}}\right) \times VF}$
Exposure Duration, child 0-2	$ED_{0-2}$	2	2	yrs	Trichloroethene:
Exposure Duration, child 2-6	$ED_{2-6}$	4	4	yrs	$TD \times AT \times 265$ day $AT \times 24$ hour
Exposure Duration, child 6-16	$ED_{6-16}$	10	10	yrs	$RSI_{c} = \frac{1R \times AI_{c} \times 305}{year} \times \frac{24}{day}$
Exposure Duration, adult 16-26	$ED_{16-26}$	10	10	yrs	$RSL_{inh} = \frac{TR \times AT_c \times 365 \frac{day}{year} \times 24 \frac{hour}{day}}{IUR \times ET_r \times VF \times \left\{ [CAF_I \times ED_r \times EF_r] + \left[ MAF_I \times \left( \frac{ED_{0-2} \times EF_r \times ADAF_{0-2} + ED_{2-6} \times EF_r \times ADAF_{2-6}}{+ED_{6-16} \times EF_r \times ADAF_{6-16} + ED_{16-26} \times EF_r \times ADAF_{16-26}} \right) \right] \right\}}$
Exposure Duration, child	$ED_c$	6	6	yrs	$(EDE_{1} - ED_{6-16} \times EF_{r} \times ADAF_{6-16} + ED_{16-26} \times EF_{r} \times ADAF_{16-26}))$
Exposure Duration, resident	$ED_r$	26	26	yrs	
Exposure Frequency, resident	$EF_r$	350	350	days/yr	Vinyl Chloride: TR
Exposure Time, resident	$ET_r$	24	24	hours/day	$RSL_{inh} = \frac{1}{\sqrt{1 + \frac{1}{2}}}$
Mutagenic Adjustment Factor, inhalation	$MAF_{I}$	0.244	0.244	dimensionless	$RSL_{inh} = \frac{IR}{\left(\frac{IUR \times EF_r \times ED_r \times ET_r \times \frac{1 \ day}{24 \ hour} \times VF}{AT_c \times 365 \frac{days}{vear}}\right) + (IUR \times VF)}$
Inhalation Reference Concentration	RfC	chemica	l-specific	$\mu g/m^3$	$\left(\frac{2 \pi \kappa \sigma dr}{days}\right) + (IUR \times VF)$
(Regional) Screening Level, inhalation	$(R)SL_{inh}$	derived	l herein	μg/L	$AI_c \times 365 {year}$
Target Hazard Quotient	THQ	1	1	dimensionless	Noncancer Hazard:
Target Risk	TR	1.0E-06	1.0E-06	dimensionless	$RSL_{inh} = \frac{THQ \times AT_{nc,c} \times 365 \frac{day}{year} \times 24 \frac{hour}{day}}{EF_r \times ED_c \times ET_r \times \frac{1}{RfC} \times VF}$
Inhalation Unit-Risk Factor	IUR	chemica	l-specific	$(\mu g/m^3)^{-1}$	$KSL_{inh} = \frac{1}{EE \times ED \times ET \times \frac{1}{E} \times VE}$
Volatilization Factor	VF	0.5	0.5	L/m <sup>3</sup>	Libertin Francisco De Control De

		USEPA Regional	Screening Level for Inhalation	n Exposure to Resider	ntial Tap Water (USEPA RSL <sub>inh</sub> )	DTSC Screenin	g Level for Inhalation Expo	sure to Residential	Tap Water (DTSC-SL <sub>inh</sub> )
		IUR	USEPA RSL <sub>inh</sub> : Cancer	RfC	USEPA RSL <sub>inh</sub> : Noncancer	IUR	DTSC-SL <sub>inh</sub> : Cancer	RfC	DTSC-SL <sub>inh</sub> : Noncancer
Analyte	Mutagen?	$(\mu g/m^3)^{-1}$	$(\mu g/L)$	$(\mu g/m^3)$	(µg/L)	$(\mu g/m^3)^{-1}$	$(\mu g/L)$	$(\mu g/m^3)$	$(\mu g/L)$
Chloroethanol, 2-								8.00E+01	1.67E+02
Chlorophenol, 2-								2.00E+01	4.17E+01
Crotonaldehyde, trans-						4.75E-04	1.18E-02	4.00E+00	8.34E+00
~Cyanogen								4.00E+00	8.34E+00
~Cyanogen Bromide								3.60E+02	7.51E+02
~Cyanogen Chloride								2.00E+02	4.17E+02
~Thiocyanic Acid								8.00E-01	1.67E+00
Cyclohexylamine								8.00E+02	1.67E+03
Dibromochloromethane						2.10E-05	2.67E-01	8.00E+01	1.67E+02
Dibromoethane, 1,2-		6.00E-04	9.36E-03	9.00E+00	1.88E+01	7.10E-05	7.91E-02	8.00E-01	1.67E+00
Dichloroethane, 1,1-		1.60E-06	3.51E+00			1.60E-06	3.51E+00	8.00E+02	1.67E+03
Dichloroethylene, 1,2-cis-								8.00E+00	1.67E+01
Dichloroethylene, 1,2-trans-								8.00E+01	1.67E+02
Dichloropropane, 1,3-								8.00E+01	1.67E+02
Diethylformamide								4.00E+00	8.34E+00
Diisopropyl Methylphosphonate								3.20E+02	6.67E+02
Dimethylaniline, N,N-								8.00E+00	1.67E+01

Table B-6. USEPA RSLs and DTSC-SLs for a Residential Receptor Exposed via Inhalation to Volatile Compounds during Domestic Use of Water

Definition	Variable	USEPA Value	DTSC Value		Risk and Hazard Equations
Age-dependent Adjustment Factor, 0-2	ADAF <sub>0-2</sub>	10	10	dimensionless	Cancer Risk:
Age-dependent Adjustment Factor, 2-6	$ADAF_{2-6}$	3	3	dimensionless	Carcinogens: $TR \times AT_c \times 365 \frac{ddy}{vear} \times 24 \frac{ddy}{day}$
Age-dependent Adjustment Factor, 6-16	$ADAF_{6-16}$	3	3	dimensionless	Carcinogens: $RSL_{inh} = \frac{TR \times AT_c \times 365 \frac{day}{year} \times 24 \frac{hour}{day}}{IUR \times FE_c \times FD_c \times FT_c \times VF}$
Age-dependent Adjustment Factor, 16-26	$ADAF_{16-26}$	1	1	dimensionless	$IOR \wedge LI_T \wedge LD_T \wedge LI_T \wedge VI$
Averaging Time, carcinogens	$AT_c$	70	70	yrs	Mutagens: $TR \times AT_c \times 365 \frac{days}{days} \times 24 \frac{hour}{days}$
Averaging Time, noncarcinogens, child	$AT_{nc,c}$	6	6	yrs	$RSL_{inh} = \frac{year}{day}$
Carcinogenic Adjustment Factor, inhalation	$CAF_{I}$	0.756	0.756	dimensionless	Mutagens: $RSL_{inh} = \frac{TR \times AT_c \times 365 \frac{days}{year} \times 24 \frac{hour}{day}}{EF_r \times ET_r \times \left(\frac{ED_{0-2} \times IUR \times ADAF_{0-2} + ED_{2-6} \times IUR \times ADAF_{2-6} +}{ED_{6-16} \times IUR \times ADAF_{6-16} + ED_{16-26} \times IUR \times ADAF_{16-26}}\right) \times VF}$
Exposure Duration, child 0-2	$ED_{0-2}$	2	2	yrs	Trichloroethene:
Exposure Duration, child 2-6	$ED_{2-6}$	4	4	yrs	$TD \times AT \times 265$ day $AT \times 24$ hour
Exposure Duration, child 6-16	$ED_{6-16}$	10	10	yrs	$RSI_{c} = \frac{1R \times AI_{c} \times 305}{year} \times \frac{24}{day}$
Exposure Duration, adult 16-26	$ED_{16-26}$	10	10	yrs	$RSL_{inh} = \frac{TR \times AT_c \times 365 \frac{day}{year} \times 24 \frac{hour}{day}}{IUR \times ET_r \times VF \times \left\{ [CAF_I \times ED_r \times EF_r] + \left[ MAF_I \times \left( \frac{ED_{0-2} \times EF_r \times ADAF_{0-2} + ED_{2-6} \times EF_r \times ADAF_{2-6}}{+ED_{6-16} \times EF_r \times ADAF_{6-16} + ED_{16-26} \times EF_r \times ADAF_{16-26}} \right) \right] \right\}}$
Exposure Duration, child	$ED_c$	6	6	yrs	$(EDE_{1} - ED_{6-16} \times EF_{r} \times ADAF_{6-16} + ED_{16-26} \times EF_{r} \times ADAF_{16-26}))$
Exposure Duration, resident	$ED_r$	26	26	yrs	
Exposure Frequency, resident	$EF_r$	350	350	days/yr	Vinyl Chloride: TR
Exposure Time, resident	$ET_r$	24	24	hours/day	$RSL_{inh} = \frac{1}{\sqrt{1 + \frac{1}{2}}}$
Mutagenic Adjustment Factor, inhalation	$MAF_{I}$	0.244	0.244	dimensionless	$RSL_{inh} = \frac{IR}{\left(\frac{IUR \times EF_r \times ED_r \times ET_r \times \frac{1 \ day}{24 \ hour} \times VF}{AT_c \times 365 \frac{days}{vear}}\right) + (IUR \times VF)}$
Inhalation Reference Concentration	RfC	chemica	l-specific	$\mu g/m^3$	$\left(\frac{2 \pi \kappa \sigma dr}{days}\right) + (IUR \times VF)$
(Regional) Screening Level, inhalation	$(R)SL_{inh}$	derived	l herein	μg/L	$AI_c \times 365 {year}$
Target Hazard Quotient	THQ	1	1	dimensionless	Noncancer Hazard:
Target Risk	TR	1.0E-06	1.0E-06	dimensionless	$RSL_{inh} = \frac{THQ \times AT_{nc,c} \times 365 \frac{day}{year} \times 24 \frac{hour}{day}}{EF_r \times ED_c \times ET_r \times \frac{1}{RfC} \times VF}$
Inhalation Unit-Risk Factor	IUR	chemica	l-specific	$(\mu g/m^3)^{-1}$	$KSL_{inh} = \frac{1}{EE \times ED \times ET \times \frac{1}{E} \times VE}$
Volatilization Factor	VF	0.5	0.5	L/m <sup>3</sup>	Libertin Francisco De Control De

		USEPA Regional	Screening Level for Inhalation	n Exposure to Residen	tial Tap Water (USEPA RSL <sub>inh</sub> )	DTSC Screening	g Level for Inhalation Expo	sure to Residential	Tap Water (DTSC-SL <sub>inh</sub> )
		IUR	USEPA RSL <sub>inh</sub> : Cancer	RfC	USEPA RSL <sub>inh</sub> : Noncancer	IUR	DTSC-SL <sub>inh</sub> : Cancer	RfC	DTSC-SL <sub>inh</sub> : Noncancer
Analyte	Mutagen?	$(\mu g/m^3)^{-1}$	$(\mu g/L)$	$(\mu g/m^3)$	(µg/L)	$(\mu g/m^3)^{-1}$	$(\mu g/L)$	$(\mu g/m^3)$	$(\mu g/L)$
Dithiane, 1,4-								4.00E+01	8.34E+01
Endosulfan								2.40E+01	5.01E+01
Epichlorohydrin		1.20E-06	4.68E+00	1.00E+00	2.09E+00	2.30E-05	2.44E-01	3.00E+00	6.26E+00
Ethyl Ether								8.00E+02	1.67E+03
Ethylene Diamine								3.60E+02	7.51E+02
~Furan								4.00E+00	8.34E+00
Guanidine								4.00E+01	8.34E+01
Hexabromobenzene								8.00E+00	1.67E+01
Hexachlorobenzene		4.60E-04	1.22E-02			5.10E-04	1.10E-02	3.20E+00	6.67E+00
Hexachlorocyclohexane, Gamma- (Linda	ane	3.10E-04	not as a volatile			3.10E-04	1.81E-02	1.20E+00	2.50E+00
Isobutyl Alcohol								1.20E+03	2.50E+03
Lewisite								2.00E-02	4.17E-02
~Mercury (elemental)				3.00E-01	6.26E-01			3.00E-02	6.26E-02
Merphos								1.20E-01	2.50E-01
Methyl Acetate								4.00E+03	8.34E+03
Methylene Chloride	M	1.00E-08	2.03E+02	6.00E+02	1.25E+03	1.00E-06	2.03E+00	4.00E+02	8.34E+02
Mineral oils								1.20E+04	2.50E+04

Table B-6. USEPA RSLs and DTSC-SLs for a Residential Receptor Exposed via Inhalation to Volatile Compounds during Domestic Use of Water

Definition	Variable	USEPA Value	DTSC Value		Risk and Hazard Equations
Age-dependent Adjustment Factor, 0-2	$ADAF_{0-2}$	10	10	dimensionless	Cancer Risk:
Age-dependent Adjustment Factor, 2-6	$ADAF_{2-6}$	3	3	dimensionless	Carcinogens: $TR \times AT_c \times 365 \frac{ddy}{v_{eq} r} \times 24 \frac{nout}{day}$
Age-dependent Adjustment Factor, 6-16	$ADAF_{6-16}$	3	3	dimensionless	Carcinogens: $RSL_{inh} = \frac{TR \times AT_c \times 365 \frac{day}{year} \times 24 \frac{hour}{day}}{IUR \times EF_r \times ED_r \times ET_r \times VF}$
Age-dependent Adjustment Factor, 16-26	$ADAF_{16\text{-}26}$	1	1	dimensionless	
Averaging Time, carcinogens	$AT_c$	70	70	yrs	Mutagens: $TR \times AT_a \times 365 \frac{days}{days} \times 24 \frac{hour}{days}$
Averaging Time, noncarcinogens, child	$AT_{nc,c}$	6	6	yrs	$RSL_{inh} = \frac{day}{day}$
Carcinogenic Adjustment Factor, inhalation	$CAF_{I}$	0.756	0.756	dimensionless	Mutagens: $RSL_{inh} = \frac{TR \times AT_c \times 365 \frac{days}{year} \times 24 \frac{hour}{day}}{EF_r \times ET_r \times \left(\frac{ED_{0-2} \times IUR \times ADAF_{0-2} + ED_{2-6} \times IUR \times ADAF_{2-6} +}{ED_{6-16} \times IUR \times ADAF_{6-16} + ED_{16-26} \times IUR \times ADAF_{16-26}}\right) \times VF}$
Exposure Duration, child 0-2	$ED_{0-2}$	2	2	yrs	Trichloroethene:
Exposure Duration, child 2-6	$ED_{2-6}$	4	4	yrs	$TD \times AT \times 2CT day \times 2A hour$
Exposure Duration, child 6-16	$ED_{6-16}$	10	10	yrs	$RSI_{c} = \frac{1R \times AI_{c} \times 365}{year} \times \frac{24}{day}$
Exposure Duration, adult 16-26	ED <sub>16-26</sub>	10	10	yrs	$RSL_{inh} = \frac{TR \times AT_c \times 365 \frac{day}{year} \times 24 \frac{hour}{day}}{IUR \times ET_r \times VF \times \left\{ [CAF_I \times ED_r \times EF_r] + \left[ MAF_I \times \left( \frac{ED_{0-2} \times EF_r \times ADAF_{0-2} + ED_{2-6} \times EF_r \times ADAF_{2-6}}{+ED_{6-16} \times EF_r \times ADAF_{6-16} + ED_{16-26} \times EF_r \times ADAF_{16-26}} \right) \right] \right\}}$
Exposure Duration, child	$ED_c$	6	6	yrs	$(Com_{1} \times 2D_{7} \times EF_{r} \times ADAF_{6-16} \times EF_{r} \times ADAF_{6-16} + ED_{16-26} \times EF_{r} \times ADAF_{16-26}))$
Exposure Duration, resident	$ED_r$	26	26	yrs	
Exposure Frequency, resident	$EF_r$	350	350	days/yr	Vinyl Chloride: TR
Exposure Time, resident	$ET_r$	24	24	hours/day	$RSL_{inh} = \frac{TR}{T}$
Mutagenic Adjustment Factor, inhalation	$MAF_{I}$	0.244	0.244	dimensionless	$RSL_{inh} = \frac{IR}{\left(\frac{IUR \times EF_r \times ED_r \times ET_r \times \frac{1 \ day}{24 \ hour} \times VF}{AT_c \times 365 \frac{days}{vear}}\right) + (IUR \times VF)}$
Inhalation Reference Concentration	RfC	chemical	l-specific	$\mu g/m^3$	$\left(\frac{24\pi nour}{days}\right) + (IUR \times VF)$
(Regional) Screening Level, inhalation	$(R)SL_{inh}$	derived	l herein	$\mu g/L$	$\left\langle \frac{AI_c \times 365}{year} \right\rangle$
Target Hazard Quotient	THQ	1	1	dimensionless	Noncancer Hazard:
Target Risk	TR	1.0E-06	1.0E-06	dimensionless	$THQ \times AT_{nc,c} \times 365 \frac{day}{year} \times 24 \frac{day}{day}$
Inhalation Unit-Risk Factor	IUR	chemical	l-specific	$(\mu g/m^3)^{-1}$	RSL <sub>inh</sub> = $\frac{THQ \times AT_{nc,c} \times 365 \frac{day}{year} \times 24 \frac{hour}{day}}{EF_r \times ED_c \times ET_r \times \frac{1}{RfC} \times VF}$
Volatilization Factor	VF	0.5	0.5	L/m <sup>3</sup>	$E_r \wedge E_c \wedge E_r \wedge \overline{RfC} \wedge V_r$

		USEPA Regional	Screening Level for Inhalation	n Exposure to Residen	tial Tap Water (USEPA RSL <sub>inh</sub> )	DTSC Screenin	g Level for Inhalation Expo	sure to Residential	Tap Water (DTSC-SL <sub>inh</sub> )
		IUR	USEPA RSL <sub>inh</sub> : Cancer	RfC	USEPA RSL <sub>inh</sub> : Noncancer	IUR	DTSC-SL <sub>inh</sub> : Cancer	RfC	DTSC-SL <sub>inh</sub> : Noncancer
Analyte	Mutagen?	$(\mu g/m^3)^{-1}$	$(\mu g/L)$	$(\mu g/m^3)$	(μg/L)	$(\mu g/m^3)^{-1}$	$(\mu g/L)$	$(\mu g/m^3)$	$(\mu g/L)$
Mirex		5.10E-03	1.10E-03			5.10E-03	1.10E-03	8.00E-01	1.67E+00
Naled								8.00E+00	1.67E+01
Nitrotoluene, o-						5.50E-05	1.02E-01	3.60E+00	7.51E+00
Pentabromodiphenyl Ether								8.00E+00	1.67E+01
Pentachloroethane						2.25E-05	2.50E-01		
Perfluorobutane Sulfonate								8.00E+01	1.67E+02
Phosphorus, White								8.00E-02	1.67E-01
~Dimethylterephthalate								4.00E+02	8.34E+02
~Aroclor 1016		2.00E-05	2.81E-01			2.00E-05	2.81E-01	2.80E-01	5.84E-01
~Aroclor 1254		5.71E-04	9.83E-03		<del></del>	5.70E-04	9.85E-03	8.00E-02	1.67E-01
~Aroclor 5460								2.40E+00	5.01E+00
Propargyl Alcohol					<del></del>			8.00E+00	1.67E+01
Pyridine								4.00E+00	8.34E+00
Tetrachloroethane, 1,1,2,2-		5.80E-05	9.68E-02		77	5.80E-05	9.68E-02	8.00E+01	1.67E+02
Tetrachloroethylene		2.60E-07	2.16E+01	4.00E+01	8.34E+01	5.90E-06	9.52E-01	3.50E+01	7.30E+01
Trichloroethane, 1,1,1-				5.00E+03	1.04E+04			1.00E+03	2.09E+03
Trichlorofluoromethane								1.20E+03	2.50E+03

Table B-6. USEPA RSLs and DTSC-SLs for a Residential Receptor Exposed via Inhalation to Volatile Compounds during Domestic Use of Water

Definition	Variable	USEPA Value	DTSC Value		Risk and Hazard Equations
Age-dependent Adjustment Factor, 0-2	$ADAF_{0-2}$	10	10	dimensionless	Cancer Risk:
Age-dependent Adjustment Factor, 2-6	$ADAF_{2-6}$	3	3	dimensionless	Carcinogens: $TR \times AT_c \times 365 \frac{ddy}{vear} \times 24 \frac{nout}{day}$
Age-dependent Adjustment Factor, 6-16	$ADAF_{6-16}$	3	3	dimensionless	Carcinogens: $RSL_{inh} = \frac{TR \times AT_c \times 365 \frac{day}{year} \times 24 \frac{hour}{day}}{IIIR \times FE_c \times FD_c \times FT_c \times VF}$
Age-dependent Adjustment Factor, 16-26	$ADAF_{16-26}$	1	1	dimensionless	$IOR \wedge LI_{r} \wedge LD_{r} \wedge LI_{r} \wedge VI$
Averaging Time, carcinogens	$AT_c$	70	70	yrs	Mutagens: $TR \times AT_{-} \times 365 \frac{days}{days} \times 24 \frac{hour}{days}$
Averaging Time, noncarcinogens, child	$AT_{nc,c}$	6	6	yrs	$RSL_{inh} = \frac{11 \times 11 \times 12 \times 12}{11 \times 11 $
Carcinogenic Adjustment Factor, inhalation	$CAF_{I}$	0.756	0.756	dimensionless	Mutagens: $RSL_{inh} = \frac{TR \times AT_c \times 365 \frac{days}{year} \times 24 \frac{hour}{day}}{EF_r \times ET_r \times \left(\frac{ED_{0-2} \times IUR \times ADAF_{0-2} + ED_{2-6} \times IUR \times ADAF_{2-6} +}{ED_{6-16} \times IUR \times ADAF_{6-16} + ED_{16-26} \times IUR \times ADAF_{16-26}}\right) \times VF}$
Exposure Duration, child 0-2	$ED_{0-2}$	2	2	yrs	Trichloroethene:
Exposure Duration, child 2-6	$ED_{2-6}$	4	4	yrs	$TD \sim AT \sim 26\pi day \sim 24 hour$
Exposure Duration, child 6-16	$ED_{6-16}$	10	10	yrs	$RSI_{c} = \frac{1R \times AI_{c} \times 365}{year} \times 24 \frac{day}{day}$
Exposure Duration, adult 16-26	$ED_{16-26}$	10	10	yrs	$RSL_{inh} = \frac{TR \times AT_c \times 365 \frac{day}{year} \times 24 \frac{hour}{day}}{IUR \times ET_r \times VF \times \left\{ [CAF_I \times ED_r \times EF_r] + \left[ MAF_I \times \left( \frac{ED_{0-2} \times EF_r \times ADAF_{0-2} + ED_{2-6} \times EF_r \times ADAF_{2-6}}{+ED_{6-16} \times EF_r \times ADAF_{6-16} + ED_{16-26} \times EF_r \times ADAF_{16-26}} \right) \right] \right\}}$
Exposure Duration, child	$ED_c$	6	6	yrs	$([CM_{1} \times EF_{r} \times ADAF_{6-16} \times EF_{r} \times ADAF_{6-16} + ED_{16-26} \times EF_{r} \times ADAF_{16-26})])$
Exposure Duration, resident	$ED_r$	26	26	yrs	
Exposure Frequency, resident	$EF_r$	350	350	days/yr	Vinyl Chloride: TR
Exposure Time, resident	$ET_r$	24	24	hours/day	$RSL_{inh} = \frac{TR}{\sqrt{\frac{1}{1}}}$
Mutagenic Adjustment Factor, inhalation	$MAF_{I}$	0.244	0.244	dimensionless	$RSL_{inh} = \frac{TR}{\left(\frac{IUR \times EF_r \times ED_r \times ET_r \times \frac{1 \ day}{24 \ hour} \times VF}{AT_c \times 365 \frac{days}{year}}\right) + (IUR \times VF)}$
Inhalation Reference Concentration	RfC	chemica	l-specific	$\mu g/m^3$	$\left(\frac{24\pi var}{days}\right) + (IUR \times VF)$
(Regional) Screening Level, inhalation	$(R)SL_{inh}$	derived	l herein	$\mu g/L$	$\left\langle AI_c \times 365 \frac{1}{year} \right\rangle$
Target Hazard Quotient	THQ	1	1	dimensionless	Noncancer Hazard: day hour
Target Risk	TR	1.0E-06	1.0E-06	dimensionless	$THQ \times AT_{nc,c} \times 365 \frac{ddy}{year} \times 24 \frac{ddy}{day}$
Inhalation Unit-Risk Factor	IUR	chemica	l-specific	$(\mu g/m^3)^{-1}$	$RSL_{inh} = \frac{THQ \times AT_{nc,c} \times 365 \frac{day}{year} \times 24 \frac{hour}{day}}{EF_r \times ED_c \times ET_r \times \frac{1}{RfC} \times VF}$
Volatilization Factor	VF	0.5	0.5	L/m <sup>3</sup>	$Er_r \times ED_c \times EI_r \times \overline{RfC} \times VF$
		Ţ	JSEPA Regional	Screening Level for	Inhalation Exposure to Residential Tap Water (USEPA RSL <sub>inh</sub> ) DTSC Screening Level for Inhalation Exposure to Residential Tap Water (DTSC-SL <sub>inh</sub> )

		USEPA Regional	Screening Level for Inhalation	<b>Exposure to Reside</b>	ntial Tap Water (USEPA RSL <sub>inh</sub> )	DTSC Screening	g Level for Inhalation Expo	sure to Residential	Tap Water (DTSC-SL <sub>inh</sub> )
		IUR	USEPA RSL <sub>inh</sub> : Cancer	RfC	USEPA RSL <sub>inh</sub> : Noncancer	IUR	DTSC-SL <sub>inh</sub> : Cancer	RfC	DTSC-SL <sub>inh</sub> : Noncancer
Analyte	Mutagen?	$(\mu g/m^3)^{-1}$	$(\mu g/L)$	$(\mu g/m^3)$	(µg/L)	$(\mu g/m^3)^{-1}$	$(\mu g/L)$	$(\mu g/m^3)$	$(\mu g/L)$
Trichloropropane, 1,1,2-								2.00E+01	4.17E+01
Trichloropropane, 1,2,3-	M			3.00E-01	6.26E-01	7.50E-03	2.70E-04	3.00E-01	6.26E-01
Additional Analytes									
Dichlorobenzene, 1,3-								1.20E+02	2.50E+02
Methylcyclohexane								6.00E+03	1.25E+04

<sup>&</sup>quot;--" = no value

Table C-1. Air Screening Levels for Analytes with at least one DTSC-SL

	_		Toxicity Factor for	Final Screening Value					Screeni	ing Levels for Resi	idential Air (µ	g/m³)				S	creening Lev	els for Commerc	ial/Industria	ıl Air (μg/m	3)
		Inhalation Unit Risk,		Reference Concentration,	_									_							
Analysis	CAS #	IUR (μg/m <sup>3</sup> ) <sup>-1</sup>	G	RfC or REL (µg/m <sup>3</sup> )	6	USEPA RSL	Cancer E	ndpoint Final Value	Source	USEPA RSL	Noncancer E DTSC-SL	ndpoint Final Value	C	USEPA RSL	Cancer E	•	Source	USEPA RSL	Noncancer		- Co
Analyte USEPA RSL Analytes	CAS#	(μg/III )	Source	(μg/III )	Source	USEFA KSL	D15C-SL	rillai value	Source	USEFA KSL	D15C-SL	riliai value	Source	USEFA KSL	DISC-SL	riliai value	Source	USEFA KSL	D13C-SL	riiiai value	Source
Acetaldehyde	75-07-0	2.7E-06	ОЕННА	9.0E+00	IRIS	1.28E+00	1.04E+00	1.0E+00	DTSC	9.39E+00	9.39E+00	9.4E+00	USEPA	5.57E+00	4.54E+00	4.5E+00	DTSC	3.94E+01	3.94E+01	3.9E+01	USEPA
Acetophenone	98-86-2			4.0E+02	Route						4.17E+02	4.2E+02	DTSC						1.75E+03		DTSC
Acrylamide	79-06-1	1.3E-03	ОЕННА	6.0E+00	IRIS	1.01E-02	7.80E-04	7.8E-04	DTSC	6.26E+00	6.26E+00	6.3E+00	USEPA	1.23E-01	9.43E-03	9.4E-03	DTSC	2.63E+01	2.63E+01	2.6E+01	USEPA
Acrylonitrile	107-13-1	2.9E-04	ОЕННА	2.0E+00	IRIS	4.13E-02	9.68E-03	9.7E-03	DTSC	2.09E+00	2.09E+00	2.1E+00	USEPA	1.80E-01	4.23E-02	4.2E-02	DTSC	8.76E+00	8.76E+00	8.8E+00	USEPA
Aldrin	309-00-2	4.9E-03	IRIS	1.2E-01	Route	5.73E-04	5.73E-04	5.7E-04	USEPA		1.25E-01	1.3E-01	DTSC	2.50E-03	2.50E-03	2.5E-03	USEPA		5.26E-01	5.3E-01	DTSC
Arsine	7784-42-1			1.5E-02	ОЕННА					5.21E-02	1.56E-02	1.6E-02	DTSC					2.19E-01	6.57E-02	6.6E-02	DTSC
Benfluralin	1861-40-1 100-52-7			1.2E+03	Route						1.25E+03	1.3E+03	DTSC						5.26E+03		DTSC
Benzaldehyde Benzene	71-43-2	2.9E-05	оенна	4.0E+02 3.0E+00	Route OEHHA	3.60E-01	9.68E-02	9.7E-02	DTSC	3.13E+01	4.17E+02 3.13E+00	4.2E+02 3.1E+00	DTSC DTSC	1.57E+00	4.23E-01	4.2E-01	DTSC	1.31E+02	1.75E+03 1.31E+01	1.8E+03 1.3E+01	DTSC DTSC
Benzenethiol	108-98-5	2.7E-03		4.0E+00	Route	3.00L-01	7.00L-02	7.7E-02		5.13E101	4.17E+00	4.2E+00	DTSC	1.57E100	4.23L-01	4.2L-01		1.51E+02	1.75E+01	1.8E+01	DTSC
Benzidine	92-87-5	1.4E-01	ОЕННА			1.51E-05	7.24E-06	7.2E-06	DTSC					1.83E-04	8.76E-05	8.8E-05	DTSC				
Benzotrichloride	98-07-7	3.3E-03	Route	-			8.64E-04	8.6E-04	DTSC						3.77E-03	3.8E-03	DTSC				
Beryllium and compounds	7440-41-7	2.4E-03	IRIS	7.0E-03	ОЕННА	1.17E-03	1.17E-03	1.2E-03	USEPA	2.09E-02	7.30E-03	7.3E-03	DTSC	5.11E-03	5.11E-03	5.1E-03	USEPA	8.76E-02	3.07E-02	3.1E-02	DTSC
Biphenyl, 1,1'-	92-52-4	2.0E-06	Route	4.0E-01	Screening PPRTV		1.40E+00	1.4E+00	DTSC	4.17E-01	4.17E-01	4.2E-01	USEPA		6.13E+00	6.1E+00	DTSC	1.75E+00	1.75E+00		USEPA
Bis(2-chloro-1-methylethyl) ether	108-60-1	7.15.04		1.6E+02	Route	0.51F.02	2.050.02	4.00.00	DTCC		1.67E+02	1.7E+02	DTSC	2.72F.02	1.725.02	1.50.00	 DTGC		7.01E+02		DTSC
Bis(2-chloroethyl)ether	111-44-4	7.1E-04	ОЕННА	7.0E.01		8.51E-03	3.95E-03	4.0E-03	DTSC	1.36E+01	7 20E 01	7.3E.01	DTSC	3.72E-02	1.73E-02	1.7E-02	DTSC	5 40E : 01	3.07E+00	3 1E : 00	DTSC
Boron Trifluoride Bromodichloromethane	7637-07-2 75-27-4	3.7E-05	ОЕННА	7.0E-01 8.0E+01	HEAST Route	7.59E-02	7.59E-02	7.6E-02	USEPA	1.36E+01	7.30E-01 8.34E+01	7.3E-01 8.3E+01	DTSC DTSC	3.31E-01	3.31E-01	3.3E-01	USEPA	5.69E+01	3.0/E+00 3.50E+02		DTSC
Bromoform	75-25-2	1.1E-06	IRIS	8.0E+01	Route	2.55E+00	2.55E+00	2.6E+00	USEPA		8.34E+01	8.3E+01	DTSC		1.11E+01	1.1E+01	USEPA		3.50E+02 3.50E+02		DTSC
Bromophos	2104-96-3			2.0E+01	Route						2.09E+01	2.1E+01	DTSC						8.76E+01		DTSC
Bromoxynil Octanoate	1689-99-2			8.0E+01	Route						8.34E+01	8.3E+01	DTSC						3.50E+02	3.5E+02	DTSC
Butadiene, 1,3-	106-99-0	1.7E-04	ОЕННА	2.0E+00	IRIS	9.36E-02	1.65E-02	1.7E-02	DTSC	2.09E+00	2.09E+00	2.1E+00	USEPA	4.09E-01	7.21E-02	7.2E-02	DTSC	8.76E+00	8.76E+00	8.8E+00	USEPA
Butanol, N-	71-36-3			4.0E+02	Route						4.17E+02	4.2E+02	DTSC						1.75E+03	1.8E+03	DTSC
Butylate	2008-41-5			2.0E+02	Route						2.09E+02	2.1E+02	DTSC						8.76E+02		DTSC
Butylbenzene, n-	104-51-8			2.0E+02 4.0E+02	Route						2.09E+02	2.1E+02	DTSC DTSC						8.76E+02 1.75E+03		DTSC
Butylbenzene, sec- Butylbenzene, tert-	135-98-8 98-06-6			4.0E+02 4.0E+02	Route Route						4.17E+02 4.17E+02	4.2E+02 4.2E+02	DTSC						1.75E+03 1.75E+03	1.8E+03 1.8E+03	DTSC
Cadmium (Water)	7440-43-9 (water)	4.2E-03	ОЕННА	1.0E-02	ATSDR	1.56E-03	6.68E-04	6.7E-04	DTSC	1.04E-02	1.04E-02		USEPA		2.92E-03	2.9E-03	DTSC	4.38E-02	4.38E-02	4.4E-02	USEPA
Carbon Tetrachloride	56-23-5	4.2E-05	ОЕННА	4.0E+01	ОЕННА	4.68E-01	6.68E-02	6.7E-02	DTSC	1.04E+02	4.17E+01	4.2E+01	DTSC		2.92E-01	2.9E-01	DTSC	4.38E+02	1.75E+02		DTSC
Chloral Hydrate	302-17-0			4.0E+02	Route						4.17E+02	4.2E+02	DTSC						1.75E+03	1.8E+03	DTSC
Chlordane	12789-03-6	3.4E-04	ОЕННА	7.0E-01	IRIS	2.81E-02	8.26E-03	8.3E-03	DTSC	7.30E-01	7.30E-01	7.3E-01	USEPA	1.23E-01	3.61E-02	3.6E-02	DTSC	3.07E+00	3.07E+00	3.1E+00	USEPA
Chloroacetaldehyde, 2-	107-20-0	6.8E-05	Route				4.16E-02	4.2E-02	DTSC						1.82E-01	1.8E-01	DTSC				
Chlorobenzilate	510-15-6	7.8E-05	HEAST			9.06E-02	3.60E-02	3.6E-02	DTSC					3.96E-01	1.57E-01	1.6E-01	DTSC				 Dmag
Chlorobutane, 1- Chloroethanol, 2-	109-69-3 107-07-3			1.6E+02 8.0E+01	Route Route						1.67E+02 8.34E+01	1.7E+02 8.3E+01	DTSC DTSC						7.01E+02 3.50E+02		DTSC DTSC
Chlorophenol, 2-	95-57-8			2.0E+01	Route						2.09E+01	2.1E+01	DTSC						8.76E+01		DTSC
Chlorotoluene, o-	95-49-8			8.0E+01	Route						8.34E+01	8.3E+01	DTSC						3.50E+02		DTSC
Chlorotoluene, p-	106-43-4			8.0E+01	Route						8.34E+01	8.3E+01	DTSC						3.50E+02		DTSC
Crotonaldehyde, trans-	123-73-9	4.8E-04	Route	4.0E+00	Route		5.91E-03	5.9E-03	DTSC		4.17E+00	4.2E+00	DTSC		2.58E-02	2.6E-02	DTSC		1.75E+01	1.8E+01	DTSC
Cyanides																					
~Cyanogen	460-19-5			4.0E+00	Route						4.17E+00	4.2E+00	DTSC						1.75E+01	1.8E+01	DTSC
~Cyanogen Bromide	506-68-3 506-77-4			3.6E+02	Route						3.75E+02		DTSC						1.58E+03		
~Cyanogen Chloride ~Thiocyanic Acid	463-56-9			2.0E+02 8.0E-01	Route Route						2.09E+02 8.34E-01	2.1E+02 8.3E-01	DTSC DTSC						8.76E+02 3.50E+00		DTSC DTSC
Cyclohexylamine	108-91-8			8.0E+02	Route						8.34E+02		DTSC						3.50E+00 3.50E+03		
Dibenzothiophene	132-65-0			4.0E+01	Route						4.17E+01	4.2E+01	DTSC						1.75E+02		
Dibromobenzene, 1,3-	108-36-1			1.6E+00	Route						1.67E+00		DTSC						7.01E+00	7.0E+00	DTSC
Dibromobenzene, 1,4-	106-37-6			4.0E+01	Route						4.17E+01	4.2E+01	DTSC						1.75E+02	1.8E+02	DTSC
Dibromochloromethane	124-48-1	2.1E-05	Route	8.0E+01	Route		1.34E-01	1.3E-01	DTSC		8.34E+01	8.3E+01	DTSC		5.84E-01	5.8E-01	DTSC		3.50E+02		DTSC
Dibromoethane, 1,2-	106-93-4	6.0E-04	IRIS	8.0E-01	ОЕННА	4.68E-03	4.68E-03	4.7E-03	USEPA	9.39E+00	8.34E-01		DTSC		2.04E-02	2.0E-02	USEPA	3.94E+01	3.50E+00		
Dichloroethylene, 1,1-	75-34-3 75-35-4	1.6E-06	ОЕННА	8.0E+02 7.0E+01	Route OEHHA	1.75E+00	1.75E+00	1.8E+00	USEPA	2.09E+02	8.34E+02 7.30E+01	8.3E+02 7.3E+01	DTSC DTSC		7.67E+00	7.7E+00	USEPA	9.76E+02	3.50E+03		DTSC DTSC
Dichloroethylene, 1,2-cis-	156-59-2			8.0E+00	Route					2.09E+02	8.34E+00		DTSC					8.76E+02	3.07E+02 3.50E+01		DTSC
Dichloroethylene, 1,2-trans-	156-60-5			8.0E+00	Route	-					8.34E+00	8.3E+00	DTSC							3.5E+01	
Dichloropropane, 1,3-	142-28-9			8.0E+01	Route						8.34E+01	8.3E+01	DTSC						3.50E+02		
Dichloropropene, 1,3-	542-75-6	1.6E-05	ОЕННА	2.0E+01	IRIS	7.02E-01	1.75E-01	1.8E-01	DTSC	2.09E+01	2.09E+01		USEPA	3.07E+00	7.67E-01	7.7E-01	DTSC	8.76E+01	8.76E+01	8.8E+01	USEPA
Dieldrin	60-57-1	4.6E-03	IRIS	2.0E-01	Route	6.10E-04	6.10E-04	6.1E-04	USEPA		2.09E-01	2.1E-01	DTSC	2.67E-03	2.67E-03	2.7E-03	USEPA		8.76E-01	8.8E-01	DTSC
Diethylformamide	617-84-5			4.0E+00	Route						4.17E+00		DTSC						1.75E+01		DTSC
Diisopropyl Methylphosphonate	1445-75-6			3.2E+02	Route						3.34E+02		DTSC						1.40E+03		DTSC
Dimethylaniline, N,N-	121-69-7 123-91-1	7.7E.06	OEHH V	8.0E+00	Route IRIS	5.62E.01	3 65E 01	3 6E 01	DTSC	3 13E+01	8.34E+00		DTSC	2.45E±00	1.50E±00	1.6E±00	DTSC	1.31E+02	3.50E+01		DTSC
Dioxane, 1,4- Dioxins	123-91-1	7.7E-06	ОЕННА	3.0E+01	IKIS	5.62E-01	3.65E-01	3.6E-01	DTSC	3.13E+01	3.13E+01	3.1E+UI	USEPA	2.45E+00	1.39E+00	1.6E+00	DISC	1.31E+02	1.31E+02	1.3E+02	USEPA
~Hexachlorodibenzo-p-dioxin, Mixture	Hexachlorodibenzo-p-dioxin Mixture	3.8E+00	ОЕННА			2.16E-06	7.39E-07	7.4E-07	DTSC					9.43E-06	3.23E-06	3.2E-06	DTSC				
	riexacinorodiocneo-p-dioxiii wiixtule	J.0L 100	JLIIIA			2.1012-00	1.37L-01	,.TL-01	שווע					7.TJL-00	J.2JL-00	J.21-00	שונע				

..\2016-01 Ambient Air Documentation - Screening-Level Summary

Table C-1. Air Screening Levels for Analytes with at least one DTSC-SL

			Toxicity Factor for F	inal Screening Value					Screeni	ing Levels for Resi	idential Air (µ	ıg/m³)		_		S	Screening Lev	els for Commer	rcial/Industria	ıl Air (μg/m³	5
		Inhalation Unit Risk,	, F	Reference Concentration,																	
		IUR	_	RfC or REL	_	Tappi par	Cancer En	•		TIGERAL BOX	Noncancer E	1		TIGERY DG		Endpoint		TIGER L PG	Noncancer		
Analyte	CAS#	(μg/m <sup>3</sup> ) <sup>-1</sup>	Source	(μg/m³)	Source	USEPA RSL		Final Value		USEPA RSL	DTSC-SL	Final Value	e Source			Final Value		USEPA RSI	L DTSC-SL	Final Value	Source
Diphenylhydrazine, 1,2-	122-66-7	2.5E-04	ОЕННА			1.28E-02	1.12E-02	1.1E-02	DTSC					5.57E-02	4.91E-02	4.9E-02	DTSC				 D.M.G.G.
Dithiane, 1,4-	505-29-3			4.0E+01	Route						4.17E+01	4.2E+01	DTSC						1.75E+02	1.8E+02	
EPTC	759-94-4			1.0E+02	Route						1.04E+02	1.0E+02	DTSC						4.38E+02		
Endosulfan	115-29-7	2.25.05	OFILIA	2.4E+01	Route	2.245.00	1.225.01	1.00.01	DTCC	1.04E .00	2.50E+01	2.5E+01	DTSC	1.025.01	5 22E 01	5 2E 01	DTCC	4.38E+00	1.05E+02	1.1E+02	
Epichlorohydrin Ethoxyethanol, 2-	106-89-8 110-80-5	2.3E-05	OEHHA 	1.0E+00 7.0E+01	IRIS OEHHA	2.34E+00	1.22E-01	1.2E-01	DTSC 	1.04E+00 2.09E+02	1.04E+00 7.30E+01	1.0E+00 7.3E+01	USEPA DTSC	1.02E+01	5.33E-01	5.3E-01	DTSC	4.38E+00 8.76E+02		4.4E+00 3.1E+02	
Ethyl Chloride (Chloroethane)	75-00-3	1.2E-06	Route	1.0E+04	IRIS		2.39E+00	2.4E+00	DTSC	1.04E+04	1.04E+04	1.0E+04	USEPA		1.04E+01	1.0E+01	DTSC	4.38E+04	4.38E+04	4.4E+04	
Ethyl Ether	60-29-7	1.2E-00		8.0E+02	Route		2.39E+00	2.4E+00	D13C	1.04E+04	8.34E+02	8.3E+02	DTSC		1.04E±01	1.0E+01	D13C	4.36E+04	3.50E+03	3.5E+03	
Ethylene Diamine	107-15-3			3.6E+02	Route			-			3.75E+02	3.8E+02	DTSC						1.58E+03	1.6E+03	
Formaldehyde	50-00-0	1.3E-05	IRIS	9.0E+00	ОЕННА	2.16E-01	2.16E-01	2.2E-01	USEPA	1.02E+01	9.39E+00	9.4E+00	DTSC	9.43E-01	9.43E-01	9.4E-01	USEPA	4.29E+01	3.94E+01	3.9E+01	DTSC
Furans	30 00 0	1.52 05	IKB	).0E100	OLIMA	2.102 01	2.102 01	2.22 01	OBLITI	1.0215101	).5)E100	).HE100	Disc	).43E 01	).43E 01	).4E 01	COLLIN	4.275101	3.741101	3.71.01	Disc
~Dibenzofuran	132-64-9			4.0E+00	Route						4.17E+00	4.2E+00	DTSC						1.75E+01	1.8E+01	DTSC
~Furan	110-00-9			4.0E+00	Route						4.17E+00	4.2E+00	DTSC						1.75E+01	1.8E+01	DTSC
Guanidine	113-00-8			4.0E+01	Route						4.17E+01	4.2E+01	DTSC						1.75E+02	1.8E+02	
Heptachlor	76-44-8	1.3E-03	IRIS	2.0E+00	Route	2.16E-03	2.16E-03	2.2E-03	USEPA		2.09E+00	2.1E+00	DTSC	9.43E-03	9.43E-03	9.4E-03	USEPA		8.76E+00	8.8E+00	DTSC
Heptachlor Epoxide	1024-57-3	2.6E-03	IRIS	5.2E-02	Route	1.08E-03	1.08E-03	1.1E-03	USEPA		5.42E-02	5.4E-02	DTSC	4.72E-03		4.7E-03	USEPA		2.28E-01	2.3E-01	DTSC
Hexabromobenzene	87-82-1			8.0E+00	Route						8.34E+00	8.3E+00	DTSC						3.50E+01	3.5E+01	DTSC
Hexachlorobenzene	118-74-1	5.1E-04	ОЕННА	3.2E+00	Route	6.10E-03	5.51E-03	5.5E-03	DTSC		3.34E+00	3.3E+00	DTSC	2.67E-02	2.40E-02	2.4E-02	DTSC		1.40E+01	1.4E+01	DTSC
Hexachlorobutadiene	87-68-3	2.2E-05	IRIS	4.0E+00	Route	1.28E-01	1.28E-01	1.3E-01	USEPA		4.17E+00	4.2E+00	DTSC	5.57E-01	5.57E-01	5.6E-01	USEPA		1.75E+01	1.8E+01	DTSC
Hexachlorocyclohexane, Alpha-	319-84-6	1.8E-03	IRIS	3.2E+01	Route	1.56E-03	1.56E-03	1.6E-03	USEPA		3.34E+01	3.3E+01	DTSC	6.81E-03	6.81E-03	6.8E-03	USEPA		1.40E+02	1.4E+02	DTSC
Hexachlorocyclohexane, Gamma- (Lindane)	58-89-9	3.1E-04	ОЕННА	1.2E+00	Route	9.06E-03	9.06E-03	9.1E-03	USEPA		1.25E+00	1.3E+00	DTSC	3.96E-02	3.96E-02	4.0E-02	USEPA		5.26E+00	5.3E+00	DTSC
Hexachlorocyclohexane, Technical	608-73-1	1.1E-03	OEHHA			5.51E-03	2.55E-03	2.6E-03	DTSC					2.40E-02	1.11E-02	1.1E-02	DTSC				
Hydrogen Chloride	7647-01-0			9.0E+00	ОЕННА					2.09E+01	9.39E+00	9.4E+00	DTSC					8.76E+01	3.94E+01	3.9E+01	DTSC
Isobutyl Alcohol	78-83-1			1.2E+03	Route						1.25E+03	1.3E+03	DTSC						5.26E+03	5.3E+03	DTSC
Isopropalin	33820-53-0			6.0E+01	Route						6.26E+01	6.3E+01	DTSC						2.63E+02	2.6E+02	DTSC
Lead Compounds																					
~Tetraethyl Lead	78-00-2			4.0E-04	Route						4.17E-04	4.2E-04	DTSC						1.75E-03	1.8E-03	DTSC
Lewisite	541-25-3			2.0E-02	Route						2.09E-02	2.1E-02	DTSC						8.76E-02	8.8E-02	DTSC
Mercury Compounds				2.07.02	0.0011111					2.425.04	2.425.02	2.45.02	D. M. C.					4.445.00	4.045.04	4.00.04	D.Ma.a
~Mercuric Chloride (and other Mercury salts)	7487-94-7			3.0E-02	OEHHA					3.13E-01	3.13E-02	3.1E-02	DTSC					1.31E+00	1.31E-01	1.3E-01	DTSC
~Mercury (elemental)	7439-97-6			3.0E-02	ОЕННА					3.13E-01	3.13E-02	3.1E-02	DTSC					1.31E+00		1.3E-01	DTSC
Merphos	150-50-5			1.2E-01	Route					2.09E+04	1.25E-01	1.3E-01	DTSC					8.76E+04	5.26E-01 1.75E+04	5.3E-01	DTSC
Methanol  Methoxychlor	67-56-1 72-43-5			4.0E+03 2.0E+01	OEHHA Route					2.09E+04	4.17E+03 2.09E+01	4.2E+03 2.1E+01	DTSC DTSC					8./0E+04	8.76E+01	1.8E+04 8.8E+01	DTSC DTSC
Methyl Acetate	79-20-9			4.0E+03	Route						4.17E+03	4.2E+03	DTSC						1.75E+04	1.8E+04	
Methylene Chloride	75-09-2	1.0E-06	ОЕННА	4.0E+02	OEHHA	1.01E+02	1.01E+00	1.0E+00	DTSC	6.26E+02	4.17E+03 4.17E+02	4.2E+03 4.2E+02	DTSC	1.23E+03		1.2E+01	DTSC	2.63E+03	1.75E+04 1.75E+03	1.8E+03	
Methylstyrene, Alpha-	98-83-9	1.0E-00		2.8E+02	Route	1.01E+02	1.01E+00	1.0E+00	D13C	0.20E+02	2.92E+02	2.9E+02	DTSC	1.23E+03	1.23E±01	1.2E±01		2.03E+03	1.73E+03	1.2E+03	
Mineral oils	8012-95-1			1.2E+04	Route						1.25E+04	1.3E+04	DTSC						5.26E+04	5.3E+04	
Mirex	2385-85-5	5.1E-03	ОЕННА	8.0E-01	Route	5.51E-04	5.51E-04	5.5E-04	USEPA		8.34E-01	8.3E-01	DTSC	2.40E-03		2.4E-03	USEPA		3.50E+00	3.5E+00	
Naled	300-76-5			8.0E+00	Route						8.34E+00	8.3E+00	DTSC						3.50E+01	3.5E+01	DTSC
Naphthylamine, 2-	91-59-8	5.1E-04	ОЕННА				5.51E-03	5.5E-03	DTSC						2.40E-02	2.4E-02	DTSC				
Nickel Refinery Dust	Nickel refinery dust	2.6E-04	ОЕННА	1.4E-02	ОЕННА	1.17E-02	1.08E-02	1.1E-02	DTSC	1.46E-02	1.46E-02	1.5E-02	USEPA	5.11E-02		4.7E-02	DTSC	6.13E-02	6.13E-02	6.1E-02	USEPA
Nickel Soluble Salts	7440-02-0	2.6E-04	ОЕННА	1.4E-02	ОЕННА	1.08E-02	1.08E-02	1.1E-02	USEPA	9.39E-02	1.46E-02	1.5E-02	DTSC		4.72E-02		USEPA	3.94E-01		6.1E-02	
Nickel Subsulfide	12035-72-2	4.9E-04	ОЕННА	1.4E-02	ОЕННА	5.85E-03	5.73E-03	5.7E-03	DTSC	1.46E-02	1.46E-02	1.5E-02	USEPA	2.56E-02			DTSC	6.13E-02	6.13E-02		
Nitroso-di-N-butylamine, N-	924-16-3	3.1E-03	ОЕННА			1.75E-03	9.06E-04	9.1E-04	DTSC					7.67E-03	3.96E-03	4.0E-03	DTSC				
Nitrotoluene, o-	88-72-2	5.5E-05	Route	3.6E+00	Route		5.10E-02	5.1E-02	DTSC		3.75E+00	3.8E+00	DTSC		2.23E-01	2.2E-01	DTSC		1.58E+01	1.6E+01	DTSC
Pebulate	1114-71-2			2.0E+02	Route						2.09E+02	2.1E+02	DTSC						8.76E+02	8.8E+02	DTSC
Pentabromodiphenyl Ether	32534-81-9			8.0E+00	Route						8.34E+00	8.3E+00	DTSC						3.50E+01	3.5E+01	
Pentachlorobenzene	608-93-5			3.2E+00	Route						3.34E+00	3.3E+00	DTSC						1.40E+01	1.4E+01	DTSC
Pentachloroethane	76-01-7	2.3E-05	Route				1.25E-01	1.2E-01	DTSC						5.45E-01	5.5E-01	DTSC				
Pentachloronitrobenzene	82-68-8	6.5E-05	Route	1.2E+01	Route		4.32E-02	4.3E-02	DTSC		1.25E+01	1.3E+01	DTSC		1.89E-01	1.9E-01	DTSC		5.26E+01	5.3E+01	DTSC
Perfluorobutane Sulfonate	375-73-5			8.0E+01	Route						8.34E+01	8.3E+01	DTSC							3.5E+02	
Phosphoric Acid	7664-38-2			7.0E+00	ОЕННА					1.04E+01	7.30E+00		DTSC					4.38E+01	3.07E+01		
Phosphorus, White	7723-14-0			8.0E-02	Route						8.34E-02	8.3E-02	DTSC						3.50E-01	3.5E-01	DTSC
Phthalates																					
~Dimethylterephthalate	120-61-6			4.0E+02	Route						4.17E+02	4.2E+02	DTSC						1.75E+03	1.8E+03	DTSC
Polychlorinated Biphenyls (PCBs)					_																
~Aroclor 1016	12674-11-2	2.0E-05	IRIS (lowest risk)	2.8E-01	Route	1.40E-01	1.40E-01	1.4E-01	USEPA		2.92E-01	2.9E-01	DTSC	6.13E-01			USEPA		1.23E+00		
~Aroclor 1254	11097-69-1	5.7E-04	IRIS (highest risk)	8.0E-02	Route	4.92E-03	4.92E-03	4.9E-03	USEPA		8.34E-02	8.3E-02	DTSC		2.15E-02		USEPA		3.50E-01	3.5E-01	DTSC
~Aroclor 5460	11126-42-4			2.4E+00	Route						2.50E+00	2.5E+00	DTSC						1.05E+01	1.1E+01	DTSC

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Table C-1. Air Screening Levels for Analytes with at least one DTSC-SL

			for Final Screening Value					Screem	ng Levels for Resi	identiai Air (µ	(g/III )				31	creening nev	els for Commerc	muusu lai	TAIL (MR/III	)
	Inhalation Unit Risk, IUR	-	Reference Concentration, RfC or REL			Cancer Er	ndnoint			Noncancer E	Endpoint			Cancer E	ndpoint			Noncancer 1	Endpoint	
CAS#	2 1	Source	2	Source	USEPA RSL		•	Source	USEPA RSL			Source	USEPA RSL			Source	USEPA RSL			e Source
83-32-9			2.4F+02	Route						2 50F±02	2 5F+02	DTSC						1.05F±03	1 1F+03	DTSC
																				DTSC
																				DTSC
																				DTSC
	7.3E-06					3.87E-01	3.9E-01	DTSC						1.69E+00	1.7E+00	DTSC				DTSC
																				DTSC
																				DTSC
																				DTSC
																				DTSC
			4.0E+00	Route																DTSC
299-84-3			2.0E+02	Route						2.09E+02	2.1E+02	DTSC		-				8.76E+02	8.8E+02	DTSC
																				DTSC
140-57-8	8.6E-06	ОЕННА			3.95E-01	3.26E-01	3.3E-01	DTSC						1.43E+00	1.4E+00	DTSC				
			1.0E-01	Route						1.04E-01	1.0E-01	DTSC						4.38E-01	4.4E-01	DTSC
																				DTSC
	7.4E-06	IRIS			3.79E-01	3.79E-01	3.8E-01	USEPA					1.66E+00	1.66E+00	1.7E+00	USEPA				DTSC
																				DTSC
									4.17E+01								1.75E+02			DTSC
563-68-8			2.4E-02	Route						2.50E-02	2.5E-02	DTSC						1.05E-01	1.1E-01	DTSC
6533-73-9			8.0E-02	Route						8.34E-02	8.3E-02									DTSC
108-88-3			3.0E+02	ОЕННА					5.21E+03								2.19E+04			DTSC
8001-35-2	3.4E-04	ОЕННА			8.77E-03	8.26E-03	8.3E-03	DTSC					3.83E-02	3.61E-02	3.6E-02	DTSC				
			1.2E+00	Route						1.25E+00	1.3E+00	DTSC						5.26E+00	5.3E+00	DTSC
	-		5.2E+01	Route						5.42E+01										DTSC
																				DTSC
87-61-6			3.2E+00	Route						3.34E+00	3.3E+00	DTSC						1.40E+01	1.4E+01	DTSC
120-82-1	7.3E-06	Route	2.0E+00	PPRTV		3.87E-01	3.9E-01	DTSC	2.09E+00	2.09E+00	2.1E+00	USEPA		1.69E+00	1.7E+00	DTSC	8.76E+00	8.76E+00	8.8E+00	USEPA
71-55-6			1.0E+03	ОЕННА					5.21E+03	1.04E+03	1.0E+03	DTSC					2.19E+04	4.38E+03	4.4E+03	DTSC
75-69-4			1.2E+03	Route						1.25E+03	1.3E+03	DTSC						5.26E+03	5.3E+03	DTSC
88-06-2	2.0E-05	ОЕННА			9.06E-01	1.40E-01	1.4E-01	DTSC					3.96E+00	6.13E-01	6.1E-01	DTSC				
598-77-6			2.0E+01	Route						2.09E+01	2.1E+01	DTSC						8.76E+01	8.8E+01	DTSC
96-18-4	7.5E-03	Route	3.0E-01	IRIS		1.35E-04	1.4E-04	DTSC	3.13E-01	3.13E-01	3.1E-01	USEPA		1.64E-03	1.6E-03	DTSC	1.31E+00	1.31E+00	1.3E+00	USEPA
1582-09-8	1.9E-06	Route	3.0E+01	Route		1.46E+00	1.5E+00	DTSC		3.13E+01	3.1E+01	DTSC		6.37E+00	6.4E+00	DTSC		1.31E+02	1.3E+02	DTSC
108-67-8			4.0E+01	Route						4.17E+01	4.2E+01	DTSC						1.75E+02	1.8E+02	DTSC
25167-70-8			4.0E+01	Route						4.17E+01	4.2E+01	DTSC						1.75E+02	1.8E+02	DTSC
1929-77-7			4.0E+00	Route						4.17E+00	4.2E+00	DTSC						1.75E+01	1.8E+01	DTSC
75-01-4	7.8E-05	ОЕННА	1.0E+02	IRIS	1.68E-01	9.45E-03	9.5E-03	DTSC	1.04E+02	1.04E+02	1.0E+02	USEPA	2.79E+00	1.57E-01	1.6E-01	DTSC	4.38E+02	4.38E+02	4.4E+02	USEPA
13510-49-1	8.6E-01	ОЕННА	7.0E-03	ОЕННА	1.17E-03	3.26E-06	3.3E-06	DTSC	2.09E-02	7.30E-03	7.3E-03	DTSC	5.11E-03	1.43E-05	1.4E-05	DTSC	8.76E-02	3.07E-02	3.1E-02	DTSC
541-73-1			1.2E+02	Route						1.25E+02	1.3E+02	DTSC						5.26E+02	5.3E+02	DTSC
108-87-2			6.0E+03									DTSC								DTSC
	100-42-5 140-57-8 13071-79-9 95-94-3 630-20-6 79-34-5 127-18-4 5216-25-1 563-68-8 6533-73-9 108-88-3 8001-35-2 688-73-3 2303-17-5 615-54-3 87-61-6 120-82-1 71-55-6 75-69-4 88-06-2 598-77-6 96-18-4 1582-09-8 108-67-8 25167-70-8 1929-77-7 75-01-4	83-32-9 120-12-7 91-58-7 86-73-7 90-12-0 7.3E-06 91-57-6 129-00-0 26399-36-0 107-19-7 110-86-1 299-84-3 100-42-5 140-57-8 8.6E-06 13071-79-9 95-94-3 630-20-6 7.4E-06 79-34-5 5.8E-05 127-18-4 5.9E-06 5216-25-1 5.0E-03 563-68-8 6533-73-9 108-88-3 8001-35-2 3.4E-04 688-73-3 2303-17-5 615-54-3 87-61-6 120-82-1 7.3E-06 71-55-6 75-69-4 88-06-2 2.0E-05 598-77-6 96-18-4 7.5E-03 1582-09-8 1.9E-06 13510-49-1 8.6E-01 541-73-1	83-32-9	83-32-9 2.4E+02 120-12-7 1.2E+03 91-58-7 3.2E+02 86-73-7 1.6E+02 90-12-0 7.3E-06 Route 2.8E+02 91-57-6 1.6E+01 129-00-0 1.2E+02 26399-36-0 2.4E+01 107-19-7 8.0E+00 110-86-1 4.0E+01 129-98-4-3 2.0E+02 100-42-5 1.0E-01 13071-79-9 1.0E-01 95-94-3 1.0E-01 95-94-3 1.0E-01 95-94-3 1.0E-01 95-94-3 1.2E+00 630-20-6 7.4E-06 RIS 1.2E+02 79-34-5 5.8E-05 OEHHA 8.0E+01 127-18-4 5.9E-06 OEHHA 3.5E+01 5216-25-1 5.0E-03 Route 8.0E-02 108-88-3 2.4E-02 6533-73-9 8.0E-02 108-88-3 3.0E+02 8001-35-2 3.4E-04 OEHHA 5.2E+00 127-15-6 3.0E+02 8001-35-2 3.4E-04 OEHHA 5.2E+00 127-15-6 5.2E+01 175-56 5.2E+01 187-61-6 5.2E+00 120-82-1 7.3E-06 Route 2.0E+00 171-55-6 1.0E+03 75-69-4 5.2E+00 158-09-8 1.9E-06 Route 3.0E+01 1582-09-8 1.9E-06 Route 3.0E+01	S3-32-9	83-32-9 1.2E+02 Route 91-58-7 1.2E+03 Route 91-58-7 1.6E+02 Route 86-73-7 1.6E+02 Route 90-12-0 7.5E-06 Route 2.8E+02 Route 91-57-6 1.6E+01 Route 129-00-0 1.2E+02 Route 129-00-0 1.2E+02 Route 129-00-0 1.2E+02 Route 107-19-7 8.6E+00 Route 107-19-7 8.6E+00 Route 107-19-7 8.6E+00 Route 108-61 4.0E+00 Route 299-84-3 2.0E+02 Route 100-42-5 9.9E+02 OEHHA 13071-79-9 1.0E-01 Route 95-94-3 1.0E-01 Route 95-94-3 1.2E+00 Route 95-94-3 1.2E+00 Route 13071-79-9 1.0E-01 Route 95-94-3 1.2E+00 Route 13071-79-9 1.2E+00 Route 13071-79-9 1.2E+00 Route 95-94-3 1.2E+00 Route 95-94-3 1.2E+00 Route 95-94-3 1.2E+00 Route 108-88-3 2.4E-02 Route 2303-17-5 8.0E-02 Route 2303-17-5 8.0E-02 Route 108-88-3 1.2E+00 Route 108-88-3 2.4E-01 Route 108-88-3 1.2E+00 Route 108-88-3 9.0E-01 Route 108-88-3 Route 9.0E-01 Route 108-88-1 Route 9.0E-01 Route 108-88-1 Route 9.0E-01 Route 108-	83-32-9	83-32-9	\$1-32-9	\$3-32.9	83-329	\$\$32.9	State   Stat	St. 12-0	S3-12-9	S3.19	St.19	S-124	\$\frac{5}{194}\$\frac{1}{194}\$\frac{1}{1}\$\$\f	18-25   18-2

<sup>&</sup>quot;--" = no value

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Table C-2. USEPA RSLs and DTSC-SLs for Inhalation of Residential Air

Definition	Variable	USEPA Value	DTSC Value		RSL Derivation:	
Age-dependent Adjustment Factor, 0-2	$ADAF_{0-2}$	10	10	dimensionless	Carcinogens:	$(R)SL = \frac{TR \times AT_c \times 365 \frac{day}{year} \times 24 \frac{hour}{day}}{IUR \times ED_r \times EF_r \times ET_r}$
Age-dependent Adjustment Factor, 2-6	$ADAF_{2-6}$	3	3	dimensionless		$(R)SL = \frac{year  aay}{UD \times FD \times FE \times FT}$
Age-dependent Adjustment Factor, 6-16	$ADAF_{6-16}$	3	3	dimensionless		, , ,
Age-dependent Adjustment Factor, 16-30	$ADAF_{16-30}$	1	1	dimensionless	Mutagens:	$TR \times AT_{c} \times 365 \frac{day}{year} \times 24 \frac{hour}{day}$ $TT_{r} \times \left[ \frac{(ED_{0-2} \times IUR \times ADAF_{0-2}) + (ED_{2-6} \times IUR \times ADAF_{2-6})}{(ED_{6-16} \times IUR \times ADAF_{6-16}) + (ED_{16-26} \times IUR \times ADAF_{16-26})} \right]$
Averaging Time, carcinogens	$AT_c$	70	70	yrs	(R)SL =	$\frac{1}{(ED \times IIIP \times ADAE) + (ED \times IIIP \times ADAE)}$
Averaging Time, noncarcinogens, child	$AT_{nc,c}$	6	6	yrs	$EF_r \times E$	$T_T \times \left  \begin{array}{c} (ED_{0-2} \times IOK \times ADAF_{0-2}) + (ED_{2-6} \times IOK \times ADAF_{2-6}) \\ + (FD \times IUR \times ADAF \end{array} \right  + (FD \times IUR \times ADAF )$
COPC Concentration in indoor air	$C_{indoorair}$	chemic	cal-specific	$\mu g/m^3$		$[+(LD_{6-16} \times IOR \times ADAP_{6-16}) + (LD_{16-26} \times IOR \times ADAP_{16-26})]$
Carcinogenic adjustment factor, inhalation	$CAF_{I}$	0.756	0.756	dimensionless	Trichloroethene:	
Exposure Duration, child 0-2	$ED_{0-2}$	2	2	yrs		$TD \times AT \times 265$ day $\times 24$ hour
Exposure Duration, child 2-6	$ED_{2-6}$	4	4	yrs	(R)SI —	$\frac{1R \times AI_c \times 303}{year} \times 24 \frac{1}{day}$
Exposure Duration, child 6-16	$ED_{6-16}$	10	10	yrs	IIIR × FF × I	$TR \times AT_c \times 365 \frac{day}{year} \times 24 \frac{hour}{day}$ $ET_r \times \left[ (CAF_I \times ED_r) + \begin{pmatrix} (MAF_I \times ED_{0-2} \times ADAF_{0-2}) + (MAF_I \times ED_{2-6} \times ADAF_{2-6}) \\ + (MAF_I \times ED_{6-16} \times ADAF_{6-16}) + (MAF_I \times ED_{16-26} \times ADAF_{16-26}) \end{pmatrix} \right]$
Exposure Duration, adult 16-30	$ED_{16-30}$	10	10	yrs	TORXELTX	$+(MAF_{I} \times ED_{6-16} \times ADAF_{6-16}) + (MAF_{I} \times ED_{16-26} \times ADAF_{16-26})$
Exposure Duration, child	$ED_c$	6	6	yrs		
Exposure Duration, resident	$ED_r$	26	26	yrs	Vinyl Chloride:	TR
Exposure Frequency, resident	$\mathrm{EF_{r}}$	350	350	days/yr		$(R)SL = \frac{1}{\sqrt{1 + day}}$
Exposure Time, resident	$\mathrm{ET}_{\mathrm{r}}$	24	24	hours/day		$IUR \times EF_r \times ED_r \times ET_r \times \frac{1}{24} \frac{ddy}{hour}$
Inhalation Unit-Risk Factor	IUR	chemic	cal-specific	$(\mu g/m^3)^{-1}$		$(R)SL = \frac{TR}{IUR + \left(\frac{IUR \times EF_r \times ED_r \times ET_r \times \frac{1 \ day}{24 \ hour}}{AT_c \times 365 \frac{days}{vegr}}\right)}$
Mutagenic adjustment factor, inhalation	$MAF_{I}$	0.244	0.244	dimensionless		$\setminus \frac{AI_c \times 303}{year}$
Inhalation Reference Concentration	RfC	chemic	cal-specific	$\mu g/m^3$	Noncancer Hazard:	THO AT 265 day 24 hour
(Regional) Screening Level	(R)SL	deriv	red herein			$THQ \times AI_{nc,c} \times 365 \frac{1}{year} \times 24 \frac{1}{day}$
Target Hazard Quotient	THQ	1	1	dimensionless		$(R)SL = \frac{THQ \times AT_{nc,c} \times 365 \frac{day}{year} \times 24 \frac{hour}{day}}{\frac{1}{RfC} \times ED_c \times EF_r \times ET_r}$
Target Risk	TR	1.0E-06	1.0E-06			$RfC \cap L^{D_C} \cap L^{I_T} \cap L^{I_T}$

	_		USEPA Regional Screening	g Levels for Re	sidential Air	DTSC Screening Levels for Residential Air				
	_	IUR	USEPA RSL:Cancer	RfC	USEPA RSL: Noncancer	IUR	DTSC-SL: Cancer	RfC	DTSC-SL: Noncancer	
Analyte	Mutagen?	$(\mu g/m^3)^{-1}$	$(\mu g/m^3)$	$(\mu g/m^3)$	$(\mu g/m^3)$	$(\mu g/m^3)^{-1}$	$(\mu g/m^3)$	$(\mu g/m^3)$	$(\mu g/m^3)$	
USEPA RSL Analytes										
Acetaldehyde		2.20E-06	1.28E+00	9.00E+00	9.39E+00	2.70E-06	1.04E+00	9.00E+00	9.39E+00	
Acetophenone			-					4.00E+02	4.17E+02	
Acrylamide	M	1.00E-04	1.01E-02	6.00E+00	6.26E+00	1.30E-03	7.80E-04	6.00E+00	6.26E+00	
Acrylonitrile		6.80E-05	4.13E-02	2.00E+00	2.09E+00	2.90E-04	9.68E-03	2.00E+00	2.09E+00	
Aldrin		4.90E-03	5.73E-04			4.90E-03	5.73E-04	1.20E-01	1.25E-01	
Arsine				5.00E-02	5.21E-02			1.50E-02	1.56E-02	
Benfluralin								1.20E+03	1.25E+03	
Benzaldehyde								4.00E+02	4.17E+02	
Benzene		7.80E-06	3.60E-01	3.00E+01	3.13E+01	2.90E-05	9.68E-02	3.00E+00	3.13E+00	
Benzenethiol								4.00E+00	4.17E+00	
Benzidine	M	6.70E-02	1.51E-05			1.40E-01	7.24E-06			
Benzotrichloride						3.25E-03	8.64E-04			
Beryllium and compounds		2.40E-03	1.17E-03	2.00E-02	2.09E-02	2.40E-03	1.17E-03	7.00E-03	7.30E-03	
Biphenyl, 1,1'-				4.00E-01	4.17E-01	2.00E-06	1.40E+00	4.00E-01	4.17E-01	
Bis(2-chloro-1-methylethyl) ether								1.60E+02	1.67E+02	
Bis(2-chloroethyl)ether		3.30E-04	8.51E-03			7.10E-04	3.95E-03			
Boron Trifluoride				1.30E+01	1.36E+01			7.00E-01	7.30E-01	

Table C-2. USEPA RSLs and DTSC-SLs for Inhalation of Residential Air

Definition	Variable	USEPA Value	DTSC Value		RSL Derivation:	
Age-dependent Adjustment Factor, 0-2	$ADAF_{0-2}$	10	10	dimensionless	Carcinogens:	$(R)SL = \frac{TR \times AT_c \times 365 \frac{day}{year} \times 24 \frac{hour}{day}}{IUR \times ED_r \times EF_r \times ET_r}$
Age-dependent Adjustment Factor, 2-6	$ADAF_{2-6}$	3	3	dimensionless		$(R)SL = \frac{yeur  uuy}{UP \times FD \times FF \times FT}$
Age-dependent Adjustment Factor, 6-16	$ADAF_{6-16}$	3	3	dimensionless		
Age-dependent Adjustment Factor, 16-30	$ADAF_{16-30}$	1	1	dimensionless	Mutagens:	$TR \times AT_{c} \times 365 \frac{day}{year} \times 24 \frac{hour}{day}$ $\times \left[ \frac{(ED_{0-2} \times IUR \times ADAF_{0-2}) + (ED_{2-6} \times IUR \times ADAF_{2-6})}{(ED_{6-16} \times IUR \times ADAF_{6-16}) + (ED_{16-26} \times IUR \times ADAF_{16-26})} \right]$
Averaging Time, carcinogens	$AT_c$	70	70	yrs	(R)SL =	$\frac{year}{(FD_{-} \times IIIR \times ADAF_{-}) + (FD_{-} \times IIIR \times ADAF_{-})} = 1$
Averaging Time, noncarcinogens, child	$AT_{nc,c}$	6	6	yrs	$EF_r \times ET_r$	$\times \left  \begin{array}{c} (ED_{0-2} \times IOR \times ADAF_{0-2}) + (ED_{2-6} \times IOR \times ADAF_{0-2}) \\ + (FD_{0-1} \times IIIR \times ADAF_{0-1}) + (FD_{0-1} \times IIIR \times ADAF_{0-1}) \end{array} \right $
COPC Concentration in indoor air	$C_{indoorair}$	chemic	al-specific	μg/m <sup>3</sup>		$[ (BD_{6-16} \times 1011 \times 11011 + (BD_{16-26} \times 1011 \times 11011 + (BD_{16-26})) ]$
Carcinogenic adjustment factor, inhalation	$CAF_{I}$	0.756	0.756	dimensionless	Trichloroethene:	
Exposure Duration, child 0-2	$ED_{0-2}$	2	2	yrs		$TP \times AT \times 265$ day $\sim 24$ hour
Exposure Duration, child 2-6	$ED_{2-6}$	4	4	yrs	(R)SL =	$\frac{11.7 \times 11_c \times 303}{year} \times \frac{24}{day}$
Exposure Duration, child 6-16	$ED_{6-16}$	10	10	yrs	$IUR \times EF_n \times ET$	$TR \times AT_{c} \times 365 \frac{day}{year} \times 24 \frac{hour}{day}$ $T_{r} \times \left[ (CAF_{I} \times ED_{r}) + \begin{pmatrix} (MAF_{I} \times ED_{0-2} \times ADAF_{0-2}) + (MAF_{I} \times ED_{2-6} \times ADAF_{2-6}) \\ + (MAF_{I} \times ED_{6-16} \times ADAF_{6-16}) + (MAF_{I} \times ED_{16-26} \times ADAF_{16-26}) \end{pmatrix} \right]$
Exposure Duration, adult 16-30	$ED_{16-30}$	10	10	yrs	1011 11 21 7 11 21	$+(MAF_{I} \times ED_{6-16} \times ADAF_{6-16}) + (MAF_{I} \times ED_{16-26} \times ADAF_{16-26})/$
Exposure Duration, child	$ED_c$	6	6	yrs		
Exposure Duration, resident	$ED_r$	26	26	yrs	Vinyl Chloride:	TR
Exposure Frequency, resident	$EF_r$	350	350	days/yr		$IUR + \left(\frac{IUR \times EF_r \times ED_r \times ET_r \times \frac{1  day}{24  hour}}{AT_c \times 365 \frac{days}{vear}}\right)$
Exposure Time, resident	$ET_r$	24	24	hours/day		$IUR \times EF_r \times ED_r \times ET_r \times \frac{1}{24} \frac{uuy}{hour}$
Inhalation Unit-Risk Factor	IUR	chemic	al-specific	$(\mu g/m^3)^{-1}$		$\frac{10R + \sqrt{\frac{21763a}{ays}}}{\sqrt{11} \times 365} $
Mutagenic adjustment factor, inhalation	$MAF_{I}$	0.244	0.244	dimensionless		$\frac{A_{1c} \times 303}{year}$
Inhalation Reference Concentration	RfC	chemic	al-specific	μg/m <sup>3</sup>	Noncancer Hazard:	THO WAT WAS day Way hour
(Regional) Screening Level	(R)SL	deriv	ed herein			$(R)SL = \frac{THQ \times AT_{nc,c} \times 365 \frac{day}{year} \times 24 \frac{hour}{day}}{\frac{1}{RfC} \times ED_c \times EF_r \times ET_r}$
Target Hazard Quotient	THQ	1	1	dimensionless		$\frac{1}{8.62} \times ED_a \times EE_a \times ET_a$
Target Risk	TR	1.0E-06	1.0E-06			Rf C \ 25 c \ 21 r \ 21 r

			<b>USEPA Regional Screenin</b>	g Levels for Re	esidential Air		DTSC Screening Levels for Residential Air				
	_	IUR	USEPA RSL:Cancer	RfC	USEPA RSL: Noncancer	IUR	DTSC-SL: Cancer	RfC	DTSC-SL: Noncancer		
Analyte	Mutagen?	$(\mu g/m^3)^{-1}$	$(\mu g/m^3)$	$(\mu g/m^3)$	$(\mu g/m^3)$	$(\mu g/m^3)^{-1}$	$(\mu g/m^3)$	$(\mu g/m^3)$	$(\mu g/m^3)$		
Bromodichloromethane		3.70E-05	7.59E-02			3.70E-05	7.59E-02	8.00E+01	8.34E+01		
Bromoform		1.10E-06	2.55E+00			1.10E-06	2.55E+00	8.00E+01	8.34E+01		
Bromophos								2.00E+01	2.09E+01		
Bromoxynil Octanoate								8.00E+01	8.34E+01		
Butadiene, 1,3-		3.00E-05	9.36E-02	2.00E+00	2.09E+00	1.70E-04	1.65E-02	2.00E+00	2.09E+00		
Butanol, N-								4.00E+02	4.17E+02		
Butylate								2.00E+02	2.09E+02		
Butylbenzene, n-								2.00E+02	2.09E+02		
Butylbenzene, sec-								4.00E+02	4.17E+02		
Butylbenzene, tert-								4.00E+02	4.17E+02		
Cadmium (Water)		1.80E-03	1.56E-03	1.00E-02	1.04E-02	4.20E-03	6.68E-04	1.00E-02	1.04E-02		
Carbon Tetrachloride		6.00E-06	4.68E-01	1.00E+02	1.04E+02	4.20E-05	6.68E-02	4.00E+01	4.17E+01		
Chloral Hydrate								4.00E+02	4.17E+02		
Chlordane		1.00E-04	2.81E-02	7.00E-01	7.30E-01	3.40E-04	8.26E-03	7.00E-01	7.30E-01		
Chloroacetaldehyde, 2-						6.75E-05	4.16E-02				
Chlorobenzilate		3.10E-05	9.06E-02			7.80E-05	3.60E-02				
Chlorobutane, 1-								1.60E+02	1.67E+02		
Chloroethanol, 2-								8.00E+01	8.34E+01		

			Table C-2. U	JSEPA RSLs a	and DTSC-SLs for Inhala	ation of Residential A	ir		
Definition	Variable	USEPA Value	DTSC Value		RSL Derivation:				
Age-dependent Adjustment Factor, 0-2	ADAF <sub>0-2</sub>	10	10	dimensionless	Carcinogens:	$(R)SL = \frac{TR \times AT_c \times IUR \times AT_c}{IUR \times IUR}$	$365\frac{day}{day} \times 24\frac{hour}{day}$		
Age-dependent Adjustment Factor, 2-6	$ADAF_{2-6}$	3	3	dimensionless		$(R)SL = \frac{C}{UD}$	year aay		
Age-dependent Adjustment Factor, 6-16	$ADAF_{6-16}$	3	3	dimensionless					
Age-dependent Adjustment Factor, 16-30	$ADAF_{16-30}$	1	1	dimensionless	Mutagens:	$TR \times AT_c \times$	$365 \frac{day}{year} \times 24 \frac{hour}{day}$ $4DAF_{0-2}) + (ED_{2-6} \times IUR \times DAF_{6-16}) + (ED_{16-26} \times IUR)$		
Averaging Time, carcinogens	$AT_c$	70	70	yrs	(R)SL =	r (ED VIIID)	yeur aay	(ADAE ) 1	
Averaging Time, noncarcinogens, child	$AT_{nc,c}$	6	6	yrs	$EF_r \times ET_r >$	$\langle   (ED)_{0-2} \times IUK \times$	$(ED_{2-6} \times IUK \times DAE_{1}) + (ED_{2-6} \times IUK \times DAE_{1})$	$(ADAF_{2-6})$	
COPC Concentration in indoor air	$C_{indoorair}$	che	mical-specific	$\mu g/m^3$		$[+(ED_{6-16} \times IUK \times A)]$	$DAF_{6-16}$ ) + ( $ED_{16-26}$ × $IUN$	$X ADAr_{16-26}$	
Carcinogenic adjustment factor, inhalation	$CAF_{I}$	0.756	0.756	dimensionless	Trichloroethene:				
Exposure Duration, child 0-2	$ED_{0-2}$	2	2	yrs		TI D		r	
Exposure Duration, child 2-6	$ED_{2-6}$	4	4	yrs	(D)CI =	IK	$\times AI_c \times 365 \frac{1}{year} \times 24 \frac{1}{day}$	_	
Exposure Duration, child 6-16	$ED_{6-16}$	10	10	yrs	IIID V FF V FT	V (CAE V ED ) ± (	$ \times AT_c \times 365 \frac{day}{year} \times 24 \frac{houn}{day} $ $ (MAF_I \times ED_{0-2} \times ADAF_{0-2} $ $ MAF_I \times ED_{6-16} \times ADAF_{6-16} $	$) + (MAF_I \times ED_{2-6})$	$\times ADAF_{2-6}$
Exposure Duration, adult 16-30	ED <sub>16-30</sub>	10	10	yrs	ION X EI <sub>T</sub> X EI <sub>T</sub>	$\wedge [(CHI_{1} \wedge ED_{r})^{+}] + ($	$MAF_I \times ED_{6-16} \times ADAF_{6-16}$	$)+(MAF_{I}\times ED_{16-}$	$_{26} \times ADAF_{16-26})$
Exposure Duration, child	$ED_c$	6	6	yrs					
Exposure Duration, resident	$ED_r$	26	26	yrs	Vinyl Chloride:		TR		
Exposure Frequency, resident	$EF_r$	350	350	days/yr		(R)SL =	11.		
Exposure Time, resident	$ET_r$	24	24	hours/day		( IU	$TR$ $R \times EF_r \times ED_r \times ET_r \times \frac{1 d}{24 h}$ $AT_c \times 365 \frac{days}{vegr}$	$\frac{ay}{our}$	
Inhalation Unit-Risk Factor	IUR	che	mical-specific	$(\mu g/m^3)^{-1}$		IUR + ( —	days	<u>our</u>	
Mutagenic adjustment factor, inhalation	$MAF_{I}$	0.244	0.244	dimensionless		\	$AI_c \times 365 {year}$		
Inhalation Reference Concentration	RfC	che	mical-specific	$\mu g/m^3$	Noncancer Hazard:	mv. 0 4m	acz day a. hour		
(Regional) Screening Level	(R)SL	de	rived herein			$THQ \times AT_n$	$_{c,c} \times 365 \frac{5}{year} \times 24 \frac{day}{day}$		
Target Hazard Quotient	THQ	1	1	dimensionless		$(\kappa)SL = \frac{1}{1}$	$\frac{day}{day} \times 365 \frac{day}{year} \times 24 \frac{hour}{day} \times ED_c \times EF_r \times ET_r$		
Target Risk	TR	1.0E-06	1.0E-06			RfC	∧ ED <sub>C</sub> ∧ EI <sub>T</sub> ∧ EI <sub>T</sub>		
	_		USEPA Regional Screer	ning Levels for R	esidential Air		DTSC Screening Levels	for Residential Air	
		IUR	USEPA RSL:Cancer	RfC	<b>USEPA RSL: Noncancer</b>	IUR	DTSC-SL: Cancer	RfC	DTSC-SL: Noncancer
Analyte	Mutagen?	$(\mu g/m^3)^{-1}$	$(\mu g/m^3)$	$(\mu g/m^3)$	$(\mu g/m^3)$	$(\mu g/m^3)^{-1}$	$(\mu g/m^3)$	$(\mu g/m^3)$	$(\mu g/m^3)$
Chlorophenol, 2-								2.00E+01	2.09E+01
Chlorotoluene, o-								8.00E+01	8.34E+01

			USEPA Regional Screening	g Levels for Re	esidential Air	DTSC Screening Levels for Residential Air				
	_	IUR	USEPA RSL:Cancer	RfC	USEPA RSL: Noncancer	IUR	DTSC-SL: Cancer	RfC	DTSC-SL: Noncancer	
Analyte	Mutagen?	$(\mu g/m^3)^{-1}$	$(\mu g/m^3)$	$(\mu g/m^3)$	$(\mu g/m^3)$	$(\mu g/m^3)^{-1}$	$(\mu g/m^3)$	$(\mu g/m^3)$	$(\mu g/m^3)$	
Chlorophenol, 2-								2.00E+01	2.09E+01	
Chlorotoluene, o-								8.00E+01	8.34E+01	
Chlorotoluene, p-								8.00E+01	8.34E+01	
Crotonaldehyde, trans-						4.75E-04	5.91E-03	4.00E+00	4.17E+00	
Cyanides										
~Cyanogen								4.00E+00	4.17E+00	
~Cyanogen Bromide								3.60E+02	3.75E+02	
~Cyanogen Chloride								2.00E+02	2.09E+02	
~Thiocyanic Acid								8.00E-01	8.34E-01	
Cyclohexylamine								8.00E+02	8.34E+02	
Dibenzothiophene								4.00E+01	4.17E+01	
Dibromobenzene, 1,3-								1.60E+00	1.67E+00	
Dibromobenzene, 1,4-								4.00E+01	4.17E+01	
Dibromochloromethane						2.10E-05	1.34E-01	8.00E+01	8.34E+01	
Dibromoethane, 1,2-		6.00E-04	4.68E-03	9.00E+00	9.39E+00	6.00E-04	4.68E-03	8.00E-01	8.34E-01	
Dichloroethane, 1,1-		1.60E-06	1.75E+00			1.60E-06	1.75E+00	8.00E+02	8.34E+02	
Dichloroethylene, 1,1-				2.00E+02	2.09E+02			7.00E+01	7.30E+01	

Table C-2. USEPA RSLs and DTSC-SLs for Inhalation of Residential Air

Definition	Variable	USEPA Value	DTSC Value		RSL Derivation:		<u> </u>		
Age-dependent Adjustment Factor, 0-2	ADAF <sub>0-2</sub>	10	10	dimensionless	Carcinogens:	$(R)SL = \frac{TR \times AT_c \times IUR \times IUR}{IUR}$	$365 \frac{day}{vogr} \times 24 \frac{hour}{day}$		
Age-dependent Adjustment Factor, 2-6	$ADAF_{2-6}$	3	3	dimensionless		$(R)SL = \frac{111D}{111D}$	FD V FF V FT		
Age-dependent Adjustment Factor, 6-16	$ADAF_{6-16}$	3	3	dimensionless		IUK X			
Age-dependent Adjustment Factor, 16-30	$ADAF_{16-30}$	1	1	dimensionless	Mutagens:	$TR \times AT_c \times$	$365 \frac{day}{year} \times 24 \frac{hour}{day}$ $ADAF_{0-2}) + (ED_{2-6} \times IUR)$ $DAF_{6-16}) + (ED_{16-26} \times IUR)$		
Averaging Time, carcinogens	$AT_c$	70	70	yrs	(R)SL =	r (FD × IIID ×	yeui uuy ADAF \⊥(FD ∨ IIID \	(ADAE ) 1	
Averaging Time, noncarcinogens, child	$AT_{nc,c}$	6	6	yrs	$EF_r \times ET_r \times$	$\langle   +(FD) \times \times IIIR \times A$	$DAF_{0-2}$ ) + $(ED_{2-6} \times IUK)$	$(ADAI^2_{2-6})$ $(ADAF_{1}, ADAF_{2-6})$	
COPC Concentration in indoor air	$C_{indoorair}$	cher	nical-specific	$\mu g/m^3$		[   (LD <sub>6</sub> -16 × 10 lt × 11	DIII 6-16)   (LD16-26 × 101)	16-26)	
Carcinogenic adjustment factor, inhalation	$CAF_{I}$	0.756	0.756	dimensionless	Trichloroethene:				
Exposure Duration, child 0-2	$ED_{0-2}$	2	2	yrs		TD	VAT V265 day V24 hour	r	
Exposure Duration, child 2-6	$ED_{2-6}$	4	4	yrs	(R)SL =	I K	$ \times AT_c \times 365 \frac{day}{year} \times 24 \frac{hour}{day} $ $ (MAF_I \times ED_{0-2} \times ADAF_{0-2} $ $ MAF_I \times ED_{6-16} \times ADAF_{6-16} $		
Exposure Duration, child 6-16	$ED_{6-16}$	10	10	yrs	$IIIR \times FF \times FT$	$\times \left[ (CAF_{\bullet} \times FD) + \left( \right) \right]$	$(MAF_I \times ED_{0-2} \times ADAF_{0-2})$	$) + (MAF_I \times ED_{2-6})$	$\times ADAF_{2-6}$ )
Exposure Duration, adult 16-30	$ED_{16-30}$	10	10	yrs	топ лыт лыт л	(-) (-) (+(	$MAF_I \times ED_{6-16} \times ADAF_{6-16}$	$) + (MAF_I \times ED_{16-}$	$_{26} \times ADAF_{16-26})$
Exposure Duration, child	$ED_c$	6	6	yrs					
Exposure Duration, resident	$ED_r$	26	26	yrs	Vinyl Chloride:		TR		
Exposure Frequency, resident	$EF_r$	350	350	days/yr		$(R)SL = \phantom{AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA$	1		
Exposure Time, resident	$ET_r$	24	24	hours/day		IU	$R \times EF_r \times ED_r \times ET_r \times \frac{1}{24} \frac{a}{h}$	$\frac{ay}{our}$	
Inhalation Unit-Risk Factor	IUR	cher	nical-specific	$(\mu g/m^3)^{-1}$		<i>IUR</i> + \ —	$TR$ $R \times EF_r \times ED_r \times ET_r \times \frac{1}{24} \frac{d}{h}$ $AT_c \times 365 \frac{days}{vear}$	<u> </u>	
Mutagenic adjustment factor, inhalation	$MAF_{I}$	0.244	0.244	dimensionless			$\frac{AI_c \times 303}{year}$	/	
Inhalation Reference Concentration	RfC	cher	nical-specific	$\mu g/m^3$	Noncancer Hazard:	TILO AT	day hour		
(Regional) Screening Level	(R)SL	der	rived herein			$THQ \times AT_n$	$\frac{day}{day} \times 365 \frac{day}{year} \times 24 \frac{hour}{day}$ $\times ED_c \times EF_r \times ET_r$		
Target Hazard Quotient	THQ	1	1	dimensionless		$(R)SL = \frac{1}{1}$	× FD × FF × FT		
Target Risk	TR	1.0E-06	1.0E-06			RfC	X ED <sub>C</sub> X EI <sub>T</sub> X EI <sub>T</sub>		
		1	USEPA Regional Screen	ning Levels for R	Residential Air		DTSC Screening Levels	for Residential Air	
		IUR	USEPA RSL:Cancer	RfC	<b>USEPA RSL: Noncancer</b>	IUR	DTSC-SL: Cancer	RfC	DTSC-SL: Noncancer
Analyte	Mutagen?	$(\mu g/m^3)^{-1}$	$(\mu g/m^3)$	$(\mu g/m^3)$	$(\mu g/m^3)$	$(\mu g/m^3)^{-1}$	$(\mu g/m^3)$	$(\mu g/m^3)$	$(\mu g/m^3)$
Dichloroethylene, 1,2-cis-								8.00E+00	8.34E+00
Dichloroethylene, 1,2-trans-								8.00E+01	8.34E+01
Dichloropropane, 1,3-								8.00E+01	8.34E+01
Dichloropropene, 1,3-		4.00E-06	7.02E-01	2.00E+01	2.09E+01	1.60E-05	1.75E-01	2.00E+01	2.09E+01
Dieldrin		4.60E-03	6.10E-04			4.60E-03	6.10E-04	2.00E-01	2.09E-01
D' 4 10 '1								4 00E 00	4.150.00

Diethylformamide 4.00E+00 4.17E+00 Diisopropyl Methylphosphonate 3.20E+02 3.34E+02 8.00E+00 Dimethylaniline, N,N---8.34E+00 Dioxane, 1,4-5.62E-01 3.00E+01 7.70E-06 3.65E-01 3.00E+01 3.13E+01 5.00E-06 3.13E+01 Dioxins ~Hexachlorodibenzo-p-dioxin, Mixture 1.30E+00 2.16E-06 3.80E+00 7.39E-07 Diphenylhydrazine, 1,2-2.20E-04 1.28E-02 2.50E-04 1.12E-02 Dithiane, 1,4-4.00E+01 4.17E+01 -------**EPTC** 1.04E+02--1.00E+02--Endosulfan 2.40E+01 2.50E+01 Epichlorohydrin 1.20E-06 2.34E+00 1.00E+00 1.04E+002.30E-05 1.22E-01 1.00E+00 1.04E+00Ethoxyethanol, 2-2.00E+02 2.09E+02 7.00E+01 7.30E+01 ----Ethyl Chloride (Chloroethane) 1.00E+04 1.04E+04 1.00E+041.04E+041.18E-06 2.39E+00

Table C-2. USEPA RSLs and DTSC-SLs for Inhalation of Residential Air

Definition	Variable	USEPA Value	DTSC Value		RSL Derivation:	
Age-dependent Adjustment Factor, 0-2	ADAF <sub>0-2</sub>	10	10	dimensionless	Carcinogens:	$(R)SL = \frac{TR \times AT_c \times 365 \frac{day}{year} \times 24 \frac{hour}{day}}{IUR \times ED_r \times EF_r \times ET_r}$
Age-dependent Adjustment Factor, 2-6	$ADAF_{2-6}$	3	3	dimensionless		$(R)SL = \frac{year  aay}{UD \times FD \times FE}$
Age-dependent Adjustment Factor, 6-16	$ADAF_{6-16}$	3	3	dimensionless		
Age-dependent Adjustment Factor, 16-30	$ADAF_{16-30}$	1	1	dimensionless	Mutagens:	$TR \times AT_c \times 365 \frac{day}{year} \times 24 \frac{hour}{day}$ $T_r \times \left[ \frac{(ED_{0-2} \times IUR \times ADAF_{0-2}) + (ED_{2-6} \times IUR \times ADAF_{2-6})}{+(ED_{6-16} \times IUR \times ADAF_{6-16}) + (ED_{16-26} \times IUR \times ADAF_{16-26})} \right]$
Averaging Time, carcinogens	$AT_c$	70	70	yrs	(R)SL =	yeur aay
Averaging Time, noncarcinogens, child	$AT_{nc,c}$	6	6	yrs	$EF_r \times E'$	$I_r \times \left  \begin{array}{c} (ED_{0-2} \times IUR \times ADAF_{0-2}) + (ED_{2-6} \times IUR \times ADAF_{2-6}) \\ \downarrow (FD \times IUP \times ADAE \end{array} \right  + (FD \times IUP \times ADAE )$
COPC Concentration in indoor air	$C_{indoorair}$	chemic	al-specific	$\mu g/m^3$		$[+(ED_{6-16} \times IOK \times ADAF_{6-16}) + (ED_{16-26} \times IOK \times ADAF_{16-26})]$
Carcinogenic adjustment factor, inhalation	$CAF_{I}$	0.756	0.756	dimensionless	Trichloroethene:	
Exposure Duration, child 0-2	$ED_{0-2}$	2	2	yrs		$\pi_{\text{D}} \times \pi_{\text{A}} \times 265 \text{ day}$
Exposure Duration, child 2-6	$ED_{2-6}$	4	4	yrs	(P)SI =	$1R \times AI_c \times 365 \frac{1}{year} \times 24 \frac{1}{day}$
Exposure Duration, child 6-16	$ED_{6-16}$	10	10	yrs	IIID × FE × F	$TR \times AT_c \times 365 \frac{day}{year} \times 24 \frac{hour}{day}$ $T_r \times \left[ (CAF_I \times ED_r) + \left( \frac{(MAF_I \times ED_{0-2} \times ADAF_{0-2}) + (MAF_I \times ED_{2-6} \times ADAF_{2-6})}{+(MAF_I \times ED_{6-16} \times ADAF_{6-16}) + (MAF_I \times ED_{16-26} \times ADAF_{16-26})} \right]$
Exposure Duration, adult 16-30	ED <sub>16-30</sub>	10	10	yrs	IOR A LI <sub>T</sub> A L	$(CAF_I \times ED_r) + (MAF_I \times ED_{6-16} \times ADAF_{6-16}) + (MAF_I \times ED_{16-26} \times ADAF_{16-26})$
Exposure Duration, child	$ED_c$	6	6	yrs		
Exposure Duration, resident	$\mathrm{ED}_{\mathrm{r}}$	26	26	yrs	Vinyl Chloride:	TR
Exposure Frequency, resident	$EF_r$	350	350	days/yr		$IUR + \left(\frac{IUR \times EF_r \times ED_r \times ET_r \times \frac{1  day}{24  hour}}{AT_c \times 365 \frac{days}{vear}}\right)$
Exposure Time, resident	$ET_r$	24	24	hours/day		$IUR \times EF_r \times ED_r \times ET_r \times \frac{1 \text{ ady}}{24 \text{ hour}}$
Inhalation Unit-Risk Factor	IUR	chemic	al-specific	$(\mu g/m^3)^{-1}$		$IUR + \left( \frac{24\pi \omega u}{days} \right)$
Mutagenic adjustment factor, inhalation	$MAF_{I}$	0.244	0.244	dimensionless		$\left\langle AI_c \times 365 \frac{1}{year} \right\rangle$
Inhalation Reference Concentration	RfC	chemic	al-specific	$\mu g/m^3$	Noncancer Hazard:	Tuo IT oct day o hour
(Regional) Screening Level	(R)SL	deriv	ed herein			$(R)SL = \frac{THQ \times AT_{nc,c} \times 365 \frac{day}{year} \times 24 \frac{hour}{day}}{\frac{1}{RfC} \times ED_c \times EF_r \times ET_r}$
Target Hazard Quotient	THQ	1	1	dimensionless		$\frac{1}{2} \times FD \times FF \times FT$
Target Risk	TR	1.0E-06	1.0E-06			$Rf\bar{C} \wedge ED_c \wedge ET_r \wedge ET_r$
USEPA Regional Screening Levels for Residential Air						DTSC Screening Levels for Residential Air

1			USEPA Regional Screening	ig Levels for Re	esidential Air	DTSC Screening Levels for Residential Air				
	_	IUR	USEPA RSL:Cancer	RfC	USEPA RSL: Noncancer	IUR	DTSC-SL: Cancer	RfC	DTSC-SL: Noncancer	
Analyte	Mutagen?	$(\mu g/m^3)^{-1}$	$(\mu g/m^3)$	$(\mu g/m^3)$	$(\mu g/m^3)$	$(\mu g/m^3)^{-1}$	$(\mu g/m^3)$	$(\mu g/m^3)$	$(\mu g/m^3)$	
Ethyl Ether								8.00E+02	8.34E+02	
Ethylene Diamine								3.60E+02	3.75E+02	
Formaldehyde		1.30E-05	2.16E-01	9.80E+00	1.02E+01	1.30E-05	2.16E-01	9.00E+00	9.39E+00	
Furans		/								
~Dibenzofuran								4.00E+00	4.17E+00	
~Furan								4.00E+00	4.17E+00	
Guanidine								4.00E+01	4.17E+01	
Heptachlor		1.30E-03	2.16E-03			1.30E-03	2.16E-03	2.00E+00	2.09E+00	
Heptachlor Epoxide		2.60E-03	1.08E-03			2.60E-03	1.08E-03	5.20E-02	5.42E-02	
Hexabromobenzene								8.00E+00	8.34E+00	
Hexachlorobenzene		4.60E-04	6.10E-03			5.10E-04	5.51E-03	3.20E+00	3.34E+00	
Hexachlorobutadiene		2.20E-05	1.28E-01			2.20E-05	1.28E-01	4.00E+00	4.17E+00	
Hexachlorocyclohexane, Alpha-		1.80E-03	1.56E-03			1.80E-03	1.56E-03	3.20E+01	3.34E+01	
Hexachlorocyclohexane, Gamma- (Lindane)		3.10E-04	9.06E-03			3.10E-04	9.06E-03	1.20E+00	1.25E+00	
Hexachlorocyclohexane, Technical		5.10E-04	5.51E-03			1.10E-03	2.55E-03			
Hydrogen Chloride				2.00E+01	2.09E+01			9.00E+00	9.39E+00	
Isobutyl Alcohol								1.20E+03	1.25E+03	
Isopropalin								6.00E+01	6.26E+01	

Table C-2. USEPA RSLs and DTSC-SLs for Inhalation of Residential Air

Definition	Variable	USEPA Value	DTSC Value		RSL Derivation:				
Age-dependent Adjustment Factor, 0-2	ADAF <sub>0-2</sub>	10	10	dimensionless	Carcinogens:	$TR \times AT_c \times$	$365 \frac{day}{day} \times 24 \frac{hour}{day}$		
Age-dependent Adjustment Factor, 2-6	$ADAF_{2-6}$	3	3	dimensionless		$(R)SL = \frac{TR \times AT_c \times TR}{IUR \times R}$	year aay		
Age-dependent Adjustment Factor, 6-16	$ADAF_{6-16}$	3	3	dimensionless					
Age-dependent Adjustment Factor, 16-30	$ADAF_{16-30}$	1	1	dimensionless	Mutagens:	$TR \times AT_c \times$	$365 \frac{day}{year} \times 24 \frac{hour}{day}$ $3DAF_{0-2}) + (ED_{2-6} \times IUR)$ $3DAF_{6-16}) + (ED_{16-26} \times IUR)$		
Averaging Time, carcinogens	$AT_c$	70	70	yrs	(R)SL =	r (ED VIIIDV)	year aay	(ADAE ) 1	
Averaging Time, noncarcinogens, child	$AT_{nc,c}$	6	6	yrs	$EF_r \times ET_r \times$	$\langle   LD_{0-2} \times IUK \times E_{0} \rangle $	NDAF <sub>0-2</sub> ) + (ED <sub>2-6</sub> × IUK >	$(ADAF_{2-6})$	
COPC Concentration in indoor air	$C_{indoorair}$	che	emical-specific	$\mu g/m^3$		$[+(ED_{6-16} \times IUK \times AI$	$(ED_{16-26}) + (ED_{16-26} \times 10)$	$(XADAF_{16-26})$	
Carcinogenic adjustment factor, inhalation	$CAF_{I}$	0.756	0.756	dimensionless	Trichloroethene:				
Exposure Duration, child 0-2	$ED_{0-2}$	2	2	yrs		TD.	$ \times AT_c \times 365 \frac{day}{year} \times 24 \frac{hour}{day} $ $ (MAF_I \times ED_{0-2} \times ADAF_{0-2} $ $ MAF_I \times ED_{6-16} \times ADAF_{6-16} $	r	
Exposure Duration, child 2-6	$ED_{2-6}$	4	4	yrs	(D) SI =	I K	$\times AI_c \times 365 \frac{1}{year} \times 24 \frac{1}{day}$	,	
Exposure Duration, child 6-16	$ED_{6-16}$	10	10	yrs	(N)SL = TIID V FF V FT	V (CAE V ED ) ± (	$(MAF_I \times ED_{0-2} \times ADAF_{0-2})$	$(+) + (MAF_I \times ED_{2-6})$	$_{5} \times ADAF_{2-6})$
Exposure Duration, adult 16-30	$ED_{16-30}$	10	10	yrs	ION A LIT A LIT	$\wedge [(CHI_{I} \wedge ED_{r})^{-1}] + (I$	$MAF_I \times ED_{6-16} \times ADAF_{6-16}$	$) + (MAF_I \times ED_{16} -$	$A_{26} \times ADAF_{16-26})$
Exposure Duration, child	$ED_c$	6	6	yrs					
Exposure Duration, resident	$ED_r$	26	26	yrs	Vinyl Chloride:		TR		
Exposure Frequency, resident	$EF_r$	350	350	days/yr		(R)SL =	$R \times EF_r \times ED_r \times ET_r \times \frac{1}{24} \frac{d}{h}$ $AT_r \times 365 \frac{days}{days}$	(a)	
Exposure Time, resident	$\mathrm{ET}_{\mathrm{r}}$	24	24	hours/day		(IUI	$R \times EF_r \times ED_r \times ET_r \times \frac{1}{24} \frac{a}{b}$	$\frac{ay}{av}$	
Inhalation Unit-Risk Factor	IUR	che	emical-specific	$(\mu g/m^3)^{-1}$		<i>IUR</i> + (	4T 26 days	<u>.our</u>	
Mutagenic adjustment factor, inhalation	$MAF_{I}$	0.244	0.244	dimensionless		\	$AI_c \times 365 \frac{1}{year}$	/	
Inhalation Reference Concentration	RfC	che	emical-specific	$\mu g/m^3$	Noncancer Hazard:		dav hour		
(Regional) Screening Level	(R)SL	de	erived herein			$THQ \times AT_{no}$	$\frac{day}{day} \times 365 \frac{day}{year} \times 24 \frac{hour}{day}$ $\times ED_c \times EF_r \times ET_r$		
Target Hazard Quotient	THQ	1	1	dimensionless		$(R)SL = \frac{1}{1}$	∨ FD ∨ FF ∨ FT		
Target Risk	TR	1.0E-06	1.0E-06			RfC '	~ LD <sub>C</sub> ~ LI <sub>T</sub> ~ LI <sub>T</sub>		
	_		USEPA Regional Screen	ning Levels for R	esidential Air		DTSC Screening Levels	for Residential Air	
		IUR	USEPA RSL:Cancer	RfC	<b>USEPA RSL: Noncancer</b>	IUR	DTSC-SL: Cancer	RfC	DTSC-SL: Noncancer
Analyte	Mutagen?	$(\mu g/m^3)^{-1}$	$(\mu g/m^3)$	$(\mu g/m^3)$	$(\mu g/m^3)$	$(\mu g/m^3)^{-1}$	$(\mu g/m^3)$	$(\mu g/m^3)$	$(\mu g/m^3)$
Lead Compounds									
~Tetraethyl Lead								4.00E-04	4.17E-04
Lewisite								2.00E-02	2.09E-02
Mercury Compounds									
~Mercuric Chloride (and other Mercury salts	)			3.00E-01	3.13E-01			3.00E-02	3.13E-02
~Mercury (elemental)				3.00E-01	3.13E-01			3.00E-02	3.13E-02
Merphos								1.20E-01	1.25E-01
Methanol				2.00E+04	2.09E+04			4.00E+03	4.17E+03
Methoxychlor								2.00E+01	2.09E+01
Methyl Acetate								4.00E+03	4.17E+03
Methylene Chloride	M	1.00E-08	1.01E+02	6.00E+02	6.26E+02	1.00E-06	1.01E+00	4.00E+02	4.17E+02
Methylstyrene, Alpha-								2.80E+02	2.92E+02
Mineral oils								1.20E+04	1.25E+04
Mineral oils Mirex							 5.51E-04	1.20E+04 8.00E-01	1.25E+04 8.34E-01

5.10E-04

5.51E-03

Naphthylamine, 2-

Table C-2. USEPA RSLs and DTSC-SLs for Inhalation of Residential Air

Definition	Variable	USEPA Value	DTSC Value		RSL Derivation:	
Age-dependent Adjustment Factor, 0-2	$ADAF_{0-2}$	10	10	dimensionless	Carcinogens:	$(R)SL = \frac{TR \times AT_c \times 365 \frac{day}{year} \times 24 \frac{hour}{day}}{IUR \times ED_r \times EF_r \times ET_r}$
Age-dependent Adjustment Factor, 2-6	$ADAF_{2-6}$	3	3	dimensionless		$(R)SL = \frac{yeur  uuy}{UUD \times FD \times FE \times FT}$
Age-dependent Adjustment Factor, 6-16	$ADAF_{6-16}$	3	3	dimensionless		
Age-dependent Adjustment Factor, 16-30	$ADAF_{16-30}$	1	1	dimensionless	Mutagens:	$TR \times AT_{c} \times 365 \frac{day}{year} \times 24 \frac{hour}{day}$ $\times \left[ \frac{(ED_{0-2} \times IUR \times ADAF_{0-2}) + (ED_{2-6} \times IUR \times ADAF_{2-6})}{(ED_{6-16} \times IUR \times ADAF_{6-16}) + (ED_{16-26} \times IUR \times ADAF_{16-26})} \right]$
Averaging Time, carcinogens	$AT_c$	70	70	yrs	(R)SL =	r (ED VIIID VADAE )   (ED VIIID VADAE )
Averaging Time, noncarcinogens, child	$AT_{nc,c}$	6	6	yrs	$EF_r \times ET_r$	$\times \left  \begin{array}{c} (ED_{0-2} \times IUK \times ADAF_{0-2}) + (ED_{2-6} \times IUK \times ADAF_{2-6}) \\ + (ED \times IUD \times ADAE \end{array} \right  + (ED \times IUD \times ADAE \end{array} \right $
COPC Concentration in indoor air	$C_{indoorair}$	chemic	cal-specific	$\mu g/m^3$		$[\top(ED_{6-16} \land IOK \land ADAI_{6-16}) \top (ED_{16-26} \land IOK \land ADAI_{16-26})]$
Carcinogenic adjustment factor, inhalation	$CAF_{I}$	0.756	0.756	dimensionless	Trichloroethene:	
Exposure Duration, child 0-2	$\mathrm{ED}_{0 ext{-}2}$	2	2	yrs		$TD \times AT \times 265 day$
Exposure Duration, child 2-6	$ED_{2-6}$	4	4	yrs	(B)SI -	$TR \times AT_c \times 365 \frac{day}{year} \times 24 \frac{hour}{day}$
Exposure Duration, child 6-16	$ED_{6-16}$	10	10	yrs	$IIIR \vee FF \vee FT$	$ \frac{(MAF_{I} \times ED_{0-2} \times ADAF_{0-2}) + (MAF_{I} \times ED_{2-6} \times ADAF_{2-6})}{(CAF_{I} \times ED_{r}) + \left(\frac{(MAF_{I} \times ED_{0-2} \times ADAF_{0-2}) + (MAF_{I} \times ED_{2-6} \times ADAF_{2-6})}{(MAF_{I} \times ED_{6-16} \times ADAF_{6-16}) + (MAF_{I} \times ED_{16-26} \times ADAF_{16-26})}\right) \right] $
Exposure Duration, adult 16-30	$ED_{16-30}$	10	10	yrs	ION A LIT A LIT	$+(MAF_I \times ED_{r}) + (MAF_I \times ED_{6-16} \times ADAF_{6-16}) + (MAF_I \times ED_{16-26} \times ADAF_{16-26})$
Exposure Duration, child	$ED_c$	6	6	yrs		
Exposure Duration, resident	$\mathrm{ED}_{\mathrm{r}}$	26	26	yrs	Vinyl Chloride:	TR
Exposure Frequency, resident	$EF_r$	350	350	days/yr		$(R)SL = \frac{TR}{\sqrt{\frac{1}{2} I_{AB}}}$
Exposure Time, resident	$ET_r$	24	24	hours/day		$IUR + \left(\frac{IUR \times EF_r \times ED_r \times ET_r \times \frac{1 \ day}{24 \ hour}}{AT_c \times 365 \frac{days}{360 \ r}}\right)$
Inhalation Unit-Risk Factor	IUR	chemic	cal-specific	$(\mu g/m^3)^{-1}$		$IUR + \left( \frac{2\pi nour}{days} \right)$
Mutagenic adjustment factor, inhalation	$MAF_{I}$	0.244	0.244	dimensionless		$AI_c \times 305 \overline{year}$
Inhalation Reference Concentration	RfC	chemic	al-specific	$\mu g/m^3$	Noncancer Hazard:	TWO AT OCT day o hour
(Regional) Screening Level	(R)SL	deriv	ed herein			$(R)SL = \frac{THQ \times AT_{nc,c} \times 365 \frac{day}{year} \times 24 \frac{hour}{day}}{\frac{1}{RfC} \times ED_c \times EF_r \times ET_r}$
Target Hazard Quotient	THQ	1	1	dimensionless		$\frac{1}{2} \times FD \times FF \times FT$
Target Risk	TR	1.0E-06	1.0E-06			$RfC \land ED_c \land ET_r \land ET_r$
		TIC	FPA Regional Scre	aning I avale for R	Pacidential Air	DTSC Screening Levels for Residential Air

	_		USEPA Regional Screening	g Levels for Re	sidential Air	DTSC Screening Levels for Residential Air				
	_	IUR	USEPA RSL:Cancer	RfC	USEPA RSL: Noncancer	IUR	DTSC-SL: Cancer	RfC	DTSC-SL: Noncancer	
Analyte	Mutagen?	$(\mu g/m^3)^{-1}$	$(\mu g/m^3)$	$(\mu g/m^3)$	$(\mu g/m^3)$	$(\mu g/m^3)^{-1}$	$(\mu g/m^3)$	$(\mu g/m^3)$	$(\mu g/m^3)$	
Nickel Refinery Dust		2.40E-04	1.17E-02	1.40E-02	1.46E-02	2.60E-04	1.08E-02	1.40E-02	1.46E-02	
Nickel Soluble Salts		2.60E-04	1.08E-02	9.00E-02	9.39E-02	2.60E-04	1.08E-02	1.40E-02	1.46E-02	
Nickel Subsulfide		4.80E-04	5.85E-03	1.40E-02	1.46E-02	4.90E-04	5.73E-03	1.40E-02	1.46E-02	
Nitroso-di-N-butylamine, N-		1.60E-03	1.75E-03			3.10E-03	9.06E-04			
Nitrotoluene, o-						5.50E-05	5.10E-02	3.60E+00	3.75E+00	
Pebulate								2.00E+02	2.09E+02	
Pentabromodiphenyl Ether								8.00E+00	8.34E+00	
Pentachlorobenzene								3.20E+00	3.34E+00	
Pentachloroethane						2.25E-05	1.25E-01			
Pentachloronitrobenzene						6.50E-05	4.32E-02	1.20E+01	1.25E+01	
Perfluorobutane Sulfonate								8.00E+01	8.34E+01	
Phosphoric Acid				1.00E+01	1.04E+01			7.00E+00	7.30E+00	
Phosphorus, White								8.00E-02	8.34E-02	
Phthalates										
~Dimethylterephthalate								4.00E+02	4.17E+02	

Table C-2. USEPA RSLs and DTSC-SLs for Inhalation of Residential Air

Definition	Variable	USEPA Value	DTSC Value		RSL Derivation:	
Age-dependent Adjustment Factor, 0-2	$ADAF_{0-2}$	10	10	dimensionless	Carcinogens:	$(R)SL = \frac{TR \times AT_c \times 365 \frac{day}{year} \times 24 \frac{hour}{day}}{IUR \times ED_r \times EF_r \times ET_r}$
Age-dependent Adjustment Factor, 2-6	$ADAF_{2-6}$	3	3	dimensionless		$(R)SL = \frac{year}{UD \times FD \times FE \times FT}$
Age-dependent Adjustment Factor, 6-16	$ADAF_{6-16}$	3	3	dimensionless		, , ,
Age-dependent Adjustment Factor, 16-30	$ADAF_{16-30}$	1	1	dimensionless	Mutagens:	$TR \times AT_{c} \times 365 \frac{day}{year} \times 24 \frac{hour}{day}$ $ET_{r} \times \left[ \frac{(ED_{0-2} \times IUR \times ADAF_{0-2}) + (ED_{2-6} \times IUR \times ADAF_{2-6})}{(ED_{6-16} \times IUR \times ADAF_{6-16}) + (ED_{16-26} \times IUR \times ADAF_{16-26})} \right]$
Averaging Time, carcinogens	$AT_c$	70	70	yrs	(R)SL =	$\frac{1}{1} \frac{yeui  uuy}{1}$
Averaging Time, noncarcinogens, child	$AT_{nc,c}$	6	6	yrs	$EF_r \times E$	$ET_r \times \left  \begin{array}{c} (ED_{0-2} \times IUR \times ADAF_{0-2}) + (ED_{2-6} \times IUR \times ADAF_{2-6}) \\ + (FD_{0-1} \times IUR \times ADAF_{0-1}) + (FD_{0-1} \times IUR \times ADAF_{0-1}) \end{array} \right $
COPC Concentration in indoor air	$C_{indoorair}$	chemi	cal-specific	$\mu g/m^3$		$[ (LD_{6-16} \times IOR \times IDIR_{6-16}) + (LD_{16-26} \times IOR \times IDIR_{16-26}) ]$
Carcinogenic adjustment factor, inhalation	$CAF_{I}$	0.756	0.756	dimensionless	Trichloroethene:	
Exposure Duration, child 0-2	$ED_{0-2}$	2	2	yrs		$TP \times AT \times 265$ day $\sim 24$ hour
Exposure Duration, child 2-6	$ED_{2-6}$	4	4	yrs	(R)SL = -	$\frac{1 \text{ K} \times \text{A1}_c \times 303}{\text{year}} \times \frac{24}{\text{day}}$
Exposure Duration, child 6-16	$ED_{6-16}$	10	10	yrs	$IIIR \times FF_{-} \times$	$TR \times AT_c \times 365 \frac{day}{year} \times 24 \frac{hour}{day}$ $ET_r \times \left[ (CAF_I \times ED_r) + \begin{pmatrix} (MAF_I \times ED_{0-2} \times ADAF_{0-2}) + (MAF_I \times ED_{2-6} \times ADAF_{2-6}) \\ + (MAF_I \times ED_{6-16} \times ADAF_{6-16}) + (MAF_I \times ED_{16-26} \times ADAF_{16-26}) \end{pmatrix} \right]$
Exposure Duration, adult 16-30	$ED_{16-30}$	10	10	yrs	1011 117 11	$+(MAF_{I} \times ED_{6-16} \times ADAF_{6-16}) + (MAF_{I} \times ED_{16-26} \times ADAF_{16-26})$
Exposure Duration, child	$ED_c$	6	6	yrs		
Exposure Duration, resident	$ED_r$	26	26	yrs	Vinyl Chloride:	TR
Exposure Frequency, resident	$EF_r$	350	350	days/yr		$(R)SL = \frac{TR}{IUR + \left(\frac{IUR \times EF_r \times ED_r \times ET_r \times \frac{1 \ day}{24 \ hour}}{AT_c \times 365 \frac{days}{year}}\right)}$
Exposure Time, resident	$ET_r$	24	24	hours/day		$IUR \times EF_r \times ED_r \times ET_r \times \frac{1}{24} \frac{ddy}{hour}$
Inhalation Unit-Risk Factor	IUR	chemi	cal-specific	$(\mu g/m^3)^{-1}$		$TUR + \left( \frac{2TROW}{AT \times 26\pi} \right)$
Mutagenic adjustment factor, inhalation	$MAF_{I}$	0.244	0.244	dimensionless		$\frac{AI_c \times 303}{year}$
Inhalation Reference Concentration	RfC	chemi	cal-specific	$\mu g/m^3$	Noncancer Hazard:	THO WATER A 2015 day 21 hour
(Regional) Screening Level	(R)SL	deriv	ved herein			$(R)SL = \frac{THQ \times AT_{nc,c} \times 365 \frac{day}{year} \times 24 \frac{hour}{day}}{\frac{1}{RfC} \times ED_c \times EF_r \times ET_r}$
Target Hazard Quotient	THQ	1	1	dimensionless		$\frac{1}{\frac{1}{E-E} \times ED_{-} \times EF_{-} \times ET_{-}}$
Target Risk	TR	1.0E-06	1.0E-06			RfC \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \

			<b>USEPA Regional Screenin</b>	g Levels for R	esidential Air	DTSC Screening Levels for Residential Air						
	_	IUR	USEPA RSL:Cancer	RfC	USEPA RSL: Noncancer	IUR	DTSC-SL: Cancer	RfC	DTSC-SL: Noncancer			
Analyte	Mutagen?	$(\mu g/m^3)^{-1}$	$(\mu g/m^3)$	$(\mu g/m^3)$	$(\mu g/m^3)$	$(\mu g/m^3)^{-1}$	$(\mu g/m^3)$	$(\mu g/m^3)$	$(\mu g/m^3)$			
Polychlorinated Biphenyls (PCBs)												
~Aroclor 1016		2.00E-05	1.40E-01			2.00E-05	1.40E-01	2.80E-01	2.92E-01			
~Aroclor 1254		5.71E-04	4.92E-03			5.71E-04	4.92E-03	8.00E-02	8.34E-02			
~Aroclor 5460								2.40E+00	2.50E+00			
Polynuclear Aromatic Hydrocarbons (PAHs)												
~Acenaphthene								2.40E+02	2.50E+02			
~Anthracene								1.20E+03	1.25E+03			
~Chloronaphthalene, Beta-								3.20E+02	3.34E+02			
~Fluorene			-					1.60E+02	1.67E+02			
~Methylnaphthalene, 1-						7.25E-06	3.87E-01	2.80E+02	2.92E+02			
~Methylnaphthalene, 2-								1.60E+01	1.67E+01			
~Pyrene								1.20E+02	1.25E+02			
Profluralin								2.40E+01	2.50E+01			
Propargyl Alcohol								8.00E+00	8.34E+00			
Pyridine								4.00E+00	4.17E+00			
Ronnel								2.00E+02	2.09E+02			
Styrene				1.00E+03	1.04E+03			9.00E+02	9.39E+02			
Sulfurous acid, 2-chloroethyl 2-[4-(1,1-dimethy	,	7.10E-06	3.95E-01			8.60E-06	3.26E-01					

Table C-2. USEPA RSLs and DTSC-SLs for Inhalation of Residential Air

Definition	Variable	USEPA Value	DTSC Value		RSL Derivation:	
Age-dependent Adjustment Factor, 0-2	$ADAF_{0-2}$	10	10	dimensionless	Carcinogens:	$(R)SL = \frac{TR \times AT_c \times 365 \frac{day}{year} \times 24 \frac{hour}{day}}{IUR \times ED_r \times EF_r \times ET_r}$
Age-dependent Adjustment Factor, 2-6	$ADAF_{2-6}$	3	3	dimensionless		$(R)SL = \frac{year}{UID \times FD \times FE \times FT}$
Age-dependent Adjustment Factor, 6-16	$ADAF_{6-16}$	3	3	dimensionless		, , ,
Age-dependent Adjustment Factor, 16-30	$ADAF_{16-30}$	1	1	dimensionless	Mutagens:	$TR \times AT_{c} \times 365 \frac{day}{year} \times 24 \frac{hour}{day}$ $\times \left[ \frac{(ED_{0-2} \times IUR \times ADAF_{0-2}) + (ED_{2-6} \times IUR \times ADAF_{2-6})}{+(ED_{6-16} \times IUR \times ADAF_{6-16}) + (ED_{16-26} \times IUR \times ADAF_{16-26})} \right]$
Averaging Time, carcinogens	$AT_c$	70	70	yrs	(R)SL =	$(FD \rightarrow IIIR \times ADAF \rightarrow) + (FD \rightarrow IIIR \times ADAF \rightarrow) = 1$
Averaging Time, noncarcinogens, child	$AT_{nc,c}$	6	6	yrs	$EF_r \times ET_r$	$\times \left  \begin{array}{c} (ED_{0-2} \times IOR \times ADAF_{0-2}) + (ED_{2-6} \times IOR \times ADAF_{2-6}) \\ + (FD_{1-1} \times IIIR \times ADAF_{1-1}) + (FD_{1-1} \times IIIR \times ADAF_{1-1}) \end{array} \right $
COPC Concentration in indoor air	$C_{indoorair}$	chemic	cal-specific	$\mu g/m^3$		$[ (LD_{6-16} \times IOR \times IDIR_{6-16}) + (LD_{16-26} \times IOR \times IDIR_{16-26})]$
Carcinogenic adjustment factor, inhalation	$CAF_{I}$	0.756	0.756	dimensionless	Trichloroethene:	
Exposure Duration, child 0-2	$ED_{0-2}$	2	2	yrs		$TP \times AT \times 365 \frac{day}{day} \times 24 \frac{hour}{day}$
Exposure Duration, child 2-6	$ED_{2-6}$	4	4	yrs	(R)SL =	$TR \times AT_{c} \times 365 \frac{day}{year} \times 24 \frac{hour}{day} \times \left[ (CAF_{I} \times ED_{r}) + \left( \frac{(MAF_{I} \times ED_{0-2} \times ADAF_{0-2}) + (MAF_{I} \times ED_{2-6} \times ADAF_{2-6})}{+ (MAF_{I} \times ED_{6-16} \times ADAF_{6-16}) + (MAF_{I} \times ED_{16-26} \times ADAF_{16-26})} \right]$
Exposure Duration, child 6-16	$ED_{6-16}$	10	10	yrs	$IIIR \times EE_{-} \times ET_{-}$	$\times \left[ (CAF_1 \times ED_{-1}) + \left( (MAF_1 \times ED_{0-2} \times ADAF_{0-2}) + (MAF_1 \times ED_{2-6} \times ADAF_{2-6}) \right) \right]$
Exposure Duration, adult 16-30	$ED_{16-30}$	10	10	yrs	1011.11.21.	$+(MAF_I \times ED_{6-16} \times ADAF_{6-16}) + (MAF_I \times ED_{16-26} \times ADAF_{16-26})/$
Exposure Duration, child	$ED_c$	6	6	yrs		
Exposure Duration, resident	$ED_r$	26	26	yrs	Vinyl Chloride:	TR
Exposure Frequency, resident	$EF_r$	350	350	days/yr		$IUR + \left(\frac{IUR \times EF_r \times ED_r \times ET_r \times \frac{1  day}{24  hour}}{AT_c \times 365 \frac{days}{vegr}}\right)$
Exposure Time, resident	$ET_r$	24	24	hours/day		$IUR \times EF_r \times ED_r \times ET_r \times \frac{1}{24} \frac{uuy}{hour}$
Inhalation Unit-Risk Factor	IUR	chemic	cal-specific	$(\mu g/m^3)^{-1}$		$\frac{10R + \sqrt{\frac{217080}{AT}}}{AT \times 365} $
Mutagenic adjustment factor, inhalation	$MAF_{I}$	0.244	0.244	dimensionless		$\frac{AT_c \times 303}{year}$
Inhalation Reference Concentration	RfC	chemic	cal-specific	$\mu g/m^3$	Noncancer Hazard:	THO WAT WAS day An hour
(Regional) Screening Level	(R)SL	deriv	red herein			$(R)SL = \frac{THQ \times AT_{nc,c} \times 365 \frac{day}{year} \times 24 \frac{hour}{day}}{\frac{1}{RfC} \times ED_c \times EF_r \times ET_r}$
Target Hazard Quotient	THQ	1	1	dimensionless		$\frac{1}{2000} \times ED_0 \times EE_0 \times EE_0$
Target Risk	TR	1.0E-06	1.0E-06			RfC ~ Blr ~ Blr

		USEPA Regional Screening Levels for Residential Air				DTSC Screening Levels for Residential Air						
	_	IUR	USEPA RSL:Cancer	RfC	USEPA RSL: Noncancer	IUR	DTSC-SL: Cancer	RfC	DTSC-SL: Noncancer			
Analyte	Mutagen?	$(\mu g/m^3)^{-1}$	$(\mu g/m^3)$	$(\mu g/m^3)$	$(\mu g/m^3)$	$(\mu g/m^3)^{-1}$	$(\mu g/m^3)$	$(\mu g/m^3)$	$(\mu g/m^3)$			
Terbufos								1.00E-01	1.04E-01			
Tetrachlorobenzene, 1,2,4,5-								1.20E+00	1.25E+00			
Tetrachloroethane, 1,1,1,2-		7.40E-06	3.79E-01			7.40E-06	3.79E-01	1.20E+02	1.25E+02			
Tetrachloroethane, 1,1,2,2-		5.80E-05	4.84E-02			5.80E-05	4.84E-02	8.00E+01	8.34E+01			
Tetrachloroethylene		2.60E-07	1.08E+01	4.00E+01	4.17E+01	5.90E-06	4.76E-01	3.50E+01	3.65E+01			
Tetrachlorotoluene, p- alpha, alpha, alpha-						5.00E-03	5.62E-04					
Thallium Acetate								2.40E-02	2.50E-02			
Thallium Carbonate								8.00E-02	8.34E-02			
Toluene				5.00E+03	5.21E+03			3.00E+02	3.13E+02			
Toxaphene		3.20E-04	8.77E-03			3.40E-04	8.26E-03					
Tri-n-butyltin								1.20E+00	1.25E+00			
Triallate								5.20E+01	5.42E+01			
Tribromobenzene, 1,2,4-								2.00E+01	2.09E+01			
Trichlorobenzene, 1,2,3-								3.20E+00	3.34E+00			
Trichlorobenzene, 1,2,4-				2.00E+00	2.09E+00	7.25E-06	3.87E-01	2.00E+00	2.09E+00			
Trichloroethane, 1,1,1-				5.00E+03	5.21E+03			1.00E+03	1.04E+03			
Trichlorofluoromethane								1.20E+03	1.25E+03			
Trichlorophenol, 2,4,6-		3.10E-06	9.06E-01			2.00E-05	1.40E-01					

Table C-2. USEPA RSLs and DTSC-SLs for Inhalation of Residential Air

Definition	Variable	USEPA Value	DTSC Value		RSL Derivation:				
Age-dependent Adjustment Factor, 0-2	$ADAF_{0-2}$	10	10	dimensionless	Carcinogens:	$TR \times AT_c \times$	$365 \frac{day}{day} \times 24 \frac{hour}{day}$		
Age-dependent Adjustment Factor, 2-6	$ADAF_{2-6}$	3	3	dimensionless		$(R)SL = \frac{TR \times AT_c \times TR}{IUR \times R}$	ED VEE VET		
Age-dependent Adjustment Factor, 6-16	$ADAF_{6-16}$	3	3	dimensionless		IUK X	$ED_T \times EF_T \times EF_T$		
Age-dependent Adjustment Factor, 16-30	$ADAF_{16-30}$	1	1	dimensionless	Mutagens:	$TR \times AT_c \times$	$365 \frac{day}{year} \times 24 \frac{hour}{day}$ $ADAF_{0-2}) + (ED_{2-6} \times IUR)$ $DAF_{6-16}) + (ED_{16-26} \times IUR)$		
Averaging Time, carcinogens	$AT_c$	70	70	yrs	(R)SL =	r (FD × IIID ×	yeui uuy ADAF \⊥(FD ∨ IIID \	<i>∨ 1D1E</i> ) 1	
Averaging Time, noncarcinogens, child	$AT_{nc,c}$	6	6	yrs	$EF_r \times ET_r \times$	$\langle   +(FD_1, \times IIIR \times A) \rangle$	$DAF_{10-2}$ ) + $(ED_{2-6} \times IOK)$	$R \times ADAF$	
COPC Concentration in indoor air	$C_{indoorair}$	cher	nical-specific	$\mu g/m^3$		$[ (LD_{6-16} \times IOR \times A) ]$	DAI 6-16)   (LD <sub>16-26</sub> × 101	1 × ADAI <sub>16-26</sub> )	
Carcinogenic adjustment factor, inhalation	$CAF_{I}$	0.756	0.756	dimensionless	Trichloroethene:				
Exposure Duration, child 0-2	$ED_{0-2}$	2	2	yrs		TD	VAT V265 day V21 hou	r	
Exposure Duration, child 2-6	$ED_{2-6}$	4	4	yrs	(R)SL =	1 π	$\times H_c \times 303 {year} \times 24 {day}$	<del>y</del>	
Exposure Duration, child 6-16	$ED_{6-16}$	10	10	yrs	$IIIR \times FF_{-} \times FT_{-}:$	$\times \left[ (CAF_t \times ED_u) + \left( \right) \right]$	$ \times AT_c \times 365 \frac{day}{year} \times 24 \frac{how}{day} $ $ (MAF_I \times ED_{0-2} \times ADAF_{0-2} \times MAF_I \times ED_{6-16} \times ADAF_{6-16} $	$_{2})+(MAF_{I}\times ED_{2-6})$	$\times ADAF_{2-6}$ )
Exposure Duration, adult 16-30	$ED_{16-30}$	10	10	yrs	TOR A DIT A DIT	+(	$MAF_I \times ED_{6-16} \times ADAF_{6-16}$	$_{6})+(MAF_{I}\times ED_{16-2})$	$_{26} \times ADAF_{16-26})$
Exposure Duration, child	$ED_c$	6	6	yrs					
Exposure Duration, resident	$ED_r$	26	26	yrs	Vinyl Chloride:		TR		
Exposure Frequency, resident	$EF_r$	350	350	days/yr		$(R)SL = \phantom{AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA$	$\frac{1 R}{R \times EF_r \times ED_r \times ET_r \times \frac{1}{24} \frac{d}{h}}$ $AT_c \times 365 \frac{days}{vear}$	day \	
Exposure Time, resident	$ET_r$	24	24	hours/day		IU	$R \times EF_r \times ED_r \times ET_r \times \frac{1}{24} \frac{a}{h}$	hour	
Inhalation Unit-Risk Factor	IUR	cher	nical-specific	$(\mu g/m^3)^{-1}$		IUR + ( —	AT × 265 days		
Mutagenic adjustment factor, inhalation	$MAF_{I}$	0.244	0.244	dimensionless		\	$\frac{AI_c \times 303}{year}$	/	
Inhalation Reference Concentration	RfC	cher	nical-specific	$\mu g/m^3$	Noncancer Hazard:	THO AT	day hour		
(Regional) Screening Level	(R)SL	de	rived herein			$IHU \times AI_n$	$_{c,c} \times 365 \frac{1}{year} \times 24 \frac{1}{day}$		
Target Hazard Quotient	THQ	1	1	dimensionless		$\frac{1}{1}$	$\frac{day}{day} \times 365 \frac{day}{year} \times 24 \frac{hour}{day}$ $\times ED_c \times EF_r \times ET_r$		
Target Risk	TR	1.0E-06	1.0E-06			RfC	A B D C A B I T A B I T		
	_	1	USEPA Regional Scree	ning Levels for R	Residential Air		DTSC Screening Levels	s for Residential Air	
		IUR	USEPA RSL:Cancer	RfC	<b>USEPA RSL: Noncancer</b>	IUR	DTSC-SL: Cancer	RfC	<b>DTSC-SL:</b> Noncancer
Analyte	Mutagen?	$(\mu g/m^3)^{-1}$	$(\mu g/m^3)$	$(\mu g/m^3)$	$(\mu g/m^3)$	$(\mu g/m^3)^{-1}$	$(\mu g/m^3)$	$(\mu g/m^3)$	$(\mu g/m^3)$
Trichloropropane, 1,1,2-								2.00E+01	2.09E+01
Trichloropropane, 1,2,3-	M			3.00E-01	3.13E-01	7.50E-03	1.35E-04	3.00E-01	3.13E-01
Trifluralin						1.93E-06	1.46E+00	3.00E+01	3.13E+01
·		·	·	·					

			USEPA Regional Screening Levels for Residential Air				DTSC Screening Level	s for Residential Air	
	_	IUR	USEPA RSL:Cancer	RfC	USEPA RSL: Noncancer	IUR	DTSC-SL: Cancer	RfC	DTSC-SL: Noncancer
Analyte	Mutagen?	$(\mu g/m^3)^{-1}$	$(\mu g/m^3)$	$(\mu g/m^3)$	$(\mu g/m^3)$	$(\mu g/m^3)^{-1}$	$(\mu g/m^3)$	$(\mu g/m^3)$	$(\mu g/m^3)$
Trichloropropane, 1,1,2-								2.00E+01	2.09E+01
Trichloropropane, 1,2,3-	M			3.00E-01	3.13E-01	7.50E-03	1.35E-04	3.00E-01	3.13E-01
Trifluralin						1.93E-06	1.46E+00	3.00E+01	3.13E+01
Trimethylbenzene, 1,3,5-								4.00E+01	4.17E+01
Trimethylpentene, 2,4,4-								4.00E+01	4.17E+01
Vernolate								4.00E+00	4.17E+00
Vinyl Chloride	M (VC)	4.40E-06	1.68E-01	1.00E+02	1.04E+02	7.80E-05	9.45E-03	1.00E+02	1.04E+02
Additional Analytes									
Beryllium Sulfate		2.40E-03	1.17E-03	2.00E-02	2.09E-02	8.60E-01	3.26E-06	7.00E-03	7.30E-03
Dichlorobenzene, 1,3-								1.20E+02	1.25E+02
Methylcyclohexane								6.00E+03	6.26E+03

<sup>&</sup>quot;--" = no value

Table C-3. USEPA RSLs and DTSC-SLs for Inhalation of Commercial/Industrial Air

Definition	Variable	USEPA Value	DTSC Value		Risk and Hazard Equations	
Averaging Time, carcinogens	$AT_c$	70	70	yrs	Cancer Risk:	
Averaging Time, noncarcinogens, worker	$AT_{nc,w}$	25	25	yrs		$TR \times 4T \times 365 \frac{day}{day} \times 24 \frac{hour}{day}$
COPC Concentration in indoor air	$C_{indoorair}$	chemic	cal-specific	$\mu g/m^3$		$(R)SL = \frac{TR \times AT_c \times 365 \frac{day}{year} \times 24 \frac{hour}{day}}{IUR \times ED_w \times EF_w \times ET_w}$
Exposure Duration, worker	$\mathrm{ED}_{\mathrm{w}}$	25	25	yrs		$IUR \times ED_w \times EF_w \times ET_w$
Exposure Frequency, worker	$EF_{w}$	250	250	days/yr		
Exposure Time, worker	$ET_{\mathrm{w}}$	8	8	hours/day		
Inhalation Unit-Risk Factor	IUR	chemic	cal-specific	$(\mu g/m^3)^{-1}$		
Inhalation Reference Concentration	RfC	chemic	cal-specific	$\mu g/m^3$	Noncancer Hazard:	day hour
(Regional) Screening Level	(R)SL	deriv	ed herein	$\mu g/m^3$		$THQ \times AT_{nc,w} \times 365 \frac{day}{year} \times 24 \frac{day}{day}$
Target Hazard Quotient	THQ	1	1	dimensionless		$(R)SL = \frac{THQ \times AT_{nc,w} \times 365 \frac{day}{year} \times 24 \frac{hour}{day}}{\frac{1}{RfC} \times ED_w \times EF_w \times ET_w}$
Target Risk	TR	1.0E-06	1.0E-06	dimensionless		$\overline{RfC} \times ED_W \times EF_W \times EI_W$

	US	SEPA Regional Screening Le	evel for Commerc	cial/Industrial Air		DTSC Screening Level for Commercial/Industrial Air				
	IUR	USEPA RSL: Cancer	RfC	USEPA RSL: Noncancer	IUR	DTSC-SL: Cancer	RfC	DTSC-SL: Noncancer		
Analyte	(µg/m3)-1	$(\mu g/m3)$	$(\mu g/m3)$	$(\mu g/m3)$	$(\mu g/m3)-1$	$(\mu g/m3)$	$(\mu g/m3)$	$(\mu g/m3)$		
USEPA RSL Analytes										
Acetaldehyde	2.20E-06	5.57E+00	9.00E+00	3.94E+01	2.70E-06	4.54E+00	9.00E+00	3.94E+01		
Acetophenone							4.00E+02	1.75E+03		
Acrylamide	1.00E-04	1.23E-01	6.00E+00	2.63E+01	1.30E-03	9.43E-03	6.00E+00	2.63E+01		
Acrylonitrile	6.80E-05	1.80E-01	2.00E+00	8.76E+00	2.90E-04	4.23E-02	2.00E+00	8.76E+00		
Aldrin	4.90E-03	2.50E-03			4.90E-03	2.50E-03	1.20E-01	5.26E-01		
Arsine			5.00E-02	2.19E-01			1.50E-02	6.57E-02		
Benfluralin							1.20E+03	5.26E+03		
Benzaldehyde							4.00E+02	1.75E+03		
Benzene	7.80E-06	1.57E+00	3.00E+01	1.31E+02	2.90E-05	4.23E-01	3.00E+00	1.31E+01		
Benzenethiol		-					4.00E+00	1.75E+01		
Benzidine	6.70E-02	1.83E-04			1.40E-01	8.76E-05				
Benzotrichloride					3.25E-03	3.77E-03				
Beryllium and compounds	2.40E-03	5.11E-03	2.00E-02	8.76E-02	2.40E-03	5.11E-03	7.00E-03	3.07E-02		
Biphenyl, 1,1'-		-	4.00E-01	1.75E+00	2.00E-06	6.13E+00	4.00E-01	1.75E+00		
Bis(2-chloro-1-methylethyl) ether							1.60E+02	7.01E+02		
Bis(2-chloroethyl)ether	3.30E-04	3.72E-02			7.10E-04	1.73E-02				
Boron Trifluoride			1.30E+01	5.69E+01			7.00E-01	3.07E+00		
Bromodichloromethane	3.70E-05	3.31E-01			3.70E-05	3.31E-01	8.00E+01	3.50E+02		
Bromoform	1.10E-06	1.11E+01			1.10E-06	1.11E+01	8.00E+01	3.50E+02		
Bromophos							2.00E+01	8.76E+01		
Bromoxynil Octanoate							8.00E+01	3.50E+02		
Butadiene, 1,3-	3.00E-05	4.09E-01	2.00E+00	8.76E+00	1.70E-04	7.21E-02	2.00E+00	8.76E+00		
Butanol, N-							4.00E+02	1.75E+03		
Butylate							2.00E+02	8.76E+02		
Butylbenzene, n-							2.00E+02	8.76E+02		
Butylbenzene, sec-							4.00E+02	1.75E+03		
Butylbenzene, tert-							4.00E+02	1.75E+03		

Table C-3. USEPA RSLs and DTSC-SLs for Inhalation of Commercial/Industrial Air

Definition	Variable	USEPA Value	DTSC Value		Risk and Hazard Equations	
Averaging Time, carcinogens	$AT_c$	70	70	yrs	Cancer Risk:	
Averaging Time, noncarcinogens, worker	$AT_{nc,w}$	25	25	yrs		$TR \times AT \times 365 \frac{day}{day} \times 24 \frac{hour}{day}$
COPC Concentration in indoor air	$C_{\text{indoor air}}$	chemic	cal-specific	$\mu g/m^3$		$(R)SL = \frac{TR \times AT_c \times 365 \frac{day}{year} \times 24 \frac{hour}{day}}{IUR \times ED_w \times EF_w \times ET_w}$
Exposure Duration, worker	$\mathrm{ED}_{\mathrm{w}}$	25	25	yrs		$IUR \times ED_w \times EF_w \times ET_w$
Exposure Frequency, worker	$\mathrm{EF}_{\mathrm{w}}$	250	250	days/yr		
Exposure Time, worker	$\mathrm{ET_w}$	8	8	hours/day		
Inhalation Unit-Risk Factor	IUR	chemic	cal-specific	$(\mu g/m^3)^{-1}$		
Inhalation Reference Concentration	RfC	chemic	cal-specific	$\mu g/m^3$	Noncancer Hazard:	day hour
(Regional) Screening Level	(R)SL	deriv	ed herein	$\mu g/m^3$		$THQ \times AT_{nc,w} \times 365 \frac{ds}{year} \times 24 \frac{ds}{day}$
Target Hazard Quotient	THQ	1	1	dimensionless		$(R)SL = \frac{THQ \times AT_{nc,w} \times 365 \frac{day}{year} \times 24 \frac{hour}{day}}{\frac{1}{RfC} \times ED_w \times EF_w \times ET_w}$
Target Risk	TR	1.0E-06	1.0E-06	dimensionless		$\overline{RfC} \wedge ED_W \wedge EF_W \wedge EF_W$

	US	SEPA Regional Screening Le	vel for Commerc	ial/Industrial Air	]	DTSC Screening Level for Commercial/Industrial Air				
	IUR	USEPA RSL: Cancer	RfC	USEPA RSL: Noncancer	IUR	DTSC-SL: Cancer	RfC	DTSC-SL: Noncancer		
Analyte	$(\mu g/m3)-1$	$(\mu g/m3)$	$(\mu g/m3)$	$(\mu g/m3)$	$(\mu g/m3)-1$	$(\mu g/m3)$	$(\mu g/m3)$	$(\mu g/m3)$		
Cadmium (Water)	1.80E-03	6.81E-03	1.00E-02	4.38E-02	4.20E-03	2.92E-03	1.00E-02	4.38E-02		
Carbon Tetrachloride	6.00E-06	2.04E+00	1.00E+02	4.38E+02	4.20E-05	2.92E-01	4.00E+01	1.75E+02		
Chloral Hydrate							4.00E+02	1.75E+03		
Chlordane	1.00E-04	1.23E-01	7.00E-01	3.07E+00	3.40E-04	3.61E-02	7.00E-01	3.07E+00		
Chloroacetaldehyde, 2-					6.75E-05	1.82E-01				
Chlorobenzilate	3.10E-05	3.96E-01			7.80E-05	1.57E-01				
Chlorobutane, 1-							1.60E+02	7.01E+02		
Chloroethanol, 2-							8.00E+01	3.50E+02		
Chlorophenol, 2-							2.00E+01	8.76E+01		
Chlorotoluene, o-							8.00E+01	3.50E+02		
Chlorotoluene, p-							8.00E+01	3.50E+02		
Crotonaldehyde, trans-					4.75E-04	2.58E-02	4.00E+00	1.75E+01		
Cyanides										
~Cyanogen							4.00E+00	1.75E+01		
~Cyanogen Bromide							3.60E+02	1.58E+03		
~Cyanogen Chloride							2.00E+02	8.76E+02		
~Thiocyanic Acid							8.00E-01	3.50E+00		
Cyclohexylamine							8.00E+02	3.50E+03		
Dibenzothiophene							4.00E+01	1.75E+02		
Dibromobenzene, 1,3-							1.60E+00	7.01E+00		
Dibromobenzene, 1,4-							4.00E+01	1.75E+02		
Dibromochloromethane					2.10E-05	5.84E-01	8.00E+01	3.50E+02		
Dibromoethane, 1,2-	6.00E-04	2.04E-02	9.00E+00	3.94E+01	6.00E-04	2.04E-02	8.00E-01	3.50E+00		
Dichloroethane, 1,1-	1.60E-06	7.67E+00			1.60E-06	7.67E+00	8.00E+02	3.50E+03		
Dichloroethylene, 1,1-			2.00E+02	8.76E+02			7.00E+01	3.07E+02		
Dichloroethylene, 1,2-cis-							8.00E+00	3.50E+01		
Dichloroethylene, 1,2-trans-							8.00E+01	3.50E+02		

Table C-3. USEPA RSLs and DTSC-SLs for Inhalation of Commercial/Industrial Air

Definition	Variable	USEPA Value	DTSC Value		Risk and Hazard Equations	
Averaging Time, carcinogens	$AT_c$	70	70	yrs	Cancer Risk:	
Averaging Time, noncarcinogens, worker	$AT_{nc,w}$	25	25	yrs		$TR \times AT \times 365 \frac{day}{day} \times 24 \frac{hour}{day}$
COPC Concentration in indoor air	$C_{indoorair}$	chemic	al-specific	$\mu g/m^3$		$(R)SL = \frac{TR \times AT_c \times 365 \frac{day}{year} \times 24 \frac{hour}{day}}{IUR \times ED_w \times EF_w \times ET_w}$
Exposure Duration, worker	$\mathrm{ED}_{\mathrm{w}}$	25	25	yrs		$IUR \times ED_w \times EF_w \times ET_w$
Exposure Frequency, worker	$EF_{\mathrm{w}}$	250	250	days/yr		
Exposure Time, worker	$\mathrm{ET_w}$	8	8	hours/day		
Inhalation Unit-Risk Factor	IUR	chemic	al-specific	$(\mu g/m^3)^{-1}$		
Inhalation Reference Concentration	RfC	chemic	al-specific	$\mu g/m^3$	Noncancer Hazard:	day hour
(Regional) Screening Level	(R)SL	deriv	ed herein	$\mu g/m^3$		$THQ \times AT_{nc,w} \times 365 \frac{day}{year} \times 24 \frac{day}{day}$
Target Hazard Quotient	THQ	1	1	dimensionless		$(R)SL = \frac{1}{1 \times FD \times FE \times FT}$
Target Risk	TR	1.0E-06	1.0E-06	dimensionless		$\overline{RfC} \wedge ED_W \wedge EF_W \wedge EF_W$
	_	1 1.0E-06	1 1.0E-06			$(R)SL = \frac{THQ \times AT_{nc,w} \times 365 \frac{day}{year} \times 24 \frac{hour}{day}}{\frac{1}{RfC} \times ED_w \times EF_w \times ET_w}$

	US	SEPA Regional Screening Le	vel for Commerc	cial/Industrial Air		DTSC Screening Level for Commercial/Industrial Air					
	IUR	USEPA RSL: Cancer	RfC	USEPA RSL: Noncancer	IUR	DTSC-SL: Cancer	RfC	DTSC-SL: Noncancer			
Analyte	(μg/m3)-1	$(\mu g/m3)$	$(\mu g/m3)$	(µg/m3)	$(\mu g/m3)-1$	$(\mu g/m3)$	$(\mu g/m3)$	$(\mu g/m3)$			
Dichloropropane, 1,3-							8.00E+01	3.50E+02			
Dichloropropene, 1,3-	4.00E-06	3.07E+00	2.00E+01	8.76E+01	1.60E-05	7.67E-01	2.00E+01	8.76E+01			
Dieldrin	4.60E-03	2.67E-03			4.60E-03	2.67E-03	2.00E-01	8.76E-01			
Diethylformamide							4.00E+00	1.75E+01			
Diisopropyl Methylphosphonate							3.20E+02	1.40E+03			
Dimethylaniline, N,N-							8.00E+00	3.50E+01			
Dioxane, 1,4-	5.00E-06	2.45E+00	3.00E+01	1.31E+02	7.70E-06	1.59E+00	3.00E+01	1.31E+02			
Dioxins											
~Hexachlorodibenzo-p-dioxin, Mixture	1.30E+00	9.43E-06			3.80E+00	3.23E-06					
Diphenylhydrazine, 1,2-	2.20E-04	5.57E-02			2.50E-04	4.91E-02					
Dithiane, 1,4-							4.00E+01	1.75E+02			
EPTC							1.00E+02	4.38E+02			
Endosulfan							2.40E+01	1.05E+02			
Epichlorohydrin	1.20E-06	1.02E+01	1.00E+00	4.38E+00	2.30E-05	5.33E-01	1.00E+00	4.38E+00			
Ethoxyethanol, 2-			2.00E+02	8.76E+02			7.00E+01	3.07E+02			
Ethyl Chloride (Chloroethane)			1.00E+04	4.38E+04	1.18E-06	1.04E+01	1.00E+04	4.38E+04			
Ethyl Ether							8.00E+02	3.50E+03			
Ethylene Diamine							3.60E+02	1.58E+03			
Formaldehyde	1.30E-05	9.43E-01	9.80E+00	4.29E+01	1.30E-05	9.43E-01	9.00E+00	3.94E+01			
Furans											
~Dibenzofuran							4.00E+00	1.75E+01			
~Furan							4.00E+00	1.75E+01			
Guanidine							4.00E+01	1.75E+02			
Heptachlor	1.30E-03	9.43E-03			1.30E-03	9.43E-03	2.00E+00	8.76E+00			
Heptachlor Epoxide	2.60E-03	4.72E-03			2.60E-03	4.72E-03	5.20E-02	2.28E-01			
Hexabromobenzene							8.00E+00	3.50E+01			
Hexachlorobenzene	4.60E-04	2.67E-02			5.10E-04	2.40E-02	3.20E+00	1.40E+01			
Hexachlorobutadiene	2.20E-05	5.57E-01			2.20E-05	5.57E-01	4.00E+00	1.75E+01			

Table C-3. USEPA RSLs and DTSC-SLs for Inhalation of Commercial/Industrial Air

Variable	USEPA Value	DTSC Value		Risk and Hazard Equations	
$AT_c$	70	70	yrs	Cancer Risk:	
$AT_{nc,w}$	25	25	yrs		$TR \times AT \times 365 \frac{day}{day} \times 24 \frac{hour}{day}$
$C_{indoorair}$	chemica	al-specific	$\mu g/m^3$		$(R)SL = \frac{TR \times AT_c \times 365 \frac{day}{year} \times 24 \frac{hour}{day}}{IUR \times ED_w \times EF_w \times ET_w}$
$\mathrm{ED}_{\mathrm{w}}$	25	25	yrs		$IUR \times ED_w \times EF_w \times ET_w$
$EF_{w}$	250	250	days/yr		
$\mathrm{ET}_{\mathrm{w}}$	8	8	hours/day		
IUR	chemica	al-specific	$(\mu g/m^3)^{-1}$		
RfC	chemica	al-specific	$\mu g/m^3$	Noncancer Hazard:	day hour
(R)SL	derive	d herein	$\mu g/m^3$		$THQ \times AT_{nc,w} \times 365 \frac{day}{year} \times 24 \frac{day}{day}$
THQ	1	1	dimensionless		$(R)SL = \frac{THQ \times AT_{nc,w} \times 365 \frac{day}{year} \times 24 \frac{hour}{day}}{\frac{1}{RfC} \times ED_w \times EF_w \times ET_w}$
TR	1.0E-06	1.0E-06	dimensionless		$\overline{RfC} \wedge ED_W \wedge EF_W \wedge EI_W$
<u> </u>	AT <sub>c</sub> AT <sub>nc,w</sub> C <sub>indoor air</sub> ED <sub>w</sub> EF <sub>w</sub> IUR RfC (R)SL THQ	$\begin{array}{ccccc} AT_c & 70 \\ AT_{nc,w} & 25 \\ C_{indoorair} & chemica \\ ED_w & 25 \\ EF_w & 250 \\ ET_w & 8 \\ IUR & chemica \\ RfC & chemica \\ (R)SL & derive \\ THQ & 1 \\ \end{array}$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$

	US	SEPA Regional Screening Le	vel for Commerc	cial/Industrial Air		DTSC Screening Level for	· Commercial/In	dustrial Air
	IUR	USEPA RSL: Cancer	RfC	USEPA RSL: Noncancer	IUR	DTSC-SL: Cancer	RfC	DTSC-SL: Noncancer
Analyte	(μg/m3)-1	$(\mu g/m3)$	$(\mu g/m3)$	$(\mu g/m3)$	$(\mu g/m3)-1$	$(\mu g/m3)$	$(\mu g/m3)$	$(\mu g/m3)$
Hexachlorocyclohexane, Alpha-	1.80E-03	6.81E-03			1.80E-03	6.81E-03	3.20E+01	1.40E+02
Hexachlorocyclohexane, Gamma- (Lindane)	3.10E-04	3.96E-02			3.10E-04	3.96E-02	1.20E+00	5.26E+00
Hexachlorocyclohexane, Technical	5.10E-04	2.40E-02			1.10E-03	1.11E-02		
Hydrogen Chloride			2.00E+01	8.76E+01			9.00E+00	3.94E+01
Isobutyl Alcohol							1.20E+03	5.26E+03
Isopropalin							6.00E+01	2.63E+02
Lead Compounds								
~Tetraethyl Lead							4.00E-04	1.75E-03
Lewisite							2.00E-02	8.76E-02
Mercury Compounds								
~Mercuric Chloride (and other Mercury salts)			3.00E-01	1.31E+00			3.00E-02	1.31E-01
~Mercury (elemental)			3.00E-01	1.31E+00			3.00E-02	1.31E-01
Merphos							1.20E-01	5.26E-01
Methanol			2.00E+04	8.76E+04			4.00E+03	1.75E+04
Methoxychlor							2.00E+01	8.76E+01
Methyl Acetate				<del></del>			4.00E+03	1.75E+04
Methylene Chloride	1.00E-08	1.23E+03	6.00E+02	2.63E+03	1.00E-06	1.23E+01	4.00E+02	1.75E+03
Methylstyrene, Alpha-				<del></del>			2.80E+02	1.23E+03
Mineral oils							1.20E+04	5.26E+04
Mirex	5.10E-03	2.40E-03			5.10E-03	2.40E-03	8.00E-01	3.50E+00
Naled							8.00E+00	3.50E+01
Naphthylamine, 2-					5.10E-04	2.40E-02		
Nickel Refinery Dust	2.40E-04	5.11E-02	1.40E-02	6.13E-02	2.60E-04	4.72E-02	1.40E-02	6.13E-02
Nickel Soluble Salts	2.60E-04	4.72E-02	9.00E-02	3.94E-01	2.60E-04	4.72E-02	1.40E-02	6.13E-02
Nickel Subsulfide	4.80E-04	2.56E-02	1.40E-02	6.13E-02	4.90E-04	2.50E-02	1.40E-02	6.13E-02
Nitroso-di-N-butylamine, N-	1.60E-03	7.67E-03			3.10E-03	3.96E-03		
Nitrotoluene, o-					5.50E-05	2.23E-01	3.60E+00	1.58E+01
Pebulate							2.00E+02	8.76E+02

Table C-3. USEPA RSLs and DTSC-SLs for Inhalation of Commercial/Industrial Air

Variable	USEPA Value	DTSC Value		Risk and Hazard Equations	
$AT_c$	70	70	yrs	Cancer Risk:	
$AT_{nc,w}$	25	25	yrs		$TR \times AT \times 365 \frac{day}{day} \times 24 \frac{hour}{day}$
$C_{indoorair}$	chemica	al-specific	$\mu g/m^3$		$(R)SL = \frac{TR \times AT_c \times 365 \frac{day}{year} \times 24 \frac{hour}{day}}{IUR \times ED_w \times EF_w \times ET_w}$
$\mathrm{ED}_{\mathrm{w}}$	25	25	yrs		$IUR \times ED_w \times EF_w \times ET_w$
$EF_{w}$	250	250	days/yr		
$\mathrm{ET}_{\mathrm{w}}$	8	8	hours/day		
IUR	chemica	al-specific	$(\mu g/m^3)^{-1}$		
RfC	chemica	al-specific	$\mu g/m^3$	Noncancer Hazard:	day hour
(R)SL	derive	d herein	$\mu g/m^3$		$THQ \times AT_{nc,w} \times 365 \frac{day}{year} \times 24 \frac{day}{day}$
THQ	1	1	dimensionless		$(R)SL = \frac{THQ \times AT_{nc,w} \times 365 \frac{day}{year} \times 24 \frac{hour}{day}}{\frac{1}{RfC} \times ED_w \times EF_w \times ET_w}$
TR	1.0E-06	1.0E-06	dimensionless		$\overline{RfC} \wedge ED_W \wedge EF_W \wedge EI_W$
<u> </u>	AT <sub>c</sub> AT <sub>nc,w</sub> C <sub>indoor air</sub> ED <sub>w</sub> EF <sub>w</sub> IUR RfC (R)SL THQ	$\begin{array}{ccccc} AT_c & 70 \\ AT_{nc,w} & 25 \\ C_{indoorair} & chemica \\ ED_w & 25 \\ EF_w & 250 \\ ET_w & 8 \\ IUR & chemica \\ RfC & chemica \\ (R)SL & derive \\ THQ & 1 \\ \end{array}$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$

	US	SEPA Regional Screening Lev	vel for Commerc	cial/Industrial Air	]	DTSC Screening Level for	Commercial/Inc	dustrial Air
	IUR	USEPA RSL: Cancer	RfC	USEPA RSL: Noncancer	IUR	DTSC-SL: Cancer	RfC	DTSC-SL: Noncancer
Analyte	$(\mu g/m3)-1$	$(\mu g/m3)$	$(\mu g/m3)$	$(\mu g/m3)$	$(\mu g/m3)-1$	$(\mu g/m3)$	$(\mu g/m3)$	$(\mu g/m3)$
Pentabromodiphenyl Ether							8.00E+00	3.50E+01
Pentachlorobenzene							3.20E+00	1.40E+01
Pentachloroethane					2.25E-05	5.45E-01		
Pentachloronitrobenzene					6.50E-05	1.89E-01	1.20E+01	5.26E+01
Perfluorobutane Sulfonate							8.00E+01	3.50E+02
Phosphoric Acid			1.00E+01	4.38E+01			7.00E+00	3.07E+01
Phosphorus, White							8.00E-02	3.50E-01
Phthalates								
~Dimethylterephthalate							4.00E+02	1.75E+03
Polychlorinated Biphenyls (PCBs)								
~Aroclor 1016	2.00E-05	6.13E-01			2.00E-05	6.13E-01	2.80E-01	1.23E+00
~Aroclor 1254	5.71E-04	2.15E-02			5.71E-04	2.15E-02	8.00E-02	3.50E-01
~Aroclor 5460							2.40E+00	1.05E+01
Polynuclear Aromatic Hydrocarbons (PAHs)								
~Acenaphthene							2.40E+02	1.05E+03
~Anthracene							1.20E+03	5.26E+03
~Chloronaphthalene, Beta-							3.20E+02	1.40E+03
~Fluorene							1.60E+02	7.01E+02
~Methylnaphthalene, 1-					7.25E-06	1.69E+00	2.80E+02	1.23E+03
~Methylnaphthalene, 2-							1.60E+01	7.01E+01
~Pyrene							1.20E+02	5.26E+02
Profluralin							2.40E+01	1.05E+02
Propargyl Alcohol							8.00E+00	3.50E+01
Pyridine							4.00E+00	1.75E+01
Ronnel							2.00E+02	8.76E+02
Styrene			1.00E+03	4.38E+03			9.00E+02	3.94E+03
Sulfurous acid, 2-chloroethyl 2-[4-(1,1-dimethylethyl)phenoxy]-1-methylethyl es	7.10E-06	1.73E+00			8.60E-06	1.43E+00		
Terbufos							1.00E-01	4.38E-01

Table C-3. USEPA RSLs and DTSC-SLs for Inhalation of Commercial/Industrial Air

Definition	Variable	USEPA Value	DTSC Value		Risk and Hazard Equations	
Averaging Time, carcinogens	$AT_c$	70	70	yrs	Cancer Risk:	
Averaging Time, noncarcinogens, worker	$AT_{nc,w}$	25	25	yrs		$TR \times AT \times 365 \frac{day}{day} \times 24 \frac{hour}{day}$
COPC Concentration in indoor air	$C_{\text{indoor air}}$	chemic	cal-specific	$\mu g/m^3$		$(R)SL = \frac{TR \times AT_c \times 365 \frac{day}{year} \times 24 \frac{hour}{day}}{IUR \times ED_w \times EF_w \times ET_w}$
Exposure Duration, worker	$\mathrm{ED}_{\mathrm{w}}$	25	25	yrs		$IUR \times ED_w \times EF_w \times ET_w$
Exposure Frequency, worker	$\mathrm{EF}_{\mathrm{w}}$	250	250	days/yr		
Exposure Time, worker	$\mathrm{ET_w}$	8	8	hours/day		
Inhalation Unit-Risk Factor	IUR	chemic	cal-specific	$(\mu g/m^3)^{-1}$		
Inhalation Reference Concentration	RfC	chemic	cal-specific	$\mu g/m^3$	Noncancer Hazard:	day hour
(Regional) Screening Level	(R)SL	deriv	ed herein	$\mu g/m^3$		$THQ \times AT_{nc,w} \times 365 \frac{ds}{year} \times 24 \frac{ds}{day}$
Target Hazard Quotient	THQ	1	1	dimensionless		$(R)SL = \frac{THQ \times AT_{nc,w} \times 365 \frac{day}{year} \times 24 \frac{hour}{day}}{\frac{1}{RfC} \times ED_w \times EF_w \times ET_w}$
Target Risk	TR	1.0E-06	1.0E-06	dimensionless		$\overline{RfC} \wedge ED_W \wedge EF_W \wedge EF_W$

	US	SEPA Regional Screening Le	vel for Commerc	cial/Industrial Air	]	DTSC Screening Level for	r Commercial/In	dustrial Air
	IUR	USEPA RSL: Cancer	RfC	USEPA RSL: Noncancer	IUR	DTSC-SL: Cancer	RfC	DTSC-SL: Noncancer
Analyte	(μg/m3)-1	$(\mu g/m3)$	$(\mu g/m3)$	$(\mu g/m3)$	$(\mu g/m3)-1$	$(\mu g/m3)$	$(\mu g/m3)$	$(\mu g/m3)$
Tetrachlorobenzene, 1,2,4,5-							1.20E+00	5.26E+00
Tetrachloroethane, 1,1,1,2-	7.40E-06	1.66E+00			7.40E-06	1.66E+00	1.20E+02	5.26E+02
Tetrachloroethane, 1,1,2,2-	5.80E-05	2.11E-01			5.80E-05	2.11E-01	8.00E+01	3.50E+02
Tetrachloroethylene	2.60E-07	4.72E+01	4.00E+01	1.75E+02	5.90E-06	2.08E+00	3.50E+01	1.53E+02
Tetrachlorotoluene, p- alpha, alpha, alpha-					5.00E-03	2.45E-03		
Thallium Acetate							2.40E-02	1.05E-01
Thallium Carbonate							8.00E-02	3.50E-01
Toluene			5.00E+03	2.19E+04			3.00E+02	1.31E+03
Toxaphene	3.20E-04	3.83E-02			3.40E-04	3.61E-02		
Tri-n-butyltin							1.20E+00	5.26E+00
Triallate							5.20E+01	2.28E+02
Tribromobenzene, 1,2,4-							2.00E+01	8.76E+01
Trichlorobenzene, 1,2,3-							3.20E+00	1.40E+01
Trichlorobenzene, 1,2,4-			2.00E+00	8.76E+00	7.25E-06	1.69E+00	2.00E+00	8.76E+00
Trichloroethane, 1,1,1-			5.00E+03	2.19E+04			1.00E+03	4.38E+03
Trichlorofluoromethane							1.20E+03	5.26E+03
Trichlorophenol, 2,4,6-	3.10E-06	3.96E+00			2.00E-05	6.13E-01		
Trichloropropane, 1,1,2-							2.00E+01	8.76E+01
Trichloropropane, 1,2,3-			3.00E-01	1.31E+00	7.50E-03	1.64E-03	3.00E-01	1.31E+00
Trifluralin					1.93E-06	6.37E+00	3.00E+01	1.31E+02
Trimethylbenzene, 1,3,5-							4.00E+01	1.75E+02
Trimethylpentene, 2,4,4-							4.00E+01	1.75E+02
Vernolate							4.00E+00	1.75E+01
Vinyl Chloride	4.40E-06	2.79E+00	1.00E+02	4.38E+02	7.80E-05	1.57E-01	1.00E+02	4.38E+02

Table C-3. USEPA RSLs and DTSC-SLs for Inhalation of Commercial/Industrial Air

Definition	Variable	USEPA Value	DTSC Value		Risk and Hazard Equations	
Averaging Time, carcinogens	$AT_c$	70	70	yrs	Cancer Risk:	
Averaging Time, noncarcinogens, worker	$AT_{nc,w}$	25	25	yrs		$TR \times AT \times 365 \frac{day}{day} \times 24 \frac{hour}{day}$
COPC Concentration in indoor air	$C_{indoorair}$	chemic	al-specific	$\mu g/m^3$		$(R)SL = \frac{TR \times AT_c \times 365 \frac{day}{year} \times 24 \frac{hour}{day}}{IUR \times ED_w \times EF_w \times ET_w}$
Exposure Duration, worker	$\mathrm{ED}_{\mathrm{w}}$	25	25	yrs		$IUR \times ED_w \times EF_w \times ET_w$
Exposure Frequency, worker	$EF_{w}$	250	250	days/yr		
Exposure Time, worker	$\mathrm{ET_w}$	8	8	hours/day		
Inhalation Unit-Risk Factor	IUR	chemic	al-specific	$(\mu g/m^3)^{-1}$		
Inhalation Reference Concentration	RfC	chemic	al-specific	$\mu g/m^3$	Noncancer Hazard:	day _ hour
(Regional) Screening Level	(R)SL	deriv	ed herein	$\mu g/m^3$		$THQ \times AT_{nc,w} \times 365 \frac{day}{year} \times 24 \frac{day}{day}$
Target Hazard Quotient	THQ	1	1	dimensionless		$(R)SL = \frac{THQ \times AT_{nc,w} \times 365 \frac{day}{year} \times 24 \frac{hour}{day}}{\frac{1}{RfC} \times ED_w \times EF_w \times ET_w}$
Target Risk	TR	1.0E-06	1.0E-06	dimensionless		$\overline{RfC} \wedge ED_W \wedge EF_W \wedge EI_W$

	US	EPA Regional Screening Le	vel for Commerc	cial/Industrial Air		DTSC Screening Level for	r Commercial/Inc	dustrial Air
	IUR	USEPA RSL: Cancer	RfC	USEPA RSL: Noncancer	IUR	DTSC-SL: Cancer	RfC	DTSC-SL: Noncancer
Analyte	$(\mu g/m3)-1$	$(\mu g/m3)$	$(\mu g/m3)$	$(\mu g/m3)$	$(\mu g/m3)-1$	$(\mu g/m3)$	$(\mu g/m3)$	$(\mu g/m3)$
Additional Analytes								
Beryllium Sulfate	2.40E-03	5.11E-03	2.00E-02	8.76E-02	8.60E-01	1.43E-05	7.00E-03	3.07E-02
Dichlorobenzene, 1,3-							1.20E+02	5.26E+02
Methylcyclohexane							6.00E+03	2.63E+04

<sup>&</sup>quot;--" = no value



Key: I = IRIS; P = PPRTV; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ.#27); H = HEAST; F = See FAQ; J = New Jersey; O = EPA Office of Water; E = see user guide Section 2.3.5; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice) c = cancer; n = noncancer; \* = where: n SL < 100X c SL; \*\* = where n SL < 100X c SL; \*\* = where n SL < 100X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide) rotection of Ground Water SSLs CL-base SEO IUR esident Air Air (mg/kgesident So ndustrial So apwate MCL SSL SSL (ug/m<sup>3</sup>) mg/kg-day) day) gen GIABS ABS (mg/kg) Analyte CAS No (mg/kg) (mg/kg) (ug/m<sup>3</sup>) (ug/L) (ug/L) (mg/kg) (mg/kg) 8.7E-03 4.0E-03 0.1 30560-19 2.6E+02 2.0E-03 5.2E-04 c\*\* 5.6E+00 c\*\* 2.2F-06 I 9.0F-03 I V 1.1F+05 Acetaldehyde 75-07-0 1.1F+01 4.9F+01 1.3F+00 2.6F+00 c 0.1 2 OF-02 I Acetochlor 34256-82-1 3F+03 1 6F+04 3 5F+02 2 SF-01 9.0F-01 | 3.1F+01 A V 1 1.1F+0 Acetone 67-64-1 6.1F+04 6.7F+05 nms 3.2F+04 1.4F+05 n 1.4F+04 2.9F+00 cetone Cyanohydrin 2.0E-03 X 0.1 75-86-5 2.8F+06 1.2E+07 2.1F+00 8.8F+00 6.0E-02 I V 1 3F+0 Acetonitrile 75-05-8 8.1E+02 3.4E+03 6 3F+01 2.6E+02 1 3F+02 2 6F-02 1.0F-01 2.5E+03 98-86-2 7.8E+03 1.2E+05 1.9E+03 5.8F-01 3.8E+00 C 1.3E-03 C 0.1 Acetylaminofluorene, 2-53-96-3 1.4E-01 6.0E-01 2.2E-03 9.4E-03 1.6E-02 7.2E-05 5.0E-04 | 2.0E-05 | V 2.3E+0 107-02-8 6.0E-01 2.1E-02 Acrolein 2.0E-03 I 6.0E-03 I Acrylamide 79-06-1 5.0E-02 1.1E-05 5.0F-01 | 1.0F-03 | V 1 1F+09 79-10-7 1.0F+00 4 4F+00 Acrylic Acid 9 9F+01 4 2F+02 2 1F+00 4 2F-04 n 5.4E-01 I 6.8F-05 I 4.0F-02 A 2.0F-03 I V 1.1F+04 Acrylonitrile 107-13-1 2.5F-01 1.1F+00 4.1F-02 1.8F-01 5.2E-02 1.1F-05 111-69-3 6.0F-03 P 8 5F+06 3 6F+07 2.6E+01 1 0.1 Adinonitrile nm nm 6 3F+00 n 5.6E-02 C 1 0F-02 1 0.1 Alachlor 15972-60-8 9 7F+00 c\* 4.1E+01 1 1F+00 2 OF+00 8 7F-04 1 6F-03 1.0E-03 0.1 Aldicarb 6.3E+01 8.2E+02 2.0E+01 3.0E+00 4.9E-03 7.5E-04 116-06-3 1.0F-03 0.1 Aldicarb Sulfone 1646-88-4 6.3E+01 8.2E+02 2.0E+01 2.0E+00 4 4F-03 4 4F-04 0.1 Aldicarb sulfoxide 1646-87-3 8.8E-04 4.0E+00 1.7E+01 | 4.9E-03 | 3.0E-05 | 3.9E-02 1.8E-01 5.7E-04 2.5E-03 1.5E-04 Aldrin 309-00-2 9.2E-04 5.0E-03 I 1.0E-04 X V 1.1E+0 107-18-6 4.2E-05 Allyl Chloride 107-05-1 c\*\* 7.3E-01 c\* 1.4E+0 2.0F+00 c\*\* 2.1E-02 C 6.0E-06 C 1.0F-03 I V 7.2F-01 3.2F+00 4.7F-01 2.3F-04 1.0E+00 P 5.0E-03 P Aluminum 7429-90-5 7 7F+04 1 1F+06 nm 5 2F+00 n 2.2E+01 n 2 0F+04 3 0F+04 n 4.0F-04 uminum Phosphide 20859-73 3.1F+01 4.7F+02 8.0F+00 metryn 9.0E-03 0.1 834-12-8 5.7E+02 7.4F+03 1.5E+02 1.6E-01 2.1E+01 C 6.0E-03 C 0.1 minobiphenyl, 4 92-67-1 4.7E-04 1.5E-05 2.6E-02 1.1E-01 0.1 minophenol, m 591-27-5 5.1E+03 6.6E+04 1.6E+03 6.1E-01 8.0E-02 2.0E-02 0.1 123-30-8 ninophenol, b-1.3E+03 1.6E+04 4.0E+02 1.5E-01 n 2.5E-03 0.1 33089-61-2.1E+03 8.2E+00 4.2E+00 nitr'aż 1.6E+02 1.0E-01 I V 7664-41-7 nmonia 2 OF-01 I mmonium Sulfamate 7773-06-0 1 6F+04 2 3F+05 4 0F+03 3.0E-03 X V 1 4F+04 myl Alcohol tert 75-85-4 8.2E+01 3.4F+02 3.1E+00 1.3E+01 6.3E+00 1.3E-03 1 0.1 62-53-3 9 5F+01 4 0F+02 1.0E+00 n 4.4E+00 n 1 3F+01 4 6F-03 ٠\* 4.0E-02 2.0E-03 1 0.1 84-65-1 1.4E+01 c\*\* 5.7E+01 1.4E-02 thraquinone, 9,10 1.4E+00 4.0F-04 0.15 tim ony (metallic) 7440-36-0 3.1F+01 4.7F+02 7.8F+00 3.5E-01 n 2.7E-01 5.0E-04 H 0.15 ntimony Pentoxide 1314-60-5.8E+02 1332-81-6 ntim ohy Tetroxide 4.0F-04 H 0.15 3.1F+01 4.7F+02 7.8E+00 2.0F-04 I 1309-64-4 2.1F-01 ntimohy Trioxide 2.8F+05 1.2F+06 n 8.8F-01 0.15 nm nm 1.5E+00 | 4.3E-03 | 3.0E-04 1 1 5F-05 C 7440-38-2 0.03 1.5E-03 rsenic, Inorganic 3.5E-06 C 5.0E-05 I rsine 778/1-//2-1 2.7F-01 4.1F+00 5.2E-02 2.2E-01 5 OF-02 0.1 sulam 3337-71-1 3 2F+03 4.1E+04 1 0F+03 2 6F-01 2.3F-01 C 3.5F-02 0.1 Atrazine 1912-24-9 2.4F+00 1.0E+01 3.0E-01 2.0F-04 1.9E-03 8.8E-01 C 2.5E-04 C 0.1 uramine 492-80-8 6.1E-04 4.0E-04 0.1 vermectin B1 65195-55 2.5E+01 3.3E+02 8.0E+00 1.4E+01 86-50-û 3.0E-03 A 1.0E-02 A Azinphos-methy 2.5E+03 5.6E+01 1.7E-02 1 1F-01 | 3 1F-05 | 103-33-3 5.6F+00 2 6F+01 9 1F-02 4 OF-01 Azohenzene 1 2F-01 9 3F-04 1.0E+00 P 7.0E-06 P 0.1 123-77-3 4.0E+04 7.3E-03 3.1E-02 2.0E+04 Azodicarbonamide 8.6E+03 6.8E+00 2.0E-01 | 5.0E-04 H 0.07 7440-39-3 1.5E+04 2.2E+05 5.2E-01 2.2E+00 3.8E+03 1.6E+02 8.2E+01 Barium 5.0E-01 C 1.5E-01 C 2.0E-02 C 2.0E-04 C M 0.025 Barium Chromate 10294-40-3 3 0F-01 6.2F+00 6.8E-06 8.2E-05 4 1F-02 3 0F-01 Renfluralin 1861-40-1 2 3F+04 3 5F+05 1.7E+03 5 6F+01 5 OF-02 0.1 Benomyl 17804-35-2 3 2F+03 4 1F+04 9 7F+02 8 5F-01 0.1 2.0E-01 Bensulfuron-methyl 83055-99-6 1.6E+05 3.0E-02 0.1 Bentazon 25057-89-0 1.9E+03 2.5E+04 5.7E+02 1.2E-01 100-52-7 1.0E-01 1.2E+0 enzaldehvde 4.3E-01 5.5E-02 | 7.8E-06 | 4.0E-03 | 3.0E-02 | V 2.6E-03 1.8E+03 71-43-2 1.2E+00 5.1E+00 3.6E-01 c\* 1.6E+00 c\* 4.6E-01 5.0E+00 2.3E-04 Benzene 1.0F-01 X 3.0F-04 0.1 Benzenediamine-2-methyl sulfate, 1.4-6369-59-1 5.4F+00 2.3F+01 7.8F-01 c 2.2F-04 c\*\* 1.0E-03 Benzenethiol 108-98-5 7.8E+01 1.2E+03 1.1E-02 1.3E+03 1.7E+01 2.3E+02 | 6.7E-02 | 3.0F-03 м 0.1 Benzidine 92-87-5 5.3F-04 1.0F-02 1.1F-04 2.8F-07 4.0E+00 0.1 Benzoic Acid 65-85-0 2.5E+05 nm 3.3E+06 7.5F+04 1.8E+01 1.3E+01 3.2E+02 Benzotrichloride 98-07-7 5.3E-02 2.5E-01 3.0E-03 6.6F-06 1.0E-01 0.1 Benzyl Alcohol 100-51-6 6.3E+03 8.2E+04 2.0E+03 4.8E-01 1 7F-01 I 4.9E-05 C 2.0E-03 P 1.0E-03 P V 1 5E+03 100-44-7 5 7F-02 2 SF-01 Benzyl Chloride 1.1E+00 4.8E+00 8.9E-02 9.8E-05 2.4E-03 I 2.0E-03 I 2.0E-05 I 0.007 7440-41-7 1.6F+02 2.3E+03 5.1E-03 2.5E+01 1.9E+01 3.2E+00 Beryllium and compounds 1.2E-03 0.1 9.0F-03 1 Bifenox 42576-02-5.7F+02 7.4F+03 1.0F+02 7.6F-01 n 1 5F-02 0.1 Rinhenthrir 82657-04-3 9 5F+02 1 2F+04 3 0F+02 1 4F+03 8.0F-03 L 5.0F-01 | 4.0F-04 X V Biphenyl, 1,1'-92-52-4 4.7F+01 2.0F+02 4.2E-01 n 1.8E+00 8.3F-01 8.7F-03 4.0E-02 1.0E+03 Bis(2-chloro-1-methylethyl) ether 108-60-1 2.6E-01

Key: I = IRIS; P = PPRTV; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ.#27); H = HEAST; F = See FAQ; J = New Jersey; O = EPA Office of Water; E = see user guide Section 2.3.5; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice) c = cancer; n = noncancer; \* = where: n SL < 100X c SL; \*\* = where n SL < 100X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \* rotection of Ground Water SSLs CL-base IUR esident Air Air (mg/kgesident So ndustrial So apwate MCL SSL SSL (ug/m<sup>3</sup>) mg/kg-day) ug/m³) day) gen GIABS ABS (mg/kg) Analyte CAS No. (mg/kg) (mg/kg) (ug/m³) (ug/L) (ug/L) (mg/kg) (mg/kg) 3.0E-03 0.1 is(2-chloroethoxy)methane 2.5E+03 1.3E-02 111-91-1 1.9E+02 I 3.3E-04 is(2-chloroethyl)ethe 111-44-4 3.6F-06 1.1E+00 2.2E+02 | 6.2E-02 | 4.2E+03 542-88-1 Bis(chloromethyl)ether 8.3E-05 3.6E-04 4.5E-05 2.0E-04 7.2E-05 1.7E-08 5 OF-02 0.1 80-05-7 3.2E+03 4.1E+04 Bisphenol A 5.8E+01 2.0E-01 I 2.0E-02 H 7440-42-8 1.3E+01 Soron And Borates Only 1.6F+04 2.3E+05 2 0F+00 P 2 0F-02 P V Boron Trichloride 10294-34-1 6F+05 2 3F+06 nm 2 1F+01 8 8F+01 n 4.2E+01 4 0F-02 C 1 3F-02 C V **Boron Trifluoride** 7637-07-2 3 1F+03 4 7F+04 1 4F+01 5 7F+01 2 6F+01 7 0F-01 I 4 0F-03 | Bromate 15541-45-4 9 9F-01 4 7F+00 1 1F-01 1.0E+01 8 5F-04 7 7F-02 2.0E+00 X 6.0E-04 X 2.4E+0 Bromo-2-chloroethane, 1-107-04-0 2.6E-02 1.1E-01 4.7E-03 2.0E-02 7.4E-03 2.1E-06 8.0E-03 | 6.0E-02 | V 6.8E+0 Bromobenzene 108-86-1 2.9E+02 1.8E+03 6.2E+01 4.2E-02 4,2E+01 4.0E-02 X V 4 0F+0 3romochloromethane 74-97-5 1.5E+02 6.3E+02 1.8E+02 8.3E+01 2.1E-02 I 3.7E-05 C 2.0E-02 9.3E+0 Bromodichloromethane 75-27-4 2.9E-01 1.3E+00 3.3E-01 1.3E-01 .0E+01( 3.6E-05 2.2E-02 7.9F-03 I 1.1F-06 I 2.0F-02 75-25-2 8.6F+01 2.6F+00 1.1F+01 3.0F+01(I 2.1F-02 9.2F+02 romoform 1.9F+01 3.3F+00 8.7F-04 I 5.0E-03 I V romomethan 74-83-9 5.0F-03 V Bromonhos 2104-96-3 3.9F+02 5.8F+03 3.5F+01 1.5F-01 2.0F-02 0.1 1689-84-5 1.3F+03 1.6F+04 3.3F+02 2.8F-01 2.0F-02 romoxynil Octanoate 1689-99-7 1.6F+03 2.3F+04 1.4F+02 1.2F+00 6.7E+0 3.4E+00 C 3.0E-05 I 2.0E-03 I V 106-99-0 2.6E-01 1.0E-01 7.6E+0 utanol. N-71-36-3 7.8E+03 ns 1.2E+05 4.1E-01 nms 85-68-7 1.9E-03 2.0E-01 0.1 utyl Benzyl Phthalate 1.2E+03 2.4E-01 P 3.0E+01 P V 2.1E+04 Butyl alcohol, sec-78-92-2 1.3E+05 1.5E+06 2.4E+04 2.0E+00 nms 3.1E+04 n 1.3E+05 5.0E+00 nms 5.0E-02 2008-41-5 3.9E+03 5.8E+04 4.5E-01 Butylate 4.6E+02 25013-16 2.0E-04 C 5.7E-08 C utylated hydroxyanisole 2.7E+03 1.1E+04 2.9E-01 0.1 2.2E+02 1.5E+02 3 6F-03 P 3 0F-01 P 1 0.1 Butvlated hydroxytoluene 128-37-0 1 5F+02 6 4F+02 3 4F+00 1 0F-01 1 1F+02 Butylhenzene n-5 OF-02 1 104-51-8 3 9F+03 ns 5 8F+04 1 0F+03 3 2F+00 1.5F+0 135-98-8 1 0F-01 X 1 utylbenzene\_sec 7 8F+03 ns 1.2E+05 2.0E+03 5 9F+00 1.0E-01 1.8E+0 98-06-6 7.8E+03 ns 1.2E+05 1.6E+00 75-60-5 2.0E-02 0.1 acodylic Acid 1.3F+03 1.6E+04 4.0E+02 1.1E-01 1.8E-03 I 1.0E-03 | 1.0E-05 A 0.025 0.001 7440-43-9 1.8E-03 I 5.0E-04 I 1.0E-05 A 0.05 0.001 7440-43-9 1.6E-03 c\*\* 6.8E-03 c\*\* 9.2E+00 6.9E-01 3.8E-01 Cadmium (Water) n 5.0F-01 C 1.5F-01 C 2.0F-02 C 2.0F-04 C M 0.025 Calcium Chromate 13765-19-3.0F-01 6.2F+00 6.8F-06 8.2F-05 c 4.1F-02 5.0E-01 I 2.2E-03 C Caprolactam 105-60-2 0.1 1.5F-01 C 4.3E-05 C 2.0E-03 1 0.1 Captafol 2425-06-1 3.6F+00 1.5F+01 6.5E-02 2.9F-01 4.0F-01 7.1F-04 2.3E-03 C 6.6E-07 C 1.3E-01 0.1 antan 133-06-2 2.4F+02 1.0F+03 4 3F±00 1.9F+01 3.1E+01 2.2E-02 1 0F-01 0.1 63-25-2 6 3F+03 8 2F+04 1 7F+00 5.0F-03 0.1 1563-66-2 3.2E+02 4.1E+03 9.4F+01 4.0F+01 3.7E-02 1.6E-02 1.0E-01 I 7.0E-01 I V Carbon Disulfide 75-15-0 7.7E+02 3.5E+03 7.3E+02 3.1E+03 8.1E+02 2.4E-01 7.0E-02 I 6.0E-06 I 4.0F-03 I 1.0F-01 I V 4.6E+0 arbon Tetrachloride 56-23-5 4.6F-01 1.8F-04 1.0F-01 P V 5.9F+0 arbonyl Sulfide 463-58-1 6.7F+01 2.8F+02 1.0F+02 n 4.4F+02 2.1F+02 5.1F-01 1 0F-02 0.1 Carhosulfan 55285-14-8 6 3F+02 8 2F+03 5 1F+01 1 2F+00 1.0F-01 I 0.1 5234-68-4 8.2F+04 1.0F+00 1 Carboxin 6.3F+03 1.9F+03 9.0E-04 I eric oxide 1306-38-3 1 3F+06 5 4F+06 9.4E-01 n 3.9E+00 1.0F-01 I 1 Chloral Hydrate 302-17-0 7 8F+03 1.2E+05 2 0F+03 4 0F-01 1.5F-02 L 0.1 Chloramber 133-90-4 9.5F+02 1.2E+04 2.9E+02 7 0F-02 4.0E-01 H 0.1 Chloranti 118-75-2 5.7E+00 1.8E-01 1.5E-04 3.5E-01 | 1.0E-04 | 5.0E-04 | 7.0E-04 | V 0.04 Chlordane 12789-03-1.7E+00 7.5E+00 2.8E-02 c\* 1.2E-01 4.5E-02 2.0E+00 3.0E-03 1.4E-01 1.0E+01 | 4.6E-03 C 3.0E-04 0.1 Chlordecone (Kepone) 143-50-0 5.4E-02 2.3E-01 2.7E-03 3.5E-03 1.2E-04 7.0E-04 1 0.1 Chlorfenvinphos 470-90-6 4.4E+01 5.7E+02 3.1E-02 1.1E+01 2.0F-02 0.1 Chlorimuron, Ethyl 90982-32-1.3F+03 1.6F+04 3.9F+02 1.3F-01 1.0E-01 | 1.5E-04 A V 2.8E+03 7782-50-5 1.8E-01 7.8E-01 1.5E-01 6.4E-01 3.0E-01 1.4E-04 Chlorine 3.0E-02 | 2.0E-04 | V 10049-04-4 3.4E+04 Chlorine Dioxide 2.1E-01 n 8.8E-01 4.2E-01 3.0E-02 Chlorite (Sodium Salt) 7758-19-2 2.3E+03 3.5E+04 1.0F+03 5.0E+01 I V 1 2F+0 Chloro-1 1-difluoroethane 1 75-68-3 5 4F+04 2 3F+05 5 2F+04 5 2F+01 Chloro-1,3-butadiene, 2-126-99-8 1.0E-02 4.4E-02 3.0E-04 I 2.0E-02 H 2.0E-02 I V 7.9E+0 9.4E-03 c 4.1E-02 c 1.9E-02 9.8E-06 4.6E-01 0.1 Chloro-2-methylaniline HCl. 4 3165-93-3 1.2E+00 5.0E+00 1.7E-01 1.5E-04 1.0E-01 P 7.7E-05 C 3.0E-03 X 0.1 hloro-2-methylaniline, 4-95-69-2 5.4E+00 2.3E+01 4.0E-04 3.6E-02 7.0E-01 2.7F-01 X 1.2F+04 Chloroacetaldehyde, 2-107-20-0 2.6E+00 1.2E+01 2.9E-01 5.8F-05 1 0.1 hloroacetic Acid 79-11-8 6 0F+01 1 2F-02 0.1 532-27-4 3.0F-05 I 1 hloroacetophenone, 2-4.3F+04 1.8E+05 nm 3.1E-02 n 1.3E-01 2.0E-01 P 0.1 106-47-8 1.6E-04 4.0E-03 hloroaniline, p-2.7E+00 2.0E-02 5.0E-02 P V 7.6E+02 Chlorobenzene 108-90-7 5.2E+01 2.2E+02 1.0E+02 5.3E-02 6.8E-02 2.8E+02 1.3E+03 7.8E+01 1.1E-01 C 3.1E-05 C 2.0E-02 0.1 hlorobenzilate 510-15-6 4.9F+00 2.1E+01 3.1E-01 1.0E-03 3.0E-02 X 0.1 Chlorobenzoic Acid, p-74-11-3 1.9E+03 2.5E+04 1.3E-01 1 5.1E+02 n n 3.0F-03 P 3.0F-01 P V 2.9F+02 Chlorobenzotrifluoride, 4 98-56-6 2.1F+02 2.5F+03 ns 3.1F+02 3.5F+01 1.2E-01 4.0E-02 P 7.3E+02 Chlorobutane, 1-109-69-3 3.1E+03 4.7E+04 6.4E+02 2.6E-01 ns ns

	; H = HEAST; F = See FAQ; J = New Jersey; O = EPA Office of Water; E = see user guide Section 2.3.5 < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may ex-	5; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice); (seed ceiling limit (See User Guide): s = Concentration may exceed (Sat (See User Guide)
Toxicity and Chemical-specific Information	Contaminant	Screening Levels Protection of Ground Water SSLs
k k RtD <sub>o</sub> k k V		Industrial Risk-based MCL-based
SFO e $ UR $ e $ mg/kg $ y $ mg/m^3 $ y $ mg $ gen $ mg/mg $ ABS $ mg/kg $	Analyte CAS No.	Resident Soil Industrial Soil Resident Air Air Tapwater MCL SSL SSL (mg/kg) key (mg/kg) key (ug/m³) key (ug/m³) key (ug/L) key (ug/L) (mg/kg) key (mg/kg)
5.0E+01   V		4.9E+04 ns 2.1E+05 nms 5.2E+04 n 2.2E+05 n 1.0E+05 n 4.3E+01 n 1.6E+03 n 2.3E+04 n 4.0E+02 n 8.1E-02 n
3.1E-02 C 2.3E-05 I 1.0E-02 I 9.8E-02 A V 1 2.5E+03	Chloroform 67-66-3	3.2E-01 c 1.4E+00 c 1.2E-01 c 5.3E-01 c 2.2E-01 c 8.0E+01(F) 6.1E-05 c 2.2E-02
9.0E-02   V		1.1E+02 n 4.6E+02 n 9.4E+01 n 3.9E+02 n 1.9E+02 n 4.9E-02 n 2.0E-02 c 8.9E-02 c 4.1E-03 c 1.8E-02 c 6.5E-03 c 1.4E-06 c
3.0E-01 P 3.0E-03 P 1.0E-05 X 1 0.1	Chloronitrobenzene, o- 88-73-3	1.8E+00 c 7.7E+00 c 1.0E-02 n 4.4E-02 n 2.4E-01 c 2.2E-04 c
6.3E-03 P 1.0E-03 P 6.0E-04 P 1 0.1 5.0E-03 I V 1 2.2E+0-	Chloronitrobenzene, p- 100-00-5 Chlorophenol, 2- 95-57-8	6.3E+01 n 3.6E+02 c** 6.3E-01 n 2.6E+00 n 1.1E+01 c** 1.0E-02 c** 3.9E+02 n 5.8E+03 n 9.1E+01 n 7.4E-02 n
4.0E-04 C V 1 6.2E+0.	Chloropicrin 76-06-2	2.0E+00 n 8.2E+00 n 4.2E-01 n 1.8E+00 n 8.3E-01 n 2.5E-04 n
3.1E-03 C 8.9E-07 C 1.5E-02 I 1 0.1 2.0E-02 I V 1 9.1E+0	Chlorothalonil 1897-45-6 Chlorotoluene, o- 95-49-8	1.8E+02 c** 7.4E+02 c* 3.2E+00 c 1.4E+01 c 2.2E+01 c* 5.0E-02 c* 1.6E+03 ns 2.3E+04 ns 2.4E+02 n
	Chlorotoluene, p- 106-43-4	1.6E+03 ns 2.3E+04 ns 2.5E+02 n 2.4E-01 n
2.4E+02 C 6.9E-02 C 1 0.1 2.0F-01 I 1 0.1	Chlorozotocin 54749-90-5 Chlorozopham 101-21-3	2.3E-03 c 9.6E-03 c 4.1E-05 c 1.8E-04 c 3.2E-04 c 7.1E-08 c 1.3E+04 n 1.6E+05 nm 2.8E+03 n 2.6E+00 n
1.0E-03 A 1 0.1	Chlorpyrifos 2921-88-2	6.3E+01 n 8.2E+02 n 8.4E+00 n 1.2E-01 n
1.0E-02 H 1 0.1	Chlorpyrifos Methyl 5598-13-0	6.3E+02 n 8.2E+03 n 1.2E+02 n 5.4E-01 n
5.0E-02 I 1 0.1 1.0E-02 I 1 0.1	Chlorsulfuron         64902-72-3           Chlorthal-dimethyl         1861-32-1	3.2E+03 n 4.1E+04 n 9.9E+02 n 8.3E-01 n 6.3E+02 n 8.2E+03 n 1.2E+02 n 1.5E-01 n
8.0E-04 H 1 0.1	Chlorthiophos 60238-56-4	5.1E+01 n 6.6E+02 n 2.8E+00 n 7.3E-02 n
1.5E+00   0.013 5.0E-01   8.4E-02   S.0E-03   1.0E-04   M 0.025	Chromium(III), Insoluble Salts 16065-83-1 Chromium(VI) 18540-29-9	1.2E+05         nm         1.8E+06         nm         2.2E+04         n         4.0E+07         n           3.0E-01         c         6.3E+00         c         1.5E-04         c         3.5E-02         c         6.7E-04         c
0.013	Chromium, Total 7440-47-3	1.0E+02 1.8E+05
1.3E-02 I 1 0.1	Clofentezine 74115-24-5	8.2E+02 n 1.1E+04 n 2.3E+02 n 1.4E+01 n
9.0E-03 P 3.0E-04 P 6.0E-06 P 1 6.2E-04 I V M 1	Cobalt         7440-48-4           Coke Oven Emissions         8007-45-2	2.3E+01 n 3.5E+02 n 3.1E-04 c* 1.4E-03 c* 6.0E+00 n 2.7E-01 n
4.0E-02 H 1	Серрег 7440-50-8	3.1E+03 n 4.7E+04 n 8.0E+02 n 1.3E+03 2.8E+01 n 4.6E+01
5.0E-02   6.0E-01 C	Cresol, m- Cresol, b- 108-39-4 Cresol, b- 95-48-7	3.2E+03 n 4.1E+04 n 6.3E+02 n 2.6E+03 n 9.3E+02 n 7.4E-01 n 7.5E-01 n 7.5E-01 n
1.0E-01 A 6.0E-01 C 1 0.1	Cresol, p- ( ) ( ) 106-44-5	6.3E+03 n 8.2E+04 n 6.3E+02 n 2.6E+03 n 1.9E+03 n
1.0E-01 A 1 0.1 1.0E-01 A 6.0E-01 C 1 0.1	Cresol, b-chloko-m- \( \) \( \	6.3E+03 n 8.2E+04 n 1.4E+03 n 1.7E+00 n 1.3E+03 n 8.2E+04 n 6.3E+02 n 2.6E+03 n 1.5E+03 n 1.3E+00 n
	Crotonaldehyde, trans-	3.7E-01 c 1.7E+00 c 4.0E-02 c 8.2E-06 c
1.0E-01   4.0E-01   V		1.9E+03 ns 9.9E+03 ns 4.2E+02 n 1.8E+03 n 4.5E+02 n 7.4E-01 n
2.2E-01 C 6.3E-05 C 1 0.1 8.4E-01 H 2.0E-03 H 1 0.1	Conference 135-20-6 Cyanazine 135-20-6 21725-46-2	2.5E+00 c 1.0E+01 c 4.5E-02 c 1.9E-01 c 3.5E-01 c 6.1E-04 c 6.5E-01 c 2.7E+00 c 8.8E-02 c 4.1E-05 c
4.05.03	Cyanides	705-04 - 425-02 - 205-04 -
1.0E-03   1 5.0E-03   1	~Copper Cyarlide 544-92-3	7.8E+01 n 1.2E+03 n 2.0E+01 n 3.9E+02 n 5.8E+03 n 1.0E+02 n
6.0E-04 I 8.0E-04 S V 1 9.7E+0	~Cyanide (CN-) 57-12-5	2.7E+00 n 1.2E+01 n 8.3E-01 n 3.5E+00 n 1.5E+00 n 2.0E+02 1.5E-02 n 2.0E+00
1.0E-03 I V 1 9.0E-02 I V 1	~Cyanogen     460-19-5       ~Cyanogen Bromide     506-68-3	7.8E+01 n 1.2E+03 n 2.0E+01 n n 7.0E+03 n 1.1E+05 nm 1.8E+03 n
5.0E-02 I V 1	~Cyanogen Chloride 506-77-4	3.9E+03 n 5.8E+04 n 1.0E+03 n n
6.0E-04   8.0E-04   V 1 1.0E+0 2.0E-03   1	"Hydrogen Cyanide"         74-90-8           "Potassium Cyanide"         151-50-8	2.3E+01 n 1.5E+02 n 8.3E-01 n 3.5E+00 n 1.5E+00 n 1.5E-02 n 1.6E+02 n 2.3E+03 n 4.0E+01 n
5.0E-03 I 0.04	~Potassium Silver Cyanide 506-61-6	3.9E+02 n 5.8E+03 n 8.2E+01 n n
1.0E-01   0.04 1.0E-03   1	~Silver Cyanide 506-64-9 ~Sodium Cyanide 143-33-9	7.8E+03 n 1.2E+05 nm 1.8E+03 n n n n n n n n n n n n n n n n n n n
2.0E-04 P 1	~Thiocyanates NA	1.6E+01 n 2.3E+02 n 4.0E+00 n
2.0E-04 X V 1 5.0F-02 I 1	~Thiocyanic Acid 463-56-9 ~Zinc Cyanide 557-21-1	1.6E+01 n 2.3E+02 n 4.0E+00 n n 3.9F+03 n 5.8F+04 n 1.0F+03 n
0.02 02 1	Cyclohexane 110-82-7	6.5E+03 ns 2.7E+04 ns 6.3E+03 n 2.6E+04 n 1.3E+04 n 1.3E+01 n
2.3E-02 H 1 0.1 5.0E+00 I 7.0E-01 P V 1 5.1E+0	Cyclohexane, 1,2,3,4,5-pentabromo-6-chloro- 87-84-3 Cyclohexanone 108-94-1	2.4E+01 c 1.0E+02 c 2.4E+00 c 1.4E-02 c 2.8E+04 ns 1.3E+05 nms 7.3E+02 n 3.1E+03 n 1.4E+03 n 3.4E-01 n
5.0E+00 1 7.0E+01 P V 1 5.1E+0: 5.0E-03 P 1.0E+00 X V 1 2.8E+0:		2.8E+04 ns 1.3E+05 nms 7.3E+02 n 3.1E+03 n 1.4E+03 n 3.4E-01 n 3.1E+02 ns 3.1E+03 ns 1.0E+03 n 4.4E+03 n 7.0E+01 n 4.6E-02 n
2.0E-01 I V 1 2.9E+0	Cyclohexylamine 108-91-8	1.6E+04 n 2.3E+05 nm 3.8E+03 n 1.0E+00 n
2.5E-02 I 1 0.1 5.0E-03 I 1 0.1	Cyfluthrin         68359-37-5           Cyhalothrin         68085-85-8	1.6E+03         n         2.1E+04         n         1.2E+02         n         3.1E+01         n           3.2E+02         n         4.1E+03         n         1.0E+02         n         6.8E+01         n
1.0E-02 I 1 0.1	Cypermethrin 52315-07-8	6.3E+02 n 8.2E+03 n 2.0E+02 n 3.2E+01 n
7.5E-03 I 1 0.1 2.4E-01 I 6.9E-05 C 1 0.1	Cyromazine         66215-27-8           DDD         72-54-8	4.7E+02     n     6.2E+03     n     1.5E+02     n     3.8E-02     n       2.3E+00     c     9.6E+00     c     4.1E-02     c     1.8E-01     c     3.2E-02     c     7.5E-03     c
3.4E-01 I 9.7E-05 C V 1	DDE, p,p'- 72-55-9	2.0E+00 c 9.3E+00 c 2.9E-02 c 1.3E-01 c 4.6E-02 c 1.1E-02 c
3.4E-01   9.7E-05   5.0E-04   1 0.03 3.0E-02   1 0.1	DDT 50-29-3	1.9E+00 c* 8.5E+00 c* 2.9E-02 c 1.3E-01 c 2.3E-01 c* 7.7E-02 c* 1.9E+03 n 2.5E+04 n 6.0E+02 n 2.0E+02 1.2E-01 n 4.1E-02
3.0E-02   1 0.1 1.8E-02   C 5.1E-06   C 1.5E-01   1 0.1	Dalapon         75-99-0           Daminozide         1596-84-5	3.0E+01 c 1.3E+02 c 5.5E-01 c 2.4E+00 c 4.3E+00 c 9.5E-04 c
7.0E-04 I 7.0E-03 I 1 0.1	Decabromodiphenyl ether, 2,2',3,3',4,4',5,5',6,6'- (BDE-209) 1163-19-5	4.4E+02 n 3.3E+03 c** 1.1E+02 c** 6.2E+01 c**

Key: I = IRIS; P = PPRTV; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #27); H = HEAST; F = See FAQ; J = New Jersey; O = EPA Office of Water; E = see user guide Section 2.3.5; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice) c = cancer; n = noncancer; \* = where: n SL < 100X c SL; \*\* = where n SL < 100X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \* rotection of Ground Water SSLs CL-base SEO IUR esident Ai Air (mg/kgesident So dustrial Sc MCL SSL SSL (ug/m<sup>3</sup>) mg/kg-day) day) gen GIABS ABS (mg/kg) Analyte CAS No. (mg/kg) (mg/kg) (ug/m³) (ug/L) (ug/L) (mg/kg) (mg/kg) 4.0E-05 0.1 8065-48-3 2.5E+00 3.3E+01 4.2E-01 emetor 1 2F-03 6.0F-01 1 0.1 Di(2-ethylhexyl)adipate 103-23-1 4 5F+02 1 9F+03 6 5F+01 4 0F+02 4 7F+00 2 9F+01 6.1E-02 1 0.1 Diallate 2303-16-4 8.9F+00 3.8F+01 5.4E-01 8.0E-04 7 OF-04 A 0.1 Diazinon 333-41-5 4 4F+01 5 7F+02 1.0F+01 6 5F-02 1.0E-02 Dibenzothiophene 132-65-0 7.8F+02 1.2F+04 6.5E+01 1.2F+00 P 6.0E-03 P 2.0E-04 P 2.0E-04 I V M 9.8F+02 Dibromo-3-chloropropane, 1,2-96-12-8 5.3F-03 6.4F-02 2.0F-03 3.3F-04 1.4F-07 8.6F-05 4.0E-04 1.6E+0 Dibromobenzene, 1,3-108-36-1 3.1E+01 4.7E+02 5.3E+00 5.1E-03 1.0F-02 Dibromobenzene, 1.4-106-37-6 7.8F+02 1.2F+04 1.3F+02 1.2F-01 8 4F-02 8 0F+0 0F+01( 2 1F-02 2 NF-02 )ihromochloromethane 124-48-1 8 3F+00 3 9F+01 8 7F-01 2 3F-04 106-93-4 7.5E-03 2.0F+00 | 6.0F-04 | 9.0F-03 I 9.0F-03 I V ibromoethane, 1,2-3.6F-02 1.6F-01 2.0F-02 1.4F-05 1.3F+03 2.1F-06 4.0E-03 X V 2.8E+0 Dibromomethane (Methylene Bromide) 74-95-3 2.4F+01 9.9F+01 4.2E+00 1.8E+01 8.3F+00 2.1E-03 3.0E-04 0.1 ibutyltin Compounds NA 1.9E+01 2 5F+02 6.0E+00 3.0F-02 0.1 1918-00-1.9F+03 2.5E+04 5.7F+02 1.5F-01 4.2E-03 P Dichloro-2-butene, 1,4-9.4E-03 2.9E-03 4.2E-03 P 5.2E+02 Dichloro-2-butene, cis-1,4 1476-11-5 7.4E-03 6.7E-04 2.9E-03 110-57-6 3.2E-02 5.0E-02 0.1 с\* 1.2E-02 4.0E-03 I Dichloroacetic Acid 79-43-6 1.1E+01 4.6E+01 1.5E+00 6.0E+01 3.1E-04 9.0F-02 I 2.0F-01 H V 3.8F+0 Dichlorobenzene, 1.2 95-50-1 1.8F+03 ns 9.3F+03 2.1F+02 8.8F+02 3.0F+02 6.0F+02 3.0F-01 5.8F-01 5.4E-03 C 1.1E-05 C 7.0E-02 A 8.0E-01 I V 1 Dichlorobenzene, 1.4-106-46-7 2.6E+00 1.1E+01 2.6E-01 1.1E+00 4.8E-01 7.5E+01 4.6E-04 С 7.2E-02 4.5E-01 I 3.4E-04 C 0.1 ichlorobenzidine, 3,3'-91-94-1 1 2F+00 5 1F+00 8 3F-03 3 6F-02 1 3F-01 8 2F-04 9.0E-03 X 0.1 Dichlorobenzophenone, 4,4'-90-98-2 5.7E+02 7.4E+03 7.8E+01 4.7E-01 2 OF-01 I 1.0E-01 X V 8.5F+0 ichlorodifluoromethane 75-71-8 8 7F+01 3 7F+02 1 0F+02 4 4F+02 2.0E+02 3 0F-01 75-34-3 1.7E+0 ichloroethane, 1,1-3.6E+00 5.7E-03 C 1.6E-06 C 2.0E-01 1.6E+01 1.8E+00 7.7E+00 2.8E+00 7.8E-04 107-06-2 9.1E-02 I 2.6E-05 I X 7.0E-03 P V Dichloroethane, 1,2 4.6E-01 2.0E+00 1.1E-01 4.7E-01 1.7E-01 5.0F+00 1.4E-03 6.0E-03 4.8E-05 I 2.0E-01 I V ich loroethylene, 1,1 75-35-4 1.0E+03 2.5E-03 5.0E-02 1.2E+0 1.0E-01 2.4E+03 Dichloroethylene\_1.2-cis-156-59-2 2.0F-03 1.6F+02 2.3F+03 3.6F+01 7.0F+01 1.1F-02 n 2.1F-02 ichlorbethylene, 1,2 trans 156-60-5 2 OF-02 1.9E+03 1 6F+03 2 3F+04 3 6F+02 1.0F+02 1 1F-01 3 1F-02 120-83-2 ichlorophenol-2.4-2.5F+03 4.6F+01 3.0F-03 0.1 1.9F+02 5.4F-02 1.0F-02 0.05 ichlorophenoxy Acetic Acid, 2,43 94-75-7 7.0F+02 9.6F+03 1.7E+02 7.0F+01 4.5F-02 1.8F-02 8.0E-03 0.1 ichlorophenoxy)butyric Acid, 4-(2,4= 94-82-6 5.1E+02 6.6E+03 1.1E-01 9.0E-02 A 4.0E-03 I V 1.4E+0 ichloropropane, 1,2 78-87-5 1.0E+00 4.4F+00 4.4E-01 1.5F-04 1.7E-03 3.6E-02 C 1.0E-05 C 2.0E-02 1.5E+03 Dichloropropane, 1,3-142-28-9 1.6E+03 2.3E+04 3.7E+02 1.3E-01 ns 3 0F-03 0.1 ichloropropanol, 2,3-1.9E+02 616-23-9 2.5E+03 5 9F+01 1.3E-02 I 4.0E-06 I 3.0E-02 542-75-6 8.2E+00 1.7E-04 1.0E-01 I 2.0E-02 I V ichloropropene, 1,3-1.8F+00 2 9F-01 I 8 3F-05 C 5 0F-04 1 5 0F-04 I 0.1 ichlarvas 62-73-7 1 9F+00 7 9F+00 3 4F-02 1 5F-01 c\* 2 6F-01 8 1F-05 ۰\* 1 0F-04 1 0.1 icrotobhos 141-66-2 6 3F+00 8 2F+01 2 0F+00 4 7F-04 8 0F-02 P 3 0F-04 X V 1 2.6F+02 icyclopentadiene 77-73-6 1 3F+00 5 4F+00 3 1F-01 1.3E+00 6 3F-01 2 2F-03 n 6.1E-04 1.6E+01 | 4.6E-03 | 5.0E-05 0.1 60-57-1 3.4E-02 1.4E-01 2.7E-03 7.1E-05 3.0E-04 C 5.0E-03 I 0.1 iesel Engine Exhaust NA 9.4E-03 4.1E-02 2.0E-03 P 2.0E-04 F 0.1 111-42-2 1.6E+03 2.1E-01 8 8F-01 4.0E+01 8.1E-03 3.0E-02 P 1.0E-04 P 0.1 1.9E+03 2.4E+04 1.0E-01 4.4E-01 6.0E+02 1.3E-01 Diethylene Glycol Monobutyl Ether 112-34-5 6.0F-02 P 3.0E-04 P 0.1 3.8F+03 4.8F+04 3.1F-01 1.3F+00 1.2F+03 2.4F-01 iethylene Glycol Monoethyl Ether 111\_90\_0 2.0E+01 4.1E-03 1.1F+05 Diethylformamide 617-84-5 3.5E+02 C 1.0E-01 C 0.1 iethylstilbestrol 56-53-1 1 6F-03 6.6F-03 2.8E-05 1.2E-04 5.1E-05 2.8F-05 8.0F-02 0.1 Ifenzoquar 43222-48 5.1F+03 6.6F+04 1.6F+03 35367-38-2.0E-02 0.1 iflubenzuror 1.3F+03 1.6F+04 2.9F+02 3.3F-01 4.0E+01 I V 1.4E+03 Difluoroethane, 1,1-75-37-6 4.8F+04 2.0E+05 nms 4.2E+04 2.8E+01 4.4E-02 C 1.3E-05 C ihydrosafrole 94-58-6 9.9E+00 4.5E+01 2.2E-01 9.4E-01 iisopropyl Ether 108-20-3 2.2E+03 3.7E-01 8.0E-02 Diisopropyl Methylphosphonate 1445-75-6 9.3E+04 4.5E-01 5.3E+0 6.3E+03 ns ns 1.6E+03 2.0E-02 0.1 55290-64-1.3E+03 1.6E+04 4.0E+02 8.8E-02 Dimethipin 2.0E-04 0.1 9.0E-04 methoate 60-51-5 1.3E+01 1.6E+02 1 6F+00 0.1 imethoxybenzidine, 3,3'-119-90-4 3 4F-01 1 4F+00 4 7F-02 5 8F-05 1 7F-03 6.0F-02 P 1 0.1 imethyl methylphosphonate 756-79-6 3 2F+02 1 4F+03 4 6F+01 9 6F-03 imethylamino azobenzene [p-] 4 6F+00 C 1.3E-03 C 1 0.1 60-11-7 1.2E-01 5.0E-01 2.2E-03 c 9.4E-03 5.0E-03 2 1F-05 5.8E-01 0.1 imethylaniline HCl, 2.4-21436-96 9.4E-01 4.0E+00 1.2E-04 2.0E-01 2.0E-03 X 0.1 imethylaniline, 2,4-95-68-1 2.7E+00 1.1E+01 3.7E-01 2.1E-04 2.0E-03 121-69-7 3.5E+01 1.3E-02 8.3E+0 2.3E+03 1.1E+01 P 0.1 Dimethylbenzidine, 3,3'-119-93-7 4.9E-02 2.1E-01 6.5E-03 4.3E-05 1.0F-01 P 3.0F-02 I V 1.1F+05 Dimethylformamide 68-12-2 2.6F+03 1.5F+04 3.1F+01 1.3F+02 6.1F+01 1.2F-02 methylhydrazine, 1,1-57-14-7 8 8F-03 4.2E-03 1.0E-04 X 2.0E-06 X V 1.7E+0 9.3E-07 5.5E+02 C 1.6E-01 C v 1.9E+0 Dimethylhydrazine, 1,2-540-73-8 8.8F-04 4.1F-03 2.8F-05 6.5F-09 1.8E-05 2.0E-02 0.1 methylphenol, 2,4-105-67-9 1.3F+03 1.6E+04 3.6F+02 4.2E-01 6.0F-04 0.1 imethylphenol, 2.6-576-26-1 3 8F+01 4 9F+02 1 1F+01 1 3F-02 1.0E-03 I 0.1 Dimethylphenol, 3,4-95-65-8 6.3E+01 8.2E+02 1.8E+01 2.1E-02

Key: I = IRIS; P = PPRTV; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #27); H = HEAST; F = See FAQ; J = New Jersey; O = EPA Office of Water; E = see user guide Section 2.3.5; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice) c = cancer; n = noncancer; \* = where: n SL < 100X c SL; \*\* = where n SL < 100X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide) rotection of Ground Water SSLs CL-base SEO IUR esident Air Air (mg/kgesident So ndustrial Sc apwate MCL SSL SSL (ug/m<sup>3</sup>) mg/kg-day)<sup>-1</sup> ug/m<sup>3</sup>)-1 day) gen GIABS ABS (mg/kg) Analyte CAS No. (mg/kg) (mg/kg) (ug/m³) (ug/L) (ug/L) (mg/kg) (mg/kg) 4.5E-02 C 1.3E-05 C 1.3E+03 513-37-1 2.0E-01 8.9E-01 2.2E-01 3.3E-01 2.4E-04 ethylvinylchlorid 9.4E-01 0.1 2.6F-03 0.1 131-89-5 2.0E-03 Dinitro-o-cyclohexyl Phenol, 4.6-1.3E+02 1.6E+03 2.3E+01 7.7E-01 1.0E-04 0.1 6.3E+00 8.2E+01 initrobenzene. 1.2-528-29-0 1.9E+00 1.8E-03 1.0E-04 0.1 6.3E+00 8.2E+01 1.8E-03 99-65-0 initrobenzene, 1,3 1 0F-04 0.1 initrohenzene 14-100-25-4 6 3F+00 8 2F+01 2 0F+00 1 8F-03 n 2 0F-03 1 0.1 Dinitrophenol 24-51-28-5 1 3F+02 1 6F+03 3 9F+01 4 4F-02 6 8F-01 1 0.1 Dinitrotoluene Mixture, 2,4/2,6-NΔ 8 0F-01 3 4F+00 1.1E-01 1 5F-04 3.1E-01 C 8.9E-05 C 2.0E-03 1 0.102 Dinitrotoluene, 2,4-121-14-2 1.7E+00 7.4E+00 3.2E-02 c 1.4E-01 2.4E-01 3 2F-04 Dinitrotoluene, 2,6-1.5E+00 3.0E-04 0.099 606-20-2 3.6E-01 1.5E+00 4.9E-02 6.7E-05 2 OF-03 0.006 initrotoluene, 2-Amino-4,6 35572-78-2 1.5E+02 2.3E+03 3.9E+01 3 0F-02 2.0E-03 0.009 Dinitrotoluene, 4-Amino-2,6-19406-51-0 1.5E+02 2.3E+03 3.9E+01 3.0E-02 4.5F-01 9.0F-04 0.1 Dinitrotoluene, Technical grade 25321-14-6 1.2F+00 5.1F+00 1.0F-01 1.4F-04 1.0E-03 0.1 88-85-8.2E+02 1.5E+01 6.2E-02 1.0E-01 | 5.0E-06 | 3.0E-02 | 3.0E-02 | V 1 1.2F+0 Dioxane, 1,4 123-91-1 5.3F+00 2.4E+01 5.6E-01 c\* 2.5E+00 c\* 4.6E-01 9.4E-05 С Dioxins 6.2F+03 | 1.3F+00 | 0.03 Hexachlorodibenzo-p-dioxin, Mixture NA 1.0F-04 4.7F-04 2.2F-06 9.4F-06 1.3F-05 1.7F-05 1.3E+05 C 3.8E+01 C 7.0E-10 I 4.0E-08 C V 0.03 1746-01-6 TCDD, 2,3,7,8-4.8E-06 2.2E-05 3.2E-07 1.5E-05 0.1 Diphenamid 1.9E+03 0.1 8.0E-04 iphenyl Sulfone 127-63-9 0.1 122-39-4 1.6E+03 2.1E+04 3.1E+02 5.8E-01 2.5E-02 I Diphenylamine 8.0E-01 I 2.2E-04 I 0.1 iphenylhydrazine, 1,2-122-66-7 6.8E-01 2.9E+00 1.3E-02 5.6E-02 7.8E-02 2.5E-04 85-00-7 2.2E-03 I 0.1 1.4E+02 1.8E+03 8.3E-01 3.7E-01 4.4E+01 7 1F+00 C 1 4F-01 C 0.1 Direct Black 38 1937-37-7 6F-02 3 2F-01 2 OF-05 8 8F-05 1 1F-02 5 3F+00 7.4E+00 C 1.4E-01 C 0.1 Direct Blue 6 2602-46-2 7 3F-02 3 1F-01 2 OF-05 8 8F-05 1.1E-02 1 7F+01 16071-86-6.7E+00 C 1.4E-01 C 1 0.1 irect Brown 9 8.1E-02 3.4E-01 2.0E-05 8.8E-05 1.2E-02 4.0E-05 0.1 298-04-4 9 4F-04 2.5E+00 3.3E+01 Dithiane, 1,4 505-29-3 1.0E-02 7.8E+02 1.2E+04 2.0E+02 9.7E-02 2.0E-03 0.1 330-54-1 1.6E+03 3.6E+01 1.5E-02 4.0E-03 0.1 Oodine 2439-10-3 2.5E+02 3.3E+03 8.0E+01 4.1E-01 2.5F-02 759-94-4 2.0F+03 2.9F+04 3.8F+02 2.0F-01 6.0E-03 Endosulfan 115-29-7 4 7F+02 7.0E+03 1.0E+02 1.4E+00 2.0F-02 0.1 ndothall 145-73-3 1.3F+03 1.6F+04 3.8F+02 1.0F+02 9.1F-02 2.4F-02 3.0F-04 0.1 ndrin 72-20-8 1.9F+01 2.5E+02 2.3F+00 2.0F+00 9.2E-02 8.1E-02 9 9F-03 | 1 2F-06 | 6.0F-03 P 1 0F-03 I V 1 1F+04 106-89-8 8 2F+01 4 4F+00 2 0F+00 4 5F-04 2.0E-02 I V 1.5E+04 Epoxybutane, 1,2-106-88-7 1.6F+02 6.7E+02 n 8.8E+01 4.2E+01 9.2E-03 2.1E+01 n 4.0E-02 0.1 thano, 2-(2-methoxyethoxy) 111-77-3 2.5E+03 3.3E+04 8.0E+02 1.6E-01 5.0E-03 0.1 16672-87 3.2E+02 4.1F+03 2.1E-02 563-12-2 5.0F-04 0.1 thion 3.2F+01 4.1F+02 4.3F+00 8.5F-03 P 6 0F-02 P V 1 0F-01 1 2 4F+04 Ethoxyethanol Acetate 2-111-15-9 2 6F+03 1 4F+04 6 3F+01 2 6F+02 1 2F+02 2 5F-02 9.0F-02 P 2.0F-01 I V 1.1F+05 110-80-5 6.8F-02 1 Ethoxyethanol. 2-5.2F+03 4.7F+04 2.1F+02 8.8F+02 n 3.4F+02 9 0F-01 I 7.0E-02 P V 1.1F+04 Ethyl Acetate 141-78-6 6.2E+02 2 6F+03 7.3E+01 3.1E+02 1 4F+02 3 1F-02 5.0E-03 P 8.0E-03 P V 2.5E+03 Ethyl Acrylate 140-88-5 4.7E+01 2.1E+02 8 3F+00 3.5E+01 1.4E+01 3 2F-03 1.0E+01 I V 2.1F+0 thyl Chloride (Chloroethane) 75-00-3 1.4F+04 5.7E+04 4.4F+04 n 2.1E+04 5 9F±00 2.0E-01 1.0E+04 Ethyl Ether 60-29-7 1.6E+04 ns 2.3E+05 3.9E+03 8.8E-01 n nms 3.0E-01 P V 1.1E+03 Ethyl Methacrylate 97-63-2 1.8E+03 7.6E+03 3.1E+02 1.3E+03 6.3E+02 1.5E-01 ns ns 1.0E-05 thyl-p-nitrophenyl Phosphonate 2104-64-5 6.3E-01 8.2E+00 8.9E-02 2.8E-03 1.1E-02 C 2.5E-06 C 1.0E-01 I 1.0E+00 I V 4.8E+02 100-41-4 5.8E+00 2.5E+01 4.9E+00 7.0E+02 1.7E-03 7.8E-01 Ethylbenzene 1.1E+00 1.5E+00 7.0F-02 0.1 thylene Cyanohydrin 109-78-4 4.4F+03 5.7F+04 1.4F+03 2.8F-01 9.0E-02 107-15-3 7.0E+03 1.9E+05 Ethylene Diamine 1.1E+05 nm 1.8E+03 4.1E-01 I 4.0E-01 C 0.1 107-21-1 1.6E+06 4.0E+04 8.1E+00 2.0E+00 1.3E+05 1.8E+03 I 1.6E+00 0.1 thylene Glycol Monobutyl Ether 111-76-2 6.3E+03 8.2E+04 1.7E+03 7.0E+03 4.1E-01 1.0E-01 3 1F-01 C 8.8F-05 C 3.0F-02 C V 1 2F+0 thylene Oxide 75-21-8 1 8F-01 1 1F-05 4.5E-02 C 1.3E-05 C 8.0E-05 0.1 thylene Thiourea 96-45-7 5.1E+00 5.1E+01 9.4E-01 3.6E-04 2.2E-01 c 1.6E+00 6.5E+01 C 1.9E-02 C 1.5E+05 151-56-4 2.7E-03 1.2E-02 1.5E-04 6.5E-04 2.4E-04 5.2E-08 Ethyleneimine 0.1 84-72-0 1.3E+02 3.0E+00 thylphthalyl Ethyl Glycolate 1.9E+05 2.5E+06 5.8E+04 2.5F-04 0.1 enaminhos 22224-92-1.6F+01 2.1F+02 4.4F+00 4.3F-03 n 2 5F-02 1 0.1 Fenpropathrin 39515-41-8 1 6F+03 2 1F+04 6.4F+01 2 9F+00 2.5F-02 0.1 envalerate 51630-58-1 1.6F+03 2.1E+04 5.0E+02 3.2F+02 1.3E-02 0.1 2164-17-2 1 9F-01 luometuror 8.2E+02 4.0E-02 C 1.3E-02 C 16984-48-8 3.1E+03 4.7E+04 1.4E+01 n 5.7E+01 1.2E+02 luoride 6.0E-02 I 1.3E-02 C Fluorine (Soluble Fluoride) 7782-41-4 4.7F+03 7.0E+04 1.2E+03 1.8F+02 6.0E+02 8.0E-02 0.1 Fluridone 59756-60-4 1.6E+02 1 5.1E+03 6.6E+04 1.4E+03 n 2.0F-02 0.1 Flurprimidol 56425-91-3 1.3F+03 1.6F+04 3.4F+02 1.6F+00 7.0E-04 0.1 85509-19-9 4.4E+01 5.7E+02 1.1E+01 1.8E+00 Flusilazole

Key: I = IRIS;	P = PPRTV; A = ATSDR; C = Cal E				; H = HEAST; F = See FAQ; J = New Jersey; O = EPA Office of Water; E = see user guidd < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concent									SA applied (S	ee User Guide fo	r Arsen	ic notice);
	Toxicity and Chemic	cal-specific Information			Contaminant	,	1				eening Le		(400 000 0000)		Protection of C	round \	Water SSLs
	k k RfD <sub>o</sub> k	k v										Industriai			Risk-based	M	ICL-based
SFO	e IUR e (mg/kg- e	RfC <sub>i</sub> e o muta-		C <sub>sat</sub>			Resident So	il I	ndustrial So	"	ent Air	Air	Tapwater	MCL	SSL		SSL
(mg/kg-day)	<sup>1</sup> y (ug/m <sup>3</sup> ) <sup>-1</sup> y day) y	/ (mg/m³) y I gen G	GIABS ABS	(mg/kg)	Analyte	CAS No.	(mg/kg)	key	(mg/kg)	key (ug/	'm³) key	(ug/m³)	key (ug/L) ke	y (ug/L)	(mg/kg)	ey (	(mg/kg)
	6.0E-02 I		1 0.1		Flutolanil	66332-96-5	3.8E+03	n	4.9E+04	n			9.5E+02 n			n	
	1.0E-02 I		1 0.1		Fluvalinate	69409-94-5	6.3E+02	n	8.2E+03	n			2.0E+02 n		2.9E+02	n	
3.5E-03	I 1.0E-01 I		1 0.1		Folpet	133-07-3	1.6E+02	C*	6.6E+02	С			2.0E+01 c*		= 00	c*	
1.9E-01	1		1 0.1		Fomesafen	72178-02-0	2.9E+00	С	1.2E+01	С			3.9E-01 c			С	
	2.0E-03 I		1 0.1		Fonofos	944-22-9	1.3E+02	n	1.6E+03	n			2.4E+01 n			n	
		9.8E-03 A V	1	4.2E+04	Formaldehyde	50-00-0	1.7E+01	C*	7.3E+01	c* 2.28		9.4E-01	c* 4.3E-01 c*			c*	
	9.0E-01 P 3.0E+00 I		1 0.1	1.1E+05	Formic Acid Fosetyl-AL	64-18-6 39148-24-8	2.9E+01 1.9E+05	n nm	1.2E+02 2.5E+06	n 3.18	-01 n	1.3E+00	n 6.3E-01 n 6.0E+04 n			n n	
	3.02.00 1		1 0.1		Furans	33140 24 0	1.50105		2.52.100	11111			0.02.04 11		7.52.102		_
	1.0E-03 X	< v	1 0.03		~Dibenzofuran	132-64-9	7.3E+01	n	1.0E+03	n			7.9E+00 n		1.5E-01	n	
	1.0E-03 I	•	1 0.03	6.2E+03	~Furan	110-00-9	7.3E+01	n	1.0E+03	n			1.9E+01 n			n	
	9.0E-01 I		1 0.03	1.7E+05	~Tetrahydrofuran	109-99-9	1.8E+04	n	9.6E+04	n 2.1E	+03 n	8.8E+03	n 3.4E+03 n			n	
3.8E+00	н		1 0.1		Furazolidone	67-45-8	1.4E-01	С	6.0E-01	С			2.0E-02 c		3.9E-05	с	
		5.0E-02 H V	1	1.0E+04	Furfural	98-01-1	2.1E+02	n	2.6E+03	n 5.28	+01 n	2.2E+02	n 3.8E+01 n		8.1E-03	n	
1.5E+00	C 4.3E-04 C		1 0.1		Furium	531-82-8	3.6E-01	С	1.5E+00	c 6.58	-03 с	2.9E-02	c 5.1E-02 c		6.8E-05	С	
3.0E-02	I 8.6E-06 C		1 0.1		Furmecyclox	60568-05-0	1.8E+01	С	7.7E+01	c 3.38	-01 c	1.4E+00	c 1.1E+00 c			С	
	4.0E-04 I		1 0.1		Glufosinate, Ammonium	77182-82-2	2.5E+01	n	3.3E+02	n			8.0E+00 n		1.8E-03	n	الوايد
			1 0.1		Glutaraldehyde	111-30-8	1.1E+05	nm	4.8E+05	nm 8.38		3.5E-01	n				
	4.0E-04 I		1	1.1E+05	Glycidyl	765-34-4	2.3E+01	n	2.1E+02	n 1.0E	+00 n	4.4E+00	n 1.7E+00 n	7.05.05		n	2.45.00
	1.0E-01 I		1 0.1		Glyphosate	1071-83-6	6.3E+03	n	8.2E+04	n			2.0E+03 n	7.0E+02		n 3	3.1E+00
	1.0E-02 X		1		Guaridine Guaridine Guarida	113-00-8	7.8E+02	n	1.2E+04	n			2.0E+02 n		4.5E-02	n	
	2.0E-02 P 5.0E-05 I		1 0.1 1 0.1		Guanidine Chloride Haloxyfop, Methyl	50-01-1 69806-40-2	1.3E+03 3.2E+00	n n	1.6E+04 4.1E+01	n			4.0E+02 n 7.6E-01 n		8.4E-03	n n	
4 5F+00					Hentachlor	76-44-8				n a a	. 00	0.45.00		4.05.04		n ,	2.25.02
4.5E+00 9.1E+00	I 1.3E-03 I 5.0E-04 I I 2.6E-03 I 1.3E-05 I		1		Heptachlor Epoxide	1024-57-3	1.3E-01 7.0E-02	c c*	6.3E-01 3.3E-01	c 2.28		9.4E-03 4.7E-03	c 1.4E-03 c c 1.4E-03 c*	4.0E-01 2.0E-01			3.3E-02 4.1E-03
9.12+00	2.0E-03 I	•	1		Hexabromoblenzane / TOTO	87-82-1	1.6E+02	n	2.3E+03	n 1.11	:-U5 C	4.76-03	4.0E+01 n	2.0E-01		n .	+.1E-U5
	2.0E-04 I	•	1 0.1		Hexabromodiphenyl ether, 2,2',4,4',5,5'-(BDE-153)	68631-49-2	1.3E+01	n	1.6E+02	n			4.0E+00 n	1	2.52 01	n.	
1.6E+00	I 4.6E-04 I 8.0E-04 I	v	1 0.1		Hexachldrobenzene*	118-74-1	2.1E-01	c	9.6E-01	c 6.18	-03 c	2.7E-02	c 9.8E-03 c	1.0E+00	1.2E-04	 c :	1.3E-02
7.8E-02	I 2.2E-05 I 1.0E-03 P	v	1	1.7E+01	Hexachldrobutadiene (	87-68-3	1.2E+00	c*	5.3E+00	c 1.3		5.6E-01	c 1.4E-01 c*	1.02.00		c*	1.52 02
6.3E+00	I 1.8E-03 I 8.0E-03 A	4	1 0.1		Hexachlorocyclohexane, Alpha-	319-84-6	8.6E-02	С	3.6E-01	c 1.68		6.8E-03	c 7.2E-03 c		4.2E-05	С	
1.8E+00	I 5.3E-04 I		1 0.1		Hexachlorocyclohexane, Beta-	319-85-7	3.0E-01	С	1.3E+00	c 5.38	-03 c	2.3E-02	c 2.5E-02 c		1.5E-04	c	
1.1E+00	C 3.1E-04 C 3.0E-04 I		1 0.04		Hexachlorocyclohexane, Gamma- (Lindane)	58-89-9	5.7E-01	c*	2.5E+00	c 9.18		4.0E-02	c 4.2E-02 c*	2.0E-01	2.4E-04	c* :	1.2E-03
1.8E+00	I 5.1E-04 I		1 0.1		Hexachlorocyclohexane, Technical	608-73-1	3.0E-01	С	1.3E+00	c 5.58	-03 c	2.4E-02	c 2.5E-02 c		1.5E-04	С	
			1	1.6E+01	Hexachlorocyclopentadiene /	77-47-4	1.8E+00	n	7.5E+00	n 2.18		8.8E-01	n 4.1E-01 n	5.0E+01			1.6E-01
4.0E-02		3.0E-02 I V	1		Hexachloroetharle //	67-72-1	1.8E+00	c*	8.0E+00	c* 2.6	-01 c	1.1E+00	c 3.3E-01 c*			c*	
	3.0E-04 I		1 0.1		Hexachlorophene	70-30-4	1.9E+01	n	2.5E+02	n			6.0E+00 n			n	
1.1E-01	I 3.0E-03 I		1 0.015		Hexahydro-1,3,5 trinitro 1,3,5 triazine (RDX)	121-82-4	6.1E+00	c*	2.8E+01	c			7.0E-01 c*			c*	
		1.0E-05   V	1	3.4E+03	Hexamlethylene Diisocyahate, 1,6-	822-06-0	3.1E+00	n	1.3E+01	n 1.08	-02 n	4.4E-02	n 2.1E-02 n			n	
	4.0E-04 P		1 0.1		Hexamethylphosphoramide	680-31-9	2.5E+01	n	3.3E+02	n			8.0E+00 n		7 7 7 7	n	
	2.0E+00 P		1 0.1	1.4E+02	Hexane, N- Hexanedioic Acid	110-54-3 124-04-9	6.1E+02 1.3E+05	ns nm	2.5E+03 1.6E+06	ns 7.3E	+02 n	3.1E+03	n 1.5E+03 n 4.0E+04 n			n n	
			1 0.1	3.3E+03	Hexanone, 2-		2.0E+02		1.3E+08		+01	1.3E+02				n n	
	5.0E-03 I 3.3E-02 I		1 0.1	3.3E+U3	Hexazinone	591-78-6 51235-04-2	2.0E+02 2.1E+03	n n	1.3E+03 2.7E+04	n 3.1E	+01 n	1.3E+UZ	n 3.8E+01 n 6.4E+02 n			n n	البروء
	2.5E-02 I		1 0.1		Hexythiazox	78587-05-0	1.6E+03	n	2.7E+04 2.1E+04	n			1.1E+02 n			n	البروء
	3.0E-04 I		1 0.1		Hydramethylnon	67485-29-4	1.9E+01	n	2.5E+02	n			5.9E+00 n			n	
3.0E+00	I 4.9E-03 I		1		Hydrazine	302-01-2	2.3E-01	c	1.1E+00	c 5.78	-04 c*	2.5E-03	c* 1.1E-03 c*		7.7	:*	البروء
	I 4.9E-03 I		1		Hydrazine Sulfate	10034-93-2	2.3E-01	c	1.1E+00	c 5.76		2.5E-03	c 2.6E-02 c			С	البيداء
		2.0E-02 I V	1		Hydrogen Chloride	7647-01-0	2.8E+07	nm	1.2E+08	nm 2.1E	+01 n	8.8E+01	n 4.2E+01 n			n	
	4.0E-02 C		1		Hydrogen Fluoride	7664-39-3	3.1E+03	n	4.7E+04	n 1.58		6.1E+01	n 2.8E+01 n			n	البروء
		2.0E-03 I V	1		Hydrogen Sulfide	7783-06-4	2.8E+06	nm	1.2E+07	nm 2.18	+00 n	8.8E+00	n 4.2E+00 n			n	
6.0E-02	P 4.0E-02 P	·	1 0.1		Hydroquinone	123-31-9	9.0E+00	С	3.8E+01	С			1.3E+00 c			С	
	1.3E-02 I		1 0.1		Imazalil .	35554-44-0	8.2E+02	n	1.1E+04	n			1.9E+02 n			n	البروء
	2.5E-01 I		1 0.1		Imazaquin	81335-37-7	1.6E+04	n	2.1E+05	nm			4.9E+03 n			n	
	2.5E-01 I		1 0.1		Imazethapyr	81335-77-5	1.6E+04	n	2.1E+05	nm			4.7E+03 n		7.7	n	البيداء
	1.0E-02 A 4.0E-02 I	•	1 0.1		lodine Iprodione	7553-56-2 36734-19-7	7.8E+02 2.5E+03	n n	1.2E+04 3.3E+04	n			2.0E+02 n 7.4E+02 n			n n	
										n							
	7.0E-01 P		1	1.05.01	Iron	7439-89-6	5.5E+04	n	8.2E+05	nm			1.4E+04 n			n	البروء
9.5E-04	3.0E-01 I I 2.0E-01 I		1 0.1	1.UE+U4	Isobutyl Alcohol Isophorone	78-83-1 78-59-1	2.3E+04 5.7E+02	ns c*	3.5E+05 2.4E+03	nms c* 2.1E	+03 n	8.8E+03	5.9E+03 n n 7.8E+01 c*			n c*	البروء
J.JL 04	1.5E-02 I		1 0.1		Isopropalin	33820-53-0	1.2E+03		1.8E+04	n 2.11	00 11	0.02.03	4.0E+01 n			n	
			1	1.1E+05	Isopropanol	67-63-0	5.6E+03	n n	2.4E+04	n 2.1E	+02 n	8.8E+02	n 4.1E+02 n			n .	
	1.0E-01 I		1 0.1	2.12.03	Isopropyl Methyl Phosphonic Acid	1832-54-8	6.3E+03	n	8.2E+04	n 2.10	11	0.01.02	2.0E+03 n			n	
	5.0E-02 I		1 0.1		Isoxaben	82558-50-7	3.2E+03	n	4.1E+04	n			7.3E+02 n			n	
		3.0E-01 A V	1		JP-7	NA	4.3E+08	nm	1.8E+09	nm 3.1E	+02 n	1.3E+03	n 6.3E+02 n			n	
	2.0E-03 I		1 0.1		Lactofen	77501-63-4	1.3E+02	n	1.6E+03	n			2.5E+01 n		1.2E+00	n	البيداء

Key: I = IRIS; P = PPRTV; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #27); H = HEAST; F = See FAQ; J = New Jersey; O = EPA Office of Water; E = see user guide Section 2.3.5; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice) c = cancer; n = noncancer; \* = where: n SL < 100X c SL; \*\* = where n SL < 100X c SL; \*\* = where n SL < 100X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide) rotection of Ground Water SSLs CL-based SEO IUR esident Ai Air (mg/kgesident So ndustrial So apwate MCI SSL SSL (ug/m<sup>3</sup>) mg/kg-day) day) gen GIABS ABS (mg/kg) Analyte CAS No. (mg/kg) (mg/kg) (ug/m³) (ug/L) (ug/L) (mg/kg) (mg/kg) ead Compounds 5.0F-01 C 1.5F-01 C 2.0F-02 C 2.0F-04 C M 0.025 Lead Chromate 7758-97-6 3 0F-01 6.2F+00 6.8F-06 8 2F-05 c 4.1F-02 8.5E-03 C 1.2E-05 C Lead Phosphate 7446-27-7 8.2F+01 3.8F+02 2.3E-01 1.0F+00 c 9.1E+00 2 8F-01 C 8 0F-05 C 0.1 'l ead acetate 301-04-2 1 9F+00 8 2F+00 2 8F-01 Lead and Compounds 7439-92-1 4.0F+02 8.0F+02 1.5E-01 1.5E+01 1.4E+01 1.5F+01 8.5E-03 C 1.2E-05 C 0.1 · Lead subacetate 1335-32-6 6.4F+01 2.7F+02 2.3E-01 9.2F+00 1.0E-07 2.4E+0 ~Tetraethyl Lead 78-00-2 7.8E-03 1.2E-01 1.3E-03 4.7E-06 V 5.0F-06 3.8F+02 Lewisite 541-25-3 3.9F-01 5.8F+00 9.0F-02 3.8F-05 0.1 2 0F-03 inuron 330-55-2 1 3F+02 1 6F+03 3 3F+01 2 9F-02 7439-93-2 1.6E+02 4.0E+01 2.0F-03 2.3F+03 1.2F+01 5.0F-04 0.1 MCPA 94-74-6 3.2F+01 4.1F+02 7.5E+002 UE-U3 1 0F-02 0.1 МСРВ 94-81-5 6 3F+02 8.2E+03 1.5E+02 5 8F-02 1.0F-03 0.1 MCPP 93-65-2 6.3E+01 8.2E+02 1.6F+01 4 7F-03 0.1 121-75-5 1.6E+04 1.0E-01 n I 7.0E-04 C 1.0E-01 0.1 Maleic Anhydride 108-31-6 8.0E+04 7.3E-01 n 3.1E+00 1.9E+03 3.8E-01 5.0E-01 0.1 Maleic Hydrazide 123-33-1 4.1E+05 2.1E+00 109-77-3 1.0E-04 1 0.1 Malononitrile 6.3E+00 8.2E+01 2.0E+00 4.1E-04 n 3.0F-02 H 0.1 Mancozeb 8018-01-7 1.9F+03 2.5F+04 5.4F+02 7.6F-01 5.0E-03 I 0.1 12427-38-2 1 Maneb 3.2E+02 4.1E+03 9.8E+01 1.4E-01 1.4F-01 | 5.0F-05 | Manganese (Diet) 7439-96-9 2.4E-02 S 5.0E-05 I 0.04 Manganese (Non-diet) 7439-96-5 1.8F+03 2.6F+04 n 4.3E+02 2.8E+01 5.2E-02 n 2.2E-01 950-10-7 9.0F-05 H 1 0.1 5 7F+00 7 4F+01 1.8E+00 2 6F-03 3.0E-02 I 1 0.1 Mepiquat Chloride 24307-26-1.9E+03 2.0E-01 n n 2.5E+04 6.0E+02 Mercury Compounds 3.0E-04 I 3.0E-04 S 0.07 Mercuric Chloride (and other Mercury salts) 7487-94-3.5E+02 5.7E+00 3.1E+00 7439-97-6 3.0F-04 I V ~Mercury (elemental) 1 1.1F+01 ns 4.6F+01 ns 3.1E-01 n 1.3E+00 6.3F-01 2.0F+00 3.3F-02 n 1.0F-01 1 0F-04 "Methyl Mercury -22967-92-7 8F+00 1 2F+02 2 0F+00 8.0F-05 0.1 Phenylmercuric Acetate 62-38-4 5.1F+00 6.6F+01 1.6F+00 5.0F-04 3.0E-05 Merphos 150-50-5 2.3F+00 3.5F+01 6.0E-01 5.9F-02 3.0E-05 0.1 Merphos Oxide 78-48-8 1.9E+00 2.5E+01 8.5E-02 4.2E-04 6.0E-02 0.1 Metalaxyl 57837-19 3.8E+03 4.9F+04 3.3E-01 I 3.0E-02 P V 4.6F+03 Methacrylonitrile 126-98-7 7.5E+00 1.0E+02 3.1E+01 n 1.3E+02 1.9E+00 4.3E-04 1.0E-04 0.1 Methamidophos 10265-92-5.0E-05 3.2E+00 4.1E+01 1.0E+00 2.1E-04 2.0E+00 67-56-1 1.2E+06 4.1F+00 I 2.0E+01 I V 1.1E+0 /lethanol 1.2E+05 nms 1 0F-03 0.1 Aethidathion 950-37-8 6 3F+01 8 2F+02 1 9F+01 4 7F-03 n 2 5F-02 1 0.1 Metho myl 16752-77-1 6F+03 2 1F+04 5 0F+02 1 1F-01 99-59-2 4 9F-02 C 1 4F-05 C 1 0.1 Methoxy-5-nitroaniline, 1 1F+01 4 7F+01 2.0E-01 c 8.8E-01 1 5F+00 5 3F-04 5.0E-03 0.1 72-43-5 3.2E+02 4.1E+03 3.7E+01 4.0E+01 2.0E+00 2.2E+00 8.0E-03 P 1.0E-03 P V 1.2E+05 Methoxyethanol Acetate, 2 110-49-6 1.1E+02 5.1E+02 1.0E+00 n 4.4E+00 2.1E+00 4.2E-04 5.0E-03 P 2.0E-02 I V 1.1E+0 Methoxyethanol, 2-109-86-4 3.3E+02 3.5E+03 8.8E+01 2.9E+01 5 9F-03 1.0E+00 X 7.8E+04 1.2E+06 2.0E+04 4.1E+00 2.9F+04 Methyl Acetate 79-20-9 ns nms 2.0E-02 P V 1.5F+02 6.1F+02 8.8F+01 4.2F+01 8.9F-03 6.8E+03 Methyl Acrylate 96-33-3 I 5.0E+00 I V 2.8E+04 Methyl Ethyl Ketone (2-Butanone) 78-93-3 2.2E+04 1.2E+00 1.8E+05 Methyl Hydrazine c\*\* 5.6E-03 c 1.0E-03 X 1.0E-03 P 2.0E-05 X V 60-34-4 1 /F\_01 6.2F-01 c\*\* 2.8E-03 c\*\* 1.2E-02 1 3F-06 C\*\* 3.0F+00 I V Methyl Isobutyl Ketone (4-methyl-2-pentanone) 108-10-1 3.3F+04 1.4F+05 nms 3.1F+03 1.3F+04 1.4F+00 3 /F+03 624-83-9 1.0F-03 C V 1.0E+04 Methyl Isocyanate 4.6F+00 1.9F+01 1.0F+00 4.4F+00 5.9F-04 1.4E+00 Methyl Methacrylate 80-62-6 I 7.0E-01 I V 2.4E+03 4.4E+03 1.9E+04 7.3E+02 n 3.1E+03 1.4E+03 0.1 2.5E-04 Methyl Parathion 298-00-0 1.6E+01 6.0E-02 0.1 Methyl Phosphonic Acid 993-13-5 4.9E+04 2.4E-01 6.0E-03 H 4.0E-02 H V 3.9E+02 Methyl Styrene (Mixed Isomers) 25013-15-3.2E+02 2.6E+03 ns 4.2E+01 n 1.8E+02 2.3E+01 3.8E-02 9.9E-02 C 2.8E-05 C 0.1 Methyl methanesulfonate 5.5E+00 2.3E+01 1.0E-01 4.4E-01 1.6E-04 66-27-3 7.9E-01 1.8E-03 C 2.6E-07 C 3.0E+00 I V Methyl tert-Butyl Ether (MTBE) 1634-04-4 4.7E+01 2.1E+02 4.7E+01 3.2E-03 1.4E+01 3 0F-04 0.1 Methyl-1,4-benzenediamine dihydrochloride, 2-615-45-2 1 9F+01 2 5F+02 6.0F+00 3 6F-03 9 0F-03 2 OF-02 1 0.1 Methyl-5-Nitroaniline, 2-99-55-8 6.0F+01 2 6F+02 8 2F+00 4 6F-03 8.3E+00 C 2.4E-03 C 1 0.1 Methyl-N-nitro-N-nitrosoguanidine, N-70-25-7 6 5F-02 2.8E-01 1.2E-03 5.1E-03 9.4E-03 3 2F-06 1.3E-01 C 3.7E-05 C 0.1 Methylaniline Hydrochloride, 2-1.8E+01 2.6E-04 1.0E-02 A 0.1 Methylarsonic acid 124-58-3 6.3E+02 8.2E+03 2.0E+02 2.0E-04 X 0.1 74612-12 1.3E+01 1.6E+02 4.0E+00 Methylbenzene.1-4-diamine monohydrochloride. 2 0.1 c\*\* 1.0E-01 X 3.0E-04 X 1 Methylbenzene-1.4-diamine sulfate, 2-615-50-9 5.4E+00 2.3E+01 7.8E-01 c 1.9F-03 2.2F+01 C 6.3F-03 C 0.1 Methylcholanthrene, 3-56-49-5 5.5F-03 1.0F-01 1.6F-04 1.1F-03 2.2F-03 I 1.0E-08 I 6.0E-03 I 6.0E-01 I V Methylene Chloride 75-09-2 1.2E+03 1.1E+01 2.9E-03 1.3E-03 P 4.3E-04 C 2.0E-03 P М 1 0.1 Methylene-bis(2-chloroaniline), 4.4'-101-14-4 1.2E+00 2.3F+01 2.4E-03 2.9F-02 1.8F-03 4.6E-02 I 1.3E-05 C 0.1 Methylene-bis(N,N-dimethyl) Aniline, 4,4 101-61-1 1.2E+01 5.0F+01 2.2E-01 9.4F-01 4.8F-01 2.6E-03 1.6F+00 C 4.6F-04 C 2 0F-02 C 0.1 Methylenebisbenzenamine, 4.41-101-77-9 3 4F-01 1 4F+00 6 1F-03 2 7F-02 2 1F-04 6.0E-04 I 1 0.1 Methylenediphenyl Diisocyanate 101-68-8 8.5E+05 nm 3.6E+06 nm 6.3E-01 n 2.6E+00

Key: I = IRIS;	P = PPRTV; A = A	TSDR; C = Ca						; H = HEAST; F = See FAQ; J = New Jersey; O = EPA Office of Water; E = see user guid < 100X c St.; ** = where n St < 10X c St.; SSt values are based on DAF=1; m = Concent											applied (Se	ee User Guide	for Ar	senic notice)
	Toxici	ity and Chen	nical-specific Inf		,			Contaminant	,		(===		,, -		ing Levels		(			Protection o	Grou	nd Water SSLs
	k k	RfD <sub>o</sub>	k k	v												industriai				Risk-based		MCL-based
SFO	e IUR e	(mg/kg-	e RfC <sub>i</sub> e o	o muta-			C <sub>sat</sub>			Resident Soi	1	Industrial S		Resident /		Air		apwater	MCL	SSL		SSL
(mg/kg-day)	y (ug/m³) <sup>-1</sup> y	day)	y (mg/m³) y	I gen GI	ABS	ABS	(mg/kg)	Analyte	CAS No.	(mg/kg)	key	(mg/kg)	ke	ey (ug/m³)	key	(ug/m³)		(ug/L) key	(ug/L)	(mg/kg)	key	(mg/kg)
		7.02 02	н \	V	1		5.0E+02	Methylstyrene, Alpha-	98-83-9	5.5E+03	ns	8.2E+04	ns	S				7.8E+02 n		1.2E+00	n	
		1.5E-01	I			0.1		Metolachlor	51218-45-2	9.5E+03	n	1.2E+05						2.7E+03 n		3.2E+00	n	
		2.5E-02 2.5E-01	!			0.1		Metribuzin Metsulfuron-methyl	21087-64-9 74223-64-6	1.6E+03 1.6E+04	n n	2.1E+04 2.1E+05						1.9E+02 n 1.9E+03 n		1.5E-01 1.9E+00	n	
		3.0F+00	D A		1	0.1	3.4E-01	Mineral oils		2.3E+05	nms							5.0E+04 n		2.4F+03	n	
1 8F±01	C 5.1E-03 C	2.0E-04		•	1		3.4E-UI	Mirex	8012-95-1 2385-85-5	3.6E-02	C	3.5E+06 1.7E-01	C		С	2.4E-03		3.8E-04 C		6.3F-04	C	
1.02.01	C 3.12 03 C	2.0E-03	i '	•		0.1		Molinate	2212-67-1	1.3E+02	n	1.6E+03				2.42 03		3.0E+01 n		1.7E-02	n	
		5.0E-03	1		1			Molybdenum	7439-98-7	3.9E+02	n	5.8E+03	n	1			1	L.0E+02 n		2.0E+00	n	
		1.0E-01	1		1			Monochloramine	10599-90-3	7.8E+03	n	1.2E+05		n			2	2.0E+03 n	4.0E+03		n	
		2.0E-03	P		1	0.1		Monomethylaniline	100-61-8	1.3E+02	n	1.6E+03	n				3	3.8E+01 n		1.4E-02	n	
		2.5E-02	I			0.1		Myclobutanil	88671-89-0	1.6E+03	n	2.1E+04		1				1.5E+02 n		5.6E+00	n	
		3.0E-04	X			0.1		N,N'-Diphenyl-1,4-benzenediamine	74-31-7	1.9E+01	n	2.5E+02						8.6E+00 n		3.7E-01	n	
		2.0E-03	I \		1			Naled	300-76-5	1.6E+02	n	2.3E+03						I.0E+01 n		1.8E-02	n	
		3.0E-02	X 1.0E-01 P V	•	1			Naphtha, High Flash Aromatic (HFAN)	64742-95-6	2.3E+03	n	3.5E+04			n	4.4E+02		1.5E+02 n			n	
1.8E+00	C 0.0E+00 C	1.0E-01				0.1		Naphthylamine, 2- Napropamide	91-59-8 15299-99-7	3.0E-01 6.3E+03	c n	1.3E+00 8.2E+04						3.9E-02 c		2.0E-04 1.1E+01	C n	
	2.55.24														-++	4.75.00				1.12+01		
			C 1.4E-05 C C 1.4E-05 C			0.1		Nickel Acetate Nickel Carbonate	373-02-4 3333-67-3	6.7E+02 6.7E+02	n n	8.1E+03 8.1E+03				4.7E-02 4.7E-02		2.2E+02 n 2.2E+02 n			n n	
	2.6E-04 C		C 1.4E-05 C \		1	0.1		Nickel Carbonate Nickel Carbonyl	3333-67-3 13463-39-3	6.7E+02 8.2E+02	n n	8.1E+03 1.1E+04	n n			4.7E-02 4.7E-02		2.2E+02 n 2.2E-02 c**			n c**	
	2.6E-04 C		C 1.4E-05 C		.04			Nickel Hydroxide	12054-48-7	8.2E+02	n	1.1E+04				4.7E-02		2.0E+02 n			n	
	2.6E-04 C		C 2.0E-05 C		.04			Nickel Oxide	1313-99-1	8.4E+02	n	1.1E+04 1.2E+04				4.7E-02 4.7E-02		2.0E+02 n			n	
	2.4E-04 I		C 1.4E-05 C		.04			Nickel Refinery Dust	NA NA	8.2E+02	n	1.1E+04				5.1E-02		2.2E+02 n		3.2E+01	n	
	2.6E-04 C		I 9.0E-05 A		.04			Nickel Soluble Salts	7440-02-0	1.5E+03	n	2.2E+04	n	1.1E-02		4.7E-02		3.9E+02 n		2.6E+01	n	
1.7E+00	C 4.8E-04 I	1.1E-02	C 1.4E-05 C	0.	.04			Nickel Subsulfide	12035-72-2	4.1E-01	С	1.9E+00	С	5.8E-03	c**	2.6E-02	c** 4	4.5E-02 c			С	
	2.6E-04 C	1.1E-02	C 1.4E-05 C		1	0.1		Nickelocene	1271-28-9	6.7E+02	n	8.1E+03	n	1.1E-02	C**	4.7E-02	c** 2	2.2E+02 n			n	
		1.6E+00	I		1			Nitrate	14797-55-8	1.3E+05	nm	1.9E+06	nn	n			3	3.2E+04 n	1.0E+04		n	
					1			Nitrate + Nitrite (as N)	, NA										1.0E+04			
		1.0E-01	1		1			Nitrite	14797-65-0	7.8E+03	n	1.2E+05						2.0E+03 n	1.0E+03		n	
			X 5.0E-05 X			0.1		Nitroaniline, 2	88-74-4	6.3E+02	n	8.0E+03				2.2E-01		l.9E+02 n		8.0E-02	n	
2.0E-02	P 4.05.05 I		P 6.0E-03 P			0.1	2.45.02	Nitroaniline, 4	100-01-6	2.7E+01	C**	1.1E+02				2.6E+01		3.8E+00 c*		1.6E-03	c*	
	4.0E-05 I		I 9.0E-03 I \		1		3.1E+03	Nitrobegizene U V3 (2002) V2007	· 198-95-3	5.1E+00	C*	2.2E+01			С	3.1E-01		1.4E-01 c*		9.2E-05	с*	
		3.0E+03	P			0.1		Nitrocellulose Nitrofurantoin	9004-70-0 67-20-9	1.9E+08 4.4F+03	nm	2.5E+09 5.7E+04					-	5.0E+07 n 1.4E+03 n		1.3E+04	n	
1.3E+00	C 3.7E-04 C	7.0E-02	Н		_	0.1		Nitrofurazione	59-87-0	4.4E+03 4.2E-01	n	1.8E+00	n	7.6E-03	c	3.3E-02		5.0E-02 c		6.1E-01 5.4E-05	n C	
1.7F-02	P	1.0E-04	D			0.1		Nitroglycerin	55-63-0	6.3E+00	n	8.2E+01	n	7.02.03		3.3E 0E		2.0E+00 n		8.5F-04	n	
1.72 02	•	1.0E-01	i			0.1		Nitroguanidine (77)	556-88-7	6.3E+03	n	8.2E+04	n.					2.0E+03 n		4.8E-01	n	
	8.8E-06 P		5.0E-03 P \		1		1.8E+04	Nitromethane	75-52-5	5.4E+00	c*	2.4E+01	c*	* 3.2E-01	c*	1.4E+00		5.4E-01 c*		1.4E-04	c*	
	2.7E-03 H		2.0E-02 I \	V	1		4.9E+03	Nitropropane, 21	79-46-9	1.4E-02	С	6.0E-02	С	1.0E-03	С	4.5E-03	c 2	2.1E-03 c		5.4E-07	С	
2.7E+01	C 7.7E-03 C			M	1	0.1		Nitroso-N-ethylurea, N-	759-73-9	4.5E-03	С	8.5E-02	С	1.3E-04	С	1.6E-03	c 9	9.2E-04 c		2.2E-07	С	
1.2E+02	C 3.4E-02 C			М	1	0.1		Nitroso-N-methylurea, N-	684-93-5	1.0E-03	С	1.9E-02	С	3.0E-05	С	3.6E-04	c 2	2.1E-04 c		4.6E-08	С	
5.4E+00	I 1.6E-03 I			V	1			Nitroso-di-N-butylamine, N-	924-16-3	9.9E-02	С	4.6E-01	С	1.8E-03	С	7.7E-03	c 2	2.7E-03 c		5.5E-06	С	
7.0E+00	I 2.0E-03 C					0.1		Nitroso-di-N-propylamine, N-	621-64-7	7.8E-02	С	3.3E-01	С		-	6.1E-03		1.1E-02 c		8.1E-06	С	
2.8E+00	I 8.0E-04 C					0.1		Nitrosodiethanolamine, N-	1116-54-7	1.9E-01	С	8.2E-01	С	3.5E-03		1.5E-02		2.8E-02 c		5.6E-06	С	
1.5E+02	I 4.3E-02 I	0.05				0.1		Nitrosodiethylamine, N-	55-18-5	8.1E-04	С	1.5E-02	С			2.9E-04		1.7E-04 c		6.1E-08	С	
5.1E+01 4.9F-03	I 1.4E-02 I I 2.6F-06 C	8.0E-06	P 4.0E-05 X \		1	0.1	2.4E+05	Nitrosodimethylamine, N- Nitrosodiphenylamine, N-	62-75-9 86-30-6	2.0E-03 1.1F+02	c	3.4E-02 4.7F+02	c	7.2E-05		8.8E-04 4.7F+00		1.1E-04 c		2.7E-08 6.7F-02	C C	
2.2E+01	1 6.3E-03 C				1	0.1	1.15,05	Nitrosodiphenylamine, N-	10595-95-6	2.0E-02	C	9.1E-02	C	4.5E-04		4.7E+00 1.9E-03		7.1E-04 c		2.0E-07	С	
	C 1.9E-03 C		,			0.1	1.1E+05	Nitrosometnyietnyiamine, N- Nitrosomorpholine [N-]	10595-95-6 59-89-2	2.0E-02 8.1E-02	c c	9.1E-02 3.4E-01	c c			1.9E-03 6.5E-03		7.1E-04 C 1.2E-02 C		2.0E-07 2.8E-06	C C	
	C 2.7E-03 C					0.1		Nitrosopiperidine [N-]	100-75-4	5.8E-02	c	2.4E-01	c			4.5E-03		3.2E-03 c		4.4E-06	C	
2.1E+00	I 6.1E-04 I					0.1		Nitrosopyrrolidine, N-	930-55-2	2.6E-01	С	1.1E+00				2.0E-02		3.7E-02 c		1.4E-05	С	
		1.0E-04	х			0.1		Nitrotoluene, m-	99-08-1	6.3E+00	n	8.2E+01						1.7E+00 n		1.6E-03	n	
2.2E-01	P	9.0E-04	Ρ ,	V	1		1.5E+03	Nitrotoluene, o-	88-72-2	3.2E+00	c*	1.5E+01		*			3	3.1E-01 c*		3.0E-04	c*	
1.6E-02	Р	4.0E-03	Р		1	0.1		Nitrotoluene, p-	99-99-0	3.4E+01	C**	1.4E+02	c*	*			4	1.3E+00 c*		4.0E-03	c*	
			X 2.0E-02 P V	V	1		6.9E+00	Nonane, n-	111-84-2	1.1E+01	ns	7.2E+01	ns	s 2.1E+01	. n	8.8E+01		5.3E+00 n		7.5E-02	n	
		4.0E-02	1		1	0.1		Norflurazon	27314-13-2	2.5E+03	n	3.3E+04	n				7	7.7E+02 n		5.0E+00	n	
		3.0E-03	1			0.1		Octabromodiphenyl Ether	32536-52-0	1.9E+02	n	2.5E+03						5.0E+01 n		1.2E+01	n	
		5.0E-02	1			0.006		Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	2691-41-0	3.9E+03	n	5.7E+04	n					l.0E+03 n		1.3E+00	n	
		2.02 03	Н			0.1		Octamethylpyrophosphoramide	152-16-9	1.3E+02	n	1.6E+03	n					I.0E+01 n		9.6E-03	n	
		5.0E-02	1			0.1		Oryzalin	19044-88-3	3.2E+03	n	4.1E+04						3.1E+02 n		1.5E+00	n	
		5.0E-03				0.1		Oxadiazon Oxamvl	19666-30-9	3.2E+02	n n	4.1E+03						1.7E+01 n	2.05.02	4.8E-01	n n	4.45.03
		2.5E-02				0.1		7	23135-22-0	1.6E+03		2.1E+04	n					5.0E+02 n	2.0E+02	1.1E-01		4.4E-02
		3.0E-03 1.3F-02			-	0.1		Oxyfluorfen Paclobutrazol	42874-03-3 76738-62-0	1.9E+02 8.2E+02	n n	2.5E+03 1.1E+04	n n					3.2E+01 n 2.3E+02 n		2.5E+00 4.6E-01	n n	
		1.3E-02 4.5E-03				0.1		Paciobutrazoi Paraquat Dichloride	76738-62-0 1910-42-5	8.2E+02 2.8E+02	n n	1.1E+04 3.7F+03						2.3E+02 n 9.0E+01 n		4.6E-01 1.2E+00	n n	
		6.0E-03	Н			0.1		Parathion	56-38-2	3.8E+02	n	4.9E+03						3.6E+01 n		4.3E-01	n	
		0.UE-U3	11		1	0.1		raraunon	30-36-2	3.00+02	- 11	4.96+03	n				8	0.0E+01 N		4.56-01	-11	

Key: I = IRIS; P = PPRTV; A = ATSDR; C = Cal E				H = HEAST; F = See FAQ; J = New Jersey; O = EPA Office of Water; E = see user guide \$ < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentre									A applied (Se	ee User Guide	for Arse	enic notice) ;
Toxicity and Chemi	ical-specific Information	, <b>, ,</b>	C. II SE	Contaminant	acion may ex	ceed cenning in	(500	oser outde	.,, 5 00	Screening		re (see oser outde)		Protection of	Ground	Water SSLs
k k RfD <sub>o</sub> k	k k v										Industrial			Risk-based		MCL-based
SFO e IUR e (mg/kg- e	e RfC <sub>i</sub> e o muta- y (mg/m³) y I gen GIAB	BS ABS (	C <sub>sat</sub> mg/kg)	Analyte	CAS No.	Resident Soi (mg/kg)	ll lr	ndustrial So (mg/kg)	il kov	Resident Air (ug/m³)	Air ey (ug/m³)	Tapwater	MCL (ug/L)	SSL (mg/kg)	kov	SSL (mg/kg)
(mg/kg-day) <sup>-1</sup> y (ug/m <sup>3</sup> ) <sup>-1</sup> y day) y 5.0E-02 H	y (mg/m³) y I gen GIAB H V 1	3 AB3 (	ilig/ kg)	,	1114-71-2	3.9E+03	кеу	5.8E+04	кеу	(ug/III )	(ug/III )	key (ug/L) key 5.6E+02 n	(ug/L)	(mg/kg) 4.5E-01	кеу	(mg/kg)
4.0E-02 I	1 V 1	0.1			40487-42-1	2.5E+03	n n	3.3E+04	n			1.8E+02 n		2.1E+00	n n	
2.0E-03 I	I V 1	3	3.1E-01	Pentabromodiphenyl Ether	32534-81-9	1.6E+02	ns	2.3E+03	ns			4.0E+01 n		1.7E+00	n	
1.0E-04	1	0.1			60348-60-9	6.3E+00	n	8.2E+01	n			2.0E+00 n		8.7E-02	n	
8.0E-04 I	l V 1		65.00		608-93-5	6.3E+01	n	9.3E+02	n			3.2E+00 n		2.4E-02	n	
9.0E-02 P 2.6E-01 H 3.0E-03 I	V 1 I V 1	4	.6E+02		76-01-7 82-68-8	7.7E+00 2.7E+00	c c*	3.6E+01 1.3E+01	c c			6.5E-01 c 1.2E-01 c		3.1E-04 1.5E-03	c c	
4.0E-01   5.1E-06 C 5.0E-03	i 1	0.25			87-86-5	1.0E+00	С	4.0E+00	С	5.5E-01	c 2.4E+00		1.0E+00	4.2E-04	С	1.0E-02
4.0E-03 X 2.0E-03 F	P 1	0.1		Pentaerythritol tetranitrate (PETN)	78-11-5	1.3E+02	n	5.7E+02	C**			1.9E+01 c**		2.8E-02	C**	
	1.0E+00 P V 1	3	.9E+02		109-66-0	8.1E+02	ns	3.4E+03	ns	1.0E+03	n 4.4E+03	n 2.1E+03 n		1.0E+01	n	
7.0E-04	I 1			Perchlorates ~Ammonium Perchlorate	7790-98-9	5.5F+01	n	8.2E+02	n			1.4E+01 n			n	
7.0E-04 I	1 1				7790-98-9	5.5E+01	n	8.2E+02	n			1.4E+01 II			n	
7.0E-04 I	i 1				14797-73-0	5.5E+01	n	8.2E+02	n			1.4E+01 n	1.5E+01(F)		n	
7.0E-04 I	1				7778-74-7	5.5E+01	n	8.2E+02	n			1.4E+01 n			n	
7.0E-04 I	1				7601-89-0	5.5E+01	n	8.2E+02	n			1.4E+01 n		2.45.04	n	
2.0E-02 F	P V 1	0.1			375-73-5	1.6E+03	n	2.3E+04	n			3.8E+02 n		2.1E-01 2.4F+02	n	
5.0E-02 I 2.2E-03 C 6.3E-07 C	1 1	0.1 0.1			52645-53-1 62-44-2	3.2E+03 2.5E+02	n c	4.1E+04 1.0E+03	n c	4.5E+00	c 1.9E+01	1.0E+03 n c 3.4E+01 c		2.4E+02 9.7E-03	n c	
2.5E-01 I	1 1	0.1			13684-63-4	1.6E+04	n	2.1E+05	nm		1.52.01	4.0E+03 n		2.1E+01	n	
	I 2.0E-01 C 1				108-95-2	1.9E+04	n	2.5E+05	nm	2.1E+02	n 8.8E+02	n 5.8E+03 n		3.3E+00	n	
5.0E-04 >					92-84-2	3.2E+01	n	4.1E+02	n			4.3E+00 n		1.4E-02	n	
6.0E-03 I 4.7E-02 H	1 1	0.1			108-45-2 95-54-5	3.8E+02	n	4.9E+03	n			1.2E+02 n		3.2E-02	n	
4.7E-02 H 1.9E-01 H	-	0.1			95-54-5 106-50-3	1.2E+01 1.2E+04	c n	4.9E+01 1.6E+05	c nm			1.6E+00 c 3.8E+03 n		4.4E-04 1.0E+00	c n	
1.9E-03 H	1	0.1			90-43-7	2.8E+02	c	1.2E+03	С			3.0E+01 c		4.1E-01	c	
2.0E-04 H	Н 1	0.1		Phorate	298-02-2	1.3E+01	n	1.6E+02	n			3.0E+00 n		3.4E-03	n	
	3.0E-04 I V 1		.6E+03		75-44-5	3.1E-01	n	1.3E+00	n	3.1E-01	n 1.3E+00					
2.0E-02 I	1	0.1			732-11-6	1.3E+03	n	1.6E+04	n			3.7E+02 n		8.2E-02	n	
4.9E+01 F	P 1			Phosphates, Inorganic  "Aluminum metaphosphate"	13776-88-0	3.8E+06	nm	5.7E+07	nm			9.7E+05 n			n	
4.9E+01 F	P 1				68333-79-9	3.8E+06	nm	5.7E+07	nm			9.7E+05 n			n	
4.9E+01 F	P 1				7790-76-3	3.8E+06	nm	5.7E+07	nm			9.7E+05 n			n	
4.9E+01 F	P 1				7783-28-0	3.8E+06	nm	5.7E+07	nm			9.7E+05 n			n	
4.9E+01 F 4.9E+01 F	P 1				7757-93-9 7782-75-4	3.8E+06 3.8E+06	nm	5.7E+07 5.7E+07	nm			9.7E+05 n 9.7E+05 n			n	
4.9E+01 F 4.9E+01 F	P 1				7758-11-4	3.8E+06 3.8E+06	nm	5.7E+07 5.7E+07	nm nm			9.7E+05 n			n n	
4.9E+01 F	P 1				7558-79-4	3.8E+06	nm	5.7E+07	nm			9.7E+05 n			n	
4.9E+01 F	P 1			~Mondaluminum phosphate	13530-50-2	3.8E+06	nm	5.7E+07	nm			9.7E+05 n			n	
4.9E+01 F	P 1			ivionoammonium prospriate	7722-76-1	3.8E+06	nm	5.7E+07	nm			9.7E+05 n			n	
4.9E+01 F 4.9E+01 F	P 1 P 1				7758-23-8	3.8E+06 3.8E+06	nm	5.7E+07 5.7E+07	nm			9.7E+05 n 9.7E+05 n			n n	
4.9E+01 F 4.9E+01 F	P 1				7757-86-0 7778-77-0	3.8E+06 3.8E+06	nm nm	5.7E+07 5.7E+07	nm nm			9.7E+05 n 9.7E+05 n			n n	
4.9E+01 F	P 1				7558-80-7	3.8E+06	nm	5.7E+07	nm			9.7E+05 n			n	
4.9E+01 F	P 1				8017-16-1	3.8E+06	nm	5.7E+07	nm			9.7E+05 n			n	
4.9E+01 F	P 1				13845-36-8	3.8E+06	nm	5.7E+07	nm nm			9.7E+05 n			n	
4.9E+01 F 4.9E+01 F	P 1				7758-16-9 7785-88-8	3.8E+06 3.8E+06	nm	5.7E+07 5.7E+07	nm			9.7E+05 n 9.7E+05 n			n n	
4.9E+01 F	P 1				10279-59-1	3.8E+06	nm	5.7E+07 5.7E+07	nm			9.7E+05 n			n	
4.9E+01 F	P 1				10305-76-7	3.8E+06	nm	5.7E+07	nm			9.7E+05 n			n	
4.9E+01 F	P 1				10124-56-8	3.8E+06	nm	5.7E+07	nm			9.7E+05 n			n	
4.9E+01 F 4.9E+01 F	P 1 P 1				68915-31-1 7785-84-4	3.8E+06 3.8E+06	nm nm	5.7E+07 5.7E+07	nm			9.7E+05 n 9.7E+05 n			n	
4.9E+01 F	P 1				7758-29-4	3.8E+06	nm	5.7E+07 5.7E+07	nm			9.7E+05 n 9.7E+05 n			n n	
4.9E+01 F					7320-34-5	3.8E+06	nm	5.7E+07 5.7E+07	nm			9.7E+05 n			n	
4.9E+01 F	P 1				7722-88-5	3.8E+06	nm	5.7E+07	nm			9.7E+05 n			n	
4.9E+01 F	P 1				15136-87-5	3.8E+06	nm	5.7E+07	nm			9.7E+05 n			n	
4.9E+01 F 4.9E+01 F	P 1 P 1				7758-87-4	3.8E+06	nm nm	5.7E+07 5.7E+07	nm nm			9.7E+05 n			n	
4.9E+01 F	P 1				7757-87-1 7778-53-2	3.8E+06 3.8E+06	nm	5.7E+07	nm			9.7E+05 n 9.7E+05 n			n n	
4.9E+01 F 4.9E+01 F	P 1				7778-53-2 7601-54-9	3.8E+06 3.8E+06	nm	5.7E+07 5.7E+07	nm			9.7E+05 n			n n	
	I 3.0E-04 I V 1				7803-51-2	2.3E+01	n	3.5E+02	n	3.1E-01	n 1.3E+00	n 5.7E-01 n			n	
	P 1.0E-02 I 1				7664-38-2	3.0E+06	nm	2.9E+07	nm	1.0E+01	n 4.4E+01	n 9.7E+05 n			n	
2.0E-05 I	I V 1			Phosphorus, White Phthalates	7723-14-0	1.6E+00	n	2.3E+01	n			4.0E-01 n		1.5E-03	n	
				r illialates												

Key: I = IRIS; P = PPRTV; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #27); H = HEAST; F = See FAQ; J = New Jersey; O = EPA Office of Water; E = see user guide Section 2.3.5; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice) c = cancer; n = noncancer; \* = where: n SL < 100X c SL; \*\* = where n SL < 100X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c SL; \*\* = where n SL < 10X c 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1F+02 1.0E-01 1 0.1 ~Dibutyl Phthalate 84-74-2 6.3F+03 8.2E+04 9.0F+02 2.3E+00 8 0F-01 1 0.1 \*Diethyl Phthalate 84-66-2 5 1F+04 6 6F+05 nm 1 5F+04 6.1E+00 1.0F-01 Dimethylterephthalate 120-61-6 7.8F+03 1.2F+05 1.9F+03 4.9F-01 n nm 1.0F-02 0.1 ~Octyl Phthalate, di-N-117-84-0 6.3F+02 8.2F+03 2.0F+02 5.7F+01 1.0E+00 H 0.1 Phthalic Acid, P-100-21-0 6.3E+04 8.2E+05 1.9E+04 6.8F+00 2.0F+00 | 2.0F-02 C 1 0.1 Phthalic Anhydride 85-44-9 1.3F+05 nm 1.6F+06 nm 2.1F+01 n 8.8F+01 3.9F+04 8.5F+00 1918-02-1 5 0F+02 1 4F-01 7 0F-02 0.1 Picloram 4 4F+03 5 7F+04 1 4F+03 3 8F-01 Picramic Acid (2-Amino-4,6-dinitrophenol) 96-91-3 6.3E+00 1.0F-04 0.1 8.2F+01 2.0F+00 1.3F-03 9.0F-04 0.1 Picric Acid (2,4,6-Trinitrophenol) 88-89-1 5.7F+01 7.4F+02 1.8F+01 8.4F-02 1 0F-02 0.1 ririmiphos, Methyl 29232-93-6 3F+02 8.2E+03 1.2E+02 1.2E-01 3.0E+01 C 8.6E-03 C 7.0E-06 H 0.1 59536-65-2 1.8E-02 7.7E-02 3.3E-04 1.4E-03 2.6E-03 Polychlorinated Biphenyls (PCBs) 7.0E-02 S 2.0E-05 S 7.0E-05 I 0.14 Aroclor 1016 12674-11-2 2.7E+01 2.1E-02 0.14 Aroclor 1221 11104-28-2 2.0E+00 S 5.7E-04 S 1 0.14 ~Aroclor 1232 11141-16-5 1.7E-01 7.2E-01 4.9E-03 2.1E-02 c 4.7E-03 8.0E-05 2.0F+00 S 5.7F-04 S 0.14 Aroclor 1242 53469-21-9 2.3F-01 9.5F-01 4.9F-03 2.1F-02 7.8F-03 1.2F-03 0.14 2.0E+00 S 5.7E-04 S 1 Aroclor 1248 12672-29-6 2.3E-01 9.5E-01 4.9E-03 2.1E-02 7.8E-03 1.2E-03 С 2 0F+00 S 5.7F-04 S 2.0F-05 I 0.14 Aroclor 1254 11097-69-2 4F-01 9 7F-01 4 9F-03 2 1F-02 7 8F-03 2 OF-03 c\* 2.0E+00 v 0.14 ~Aroclor 1260 11096-82-5 2.4E-01 9.9E-01 4.9F-03 7.8E-03 5.5E-03 S 5.7E-04 S 2.1E-02 6.0F-04 0.14 Aroclor 5460 11126-42-4 3 5F+01 4 4F+02 1.2E+01 2 0F+00 E 1.1E-03 E 2.3E-05 E 1.3E-03 E V 0.14 Teptachlorobiphenyl, 2,3,3',4,4',5,5'- (PCB 189) 39635-31-4.0E-03 2.8E-03 3.9E+00 1.3E-01 5.2E-01 2.5E-03 1.1E-02 Hexachlorobiphenyl, 2,3',4,4',5,5'- (PCB 167) 52663-72-6 E 1.1E-03 E 2.3E-05 E 1.3E-03 E V 0.14 5.2E-01 2.5E-03 1.1E-02 3.9F+00 1.2E-01 4.0F-03 1.7E-03 E 1.1E-03 E 2.3E-05 E 1.3E-03 E V 0.14 Hexachlorobiphenyl, 2,3,3',4,4',5'- (PCB 157) 69782-90-7 2.5E-03 4.0E-03 5.1E-01 1.1E-02 1.7E-03 Hexachlorobiphenyl, 2,3,3',4,4',5- (PCB 156) 0.14 38380-08-4 1.1F-02 3.9F+00 F 1.1F-03 F 2.3F-05 F 1.3F-03 F V 1.2F-01 5.1F-01 2.5F-03 4.0F-03 1.7F-03 Hexachlorobiphenyl, 3.3',4,4',5,5'- (PCB 169) 3 9F+03 F 1 1F+00 F 2 3F-08 F 13F-06 F V 0.14 32774-16-6 1 2F-04 5 2F-04 2 5F-06 1 1F-05 4 0F-06 1 7F-06 65510-44-3 0.14 Rentachle robinhen vl. 2', 3,4,4',5- (PCB 128) 2.5F-03 4.0F-03 3.9F+00 F 1.1F-03 F 2.3F-05 F 1.3F-03 F V 1.2F-01 5.0F-01 1.1F-02 1.0F-03 E 1.1E-03 E 2.3E-05 E 1.3E-03 E V 0.14 Pentachlorobiphenyl, 2,3',4,4',5~(PCB 118) 31508-00-6 1.2F-01 5.0E-01 2.5E-03 1.1E-02 c 4.0E-03 1.0F-03 3.9F+00 3.9E+00 E 1.1E-03 E 2.3E-05 E 1.3E-03 E V 0.14 Pentachlorobiphenyl, 2,3,3',4,4'- (PCB 105) 32598-14-4 1.2E-01 5.0E-01 2.5E-03 1.0E-03 F 1.1F-03 F 2.3E-05 0.14 Pentachlorobiphenyl, 2,3,4,4,5-(PCB 114) 74472-37-1.1F-02 4.0F-03 1.0E-03 3.9E+00 F 1.3F-03 F V Pentachlorobiphenyl, 3,3',4,4',5- (PCB 126) 1.3E+04 E 3.8E+00 E 7.0E-09 E 4.0E-07 E V 0.14 57465-28-8 3.7E-05 1.5E-04 7.4E-07 3.2E-06 3.0E-07 c 1.2E-06 1 5 7F-04 I 0.14 Polychlorinated Biphenyls (high risk) 1336-36-3 9.4E-01 4.9E-03 2.0E+00 2.3E-01 2.1E-02 4.0E-01 0.14 Polychlorinated Biphenyls (low risk) 1336-36-3 6.8E-03 I 1.0F-04 1.2E-01 7 OF-02 1 2 0F-05 I 0.14 Polychlorinated Biphenyls (lowest risk) 1336-36-3 1 4F-01 6 1F-01 F 3.8F-03 F 7.0F-06 F 4.0F-04 F 3 8F-02 1 6F-01 6.0F-03 9 4F-04 1 3F+01 1 0.14 Tefrachlorobiphenyl, 3,3',4,4' - (PCB-77) 32598-13-3 7 4F-04 3 2F-03 ٠\* 0.14 3.9E+01 E 1.1E-02 E 2.3E-06 E 1.3E-04 E V 1 Tetrachlorobiphenyl, 3,4,4',5- (PCB 81) 70362-50-1 2F-02 4 9F-02 2 5F-04 1 1F-03 c 4.0E-04 6.2F-05 6.0E-04 I 0.1 olymeric Methylene Dipherlyl Diisocyanate (PMDI) 9016-87-9 8.5E+05 3.6E+06 6.3E-01 2.6E+00 Polynuclear Aromatic Hydrocarbon's (PAHs) 6.0F-02 0.13 83-32-9 4.5E+04 5.3E+02 5 5E+00 3.0E-01 0.13 1.8E+04 2.3E+05 1.8E+03 5.8E+01 'Anthracene 120-12-7 nm 7.3E-01 E 1.1E-04 C V M 0.13 1.6F-01 2.9F+00 9.2F-03 1.1F-01 1.2F-02 4.2F-03 'Renz[alanthracene 56-55-3 1.2E+00 C 1.1E-04 C 0.13 205-82-3 Benzo(i)fluoranthene 7.3F + 00I 1.1F-03 C M 0.13 'Benzo[a]pyrene 50-32-8 1.6F-02 2.9F-01 9.2E-04 1.1F-02 3.4F-03 4.0F-03 2.4F-01 7.3E-01 E 1.1E-04 C М 0.13 1.6F-01 2.9F+00 9.2F-03 1.1F-01 3.4F-02 4.1F-02 Benzo[b]fluoranthen 205-99-2 7.3F-02 E 1.1E-04 C 0.13 Benzo[k]fluoranthene 207-08-9 1.6F+00 2.9F+01 1.1E-01 3.4F-01 4.0F-01 0.13 "Chloronaphthalene, Beta-91-58-7 4.8E+03 6.0E+04 7.5E+02 3.9E+00 М 7.3E-03 E 1.1E-05 C 0.13 Chrysene 1.6E+01 2.9E+02 9.2E-02 3.4E+00 1.2E+00 7.3E+00 E 1.2E-03 C М 0.13 Dibenz[a,h]anthracene 53-70-3 1.0E-02 1.3E-02 1.2E+01 C 1.1E-03 C 0.13 192-65-4 4.2E-02 1.8E-01 2.6E-03 1.1E-02 c 6.5E-03 8.4E-02 ~Dibenzo(a,e)pyrene ~Dimethylbenz(a)anthracene, 7,12-2.5E+02 C 7.1E-02 C М 0.13 57-97-6 4.6E-04 8.4E-03 1.4E-05 1.7E-04 1.0E-04 9.9E-05 4.0E-02 0.13 Fluoranthene 206-44-0 2.4E+03 3.0E+04 8.9E+01 4 0F-02 0.13 Fluorene 86-73-7 2 4F+03 3 0F+04 2 9F+02 5 4F+00 7.3E-01 E 1.1E-04 C М 1 0.13 Indeno[1,2,3-cd]pyrene 193-39-5 1 6F-01 2 9F+00 9 2F-03 1 1F-01 3 4F-02 1 3F-01 ~Methylnaphthalene, 1-2.9E-02 P 7.0E-02 A 1 0.13 3.9E+0 90-12-0 1 8F+01 7.3E+01 1.1E+00 6.0F-03 0.13 Methylnaphthalene, 2-91-57-6 2.4E+02 3.0E+03 1.9E-01 3.4E-05 C 2.0E-02 I 3.0E-03 I V 0.13 "Naphthalene 91-20-3 3.8F+00 1.7E+01 8.3F-02 c\* 3.6F-01 1.7E-01 5.4E-04 1.2E+00 C 1.1E-04 C 0.13 57835-92-4.2E-01 1.8E+00 3.3E-03 Nitropyrene, 4 1.9E-02 3.0E-02 0.13 129-00-0 1.8E+03 2.3E+04 1.2E+02 1.3E+01 ~Pvrene Potassium Perfluorobutane Sulfonate 2.0F-02 0.1 29420-49-3 1.3F+03 1.6F+04 4.0F+02 1.5E-01 rochloraz 67747-09-5 1.5E+01 3.8E-01 1.9E-03 9.0E-03 0.1 6.0F-03 v Profluralin 26399-36-0 4.7F+02 7.0F+03 2.6F+01 1.6F+00 н 1.5E-02 0.1 rometon 1610-18-0 9.5F+02 1.2E+04 2.5E+02 1.2E-01 4 0F-03 0.1 rometryr 7287-19-6 3 3F+03 6.0F+01 9 0F-02 1.3E-02 I 0.1 Propachlor 1918-16-7 8.2E+02 1.1E+04 2.5E+02 1.5E-01

	,,,,	JDIN, C - Ca						; H = HEAST; F = See FAQ; J = New Jersey; O = EPA Office of Water; E = see user guide < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concent											applied (Se	ee User Guide	for Ar	senic notice
	Toxicit	y and Chem	nical-specific Info					Contaminant	,						ng Levels	5	`			Protection o	f Grou	nd Water SSI
SFO	k k e IUR e	RfD <sub>o</sub> (mg/kg-	k k v e RfC <sub>i</sub> e o	v o muta-			C <sub>sat</sub>			Resident Soi		ndustrial S	oil	Resident Ai	ir	Air	Тарм		MCL	Risk-based SSL		MCL-based SSL
(mg/kg-day) <sup>-1</sup>	y (ug/m³)-1 y	day)	y (mg/m³) y I	l gen	GIABS	ABS	(mg/kg)	Analyte	CAS No.	(mg/kg)	key	(mg/kg)	key	(ug/m³)	key	(ug/m³)	key (ug	g/L) key	(ug/L)	(mg/kg)	key	(mg/kg)
		4.0E-03	I		1	0.1		Propanediol, 1,2-	114-26-1	2.5E+02	n	3.3E+03	n				7.8E	+01 n		2.5E-02	n	
		5.0E-03	I		1	0.1		Propanil	709-98-8	3.2E+02	n	4.1E+03	n					+01 n		4.5E-02	n	
		2.0E-02 2.0E-03	I		1	0.1	1.1E+05	Propargite	2312-35-8 107-19-7	1.3E+03 1.6E+02	n n	1.6E+04 2.3E+03	n					+02 n +01 n		1.2E+01 8.1E-03	n	
		2.0E-03 2.0F-02	. v	V	1	0.1	1.1E+05	Propargyl Alcohol	139-40-2			1.6E+04	n							8.1E-03 3.0F-01	n n	
		2.0E-02 2.0E-02	1		1	0.1		Propazine Propham	122-42-9	1.3E+03 1.3E+03	n n	1.6E+04	n				3.4E	E+02 n		2.2F-01	n	
		1.3E-02	i		1	0.1		Propiconazole	60207-90-1	8.2E+02	n	1.1E+04	n					+02 n		6.9E-01	n	
			8.0E-03 I V	V	1		3.3E+04	Propionaldehyde	123-38-6	7.5E+01	n	3.1E+02	n	8.3E+00	n	3.5E+01	n 1.7E	+01 n		3.4E-03	n	
		1.0E-01	X 1.0E+00 X V		1			Propyl benzene	103-65-1	3.8E+03	ns	2.4E+04	ns	1.0E+03	n	4.4E+03	n 6.6E	+02 n		1.2E+00	n	
			3.0E+00 C V	V	1		3.5E+02	Propylene	115-07-1	2.2E+03	ns	9.3E+03	ns	3.1E+03	n	1.3E+04	n 6.3E	+03 n		6.0E+00	n	
		2.0E+01	P		1	0.1		Propylene Glycol	57-55-6	1.3E+06	nm	1.6E+07	nm				4.0E	+05 n		8.1E+01	n	
			2.7E-04 A		1	0.1		Propylene Glycol Dinitrate	6423-43-4	3.9E+05	nm	1.6E+06	nm			1.2E+00	n					
		7.0E-01	H 2.0E+00 I V		1			Propylene Glycol Monomethyl Ether	107-98-2	4.1E+04	n	3.7E+05	nms			8.8E+03	n 3.2E			6.5E-01	n	
2.4E-01	I 3.7E-06 I	7.55.00	3.0E-02 I V	V	1	0.4	7.8E+04	Propylene Oxide	75-56-9	2.1E+00	C	9.7E+00	С	7.6E-01	C*	3.3E+00	c* 2.7E			5.6E-05	C	
		7.5E-02 1.0E-03	I V	V	1	0.1	5 3E+05	Propyzamide Pyridine	23950-58-5 110-86-1	4.7E+03 7.8E+01	n n	6.2E+04 1.2E+03	n n					+03 n +01 n		1.2E+00 6.8E-03	n n	
		5.0E-04		•	1	0.1	3.32.03	Quinalphos	13593-03-8	3.2E+01	n	4.1E+02	n					+00 n		4.3E-02	n	
3.0E+00		J.UL-04			1	0.1		Quinoline	91-22-5	1.8E-01	n c	7.7E-01						E+00 n E-02 c		7.8E-05	n C	
		9.0E-03	I .		1	0.1		Quizalofop-ethyl	76578-14-8	5.7E+02	n	7.4E+03	n					E+02 n		1.9E+00	n	
			3.0E-02 A		1			Refractory Ceramic Fibers	NA	4.3E+07	nm	1.8E+08	nm	3.1E+01	n	1.3E+02	n					
		3.0E-02	L		1	0.1		Resmethrin	10453-86-8	1.9E+03	n	2.5E+04	n					+01 n		4.2E+01	n	
		5.0E-02	H V	٧	1			Ronnel	299 84 ર	3.9E+03	n	5.8E+04	n					E+02 n		3.7E+00	n	
		4.0E-03	T		1	0.1		Rotenone	83-79-4	2.5E+02	n	3.3E+03	n					+01 n		3.2E+01	n	
2.2E-01	C 6.3E-05 C	5.0E-03		М	1	0.1		Safrole Selenious Acid	94-59-7 7783-00-8	5.5E-01	С	1.0E+01 5.8E+03	C	1.6E-02	С	1.9E-01	c 9.6E			5.9E-05	C	
			1 2 25 22 2		1			Selenium Selenium		3.9E+02	n		n	2.45.04		0.05.04		+02 n	F 0F 04	5.05.04	n	2 55 04
			I 2.0E-02 C C 2.0E-02 C		1			Selenium Sulfide 2211 (2212)	7782-49-2	3.9E+02 3.9E+02	n n	5.8E+03 5.8E+03	n n	2.1E+01 2.1E+01		8.8E+01 8.8E+01	n 1.0E n 1.0E		5.0E+01	5.2E-01	n	2.6E-01
		9.0E-03	L 2.0E-02 C		1	0.1		Sethoxydim	74051-80-2	5.7E+03	n	7.4E+04	n	2.12+01	"	0.05+01		+02 II E+03 n		9.3E+00	n	
			3.0E-03 C		1			Silica (crystalline, respirable)	7631-86-9	4.3E+06	nm	1.8E+07	nm	3.1E+00	n	1.3E+01	n					
		5.0E-03	1		0.04			Silver	7440-22-4	3.9E+02	n	5.8E+03	n	3.12.00		1.52.01	9.4E	+01 n		8.0E-01	n	
1.2E-01 H	н	5.0E-03	L		1	0.1		Simazine U V Collection Collection (Section Collection	122-34-9	4.5E+00	c*	1.9E+01	С					E-01 c	4.0E+00	3.0E-04	С	2.0E-03
		1.3E-02	I		1	0.1		Sodium Acifluorfen	62476-59-9	8.2E+02	n	1.1E+04	n				2.6E	+02 n		2.1E+00	n	
		4.0E-03	L		1			Sodium Azide	26628-22-8	3.1E+02	n	4.7E+03	n					+01 n			n	
			C 2.0E-04 C	М	0.025			Sodium Dichromate	10588-01-9	3.0E-01	С	6.2E+00	С	6.8E-06	С	8.2E-05	c 4.1E				С	
2.7E-01	н	3.0E-02			1	0.1		Sodium Diethyldithiocard amate	148-18-5	2.0E+00	С	8.5E+00	С				2.9E				С	
		5.0E-02 2.0E-05	A 1.3E-02 C		1	0.1		Sodium Pluoroacetate	7681-49-4 62-74-8	3.9E+03 1.3F+00	n n	5.8E+04 1.6F+01	n	1.4E+01	n	5.7E+01	n 1.0E 4.0F			8.1E-05	n n	
		1.0E-03	<u> </u>		1	0.1		Sodium Metavanadate	13718-26-8	7.8E+01	n	1.0E+01	n					+01 n		8.1L-03	n	
		8.0E-04	P		1			Sodium Tungstate	13472-45-2	6.3E+01	n	9.3E+02	n					+01 n			n	
		8.0E-04	P		1			Sodium Tungstate Dihydrate	10213-10-2	6.3E+01	n	9.3E+02	n				1.6E	-			n	
2.4E-02	Н	3.0E-02	I		1	0.1		Stirofos (Tetrachlorovinphos)	961-11-5	2.3E+01	c*	9.6E+01	С				2.8E	+00 c		8.2E-03	С	
5.0E-01	C 1.5E-01 C		C 2.0E-04 C	M	0.025			Strontium Chromate	7789-06-2	3.0E-01	С	6.2E+00	С	6.8E-06	С	8.2E-05	c 4.1E				С	
		6.0E-01	I		1			Strontium, Stable	7440-24-6	4.7E+04	n	7.0E+05	nm				1.2E			4.2E+02	n	
		3.0E-04	1		1	0.1		Strychnine	57-24-9	1.9E+01	n	2.5E+02	n				5.9E			6.5E-02	n	
		2.0E-01 3.0F-03	I 1.0E+00 I V	V	1	0.1	8.7E+02	Styrene	100-42-5 NA	6.0E+03 1.9F+02	ns	3.5E+04	ns	1.0E+03	n	4.4E+03	n 1.2E	E+03 n E+01 n	1.0E+02	1.3E+00	n	1.1E-01
		0.00	P 2.0E-03 X		1			Styrene-Acrylonitrile (SAN) Trimer Sulfolane		1.9E+02 6.3E+01	n	2.5E+03	n	2.1E+00		8.8E+00	n 2.0E			4.4E-03	n	
		1.0E-03 8.0E-04	P Z.UE-U3 X		1	0.1		Sulfolane Sulfonylbis(4-chlorobenzene), 1,1'-	126-33-0 80-07-9	6.3E+01 5.1E+01	n n	8.2E+02 6.6E+02	n n	2.1E+00	п	6.8E+UU		:+01 n :+01 n		4.4E-03 6.5E-02	n n	
		J.UL-U4	1.0E-03 C V	V	1	0.1		Sulfur Trioxide	7446-11-9	1.4E+06	nm	6.0E+02	nm	1.0E+00	n	4.4E+00	n 2.1E	-		0.3E-02	n	
			1.0E-03 C		1			Sulfuric Acid	7664-93-9	1.4E+06	nm	6.0E+06	nm	1.0E+00		4.4E+00	n					
2.5E-02	I 7.1E-06 I				1	0.1		Sulfurous acid, 2-chloroethyl 2-[4-(1,1-dimethylethyl)phenoxy]-1-methylethyl ester	140-57-8	2.2E+01	С	9.2E+01	С	4.0E-01		1.7E+00	c 1.3E			1.5E-02	С	
		3.0E-02	Н		1	0.1		ТСМТВ	21564-17-0	1.9E+03	n	2.5E+04	n				4.8E	E+02 n		3.3E+00	n	
		7.0E-02	T T		1	0.1		Tebuthiuron	34014-18-1	4.4E+03	n	5.7E+04	n					+03 n		3.9E-01	n	
		2.0E-02	H		1	0.1		Temephos	3383-96-8	1.3E+03	n	1.6E+04	n				4.0E			7.6E+01	n	
		1.3E-02	1		1	0.1	2.4-	Terbacil	5902-51-2	8.2E+02	n	1.1E+04	n				2.5E			7.5E-02	n	
		2.5E-05 1.0E-03	H V	V	1	0.1	3.1E+01	Terbufos Terbutryn	13071-79-9 886-50-0	2.0E+00 6.3E+01	n n	2.9E+01 8.2E+02	n					E-01 n E+01 n		5.2E-04 1.9E-02	n n	
		1.0E-03 1.0E-04	i		1	0.1		Tetrabromodiphenyl ether, 2,2',4,4'- (BDE-47)	5436-43-1	6.3E+01 6.3E+00	n n	8.2E+02 8.2E+01	n n				1.3E 2.0E			1.9E-02 5.3E-02	n n	
		3.0E-04	1 1	V	1			Tetrachlorobenzene, 1,2,4,5-	95-94-3	2.3E+01	n	3.5E+02	n					+00 n		7.9E-03	n	
2.6E-02	I 7.4E-06 I	3.0E-02	i v	V	1		6.8E+02	Tetrachloroethane, 1,1,1,2-	630-20-6	2.0E+00	c	8.8E+00	C	3.8E-01	С	1.7E+00	c 5.7E			2.2E-04	C	
		2.0E-02	I V	V	1		1.9E+03	Tetrachloroethane, 1,1,2,2-	79-34-5	6.0E-01	c	2.7E+00	c	4.8E-02		2.1E-01	c 7.6E			3.0E-05	c	
2.1E-03	I 2.6E-07 I	6.0E-03	I 4.0E-02 I V	V	1		1.7E+02	Tetrachloroethylene	127-18-4	2.4E+01	C**	1.0E+02	C**	1.1E+01	C**	4.7E+01	c** 1.1E	+01 c**	5.0E+00	5.1E-03	C**	2.3E-03
		3.0E-02	I		1	0.1		Tetrachlorophenol, 2,3,4,6-	58-90-2	1.9E+03	n	2.5E+04	n					E+02 n		1.5E+00	n	
2.0E+01 H			V	٧	1			Tetrachlorotoluene, p- alpha, alpha-	5216-25-1	3.5E-02	С	1.6E-01	С					E-03 c		4.5E-06	С	
		5.0E-04			1	0.1		Tetraethyl Dithiopyrophosphate	3689-24-5	3.2E+01	n	4.1E+02						+00 n		5.2E-03	n	

Key: I = IRIS; P = PPRTV; A = ATSD	R; C = C					; H = HEAST; F = See FAQ; J = New Jersey; O = EPA Office of Water; E = see user guidd < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concent									applied (Se	e User Guide	for Ars	enic notice);
Toxicity a	and Che	mical-specific I				Contaminant	,					Screening L				Protection o	Groun	d Water SSLs
k k	RfD <sub>o</sub>	k pfc	( V		_							ident Air	Industrial			Risk-based		MCL-based
	mg/kg- day)	e RfC <sub>i</sub> e y (mg/m³) y	o muta- / I gen GIA	ABS ABS	C <sub>sat</sub> (mg/kg)	Analyte	CAS No.	Resident So (mg/kg)	oil le	ndustrial So (mg/kg)	JII	ident Air ug/m³) ke	Air ey (ug/m³)	Tapwater key (ug/L) key	MCL (ug/L)	SSL (mg/kg)	kev	SSL (mg/kg)
(iiig/kg ddy) y (dg/iii / y	uuyj	8.0E+01 I		1	2.1E+03	•	811-97-2	1.0E+05	nms	4.3E+05		.3E+04 r			(ug/ L)	9.3E+01	n	(1116/116)
2	.0E-03	P 0.02.101 1		0.0007	2.12.03	Tetryl (Trinitrophenylmethylnitramine)	479-45-8	1.6E+02	n	2.3E+03	n	.52.04 1	3.52.05	3.9E+01 n		3.7E-01	n	
	.0E-06	Х	1	_		Thallium (I) Nitrate	10102-45-1	5.5E-01	n	8.2E+00	n			1.4E-01 n			n	
	.0E-05	X X	. 1	_		Thallium (Soluble Salts)	7440-28-0	7.8E-01	n	1.2E+01	n			2.0E-01 n	2.0E+00	1.4E-02	n	1.4E-01
	.0E-06	X V	V			Thallium Acetate Thallium Carbonate	563-68-8 6533-73-9	4.7E-01 1.6E+00	n n	7.0E+00 2.3E+01	n			1.2E-01 n 4.0E-01 n			n n	
	i.0E-05	X	V .			Thallium Chloride	7791-12-0	4.7E-01	n	7.0E+00	n			1.2E-01 n			n	
2	.0E-05	Х	1	1		Thallium Sulfate	7446-18-6	1.6E+00	n	2.3E+01	n			4.0E-01 n			n	
	.3E-02	1	1			Thifensulfuron-methyl	79277-27-3	8.2E+02	n	1.1E+04	n			2.6E+02 n		7.8E-02	n	
	.0E-02 '.0E-02	I X	1			Thiobencarb Thiodiglycol	28249-77-6 111-48-8	6.3E+02 5.4E+03	n n	8.2E+03 7.9E+04	n n			1.6E+02 n 1.4E+03 n		5.5E-01 2.8E-01	n n	
	.0F-04	Н				Thiofanox	39196-18-4	1.9F+01	n	2.5E+02	n			5.3E+00 n		1.8E-03	n	
8	.0E-02	ï				Thiophanate, Methyl	23564-05-8	5.1E+03	n	6.6E+04	n			1.6E+03 n		1.4E+00	n	
	.0E-03	1	1			Thiram	137-26-8	3.2E+02	n	4.1E+03	n			9.8E+01 n		1.4E-01	n	
6	.0E-01	H	1			Tin	7440-31-5	4.7E+04	n	7.0E+05	nm	05.01	. 445.01	1.2E+04 n		3.0E+03	n	
8	.0E-02	1.0E-04 A I 5.0E+00 I			8.2E+02	Titanium Tetrachloride Toluene	7550-45-0 108-88-3	1.4E+05 4.9E+03	nm ns	6.0E+05 4.7E+04		.0E-01 r .2E+03 r		n 2.1E-01 n n 1.1E+03 n	1.0E+03	7.6E-01	n n	6.9E-01
	.0E-04	X	1		32	Toluene-2,5-diamine	95-70-5	3.0E+00	c**	1.3E+01	c*			4.3E-01 c**		1.3E-04	c**	
	.0E-03	X	1	1 0.1		Toluidine, p-	106-49-0	1.8E+01	c*	7.7E+01	c*			2.5E+00 c*		1.1E-03	c*	
3	.0E+00	Р	V :		3.4E-01	, , , , , , , , , , , , , , , , , , , ,	NA	2.3E+05	nms	3.5E+06	nms			6.0E+04 n		2.4E+03	n	
4	05.03	6.0E-01 F X 1.0E-01 F			1.4E+02	Total Petroleum Hydrocarbons (Aliphatic Low)  Total Petroleum Hydrocarbons (Aliphatic Medium)	NA NA	5.2E+02 9.6E+01	ns ns	2.2E+03 4.4E+02		.3E+02 r .0E+02 r	2.6E+03 1 4.4E+02	n 1.3E+03 n n 1.0E+02 n		8.8E+00 1.5E+00	n n	
	.0E-02	X 1.0E-01 F	, A .		8. 9E+00	Total Petroleum Hydrocarbons (Airpnatic Medium)	NA NA	2.5E+01	ns n	3.3E+04	ns 1	.UE+U2 I	1 4.4E+U2	8.0E+02 n		8.9E+01	n n	
	.0E-03	P 3.0E-02 F	V :		1.8E+03	Total Petroleum Hydrocarbons (Aromatic Low)	NA	8.2E+01	n	4.2E+02	n 3	.1E+01 r	1.3E+02			1.7E-02	n	
	.0E-03	P 3.0E-03 F				Total Petroleum Hydrocarbons (Aromatic Medium)	NA	1.1E+02	n	6.0E+02		.1E+00 r		n 5.5E+00 n		2.3E-02	n	
1.1E+00   3.2E-04			-			Toxaphene	8001-35-2	4.9E-01	С	2.1E+00	c 8	.8E-03 (	3.8E-02	c 7.1E-02 c	3.0E+00	1.1E-02	С	4.6E-01
	.5E-03 .0E-04	I A	V :			Tralomethia (Tri-n-butyltin (Tri))	688-73-3	4.7E+02 2.3E+01	n n	6.2E+03 3.5E+02	n n			1.5E+02 n 3.7E+00 n		5.8E+01 8.2E-02	n n	
	.0E+01	X	•			Triaceţin E-X (50000)	102-76-1	5.1E+06	nm	6.6E+07	nm			1.6E+06 n		4.5E+02	n	
3	.0E-02	1	1	1 0.1		Triadimefon \\\	43121-43-3	1.9E+03	n	2.5E+04	n			5.5E+02 n		4.4E-01	n	
	.3E-02	1	V :			Triallate U C COLON COLON	2303-17-5	1.0E+03	n	1.5E+04	n			1.2E+02 n		2.6E-01	n	
	.0E-02	-	1			Triasulfuron	82097-50-5 101200-48-0	6.3E+02	n	8.2E+03	n			2.0E+02 n		2.1E-01	n	
	.0E-03	1	V			Tribenuron-methyl Tribromobenzene, 1,2,4-	615-54-3	5.1E+02 3.9E+02	n n	6.6E+03 5.8E+03	n n			1.6E+02 n 4.5E+01 n		6.1E-02 6.4E-02	n n	
	.0E-02	P				Tributyl Phosphate	126-73-8	6.0E+01	c*	2.6E+02	c*			5.2E+00 c*		2.5E-02	c*	
-	.0E-04	Р	1			Tributyltin Compounds	NA	1.9E+01	n	2.5E+02	n			6.0E+00 n			n	
	.0E-04 .0E+01	I I 3.0E+01 F	1 V		0.15+02	Tributykin Oxide Trichlorg-1,2,2-trifluoroethane, 1,1,2-/	56-35-9 76-13-1	1.9E+01 4.0E+04	n ns	2.5E+02 1.7E+05	n nms 3	.1E+04 r	1.3E+05	5.7E+00 n n 5.5E+04 n		2.9E+02 1.4E+02	n n	
	.0E-02	I 3.0L+01 I	1 4		3.1L+02	Trichloroacetic Acid	76-03-9	7.8E+00	C	3.3E+01	111112 2	.1L+04 I	1 1.31+03	1.1E+00 c	6.0E+01	2.2E-04	C	1.2E-02
2.9E-02 H		•	1			Trichloroaniline HCl, 2,4,6-	33663-50-2	1.9E+01	С	7.9E+01	С			2.7E+00 c	0.02.01	7.4E-03	С	1.22 02
	.0E-05	Х	1	1 0.1		Trichloroaniline, 2,4,6-	634-93-5	1.9E+00	n	2.5E+01	n			4.0E-01 n		3.6E-03	n	
~	.0E-04	X	V :			Trichlorobenzene, 1,2,3-	87-61-6	6.3E+01	n	9.3E+02	n	45.00	0.05	7.0E+00 n	7.05.0:	2.1E-02	n	2.05.04
2.52 02 1	.0E-02 .0E+00	1 2.0E-03 F 1 5.0E+00 I				Trichloro benzene, 1,2,4- Trichloro ethane, 1,1,1-	120-82-1 71-55-6	2.4E+01 8.1E+03	c** ns	1.1E+02 3.6E+04		.1E+00 r .2E+03 r	0.02.00	n 1.2E+00 c** n 8.0E+03 n	7.0E+01 2.0E+02	3.4E-03 2.8E+00	c** n	2.0E-01 7.0E-02
	.0E-03	1 2.0E-04 X			2.2E+03	Trichloroethane, 1,1,2-	79-00-5	1.1E+00	C**	5.0E+00		.8E-01 c*	** 7.7E-01	c** 2.8E-01 c**	5.0E+00	8.9E-05	C**	1.6E-03
4.6E-02   4.1E-06   5	.0E-04	I 2.0E-03 I	V M		6.9E+02	Trichloroethylene	79-01-6	9.4E-01	c**	6.0E+00	-	.8E-01 c*	** 3.0E+00	c** 4.9E-01 c**	5.0E+00	1.8E-04	c**	1.8E-03
	.0E-01	1	V :		1.2E+03	Trichlorofluoromethane	75-69-4	2.3E+04	ns	3.5E+05	nms			5.2E+03 n		3.3E+00	n	
	.0E-01 .0E-03	l D	1			Trichlorophenol, 2,4,5- Trichlorophenol, 2,4,6-	95-95-4 88-06-2	6.3E+03 4.9F+01	n c**	8.2E+04 2.1E+02	n c** q	.1F-01 d	4.0E+00	1.2E+03 n c 4.1E+00 c**		4.4E+00 1.5E-02	n c**	
	.0E-03	Í	1			Trichlorophenoxyacetic Acid, 2,4,5-	93-76-5	6.3E+01	n	8.2E+03	n g	.11-01 (	4.05+00	1.6E+02 n		6.8E-02	n	
8	.0E-03	T	1	1 0.1		Trichlorophenoxypropionic acid, -2,4,5	93-72-1	5.1E+02	n	6.6E+03	n			1.1E+02 n	5.0E+01	6.1E-02	n	2.8E-02
	.0E-03	1	V :		1.3E+03	Trichloropropane, 1,1,2-	598-77-6	3.9E+02	n	5.8E+03	ns	45.04	4.05	8.8E+01 n		3.5E-02	n	
	.0E-03	I 3.0E-04 I			1.4E+03		96-18-4	5.1E-03	С	1.1E-01		.1E-01 r	1.3E+00 1.3E+00			3.2E-07 3.1F-04	c n	
	.0E-03	X 3.0E-04 F	P V 1		3.10+02	Trichloropropene, 1,2,3- Tricresyl Phosphate (TCP)	96-19-5 1330-78-5	7.3E-01 1.3E+03	n n	3.1E+00 1.6E+04	n s n	.1E-U1 r	1.3E+00	n 6.2E-01 n 1.6E+02 n		3.1E-04 1.5E+01	n n	
	.0E-03	I .		1 0.1		Tridiphane	58138-08-2	1.9E+02	n	2.5E+03	n			1.8E+01 n		1.3E-01	n	
		7.0E-03 I			2.8E+04		121-44-8	1.2E+02	n	4.8E+02		.3E+00 r	3.1E+01	n 1.5E+01 n		4.4E-03	n	
2	.0E+00	P 2.0E+01 F	· v		V 0E+U3	Triethylene Glycol Trifluoroethane, 1,1,1-	112-27-6 420-46-2	1.3E+05 1.5E+04	nm ns	1.6E+06 6.2E+04	nm ns 2	.1E+04 r	n 8.8E+04	4.0E+04 n n 4.2E+04 n		8.8E+00 1.3E+02	n n	
7.7E-03 I 7	'.5E-03	Z.UL+U1 F	V :		OLTU3	Trifluralin	1582-09-8	9.0E+01	C**	4.2E+02	ris 2	.ILTU4 1	0.0L+U4	2.6E+00 c*		8.4E-02	C*	
	.0E-02	P	1			Trimethyl Phosphate	512-56-1	2.7E+01	c*	1.1E+02	c*			3.9E+00 c*		8.6E-04	c*	
		5.0E-03 F		1		Trimethylbenzene, 1,2,3-	526-73-8	4.9E+01	n	2.1E+02	n 5	.2E+00 r	2.2E+01	n 1.0E+01 n		1.5E-02	n	
	05.02	7.0E-03 F				Trimethylbenzene, 1,2,4-	95-63-6	5.8E+01	n	2.4E+02		.3E+00 r	3.1E+01			2.1E-02	n	
	.0E-02 .0E-02	X X	V :		1.8E+02 3.0E+01	Trimethylbenzene, 1,3,5- Trimethylpentene, 2,4,4-	108-67-8 25167-70-8	7.8E+02 7.8E+02	ns ns	1.2E+04 1.2E+04	ns ns			1.2E+02 n 6.5E+01 n		1.7E-01 2.2E-01	n n	
	02						, 0 3							2.32.02 11				

Key: I = IRIS; P = PPRTV; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #27); H = HEAST; F = See FAQ; J = New Jersey; O = EPA Office of Water; E = see user guide Section 2.3.5; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice) c = cancer; n = noncancer; \* = where: n SI < 100X c SL; \*\* = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide) rotection of Ground Water SSLs SFO IUR esident Ai Air (mg/kgesident So dustrial So apwate MCL SSL SSL mg/kg-day) ug/m³)<sup>-</sup> day) gen GIABS ABS (mg/kg) Analyte CAS No. (mg/kg) (mg/kg) (ug/m³) (ug/m³) (ug/L) (ug/L) (mg/kg) (mg/kg) 3.0E-02 0.019 initrobenzene, 1,3,5-99-35-4 2.2E+03 2.1E+00 1 3.2E+04 5.9E+02 rinitrotoluene, 2,4,6-118-96-7 3.0E-02 5 OF-04 1 0.032 2 1F+01 9 6F+01 2 5E+00 c 1 5F-02 c\*\* 2.0E-02 1 0.1 riphenylphosphine Oxide 791-28-6 1.3E+03 1.6E+04 3.6E+02 1.5E+00 n 13674-87-2 OF-O2 A 1 0.1 ris(1,3-Dichloro-2-propyl) Phosphate 1 3F+03 1 6F+04 3.6E+02 8 0F+00 1.0E-02 X 0.1 is(4-chloro-2-propyl)phosphate 13674-84-6.3E+02 8.2E+03 1.9E+02 6.5E-01 n 2.3E+00 C 6.6E-04 C ٧ 4.7E+02 ris(2,3-dibromopropyl)phosphate 126-72-7 2.8E-01 1.3E+00 6.8E-03 1.3E-04 2.0E-02 7.0E-03 0.1 ris(2-chloroethyl)phósphate 115-96-8 2.7E+01 1.1E+02 3.8E+00 3.8E-03 0.1 ris(2-ethylhexy) phosphate 78-42-2 3.2F-03 1.0F-01 P 1 1.7F+02 7.2F+02 2.4F+01 1.2F+02 c\* ingsten 7440-33-7 8 NF-N4 6 3F+01 9 3F+02 1 6F+01 2 4F+00 3.0E-03 Jranium (Soluble Salts) 2.3E+02 3.5E+03 1.8E-01 6.0E+01 1.4E+01 1 4.0F-05 A 4.2F-02 2.7F+01 M 1.0E+00 C 2.9E-04 C 1 0.1 Irethane 51-79-6 1.2E-01 2.3E+00 3.5E-03 4.2E-02 2.5E-02 5.6E-06 8.3E-03 P 9.0E-03 1 7.0E-06 P 0.026 anadium Pentoxide 1314-62-1 4.6E+02 2.0E+03 3.4E-04 1.5E-03 1.5E+02 5.0E-03 S 1.0E-04 A 0.026 an <del>adium and</del> Compounds 7440-62-2 3.9E+02 5.8E+03 1.0E-01 4.4E-01 n 8.6E+01 8.6E+01 1929-77-7 1.2E+03 1.1E+01 8.9E-03 2.5E-02 nclozolin 50471-44-8 1.6E+03 3.4E-01 1.0E+00 H 2.0E-01 I V 2.8E+0 nyl Acetate 108-05-4 9.1E+02 8.7E-02 3.2E-05 H 593-60-2 8.8E-02 c\* 3.8E-01 c\* 1.8E-01 c\* с\* 3.0E-03 I V 2.5E+03 Vinvl Bromide 1.2E-01 5.2E-01 5.1E-05 7.2E-01 | 4.4E-06 | 3.0E-03 I 1.0E-01 I V M 3.9E+03 Vinyl Chloride 75-01-4 1.7F-01 2.8F+00 5.9F-02 1.7F+00 c 1.9F-02 2.0F+00 6.5E-06 6.9E-04

81-81-2

106-42-3

108-38-3

95-47-6

1330-20-7

1314-84-7

7440-66-6

12122-67-

7440-67-7

1.9E+01

5.6E+02

5.5E+02

6.5E+02

5.8E+02

2.3E+01

3.2E+03

6.3E+00

ns

ns

ns

2.5E+02

2.4E+03

2.4E+03

2.8E+03

2.5E+03

3.5E+02

3.5E+05

4.1F+04

9.3E+01

ns 1.0E+02

ns 1.0E+02 n 4.4E+02

n

1.0E+02

ns 1.0E+02

5.6E+00

1.9E+02

6.0E+00

6.0E+03

9.9E+02

1.6E+00

n 1.9E+02

n 1.9E+02

n 1.9E+02

4.4E+02

4.4E+02

n 4.4E+02

5.9E-03 n

1 9F-01

1.9E-01

1 9F-01

1.9E-01

3.7E+02

2.9F+00

4.8E+00

n

1.0E+04

9.9E+00

3.0E-04

2.0E-01

3.0E-04

3.0E-01

5.0F-02

8.0E-05

2.0E-01 S 1.0E-01 S V

2.0E-01 S 1.0E-01 S V

2.0E-01 S 1.0E-01 S V

I 1.0E-01 I V

0.1

1 0.1

3.9E+02

4.3E+02

2.6E+02

Warfarin

Kylene, o-

zinc Phosphide

Zinc and Compounds

Kylenes

Zineb

7irconium

3.9E+02 Xylene, m-

Key: I = IRIS; P = PPRTV;						See FAQ; J = New Jersey; O = EPA Office of Water; E = see user guide Section 2.3.5 where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may ex								ied (See User (	Guide for Arsenic
		nd Chemical-specific Info		= wnere: n Si	. < 100X C SL; ***	where n St < 10x c St; SSt values are based on DAF=1; m = Concentration may ex Contaminant	ceed celling limit			rget Risk (TR)				d Hazard Inde	x (HI) = 1
	k RfD.											Ingestion SL	Dermal SL I	nhalation SL	Noncarcinogenic SL
SFO e IUR	e (mg/kg-	e RfC <sub>i</sub> e o muta-		C <sub>sat</sub>	PEF VF			Ingestion SL TR=1E-06	Dermal SL TR=1E-06	Inhalation SL TR=1E-06	Carcinogenic SL TR=1E-06	Child THQ=1	Child THQ=1	Child THQ=1	Child THI=1
(mg/kg-day) <sup>-1</sup> y (ug/m <sup>3</sup> ) <sup>-1</sup>			SIABS ABS		(m³/kg) (m³/kg	Analyte	CAS No.	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
8.7E-03 I	4.0E-03	ı	1 0.1		1.4E+09	Acephate	30560-19-1	8.0E+01	2.8E+02	·	6.2E+01	3.1E+02	1.3E+03		2.5E+02
2.2E-06		9.0E-03 I V	1		1.4E+09 8.7E+03		75-07-0			1.1E+01	1.1E+01			8.2E+01	8.2E+01
	2.0E-02 9.0E-01	1 2 45 04 4 1/	1 0.1		1.4E+09	Acetochlor Acetone	34256-82-1 67-64-1					1.6E+03 7.0E+04	6.6E+03	4.4E+05	1.3E+03
	9.0E-01	I 3.1E+01 A V 2.0E-03 X	1 0.1		1.4E+09 1.4E+04 1.4E+09	Acetone Acetone Cyanohydrin	75-86-5					7.0E+04		4.4E+05 2.8E+06	6.1E+04 2.8E+06
		6.0E-02 I V	1		1.4E+09 1.3E+04		75-05-8							8.1E+02	8.1E+02
	1.0E-01	I V	1		1.4E+09 6.0E+04		98-86-2					7.8E+03			7.8E+03
3.8E+00 C 1.3E-03		I 2.0E-05 I V	1 0.1		1.4E+09 1.4E+09 6.9E+03	Acetylaminofluorene, 2- Acrolein	53-96-3 107-02-8	1.8E-01	6.5E-01	2.9E+03	1.4E-01	3.9E+01		1.4E-01	1.4E-01
5.0E-01   1.0E-04		I 6.0E-03 I M	1 0.1		1.4E+09 6.9E+03	Acrylamide	79-06-1	3.1E-01	1.2E+00	1.4E+04	2.4E-01	1.6E+02	6.6E+02	8.5E+06	1.4E-01 1.3E+02
J.0L-01 1 1.0L-04		I 1.0E-03 I V	1 0.1		1.4E+09 9.5E+04		79-10-7	3.1L-01	1.21+00	1.41.704	2.41-01	3.9E+04	0.01+02	9.9E+01	9.9E+01
5.4E-01 I 6.8E-05	I 4.0E-02	A 2.0E-03 I V	1	1.1E+04	1.4E+09 7.7E+0	Acrylonitrile	107-13-1	1.3E+00		3.2E-01	2.5E-01	3.1E+03		1.6E+01	1.6E+01
		6.0E-03 P	1 0.1		1.4E+09	Adiponitrile	111-69-3							8.5E+06	8.5E+06
5.6E-02 C	1.0E-02 1.0E-03	I .	1 0.1 1 0.1		1.4E+09 1.4E+09	Alachlor Aldicarb	15972-60-8	1.2E+01	4.4E+01		9.7E+00	7.8E+02 7.8E+01	3.3E+03 3.3E+02		6.3E+02 6.3E+01
	1.0E-03 1.0E-03	1	1 0.1		1.4E+09 1.4E+09	Aldicarb Sulfone	116-06-3 1646-88-4					7.8E+01 7.8E+01	3.3E+02 3.3E+02		
	1.0E-03		1 0.1		1.4E+09 1.4E+09	Aldicarb sulfoxide	1646-88-4					7.00+01	3.3E+UZ		6.3E+01
1.7E+01 I 4.9E-03	1 3.0E-05	I V	1		1.4E+09 1.7E+00		309-00-2	4.1E-02		9.8E-01	3.9E-02	2.3E+00			2.3E+00
		I 1.0E-04 X V	1		1.4E+09 3.4E+04		107-18-6					3.9E+02		3.6E+00	3.5E+00
2.1E-02 C 6.0E-06		1.0E-03   V	1		1.4E+09 1.6E+03		107-05-1	3.3E+01		7.4E-01	7.2E-01			1.7E+00	1.7E+00
		P 5.0E-03 P	1		1.4E+09	Aluminum	7429-90-5					7.8E+04		7.1E+06	7.7E+04
	4.0E-04	1	1		1.4E+09 1.4E+09	Aluminum Phosphide	20859-73-8					3.1E+01	2.05.02		3.1E+01
2.1E+01 C 6.0E-03	9.0E-03	!	1 0.1 1 0.1		1.4E+09	Aminobliphenyl, 4- )	92-67-1	3.3E-02	1.2E-01	6.4E+02	2.6E-02	7.0E+02	3.0E+03		5.7E+02
	8.0E-02	P	1 0.1		1.4E+09	Aminophenol m=	591-27-5					6.3E+03	2.6E+04		5.1E+03
	2.0E-02	P	1 0.1		1.4E+09	Aminophenol, p-	123-30-8					1.6E+03	6.6E+03		1.3E+03
	2.5E-03	l .	1 0.1		1.4E+09	Amitraz	33089-61-1					2.0E+02	8.2E+02		1.6E+02
		1.0E-01   V	1		00	Ammonia	7664-41-7								
	2.0E-01	3.0E-03 X V	1		1.4E+09 1.4E+09 2.6E+04	Ammonium Sulfamate Amyl Alcohol, tert-	7773-06-0 75-85-4					1.6E+04		8.2E+01	1.6E+04 8.2E+01
5.7E-03 I 1.6E-06	C 7.0E-03	P 1.0E-03 I	1 0.1		1.4E+09	Appline ( )	62-53-3	1.2E+02	4.3E+02	2.4E+06	9.5E+01	5.5E+02	2.3E+03	1.4E+06	4.4E+02
4.0E-02 P	2.0E-03	X	1 0.1		1.4E+09	Anthraguinone, 9,10-	84-65-1	1.7E+01	6.2E+01	2. 12.00	1.4E+01	1.6E+02	6.6E+02	1.12.00	1.3E+02
	4.0E-04	I ·	0.15		1.4E+09	Antimony (metallic)	7440-36-0					3.1E+01			3.1E+01
	5.0E-04		0.15		1.4E+09	Antimony Peritoxide	1314-60-9					3.9E+01			3.9E+01
	4.0E-04		0.15 0.15		1.4E+09 1.4E+09	Antimony Tetroxide Antimony Trioxide	1332-81-6 1309-64-4					3.1E+01		2.8E+05	3.1E+01 2.8E+05
1.5E+00 I 4.3E-03	1 3.0E-04	1 1.5E-05 C	1 0.0		1.4E+09 1.4E+09	Arsenic, Inorganic	7440-38-2	7.7E-01	5.5E+00	8.9E+02	6.8E-01	3.9E+01	3.3E+02	2.1E+04	3.5E+01
1.51-00 1 4.51-03		C 5.0E-05 I	1 0.0.		1.4E+09	Arsine	7784-42-1	7.71-01	J.JL+00	0.3L+02	0.81-01	2.7E-01	J.JL+02	7.1E+04	2.7E-01
	5.0E-02	I	1 0.1		1.4E+09	Asulam	3337-71-1					3.9E+03	1.6E+04		3.2E+03
2.3E-01 C	3.5E-02	I	1 0.1		1.4E+09	Atrazine	1912-24-9	3.0E+00	1.1E+01		2.4E+00	2.7E+03	1.2E+04		2.2E+03
8.8E-01 C 2.5E-04			1 0.1		1.4E+09	Auramine	492-80-8	7.9E-01	2.8E+00	1.5E+04	6.2E-01	2.45.01	4.25.02		2.55.04
	4.0E-04 3.0E-03	A 1.0E-02 A	1 0.1		1.4E+09 1.4E+09	Avermectin B1	65195-55-3					3.1E+01	1.3E+02	1 45,07	2.5E+01
1.1E-01   3.1E-05		A 1.0E-02 A V	1 0.1		1.4E+09 1.4E+09	Azinphos-methyl Azobenzene	86-50-0 103-33-3	6.3E+00		4.7E+01	5.6E+00	2.3E+02	9.9E+02	1.4E+07	1.9E+02
		P 7.0E-06 P	1 0.1		1.4E+09	Azodicarbonamide	123-77-3	5.52.00			3.02.00	7.8E+04	3.3E+05	9.9E+03	8.6E+03
			0.07		1.4E+09	Barium	7440-39-3					1.6E+04		7.1E+05	1.5E+04
5.0E-01 C 1.5E-01			0.025		1.4E+09	Barium Chromate	10294-40-3	3.1E-01		9.2E+00	3.0E-01	1.6E+03		2.8E+05	1.6E+03
	3.0E-01	I V	1		1.4E+09 3.1E+0!		1861-40-1					2.3E+04			2.3E+04
	5.0E-02 2.0F-01		1 0.1 1 0.1		1.4E+09 1.4F+09	Benomyl Bensulfuron-methyl	17804-35-2 83055-99-6					3.9E+03 1.6F+04	1.6E+04 6.6F+04		3.2E+03 1.3E+04
	2.0E-01 3.0E-02	i	1 0.1		1.4E+09 1.4E+09	Bentazon	25057-89-0					1.6E+04 2.3E+03	9.9E+03		1.3E+04 1.9E+03
	1.0E-01	I V	1		1.4E+09 2.3E+04	Benzaldehyde	100-52-7					7.8E+03			7.8E+03
5.5E-02 I 7.8E-06	I 4.0E-03	I 3.0E-02 I V	1	1.8E+03	1.4E+09 3.5E+0	Benzene	71-43-2	1.3E+01		1.3E+00	1.2E+00	3.1E+02		1.1E+02	8.2E+01
1.0E-01 X	3.0E-04	^	1 0.1		1.4E+09	Benzenediamine-2-methyl sulfate, 1,4-	6369-59-1	7.0E+00	2.5E+01		5.4E+00	2.3E+01	9.9E+01		1.9E+01
2.05.02	1.0E-03	P V	1		1.4E+09 1.9E+04		108-98-5	675.0	2 55 05	2.45.04	5.05.04	7.8E+01	0.05.05		7.8E+01
2.3E+02 I 6.7E-02	1 3.0E-03 4.0E+00	I M	1 0.1 1 0.1		1.4E+09 1.4E+09	Benzidine Benzoic Acid	92-87-5 65-85-0	6.7E-04	2.6E-03	2.1E+01	5.3E-04	2.3E+02 3.1E+05	9.9E+02 1.3E+06		1.9E+02 2.5E+05
1.3E+01 I	4.0LT00	V	1 0.1		1.4E+09 6.8E+04		98-07-7	5.3E-02			5.3E-02	3.12+03	1.32+00		2.52+05
1.50.01	1.0E-01	P	1 0.1		1.4E+09 6.8E+04 1.4E+09	Benzyl Alcohol	100-51-6	J.JL-02			J.JL-02	7.8E+03	3.3E+04		6.3E+03
1.7E-01 I 4.9E-05		P 1.0E-03 P V	1		1.4E+09 2.6E+04		100-44-7	4.1E+00		1.5E+00	1.1E+00	1.6E+02		2.7E+01	2.3E+01
2.4E-03		I 2.0E-05 I	0.007		1.4E+09	Beryllium and compounds	7440-41-7			1.6E+03	1.6E+03	1.6E+02		2.8E+04	1.6E+02
	9.0E-03	P	1 0.1		1.4E+09	Bifenox	42576-02-3					7.0E+02	3.0E+03		5.7E+02
8.0E-03 I	1.5E-02 5.0E-01	I 4.0E-04 X V	1 0.1		1.4E+09 1.4E+09 1.1E+0	Biphenthrin	82657-04-3 92-52-4	8.7E+01			8.7E+01	1.2E+03 3.9E+04	4.9E+03	4.8E+01	9.5E+02 4.7E+01
6.UE-U3 I	5.0E-01	1 4.UE-U4 X V	1		1.4E+09 1.1E+0	oipnenyi, 1,1 -	92-52-4	8.7£+01			8./E+U1	3.9E+04		4.8E+U1	4./E+U1

Key: I = IRIS; P = PPRTV; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #27); H = HEAST; F	See FAQ; J = New Jersey; O = EPA Office of Water; E = see user guide Section 2.3.5; L = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed							ied (See User 0	Guide for Arsenic
Toxicity and Chemical-specific Information	Contaminant	a cennig minic	Carcinogenic			No	ncancer Chil	d Hazard Inde	
k k RfDa k k V			Ingestion SL Dermal S	Inhalation SI	. Carcinogenic SL	Ingestion SL Child	Dermal SL I Child	nhalation SL 1 Child	Noncarcinogenic SL Child
SFO e IUR e (mg/kg- e RfC <sub>i</sub> e o muta- C <sub>sat</sub> PEF VF			TR=1E-06 TR=1E-06	TR=1E-06	TR=1E-06	THQ=1	THQ=1	THQ=1	THI=1
(mg/kg-day) <sup>-1</sup> y (ug/m <sup>3</sup> ) <sup>-1</sup> y day) y (mg/m <sup>3</sup> ) y I gen GIABS ABS (mg/kg) (m <sup>3</sup> /kg) (m <sup>3</sup> /kg)	Analyte	CAS No.	(mg/kg) (mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
4.0E-02 I V 1 1.0E+03 1.4E+09 3.5E+0 3.0E-03 P 1 0.1 1.4E+09		108-60-1 111-91-1				3.1E+03 2.3E+02	9.9E+02		3.1E+03 1.9E+02
1.1E+00   3.3E-04   V 1 5.1E+03 1.4E+09 4.3E+0	Bis(2-chloroethyl)ether	111-44-4	6.3E-01	3.6E-01	2.3E-01				
2.2E+02   6.2E-02   V 1 4.2E+03 1.4E+09 1.9E+0 5.0E-02   1 0.1 1.4E+09		542-88-1 80-05-7	3.2E-03	8.5E-05	8.3E-05	3.9E+03	1.6E+04		3.2E+03
2.0E-01   2.0E-02 H		7440-42-8				1.6E+04	1.01+04	2.8E+07	1.6E+04
2.0E+00 P 2.0E-02 P V 1 1.4E+09	Boron Trichloride	10294-34-5				1.6E+05		2.8E+07	1.6E+05
4.0E-02 C 1.3E-02 C V 1 1.4E+09 7.0E-01 I 4.0E-03 I 1 1.4E+09		7637-07-2 15541-45-4	9.9F-01		9.9E-01	3.1E+03 3.1E+02		1.8E+07	3.1E+03 3.1E+02
2.0E+00 X 6.0E-04 X V 1 2.4E+03 1.4E+09 5.9E+0	Bromo-2-chloroethane, 1-	107-04-0	3.5E-01	2.8E-02	2.6E-02				
8.0E-03   6.0E-02   V		108-86-1				6.3E+02		5.2E+02	2.9E+02
4.0E-02 X V 1 4.0E+03 1.4E+09 3.6E+0 6.2E-02 I 3.7E-05 C 2.0E-02 I V 1 9.3E+02 1.4E+09 4.0E+0		74-97-5 75-27-4	1.1E+01	3.0E-01	2.9E-01	1.6E+03		1.5E+02	1.5E+02 1.6E+03
7.9E-03   1.1E-06   2.0E-02   V   1   9.2E+02 1.4E+09 9.7E+0	Bromoform 7	75-25-2	8.8E+01	2.5E+01	1.9E+01	1.6E+03			1.6E+03
1.4E-03   5.0E-03   V   1   3.6E+03 1.4E+09 1.4E+0 5.0E-03   H   V   1   1.4E+09 1.2E+0		74-83-9 2104-96-3				1.1E+02 3.9E+02		7.3E+00	6.8E+00 3.9E+02
2.0E-02   1 0.1 1.4E+09		1689-84-5				1.6E+03	6.6E+03		1.3E+03
2.0E-02   V 1 1.4E+09 4.7E+0		1689-99-2				1.6E+03			1.6E+03
3.4E+00 C 3.0E-05 I 2.0E-03 I V 1 6.7E+02 1.4E+09 8.7E+0 1.0E-01 I V 1 7.6E+03 1.4E+09 3.0E+0		106-99-0 71-36-3	2.0E-01	8.1E-02	5.8E-02	7.8E+03		1.8E+00	1.8E+00 7.8E+03
1.9E-03 P 2.0E-01 I 1 0.1 1.4E+09	Butyl Benzyl Phthalate	85-68-7	3.7E+02 1.3E+03		2.9E+02	1.6E+04	6.6E+04		1.3E+04
2.0E+00 P 3.0E+01 P V 1 2.1E+04 1.4E+09 2.9E+0 5.0E-02 I V 1 1.4E+09 8.6E+0		78-92-2 2008-41-5				1.6E+05 3.9E+03		9.1E+05	1.3E+05 3.9E+03
2.0E-04 C 5.7E-08 C 1 0.1 1.4E+09		25013-16-5	3.5E+03 1.2E+04	6.7E+07	2.7E+03	3.32.103			3.32.03
3.6E-03 P 3.0E-01 P 1 0.1 1.4E+09 5.0F-02 P V 1 1.1E+02 1.4F+09 8.1E+0		128-37-0	1.9E+02 6.9E+02		1.5E+02	2.3E+04	9.9E+04		1.9E+04
5.0E-02 P V 1 1.1E+02 1.4E+09 8.1E+0 1.0E-01 X V 1 1.5E+02 1.4E+09 7.4E+0		104-51-8 135-98-8	_			3.9E+03 7.8E+03			3.9E+03 7.8E+03
1.0E-01 X V 1 1.8E+02 1.4E+09 7.4E+0	Butylbenzene, tert-\ ()	98-06-6				7.8E+03			7.8E+03
2.0E-02 A 1 0.1 1.4E+09 1.8E-03   1.0E-03   1.0E-05 A 0.025 0.001 1.4E+09	2 0 0 (11113 C1111) (112 C12)	75-60-5 7440-43-9		2.45.02	2.45.02	1.6E+03	6.6E+03	1.45.04	1.3E+03
1.8E-03   1.0E-03   1.0E-05 A 0.025 0.001 1.4E+09 1.8E-03   5.0E-04   1.0E-05 A 0.05 0.001		7440-43-9 7440-43-9		2.1E+03	2.1E+03	7.8E+01	8.2E+02	1.4E+04	7.1E+01
5.0E-01 C 1.5E-01 C 2.0E-02 C 2.0E-04 C M 0.025 1.4E+09		13765-19-0	3.1E-01	9.2E+00	3.0E-01	1.6E+03		2.8E+05	1.6E+03
5.0E-01   2.2E-03 C		105-60-2 2425-06-1	4.6E+00 1.6E+01	8.9E+04	3.6E+00	3.9E+04 1.6E+02	1.6E+05 6.6E+02	3.1E+06	3.1E+04 1.3E+02
2.3E-03 C 6.6E-07 C 1.3E-01 I 1 0.1 1.4E+09		133-06-2	3.0E+02 1.1E+03	5.8E+06	2.4E+02	1.0E+04	4.3E+04		8.2E+03
1.0E-01   1 0.1 1.4E+09 5.0E-03   1 0.1 1.4E+09		63-25-2 1563-66-2				7.8E+03 3.9E+02	3.3E+04 1.6E+03		6.3E+03 3.2E+02
1.0E-01   7.0E-01   V 1 7.4E+02 1.4E+09 1.2E+0		75-15-0				7.8E+03	1.01+03	8.5E+02	7.7E+02
7.0E-02   6.0E-06   4.0E-03   1.0E-01   V		56-23-5	9.9E+00	7.0E-01	6.5E-01	3.1E+02		1.6E+02	1.0E+02
1.0E-01 P V 1 5.9E+03 1.4E+09 6.5E+0 1.0E-02 I 1 0.1 1.4E+09		463-58-1 55285-14-8				7.8E+02	3.3E+03	6.7E+01	6.7E+01 6.3E+02
1.0E-01 I 1 0.1 1.4E+09		5234-68-4				7.8E+03	3.3E+04		6.3E+03
9.0E-04   1 1.4E+09 1.0E-01   V 1 1.4E+09 1.5E+0		1306-38-3 302-17-U				7.8E+03		1.3E+06	1.3E+06 7.8E+03
1.5E-02 I 1 0.1 1.4E+09		133-90-4				1.2E+03	4.9E+03		9.5E+02
4.0E-01 H 1 0.1 1.4E+09 3.5E-01   1.0E-04   5.0E-04   7.0E-04   V 1 0.04 1.4E+09 9.0E+(		118-75-2 12789-03-6	1.7E+00 6.1E+00 2.0E+00 1.8E+01	2.5E+01	1.3E+00 1.7E+00	3.9E+01	4.1E+02	6.6E+02	3.4E+01
1.0E+01   1.4E+03   C   3.0E-04     1.7.0E-04   V   1   0.1   1.4E+09		143-50-0	7.0E-02 2.5E-01	8.3E+02	5.4E-02	2.3E+01	9.9E+01	0.0L+02	1.9E+01
7.0E-04 A 1 0.1 1.4E+09	Chlorfenvinphos	470-90-6				5.5E+01	2.3E+02		4.4E+01
2.0E-02   1 0.1 1.4E+09 1.0E-01   1.5E-04 A V 1 2.8E+03 1.4E+09 1.2E+(	·	90982-32-4 7782-50-5				1.6E+03 7.8E+03	6.6E+03	1.8E-01	1.3E+03 1.8E-01
3.0E-02   2.0E-04   V 1 1.4E+09	Chlorine Dioxide	10049-04-4				2.3E+03		2.8E+05	2.3E+03
3.0E-02   1 1.4E+09		7758-19-2				2.3E+03		E 4E 104	2.3E+03
3.0E-04   2.0E-02   2.0E-02   V 1 7.9E+02 1.4E+09 1.1E+0		75-68-3 126-99-8		1.0E-02	1.0E-02	1.6E+03		5.4E+04 2.2E+01	5.4E+04 2.2E+01
4.6E-01 H 1 0.1 1.4E+09	Chloro-2-methylaniline HCl, 4-	3165-93-3	1.5E+00 5.4E+00		1.2E+00				
1.0E-01 P 7.7E-05 C 3.0E-03 X 1 0.1 1.4E+09 2.7E-01 X V 1 1.2E+04 1.4E+09 1.6E+(		95-69-2 107-20-0	7.0E+00 2.5E+01 2.6E+00	5.0E+04	5.4E+00 2.6E+00	2.3E+02	9.9E+02		1.9E+02
1 0.1 1.4E+09		79-11-8			2.02100				
3.0E-05 I 1 0.1 1.4E+09 2.0F-01 P 4.0F-03 I 1 0.1 1.4F+09		532-27-4	3.55.00 4.35.01		2.75.00	2.15.02	1.25:02	4.3E+04	4.3E+04
2.0E-01 P 4.0E-03 I 1 0.1 1.4E+09 2.0E-02 I 5.0E-02 P V 1 7.6E+02 1.4E+09 6.5E+0		106-47-8 108-90-7	3.5E+00 1.2E+01		2.7E+00	3.1E+02 1.6E+03	1.3E+03	3.4E+02	2.5E+02 2.8E+02
1.1E-01 C 3.1E-05 C 2.0E-02 I 1 0.1 1.4E+09		510-15-6	6.3E+00 2.2E+01	1.2E+05	4.9E+00	1.6E+03	6.6E+03		1.3E+03
3.0E-02 X 1 0.1 1.4E+09	Chlorobenzoic Acid, p-	74-11-3				2.3E+03	9.9E+03		1.9E+03

		See FAQ; J = New Jersey; O = EPA Office of Water; E = see user guide Section 2.3.5; L = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may excee				Guide for Arsenic
Toxicity and Chemical-specific Info		Contaminant	a cennig mine	Carcinogenic Target Risk (TR) = 1E-06	Noncancer Child Hazard Inde	x (HI) = 1
					Ingestion SL Dermal SL Inhalation SL N	Noncarcinogenic SL
k k RfD <sub>o</sub> k k v SFO e IUR e (mg/kg- e RfC <sub>i</sub> e o muta-	C PEF VE			Ingestion SL Dermal SL Inhalation SL Carcinogenic		Child
	GIABS ABS (mg/kg) (m <sup>3</sup> /kg) (m <sup>3</sup> /kg	Analyte	CAS No.	TR=1E-06 TR=1E-06 TR=1E-06 TR=1E-06 (mg/kg) (mg/kg) (mg/kg) (mg/kg)	THQ=1 THQ=1 THQ=1 (mg/kg) (mg/kg)	THI=1 (mg/kg)
3.0E-03 P 3.0E-01 P V	1 2.9E+02 1.4E+09 6.8E+0		98-56-6	(iiig/kg) (iiig/kg) (iiig/kg)	2.3E+02 2.1E+03	2.1E+02
4.0E-02 P V	1 7.3E+02 1.4E+09 1.8E+0		109-69-3		3.1E+03	3.1E+03
4.0E-02 P V 5.0E+01 I V		2 Chlorodifluoromethane	75-45-6		4.9E+04	4.9E+04
2.0E-02 P V	1 1.1E+05 1.4E+09 7.8E+0		107-07-3		1.6E+03	1.6E+03
3.1E-02 C 2.3E-05 I 1.0E-02 I 9.8E-02 A V	1 2.5E+03 1.4E+09 2.6E+0	3 Chloroform	67-66-3	2.2E+01 3.2E-01 3.2E-01	7.8E+02 2.7E+02	2.0E+02
9.0E-02 I V	1 1.3E+03 1.4E+09 1.2E+0		74-87-3		1.1E+02	1.1E+02
2.4E+00 C 6.9E-04 C V	1 9.3E+03 1.4E+09 5.3E+0	Chloromethyl Methyl Ether	107-30-2	2.9E-01 2.2E-02 2.0E-02		
3.0E-01 P 3.0E-03 P 1.0E-05 X	1 0.1 1.4E+09	Chloronitrobenzene, o-	88-73-3	2.3E+00 8.2E+00 1.8E+00	2.3E+02 9.9E+02 1.4E+04	1.9E+02
6.3E-03 P 1.0E-03 P 6.0E-04 P	1 0.1 1.4E+09	Chloronitrobenzene, p-	100-00-5	1.1E+02 3.9E+02 8.6E+01	7.8E+01 3.3E+02 8.5E+05	6.3E+01
5.0E-03 I V	1 2.2E+04 1.4E+09 1.2E+0	The state of the s	95-57-8		3.9E+02	3.9E+02
4.0E-04 C V	1 6.2E+02 1.4E+09 4.7E+0	3 Chloropicrin Chlorothalonil	76-06-2	2.35.02 0.05.03 4.35.06 4.05.03	2.0E+00	2.0E+00
3.1E-03 C 8.9E-07 C 1.5E-02 I 2.0E-02 I V	1 0.1 1.4E+09 1 9.1E+02 1.4E+09 8.1E+0		1897-45-6 95-49-8	2.2E+02 8.0E+02 4.3E+06 1.8E+02	1.2E+03 4.9E+03 1.6E+03	9.5E+02 1.6E+03
2.0E-02 X V	1 2.5E+02 1.4E+09 7.3E+0		106-43-4		1.6E+03	1.6E+03
2.4E+02 C 6.9E-02 C	1 0.1 1.4E+09	Chlorozotocin	54749-90-5	2.9E-03 1.0E-02 5.5E+01 2.3E-03	1.02.03	1.02.03
2.0E-01	1 0.1 1.4E+09	Chlorpropham	101-21-3	2.52.03	1.6E+04 6.6E+04	1.3E+04
1.0E-03 A	1 0.1 1.4E+09	Chlorpyrifos	2921-88-2		7.8E+01 3.3E+02	6.3E+01
1.0E-02 H	1 0.1 1.4E+09	Chlorpyrifos Methyl	5598-13-0		7.8E+02 3.3E+03	6.3E+02
5.0E-02 I	1 0.1 1.4E+09	Chlorsulfuron	64902-72-3		3.9E+03 1.6E+04	3.2E+03
1.0E-02	1 0.1 1.4E+09	Chlorthal-dimethyl	1861-32-1		7.8E+02 3.3E+03	6.3E+02
8.0E-04 H 1.5E+00 I	1 0.1 1.4E+09 0.013 1.4E+09	Chlorthiophos Chromium(III), Insoluble Salts	60238-56-4 16065-83-1		6.3E+01 2.6E+02 1.2E+05	5.1E+01 1.2E+05
				3.1E-01 1.6E+01 3.0E-01		
	0.025 1.4E+09 0.013 1.4E+09	Chromium(VI) Chromium, Total	18540-29-9 7440-47-3	3.1E-01 1.6E+01 3.0E-01	2.3E+02 1.4E+05	2.3E+02
1.3E-02 I	1 0.1 1.4E+09	Clofentezine	74115-24-5		1.0E+03 4.3E+03	8.2E+02
9.0E-03 P 3.0E-04 P 6.0E-06 P	1 1.4E+09	Cobalt	7440-48-4	4.2E+02 4.2E+02	2.3E+01 8.5E+03	2.3E+01
	1	Coke-Oven Emissions,	8007-45-2			
4.0E-02 H	1 1.4E+09	Copper ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) (	7440-50-8		3.1E+03	3.1E+03
5.0E-02 I 6.0E-01 C	1 0.1 1.4E+09	Cresol, m-	108-39-4		3.9E+03 1.6E+04 8.5E+08	3.2E+03
5.0E-02   6.0E-01 C	1 0.1 1.4E+09	Cresol, b-	95-48-7		3.9E+03 1.6E+04 8.5E+08	3.2E+03
1.0E-01 A 6.0E-01 C	1 0.1 1.4E+09	Cresol, p-	106-44-5		7.8E+03 3.3E+04 8.5E+08	6.3E+03
1.0E-01 A 1.0E-01 A 6.0E-01 C	1 0.1 1.4E+09 1 0.1 1.4E+09	Cresol, p-chloro-m-	59-50-7 1319-77-3		7.8E+03 3.3E+04 7.8E+03 3.3E+04 8.5E+08	6.3E+03 6.3E+03
1.9E+00 H 1.0E-03 P V	1 1.7E+04 1.4E+09 1.9E+0	Cresols Crotonaldehyde, trans-	123-73-9	3.7E-01 3.7E-01	7.8E+03 3.3E+04 8.5E+08 7.8E+01	7.8E+01
1.0E-01   4.0E-01   V	1 2.7E+02 1.4E+09 6.2E+0		98-82-8		7.8E+03 2.6E+03	1.9E+03
2.2E-01 C 6.3E-05 C	1 0.1 1.4E+09	Cupferiion ( )	135-20-6	3.2E+00 1.1E+01 6.1E+04 2.5E+00		
8.4E-01 H 2.0E-03 H	1 0.1 1.4E+09	Cyanazine	21725-46-2	8.3E-01 2.9E+00 6.5E-01	1.6E+02 6.6E+02	1.3E+02
		Cyanides				
1.0E-03 I	1 1.4E+09	*Calcium Cyanide	592-01-8		7.8E+01	7.8E+01
5.0E-03 I	1 1.4E+09	~Copper Cyanide	544-92-3		3.9E+02	3.9E+02
6.0E-04 I 8.0E-04 S V 1.0E-03 I V	1 9.7E+05 1.4E+09 3.5E+0 1 1.4E+09		57-12-5		4.7E+01 2.9E+00 7.8E+01	2.7E+00 7.8E+01
1.0E-03 I V 9.0E-02 I V	1 1.4E+09 1 1.4E+09	~Cyanogen ~Cyanogen Bromide	460-19-5 506-68-3		7.8E+01 7.0E+03	7.8E+01 7.0E+03
5.0E-02 I V	1 1.4E+09	~Cyanogen Chloride	506-77-4		3.9E+03	3.9E+03
6.0E-04   8.0E-04   V	1 1.0E+07 1.4E+09 5.2F+0		74-90-8		4.7E+01 4.4E+01	2.3E+01
2.0E-03 I	1 1.4E+09	~Potassium Cyanide	151-50-8		1.6E+02	1.6E+02
	0.04 1.4E+09	~Potassium Silver Cyanide	506-61-6		3.9E+02	3.9E+02
	0.04 1.4E+09	~Silver Cyanide	506-64-9		7.8E+03	7.8E+03
1.0E-03	1 1.4E+09		143-33-9		7.8E+01	7.8E+01
2.0E-04 P 2.0F-04 X V	1 1.4E+09 1 1.4E+09	~Thiocyanates ~Thiocyanic Acid	NA 463-56-9		1.6E+01 1.6E+01	1.6E+01 1.6E+01
2.0E-04 X V 5.0E-02 I	1 1.4E+09 1 1.4E+09	~Iniocyanic Acid ~Zinc Cyanide	463-56-9 557-21-1		3.9E+03	3.9E+03
6.0E+00 I V	1 1.2E+02 1.4E+09 1.0E+0	,	110-82-7		6.5E+03	6.5E+03
2.3E-02 H	1 0.1 1.4E+09	Cyclohexane, 1,2,3,4,5-pentabromo-6-chloro-	87-84-3	3.0E+01 1.1E+02 2.4E+01	5.52.103	0.52.05
5.0E+00 I 7.0E-01 P V	1 5.1E+03 1.4E+09 4.2E+0		108-94-1		3.9E+05 3.0E+04	2.8E+04
5.0E-03 P 1.0E+00 X V	1 2.8E+02 1.4E+09 1.5E+0		110-83-8		3.9E+02 1.5E+03	3.1E+02
2.0E-01 I V	1 2.9E+05 1.4E+09 7.5E+0		108-91-8		1.6E+04	1.6E+04
2.5E-02 I	1 0.1 1.4E+09	Cyfluthrin	68359-37-5		2.0E+03 8.2E+03	1.6E+03
5.0E-03 I	1 0.1 1.4E+09	Cyhalothrin	68085-85-8		3.9E+02 1.6E+03	3.2E+02
1.0E-02 l 7.5E-03 l	1 0.1 1.4E+09 1 0.1 1.4E+09	Cypermethrin Cyromazine	52315-07-8 66215-27-8		7.8E+02 3.3E+03 5.9E+02 2.5E+03	6.3E+02 4.7E+02
2.4E-01 I 6.9E-05 C	1 0.1 1.4E+09	DDD	72-54-8	2.9E+00 1.0E+01 5.5E+04 2.3E+00	2.32.02	
3.4E-01   9.7E-05 C V	1 1.4E+09 2.1E+0		72-54-8	2.0E+00 1.0E+01 3.5E+04 2.3E+00 2.0E+00 6.1E+01 2.0E+00		
3.4E-01   9.7E-05   5.0E-04	1 0.03 1.4E+09	DDT	50-29-3	2.0E+00 2.4E+01 3.9E+04 1.9E+00	3.9E+01 5.5E+02	3.7E+01

Key: I = IRI	IS; P = PPRTV; A = ATSDR; C =				See FAQ; J = New Jersey; O = EPA Office of Water; E = see user guide Section 2.3.5; I								ied (See User	Guide for Arsenic
-	Tovicity	notice); c = cancer; n = no and Chemical-specific Info		where: n SL < 100X c SL; ** =	where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exce Contaminant	eed ceiling limit			ncentration n arget Risk (TR)				ld Hazard Inde	ov /⊔I\ = 1
	TOXICITY	and Chemical-Specific into	milation		Contamiliant		Cal	cinogenic ra	irget nisk (Th	= 15-06	Ingestion SI	Dermal SI	nhalation SI	Noncarcinogenic S
	k k RfD <sub>o</sub>	k k v					Ingestion SL	Dermal SI	Inhalation SL	Carcinogenic SL	Child	Child	Child	Child
SFO	e IUR e (mg/kg-	e RfC <sub>i</sub> e o muta-		C <sub>eat</sub> PEF VF			TR=1F-06	TR=1E-06	TR=1E-06	TR=1F-06	THQ=1	THQ=1	THQ=1	THI=1
(mg/kg-day)	4 4 4		GIABS ABS	(mg/kg) (m <sup>3</sup> /kg) (m <sup>3</sup> /kg)	Analyte	CAS No.	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
(1116) 116 4477	3.0E-02	1	1 0.1	1.4E+09	·	75-99-0	(8/8/	(1118/118/	(8/ 18/	(1116/116/	2.3E+03	9.9E+03	(8/ 1.8/	1.9E+03
1.8E-02		1	1 0.1	1.4E+09	Dalapon Daminozide	1596-84-5	3.9E+01	4 45.02	7.55.05	3.0E+01	1.2E+04	4.9F+04		9.5E+03
7.0E-04	C 5.1E-06 C 1.5E-01 I 7.0E-03	1	1 0.1	1.4E+09 1.4E+09	Decabromodiphenyl ether, 2,2',3,3',4,4',5,5',6,6'- (BDE-209)	1163-19-5	9.9E+01	1.4E+02 3.5E+03	7.5E+05	7.8E+02	5.5E+04 5.5E+02	4.9E+04 2.3E+03		9.5E+03 4.4E+02
7.0L-04	4.0E-05	<del>'</del>	1 0.1	1.4E+09	Decabl officially fettler, 2,2 ,3,3 ,4,4 ,3,3 ,0,0 - (BDE-203)	8065-48-3	3.3L+02	3.JL+03		7.8L+02	3.1E+00	1.3E+01		2.5E+00
4 25 02				1.4E+09 1.4E+09	Demeton Di/2 askeds and last asked		F 0F . 02	2.45.02		4.55.03				
1.2E-03 6.1E-02	I 6.0E-01	1	1 0.1 1 0.1	1.4E+09 1.4E+09	Di(2-ethylhexyl)adipate Diallate	103-23-1 2303-16-4	5.8E+02 1.1E+01	2.1E+03 4.1E+01		4.5E+02 8.9E+00	4.7E+04	2.0E+05		3.8E+04
6.1E-U2	**						1.1E+01	4.1E+01		8.9E+00				
	7.0E-04		1 0.1	1.4E+09	Diazinon	333-41-5					5.5E+01	2.3E+02		4.4E+01
8.0E-01	1.0E-02 P 6.0E-03 P 2.0E-04	X V P 2.0E-04 I V M	1		Dibenzothiophene	132-65-0 96-12-8	1.9E-01		5.4E-03	5.3E-03	7.8E+02 1.6E+01		6.7E+00	7.8E+02 4.7E+00
8.UE-U1		P 2.0E-04 I V IVI	1		Dibromo-3-chloropropane, 1,2-		1.9E-01		5.4E-03	5.3E-U3			6.7E+00	
	4.0E-04	X V	1	1.6E+02 1.4E+09 1.9E+04		108-36-1					3.1E+01			3.1E+01
0.45.00	1.0E-02	I V	1		Dibromobenzene, 1,4-	106-37-6	0.05.00			0.05.00	7.8E+02			7.8E+02
8.4E-02	I 2.0E-02	I V	1	8.0E+02 1.4E+09 8.0E+03		124-48-1	8.3E+00			8.3E+00	1.6E+03			1.6E+03
2.0E+00	I 6.0E-04 I 9.0E-03	I 9.0E-03 I V	1	1.3E+03 1.4E+09 8.6E+03		106-93-4	3.5E-01		4.0E-02	3.6E-02	7.0E+02		8.1E+01	7.3E+01
		4.0E-03 X V	1		Dibromomethane (Methylene Bromide)	74-95-3							2.4E+01	2.4E+01
	3.0E-04	Р	1 0.1	1.4E+09	Dibutyltin Compounds	NA					2.3E+01	9.9E+01		1.9E+01
	3.0E-02	1	1 0.1	1.4E+09	Dicamba	1918-00-9					2.3E+03	9.9E+03		1.9E+03
	4.2E-03 P	V	1	5.5E+02 1.4E+09 3.2E+03		764-41-0			2.1E-03	2.1E-03				
	4.2E-03 P	V	1	5.2E+02 1.4E+09 1.1E+04	Dichloro-2-butene, cis-1,4-	1476-11-5			7.4E-03	7.4E-03				
	4.2E-03 P	V	1	7.6E+02 1.4E+09 1.1E+04	Dichloro-2-butene, trans-1,4-	110-57-6			7.4E-03	7.4E-03				
5.0E-02	I 4.0E-03	1	1 0.1	1.4E+09	Dichloroacetic Acid	79-43-6	1.4E+01	4.9E+01		1.1E+01	3.1E+02	1.3E+03		2.5E+02
	9.0E-02	I 2.0E-01 H V	1	3.8E+02 1.4E+09 1.2E+04		95-50-1					7.0E+03		2.4E+03	1.8E+03
5.4E-03	C 1.1E-05 C 7.0E-02	A 8.0E-01 I V	1	1.4E+09 1.0E+04	Dichlorobenzene, 1,4-	106-46-7	1.3E+02		2.7E+00	2.6E+00	5.5E+03		8.7E+03	3.4E+03
	I 3.4E-04 C		1 0.1	1.4E+09	Dichlorobenzidine, 3,3'-	91-94-1	1.5E+00	5.5E+00	1.1E+04	1.2E+00				
1.52 01	9.0E-03	X	1 0.1	1.4E+09	Dichlorobenzophenone, 4,4'-	90-98-2	1.52.00	3.32.00	1.12.01	1.22.00	7.0E+02	3.0E+03		5.7E+02
	2.0E-01	I 1.0E-01 X V	1	8.5E+02 1.4E+09 8.4E+02	Dichlorodifluoromethane	75-71-8	_				1.6E+04		8.8E+01	8.7E+01
5.7E-03	C 1.6E-06 C 2.0E-01	D V	1	1.7E+03 1.4E+09 2.1E+03		75-34-3	1.2E+02		3.7F+00	3.6E+00	1.6E+04		0.02.01	1.6E+04
9.1E-02	I 2.6E-05 I 6.0E-03	X 7.0E-03 P V	1	3.0E+03 1.4E+09 4.6E+03		107-06-2	7.6E+00		4.9E-01	4.6E-01	4.7E+02		3.3E+01	3.1E+01
5.12 02	5.0E-02	I 2.0E-01 I V	1	1.2E+03 1.4E+09 1.2E+03		75-35-4	7.02.00		1.52 01	1.02 01	3.9E+03		2.4E+02	2.3E+02
	2.0E-03	I 2.0E-01 I V	1	2.45.02 1.45.00 2.55.02	Dichlorpethylene, 1,2-cis	156-59-2					1.6E+02		2.4E+U2	1.6E+02
	2.0E-03 2.0E-02	I V	1	1 00+03 1.40+09 2.30+03	Dichlorpethylene, 1,2-trans-	156-60-5					1.6E+02 1.6E+03			1.6E+02
	3.0E-03	· ·		1.4E+09		120-83-2						0.05.00		
		!			Dichlorophenol, 2,4-						2.3E+02	9.9E+02		1.9E+02
	1.0E-02 8.0E-03		1 0.05 1 0.1	1.4E+09 1.4E+09	Dichlorophenoxy Acetic Acid, 2,4-	94-75-7 94-82-6					7.8E+02 6.3E+02	6.6E+03 2.6E+03		7.0E+02 5.1E+02
		<u> </u>	1 0.1		Dichlorophenoxy)butyric Acid, 4-(2,4-							2.6E+U3		
3.6E-02	C 1.0E-05 C 9.0E-02	A 4.0E-03 I V	1	1.4E+03 1.4E+09 3.8E+03		78-87-5	1.9E+01		1.1E+00	1.0E+00	7.0E+03		1.6E+01	1.6E+01
	2.0E-02	P V	1	1.5E+03 1.4E+09 6.8E+03		142-28-9					1.6E+03			1.6E+03
	3.0E-03	1	1 0.1	1.4E+09	Dichloropropanol, 2,3-	616-23-9					2.3E+02	9.9E+02		1.9E+02
1.0E-01	I 4.0E-06 I 3.0E-02	I 2.0E-02 I V	1	1.6E+03 1.4E+09 3.6E+03	Dichlorppropene, 1,34 \\ // (=====)	542-75-6	7.0E+00		2.5E+00	1.8E+00	2.3E+03		7.4E+01	7.2E+01
2.9E-01	I 8.3E-05 C 5.0E-04	I 5.0E-04 I	1 0.1	1.4E+09	Dichloryos U Charles Control	62-73-7	2.4E+00	8.5E+00	4.6E+04	1.9E+00	3.9E+01	1.6E+02	7.1E+05	3.2E+01
	1.0E-04	1	1 0.1	1.4E+09	Dicrotophos	141-66-2					7.8E+00	3.3E+01		6.3E+00
	8.0E-02	P 3.0E-04 X V	1	2.6E+02 1.4E+09 4.1E+03	Dicyclopentadiene	77-73-6					6.3E+03		1.3E+00	1.3E+00
1.6E+01	I 4.6E-03 I 5.0E-05	1	1 0.1	1.4E+09	Dieldrin	60-57-1	4.3E-02	1.5E-01	8.3E+02	3.4E-02	3.9E+00	1.6E+01		3.2E+00
	3.0E-04 C	5.0E-03 I	1 0.1		Diesel Engine Exhaust	NA								
	2.0E-03	P 2.0E-04 P	1 0.1	1.4E+09	Diethanolamine	111-42-2					1.6E+02	6.6E+02	2.8E+05	1.3E+02
	3.0E-02	P 1.0E-04 P	1 0.1	1.4E+09	Diethylene Glycol Monobutyl Ether	112-34-5					2.3E+03	9.9E+03	1.4E+05	1.9E+03
	6.0E-02	P 3.0E-04 P	1 0.1	1.4E+09	Diethylene Glycol Monoethyl Ether	111 90 Đ	1				4.7E+03	2.0E+04	4.3E+05	3.8E+03
	1.0E-03	P V	1	1.1E+05 1.4E+09 1.4E+05	Diethylformamide	617-84-5					7.8E+01			7.8E+01
3.5E+02	C 1.0E-01 C		1 0.1	1.4E+09	Diethylstilbestrol	56-53-1	2.0E-03	7.1E-03	3.8E+01	1.6E-03				
	8.0E-02	1	1 0.1	1.4E+09	Difenzoquat	43222-48-6					6.3E+03	2.6E+04		5.1E+03
	2.0E-02	T	1 0.1	1.4E+09	Diflubenzuron	35367-38-5					1.6E+03	6.6E+03		1.3E+03
	2.02.02	4.0E+01   V	1 0.1	1.4E+03 1.4E+09 1.2E+03		75-37-6							4.8E+04	4.8E+04
4.4E-02	C 1.3E-05 C	V	1	1.4E+09 1.2E+05		94-58-6	1.6E+01		2.7E+01	9.9E+00				1.52104
		7.0E-01 P V	1	2.3E+03 1.4E+09 3.1E+03	•	108-20-3							2.2E+03	2.2E+03
	8.0E-02	7.0E-01 P V	1		Diisopropyl Methylphosphonate	1445-75-6					6.3E+03		2.21.703	6.3E+03
	2.0E-02	i	1 0.1	1.4E+09	Dimethipin	55290-64-7					1.6E+03	6.6E+03		1.3E+03
	2.0E-04		1 0.1	1.4E+09	Dimethoate	60-51-5					1.6F+01	6.6E+01		1.3E+01
1.6E+00			1 0.1	1.4E+09 1.4F+09	Dimethoxybenzidine, 3,3'-	60-51-5 119-90-4	4.3E-01	1.5F+00		3.4E-01	1.02+01	0.0E+01		1.5E+U1
1.6E+00 1.7E-03	P 6.0E-02	D	1 0.1	1.4E+09 1.4E+09	Dimethoxybenziaine, 3,3'- Dimethyl methylphosphonate	756-79-6	4.3E-01 4.1E+02	1.5E+00 1.5E+03		3.4E-01 3.2E+02	4.7E+03	2.0E+04		3.8E+03
									2.05.02		4.72+03	2.UL+U4		3.00+03
4.6E+00	C 1.3E-03 C		1 0.1	1.4E+09	Dimethylamino azobenzene [p-]	60-11-7	1.5E-01	5.4E-01	2.9E+03	1.2E-01				
5.8E-01	H 2.05.00	V	1 0.1	1.4E+09	Dimethylaniline HCl, 2,4-	21436-96-4	1.2E+00	4.3E+00		9.4E-01	1.65.02	C CE - 02		1.25.02
2.0E-01	P 2.0E-03	Х	1 0.1	1.4E+09	Dimethylaniline, 2,4-	95-68-1	3.5E+00	1.2E+01		2.7E+00	1.6E+02	6.6E+02		1.3E+02
	2.0E-03	I V	1	8.3E+02 1.4E+09 3.1E+04		121-69-7					1.6E+02			1.6E+02
1.1E+01			1 0.1	1.4E+09	Dimethylbenzidine, 3,3'-	119-93-7	6.3E-02	2.2E-01		4.9E-02				
		P 3.0E-02 I V	1	1.1E+05 1.4E+09 1.3E+05		68-12-2					7.8E+03		4.0E+03	2.6E+03
	1.0E-04	X 2.0E-06 X V	1	1.7E+05 1.4E+09 2.8E+04	Dimethylhydrazine, 1,1-	57-14-7					7.8E+00		5.8E-02	5.7E-02
											-			

Key: I = IRIS	S; P = PPRTV; A = A	TSDR; C =				See FAQ; J = New Jersey; O = EPA Office of Water; E = see user guide Section 2.3.5; I								ied (See User	Guide for Arsenic
		Toxicity	notice); c = cancer; n = not and Chemical-specific Infor		where: n SL < 100X c SL; ** =	where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exce Contaminant	eed ceiling limit			rget Risk (TR				ld Hazard Inde	ex (HI) = 1
												Ingestion SL	Dermal SL	nhalation SL	Noncarcinogenic S
SFO	k k	RfD <sub>o</sub> (mg/kg-	k k v e RfC <sub>i</sub> e o muta-		C <sub>sat</sub> PEF VF			Ingestion SL TR=1E-06	Dermal SL TR=1E-06	Inhalation SL TR=1E-06	Carcinogenic SL TR=1E-06	Child THQ=1	Child THQ=1	Child THQ=1	Child THI=1
(mg/kg-day) <sup>-1</sup>	y (ug/m <sup>3</sup> ) <sup>-1</sup> y	day)	c comuta	ABS ABS	(mg/kg) (m³/kg) (m³/kg)	Analyte	CAS No.	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
	C 1.6E-01 C			1	1.9E+05 1.4E+09 1.7E+05		540-73-8	1.3E-03		2.9E-03	8.8E-04				
		2.0E-02		1 0.1	1.4E+09	Dimethylphenol, 2,4-	105-67-9					1.6E+03	6.6E+03		1.3E+03
		6.0E-04 1.0E-03		1 0.1 1 0.1	1.4E+09 1.4E+09	Dimethylphenol, 2,6- Dimethylphenol, 3,4-	576-26-1 95-65-8					4.7E+01 7.8E+01	2.0E+02 3.3E+02		3.8E+01 6.3E+01
4.5E-02	C 1.3E-05 C	1.02 03		1	1.3E+03 1.4E+09 9.5E+02		513-37-1	1.5E+01		2.1E-01	2.0E-01	7.02.01	3.32.02		0.52.01
		8.0E-05		1 0.1	1.4E+09	Dinitro-o-cresol, 4,6-	534-52-1					6.3E+00	2.6E+01		5.1E+00
		2.0E-03 1.0E-04		1 0.1 1 0.1	1.4E+09 1.4E+09	Dinitro-o-cyclohexyl Phenol, 4,6- Dinitrobenzene, 1,2-	131-89-5 528-29-0					1.6E+02 7.8F+00	6.6E+02 3.3E+01		1.3E+02 6.3E+00
		1.0E-04	· ·	1 0.1	1.4E+09	Dinitrobenzene, 1,3-	99-65-0					7.8E+00	3.3E+01		6.3E+00
		1.0E-04	•	1 0.1	1.4E+09	Dinitrobenzene, 1,4-	100-25-4					7.8E+00	3.3E+01		6.3E+00
5.05.04		2.0E-03	-	1 0.1	1.4E+09	Dinitrophenol, 2,4-	51-28-5	4.05.00	2.55.00		0.05.04	1.6E+02	6.6E+02		1.3E+02
6.8E-01 3.1E-01	C 8.9E-05 C	2.0F-03		1 0.1 1 0.102	1.4E+09 1.4E+09	Dinitrotoluene Mixture, 2,4/2,6- Dinitrotoluene, 2,4-	NA 121-14-2	1.0E+00 2.2E+00	3.6E+00 7.8E+00	4.3E+04	8.0E-01 1.7E+00	1.6E+02	6.5E+02		1.3E+02
	Р			1 0.099		Dinitrotoluene, 2,6-	606-20-2	4.6E-01	1.7E+00		3.6E-01	2.3E+01	1.0E+02		1.9E+01
		2.0E-03		1 0.006		Dinitrotoluene, 2-Amino-4,6-	35572-78-2					1.6E+02	1.1E+04		1.5E+02
4.5E-01	Х	2.0E-03 9.0E-04	-	1 0.009 1 0.1	1.4E+09 1.4E+09	Dinitrotoluene, 4-Amino-2,6- Dinitrotoluene, Technical grade	19406-51-0 25321-14-6	1.5E+00	5.5E+00		1.2E+00	1.6E+02 7.0E+01	7.3E+03 3.0E+02		1.5E+02 5.7E+01
		1.0E-03		1 0.1	1.4E+09	Dinoseb	88-85-7	1.52.00	3.32.100		1.22.100	7.8E+01	3.3E+02		6.3E+01
1.0E-01	I 5.0E-06 I	3.0E-02	I 3.0E-02 I V	1	1.2E+05 1.4E+09 4.0E+04		123-91-1	7.0E+00		2.2E+01	5.3E+00	2.3E+03		1.2E+03	8.1E+02
6.05						Dioxins			4.05	2.05	107.7				
	I 1.3E+00 I C 3.8E+01 C	7 0F-10		1 0.03 1 0.03	1.4E+09 2.0E+06	~Hexachlorodibenzo p dioxin, Mixture ~TCDD, 2,3,7,8-	1746-01-6	1.1E-04 5.3E-06	1.3E-03 6.3E-05	2.9E+00 1.4E-04	1.0E-04 4.8E-06	5.5E-05	7.7E-04	8.2E-02	5.1E-05
1.32.03	C 3.02.01 C	3.0E-02		1 0.03	1.4E+09	Diphenamid	957-51-7	3.32 00	0.52 05	1.42 04	4.0L 00	2.3E+03	9.9E+03	0.21 02	1.9E+03
				1 0.1	1.4E+09	Diphenyl Sulfone	127-63-9					6.3E+01	2.6E+02		5.1E+01
8.0E-01	I 2.2E-04 I	2.5E-02		1 0.1 1 0.1	1.4E+09 1.4E+09	Diphenylamine Diphenylhydrazine; 1,2-	122-39-4 122-66-7	8.7E-01	3.1E+00	1.7E+04	6.8E-01	2.0E+03	8.2E+03		1.6E+03
8.0L-01	1 2.21-04 1	2.2E-03	1	1 0.1	1.4E+09	Digual!	85-00-7	8.71-01	3.1L+00	1.71-04	0.8L-01	1.7E+02	7.3E+02		1.4E+02
7.1E+00	C 1.4E-01 C			1 0.1	1.4E+09	Direct Black 38	1937-37-7	9.8E-02	3.5E-01	2.7E+01	7.6E-02				
	C 1.4E-01 C			1 0.1	1.4E+09	Direct Blue 6	2602-46-2	9.4E-02	3.3E-01	2.7E+01	7.3E-02				
6.7E+00	C 1.4E-01 C	4.0E-05		1 0.1 1 0.1	1.4E+09 1.4E+09	Direct Brown 95 Disulfoton	16071-86-6 298-04-4	1.0E-01	3.7E-01	2.7E+01	8.1E-02	3.1E+00	1.3E+01		2.5E+00
		1.0E-02	•	1 0.1	1.4E+09 4.5E+04		505-29-3					7.8E+02	1.55+01		7.8E+02
		2.0E-03	T	1 0.1	1.4E+09	Diuron	330-54-1					1.6E+02	6.6E+02		1.3E+02
		4.0E-03 2.5F-02		1 0.1	1.4E+09 1.4E+09 1.2E+05	Dodine III II I	2439-10-3 759-94-4					3.1E+02 2.0F+03	1.3E+03		2.5E+02 2.0F+03
		6.0E-03		1	1.4E+09 1.2E+05 1.4E+09 4.1E+05	11 11 11 11 11 11 11 11 11	115-29-7					4.7E+02			4.7E+02
		2.0E-02		1 0.1	1.4E+09	Endothall // CTTTT	145-73-3					1.6E+03	6.6E+03		1.3E+03
		3.0E-04		1 0.1	1.4E+09	Endrind U U NEXX, ELLE O NEX	72-20-8					2.3E+01	9.9E+01		1.9E+01
9.9E-03	I 1.2E-06 I	6.0E-03		1	1.1E+04 1.4E+09 1.9E+04		106-89-8	7.0E+01		4.4E+01	2.7E+01	4.7E+02		2.0E+01	1.9E+01
		4.0E-02		1 0.1	1.5E+04 1.4E+09 7.7E+03 1.4E+09	Epoxybutane, 1,2- Ethanol, 2-(2-methoxyethoxy)-	106-88-7 111-77-3					3.1E+03	1.3E+04	1.6E+02	1.6E+02 2.5E+03
		5.0E-03	I	1 0.1	1.4E+09	Ethephon	16672-87-0					3.9E+02	1.6E+03		3.2E+02
		5.0E-04		1 0.1	1.4E+09	Ethion	563-12-2					3.9E+01	1.6E+02	2.05.02	3.2E+01
		1.0E-01 9.0F-02		1	2.4E+04 1.4E+09 6.2E+04 1.1E+05 1.4E+09 9.8E+04		111-15-9 110-80-5					7.8E+03 7.0F+03		3.8E+03 2.1E+04	2.6E+03 5.2E+03
				1	1.1E+05 1.4E+09 9.8E+04 1.1E+04 1.4E+09 8.6E+03		141-78-6					7.0E+03 7.0E+04		6.3E+02	6.2E+03
		5.0E-03	P 8.0E-03 P V	1	2.5E+03 1.4E+09 6.3E+03	Ethyl Acrylate	140-88-5					3.9E+02		5.3E+01	4.7E+01
		2.05.04		1		Ethyl Chloride (Chloroethane)	75-00-3					1.65.04		1.4E+04	1.4E+04
		2.0E-01	•	1	1.0E+04 1.4E+09 3.1E+03 1.1E+03 1.4E+09 5.8E+03		60-29-7 97-63-2					1.6E+04		1.8E+03	1.6E+04 1.8E+03
		1.0E-05		1 0.1	1.4E+09	Ethyl-p-nitrophenyl Phosphonate	2104-64-5					7.8E-01	3.3E+00		6.3E-01
1.1E-02	C 2.5E-06 C			1	4.8E+02 1.4E+09 5.7E+03		100-41-4	6.3E+01		6.4E+00	5.8E+00	7.8E+03	2.25.04	5.9E+03	3.4E+03
		7.0E-02 9.0E-02		1 0.1	1.4E+09 1.9E+05 1.4E+09 1.8E+05	Ethylene Cyanohydrin Ethylene Diamine	109-78-4 107-15-3					5.5E+03 7.0E+03	2.3E+04		4.4E+03 7.0E+03
		2.0E+00	I 4.0E-01 C	1 0.1	1.4E+09	Ethylene Glycol	107-21-1					1.6E+05	6.6E+05	5.7E+08	1.3E+05
			I 1.6E+00 I	1 0.1	1.4E+09	Ethylene Glycol Monobutyl Ether	111-76-2					7.8E+03	3.3E+04	2.3E+09	6.3E+03
	C 8.8E-05 C	0.05.05		1	1.2E+05 1.4E+09 6.1E+03		75-21-8	2.2E+00	F FF . 04	1.9E-01	1.8E-01	6.35.00	2.05.05	1.9E+02	1.9E+02
	C 1.3E-05 C C 1.9E-02 C	8.UE-US		1 0.1 1	1.4E+09 1.5E+05 1.4E+09 2.4E+04	Ethylene Thiourea Ethyleneimine	96-45-7 151-56-4	1.5E+01 1.1E-02	5.5E+01	2.9E+05 3.5E-03	1.2E+01 2.7E-03	6.3E+00	2.6E+01		5.1E+00
		3.0E+00		1 0.1	1.4E+09	Ethylphthalyl Ethyl Glycolate	84-72-0					2.3E+05	9.9E+05		1.9E+05
		2.5E-04		1 0.1	1.4E+09	Fenamiphos	22224-92-6					2.0E+01	8.2E+01		1.6E+01
		2.5E-02 2.5E-02		1 0.1	1.4E+09 1.4E+09	Fenpropathrin Fenvalerate	39515-41-8 51630-58-1					2.0E+03 2.0E+03	8.2E+03 8.2E+03		1.6E+03 1.6E+03
		1.3E-02		1 0.1	1.4E+09 1.4E+09	Fenvalerate Fluometuron	2164-17-2					1.0E+03	4.3E+03		1.6E+03 8.2E+02

			See FAQ; J = New Jersey; O = EPA Office of Water; E = see user guide Section 2.3.5; I where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exce								ed (See User	Guide for Arsenic
	nd Chemical-specific Information	- WHERE. II 3E \ 100X \ C 3E,	Contaminant	ca ceiiiig iiiiic		inogenic Targ			No	ncancer Chi	d Hazard Inde	
k k RfD <sub>o</sub> k					61				Ingestion SL	Dermal SL	nhalation SL	Noncarcinogenic SL
SFO e IUR e (mg/kg- e	RfC <sub>i</sub> e o muta-	C <sub>sat</sub> PEF VF				Dermal SL In TR=1E-06	naiation SL TR=1E-06	Carcinogenic SL TR=1E-06	Child THQ=1	Child THQ=1	Child THQ=1	Child THI=1
(mg/kg-day) <sup>-1</sup> y (ug/m <sup>3</sup> ) <sup>-1</sup> y day) y	y (mg/m³) y I gen GIABS ABS	(mg/kg) (m <sup>3</sup> /kg) (m <sup>3</sup> /kg)	Analyte	CAS No.	(mg/kg)		(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
	C 1.3E-02 C 1	1.4E+09	Fluoride	16984-48-8	( 0, 0,	( 0 0)	( 0, 0,	( 0, 0,	3.1E+03	( 0, 0,	1.8E+07	3.1E+03
6.0E-02 I	I 1.3E-02 C 1	1.4E+09	Fluorine (Soluble Fluoride)	7782-41-4					4.7E+03		1.8E+07	4.7E+03
8.0E-02 I	1 0.1	1.4E+09	Fluridone	59756-60-4					6.3E+03	2.6E+04		5.1E+03
2.0E-02 I	1 0.1	1.4E+09	Flurprimidol	56425-91-3					1.6E+03	6.6E+03		1.3E+03
7.0E-04 I	1 0.1	1.4E+09	Flusilazole	85509-19-9					5.5E+01	2.3E+02		4.4E+01
6.0E-02 I 1.0E-02 I	1 0.1 1 1 0.1	1.4E+09 1.4E+09	Flutolanil Fluvalinate	66332-96-5 69409-94-5					4.7E+03 7.8E+02	2.0E+04 3.3E+03		3.8E+03 6.3E+02
3.5E-03   1.0E-01	1 0.1	1.4E+09	Folpet	133-07-3	2.0F+02	7.1E+02		1.6E+02	7.8E+03	3.3E+04		6.3E+03
1.9E-01 I	1 0.1	1.4E+09	Fomesafen	72178-02-0	3.7E+00	1.3E+01		2.9E+00	7.02.03	5.52.01		0.52.05
2.0E-03 I	1 0.1	1.4E+09	Fonofos	944-22-9					1.6E+02	6.6E+02		1.3E+02
1.3E-05 I 2.0E-01 I	I 9.8E-03 A V 1	4.2E+04 1.4E+09 7.8E+04	Formaldehyde	50-00-0			1.7E+01	1.7E+01	1.6E+04		8.0E+02	7.6E+02
	P 3.0E-04 X V 1	1.1E+05 1.4E+09 9.3E+04		64-18-6					7.0E+04	0.05.05	2.9E+01	2.9E+01
3.0E+00 I	1 0.1	1.4E+09	Fosetyl-AL	39148-24-8					2.3E+05	9.9E+05		1.9E+05
1.0E-03 X	V 1 0.03	1.4E+09 2.0E+05	Furans ~Dibenzofuran	132-64-9					7.8E+01	1.1E+03		7.3E+01
1.0E-03 / 1.0E-03 I	V 1 0.03			110-00-9					7.8E+01	1.1E+03		7.3E+01
	I 2.0E+00 I V 1 0.03		~Tetrahydrofuran	109-99-9					7.0E+04	9.9E+05	2.5E+04	1.8E+04
3.8E+00 H	1 0.1	1.4E+09	Furazolidone	67-45-8	1.8E-01	6.5E-01		1.4E-01				
	I 5.0E-02 H V 1	1.0E+04 1.4E+09 4.9E+04		98-01-1					2.3E+02		2.5E+03	2.1E+02
1.5E+00 C 4.3E-04 C	1 0.1	1.4E+09	Furium	531-82-8	4.6E-01		8.9E+03	3.6E-01				
3.0E-02   8.6E-06 C 4.0E-04	1 0.1 1 0.1	1.4E+09 1.4E+09	Furmecyclox Glufosinate. Ammonium	60568-05-0 77182-82-2	2.3E+01	8.2E+01	4.4E+05	1.8E+01	3.1E+01	1.3E+02		2.5F+01
4.0E-04 I	8.0E-05 C 1 0.1	1.4E+09	Glutaraldehyde	111-30-8	-				3.1E+U1	1.35+02	1.1E+05	1.1E+05
4.0E-04 I	1 1.0E-03 H V 1	1.1E+05 1.4E+09 8.4E+04		765-34-4					3.1E+01		8.8E+01	2.3E+01
1.0E-01 I	1 0.1	1.4E+09	Glyphosate	1071-83-6					7.8E+03	3.3E+04	0.02.02	6.3E+03
1.0E-02 X	V 1	1.4E+09 1.5E+05	Guanidine	113-00-8					7.8E+02			7.8E+02
2.0E-02 F	P 1 0.1	1.4E+09	Guanidine thioride ( )	50-01-1					1.6E+03	6.6E+03		1.3E+03
5.0E-05 I	1 0.1	1.4E+09	Haloxyfop, Methyl )	69806-40-2					3.9E+00	1.6E+01		3.2E+00
4.5E+00   1.3E-03   5.0E-04   9.1E+00   2.6E-03   1.3E-05	I V 1 I V 1	1.4E+09 4.8E+05 1.4E+09 8.4E+05		76-44-8 1024-57-3	1.5E-01		1.0E+00	1.3E-01	3.9E+01			3.9E+01
9.1E+00   2.6E-03   1.3E-05   2.0E-03	I V 1 I V 1		Hexabromoberizenes (2012)	87-82-1	7.6E-02		9.1E-01	7.0E-02	1.0E+00 1.6E+02			1.0E+00 1.6E+02
2.0E-04 I	1 0.1	1.4E+09	Hexabromodiphenyl ether, 2,2',4,4',5,5'- (BDE-153)	68631-49-2	-				1.6E+01	6.6E+01		1.3E+01
1.6E+00   4.6E-04   8.0E-04	I V 1	1.4E+09 6.8E+04		118-74-1	4.3E-01		4.1E-01	2.1E-01	6.3E+01			6.3E+01
7.8E-02 I 2.2E-05 I 1.0E-03 F	P V 1	1.7E+01 1.4E+09 1.1E+04	Hexachlorobutadiene	87-68-3	8.9E+00		1.4E+00	1.2E+00	7.8E+01			7.8E+01
6.3E+00 I 1.8E-03 I 8.0E-03 A	A 1 0.1	1.4E+09	Hexachlorocyclohexane, Alpha-	319-84-6	1.1E-01		2.1E+03	8.6E-02	6.3E+02	2.6E+03		5.1E+02
1.8E+00   5.3E-04   1.1E+00   C 3.1E-04   C 3.0E-04	1 0.1 I 1 0.04	1.4E+09 1.4E+09	Hexachlorocyclohexane, Beta- Hexachlorocyclohexane, Gamma- (Lindane)	319-85-7 58-89-9	3.9E-01 6.3E-01		7.2E+03 1.2E+04	3.0E-01 5.7E-01	2.3E+01	2.5E+02		2.1E+01
1.8E+00   5.1E-04	1 0.04	1.4E+09	. 11 10 11-11 // circus 11 11 11 1/	608-73-1	3.9E-01		7.5E+03	3.0E-01	2.3L+01	2.JL+02		2.1L+01
	I 2.0E-04 I V 1		Hexachlorocyclopentadiene	77-47-4	3.31-01	1.41+00	7.JL+03	3.0L-01	4.7E+02		1.8E+00	1.8E+00
	I 3.0E-02 I V 1	1.4E+09 8.0E+03		67-72-1	1.7E+01		2.0E+00	1.8E+00	5.5E+01		2.5E+02	4.5E+01
3.0E-04 I	1 0.1	1.4E+09	Hexachlorophene	70-30-4					2.3E+01	9.9E+01		1.9E+01
1.1E-01   3.0E-03	1 0.015		Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	121-82-4	6.3E+00	1.5E+02		6.1E+00	2.3E+02	6.6E+03		2.3E+02
	1.0E-05   V 1	3.4E+03 1.4E+09 3.0E+05		822-06-0					2.45 - 1	4.05	3.1E+00	3.1E+00
4.0E-04 F	7.0E-01   V 1	1.4E+09 1.4E+02 1.4E+09 8.3E+02	Hexamethylphosphoramide	680-31-9 110-54-3					3.1E+01	1.3E+02	6.1E+02	2.5E+01 6.1F+02
2.0E+00 F	P 1 0.1	1.4E+02 1.4E+09 8.3E+02 1.4E+09	Hexane, N- Hexanedioic Acid	124-04-9					1.6E+05	6.6E+05	0.1L+0Z	1.3E+05
	I 3.0E-02 I V 1	3.3E+03 1.4E+09 1.3E+04	Hexanone, 2-	591-78-6					3.9E+02		4.2E+02	2.0E+02
3.3E-02 I	1 0.1	1.4E+09	Hexazinone	51235-04-2					2.6E+03	1.1E+04		2.1E+03
2.5E-02 I	1 0.1	1.4E+09	Hexythiazox	78587-05-0					2.0E+03	8.2E+03		1.6E+03
3.0E-04 I	1 0.1	1.4E+09	Hydramethylnon	67485-29-4					2.3E+01	9.9E+01		1.9E+01
3.0E+00   4.9E-03   3.0E+00   4.9E-03	3.0E-05 P V 1 1	1.4E+09 1.4E+09	Hydrazine Hydrazine Sulfate	302-01-2 10034-93-2	2.3E-01 2.3E-01		7.8E+02 7.8E+02	2.3E-01 2.3E-01			4.3E+04	4.3E+04
3.0ET00 1 4.3E-03 1	2.0E-02   V 1	1.4E+09 1.4E+09	Hydrogen Chloride	7647-01-0	2.36-01		7.0L+UZ	2.3E-U1			2.8E+07	2.8E+07
4.0E-02 C	2.0E-02 T V 1 C 1.4E-02 C V 1	1.4E+09	Hydrogen Fluoride	7664-39-3					3.1E+03		2.0E+07	3.1E+03
02	2.0E-03 I V 1	1.4E+09	Hydrogen Sulfide	7783-06-4							2.8E+06	2.8E+06
6.0E-02 P 4.0E-02 F	P 1 0.1	1.4E+09	Hydroquinone	123-31-9	1.2E+01	4.1E+01		9.0E+00	3.1E+03	1.3E+04		2.5E+03
1.3E-02 I	1 0.1	1.4E+09	Imazalil .	35554-44-0					1.0E+03	4.3E+03		8.2E+02
2.5E-01 I	1 0.1	1.4E+09	Imazaquin	81335-37-7					2.0E+04	8.2E+04		1.6E+04
2.5E-01 I 1.0E-02 A	1 0.1 A 1	1.4E+09 1.4E+09	Imazethapyr Iodine	81335-77-5 7553-56-2					2.0E+04 7.8E+02	8.2E+04		1.6E+04 7.8E+02
1.0E-02 A 4.0E-02 I	1 I 1 0.1	1.4E+09 1.4E+09	Iprodione	7553-56-2 36734-19-7					7.8E+02 3.1E+03	1.3E+04		7.8E+02 2.5E+03
7.0E-01 F	P 1	1.4E+09	Iron	7439-89-6					5.5E+04			5.5E+04
3.0E-01 I	I V 1	1.0E+04 1.4E+09 2.8E+04		78-83-1					2.3E+04			2.3E+04
9.5E-04 I 2.0E-01 I	I 2.0E+00 C 1 0.1	1.4E+09	Isophorone	78-59-1	7.3E+02	2.6E+03		5.7E+02	1.6E+04	6.6E+04	2.8E+09	1.3E+04

	S; P = PPRTV; A = A						See FAQ; J = New Jersey; O = EPA Office of Water; E = see user guide Section 2.3.5; where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exc								ied (See User	Guide for Arsenio
			and Chemical-specific Inf		= wnere: n :	SL < 100X C SL; *** =	Contaminant	eed ceiling limit			rget Risk (TR				ld Hazard Ind	ex (HI) = 1
		Í											Ingestion SL	Dermal SL	Inhalation SL	Noncarcinogenic
SFO	k k e IUR e	RfD <sub>o</sub> (mg/kg-	k k v e RfC <sub>i</sub> e o muta-		C <sub>sat</sub>	PEF VF			TR=1E-06	Dermal SL TR=1E-06		Carcinogenic SL TR=1E-06	Child THQ=1	Child THQ=1	Child THQ=1	Child THI=1
ng/kg-day) <sup>-1</sup>	y (ug/m³) <sup>-1</sup> y	day)	y (mg/m³) y I gen	GIABS AB	S (mg/kg)	(m3/kg) $(m3/kg)$	Analyte	CAS No.	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
		1.5E-02	I V	1		1.4E+09 4.2E+05		33820-53-0					1.2E+03			1.2E+03
		2.0E+00 1.0E-01	P 2.0E-01 P V	1 0.:		1.4E+09 2.8E+04 1.4E+09	Isopropanol Isopropyl Methyl Phosphonic Acid	67-63-0 1832-54-8					1.6E+05 7.8E+03	3.3E+04	5.8E+03	5.6E+03 6.3E+03
		5.0E-02	1	1 0.		1.4E+09	Isoxaben	82558-50-7					3.9E+03	1.6E+04		3.2E+03
		3.UE-UZ	3.0E-01 A V	1 0	1	1.4E+09	IP-7	82558-50-7 NA					3.9E+03	1.00+04	4.3E+08	4.3E+08
		2.0E-03	J.02 01 A V	1 0.:	1	1.4E+09	Lactofen	77501-63-4					1.6E+02	6.6E+02	4.52.100	1.3E+02
							Lead Compounds									
5.0E-01	C 1.5E-01 C	2.0E-02	C 2.0E-04 C M	0.025		1.4E+09	~Lead Chromate	7758-97-6	3.1E-01		9.2E+00	3.0E-01	1.6E+03		2.8E+05	1.6E+03
	C 1.2E-05 C			1		1.4E+09	~Lead Phosphate	7446-27-7	8.2E+01		3.2E+05	8.2E+01				
2.8E-01	C 8.0E-05 C			1 0.:	1	1.4E+09	~Lead acetate	301-04-2	2.5E+00	8.8E+00	4.8E+04	1.9E+00				
8.5E-03	C 1.2E-05 C			1 0.:	1	1.4E+09 1.4E+09	~Lead and Compounds ~Lead subacetate	7439-92-1 1335-32-6	8.2E+01	2.9E+02	3.2E+05	6.4E+01				4.0E+02
8.5E-U3	C 1.2E-05 C	1.05.07	I V						8.2E+U1	2.9E+02	3.2E+U5	6.4E+U1	7.05.03			7.05.03
		1.0E-07 5.0E-06	P V	1		1.4E+09 1.9E+03 1.4E+09 2.6E+04		78-00-2 541-25-3					7.8E-03 3.9E-01			7.8E-03 3.9E-01
		2.0E-03	ı	1 0.:		1.4E+09 2.6E+04	Linuron	330-55-2					1.6E+02	6.6E+02		1.3E+02
		2.0E-03	P	1		1.4E+09	Lithium	7439-93-2					1.6E+02			1.6E+02
		5.0E-04	I	1 0.:		1.4E+09	MCPA	94-74-6					3.9E+01	1.6E+02		3.2E+01
		1.0E-02	I	1 0.:		1.4E+09	MCPB	94-81-5					7.8E+02	3.3E+03		6.3E+02
		1.0E-03	1	1 0.:		1.4E+09	MCPP	93-65-2					7.8E+01	3.3E+02		6.3E+01
		2.0E-02 1.0F-01	I I 7.0E-04 C	1 0.:		1.4E+09 1.4E+09	Malathion Maleic Anhydride	121-75-5 108-31-6					1.6E+03 7.8F+03	6.6E+03 3.3E+04	9.9F+05	1.3E+03 6.3F+03
			1 7.0E-04 C	1 0.		1.4E+09 1.4E+09		108-31-6						3.3E+04 1.6E+05	9.9E+05	3.2E+04
		5.0E-01 1.0E-04	P	1 0.:		1.4E+09 1.4E+09	Maleic Hydrazide Malononitrile	123-33-1 109-77-3					3.9E+04 7.8E+00	3.3E+01		3.2E+04 6.3E+00
			H	1 0.		1.4E+09	Mancozeb	8018-01-7					2.3E+03	9.9E+03		1.9E+03
		5.0E-03	I	1 0.:		1.4E+09	Maneb	12427-38-2					3.9E+02	1.6E+03		3.2E+02
		1.4E-01	I 5.0E-05 I	1			Manganese (Diet)	7439-96-5								
		2.4E-02	S 5.0E-05 I	0.04		1.4E+09	Manganese (Non-diet)	7439-96-5					1.9E+03		7.1E+04	1.8E+03
		9.0E-05 3.0E-02	H I	1 0.:		1.4E+09 1.4E+09	Mepiduat Chloide	950-10-7 24307-26-4					7.0E+00 2.3E+03	3.0E+01 9.9E+03		5.7E+00 1.9E+03
		3.0E-04	I 3.0E-04 S	0.07		1.4E+09	"Mercuric Chloride (and other Mercury salts)	7487-94-7					2.3E+01		4.3E+05	2.3E+01
		1.0E-04	3.0E-04 I V	1 1	3.1E+00	1.4E+09 3.5E+04 1.4E+09	~Mercury (elemental) ** ~Methyl Mercury	7439-97-6 22967-92-6					7.8E+00		1.1E+01	1.1E+01 7.8E+00
		8.0E-05	I	1 0.:	1	1.4E+09	~Phenylmercuric Acetate	62-38-4	-				6.3E+00	2.6E+01		5.1E+00
		3.0E-05	I V	1		1.4E+09 1.9E+06		150-50-5					2.3E+00			2.3E+00
		3.0E-05	1	1 0.:		1.4E+09	Merphos Oxide	78-48-8					2.3E+00	9.9E+00		1.9E+00
		6.0E-02	1 2 25 22 2 4	1 0.:		1.4E+09	Meta(axyl L / ) CTTTD	57837-19-1					4.7E+03	2.0E+04	2 45 02	3.8E+03
		1.0E-04 5.0E-05	I 3.0E-02 P V	1 0.:		1.4E+09 6.8E+03 1.4E+09	Methadrylonitrile Methamidophos	126-98-7 10265-92-6					7.8E+00 3.9E+00	1.6E+01	2.1E+02	7.5E+00 3.2E+00
			I 2.0E+01 I V	1 0		1.4E+09 2.9E+04	Wethannophos 11 ( 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	67-56-1	_				1.6E+05	1.02.01	6.1E+05	1.2E+05
		1.0E-03	1	1 0.:		1.4E+09 2.9E+04	Methidathion	950-37-8					7.8E+01	3.3E+02	0.12.03	6.3E+01
		2.5E-02	I	1 0.:		1.4E+09	Methomyl	16752-77-5					2.0E+03	8.2E+03		1.6E+03
4.9E-02	C 1.4E-05 C			1 0.:		1.4E+09	Methoxy-5-nitroaniline, 2-	99-59-2	1.4E+01	5.0E+01	2.7E+05	1.1E+01				
		5.0E-03	1	1 0.:		1.4E+09	Methoxychlor	72-43-5					3.9E+02	1.6E+03	4.05	3.2E+02
			P 1.0E-03 P V	1			Methoxyethanol Acetate, 2-	110-49-6					6.3E+02		1.3E+02	1.1E+02
		5.0E-03 1.0E+00	P 2.0E-02 I V X V	1		1.4E+09 1.0F+05 1.4E+09 8.1E+03		109-86-4 79-20-9					3.9E+02 7.8E+04		2.1E+03	3.3E+02 7.8E+04
		1.01+00	2.0E-02 P V	1		1.4E+09 8.1E+03		79-20-9 96-33-3					7.02+04		1.5E+02	1.5E+02
		6.0E-01	I 5.0E+00 I V	1		1.4E+09 1.2E+04		78-93-3					4.7E+04		6.4E+04	2.7E+04
	1.0E-03 X		P 2.0E-05 X V	1	1.8E+05	1.4E+09 5.0E+04	Methyl Hydrazine	60-34-4			1.4E-01	1.4E-01	7.8E+01		1.1E+00	1.0E+00
			3.0E+00 I V	1			Methyl Isobutyl Ketone (4-methyl-2-pentanone)	108-10-1							3.3E+04	3.3E+04
			1.0E-03 C V	1			Methyl Isocyanate	624-83-9							4.6E+00	4.6E+00
		1.4E+00 2.5E-04	I 7.0E-01 I V	1 0.:		1.4E+09 6.3E+03 1.4E+09	Methyl Methacrylate Methyl Parathion	80-62-6 298-00-0					1.1E+05 2.0E+01	8.2E+01	4.6E+03	4.4E+03 1.6E+01
			X	1 0.:		1.4E+09 1.4E+09	Methyl Phosphonic Acid	993-13-5					4.7E+03	8.2E+01 2.0E+04		3.8E+03
			H 4.0E-02 H V	1 0		1.4E+09 1.4E+09 2.4E+04		25013-15-4					4.7E+03 4.7E+02	2.UL+U4	1.0E+03	3.8E+03 3.2E+02
	C 2.8E-05 C	05		1 0.:		1.4E+09	Methyl methanesulfonate	66-27-3	7.0E+00	2.5E+01	1.4E+05	5.5E+00				2.22.02
9.9E-02			3.0E+00 I V	1	8.9E+03	1.4E+09 4.9E+03	Methyl tert-Butyl Ether (MTBE)	1634-04-4	3.9E+02		5.3E+01	4.7E+01			1.5E+04	1.5E+04
	C 2.6E-07 C			1 0.:	1	1.4E+09	Methyl-1,4-benzenediamine dihydrochloride, 2-	615-45-2					2.3E+01	9.9E+01		1.9E+01
1.8E-03		3.0E-04														
1.8E-03 9.0E-03	P		X	1 0.	1	1.4E+09	Methyl-5-Nitroaniline, 2-	99-55-8	7.7E+01	2.7E+02		6.0E+01	1.6E+03	6.6E+03		1.3E+03
1.8E-03 9.0E-03 8.3E+00	P C 2.4E-03 C			1 0.	1 1	1.4E+09 1.4E+09	Methyl-N-nitro-N-nitrosoguanidine, N-	70-25-7	8.4E-02	3.0E-01	1.6E+03	6.5E-02	1.6E+03	6.6E+03		1.3E+03
1.8E-03 9.0E-03 8.3E+00	P		х	1 0.	1 1 1	1.4E+09					1.6E+03 1.0E+05		1.6E+03	6.6E+03		6.3F+02

Key: I = IRIS; P = PPRTV; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #27); H = HEAST; F =	See FAQ; J = New Jersey; O = EPA Office of Water; E = see user guide Section 2.3.5; L = see user gui where n SL < 10X c St; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit		
Toxicity and Chemical-specific Information	Contaminant	Carcinogenic Target Risk (TR) = 1E-06	Noncancer Child Hazard Index (HI) = 1
k k RfD <sub>o</sub> k k v		Ingestion SL Dermal SL Inhalation SL Carcinogenic SL	Ingestion SL Dermal SL Inhalation SL Noncarcinogenic SL Child Child Child Child
SFO e IUR e (mg/kg- e RfC <sub>i</sub> e o muta- C <sub>sat</sub> PEF VF		TR=1E-06 TR=1E-06 TR=1E-06	THQ=1 THQ=1 THQ=1 THI=1
(mg/kg-day) <sup>-1</sup> y (ug/m <sup>3</sup> ) <sup>-1</sup> y day) y (mg/m <sup>3</sup> ) y I gen GIABS ABS (mg/kg) (m <sup>3</sup> /kg) (m <sup>3</sup> /kg)	Analyte CAS No.	(mg/kg) (mg/kg) (mg/kg) (mg/kg)	(mg/kg) (mg/kg) (mg/kg) (mg/kg)
1.0E-01 X 3.0E-04 X 1 0.1 1.4E+09 2.2E+01 C 6.3E-03 C M 1 0.1 1.4E+09	Methylbenzene-1,4-diamine sulfate, 2- 615-50-9 Methylcholanthrene, 3- 56-49-5	7.0E+00 2.5E+01 5.4E+00 7.0E-03 2.7E-02 2.2E+02 5.5E-03	2.3E+01 9.9E+01 1.9E+01
2.0E-03   1.0E-08   6.0E-03   6.0E-01   V M 1 3.3E+03 1.4E+09 2.2E+03		7.7E+01 2.2E+02 5.7E+01	4.7E+02 1.4E+03 3.5E+02
1.0E-01 P 4.3E-04 C 2.0E-03 P M 1 0.1 1.4E+09 4.6E-02 I 1.3E-05 C 1 0.1 1.4E+09	Methylene-bis(2-chloroaniline), 4,4'- Methylene-bis(N,N-dimethyl) Aniline, 4,4'- 101-61-1	1.5E+00 6.0E+00 3.2E+03 1.2E+00 1.5E+01 5.4E+01 2.9E+05 1.2E+01	1.6E+02 6.6E+02 1.3E+02
1.6E+00 C 4.6E-04 C 2.0E-02 C 1 0.1 1.4E+09	Methylenebisbenzenamine, 4,4'- 101-77-9	4.3E-01 1.5E+00 8.3E+03 3.4E-01	2.8E+07 2.8E+07
6.0E-04 I 1 0.1 1.4E+09 7.0E-02 H V 1 5.0E+02 1.4E+09 1.3E+04	Methylenediphenyl Diisocyanate 101-68-8 Methylstyrene, Alpha- 98-83-9		8.5E+05 8.5E+05 5.5E+03 5.5E+03
1.5E-01   1 0.1 1.4E+09	Metolachlor 51218-45-2		1.2E+04 4.9E+04 9.5E+03
2.5E-02 I 1 0.1 1.4E+09	Metribuzin 21087-64-9		2.0E+03 8.2E+03 1.6E+03
2.5E-01 I 1 0.1 1.4E+09 3.0E+00 P V 1 3.4E-01 1.4E+09 1.4E+03	Metsulfuron-methyl         74223-64-6           Mineral oils         8012-95-1		2.0E+04 8.2E+04 1.6E+04 2.3E+05 2.3E+05
1.8E+01 C 5.1E-03 C 2.0E-04 I V 1 1.4E+09 8.6E+09		3.9E-02 4.7E-01 3.6E-02	1.6E+01 1.6E+01
2.0E-03 I 1 0.1 1.4E+09	Molinate 2212-67-1		1.6E+02 6.6E+02 1.3E+02
5.0E-03   1 1.4E+09 1.0E-01   1 1.4E+09	Molybdenum         7439-98-7           Monochloramine         10599-90-3		3.9E+02 3.9E+02 7.8E+03 7.8E+03
2.0E-03 P 1 0.1 1.4E+09	Monomethylaniline 100-61-8		1.6E+02 6.6E+02 1.3E+02
2.5E-02 I 1 0.1 1.4E+09 3.0E-04 X 1 0.1 1.4E+09	Myclobutanil 88671-89-0 N,N'-Diphenyl-1,4-benzenediamine 74-31-7		2.0E+03 8.2E+03 1.6E+03 2.3E+01 9.9E+01 1.9E+01
3.0E-04 X 1 0.1 1.4E+09 2.0E-03 I V 1 1.4E+09 5.7E+04			1.6E+01 1.9E+01 1.9E+01 1.6E+02 1.6E+02
3.0E-02 X 1.0E-01 P V 1 1.4E+09	Naphtha, High Flash Aromatic (HFAN) 64742-95-6	20504 445.00	2.3E+03 1.4E+08 2.3E+03
1.8E+00 C 0.0E+00 C 1 0.1 1.4E+09 1.0E-01 I 1 0.1 1.4E+09	Naphthylamine, 2-         91-59-8           Napropamide         15299-99-7	3.9E-01 1.4E+00 3.0E-01	7.8E+03 3.3E+04 6.3E+03
2.6E-04 C 1.1E-02 C 1.4E-05 C 1 0.1 1.4E+09	Nickel Acetate 373-02-4	1.5E+04 1.5E+04	8.6E+02 3.6E+03 2.0E+04 6.7E+02
2.6E-04 C 1.1E-02 C 1.4E-05 C 1 0.1 1.4E+09 2.6E-04 C 1.1E-02 C 1.4E-05 C V 1 1.4E+09	Nickel Carbonate 3333-67-3 Nickel Carbonyl 13463-39-3	1.5E+04 1.5E+04 1.5E+04 1.5E+04	8.6E+02 3.6E+03 2.0E+04 6.7E+02 8.6E+02 2.0E+04 8.2E+02
2.6E-04 C 1.1E-02 C 1.4E-05 C 0.04 1.4E+09	Nickel Hydroxide	1.5E+04 1.5E+04	8.6E+02 2.0E+04 8.2E+02
2.6E-04 C 1.1E-02 C 2.0E-05 C 0.04 1.4E+09 2.4E-04   1.1E-02 C 1.4E-05 C 0.04 1.4E+09	Nickel Oxide Nickel Refinery Dust	1.5E+04 1.5E+04	8.6E+02 2.8E+04 8.4E+02
2.4E-04   1.1E-02 C 1.4E-05 C 0.04 1.4E+09 2.6E-04 C 2.0E-02   9.0E-05 A 0.04 1.4E+09	Nickel Soluble Salts 17440-02-0	1.6E+04 1.6E+04 1.5E+04 1.5E+04	8.6E+02 2.0E+04 8.2E+02 1.6E+03 1.3E+05 1.5E+03
1.7E+00 C 4.8E-04 I 1.1E-02 C 1.4E-05 C 0.04 1.4E+09	Nickel Subsulfide \\ \tag{200} \tag{200} \tag{200}	4.1E-01 8.0E+03 4.1E-01	8.6E+02 2.0E+04 8.2E+02
2.6E-04 C 1.1E-02 C 1.4E-05 C 1 0.1 1.4E+09 1.6E+00 I 1 1.4E+09	Nickelocene         1271-28-9           Nitrate         14797-55-8	1.5E+04 1.5E+04	8.6E+02 3.6E+03 2.0E+04 6.7E+02 1.3E+05 1.3E+05
1 1.4E+09	Nitrate + Nitrite (as N) NA		1.32+03
1.0E-01   1 1.4E+09	Nitrite14797-65-0	_	7.8E+03 7.8E+03
1.0E-02 X 5.0E-05 X 1 0.1 1.4E+09 2.0E-02 P 4.0E-03 P 6.0E-03 P 1 0.1 1.4E+09	Nitroaniline, 2- Nitroaniline, 4 (CCCC)	3.5E+01 1.2E+02 2.7E+01	7.8E+02 3.3E+03 7.1E+04 6.3E+02 3.1E+02 1.3E+03 8.5E+06 2.5E+02
4.0E-05   2.0E-03   9.0E-03   V   1   3.1E+03   1.4E+09   7.3E+04	Nitrobenzene 98-95-3	5.1E+00 5.1E+00	1.6E+02 6.9E+02 1.3E+02
3.0E+03 P 1 0.1 1.4E+09 7.0E-02 H 1 0.1 1.4E+09	Nitro(ellulose) 9004-70-0 Nitrofurantoin 67-20-9		2.3E+08 9.9E+08 1.9E+08 5.5E+03 2.3E+04 4.4E+03
1.3E+00 C 3.7E-04 C 1 0.1 1.4E+09	Nitrofurazone 59-87-0	5.3E-01 1.9E+00 1.0E+04 4.2E-01	3.32+03 2.32+04 4.42+03
1.7E-02 P 1.0E-04 P 1 0.1 1.4E+09	Nitroglycerin 55-63-0	4.1E+01 1.5E+02 3.2E+01	7.8E+00 3.3E+01 6.3E+00
1.0E-01   1 0.1 1.4E+09 8.8E-06 P 5.0E-03 P V 1 1.8E+04 1.4E+09 1.7E+04	Nitroguanidine         556-88-7           Nitromethane         75-52-5	5.4E+00 5.4E+00	7.8E+03 3.3E+04 6.3E+03 8.8E+01 8.8E+01
2.7E-03 H 2.0E-02 I V 1 4.9E+03 1.4E+09 1.3E+04	Nitropropane, 2- 79-46-9	1.4E-02 1.4E-02	2.7E+02 2.7E+02
2.7E+01 C 7.7E-03 C M 1 0.1 1.4E+09 1.2E+02 C 3.4E-02 C M 1 0.1 1.4E+09	Nitroso-N-ethylurea, N- 759-73-9 Nitroso-N-methylurea, N- 684-93-5	5.7E-03 2.2E-02 1.8E+02 4.5E-03 1.3E-03 5.0E-03 4.1E+01 1.0E-03	
5.4E+00   1.6E-03   V   1   1.4E+09 2.4E+05		1.3E-01 4.3E-01 9.9E-02	
7.0E+00   2.0E-03 C	Nitroso-di-N-propylamine, N- 621-64-7 Nitrosodiethanolamine, N- 1116-54-7	9.9E-02 3.5E-01 1.9E+03 7.8E-02 2.5E-01 8.8E-01 4.8E+03 1.9E-01	
1.5E+02   4.3E-02   M 1 0.1 1.4E+09	Nitrosodiethylamine, N- 1116-54-7 Nitrosodiethylamine, N- 55-18-5	1.0E-03 4.0E-03 3.2E+01 8.1E-04	
5.1E+01   1.4E-02   8.0E-06 P 4.0E-05 X V M 1 2.4E+05 1.4E+09 8.2E+04	Nitrosodimethylamine, N- 62-75-9	3.0E-03 6.0E-03 2.0E-03	6.3E-01 3.4E+00 5.3E-01
4.9E-03   2.6E-06 C	Nitrosodiphenylamine, N- 86-30-6 Nitrosomethylethylamine, N- 10595-95-6	1.4E+02 5.0E+02 1.5E+06 1.1E+02 3.2E-02 5.4E-02 2.0E-02	
6.7E+00 C 1.9E-03 C 1 0.1 1.4E+09	Nitrosomorpholine [N-] 59-89-2	1.0E-01 3.7E-01 2.0E+03 8.1E-02	
9.4E+00 C 2.7E-03 C 1 0.1 1.4E+09 2.1E+00 I 6.1E-04 I 1 0.1 1.4E+09	Nitrosopiperidine [N-] 100-75-4	7.4E-02 2.6E-01 1.4E+03 5.8E-02	
2.1E+00   6.1E-04   1 0.1 1.4E+09 1.0E-04 X 1 0.1 1.4E+09	Nitrosopyrrolidine, N- 930-55-2 Nitrotoluene, m- 99-08-1	3.3E-01 1.2E+00 6.3E+03 2.6E-01	7.8E+00 3.3E+01 6.3E+00
2.2E-01 P 9.0E-04 P V 1 1.5E+03 1.4E+09 1.4E+09	Nitrotoluene, o- 88-72-2	3.2E+00 3.2E+00	7.0E+01 7.0E+01
1.6E-02 P 4.0E-03 P 1 0.1 1.4E+09 3.0F-04 X 2.0F-02 P V 1 6.9F+00 1.4F+09 1.0F+03	Nitrotoluene, p- 99-99-0 Nonane, n- 111-84-2	4.3E+01 1.5E+02 3.4E+01	3.1E+02 1.3E+03 2.5E+02 2.3E+01 2.2E+01 1.1E+01
4.0E-02 I 1 0.1 1.4E+09	Norflurazon 27314-13-2		3.1E+03 1.3E+04 2.5E+03
3.0E-03 I 1 0.1 1.4E+09	Octabromodiphenyl Ether 32536-52-0		2.3E+02 9.9E+02 1.9E+02
5.0E-02 I 1 0.006 1.4E+09	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX) 2691-41-0		3.9E+03 2.7E+05 3.9E+03

		See FAQ; J = New Jersey; O = EPA Office of Water; E = see user guide Section 2.3.5; L = see user		
notice) ; c = cancer; n = Toxicity and Chemical-specific Int		where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling  Contaminant	Carcinogenic Target Risk (TR) = 1E-06	Noncancer Child Hazard Index (HI) = 1
				Ingestion SL Dermal SL Inhalation SL Noncarcinogenic SL
k k RfD <sub>o</sub> k k v SFO e IUR e (mg/kg- e RfC <sub>i</sub> e o muta-	C <sub>sat</sub> PEF VF		Ingestion SL Dermal SL Inhalation SL Carcinogenic SL TR=1E-06 TR=1E-06 TR=1E-06 TR=1E-06	Child         Child         Child         Child           THQ=1         THQ=1         THI=1
(mg/kg-day) <sup>-1</sup> y (ug/m <sup>3</sup> ) <sup>-1</sup> y day) y (mg/m <sup>3</sup> ) y l gen	GIABS ABS (mg/kg) (m³/kg) (m³/kg)	Analyte CAS N	(mg/kg) (mg/kg) (mg/kg) (mg/kg)	(mg/kg) (mg/kg) (mg/kg)
2.0E-03 H	1 0.1 1.4E+09	Octamethylpyrophosphoramide 152-16-9		1.6E+02 6.6E+02 1.3E+02
5.0E-02 I	1 0.1 1.4E+09	Oryzalin 19044-88		3.9E+03 1.6E+04 3.2E+03
5.0E-03 I 2.5E-02 I	1 0.1 1.4E+09 1 0.1 1.4E+09	Oxadiazon         19666-30           Oxamyl         23135-22		3.9E+02 1.6E+03 3.2E+02 2.0E+03 8.2E+03 1.6E+03
3.0E-03 I	1 0.1 1.4E+09	Oxyfluorfen 42874-03	3	2.3E+02 9.9E+02 1.9E+02
1.3E-02	1 0.1 1.4E+09	Paclobutrazol 76738-62		1.0E+03
4.5E-03 I 6.0E-03 H	1 0.1 1.4E+09 1 0.1 1.4E+09	Paraquat Dichloride 1910-42- Parathion 56-38-2		3.5E+02 1.5E+03 2.8E+02 4.7E+02 2.0E+03 3.8E+02
5.0E-02 H V	1 1.4E+09 4.5E+04			3.9E+03 3.9E+03
4.0E-02 I	1 0.1 1.4E+09	Pendimethalin 40487-42		3.1E+03 1.3E+04 2.5E+03
2.0E-03 I V 1.0E-04 I	1 3.1E-01 1.4E+09 5.1E+05 1 0.1 1.4E+09	Pentabromodiphenyl Ether 32534-81 Pentabromodiphenyl ether, 2,2',4,4',5- (BDE-99) 60348-60		1.6E+02 1.6E+02 7.8E+00 3.3E+01 6.3E+00
8.0E-04 I V	1 1.4E+09 8.1E+04	Pentachlorobenzene 608-93-5		6.3E+01 6.3E+01
9.0E-02 P V	1 4.6E+02 1.4E+09 9.7E+03		7.7E+00 7.7E+00	
2.6E-01 H 3.0E-03 I V 4.0E-01 I 5.1E-06 C 5.0E-03 I	1 1.4E+09 4.3E+05 1 0.25 1.4E+09	Pentachloronitrobenzene 82-68-8 Pentachlorophenol 87-86-5	2.7E+00 2.7E+00 2.7E+00 1.0E+00	2.3E+02 2.3E+02 3.9E+02 6.6E+02 2.5E+02
4.0E-03 X 2.0E-03 P	1 0.1 1.4E+09	Pentaerythritol tetranitrate (PETN) 78-11-5	1.7E+02	1.6E+02 6.6E+02 1.3E+02
1.0E+00 P V	1 3.9E+02 1.4E+09 7.8E+02	Pentane, n- 109-66-0		8.1E+02 8.1E+02
7.05.04		Perchlorates		555.01
7.0E-04 I 7.0E-04 I	1 1.4E+09 1 1.4E+09	~Ammonium Perchlorate 7790-98- ~Lithium Perchlorate 7791-03-		5.5E+01 5.5E+01 5.5E+01 5.5E+01
7.0E-04 I	1 1.4E+09	~Perchlorate and Perchlorate Salts 14797-73		5.5E+01 5.5E+01
7.0E-04 I	1 1.4E+09	~Potassium Perchlorate 7778-74-		5.5E+01 5.5E+01
7.0E-04 I 2.0E-02 P V	1 1.4E+09 1 1.4F+09 1.3E+05	~Sodium Perchlorate 7601-89- Perfluorobutane Sulfonate 375-73-5		5.5E+01 5.5E+01 1.6E+03 1.6E+03
5.0E-02 I	1 0.1 1.4E+09	Permethrin 52645-53	1	3.9E+03 1.6E+04 3.2E+03
2.2E-03 C 6.3E-07 C	1 0.1 1.4E+09	Phenacetin 62-44-2	3.2E+02 1.1E+03 6.1E+06 2.5E+02	
2.5E-01   3.0E-01   2.0E-01 C	1 0.1 1.4E+09 1 0.1 1.4E+09	Phenmedipham	4	2.0E+04 8.2E+04 1.6E+04 2.3E+04 9.9E+04 2.8E+08 1.9E+04
5.0E-04 X	1 0.1 1.4E+09 1 0.1 1.4E+09	Phenothiazine CIIII 92-84-2		3.9E+01 1.6E+02 3.2E+01
6.0E-03 I	1 0.1 1.4E+09	Phenylenediamine m- CIIII 108-45-2		4.7E+02 2.0E+03 3.8E+02
4.7E-02 H 1.9E-01 H	1 0.1 1.4E+09 1 0.1 1.4E+09	Phenylenediamine, 6-2 (5525) Section 95-54-5 (5625) Phenylenediamine, p- 106-50-3	1.5E+01 5.3E+01 1.2E+01	1.5E+04 6.3E+04 1.2E+04
1.9E-03 H	1 0.1 1.4E+09 1 0.1 1.4E+09	Phenylphenol, 2- 106-30-3 Phenylphenol, 2- 90-43-7	3.6E+02 1.3E+03 2.8E+02	1.55+04 0.55+04 1.25+04
2.0E-04 H	1 0.1 1.4E+09	Phorate 298-02-2		1.6E+01 6.6E+01 1.3E+01
3.0E-04   V 2.0E-02	1 1.6E+03 1.4E+09 9.8E+02 1 0.1 1.4E+09	Phospere 75-44-5 Phospet 732-11-6		3.1E-01 3.1E-01 1.6E+03 6.6E+03 1.3E+03
2.02 02	1 0.1 1.42103	Phosphates, Inorganic		1.52.03
4.9E+01 P	1 1.4E+09	~Alumihum metaphosphate // CIIII // 13776-88		3.8E+06 3.8E+06
4.9E+01 P	1 1.4E+09	~Ammonium bolyphosphate 68333-79		3.8E+06 3.8E+06
4.9E+01 P 4.9E+01 P	1 1.4E+09 1 1.4E+09	^Calcium pyrophosphate 7790-76- ^Diammonium phosphate 7783-28-		3.8E+06 3.8E+06 3.8E+06
4.9E+01 P	1 1.4E+09	~Dicalcium phosphate 7757-93-		3.8E+06 3.8E+06
4.9E+01 P 4.9F+01 P	1 1.4E+09 1 1.4E+09	*Dimagnesium phosphate 7782-75-		3.8E+06 3.8E+06 3.8F+06
4.9E+01 P 4.9E+01 P	1 1.4E+09 1 1.4E+09	^Dipotassium phosphate 7758-11- ^Disodium phosphate 7558-79-		3.8E+06 3.8E+06
4.9E+01 P	1 1.4E+09	~Monoaluminum phosphate 13530-50		3.8E+06 3.8E+06
4.9E+01 P 4.9E+01 P	1 1.4E+09 1 1.4E+09	~Monoammonium phosphate 7722-76- ~Monocalcium phosphate 7758-23-		3.8E+06 3.8E+06 3.8E+06 3.8E+06
4.9E+01 P	1 1.4E+09	*Monomagnesium phosphate 7757-86-		3.8E+06 3.8E+06
4.9E+01 P	1 1.4E+09	~Monopotassium phosphate 7778-77-		3.8E+06 3.8E+06
4.9E+01 P	1 1.4E+09	~Monosodium phosphate 7558-80-		3.8E+06 3.8E+06
4.9E+01 P 4.9E+01 P	1 1.4E+09 1 1.4E+09	~Polyphosphoric acid 8017-16- ~Potassium tripolyphosphate 13845-36		3.8E+06 3.8E+06 3.8E+06
4.9E+01 P	1 1.4E+09	~Sodium acid pyrophosphate 7758-16-		3.8E+06 3.8E+06
4.9E+01 P	1 1.4E+09	~Sodium aluminum phosphate (acidic) 7785-88-		3.8E+06 3.8E+06
4.9E+01 P 4.9E+01 P	1 1.4E+09 1 1.4E+09	~Sodium aluminum phosphate (anhydrous) 10279-59 ~Sodium aluminum phosphate (tetrahydrate) 10305-76		3.8E+06 3.8E+06 3.8E+06
4.9E+01 P	1 1.4E+09	~Sodium hexametaphosphate 10124-56	8	3.8E+06 3.8E+06
4.9E+01 P 4.9E+01 P	1 1.4E+09 1 1.4E+09	~Sodium polyphosphate 68915-3: ~Sodium trimetaphosphate 7785-84-		3.8E+06 3.8E+06 3.8E+06
4.9E+01 P 4.9E+01 P	1 1.4E+09 1 1.4E+09	"Sodium trimetapnosphate 7/85-84- "Sodium tripolyphosphate 7758-29-		3.8E+06 3.8E+06 3.8E+06 3.8E+06
4.9E+01 P	1 1.4E+09	~Tetrapotassium phosphate 7320-34-		3.8E+06 3.8E+06
4.9E+01 P	1 1.4E+09	~Tetrasodium pyrophosphate 7722-88-		3.8E+06 3.8E+06

		See FAQ; $J = New Jersey$ ; $O = EPA Office of Water$ ; $E = see user guide Section 2.3.5$ ; $L = see$ where $n SL < 10X c SL$ ; $SSL values are based on DAF=1$ ; $m = Concentration may exceed cei$							ed (See User (	Guide for Arsenic
Toxicity and Chemical-specific Info		Contaminant	ciiiig iiiiiic	Carcinogenic 1					d Hazard Inde	x (HI) = 1
							Ingestion SL	Dermal SL II	nhalation SL	Noncarcinogenic SI
k k RfD <sub>o</sub> k k v				Ingestion SL Dermal SI	L Inhalation SI		Child	Child	Child	Child
Si o le ion e (ilig/kg- e i le o lliuta-	C <sub>sat</sub> PEF VF			TR=1E-06 TR=1E-06		TR=1E-06	THQ=1	THQ=1	THQ=1	THI=1
	GIABS ABS (mg/kg) (m³/kg) (m³/kg)	,	CAS No.	(mg/kg) (mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
4.9E+01 P	1 1.4E+09		136-87-5				3.8E+06			3.8E+06
4.9E+01 P 4.9E+01 P	1 1.4E+09 1 1.4E+09		58-87-4 57-87-1				3.8E+06 3.8E+06			3.8E+06 3.8E+06
4.9E+01 P	1 1.4E+09		78-53-2				3.8E+06			3.8E+06
4.9E+01 P	1 1.4E+09		01-54-9				3.8E+06			3.8E+06
3.0E-04   3.0E-04   V	1 1.4E+09		03-51-2				2.3E+01		4.3E+05	2.3E+01
4.9E+01 P 1.0E-02 I	1 1.4E+09	· ·	54-38-2				3.8E+06		1.4E+07	3.0E+06
2.0E-05 I V			23-14-0				1.6E+00			1.6E+00
		Phthalates								
1.4E-02   2.4E-06 C 2.0E-02	1 0.1 1.4E+09	~Bis(2-ethylhexyl)phthalate 117-	7-81-7	5.0E+01 1.8E+02	1.6E+06	3.9E+01	1.6E+03	6.6E+03		1.3E+03
1.0E+00 I	1 0.1 1.4E+09	~Butylphthalyl Butylglycolate 85-7					7.8E+04	3.3E+05		6.3E+04
1.0E-01 I	1 0.1 1.4E+09	~Dibutyl Phthalate 84-7					7.8E+03	3.3E+04		6.3E+03
8.0E-01 I	1 0.1 1.4E+09		66-2				6.3E+04	2.6E+05		5.1E+04
1.0E-01 I V 1.0E-02 P	1 1.4E+09 2.1E+04 1 0.1 1.4E+09		0-61-6 7-84-0				7.8E+03	3.3E+03		7.8E+03 6.3E+02
		•					7.8E+02			
1.0E+00 H 2.0E+00 I 2.0E-02 C	1 0.1 1.4E+09 1 0.1 1.4E+09		0-21-0 44-9				7.8E+04 1.6E+05	3.3E+05 6.6E+05	2.8E+07	6.3E+04 1.3E+05
7.0E-02 I	1 0.1 1.4E+09		18-02-1				5.5E+03	2.3E+04	2.0L+U/	4.4E+03
1.0E-04 X	1 0.1 1.4E+09		91-3				7.8E+00	3.3E+01		6.3E+00
9.0E-04 X	1 0.1 1.4E+09		89-1				7.0E+01	3.0E+02		5.7E+01
1.0E-02 I	1 0.1 1.4E+09		232-93-7				7.8E+02	3.3E+03		6.3E+02
3.0E+01 C 8.6E-03 C 7.0E-06 H	1 0.1 1.4E+09		36-65-1	2.3E-02 8.2E-02	4.4E+02	1.8E-02	5.5E-01	2.3E+00		4.4E-01
		Polychlorinated Biphenyls (PCBs)	1							
7.0E-02 S 2.0E-05 S 7.0E-05 I V	1 0.14 1.4E+09 7.1E+05		574-11-2	9.9E+00 2.5E+01	1.0E+02	6.7E+00	5.5E+00	1.6E+01		4.1E+00
2.0E+00 S 5.7E-04 S V	1 0.14 1.4E+09 2.0E+05		104-28-2	3.5E-01 8.8E-01	1.0E+00	2.0E-01				
2.0E+00 S 5.7E-04 S V	1 0.14 1.4E+09 1.1E+05		141-16-5	3.5E-01 8.8E-01	5.5E-01	1.7E-01				
2.0E+00 S 5.7E-04 S V	1 0.14 1.4E+09 5.9E+05		469-21-9	3.5E-01 8.8E-01	2.9E+00	2.3E-01				
2.0E+00 S 5.7E-04 S V 2.0E+00 S 5.7E-04 S 2.0E-05 I V	1 0.14 1.4E+09 6.3E+05 1 0.14 1.4E+09 8.4E+05		572-29-6 097-69-1	3.5E-01 8.8E-01 3.5E-01 8.8E-01	3.1E+00 4.1E+00	2.3E-01 2.4E-01	1.6E+00	4.7F+00		1.2E+00
2.0E+00 S 5.7E-04 S 2.0E-05 I V	1 0.14 1.4E+09 1.3E+06		096-82-5	3.5E-01 8.8E-01	6.5E+00	2.4E-01	1.00+00	4.7E+00		1.2E+00
6.0E-04 X V	1 0.14 1.4E+09 9.6E+05		126-42-4				4.7E+01	1.4E+02		3.5E+01
3.9E+00 E 1.1E-03 E 2.3E-05 E 1.3E-03 E V	1 0.14 1.4E+09 3.3E+06		535-31-9	1.8E-01 4.5E-01	8.2E+00	1.3E-01	1.8E+00	5.5E+00	4.6E+03	1.4E+00
3.9E+00 E 1.1E-03 E 2.3E-05 E 1.3E-03 E V		~Hexachlorobiphenyl, 2,3',4,4',5,5'- (PCB 167) 5266	663-72-6	1.8E-01 4.5E-01	5.4E+00	1.2E-01	1.8E+00	5.5E+00	3.1E+03	1.4E+00
3.9E+00 E 1.1E-03 E 2.3E-05 E 1.3E-03 E V	1 0.14 1.4E+09 1.5E+06	~Hexachlorobiphenyl, 2,3,3',4,4',5'- (PCB 157) 6978	782-90-7	1.8E-01 4.5E-01	3.6E+00	1.2E-01	1.8E+00	5.5E+00	2.0E+03	1.4E+00
3.9E+00 E 1.1E-03 E 2.3E-05 E 1.3E-03 E V	1 0.14 1.4E+09 1.5E+06		380-08-4	1.8E-01 4.5E-01	3.8E+00	1.2E-01	1.8E+00	5.5E+00	2.1E+03	1.4E+00
3.9E+03 E 1.1E+00 E 2.3E-08 E 1.3E-06 E V	1 0.14 1.4E+09 2.2E+06		774-16-6	1.8E-04 4.5E-04	5.4E-03	1.2E-04	1.8E-03	5.5E-03	3.1E+00	1.4E-03
3.9E+00 E 1.1E-03 E 2.3E-05 E 1.3E-03 E V	1 0.14 1.4E+09 1.0E+06		510-44-3	1.8E-01 4.5E-01	2.5E+00	1.2E-01	1.8E+00	5.5E+00	1.4E+03	1.4E+00
3.9E+00 E 1.1E-03 E 2.3E-05 E 1.3E-03 E V	1 0.14 1.4E+09 8.3E+05		508-00-6	1.8E-01 4.5E-01	2.0E+00	1.2E-01	1.8E+00	5.5E+00	1.2E+03	1.4E+00
3.9E+00 E 1.1E-03 E 2.3E-05 E 1.3E-03 E V	1 0.14 1.4E+09 8.5E+05		598-14-4	1.8E-01 4.5E-01	2.1E+00	1.2E-01	1.8E+00	5.5E+00	1.2E+03	1.4E+00
3.9E+00 E 1.1E-03 E 2.3E-05 E 1.3E-03 E V 1.3E+04 E 3.8E+00 E 7.0E-09 E 4.0E-07 E V	1 0.14 1.4E+09 1.5E+06 1 0.14 1.4E+09 1.0E+06	the control of the c	472-37-0	1.8E-01 4.5E-01	3.6E+00 7.5E-04	1.2E-01	1.8E+00	5.5E+00	2.0E+03	1.4E+00
2.0E+00   5.7E-04   V			465-28-8 36-36-3	5.3E-05 1.4E-04 3.5E-01 8.8E-01	7.5E-04 2.6E+00	3.7E-05 2.3E-01	5.5E-04	1.6E-03	4.3E-01	4.1E-04
4.0E-01   1.0E-04   V	1 0.14		36-36-3							
7.0E-02   2.0E-05   V	1 0.14		36-36-3							
1.3E+01 E 3.8E-03 E 7.0E-06 E 4.0E-04 E	1 0.14 1.4E+09		598-13-3	5.3E-02 1.4E-01	1.0E+03	3.8E-02	5.5E-01	1.6E+00	5.7E+05	4.1E-01
3.9E+01 E 1.1E-02 E 2.3E-06 E 1.3E-04 E V			362-50-4	1.8E-02 4.5E-02	1.8E-01	1.2E-02	1.8E-01	5.5E-01	1.0E+02	1.4E-01
6.0E-04 I	1 0.1 1.4E+09		16-87-9						8.5E+05	8.5E+05
		Polynuclear Aromatic Hydrocarbons (PAHs)								
6.0E-02 I V	1 0.13 1.4E+09 1.4E+05		32-9				4.7E+03	1.5E+04		3.6E+03
3.0E-01 I V 7.3E-01 E 1.1E-04 C V M	1 0.13 1.4E+09 5.2E+05 1 0.13 1.4E+09 4.4E+06		)-12-7 55-3	2.1E-01 6.3E-01	4.1E+01	1.6E-01	2.3E+04	7.6E+04		1.8E+04
1.2E+00 C 1.1E-04 C	1 0.13 1.4E+09 4.4E+06		5-82-3	5.8E-01 1.6E+00	3.5E+01	4.2E-01				
7.3E+00 C 1.1E-04 C 7.3E+00 I 1.1E-03 C M	1 0.13 1.4E+09 1 0.13 1.4E+09		32-8	2.1E-02 6.3E-02	1.3E+03	4.2E-01 1.6E-02				
7.3E-01 E 1.1E-04 C M	1 0.13 1.4E+09		5-99-2	2.1E-02 6.3E-02 2.1E-01 6.3E-01	1.3E+03 1.3E+04	1.6E-01				
7.3E-02 E 1.1E-04 C M	1 0.13 1.4E+09		7-08-9	2.1E+00 6.3E+00	1.3E+04	1.6E+00				
8.0E-02 I V	1 0.13 1.4E+09 8.0E+04						6.3E+03	2.0E+04		4.8E+03
7.3E-03 E 1.1E-05 C M	1 0.13 1.4E+09		3-01-9	2.1E+01 6.3E+01	1.3E+05	1.6E+01				
7.3E+00 E 1.2E-03 C M	1 0.13 1.4E+09	~Dibenz[a,h]anthracene 53-7	70-3	2.1E-02 6.3E-02	1.1E+03	1.6E-02				
1.2E+01 C 1.1E-03 C	1 0.13 1.4E+09	~Dibenzo(a,e)pyrene 192-	2-65-4	5.8E-02 1.6E-01	3.5E+03	4.2E-02				
2.5E+02 C 7.1E-02 C M	1 0.13 1.4E+09	~Dimethylbenz(a)anthracene, 7,12- 57-9		6.1E-04 1.8E-03	1.9E+01	4.6E-04				
4.0E-02 I	1 0.13 1.4E+09		5-44-0				3.1E+03	1.0E+04		2.4E+03
4.0E-02 I V	1 0.13 1.4E+09 2.8E+05			3 15 01 6 35 01	1 25 . 04	1 65 01	3.1E+03	1.0E+04		2.4E+03
7.3E-01 E 1.1E-04 C M	1 0.13 1.4E+09	4.1.	3-39-5	2.1E-01 6.3E-01	1.3E+04	1.6E-01	F.FF. 02	1.05.04		4.25.02
2.9E-02 P 7.0E-02 A V	1 0.13 3.9E+02 1.4E+09 5.9E+04	~Methylnaphthalene, 1- 90-1	12-0	2.4E+01 6.6E+01		1.8E+01	5.5E+03	1.8E+04		4.2E+03

Key: I = IRI	IS; P = PPRTV; A = A						See FAQ; J = New Jersey; O = EPA Office of Water; E = see user guide Section 2.3.5; - where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exc								ied (See User (	Guide for Arsenic
			and Chemical-speci			where. If SE < 100X C SE,	Contaminant	ceed ceiling iinni			rget Risk (TR)				ld Hazard Inde	
	k k	RfD <sub>a</sub>	k kv						Ingestion SI	Dermal SI	Inhalation SL	Carcinogenic SL	Ingestion SL Child	Dermal SL I Child	nhalation SL Child	Noncarcinogenic S Child
SFO	e IUR e	(mg/kg-		nuta-		C <sub>sat</sub> PEF VF			TR=1E-06	TR=1E-06	TR=1E-06	TR=1E-06	THQ=1	THQ=1	THQ=1	THI=1
(mg/kg-day)	<sup>-1</sup> y (ug/m <sup>3</sup> ) <sup>-1</sup> y	day)	y (mg/m³) y I	gen GIABS	ABS	(mg/kg) (m <sup>3</sup> /kg) (m <sup>3</sup> /kg	Analyte	CAS No.	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
	3.4E-05 C	4.0E-03 2.0E-02	I V I 3.0E-03 I V	1	0.13	1.4E+09 5.8E+0 1.4E+09 4.6E+0		91-57-6 91-20-3			3.8E+00	3.8E+00	3.1E+02 1.6E+03	1.0E+03 5.1E+03	1.4E+02	2.4E+02 1.3E+02
1.2E+00	C 1.1E-04 C			1	0.13	1.4E+09	~Nitropyrene, 4-	57835-92-4	5.8E-01	1.6E+00	3.5E+04	4.2E-01				
		5.02 02	I V	1	0.13	1.4E+09 2.4E+0		129-00-0					2.3E+03	7.6E+03		1.8E+03
1.5E-01		2.0E-02 9.0E-03	I I	1	0.1	1.4E+09 1.4E+09	Potassium Perfluorobutane Sulfonate Prochloraz	29420-49-3 67747-09-5	4.6E+00	1.6E+01		3.6E+00	1.6E+03 7.0E+02	6.6E+03 3.0E+03		1.3E+03 5.7E+02
	•	6.0E-03	H V	1		1.4E+09 4.2E+0	Profluralin	26399-36-0					4.7E+02			4.7E+02
		1.5E-02 4.0E-03	<u> </u>	1	0.1	1.4E+09 1.4E+09	Prometon Prometryn	1610-18-0 7287-19-6					1.2E+03 3.1E+02	4.9E+03 1.3E+03		9.5E+02 2.5E+02
		1.3E-02	i	1 1	0.1	1.4E+09	Propachlor	1918-16-7					1.0E+03	4.3E+03		8.2E+02
		4.0E-03	I	1	0.1	1.4E+09	Propanediol, 1,2-	114-26-1					3.1E+02	1.3E+03		2.5E+02
		5.0E-03 2.0E-02	1	1 1	0.1	1.4E+09 1.4E+09	Propanil Propargite	709-98-8 2312-35-8					3.9E+02 1.6E+03	1.6E+03 6.6E+03		3.2E+02 1.3E+03
		2.0E-02	i v	1	0.1	1.1E+05 1.4E+09 6.3E+0		107-19-7					1.6E+02	0.01+03		1.6E+02
		2.0E-02	I	1	0.1	1.4E+09	Propazine	139-40-2					1.6E+03	6.6E+03		1.3E+03
		2.0E-02 1.3E-02		1 1	0.1	1.4E+09 1.4E+09	Propham Propiconazole	122-42-9 60207-90-1					1.6E+03 1.0E+03	6.6E+03 4.3E+03		1.3E+03 8.2E+02
			8.0E-03 I V	1		3.3E+04 1.4E+09 8.9E+0		123-38-6							7.5E+01	7.5E+01
		1.0E-01	X 1.0E+00 X V	1		2.6E+02 1.4E+09 7.0E+0		103-65-1					7.8E+03		7.3E+03	3.8E+03 2.2F+03
		2.0E+01	3.0E+00 C V	1	0.1	3.5E+02 1.4E+09 7.0E+0 1.4E+09	Propylene Propylene Glycol	115-07-1 57-55-6					1.6E+06	6.6E+06	2.2E+03	2.2E+03 1.3E+06
			2.7E-04 A	1	0.1	1.4E+09	Propylene Glycol Dinitrate	6423-43-4						0.02.00	3.9E+05	3.9E+05
		7.0E-01	H 2.0E+00 I V	1			Propylene Glycol Monomethyl Ether	107-98-2					5.5E+04		1.6E+05	4.1E+04
2.4E-01	I 3.7E-06 I	7.5E-02	3.0E-02 I V	1 1	0.1	7.8E+04 1.4E+09 1.0E+0 1.4E+09	Propylene Oxide Propyzamide	75-56-9 23950-58-5	2.9E+00		7.8E+00	2.1E+00	5.9F+03	2.5E+04	3.2E+02	3.2E+02 4.7F+03
		1.0E-03	i v	1		5.3E+05 1.4E+09 5.5E+0	Pyridine Con Carry Con Carry C	110-86-1					7.8E+01			7.8E+01
2.05.00		5.0E-04	I	1	0.1	1.4E+09	Quinalphos (CCCCC)	13593-03-8	2.25.04	0.25.01		4.05.04	3.9E+01	1.6E+02		3.2E+01
3.0E+00	'	9.0E-03	i .	1 1	0.1	1.4E+09 1.4E+09	Quinolline Cuizalofop-ethyl Common Co	91-22-5 76578-14-8	2.3E-01	8.2E-01		1.8E-01	7.0E+02	3.0E+03		5.7E+02
			3.0E-02 A	1		1.4E+09	Refractory Ceramic Fibers	NA							4.3E+07	4.3E+07
		3.0E-02 5.0E-02	I H V	1 1	0.1	1.4E+09 1.4E+09 4.7E+0	Resmethrin Ronnel	10453-86-8 299-84-3					2.3E+03 3.9F+03	9.9E+03		1.9E+03 3.9E+03
		4.0E-03	<u>v</u>	1	0.1	1.4E+09	Rotenone	83-79-4					0.02.00	1.3E+03		2.5E+02
2.2E-01	C 6.3E-05 C			M 1	0.1	1.4E+09	Satrole CO (CO)	94-59-7	7.0E-01	2.7E+00	2.2E+04	5.5E-01				
		5.0E-03 5.0E-03	I 2.0E-02 C	1		1.4E+09 1.4E+09	Selenious Acid	7783-00-8 7782-49-2					3.9E+02 3.9E+02		2.8E+07	3.9E+02 3.9E+02
			C 2.0E-02 C	1		1.4E+09	Selentum Sulfide	7446-34-6					3.9E+02		2.8E+07	3.9E+02
		9.0E-02	I .	1	0.1	1.4E+09	Setholydim U VSSKS CELLS O VSSK	74051-80-2					7.0E+03	3.0E+04		5.7E+03
		5.0E-03	3.0E-03 C	1 0.04		1.4E+09 1.4F+09	Silica (crystalline, respirable)	7631-86-9 7440-22-4					3.9F+02		4.3E+06	4.3E+06 3.9E+02
1.2E-01	н	5.0E-03	i	1	0.1	1.4E+09	Sim azine	122-34-9	5.8E+00	2.1E+01		4.5E+00	3.9E+02	1.6E+03		3.2E+02
		1.3E-02	1	1	0.1	1.4E+09	Sodium Acifluorfen	62476-59-9					1.0E+03	4.3E+03		8.2E+02
5.0E-01	C 1.5E-01 C	4.0E-03 2.0E-02	C 2.0E-04 C	1 M 0.025		1.4E+09 1.4E+09	Sodium Azide Sodium Dichromate	26628-22-8 10588-01-9	3.1E-01		9.2E+00	3.0E-01	3.1E+02 1.6E+03		2.8E+05	3.1E+02 1.6E+03
2.7E-01	Н	3.0E-02	I	1	0.1	1.4E+09	Sodium Diethyldithiocarbamate	148-18-5	2.6E+00	9.2E+00		2.0E+00	2.3E+03	9.9E+03		1.9E+03
		5.0E-02 2.0E-05	A 1.3E-02 C	1 1	0.1	1.4E+09 1.4E+09	Sodium Fluoride Sodium Fluoroacetate	7681-49-4 62-74-8					3.9E+03 1.6E+00	6.6E+00	1.8E+07	3.9E+03 1.3E+00
		1.0E-03	Н	1		1.4E+09	Sodium Metavanadate	13718-26-8					7.8E+01			7.8E+01
		8.0E-04	P	1		1.4E+09	Sodium Tungstate	13472-45-2					6.3E+01			6.3E+01
2.4E-02	Н	8.0E-04 3.0E-02	l I	1	0.1	1.4E+09 1.4E+09	Sodium Tungstate Dihydrate Stirofos (Tetrachlorovinphos)	10213-10-2 961-11-5	2.9E+01	1.0E+02		2.3E+01	6.3E+01 2.3E+03	9.9E+03		6.3E+01 1.9E+03
	C 1.5E-01 C	2.0E-02	C 2.0E-04 C	M 0.025	0.1	1.4E+09	Strontium Chromate	7789-06-2	3.1E-01	1.02.02	9.2E+00	3.0E-01	1.6E+03	3.32.03	2.8E+05	1.6E+03
		6.0E-01	1	1	0.1	1.4E+09	Strontium, Stable	7440-24-6					4.7E+04	0.05.01		4.7E+04
		3.0E-04 2.0E-01	I 1.0E+00 I V	1 1	0.1	1.4E+09 8.7E+02 1.4E+09 9.4E+0	Strychnine Styrene	57-24-9 100-42-5					2.3E+01 1.6E+04	9.9E+01	9.7E+03	1.9E+01 6.0E+03
		3.0E-03	P	1	0.1	1.4E+09	Styrene-Acrylonitrile (SAN) Trimer	NA					2.3E+02	9.9E+02		1.9E+02
		1.0E-03 8.0E-04	P 2.0E-03 X	1 1	0.1	1.4E+09 1.4E+09	Sulfolane Sulfonylbis(4-chlorobenzene), 1,1'-	126-33-0 80-07-9					7.8E+01 6.3E+01	3.3E+02 2.6E+02	2.8E+06	6.3E+01 5.1E+01
		6.UE-U4	1.0E-03 C V	1	0.1	1.4E+09 1.4E+09	Sulfur Trioxide	80-07-9 7446-11-9					0.5E+U1	2.0E+UZ	1.4E+06	5.1E+01 1.4E+06
			1.0E-03 C	1		1.4E+09	Sulfuric Acid	7664-93-9							1.4E+06	1.4E+06
2.5E-02	I 7.1E-06 I	5.0E-02 3.0E-02	H	1 1	0.1	1.4E+09 1.4E+09	Sulfurous acid, 2-chloroethyl 2-[4-(1,1-dimethylethyl)phenoxy]-1-methylethyl este TCMTB	er 140-57-8 21564-17-0	2.8E+01	9.9E+01	5.4E+05	2.2E+01	3.9E+03 2.3E+03	1.6E+04 9.9E+03		3.2E+03 1.9E+03
		7.0E-02	T .	1	0.1	1.4E+09	Tebuthiuron	34014-18-1					5.5E+03	2.3E+04		4.4E+03
		2.0E-02	н	1	0.1	1.4E+09	Temephos	3383-96-8					1.6E+03	6.6E+03		1.3E+03

Key: I = IRIS; P = PPRTV; A =					See FAQ; J = New Jersey; O = EPA Office of Water; E = see user guide Section 2.3.5; where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exc								lied (See User	Guide for Arsenic
		Chemical-specific Inform		MCTC. 11 3E \ 100X C 3E,	Contaminant	ccu cciiiig iiiiic		inogenic Targ					ild Hazard Inde	ex (HI) = 1
	0,00										Ingestion SL	Dermal SL	Inhalation SL	Noncarcinogenic SL
SEO O IUR O	RfD <sub>o</sub> k (mg/kg- e	RfC <sub>i</sub> e o muta-		C <sub>sat</sub> PEF VF				Dermal SL In		Carcinogenic SL	Child	Child THQ=1	Child	Child
(mg/kg-day) <sup>-1</sup> y (ug/m <sup>3</sup> ) <sup>-1</sup> y	day) y	(mg/m³) y   gen GIA	ABS ABS	(mg/kg) (m <sup>3</sup> /kg) (m <sup>3</sup> /kg)	Analyte	CAS No.	TR=1E-06 (mg/kg)		TR=1E-06 (mg/kg)	TR=1E-06 (mg/kg)	THQ=1 (mg/kg)	(mg/kg)	THQ=1 (mg/kg)	THI=1 (mg/kg)
(mg/kg ddy) y (dg/m / y	1.3F-02 I	1 (1116/1117)		1.4E+09	Terbacil	5902-51-2	(1116/116)	(III8/ NS)	(1118/18)	(1116/146)	1.0E+03	4.3E+03	(1118/118)	8.2E+02
	2.5E-05 H	V 1		3.1E+01 1.4E+09 2.6E+05	Terbufos	13071-79-9					2.0E+00			2.0E+00
	1.0E-03 I	1	0.1	1.4E+09	Terbutryn	886-50-0					7.8E+01	3.3E+02		6.3E+01
	1.0E-04 I	1	l 0.1	1.4E+09	Tetrabromodiphenyl ether, 2,2',4,4'- (BDE-47)	5436-43-1					7.8E+00	3.3E+01		6.3E+00
	3.0E-04 I	V 1			Tetrachlorobenzene, 1,2,4,5-	95-94-3					2.3E+01			2.3E+01
2.6E-02   7.4E-06   2.0E-01   5.8E-05 C	3.0E-02 I 2.0E-02 I	V 1 V 1			Tetrachloroethane, 1,1,1,2- Tetrachloroethane, 1,1,2,2-	630-20-6 79-34-5	2.7E+01 3.5E+00		2.2E+00 7.3E-01	2.0E+00 6.0E-01	2.3E+03 1.6E+03			2.3E+03 1.6E+03
2.1E-03   2.6E-07		4.0E-02   V 1		1.7E+02 1.4E+09 2.4E+03		127-18-4	3.3E+00		2.5E+01	2.4E+01	4.7E+02		9.8E+01	8.1E+01
2.11-03 1 2.01-07 1	3.0E-02 I	4.0L-02 1 V 1		1.4E+09	Tetrachlorophenol, 2.3.4.6-	58-90-2	3.3L+02		2.31.701	2.46+01	2.3E+03	9.9E+03	J.0L+01	1.9E+03
2.0E+01 H		V 1		1.4E+09 1.1E+05	Tetrachlorotoluene, p- alpha, alpha, alpha-	5216-25-1	3.5E-02			3.5E-02				
	5.0E-04 I	1		1.4E+09	Tetraethyl Dithiopyrophosphate	3689-24-5					3.9E+01	1.6E+02		3.2E+01
		8.0E+01 I V 1		2.1E+03 1.4E+09 1.2E+03		811-97-2							1.0E+05	1.0E+05
	2.0E-03 P	1		1.4E+09	Tetryl (Trinitrophenylmethylnitramine)	479-45-8					1.6E+02	1.0E+05		1.6E+02
	7.0E-06 X 1.0E-05 X	1		1.4E+09 1.4F+09	Thallium (I) Nitrate Thallium (Soluble Salts)	10102-45-1 7440-28-0					5.5E-01 7.8E-01			5.5E-01 7.8E-01
	6.0E-06 X	V 1		1.4E+09 1.4E+09	Thallium Acetate	7440-28-0 563-68-8					4.7E-01			7.8E-01 4.7E-01
	2.0E-05 X	V 1		1.4E+09	Thallium Carbonate	6533-73-9					1.6E+00			1.6E+00
	6.0E-06 X	1	1	1.4E+09	Thallium Chloride	7791-12-0					4.7E-01			4.7E-01
	2.0E-05 X	1		1.4E+09	Thallium Sulfate	7446-18-6					1.6E+00			1.6E+00
	1.3E-02 I	1		1.4E+09	Thifensulfuron-methyl	79277-27-3					1.0E+03	4.3E+03		8.2E+02
	1.0E-02 I 7.0E-02 X	1		1.4E+09 1.4E+09	Thiobencarb Ihiodiglycol	28249-77-6 111-48-8					7.8E+02 5.5E+03	3.3E+03 3.1E+05		6.3E+02 5.4E+03
	3.0E-04 H	1	0.0073	1.4E+09	Thiofanox	39196-18-4					2.3E+01	9.9E+01		1.9E+01
	8.0E-02 I	1		1.4E+09	Thiophanate, Methyl	23564-05-8					6.3E+03	2.6E+04		5.1E+03
	5.0E-03 I	1		1.4E+09	Thiram	137-26-8					3.9E+02	1.6E+03		3.2E+02
	6.0E-01 H		="	1.4E+09	Tin	7440-31-5					4.7E+04			4.7E+04
		1.0E-04 A V 1 5.0E+00 I V 1	-	1.4E+09	Titanium Tétradhloride	7550-45-0					C 25.02		1.4E+05	1.4E+05
1.8E-01 X	8.0E-02 I 2.0E-04 X	5.0E+00 I V 1		8.2E+02 1.4E+09 4.3E+03 1.4E+09	Toluene (/ CTTT)	108-88-3	3.9E+00	1.4E+01		3.0E+00	6.3E+03 1.6E+01	6.6E+01	2.2E+04	4.9E+03 1.3E+01
3.0E-02 P	4.0E-03 X	1		1.4E+09	Toluidine, p- 1 //	106-49-0	2.3E+01	8.2E+01		1.8E+01	3.1E+02	1.3E+03		2.5E+02
5.02 02	3.0E+00 P	V 1			Total Petroleum Hydrocarbons (Aliphatic High)	NA	2.52.01	0.22.01		1.02.01	2.3E+05	1.52.05		2.3E+05
		6.0E-01 P V 1	1	1.4E+02 1.4E+09 8.3E+02	Total Petroleum Hydrocarbons (Aliphatic Low)	NA							5.2E+02	5.2E+02
		1.0E-01 P V 1			Total Petroleum Hydrocarbons (Aliphatic Medium)	NA					7.8E+02		1.1E+02	9.6E+01
	4.0E-02 P	1		1.4E+09	Total Petroleum Hydrocarbons (Aromatic High)	NA					3.1E+03	1.3E+04	4.45.00	2.5E+03
		3.0E-02 P V 1 3.0E-03 P V 1		1.8E+03 1.4E+09 3.5E+03 1.4E+09 5.2E+04	Total Petroleum Hydrocarbons (Aromatic Low) Total Petroleum Hydrocarbons (Aromatic Medium)	NA NA					3.1E+02 3.1E+02		1.1E+02 1.6E+02	8.2E+01 1.1E+02
1.1E+00   3.2E-04	4.02 03 1	1		1.4E+09	Toxaphene	8001-35-2	6.3E-01	2.2E+00	1.2E+04	4.9E-01	3.12.02		1.02.02	1.12.02
	7.5E-03 I	1	0.1	1.4E+09	Tralomethrin	66841-25-6					5.9E+02	2.5E+03		4.7E+02
	3.0E-04 A	V 1		1.4E+09 3.4E+03	Tri-n-butyltin	688-73-3					2.3E+01			2.3E+01
	8.0E+01 X	1		1.4E+09	Triacetin	102-76-1					6.3E+06	2.6E+07		5.1E+06
	3.0E-02 I 1.3E-02 I	V 1		1.4E+09 1.4E+09 3.6E+05	Triadimefon Triallate	43121-43-3 2303-17-5					2.3E+03 1.0E+03	9.9E+03		1.9E+03 1.0E+03
	1.3E-02 I 1.0E-02 I	V 1		1.4E+09 3.6E+05	Triasulfuron	82097-50-5					7.8E+02	3.3E+03		6.3E+02
	8.0E-03 I	1		1.4E+09	Tribenuron-methyl	101200-48-0					6.3E+02	2.6E+03		5.1E+02
	5.0E-03 I	V 1	-	1.4E+09 4.8E+04	Tribromobenzene, 1,2,4-	615-54-3					3.9E+02			3.9E+02
9.0E-03 P	1.0E-02 P	1		1.4E+09	Tributyl Phosphate	126-73-8	7.7E+01	2.7E+02		6.0E+01	7.8E+02	3.3E+03		6.3E+02
	3.0E-04 P	1	0.1	1.4E+09	Tributyltin Compounds	NA NA					2.3E+01	9.9E+01		1.9E+01
	3.0E-04 I 3.0E+01 I	3.0E+01 H V 1		1.4E+09 9.1E+02 1.4E+09 1.3E+03	Tributyltin Oxide Trichloro-1,2,2-trifluoroethane, 1,1,2-	56-35-9 76-13-1					2.3E+01 2.3E+06	9.9E+01	4.0E+04	1.9E+01 4.0E+04
7.0E-02 I	2.0E-02 I	1		1.4E+09	Trichloroacetic Acid	76-03-9	9.9E+00	3.5E+01		7.8E+00	1.6E+03	6.6E+03		1.3E+03
2.9E-02 H		1	0.1	1.4E+09	Trichloroaniline HCl, 2,4,6-	33663-50-2	2.4E+01	8.5E+01		1.9E+01				
7.0E-03 X	3.0E-05 X	1		1.4E+09	Trichloroaniline, 2,4,6-	634-93-5	9.9E+01	3.5E+02		7.8E+01	2.3E+00	9.9E+00		1.9E+00
2.05.02	8.0E-04 X	V 1		1.4E+09 3.2E+04		87-61-6	2.45			2.45.51	6.3E+01		5.05.51	6.3E+01
2.9E-02 P		2.0E-03 P V 1 5.0E+00 I V 1		4.0E+02 1.4E+09 3.0E+04 6.4E+02 1.4E+09 1.7E+03		120-82-1 71-55-6	2.4E+01			2.4E+01	7.8E+02 1.6E+05		6.2E+01 8.6E+03	5.8E+01 8.1E+03
5.7E-02   1.6E-05		2.0E-04 X V 1		2.2E+03 1.4E+09 7.2E+03		79-00-5	1.2E+01		1.3E+00	1.1E+00	3.1E+02		1.5E+00	1.5E+00
4.6E-02   4.1E-06		2.0E-03 I V M 1		6.9E+02 1.4E+09 2.2E+03		79-01-6	8.8E+00		1.1E+00	9.4E-01	3.9E+01		4.6E+00	4.1E+00
	3.0E-01 I	V 1	l	1.2E+03 1.4E+09 1.0E+03		75-69-4					2.3E+04			2.3E+04
	1.0E-01 I	1		1.4E+09	Trichlorophenol, 2,4,5-	95-95-4					7.8E+03	3.3E+04		6.3E+03
1.1E-02   3.1E-06	1.0E-03 P	1		1.4E+09	Trichlorophenol, 2,4,6-	88-06-2	6.3E+01	2.2E+02	1.2E+06	4.9E+01	7.8E+01	3.3E+02 3.3E+03		6.3E+01
	1.0E-02 I 8.0E-03 I	1		1.4E+09 1.4E+09	Trichlorophenoxyacetic Acid, 2,4,5- Trichlorophenoxypropionic acid, -2,4,5	93-76-5 93-72-1					7.8E+02 6.3E+02	3.3E+03 2.6E+03		6.3E+02 5.1E+02
	5.0E-03 I	V 1		1.3E+03 1.4E+09 1.5E+04		598-77-6					3.9E+02	2.02703		3.9E+02
3.0E+01 I		3.0E-04 I V M 1		1.4E+03 1.4E+09 1.6E+04		96-18-4	5.1E-03			5.1E-03	3.1E+02		4.9E+00	4.8E+00

Key: I = IRI	IS; P = PPRTV; A = A	ATSDR; C =						See FAQ; J = New Jersey; O = EPA Office of Water; E = see user guide Section 2.3.5; L where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may excer								lied (See User	Guide for Arsenic
		Toxicity	and Chemical-specif	ic Informa	ition			Contaminant		Car	cinogenic Ta	rget Risk (TR)	= 1E-06	No	ncancer Ch	ild Hazard Inc	lex (HI) = 1
SFO	k k e IUR e	RfD <sub>o</sub> (mg/kg-	k k v e o m			C <sub>sat</sub> PE				TR=1E-06	TR=1E-06	TR=1E-06	Carcinogenic SL TR=1E-06	Ingestion SL Child THQ=1	Child THQ=1	Inhalation SL Child THQ=1	Noncarcinogenic S Child THI=1
(mg/kg-day)	y (ug/m³) 1 y	day)		gen GIAB	S ABS	(mg/kg) (m <sup>3</sup> /		Analyte	CAS No.	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
		3.0E-03	X 3.0E-04 P V	1				Trichloropropene, 1,2,3-	96-19-5					2.3E+02		7.3E-01	7.3E-01
		2.0E-02 3.0E-03	A I	1	0.1	1.4E+ 1.4E+		Tricresyl Phosphate (TCP) Tridiphane	1330-78-5 58138-08-2					1.6E+03 2.3E+02	6.6E+03 9.9E+02		1.3E+03 1.9E+02
			7.0E-03 I V	1		2.8E+04 1.4E+	09 1.6E+04	Triethylamine	121-44-8							1.2E+02	1.2E+02
		2.0E+00		1	0.1	1.4E+		Triethylene Glycol	112-27-6					1.6E+05	6.6E+05		1.3E+05
			2.0E+01 P V	1		4.8E+03 1.4E+	09 7.1E+02	Trifluoroethane, 1,1,1-	420-46-2							1.5E+04	1.5E+04
7.7E-03	T.	7.5E-03	I V	1			09 5.1E+05		1582-09-8	9.0E+01			9.0E+01	5.9E+02			5.9E+02
2.0E-02	Р	1.0E-02	P 5.0E-03 P V	1	0.1	1.4E+		Trimethyl Phosphate Trimethylbenzene, 1,2,3-	512-56-1 526-73-8	3.5E+01	1.2E+02		2.7E+01	7.8E+02	3.3E+03	4.9E+01	6.3E+02 4.9E+01
			7.0E-03 P V	1				Trimethylbenzene, 1,2,4-	95-63-6	<b>-</b>						5.8E+01	5.8E+01
		1.0E-02		1				Trimethylbenzene, 1,3,5-	108-67-8					7.8E+02		J.0L+01	7.8E+02
		1.0E-02		1				Trimethylpentene, 2,4,4-	25167-70-8					7.8E+02			7.8E+02
		3.0E-02	I	1	0.019	1.4E+	09	Trinitrobenzene, 1,3,5-	99-35-4					2.3E+03	5.2E+04		2.2E+03
3.0E-02	1	5.0E-04	1	1	0.032	1.4E+		Tringrototuene,2346-	118-96-7	2.3E+01	2.6E+02		2.1E+01	3.9E+01	5.2E+02		3.6E+01
		2.0E-02		1	0.1	1.4E+		Triphenylphosphine Oxide	791-28-6					1.6E+03	6.6E+03		1.3E+03
		2.0E-02		1	0.1 0.1	1.4E+ 1.4E+		Tris(1/3-Dichloro-2-gropy)/Phosphate	13674-87-8					1.6E+03	6.6E+03		1.3E+03
2.3F+00	C 6.6E-04 C	1.0E-02	x V	1	0.1			Tris(2,3-dibromopropyl)phosphate	126-72-7	3.0E-01		3.8E+00	2.8E-01	7.8E+02	3.3E+U3		6.3E+02
		7.0E-03	Р	1	0.1	1.4E+		Tris(2-chloroethyl)phosphate	115-96-8	3.5E+01	1.2E+02		2.7E+01	5.5E+02	2.3E+03		4.4E+02
3.2E-03	P	1.0E-01	Р	1	0.1	1.4E+	09	Tris(2-ethylhexyl)phosphate	78-42-2	2.2E+02	7.7E+02		1.7E+02	7.8E+03	3.3E+04		6.3E+03
		8.0E-04		1		1.4E+		Tungsten	7440-33-7					6.3E+01			6.3E+01
		3.0E-03	I 4.0E-05 A	1		1.4E+		Urrantum (Splithle Salts)	NA					2.3E+02		5.7E+04	2.3E+02
1.0E+00	C 2.9E-04 C	0.05.03	I 7.0E-06 P	M 1 0.02	0.1	1.4E+ 1.4E+		Urethane Vanadium Pehtoxide	51-79-6 1314-62-1	1.5E-01	6.0E-01	4.8E+03 4.6E+02	1.2E-01 4.6E+02	7.0E+02		9.9E+03	6.6E+02
	6.3L-03 F		S 1.0E-04 A	0.02		1.4E+		Vanadium and Compounds	7440-62-2	<u> </u>		4.0L+02	4.0L+02	3.9E+02		1.4E+05	3.9E+02
		1.0E-03	3 1.0E-04 A	1	ь		09 09 1.2E+05		1929-77-7					7.8E+01		1.46+05	7.8E+01
		2.5E-02	i	1	0.1	1.4E+		Vinclozolin	50471-44-8						8.2E+03		1.6E+03
		1.0E+00	H 2.0E-01 I V	1		2.8E+03 1.4E+	09 4.4E+03	Vinyl Acetate	108-05-4					7.8E+04		9.2E+02	9.1E+02
	3.2E-05 H		3.0E-03 I V	1				Vinyl Bromide	593-60-2			1.2E-01	1.2E-01			4.3E+00	4.3E+00
7.2E-01	I 4.4E-06 I		I 1.0E-01 I V			3.9E+03 1.4E+			75-01-4	9.4E-02		1.6E-01	5.9E-02	2.3E+02		1.0E+02	7.0E+01
		3.0E-04		1	0.1	1.4E+		Warfarin	81-81-2						9.9E+01	F.05.02	1.9E+01
			S 1.0E-01 S V S 1.0E-01 S V	1		3.9E+02 1.4E+ 3.9E+02 1.4E+			106-42-3 108-38-3					1.6E+04 1.6E+04		5.8E+02 5.7E+02	5.6E+02 5.5E+02
			S 1.0E-01 S V	1		4.3E+02 1.4E+		, .	95-47-6					1.6E+04		6.7E+02	6.5E+02
			I 1.0E-01 I V	1		2.6E+02 1.4E+			1330-20-7					1.6E+04		6.0E+02	5.8E+02
		3.0E-04	1	1		1.4E+	09	Zinc Phosphide	1314-84-7					2.3E+01			2.3E+01
		3.0E-01	1	1		1.4E+		Zinc and Compounds	7440-66-6					2.3E+04			2.3E+04
		5.0E-02	I v	1	0.1	1.4E+		Zineb 	12122-67-7					3.9E+03	1.6E+04		3.2E+03
		8.0E-05	Х	1		1.4E+	09	Zirconium	7440-67-7					6.3E+00			6.3E+00

Key: I = IRIS; P = PPRTV; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #27); H = HEAS										ed (See User Guide	for Arsenic
notice); c = cancer; n = noncancer; * = where: n SL < 100X c S  Toxicity and Chemical-specific Information	: SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may Contaminant	ay exceed cei			uide); s = Con rget Risk (TR)		exceed Csat (			rd Index (HI) = 1	
					844	**	Ingestion SL	Dermal SL	Inhalation SL	Noncarcinogenic SL	
k k RfD <sub>o</sub> k k v		Inge	estion SL	Dermal SL	nhalation SL	Carcinogenic SL	Child	Child	Child	Child	
SFO e IUR e (mg/kg- e RfC <sub>1</sub> e o muta-				TR=1E-06	TR=1E-06	TR=1E-06	THQ=1	THQ=1	THQ=1	THI=1	MCL
(mg/kg-day) <sup>-1</sup> y (ug/m <sup>5</sup> ) <sup>-1</sup> y day) y (mg/m <sup>5</sup> ) y I gen LOGP GIABS FA In EPD?	1,		(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(ug/L)
	phate 30560		0.0E+00	1.2E+04	2 55 00	8.9E+00	8.0E+01	1.1E+05	4.05.04	8.0E+01	
	taldehyde 75-07- tochlor 34256				2.6E+00	2.6E+00	4.0E+02	2.9E+03	1.9E+01	1.9E+01 3.5E+02	
9.0E-01   3.1E+01 A V   -0.24   1   1   Yes   Aceto							1.8E+04	4.4E+06	6.4E+04	1.4E+04	
	tone Cyanohydrin 75-86-						1.02.01		0.12.01	1.12.01	
6.0E-02   V -0.34 1 1 Yes Aceto	tonitrile 75-05-	5-8							1.3E+02	1.3E+02	
	tophenone 98-86-						2.0E+03	4.6E+04		1.9E+03	
	tylaminofluorene, 2- 53-96-		2.1E-02	6.7E-02		1.6E-02					
5.0E-04   2.0E-05   V -0.01 1 1 Yes Acrole							1.0E+01	1.7E+03	4.2E-02	4.2E-02	
	/lamide 79-06- /lic Acid 79-10-		5.0E-02	2.3E+01		5.0E-02	4.0E+01 1.0E+04	2.1E+04 1.1E+06	2.1E+00	4.0E+01 2.1E+00	
	/lonitrile 107-1:		L.4E-01	1.4E+01	8.3E-02	5.2E-02	8.0E+02	8.9E+04	4.2E+00	4.1E+00	
	ponitrile 111-6										
5.6E-02 C 1.0E-02 I 3.52 1 0.9 Yes Alach	:hlor 15972	2-60-8 1.	.4E+00	4.4E+00		1.1E+00	2.0E+02	6.9E+02		1.6E+02	2.0E+00
1.0E-03 I 1.13 1 1 Yes <mark>Aldica</mark>							2.0E+01	1.4E+03		2.0E+01	3.0E+00
	carb Sulfone 1646-						2.0E+01	2.4E+04		2.0E+01	2.0E+00
	carb sulfoxide 1646-t rin 309-00		1.6F-03		1.15.03	0.35.04	6.0F-01			6.0F-01	4.0E+00
172-01 1 132-03 1 3.02-03 1	1 Alcohol 107-1:		+.0c-U3		1.1E-03	9.2E-04	1.0E+02	1.3E+04	2.1E-01	6.0E-01 2.1E-01	
	l Chloride 107-1		3.7E+00	3.5E+01	9.4E-01	7.3E-01	1.0E+02	1.3E+U4	2.1E-01 2.1E+00	2.1E-01 2.1E+00	
	ninum 7429-		2.30	2.52.01	5 01	7.52 01	2.0E+04	4.6E+06	2.12.00	2.0E+04	
_	ninum Phosphide 20859						8.0E+00	1.8E+03		8.0E+00	
9.0E-03 I 2.98 1 1 Yes <mark>Amet</mark> i	etryn						1.8E+02	9.8E+02		1.5E+02	
	nobiphenyl, 4-		3.7E-03	1.5E-02		3.0E-03					
	nophenol, mr 591-2						1.6E+03	2.8E+05		1.6E+03	
	nophenol, p 123-31 traz						4.0E+02	9.1E+04		4.0E+02	
	nonia 7664-						5.0E+01	9.8E+00		8.2E+00	
	nonium Sulfamate 7773-1						4.0E+03	9.1E+05		4.0E+03	
3.0E-03 X V 0.89 1 1 Yes Amyl	/l Alcohol, tert- 75-85-						1.02.03	3.12.03	6.3E+00	6.3E+00	
5.7E-03   1.6E-06 C 7.0E-03 P 1.0E-03   0.9 1 1 Yes Anilin	ine	3-3 1.	1.4E+01	6.9E+02		1.3E+01	1.4E+02	7.7E+03		1.4E+02	
	hraquinone, 9,10-		L.9E+00	5.1E+00		1.4E+00	4.0E+01	1.1E+02		3.0E+01	
_	mony (meta li¢) 7440-:						8.0E+00	2.7E+02		7.8E+00	6.0E+00
	mony Pentoxide 1314-						1.0E+01	3.4E+02		9.7E+00	
	imony Tetroxide U II North Tribital C 13952-4 imony Trioxide U II North Tribital C 1309-1						8.0E+00	2.7E+02		7.8E+00	
	enic, Inorganic 7440-		5.2E-02	9.7E+00		5.2E-02	6.0E+00	1.4E+03		6.0E+00	1.0E+01
3.5E-06 C 5.0E-05 I 1 1 Yes Arsine			J.2L-02	3.72.00		J.2L 02	7.0E-02	1.6E+01		7.0E-02	1.02.01
5.0E-02 I -0.27 1 1 Yes <mark>Asula</mark>							1.0E+03	8.0E+05		1.0E+03	
2.3E-01 C 3.5E-02 I 2.61 1 1 Yes Atrazi				2.8E+00		3.0E-01	7.0E+02	6.2E+03		6.3E+02	3.0E+00
	amine 492-8		3.9E-02	2.7E-01		6.7E-02	0.05			0.05	
	rmectin B1 65195						8.0E+00	0.05		8.0E+00	
	phos-methyl 86-50- benzene 103-3:		7 1E 01	7.3E-01	1.8E-01	1.2E-01	6.0E+01	8.3E+02		5.6E+01	
	dicarbonamide 103-3:		7.1E-01	7.3E-U1	1.0E-U1	1.25-01	2.0E+04	6.8E+07		2.0E+04	
2.0E-01   5.0E-04 H   0.07 1 Yes Bariui							4.0E+03	6.4E+04		3.8E+03	2.0E+03
	um Chromate 10294		5.0E-02	2.3E-01		4.1E-02	4.0E+02	2.3E+03		3.4E+02	
	fluralin 1861-						6.0E+03	2.4E+03		1.7E+03	
	omyl 17804						1.0E+03	3.0E+04		9.7E+02	
	sulfuron-methyl 83055						4.0E+03	2.4E+05		3.9E+03	
	tazon 25057						6.0E+02	9.4E+03 4.9E+04		5.7E+02 1.9E+03	
	zaldehyde 100-5: zene 71-43-		.4E+00	9.8E+00	7.2E-01	4.6E-01	2.0E+03 8.0E+01	4.9E+04 6.1E+02	6.3E+01	1.9E+03 3.3E+01	5.0E+00
	zenediamine-2-methyl sulfate, 1,4- 6369-1		7.8E-01	J.UL -00	7.22-01	7.8E-01	6.0E+01	J.1L+UZ	J.JL FU1	6.0E+00	J.UL+00
	zenethiol 108-98	98-5					2.0E+01	1.0E+02		1.7E+01	
2.3E+02   6.7E-02   3.0E-03   M 1.34 1 1 Yes Benzi	zidine 92-87-	7-5 1	L.1E-04	5.0E-03		1.1E-04	6.0E+01	3.0E+03		5.9E+01	
	zoic Acid 65-85-						8.0E+04	1.2E+06		7.5E+04	
	zotrichloride 98-07-		5.0E-03	6.0E-03		3.0E-03					
	zyl Alcohol 100-5: zyl Chloride 100-4:		1.6E-01	3 45100	1.1E-01	8.9E-02	2.0E+03 4.0F+01	8.9E+04 3.2E+02	2.1E+00	2.0E+03 2.0E+00	
	,		1.02-01	3.4E+00	1.1E-U1	8.9E-UZ			2.1E+00		4.05.00
2.4E-03   2.0E-03   2.0E-05   0.007   Yes   Beryll   9.0E-03   P   4.48   1   0.9   Yes   Bifend							4.0E+01 1.8E+02	6.4E+01 2.3E+02		2.5E+01 1.0E+02	4.0E+00
	nenthrin 82657						3.0E+02	2.32+02		3.0E+02	
	nenyl, 1,1'- 92-52-		0.7E+00	6.5E+00		3.9E+00	1.0E+04	7.3E+03	8.3E-01	8.3E-01	

Key: I = IRIS; P = PPRTV; A = A						= HEAST; F = See FAQ; J = New Jersey; O = EPA Office of Water; E = see user guide Se									ied (See User Guide	for Arsenic
To		notice) ; c = cancer; r emical-specific Infor		er; * = whe	ere: n SL < 1	00X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentrat  Contaminant	tion may excee			Guide); s = Co arget Risk (TR		exceed Csat (			rd Index (HI) = 1	
10	cicity and Ci	emical-specific milor	IIIIatioii		1	Contaminant		Cal	unogenic ra	arget NISK (TN	) = 1E-06	Ingestion SL	Dermal SL	Inhalation SL	Noncarcinogenic SI	
k k	RfD <sub>o</sub>	k k v						Ingestion SL	Dermal SL	Inhalation SL	Carcinogenic SL	Child	Child	Child	Child	
SFO e IUR e	(mg/kg-	e RfC <sub>i</sub> e o m	nuta-					TR=1E-06	TR=1E-06	TR=1E-06	TR=1E-06	THQ=1	THQ=1	THQ=1	THI=1	MCL
(mg/kg-day) <sup>-1</sup> y (ug/m <sup>3</sup> ) <sup>-1</sup> y	day)	y (mg/m³) y Ι ε	gen LOGP	GIABS	FA In EPD	Analyte	CAS No.	(μg/L)	(µg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(ug/L)
	4.0E-02	I V	2.48	1	1 Yes	Bis(2-chloro-1-methylethyl) ether	108-60-1					8.0E+02	6.5E+03		7.1E+02	
	3.0E-03	P	1.3	1	1 Yes	Bis(2-chloroethoxy)methane	111-91-1					6.0E+01	3.0E+03		5.9E+01	
1.1E+00   3.3E-04		V	1.29		1 Yes	Bis(2-chloroethyl)ether	111-44-4	7.1E-02	2.7E+00	1.7E-02	1.4E-02					
2.2E+02   6.2E-02		. V	0.57		1 Yes	Bis(chloromethyl)ether	542-88-1	3.5E-04	3.4E-02	9.1E-05	7.2E-05					
	5.0E-02	1	3.32		1 Yes	Bisphenol A	80-05-7					1.0E+03	3.2E+03		7.7E+02	
		I 2.0E-02 H		_	1 Yes	Boron And Borates Only	7440-42-8					4.0E+03	9.1E+05	4.05.04	4.0E+03	
		P 2.0E-02 P V C 1.3E-02 C V	1.16 0.22		1 Yes 1 Yes	Boron Trichloride Boron Trifluoride	10294-34-5 7637-07-2					4.0E+04 8.0E+02	9.1E+06 1.8E+05	4.2E+01 2.7E+01	4.2E+01 2.6E+01	
7.0E-01 I	4.0E-03	L 1.52 02 C V	0.22		1 Yes	Bromate	15541-45-4	1.1E-01	2.1E+01		1.1E-01	8.0E+01	1.8E+04	2.72.01	8.0E+01	1.0E+01
2.0E+00 X 6.0E-04 X	4.02 03	· v	1.92	_	1 Yes	Bromo-2-chloroethane, 1-	107-04-0	3.9E-02	5.7E-01	9.4E-03	7.4E-03	0.02.01	1.02.04		0.02.01	1.02.01
2.02.00 X 0.02 01 X	8.0E-03	I 6.0E-02 I V	2.99		1 Yes	Bromobenzene	108-86-1	3.32 02	3.72 01	3.12 03	7.12 03	1.6E+02	5.4E+02	1.3E+02	6.2E+01	
		4.0E-02 X V	1.41	1	1 Yes	Bromochloromethane	74-97-5							8.3E+01	8.3E+01	
6.2E-02 I 3.7E-05 C	2.0E-02	I V	2		1 Yes	Bromodichloromethane	75-27-4	1.3E+00	1.9E+01	1.5E-01	1.3E-01	4.0E+02	6.5E+03		3.8E+02	8.0E+01(F)
7.9E-03 I 1.1E-06 I	2.0E-02	I V	2.4	1	1 Yes	Bromoform	75-25-2	9.9E+00	1.4E+02	5.1E+00	3.3E+00	4.0E+02	6.2E+03		3.8E+02	8.0E+01(F)
	1.4E-03	I 5.0E-03 I V	1.19		1 Yes	Bromomethane	74-83-9					2.8E+01	1.0E+03	1.0E+01	7.5E+00	
	5.0E-03	H V	5.21		0.8 Yes	Bromophos	2104-96-3					1.0E+02	5.5E+01		3.5E+01	
	2.0E-02	1	2.8		).9 Yes	Bromoxynil	1689-84-5					4.0E+02	1.8E+03		3.3E+02	
	2.0E-02	I V	5.4		0.8 Yes	Bromoxynil Octanoate	1689-99-2					4.0E+02	2.1E+02		1.4E+02	
3.4E+00 C 3.0E-05 I	4.05.04	2.0E-03 I V	1.99		1 Yes	Butadiene, 1,3-	106-99-0	2.3E-02	1.6E-01	1.9E-01	1.8E-02	2.05.02	4.05.05	4.2E+00	4.2E+00	
4.05.03 B	1.0E-01	· V	0.88		1 Yes	Butanol, N-	71-36-3	4.45.01	2.75.01		1.05.01	2.0E+03	1.0E+05		2.0E+03	
1.9E-03 P	2.0E-01	P 3.0E+01 P V	4.73 0.61		0.9 Yes 1 Yes	Butyl Benzyl Phthalate Butyl alcohol, sec-	85-68-7 78-92-2	4.1E+01	2.7E+01		1.6E+01	4.0E+03 4.0E+04	2.9E+03 3.0E+06	6.3E+04	1.7E+03 2.4E+04	
	5.0E-02	I V	4.15		1 Yes	Butvlate	2008-41-5					1.0E+03	8.5E+02	0.3E+04	4.6E+02	
2.0E-04 C 5.7E-08 C	3.0L 0Z	· ·	3.5		0.8 Yes	Butylated hydroxyanisole	25013-16-5	3.9E+02	2.5E+02		1.5E+02	1.02.03	0.52.102		4.02.102	
3.6E-03 P	3.0E-01	P	5.1		1 Yes	Butylated hydroxytoluene	128-37-0		4.0E+00		3.4E+00	6.0E+03	1.2E+03		1.0E+03	
3.02 03 1	5.0E-02	P V	4.38		1 No	Butylbenzene, n-	104-51-8	2.22.02	4.02.00		3.42.00	1.0E+03	1.21.03		1.0E+03	
	1.0E-01	X V	4.57		1 No	Butylbenzen@3@6011) CDDN (7) CDDN	135-98-8					2.0E+03			2.0E+03	
		x v	4.11	1	1 Yes	Butylbenzene, tert!	98-06-6					2.0E+03	1.1E+03		6.9E+02	
	2.0E-02	Α	0.36		1 Yes	Cacodylic Acid	75-60-5					4.0E+02	6.7E+04		4.0E+02	
1.8E-03 I	1.0E-03	I 1.0E-05 A		0.025	1	Cadmium (Diet)	7440-43-9									
1.8E-03 I	5.0E-04	I 1.0E-05 A		0.05		Cadmium (Water)	7440-43-9					1.0E+01	1.1E+02		9.2E+00	5.0E+00
5.0E-01 C 1.5E-01 C			М	0.025		Calcium Chromate	13765-19-0	5.0E-02	2.3E-01		4.1E-02	4.0E+02	2.3E+03		3.4E+02	
	5.0E-01	I 2.2E-03 C	-0.19		1 Yes	Caprolactam	105-60-2					1.0E+04	9.0E+05		9.9E+03	
1.5E-01 C 4.3E-05 C		1	3.8		0.9 Yes	Captafol	2425-06-1	5.2E-01	1.8E+00		4.0E-01	4.0E+01	1.5E+02		3.2E+01	
2.3E-03 C 6.6E-07 C		1	2.8		1 Yes	Captan Ca	-133-06-2	3.4E+01	3.6E+02		3.1E+01	2.6E+03	3.0E+04		2.4E+03	
	1.0E-01 5.0F-03	1	2.36		1 Yes	Carbofuran	63-25-2 1563-66-2					2.0E+03	2.4E+04		1.8E+03	4.05.04
	1.0E-01	I 7.0E-01 I V	1.94		1 Yes 1 Yes	Carbon Disulfide	75-15-0					1.0E+02 2.0E+03	1.4E+03 2.0E+04	1.5E+03	9.4E+01 8.1E+02	4.0E+01
7.0E-02   6.0E-06	4.0E-03	I 1.0E-01 I V	2.83		1 Yes	Carbon Tetrachloride	756-23-5	1.1E+00	4.3E+00	9.4E-01	4.6E-01	8.0E+01	3.4E+02	2.1E+02	4.9E+01	5.0E+00
7.UE-UZ   0.UE-U0	4.UE-U3	1.0E-01 P V	-1.33		1 Yes	Carbonyl Sulfide	463-58-1	1.16+00	4.3E+00	9.46-01	4.00-01	8.UE+U1	3.4E+UZ	2.1E+02 2.1E+02	2.1E+02	3.UE+UU
	1.0E-02	1	5.57		).8 Yes	Carbosulfan	55285-14-8					2.0E+02	6.9E+01	2.11.02	5.1E+01	
	1.0E-01	T	2.14		1 Yes	Carboxin	5234-68-4					2.0E+03	4.1E+04		1.9E+03	
		9.0E-04 I			1 Yes	Ceric oxide	1306-38-3									
	1.0E-01	I V	0.99	1	1 Yes	Chloral Hydrate	302-17-0					2.0E+03	1.5E+05		2.0E+03	
	1.5E-02	T	1.9	1	1 Yes	Chloramben	133-90-4					3.0E+02	7.4E+03		2.9E+02	
4.0E-01 H			2.22		1 Yes	Chloranil	118-75-2	1.9E-01	3.5E+00		1.8E-01					
3.5E-01   1.0E-04	5.0E-04	I 7.0E-04 I V	6.26		).7 No	Chlordane	12789-03-6	2.2E-01		5.6E-02	4.5E-02	1.0E+01		1.5E+00	1.3E+00	2.0E+00
1.0E+01 I 4.6E-03 C		1	5.41		0.8 Yes	Chlordecone (Kepone)	143-50-0	7.8E-03	6.5E-03		3.5E-03	6.0E+00	5.4E+00		2.9E+00	
	7.0E-04	A	3.81		0.9 Yes	Chlorienus Ethyl	470-90-6					1.4E+01	5.6E+01		1.1E+01	
	2.0E-02	1 4 55 64 4 1:	2.5		1 Yes	Chloring Children	90982-32-4					4.0E+02	1.5E+04	2.05.04	3.9E+02	
	1.0E-01 3.0E-02	I 1.5E-04 A V I 2.0E-04 I V	0.85		1 Yes 1 Yes	Chlorine Chlorine Dioxide	7782-50-5 10049-04-4					2.0E+03 6.0E+02	4.6E+05 1.4E+05	3.0E-01 4.2E-01	3.0E-01 4.2E-01	
	3.0E-02 3.0F-02	1 2.0E-04 1 V			1 Yes	Chlorite (Sodium Salt)	7758-19-2					6.0E+02 6.0E+02	1.4E+05 1.4E+05	4.2E-U1	4.2E-01 6.0E+02	1.0F+03
		5.0E+01 I V	2.05		1 Yes	Chloro-1,1-difluoroethane, 1-	75-68-3							1.0E+05	1.0E+05	
3,0F-04 I	2.0E-02	H 2.0E-02 I V	2.53		1 Yes	Chloro-1,3-butadiene, 2-	126-99-8			1.9E-02	1.9E-02	4.0E+02	1.8E+03	4.2E+01	3.7E+01	
4.6E-01 H			2.27	_	1 Yes	Chloro-2-methylaniline HCl, 4-	3165-93-3	1.7E-01	5.1E+02		1.7E-01					
1.0E-01 P 7.7E-05 C	3.0E-03	Х	2.27		1 Yes	Chloro-2-methylaniline, 4-	95-69-2	7.8E-01	6.6E+00		7.0E-01	6.0E+01	5.6E+02		5.4E+01	
2.7E-01 X		v	0.09		1 Yes	Chloroacetaldehyde, 2-	107-20-0	2.9E-01	4.6E+01		2.9E-01					
			0.22	1	1 Yes	Chloroacetic Acid	79-11-8									6.0E+01
		3.0E-05 I	1.93	1	1 Yes	Chloroacetophenone, 2-	532-27-4									
2.0E-01 P	4.0E-03	T	1.83		1 Yes	Chloroaniline, p-	106-47-8	3.9E-01	5.9E+00		3.7E-01	8.0E+01	1.3E+03		7.6E+01	
	2.0E-02	I 5.0E-02 P V	2.84		1 Yes	Chlorobenzene	108-90-7					4.0E+02	1.3E+03	1.0E+02	7.8E+01	1.0E+02
1.1E-01 C 3.1E-05 C		1	4.74		0.8 Yes	Chlorobenzilate	510-15-6	7.1E-01	5.6E-01		3.1E-01	4.0E+02	3.5E+02		1.9E+02	
	3.0E-02	X	2.65	1	1 Yes	Chlorobenzoic Acid, p-	74-11-3					6.0E+02	3.4E+03		5.1E+02	

		= HEAST; F = See FAQ; J = New Jersey; O = EPA Office of Water; E = see user guide Se						lied (See User Guide	for Arsenic
notice) ; c = cancer; n = non Toxicity and Chemical-specific Information		00X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentrat Contaminant	ion may excee		arget Risk (TR) = 1E-06		e User Guide) Noncancer CHILD Haz	ard Index (HI) = 1	
k k RfDo k k v				Ingestion SL Dermal SL	Inhalation SL Carcinogenic SL	Ingestion SL De Child	ermal SL Inhalation S Child Child	Noncarcinogenic Sl Child	L
SFO e IUR e (mg/kg- e <sup>RfC</sup> i e o muta-				TR=1E-06 TR=1E-06	TR=1E-06 TR=1E-06		THQ=1 THQ=1	THI=1	MCL
	LOGP GIABS FA In EPD?	Analyte	CAS No.	(μg/L) (μg/L)	(μg/L) (μg/L)		(μg/L) (μg/L)	(μg/L)	(ug/L)
3.0E-03 P 3.0E-01 P V 4.0E-02 P V	3.6 1 1 Yes 2.64 1 1 Yes	Chlorobenzotrifluoride, 4- Chlorobutane, 1-	98-56-6 109-69-3				9.3E+01 6.3E+02 8.1E+03	3.5E+01 6.4E+02	
	1.08 1 1 Yes	Chlorodifluoromethane	75-45-6			8.UE+U2 3	1.0E+05	1.0E+05	
2.0E-02 P V	0.03 1 1 Yes	Chloroethanol, 2-	107-07-3			4.0E+02 7	7.7E+04	4.0E+02	
	1.97 1 1 Yes 0.91 1 1 Yes	Chloroform	67-66-3	2.5E+00 2.9E+01	2.4E-01 2.2E-01	2.0E+02 2	2.5E+03 2.0E+02	9.7E+01	8.0E+01(F)
	0.91 1 1 Yes 0.32 1 1 Yes	Chloromethane Chloromethyl Methyl Ether	74-87-3 107-30-2	3.2E-02 3.7E+00	8.1E-03 6.5E-03		1.9E+02	1.9E+02	
3.0E-01 P 3.0E-03 P 1.0E-05 X	2.24 1 1 Yes	Chloronitrobenzene, o-	88-73-3	2.6E-01 2.6E+00	2.4E-01		5.4E+02	5.5E+01	
	2.39 1 1 Yes 2.15 1 1 Yes	Chloronitrobenzene, p- Chlorophenol, 2-	100-00-5 95-57-8	1.2E+01 9.7E+01	1.1E+01		1.7E+02 1.0E+03	1.8E+01 9.1E+01	
	2.09 1 1 Yes	Chloropicrin	76-06-2			1.01+02 1	8.3E-01	8.3E-01	
3.1E-03 C 8.9E-07 C 1.5E-02 I	3.05 1 0.9 Yes	Chlorothalonil	1897-45-6	2.5E+01 1.6E+02	2.2E+01		2.1E+03	2.6E+02	
	3.42 1 1 Yes	Chlorotoluene, o-	95-49-8				5.8E+02	2.4E+02	
	3.33 1 1 Yes -1.02 1 1 Yes	Chlorotoluene, p- Chlorozotocin	106-43-4 54749-90-5	3.2E-04 1.0E+00	3.2E-04	4.0E+02 6	5.6E+02	2.5E+02	
	3.51 1 0.9 Yes	Chlorpropham	101-21-3	2.02.00	3.22.07	4.0E+03 9	9.8E+03	2.8E+03	
	4.96 1 0.8 Yes	Chlorpyrifos	2921-88-2				1.5E+01	8.4E+00	
1.0E-02 H 5.0E-02 I	4.31 1 0.9 Yes 2 1 1 Yes	Chlorpyrifos Methyl Chlorsulfuron	5598-13-0 64902-72-3				2.9E+02 5.7E+04	1.2E+02 9.9E+02	
	4.28 1 0.9 Yes	Chlorthal-dimethyl	1861-32-1				3.3E+02	1.2E+02	
8.0E-04 H	5.8 1 0.8 Yes	Chlorthiophos	60238-56-4				3.4E+00	2.8E+00	
1.5E+00   5.0E-01   8.4E-02   3.0E-03   1.0E-04   M	0.013 1 Yes 0.025 1 Yes	Chromium(III), Insoluble Salts Chromium(VI)	16065-83-1 18540-29-9	5.0E-02 1.2E-01	3.5E-02		3.9E+04 1.7E+02	2.2E+04 4.4E+01	
5.0E-01 J 8.4E-02 S 5.0E-05 I 1.0E-04 I WI	0.023 1 Yes	Chromium, Total	7440-47-3	3.0E=02 1.2E-01	3.3E-UZ	0.02+01 1	1.72+02	4.46+01	1.0E+02
	3.1 1 0.9 Yes	Clofentezine	74115-24-5				2.1E+03	2.3E+02	
9.0E-03 P 3.0E-04 P 6.0E-06 P 6.2E-04 I V M	1 1 Yes 1 0	Cobalt Coke Oven Emissions	7440-48-4 8007-45-2			6.0E+00 3	3.4E+03	6.0E+00	
4.0E-02 H	1 1 Yes	Copper Till The Copper	7440-50-8			8.0E+02 1	1.8E+05	8.0E+02	1.3E+03
	1.96 1 1 Yes	Cresol, m-	108-39-4				1.2E+04	9.3E+02	
	1.95 1 1 Yes 1.94 1 1 Yes	Cresol, o- Cresol, p-	95-48-7 106-44-5				1.2E+04 2.5E+04	9.3E+02 1.9E+03	
	3.1 1 1 Yes	Cresol, p-chloro-m-	59-50-7				5.2E+03	1.4E+03	
1.0E-01 A 6.0E-01 C	1.95 1 0.9 Yes	Cresols	1319-77-3			2.0E+03 6	5.7E+03	1.5E+03	
	0.6 1 1 Yes	Crotonaldehyde, trans-	123-73-9	4.1E-02 2.7E+00	4.0E-02		1.5E+03	2.0E+01	
	3.66 1 1 Yes -1.73 1 1 Yes	Cumene Capterion Capterion (4)	-98-82-8 135-20-6	3.5E-01 1.3E+04	3.5E-01	2.0E+03 1	1.9E+03 8.3E+02	4.5E+02	
	2.22 1 1 Yes	Cyanazine (/ CIIII)	21725-46-2	9.3E-02 1.6E+00	8.8E-02	4.0E+01 7	7.6E+02	3.8E+01	
		Cyanides ( CEEEE)	11						
1.0E-03   5.0E-03	1 1 Yes 1 1 Yes	*Calcium Cyanide U U NOTER TO NOTE TO NO	592-01-8 544-92-3				1.6E+03 2.3E+04	2.0E+01 1.0E+02	
6.0E-04 I 8.0E-04 S V	1 1 Yes	~Cyanide (CN-)	57-12-5				2.7E+03 1.7E+00	1.5E+00	2.0E+02
	0.07 1 1 Yes	~Cyanogen	460-19-5				5.1E+03	2.0E+01	
9.0E-02 I V 5.0E-02 I V	1 1 Yes 1 1 Yes	~Cyanogen Bromide ~Cyanogen Chloride	506-68-3 506-77-4				1.6E+06 5.8E+05	1.8E+03 1.0E+03	
6.0E-04   8.0E-04   V	-0.25 1 1 Yes	~Hydrogen Cyanide	74-90-8			1.2E+01 2	2.7E+03 1.7E+00	1.5E+00	
2.0E-03	1 1 Yes	"Potassium Cyanide	151-50-8				1.6E+03	4.0E+01	
5.0E-03   1.0E-01	0.04 1 Yes 0.04 1 Yes	~Potassium Silver Cyanide ~Silver Cyanide	506-61-6 506-64-9				1.6E+02 1.8E+04	8.2E+01 1.8E+03	
1.0E-03	1 1 Yes	~Sodium Cyanide	143-33-9				1.6E+03	2.0E+01	2.0E+02
2.0E-04 P	1 0 Yes	~Thiocyanates	NA				9.1E+02	4.0E+00	
2.0E-04 X V 5.0E-02 I	0.58 1 1 Yes 1 1 Yes	∼Thiocyanic Acid ∼Zinc Cyanide	463-56-9 557-21-1				9.1E+02 3.8E+05	4.0E+00 1.0E+03	
	3.44 1 1 Yes	Cyclohexane	110-82-7				1.3E+04	1.3E+04	
	4.72 1 0.9 Yes 0.81 1 1 Yes	Cyclohexane, 1,2,3,4,5-pentabromo-6-chloro- Cyclohexanone	87-84-3 108-94-1	3.4E+00 8.3E+00	2.4E+00	1.0F+05 6	5.5E+06 1.5E+03	1.4E+03	
2.52-50	0.81 1 1 Yes 2.86 1 1 Yes	Cyclohexene	108-94-1				2.5E+02 2.1E+03	7.0E+01	
2.0E-01 I V	1.49 1 1 Yes	Cyclohexylamine	108-91-8			4.0E+03 9	9.3E+04	3.8E+03	
	5.95 1 0.7 Yes	Cyfluthrin	68359-37-5				1.6E+02	1.2E+02	
5.0E-03   1.0E-02	6.9 1 0.5 No 6.6 1 0.7 No	Cyhalothrin Cypermethrin	68085-85-8 52315-07-8			1.0E+02 2.0E+02		1.0E+02 2.0E+02	
	-0.061 1 1 Yes	Cyromazine	66215-27-8				1.2E+04	1.5E+02	
	6.02 1 0.8 Yes	DDD	72-54-8	3.2E-01 3.5E-02	3.2E-02				
	6.51 1 0.8 No 6.91 1 0.7 No	DDE, p,p'- DDT	72-55-9 50-29-3	2.3E-01 2.3E-01	5.8E-02 4.6E-02 2.3E-01	1.0E+01		1.0E+01	
	0., 140				2.52 02	01			

Key: I = IRIS; P = PPRTV; A						HEAST; F = See FAQ; J = New Jersey; O = EPA Office of Water; E = see user guide Se									ied (See User Guide	for Arsenic
		notice) ; c = cancer; r nemical-specific Infor		* = where: n S	L < 10	0X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentrat Contaminant	tion may excee			Guide); s = Co arget Risk (TR		exceed Csat (			ard Index (HI) = 1	
	Toxicity and Ci	iemicai-specific imor	IIIatioii		_	Containinant		Care	cinogenic ra	arget NISK (TN	= 16-06	Ingestion SL	Dermal SI	Inhalation SI	Noncarcinogenic SI	
k	k RfD <sub>o</sub>	k k v						Ingestion SL	Dermal SL	Inhalation SL	Carcinogenic SL	Child	Child	Child	Child	A r
SFO e IUR	e (mg/kg-	e RfC <sub>i</sub> e o m	nuta-					TR=1E-06	TR=1E-06	TR=1E-06	TR=1E-06	THQ=1	THQ=1	THQ=1	THI=1	MCL
(mg/kg-day) <sup>-1</sup> y (ug/m <sup>3</sup> ) <sup>-</sup>	y day)	y (mg/m³) y I g	gen LOGP	GIABS FA In	EPD?	Analyte	CAS No.	(µg/L)	(µg/L)	(μg/L)	(μg/L)	(µg/L)	(μg/L)	(μg/L)	(µg/L)	(ug/L)
	3.0E-02	1	0.78	1 1 )	'es	Dalapon	75-99-0					6.0E+02	5.5E+04		6.0E+02	2.0E+02
1.8E-02 C 5.1E-06	C 1.5E-01	1	-1.5		'es	Daminozide	1596-84-5	4.3E+00	1.3E+04		4.3E+00	3.0E+03	1.0E+07		3.0E+03	
7.0E-04 I	7.0E-03	1	12.11	1 0 1	No	Decabromodiphenyl ether, 2,2',3,3',4,4',5,5',6,6'- (BDE-209)	1163-19-5	1.1E+02			1.1E+02	1.4E+02			1.4E+02	4
	4.0E-05	1	3.21	1 0.8 Y	'es	Demeton	8065-48-3					8.0E-01	8.8E-01		4.2E-01	1
1.2E-03 I	6.0E-01	1	6.11		'es	Di(2-ethylhexyl)adipate	103-23-1	6.5E+01			6.5E+01	1.2E+04			1.2E+04	4.0E+02
6.1E-02 H			4.49	1 0.9 Y	'es	Diallate	2303-16-4	1.3E+00	9.2E-01		5.4E-01					
	7.0E-04		3.81		'es	Diazinon	333-41-5					1.4E+01	3.9E+01		1.0E+01	A
0.05.04 0.5.05.00	1.0E-02		4.38		'es	Dibenzothiophene	132-65-0	2 45 02	4 75 04	2 45 24	2.25.04	2.0E+02	9.6E+01	4.25.04	6.5E+01	2.05.04
8.0E-01 P 6.0E-03		P 2.0E-04 I V			'es	Dibromo-3-chloropropane, 1,2-	96-12-8	3.1E-02	1.7E-01	3.4E-04	3.3E-04	4.0E+00	2.4E+01	4.2E-01	3.7E-01	2.0E-01
	4.0E-04	X V	3.75		'es	Dibromobenzene, 1,3-	108-36-1					8.0E+00	1.6E+01		5.3E+00	A
8.4E-02 I	1.0E-02 2.0E-02	I V	3.79 2.16		'es 'es	Dibromobenzene, 1,4- Dibromochloromethane	106-37-6 124-48-1	9.3E-01	1.4E+01		8.7E-01	2.0E+02 4.0E+02	3.7E+02 6.7E+03		1.3E+02 3.8E+02	8.0E+01(F)
2.0E+00   6.0E-04		I 9.0E-03 I V	1.96		'es	Dibromoethane, 1.2-	106-93-4	3.9F-02	7.1F-01	9.4E-03	7.5E-03	1.8F+02	3.6E+03	1.9E+01	1.7E+01	5.0E-02
2.0E+00 1 0.0E-04	1 3.UE-U3	4.0E-03 X V	1.96		'es	Dibromoethane, 1,2- Dibromomethane (Methylene Bromide)	74-95-3	3.5E-UZ	7.12-01	J.4C-U3	7.3E-03	1.02+02	3.02+03	8.3E+00	8.3E+00	J.UE-U2
	3.0E-04	P P	1.7		Vo.	Dibutyltin Compounds	74-95-5 NA					6.0E+00		0.3L+00	6.0E+00	
	3.0E-02	1	2.21		'es	Dicamba	1918-00-9					6.0E+02	1.0E+04		5.7E+02	
4.2E-03		· v	2.6		'es	Dichloro-2-butene, 1,4-	764-41-0			1.3E-03	1.3E-03	0.02.02	1.02.04		3.7.2.102	
4.2E-03		v	2.6		'es	Dichloro-2-butene, cis-1,4-	1476-11-5			1.3E-03	1.3E-03					
4.2E-03	Р	V	2.6		'es	Dichloro-2-butene, trans-1,4-	110-57-6			1.3E-03	1.3E-03					
5.0E-02 I	4.0E-03	1	0.92	1 1 Y	'es	Dichloroacetic Acid	79-43-6	1.6E+00	9.6E+01		1.5E+00	8.0E+01	5.4E+03		7.9E+01	6.0E+01
	9.0E-02	I 2.0E-01 H V	3.43		'es	Dichlorobenzene, 1,2-	95-50-1					1.8E+03	2.9E+03	4.2E+02	3.0E+02	6.0E+02
5.4E-03 C 1.1E-05	C 7.0E-02	A 8.0E-01 I V	3.44	1 1 Y	'es	Dichlorobenzene, 1,4-	106-46-7	1.4E+01	2.1E+01	5.1E-01	4.8E-01	1.4E+03	2.2E+03	1.7E+03	5.7E+02	7.5E+01
4.5E-01 I 3.4E-04			3.51		'es	Dichlorobenzidine, 3,3'-	91-94-1	1.7E-01	4.5E-01		1.3E-01					A
		Х	4.44		'es	Dichlorobenzophenone, 4,4'-	90-98-2					1.8E+02	1.4E+02		7.8E+01	A
	2.0E-01	I 1.0E-01 X V	2.16		'es	Dichlorodifluoromethane	75-71-8					4.0E+03	3.8E+04	2.1E+02	2.0E+02	A
5.7E-03 C 1.6E-06		P V	1.79		'es	Dichloroethane, 1,1-	75-34-3	1.4E+01	1.8E+02	3.5E+00	2.8E+00	4.0E+03	5.8E+04		3.8E+03	/
9.1E-02 I 2.6E-05		X 7.0E-03 P V	1.48		'es	Dichloroethane-1-2-	107-06-2	8.6E-01	1.8E+01	2.2E-01	1.7E-01	1.2E+02	2.8E+03	1.5E+01	1.3E+01	5.0E+00
	5.0E-02	I 2.0E-01 I V	2.13		'es	Dichloroethylenė, 1,1-	75-85-4 156-59-2					1.0E+03	8.5E+03	4.2E+02	2.8E+02	7.0E+00
	2.0E-03 2.0E-02	I V	1.86 2.09		'es 'es	Dichloroethylene, 1,2-cist	156-60-5					4.0E+01 4.0E+02	3.6E+02 3.6E+03		3.6E+01 3.6E+02	7.0E+01 1.0E+02
	3.0E-03	1 V	3.06		'es	Dichlorophenol 24-	120-83-2					6.0E+01	1.9E+02		4.6E+01	1.0E+02
	1.0E-02	1	3.06 2.81		'es	Dichlorophenoxy Acetic Acid, 2,4-	94-75-7					2.0F+02	1.9E+02 1.4F+03		1.7E+02	7.0E+01
	8.0E-03	i	3.53		'es	Dichlorophenoxy)butyric Acid, 4-(2,4-	94-73-7					1.6E+02	4.8E+02		1.2E+02	7.02+01
3.6E-02 C 1.0E-05		A 4.0E-03 I V	1.98		'es	Dichloropropane, 1,2-	78-87-5	2.2E+00	2.4E+01	5.6E-01	4.4E-01	1.8E+03	2.2E+04	8.3E+00	8.3E+00	5.0E+00
3.00 02 C 1.00 03	2.0E-02	P V	2		'es	Dichloropropane, 1,3	-142-28-9	2.22.00	2.42.01	3.02 01	4.42 01	4.0E+02	4.6E+03	0.32.00	3.7E+02	3.02.00
	3.0E-03	i i	0.78		'es	Dichloropropandl, 2,3-	616-23-9					6.0E+01	5.0E+03		5.9E+01	A .
1.0E-01   4.0E-06		I 2.0E-02 I V	2.04		'es	Dichloropropene, 1,3-	542-75-6	7.8E-01	7.8E+00	1.4E+00	4.7E-01	6.0E+02	6.6E+03	4.2E+01	3.9E+01	+
	C 5.0E-04	I 5.0E-04 I	1.43	1 1 Y	'es	Dichlorvos	62-73-7	2.7E-01	1.4E+01		2.6E-01	1.0E+01	5.6E+02		9.9E+00	A .
	1.0E-04	1	0	1 1 Y	'es	Dicrotophos [] [] [] Need and Eller O	-141-66-2					2.0E+00	1.1E+03		2.0E+00	A .
	8.0E-02	P 3.0E-04 X V	3.16	1 1 Y	'es	Dicyclopentadiene	77-73-6					1.6E+03	3.5E+03	6.3E-01	6.3E-01	
1.6E+01 I 4.6E-03		1	5.4	1 0.8 Y	'es	Dieldrin	60-57-1	4.9E-03	2.7E-03		1.8E-03	1.0E+00	6.1E-01		3.8E-01	
3.0E-04	С	5.0E-03 I		1 0	_	Diesel Engine Exhaust	NA									
	2.0E-03	P 2.0E-04 P	-1.43		'es	Diethanolamine	111-42-2					4.0E+01	8.4E+04		4.0E+01	
	3.0E-02	P 1.0E-04 P	0.56		'es	Diethylene Glycol Monobutyl Ether	112-34-5					6.0E+02	8.7E+04		6.0E+02	
	6.0E-02	P 3.0E-04 P	-0.54		'es	Diethylene Glycol Monoethyl Ether	111-90-0					1.2E+03	7.8E+05		1.2E+03	
255.02	1.0E-03	P V	0.05		'es	Diethylformamide	617-84-5	2.25.51				2.0E+01	4.3E+03		2.0E+01	
3.5E+02 C 1.0E-01			5.07	1 0.9 Y		Diethylstilbestrol	56-53-1	2.2E-04	6.6E-05		5.1E-05	1 65 . 03	7 25 . 05		1 65 . 02	
	8.0E-02		0.65	1 1 1		Difenzoquat	43222-48-6						7.3E+05		1.6E+03	
	2.0E-02		3.88		es es	Difluserathans 1.1	35367-38-5					4.0E+02	1.0E+03	0.25.04	2.9E+02	
4.4E-02 C 1.3E-05	С	4.0E+01 I V V	0.75 3.58		'es 'es	Difluoroethane, 1,1- Dihydrosafrole	75-37-6 94-58-6	1.8E+00	2.3E+00	4.3E-01	3.0E-01			8.3E+04	8.3E+04	
02 0 1.51-03	-	7.0E-01 P V	1.52		'es	Diisopropyl Ether	108-20-3	1.02.100	2.32.00		3.32 01			1.5E+03	1.5E+03	
	8.0E-02	7.0E-01 P V	1.03		'es	Diisopropyl Methylphosphonate	1445-75-6					1.6E+03	1.3E+05	1.52+03	1.6E+03	
	2.0E-02	i	-0.17		'es	Dimethipin	55290-64-7					4.0E+02	2.4E+05		4.0E+02	
	2.0E-04		0.78		'es	Dimethoate	60-51-5					4.0E+00	6.4E+02		4.0E+00	_
1.6E+00 P	2.02.04		1.81		'es	Dimethoxybenzidine, 3,3'-	119-90-4	4.9E-02	1.6E+00		4.7E-02					
1.7E-03 P	6.0E-02	P	-0.61		'es	Dimethyl methylphosphonate	756-79-6	4.6E+01	2.8E+04		4.6E+01	1.2E+03	8.1E+05		1.2E+03	
4.6E+00 C 1.3E-03	С		4.58	1 1 1	'es	Dimethylamino azobenzene [p-]	60-11-7	1.7E-02	7.2E-03		5.0E-03					
5.8E-01 H			2.17		'es	Dimethylaniline HCl, 2,4-	21436-96-4	1.3E-01	5.2E+02		1.3E-01					
2.0E-01 P	2.0E-03	Х	1.68		'es	Dimethylaniline, 2,4-	95-68-1	3.9E-01	7.1E+00		3.7E-01	4.0E+01	8.0E+02		3.8E+01	
	2.0E-03	I V	2.31	1 1 Y	'es	Dimethylaniline, N,N-	121-69-7					4.0E+01	3.1E+02		3.5E+01	
1.1E+01 P			2.34		'es	Dimethylbenzidine, 3,3'-	119-93-7	7.1E-03	8.5E-02		6.5E-03					
		P 3.0E-02 I V	-1.01		'es	Dimethylformamide	68-12-2					2.0E+03	1.8E+06	6.3E+01	6.1E+01	
	1.0E-04	X 2.0E-06 X V	-1.19	1 1 1	'es	Dimethylhydrazine, 1,1-	57-14-7					2.0E+00	3.5E+03	4.2E-03	4.2E-03	

Key: I = IRIS; P = PPRTV;						= HEAST; F = See FAQ; J = New Jersey; O = EPA Office of Water; E = see user guide Se									ied (See User Guide	for Arsenic
				* = where:	n SL < 1	00X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentrat	tion may excee			Guide); s = Co arget Risk (TR		exceed Csat (				
	l oxicity and Cr	emical-specific Inform	nation			Contaminant		Care	inogenic i a	arget RISK (TR	) = 1E-Ub	Ingestion SI	Noncano	er CHILD Haza	rd Index (HI) = 1	_
k	k RfD.	k kv						Ingestion SL	Dermal SL	Inhalation SL	Carcinogenic SL	Child	Child	Child	Child	
SFO e IUR	e (mg/kg-	e RfC <sub>i</sub> e o mu	ıta-					TR=1E-06	TR=1E-06	TR=1E-06	TR=1E-06	THQ=1	THQ=1	THQ=1	THI=1	MCL
(mg/kg-day) <sup>-1</sup> y (ug/m <sup>3</sup> )	<sup>-1</sup> y day)	y (mg/m³) y I ge	n LOGP G	SIABS FA	In EPD?	Analyte	CAS No.	(μg/L)	(µg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(ug/L)
5.5E+02 C 1.6E-0		V		1 1	Yes	Dimethylhydrazine, 1,2-	540-73-8	1.4E-04	5.0E-02	3.5E-05	2.8E-05	""	,			10,
	2.0E-02	1	2.3	1 1	Yes	Dimethylphenol, 2,4-	105-67-9					4.0E+02	3.1E+03		3.6E+02	A l
	6.0E-04	T	2.36	1 1	Yes	Dimethylphenol, 2,6-	576-26-1					1.2E+01	8.5E+01		1.1E+01	
	1.0E-03	1	2.23	1 1	Yes	Dimethylphenol, 3,4-	95-65-8					2.0E+01	1.7E+02		1.8E+01	A
4.5E-02 C 1.3E-0	5 C	V	2.58	1 1	Yes	Dimethylvinylchloride	513-37-1	1.7E+00	6.5E+00	4.3E-01	3.3E-01					A
	8.0E-05	Х		1 1	Yes	Dinitro-o-cresol, 4,6-	534-52-1					1.6E+00	2.6E+01		1.5E+00	
	2.0E-03	1			Yes	Dinitro-o-cyclohexyl Phenol, 4,6-	131-89-5					4.0E+01	5.4E+01		2.3E+01	A
	1.0E-04	Р		1 1	Yes	Dinitrobenzene, 1,2-	528-29-0					2.0E+00	5.3E+01		1.9E+00	
	1.0E-04	1		1 1	Yes	Dinitrobenzene, 1,3-	99-65-0					2.0E+00	7.3E+01		2.0E+00	A
	1.0E-04 2.0E-03	P		1 1 1	Yes Yes	Dinitrobenzene, 1,4- Dinitrophenol, 2,4-	100-25-4 51-28-5					2.0E+00 4.0E+01	7.6E+01 1.2E+03		2.0E+00 3.9E+01	A
6.8F-01 I	2.0E-03	<u>'</u>		1 1	Yes	Dinitrophenol, 2,4- Dinitrotoluene Mixture, 2,4/2,6-	NA	1.1E-01	1.5E+00		1.1E-01	4.05+01	1.2E+03		3.96+01	+
	5 C 2.0E-03	1		1 1	Yes	Dinitrotoluene Mixture, 2,4/2,6- Dinitrotoluene, 2,4-	NA 121-14-2	2.5F-01	4.3E+00		2.4E-01	4.0F+01	7.5E+02		3.8E+01	A
1.5E+00 P	3.0E-04	X		1 1	Yes	Dinitrotoluene, 2,6-	606-20-2	5.2E-02	7.4E-01		4.9E-02	6.0E+00	9.3E+01		5.7E+00	A
	2.0E-03	S		1 1	Yes	Dinitrotoluene, 2-Amino-4,6-	35572-78-2					4.0E+01	1.0E+03		3.9E+01	
	2.0E-03	S		1 1	Yes	Dinitrotoluene, 4-Amino-2,6-	19406-51-0					4.0E+01	1.0E+03		3.9E+01	
4.5E-01 X	9.0E-04	X		1 0.8	Yes	Dinitrotoluene, Technical grade	25321-14-6	1.7E-01	2.6E-01		1.0E-01	1.8E+01	3.0E+01		1.1E+01	
	1.0E-03	1	3.56	1 0.9	Yes	Dinoseb	88-85-7					2.0E+01	5.4E+01		1.5E+01	7.0E+00
1.0E-01 I 5.0E-0	6 I 3.0E-02	I 3.0E-02 I V	-0.27	1 1	Yes	Dioxane, 1,4-	123-91-1	7.8E-01	2.3E+02	1.1E+00	4.6E-01	6.0E+02	1.9E+05	6.3E+01	5.7E+01	
						Dioxins										
6.2E+03   1.3E+0				1 0	No	~Hexachlorodibenzo-p-dioxin, Mixture	NA	1.3E-05			1.3E-05					
1.3E+05 C 3.8E+0		I 4.0E-08 C V		1 0.5		~TCDD, 2,3,7,8-	1746-01-6	6.0E-07		1.5E-07	1.2E-07	1.4E-05		8.3E-05	1.2E-05	3.0E-05
	3.0E-02	1		1 1	Yes	Diphenamid	957-51-7					6.0E+02	4.2E+03		5.3E+02	A
	8.0E-04	Х		1 1	Yes	Diphenyl Sulfone	127-63-9					1.6E+01	2.0E+02		1.5E+01	
0.05.04   2.25.0	2.5E-02	1		1 1	Yes	Diphenylamine	122-39-4	9.7F-02	2.05.04		7.05.03	5.0E+02	8.4E+02		3.1E+02	A
8.0E-01 I 2.2E-0					Yes	Diphenylhydrazine, 1,2-	122-66-7	9.76-02	3.9E-01		7.8E-02	4.45.04			4.45.04	2.05.04
7.45.00 6 4.45.0	2.2E-03	1		1 1	No	Diquat	85-00-7 1937-37-7	1 15 00			1 15 02	4.4E+01			4.4E+01	2.0E+01
7.1E+00 C 1.4E-0 7.4E+00 C 1.4E-0				1 1 1 1	No No	Direct Black 38 Direct Blue 6	2602-46-2	1.1E-02 1.1E-02			1.1E-02 1.1E-02					A l
6.7E+00 C 1.4E-0				1 1	No	Direct Brown 95	16071-86-6	1.2E-02			1.2E-02					+
0.7E+00 C 1.4E-0	4.0E-05	1		1 0.9	Yes	Disulfoton	298-04-4	1.21-02			1.2L-02	8.0F-01	1.3E+00		5.0E-01	A l
	1.0E-02	i v		1 1	Yes	Dithiane, 1,4-	505-29-3					2.0E+02	1.6E+04		2.0E+02	A
	2.0E-03	1	2.68	1 1	Yes	Diuron	330-54-1					4.0E+01	3.6E+02		3.6E+01	+
	4.0E-03	1	1.15	1 1	Yes	Dodine	2439-10-3					8.0E+01	1.1E+04		8.0E+01	A
	2.5E-02	I V	3.21	1 1	Yes	EPTC	759-94-4					5.0E+02	1.5E+03		3.8E+02	A
	6.0E-03	I V	3.83	1 0.9	Yes	Endosulfan (/)	115-29-7					1.2E+02	6.3E+02		1.0E+02	
	2.0E-02	1		1 1	Yes	Endothall     ( CIIII)	145-73-3					4.0E+02	8.5E+03		3.8E+02	1.0E+02
	3.0E-04	1		1 0.8	Yes	Endrin // ccccc	72-20-8					6.0E+00	3.7E+00		2.3E+00	2.0E+00
9.9E-03 I 1.2E-0	6 I 6.0E-03	P 1.0E-03 I V		1 1	Yes	Epichlorohydrin [] [] [] NEW ELLS ON	-106-89-8	7.9E+00	7.9E+02	4.7E+00	2.9E+00	1.2E+02	1.3E+04	2.1E+00	2.0E+00	
	4.05	2.0E-02 I V		1 1	Yes	Epoxybutane, 1,2-	106-88-7					0.05.05	2.05.05	4.2E+01	4.2E+01	
	4.0E-02	Р		1 1	Yes	Ethanol, 2-(2-methoxyethoxy)-	111-77-3					8.0E+02	3.9E+05		8.0E+02	
	5.0E-03			1 1	Yes	Ethephon	16672-87-0					1.0E+02	4.2E+04		1.0E+02	
	5.0E-04 1.0E-01	I P 6.0E-02 P V		1 0.8 1 1	Yes Yes	Ethion Ethoxyethanol Acetate, 2-	563-12-2 111-15-9					1.0E+01 2.0E+03	7.7E+00 2.3E+05	1.3E+02	4.3E+00 1.2E+02	
	9.0E-02	P 2.0E-01   V		1 1												
		I 7.0E-01 I V		1 1	Yes Yes	Ethoxyethanol, 2- Ethyl Acetate	110-80-5 141-78-6					1.8E+03 1.8E+04	6.3E+05 1.2E+06	4.2E+02 1.5E+02	3.4E+02 1.4E+02	
	5.0E-01	P 8.0E-03 P V		1 1	Yes	Ethyl Acrylate	141-78-6					1.8E+04 1.0E+02	3.0E+03	1.5E+02 1.7E+01	1.4E+02 1.4E+01	
		1.0E+01   V		1 1	Yes	Ethyl Chloride (Chloroethane)	75-00-3							2.1E+04	2.1E+04	
	2.0E-01			1 1	Yes	Ethyl Ether	60-29-7					4.0E+03	2.0E+05	2.12.04	3.9E+03	
		3.0E-01 P V		1 1	Yes	Ethyl Methacrylate	97-63-2							6.3E+02	6.3E+02	
	1.0E-05	1	4.78	1 0.8	Yes	Ethyl-p-nitrophenyl Phosphonate	2104-64-5					2.0E-01	1.6E-01		8.9E-02	
1.1E-02 C 2.5E-0	6 C 1.0E-01	I 1.0E+00 I V		1 1	Yes	Ethylbenzene	100-41-4	7.1E+00	1.2E+01	2.2E+00	1.5E+00	2.0E+03	3.8E+03	2.1E+03	8.1E+02	7.0E+02
	7.0E-02	Р		1 1	Yes	Ethylene Cyanohydrin	109-78-4					1.4E+03	1.1E+06		1.4E+03	
	9.0E-02	P V		1 1	No	Ethylene Diamine	107-15-3					1.8E+03			1.8E+03	
	2.0E+00	I 4.0E-01 C		1 1	Yes	Ethylene Glycol	107-21-1					4.0E+04	5.7E+07		4.0E+04	
	1.0E-01	I 1.6E+00 I		1 1	Yes	Ethylene Glycol Monobutyl Ether	111-76-2					2.0E+03	1.4E+05		2.0E+03	
3.1E-01 C 8.8E-0		3.0E-02 C V		1 1	Yes	Ethylene Oxide	75-21-8	2.5E-01	5.4E+01	6.4E-02	5.1E-02	4.05	4.05	6.3E+01	6.3E+01	
	5 C 8.0E-05	I V		1 1	Yes	Ethylene Thiourea	96-45-7 151-56-4	1.7E+00 1.2E-03	1.0E+03	3.0E-04	1.7E+00	1.6E+00	1.0E+03		1.6E+00	
6.5E+01 C 1.9E-0	3.0E+00	V		1 1	Yes	Ethyleneimine Ethyleneimine	84-72-0	1.26-03	2.5E-01	3.UE-U4	2.4E-04	6.0F+04	1.5E+06		5.8E+04	4
	3.0E+00 2.5E-04			1 1 1 1	Yes Yes	Ethylphthalyl Ethyl Glycolate Fenamiphos	84-72-0 22224-92-6					5.0E+04 5.0E+00	3.4E+01		5.8E+04 4.4E+00	
	2.5E-04 2.5E-02	i		1 0.9	Yes	Fenpropathrin	39515-41-8					5.0E+00 5.0E+02	7.3E+01		6.4E+01	
	2.5E-02			1 0.7	No	Fenvalerate	51630-58-1					5.0E+02			5.0E+02	
	1.3E-02			1 1	Yes	Fluometuron	2164-17-2					2.6E+02	3.4E+03		2.4E+02	

Key: I = IRIS; P = PI						= HEAST; F = See FAQ; J = New Jersey; O = EPA Office of Water; E = see user guide Se									ied (See User Guide	for Arsenic
		otice) ; c = cance mical-specific In		; * = where	: n SL < 1	00X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentrat Contaminant	tion may excee			Guide); s = Co arget Risk (TR)		exceed Csat (			rd Index (HI) = 1	
	Toxicity and cite	лисат эрсетте пт	iorination			Contaminant		Cai	cinogenie re	inger mak (Th	) = 1E 00	Ingestion SL	Dermal SL	Inhalation SL	Noncarcinogenic SL	
k	k RfD <sub>o</sub>	k k v						Ingestion SL	Dermal SL	Inhalation SL	Carcinogenic SL	Child	Child	Child	Child	
SFO e	IUR e (mg/kg-	e RfC <sub>i</sub> e o	muta-					TR=1E-06	TR=1E-06	TR=1E-06	TR=1E-06	THQ=1	THQ=1	THQ=1	THI=1	MCL
(mg/kg-day) <sup>-1</sup> y (u	ug/m <sup>3</sup> ) <sup>-1</sup> y day)	y (mg/m³) y I	gen LOGP	GIABS FA	In EPD?	Analyte	CAS No.	(μg/L)	(µg/L)	(μg/L)	(μg/L)	(µg/L)	(μg/L)	(μg/L)	(μg/L)	(ug/L)
	4.0E-02	C 1.3E-02 C		1 1	Yes	Fluoride	16984-48-8					8.0E+02	1.8E+05		8.0E+02	
	6.0E-02	I 1.3E-02 C		1 1	Yes	Fluorine (Soluble Fluoride)	7782-41-4					1.2E+03	2.7E+05		1.2E+03	4.0E+03
	8.0E-02	I .	3.16	1 0.9		Fluridone	59756-60-4					1.6E+03	1.4E+04		1.4E+03	/
	2.0E-02	1	3.34	1 0.9		Flurprimidol	56425-91-3					4.0E+02	2.4E+03		3.4E+02	
	7.0E-04	I .	3.7	1 0.9		Flusilazole	85509-19-9					1.4E+01	5.0E+01		1.1E+01	/
	6.0E-02	1	3.7	1 0.9		Flutolanil	66332-96-5					1.2E+03	4.5E+03		9.5E+02	/
2.55.02	1.0E-02	!	6.81	1 0.6		Fluvalinate	69409-94-5	2.25.04	2.45.02		2 05 04	2.0E+02	2.45.04		2.0E+02	4
3.5E-03 I 1.9E-01 I	1.0E-01	1	2.85 2.9	1 1	Yes Yes	Folpet Fomesafen	133-07-3 72178-02-0	2.2E+01 4.1E-01	2.1E+02 9.1E+00		2.0E+01 3.9E-01	2.0E+03	2.1E+04		1.8E+03	
1.51-01	2.0E-03	1	3.94		Yes	Fonofos	944-22-9	4.1L-01	J.1L+00		3.9L-01	4.0F+01	6.3E+01		2.4F+01	
1		I 9.8E-03 A V		1 1	Yes	Formaldehyde	50-00-0			4.3E-01	4.3E-01	4.0E+03	3.2E+05	2.0E+01	2.0E+01	+
-		P 3.0E-04 X V		1 1	Yes	Formic Acid	64-18-6			1.52 01	52 01	1.8F+04	6.4E+06	6.3E-01	6.3F-01	/
	3.0E+00	1	-2.4	1 1	No	Fosetyl-AL	39148-24-8					6.0E+04			6.0E+04	/
						Furans										$\overline{}$
		x v	4.12	1 1	Yes	~Dibenzofuran	132-64-9					2.0E+01	1.3E+01		7.9E+00	
	1.0E-03	I V	1.34	1 1	Yes	~Furan	110-00-9					2.0E+01	4.8E+02		1.9E+01	
	9.0E-01	I 2.0E+00 I V		1 1	Yes	~Tetrahydrofuran	109-99-9					1.8E+04	1.7E+06	4.2E+03	3.4E+03	
3.8E+00 H			-0.04	1 1	Yes	Furazolidone	67-45-8	2.1E-02	1.0E+01		2.0E-02		7.45	4.05	2.05 -:	
		I 5.0E-02 H V		1 1	Yes	Furfural	98-01-1					6.0E+01	7.1E+03	1.0E+02	3.8E+01	
1.5E+00 C 4			1.8	1 1	Yes	Furium	531-82-8	5.2E-02	1.9E+00		5.1E-02					
3.0E-02 I 8	8.6E-06 C 4.0F-04		4.38 -4.81	1 0.9 1 1	Yes No	Furmecyclox Glufosinate, Ammonium	60568-05-0 77182-82-2	2.6E+00	2.0E+00		1.1E+00	8.0F+00			8.0F+00	
	4.06-04	8.0E-05 C				Glutaraldehyde	111-30-8					8.UE+UU			8.UE+UU	
	4.0E-04	8.0E-05 C I 1.0E-03 H V	-0.33 -0.12	1 1	Yes Yes	Glycidyl	765-34-4					8.0E+00	1.8E+03	2.15.00	1.7E+00	/
	1.0E-01	I 1.0E-05 H V	-3.4	1 1	No	Glyphosate	1071-83-6					2.0F+03	1.00+05	2.12+00	2.0E+03	7.0F+02
		x v		1 1	Yes	Guanidine	113-00-8					2.0E+02	4.2E+05		2.0E+02	7.02.02
	2.0E-02	P	-3.56	1 1	No	Guanidine Chloride	50-01-1					4.0E+02	4.22.03		4.0E+02	/
	5.0E-05	i .	4.07	1 0.9		Haloxyfop, Methyl	69806-40-2					1.0E+00	3.1E+00		7.6E-01	
4.5E+00 I 1	1.3E-03   5.0E-04	I V	6.1	1 0.8	Yes	Heptachlor	76-44-8	1.7E-02	2.3E-03	4.3E-03	1.4E-03	1.0E+01	1.5E+00		1.3E+00	4.0E-01
9.1E+00 I 2	2.6E-03 I 1.3E-05	I V		1 0.8		Heptachlor Epoxide	1024-57-3	8.6E-03	7.1E-03	2.2E-03	1.4E-03	2.6E-01	2.4E-01		1.2E-01	2.0E-01
	2.0E-03	I V	6.07	1 0.7	No	Hexabromobenzene () () こじょう しょう ()	87-82-1					4.0E+01			4.0E+01	
	2.0E-04	1		1 0	No	Hexabromodiphenyl ether, 2,2',4,4',5,5'- (BDE-153)	68631-49-2					4.0E+00			4.0E+00	
	4.6E-04 I 8.0E-04	I V		1 0.9		Hexachlorobenzene	118-74-1	4.9E-02		1.2E-02	9.8E-03	1.6E+01			1.6E+01	1.0E+00
	2.2E-05 I 1.0E-03	P V	11.70	1 0.9		Hexachlorobutadiene	87-68-3	1.0E+00	4.4E-01	2.6E-01	1.4E-01	2.0E+01	9.5E+00		6.5E+00	4
	1.8E-03   8.0E-03	A	3.8	1 0.9		Hexachlorocyclohexane, Alpha-	-319-84-6	1.2E-02	1.8E-02		7.2E-03	1.6E+02	2.5E+02		9.7E+01	/
	5.3E-04 I 3.1E-04 C 3.0E-04		3.78 3.72	1 0.9 1 0.9		Hexachlorocyclohexane, Beta- Hexachlorocyclohexane, Gemma-(Lindane)	319-85-7 58-89-9	4.3E-02 7.1E-02	6.1E-02 1.0E-01		2.5E-02 4.2E-02	6.0E+00	9.3E+00		3.6E+00	2.0E-01
	5.1E-04 C 3.0E-04	<u> </u>	4.14	1 0.9		Hexachlorocyclohexane, Technical		4.3E-02	6.1E-02		2.5E-02	0.0L+00	3.3L+00		3.0L+00	2.01-01
1.81+00 1 3		I 2.0E-04 I V	5.04	1 0.9		Hexachlorocyclopentadiene	608,73-1 -77,47-4	4.3E-02	0.1L-02		2.3L-02	1.2E+02	4.2E+01	4.2E-01	4.1E-01	5.0E+01
4.0E-02 I 1		I 3.0E-02 I V		1 1	Yes	Hexachloroethane	67-72-1	1.9E+00	1.7E+00	5.1E-01	3.3E-01	1.4E+01	1.4E+01	6.3E+01	6.2E+00	3.02.01
	3.0E-04	T .	7.54	1 0	No	Hexachlorophene	70-30-4					6.0E+00			6.0E+00	
1.1E-01 I	3.0E-03	I .	0.87	1 1	Yes	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	121-82-4	7.1E-01	8.6E+01		7.0E-01	6.0E+01	8.0E+03		6.0E+01	
		1.0E-05 I V	3.2	1 1	Yes	Hexamethylene Diisocyanate, 1,6-	822-06-0							2.1E-02	2.1E-02	
	4.0E-04	P	0.28	1 1	Yes	Hexamethylphosphoramide	680-31-9					8.0E+00	2.0E+03		8.0E+00	
		7.0E-01 I V		1 1	Yes	Hexane, N-	110-54-3							1.5E+03	1.5E+03	
	2.02.100	P	0.08	1 1	Yes	Hexamedioic Acid	124-04-9					4.0E+04	1.1E+07		4.0E+04	
		I 3.0E-02 I V		1 1		Hexanone, 2-	591-78-6					1.0E+02	2.8E+03	6.3E+01	3.8E+01	
	3.3E-02		1.85	1 1	Yes	Hexazinone	51235-04-2					6.6E+02	2.4E+04		6.4E+02	
	2.5E-02		5.57	1 0.8		Hexythiazox	78587-05-0					5.0E+02	1.4E+02		1.1E+02	
3 05+00	3.0E-04		2.31	1 1	Yes	Hydramethylnon	67485-29-4	2 65 02	1 15:02	1 15 02	1 15 03	6.0E+00	5.1E+02	6 25 02	5.9E+00	
	4.9E-03 I 4.9E-03 I	3.0E-05 P V	-2.07	1 1	Yes Yes	Hydrazine Hydrazine Sulfate	302-01-2 10034-93-2	2.6E-02 2.6E-02	1.1E+02 4.9F+00	1.1E-03	1.1E-03 2.6E-02			6.3E-02	6.3E-02	
3.02.00 1 4		2.0E-02 I V		1 1	Yes	Hydrogen Chloride	7647-01-0	2.02 02			2.02 02			4.2E+01	4.2E+01	
	4.0F-02	C 1.4E-02 C V		1 1	Yes	Hydrogen Fluoride	7664-39-3					8.0E+02	1.8E+05	2.9E+01	2.8E+01	
	02	2.0E-03 I V	0.23	1 1	Yes	Hydrogen Sulfide	7783-06-4					5.02.02		4.2E+00	4.2E+00	
6.0E-02 P	4.0E-02	P	0.59	1 1	Yes	Hydroquinone	123-31-9	1.3E+00	1.2E+02		1.3E+00	8.0E+02	7.9E+04		7.9E+02	
	1.3E-02	I .	3.82	1 0.9	Yes	Imazalil	35554-44-0					2.6E+02	6.8E+02		1.9E+02	
	2.5E-01	I .	1.86	1 1	Yes	Imazaquin	81335-37-7					5.0E+03	2.6E+05		4.9E+03	
	2.5E-01	1	1.49	1 1	Yes	Imazethapyr	81335-77-5					5.0E+03	7.2E+04		4.7E+03	
	1.02 02	A	2.49	1 1	Yes	lodine	7553-56-2					2.0E+02	4.6E+04		2.0E+02	
	4.0E-02	I	3	1 0.9		Iprodione	36734-19-7					8.0E+02	9.1E+03		7.4E+02	
	7.0E-01	P		1 1	Yes	Iron	7439-89-6					1.4E+04	3.2E+06		1.4E+04	
9.5E-04 I	3.0E-01 2.0E-01	I V I 2.0E+00 C	0.76	1 1	Yes	Isobutyl Alcohol	78-83-1 78-59-1	8.2E+01	1.6E+03		7.8E+01	6.0E+03 4.0E+03	3.6E+05 8.6E+04		5.9E+03 3.8E+03	
9.5E-04 I	2.UE-U1	1 2.UE+UU C	1.7	1 1	Yes	Isophorone	76-59-1	8.2E+U1	1.0E+U3		7.8E+U1	4.UE+U3	o.bE+U4		3.8E+U3	

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	Toxio		notice) ; c = cancer emical-specific Inf		ancer;	* = wher	e: n SL < 1	00X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentra Contaminant	ation may excee			arget Risk (TR)		exceed Csat			rd Index (HI) = 1	
		<u> </u>	піп											Ingestion SL	Dermal SL	Inhalation SL	Noncarcinogenic SL	L
SFO e	k IUR e	RfD <sub>o</sub> (mg/kg-	k k v e RfC <sub>i</sub> e o	muta-						Ingestion SL TR=1E-06	Dermal SL TR=1E-06		Carcinogenic SL TR=1E-06	Child THQ=1	Child THQ=1	Child THQ=1	Child THI=1	MCL
(mg/kg-day) <sup>-1</sup> y	(ug/m <sup>3</sup> ) <sup>-1</sup> y	day)	y (mg/m³) y I		OGP G	GIABS FA	In EPD	Analyte	CAS No.	(μg/L)	(μg/L)	(µg/L)	(μg/L)	(μg/L)	(μg/L)	(µg/L)	(μg/L)	(ug/L)
		1.5E-02	I V		5.8	1 0.	8 Yes	Isopropalin	33820-53-0			•		3.0E+02	4.6E+01		4.0E+01	
1		2.0E+00	P 2.0E-01 P V			1 1		Isopropanol	67-63-0					4.0E+04	6.5E+06	4.2E+02	4.1E+02	
		1.0E-01	1			1 1		Isopropyl Methyl Phosphonic Acid	1832-54-8					2.0E+03	3.9E+05		2.0E+03	
1		5.0E-02	205.04 4 1/		.94 8	1 0.		Isoxaben JP-7	82558-50-7					1.0E+03	2.7E+03	C 25.02	7.3E+02	
,		2.0E-03	3.0E-01 A V		-	1 0 1 0.		Lactofen	NA 77501-63-4					4.0F+01	6.7E+01	6.3E+02	6.3E+02 2.5E+01	
				-				Lead Compounds										1
5.0E-01 C	1.5E-01 C	2.0E-02	C 2.0E-04 C	M	(	0.025 1	Yes	~Lead Chromate	7758-97-6	5.0E-02	2.3E-01		4.1E-02	4.0E+02	2.3E+03		3.4E+02	
8.5E-03 C	1.2E-05 C					1 0.	8 Yes	~Lead Phosphate	7446-27-7	9.2E+00	1.7E+03		9.1E+00					
2.8E-01 C	8.0E-05 C			-0	0.08	1 1		~Lead acetate	301-04-2	2.8E-01	2.8E+02		2.8E-01					
8.5E-03 C	12505.6				-4	1 1		~Lead and Compounds ~Lead subacetate	7439-92-1 1335-32-6	9.2E+00			9.2E+00				1.5E+01	1.5E+01
8.5E-03 C	. 1.2E-05 C	1.05.07							78-00-2	9.2E+00			9.2E+00	2.05.02	2 05 02		1 25 02	
		1.0E-07 5.0E-06	I V P V		.15	1 0. 1 1		~Tetraethyl Lead Lewisite	78-00-2 541-25-3					2.0E-03 1.0E-01	3.8E-03 9.1E-01		1.3E-03 9.0E-02	
		2.0E-03	i v			1 0.		Linuron	330-55-2					4.0E+01	2.0E+02		3.3E+01	
		2.0E-03	Р			1 1		Lithium	7439-93-2					4.0E+01	9.1E+03		4.0E+01	
		5.0E-04	I			1 1	Yes	мсра	94-74-6					1.0E+01	3.0E+01		7.5E+00	
		1.0E-02	1			1 0.		МСРВ	94-81-5					2.0E+02	5.5E+02		1.5E+02	
		1.0E-03	1			1 1		MCPP	93-65-2					2.0E+01	7.1E+01		1.6E+01	
		2.0E-02 1.0F-01	I I 7.0F-04 C			1 1		Malathion Maleic Anhydride	121-75-5 108-31-6					4.0E+02 2.0F+03	1.1E+04 3.8F+04		3.9E+02 1.9F+03	
		5.0E-01	1 7.0L-04 C		0.84	1 1		Maleic Annydride  Maleic Hydrazide	123-33-1					1.0E+04	8.9E+06		1.9E+03 1.0E+04	
,		1.0E-04	P			1 1		Malononitrile	109-77-3	l .				2.0E+00	9.2E+02		2.0E+00	
1			H			1 0.		Mancozeb	8018-01-7					6.0E+02	4.9E+03		5.4E+02	
		5.0E-03	1	0	.62	1 1	Yes	Maneb	12427-38-2					1.0E+02	3.6E+03		9.8E+01	
,			I 5.0E-05 I			1 1		Manganese (Diet)	7439-96-5									
			S 5.0E-05 I			0.04 1		Manganese (Non-diet)	7439-96-5					4.8E+02	4.4E+03		4.3E+02	
		9.0E-05 3.0E-02	Н			1 1		Mephosfolan Mepiquat Chloride	950-10-7 24307-26-4					1.8E+00 6.0E+02	2.5E+02		1.8E+00 6.0E+02	
,		3.UE-UZ	1	-2	2.02	1 1	No	Mercury Compounds	24302-204					0.UE+U2			0.UE+U2	
		3.0E-04	I 3.0E-04 S	-0	0.22	0.07 1	Yes	"Mercuric Chloride (and other Mercury salts)	7487-94-7					6.0E+00	9.6E+01		5.7E+00	2.0E+00
,			3.0E-04 I V			1 1		~Mercury (elemental)	7439-97-6							6.3E-01	6.3E-01	2.0E+00
		1.0E-04	1			1 1	Yes	~Methyl Mercury	22967-92-6					2.0E+00	4.6E+02		2.0E+00	
		8.0E-05	T		.71	1 1		~Phenylmercuric Acetate	62-38-4					1.6E+00	5.7E+02		1.6E+00	
1		3.0E-05	I V			1 0.		Merphos	150-50-5 78-48-8					6.0E-01	0.05.03		6.0E-01	
<b></b>		3.0E-05 6.0E-02	<del>!</del>		5.7 65	1 0.		Merphos Oxide //	578\$7-19-1					6.0E-01 1.2E+03	9.9E-02 6.4E+04		8.5E-02 1.2E+03	
1			I 3.0E-02 P V			1 1		La company (1) 1 (	126,98-7					2.0E+00	1.3E+02	6.3E+01	1.2E+03 1.9E+00	
,		5.0E-05	1		0.8	1 1		Methacrylonitrile Methamidophos	-10265-92-6					1.0E+00	1.0E+03	0.52.01	1.0E+00	
		2.0E+00	I 2.0E+01 I V	-0	).77	1 1		Methanol	67-56-1					4.0E+04	1.8E+07	4.2E+04	2.0E+04	
		1.0E-03	1		2.2	1 1	Yes	Methidathion	950-37-8					2.0E+01	5.8E+02		1.9E+01	
		2.5E-02	1		0.6	1 1		Methomyl	16752-77-5					5.0E+02	6.8E+04		5.0E+02	
4.9E-02 C	1.4E-05 C	F 0F 02		_	.47	1 1		Methoxy-5-nitroaniline, 2-	99-59-2	1.6E+00	5.4E+01		1.5E+00	1.05.00	F 0F 04		2.75.04	4.65.51
			P 1.0E-03 P V		.08 0.1	1 0. 1 1		Methoxychlor Methoxyethanol Acetate, 2-	72-43-5 110-49-6					1.0E+02 1.6E+02	5.9E+01 3.5E+04	2.1E+00	3.7E+01 2.1E+00	4.0E+01
			P 2.0E-02 I V		0.77	1 1		Methoxyethanol. 2-	109-86-4					1.0E+02	6.3E+04	4.2E+01	2.9E+01	
		1.0E+00				1 1		Methyl Acetate	79-20-9					2.0E+04	2.9E+06		2.0E+04	
			2.0E-02 P V			1 1		Methyl Acrylate	96-33-3							4.2E+01	4.2E+01	
			I 5.0E+00 I V		.29	1 1		Methyl Ethyl Ketone (2-Butanone)	78-93-3					1.2E+04	1.5E+06	1.0E+04	5.6E+03	
	1.0E-03 X	1.0E-03	P 2.0E-05 X V	_		1 1		Methyl Hydrazine	60-34-4			5.6E-03	5.6E-03	2.0E+01	1.5E+04	4.2E-02	4.2E-02	
			3.0E+00 I V			1 1		Methyl Isobutyl Ketone (4-methyl-2-pentanone)	108-10-1							6.3E+03	6.3E+03	
		1 /E±00	1.0E-03 C V I 7.0E-01 I V			1 1		Methyl Isocyanate Methyl Methacrylate	624-83-9 80-62-6					2.8F+04	7.7E+05	2.1E+00 1.5E+03	2.1E+00 1.4E+03	
		2.5E-04	I 7.0L-01 I V		38	1 1		Methyl Parathion	298-00-0					5.0E+00	4.1E+01	1.51+05	4.5E+00	
		6.0E-02	Х		0.7	1 1		Methyl Phosphonic Acid	993-13-5					1.2E+03	1.2E+06		1.2E+03	
			H 4.0E-02 H V			1 0.		Methyl Styrene (Mixed Isomers)	25013-15-4					1.2E+02	4.3E+01	8.3E+01	2.3E+01	
	2.8E-05 C					1 1		Methyl methanesulfonate	66-27-3	7.9E-01	4.8E+02		7.9E-01					
9.9E-02 C			3.0E+00 I V		.94	1 1		Methyl tert-Butyl Ether (MTBE)	1634-04-4	4.3E+01	2.0E+03	2.2E+01	1.4E+01			6.3E+03	6.3E+03	
	2.6E-07 C							Methyl-1,4-benzenediamine dihydrochloride, 2-	615-45-2					6.0E+00	5.9E+04		6.0E+00	
1.8E-03 C		3.0E-04 2.0E-02				1 1			99-25 0	8 75+00	1 /F+02		8 2F±00					
1.8E-03 C 9.0E-03 P	•		X	1	.87	1 1	Yes	Methyl-5-Nitroaniline, 2-	99-55-8 70-25-7	8.7E+00 9.4F-03	1.4E+02 1.1E+01		8.2E+00 9.4F-03	4.0E+02	7.3E+03		3.8E+02	1
1.8E-03 C 9.0E-03 P 8.3E+00 C	2.4E-03 C			-C	.87 ).92		Yes	Methyl-5-Nitroaniline, 2- Methyl-N-nitro-N-nitrosoguanidine, N-	70-25-7	9.4E-03	1.1E+01		9.4E-03					
1.8E-03 C 9.0E-03 P	2.4E-03 C		Х	-C 1	.87 0.92 62	1 1	Yes Yes Yes	Methyl-5-Nitroaniline, 2-										

Key: I = IRIS	S; P = PPRTV; A = A							H = HEAST; F = See FAQ; J = New Jersey; O = EPA Office of Water; E = see user guide Se									ed (See User Guide	for Arsenic
	Tox		notice) ; c = cancer; nemical-specific Info			* = whe	re: n SL <	100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentrat Contaminant	tion may excee			Guide); s = Co arget Risk (TR)		exceed Csat (			rd Index (HI) = 1	
	10	icity and Ci	lemical-specific milo	matio	)II			Containmant		Cal	cinogenic ra	arget hisk (Th	= 1E-06	Ingestion SL	Dermal SI	Inhalation SL	Noncarcinogenic SL	
	k k	RfD <sub>o</sub>	k k v							Ingestion SL	Dermal SL	Inhalation SL	Carcinogenic SL	Child	Child	Child	Child	
SFO	e IUR e	(mg/kg-	e RfC <sub>i</sub> e o n	nuta-						TR=1E-06	TR=1E-06	TR=1E-06	TR=1E-06	THQ=1	THQ=1	THQ=1	THI=1	MCL
(mg/kg-day	) <sup>-1</sup> y (ug/m³) <sup>-1</sup> y	day)	y (mg/m³) y I	gen	LOGP	GIABS F	A In EP	? Analyte	CAS No.	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(µg/L)	(μg/L)	(ug/L)
1.0E-01	Х	3.0E-04	Х			_	) No	Methylbenzene-1,4-diamine sulfate, 2-	615-50-9	7.8E-01			7.8E-01	6.0E+00			6.0E+00	
2.2E+01	C 6.3E-03 C			М			.8 No	Methylcholanthrene, 3-	56-49-5	1.1E-03			1.1E-03					
2.0E-03	I 1.0E-08 I	6.0E-03	I 6.0E-01 I V		1.25		1 Yes	Methylene Chloride	75-09-2	1.3E+01	3.5E+02	2.0E+02	1.1E+01	1.2E+02	3.7E+03	1.3E+03	1.1E+02	5.0E+00
1.0E-01 4.6E-02	P 4.3E-04 C I 1.3E-05 C	2.0E-03	Р	М		1 0	.9 Yes 1 Yes	Methylene-bis(2-chloroaniline), 4,4'- Methylene-bis(N,N-dimethyl) Aniline, 4,4'-	101-14-4 101-61-1	2.5E-01 1.7E+00	4.3E-01 6.7E-01		1.6E-01 4.8E-01	4.0E+01	7.5E+01		2.6E+01	
1.6E+00			2.0E-02 C		1.59		1 Yes	Methylenehishenzenamine, 4.4'-	101-77-9	4.9F-02	1.7E+00		4.7E-02					_
1.02.00	C 4.0L 04 C		6.0E-04 I			_	.9 Yes	Methylenediphenyl Diisocyanate	101-68-8	4.52 02	1.72.00		4.72 02					
		7.0E-02	H V				1 Yes	Methylstyrene, Alpha-	98-83-9					1.4E+03	1.7E+03		7.8E+02	
		1.5E-01	I		3.13	1	1 Yes	Metolachlor	51218-45-2					3.0E+03	2.6E+04		2.7E+03	
		2.5E-02	1		1.7	1		Metribuzin	21087-64-9					5.0E+02	1.8E+04		4.9E+02	
		2.5E-01	1		2.2		1 Yes	Metsulfuron-methyl	74223-64-6					5.0E+03	2.4E+05		4.9E+03	
		3.0E+00	P V		6.1	1		Mineral oils	8012-95-1					6.0E+04			6.0E+04	
1.8E+01	C 5.1E-03 C	2.0E-04 2.0E-03	I V				.5 No 1 Yes	Mirex Molinate	2385-85-5 2212-67-1	4.3E-03		1.1E-03	8.8E-04	4.0E+00 4.0E+01	1.2E+02		4.0E+00 3.0E+01	
-			<del> </del>		5.21													
		5.0E-03 1.0E-01				_	1 Yes 1 Yes	Molybdenum Monochloramine	7439-98-7 10599-90-3					1.0E+02 2.0E+03	2.3E+04 4.6E+05		1.0E+02 2.0E+03	4.0E+03
		2.0E-01	P		1.66		1 Yes	Monomethylaniline	100-61-8					4.0E+01	7.5E+02		3.8E+01	4.02+03
		2.5E-02	T		2.94	1	1 Yes	Myclobutanil	88671-89-0					5.0E+02	4.7E+03		4.5E+02	
		3.0E-04	х			1 0	.9 Yes	N,N'-Diphenyl-1,4-benzenediamine	74-31-7					6.0E+00	8.9E+00		3.6E+00	
		2.0E-03	I V		1.38	1	1 Yes	Naled	300-76-5					4.0E+01	6.8E+03		4.0E+01	
		3.0E-02	X 1.0E-01 P V				) No	Naphtha, High Flash Aromatic (HFAN)	64742-95-6					6.0E+02		2.1E+02	1.5E+02	
1.8E+00	C 0.0E+00 C					1		Naphthylamine, 2-	91-59-8	4.3E-02	3.6E-01		3.9E-02					
		1.0E-01					.9 Yes	Napropamide	15299-99-7					2.0E+03	9.0E+03		1.6E+03	
			C 1.4E-05 C			1		Nickel Acetate Nickel Carbonate	373-02-4 3333-67-3					2.2E+02	6.8E+05		2.2E+02	
			C 1.4E-05 C C 1.4E-05 C V		-2.12	1		Nickel Carbonate Nickel Carbonyl	3333-67-3 13463-39-3			2.2E-02	2.2E-02	2.2E+02 2.2E+02	1.4E+06	2.9E-02	2.2E+02 2.9E-02	
			C 1.4E-05 C			0.04		Nickel Hydroxide	12054-48-7			2.22 02	2.21 02	2.2E+02	2.0E+03	2.50 02	2.0E+02	_
			C 2.0E-05 C			0.04		Nickel Oxide	1313-99-1					2.2E+02	2.0E+03		2.0E+02	
	2.4E-04 I		C 1.4E-05 C			0.04		Nickel Refinery Dust	NA.					2.2E+02	1.0E+04		2.2E+02	
	2.6E-04 C	2.0E-02	I 9.0E-05 A			0.04	1 Yes	Nickel Soluble Salts	7440-02-0					4.0E+02	1.8E+04		3.9E+02	
1.7E+00			C 1.4E-05 C			0.04		Nickel Subsulfide	12035-72-2	4.6E-02	1.7E+00		4.5E-02	2.2E+02	1.0E+04		2.2E+02	
	2.6E-04 C		C 1.4E-05 C			1	) Yes	Nickelocene U U VS addition Code	1271-28-9					2.2E+02			2.2E+02	
		1.6E+00	1			_	1 Yes	Nitrate	14797-55-8					3.2E+04	7.3E+06		3.2E+04	1.0E+04
		1.0E-01				1		Nitrate + Nitrite (as N) Nitrite	NA 14707 CE O					2.0E+03	4.6F+05		2.0E+03	1.0E+04 1.0E+03
		1.0E-01 1.0E-02	X 5.0E-05 X		1.85	1		Nitroaniline. 2-	14797-65-0 -88-74-4					2.0E+03 2.0E+02	3.4E+03		1.9E+02	1.02+03
2.0F-02	P	4.0E-03	P 6.0F-03 P			1		Nitroaniline, 4-10-2011 (1) (2-5)	100-01-6	3.9E+00	1.2F+02		3.8F+00	8.0F+01	2.8F+03		7.8E+01	
2.02 02	4.0E-05 I	2.0E-03	I 9.0E-03 I V		1.85		1 Yes	Nitrobenzene	98-95-3	5.52.00	1.22.02	1.4E-01	1.4E-01	4.0E+01	6.2E+02	1.9E+01	1.3E+01	
		3.0E+03	Р		-4.56	1	1 No	Nitrocellulose	9004-70-0					6.0E+07			6.0E+07	
		7.0E-02	Н		-0.47	1	1 Yes	Nitrofurantoin	-67-20-9					1.4E+03	1.6E+06		1.4E+03	
1.3E+00	C 3.7E-04 C				0.23	1		Nitrofurazone	59-87-0	6.0E-02	1.7E+01		6.0E-02					
1.7E-02	Р	1.0E-04			1.62	_	1 Yes	Nitroglycerin	55-63-0	4.6E+00	1.8E+02		4.5E+00	2.0E+00	8.7E+01		2.0E+00	
	9 9 5 0 5 5	1.0E-01	5.0E-03 P V			1		Nitroguanidine	556-88-7			6.45.01	6.45.01	2.0E+03	1.8E+06	1.05.01	2.0E+03	
	8.8E-06 P				-0.35		1 Yes	Nitromethane	75-52-5			6.4E-01	6.4E-01			1.0E+01	1.0E+01	
2.7E+01	2.7E-03 H C 7.7E-03 C		2.0E-02 I V	М	0.93 0.23	1		Nitropropane, 2- Nitroso-N-ethylurea, N-	79-46-9 759-73-9	9.3E-04	1.5E-01	2.1E-03	2.1E-03 9.2E-04			4.2E+01	4.2E+01	
1.2E+01	C 3.4E-02 C			M			1 Yes	Nitroso-N-ethylurea, N- Nitroso-N-methylurea, N-	759-73-9 684-93-5	9.3E-04 2.1Ε-04	4.6E-02		9.2E-04 2.1E-04					
5.4E+00	I 1.6E-03 I		V		2.63	1	1 Yes	Nitroso-di-N-butylamine, N-	924-16-3	1.4E-02	7.9E-02	3.5E-03	2.7E-03					
7.0E+00	I 2.0E-03 C					1		Nitroso-di-N-propylamine, N-	621-64-7	1.1E-02	3.5E-01		1.1E-02					
2.8E+00	I 8.0E-04 C				-1.28	1	1 Yes	Nitrosodiethanolamine, N-	1116-54-7	2.8E-02	8.1E+01		2.8E-02					
1.5E+02	I 4.3E-02 I			М	0.48		1 Yes	Nitrosodiethylamine, N-	55-18-5	1.7E-04	1.7E-02		1.7E-04					
5.1E+01	I 1.4E-02 I	8.0E-06	P 4.0E-05 X V	M			1 Yes	Nitrosodimethylamine, N-	62-75-9	4.9E-04	2.0E-01	1.4E-04	1.1E-04	1.6E-01	7.4E+01	8.3E-02	5.5E-02	
4.9E-03	1 2.6E-06 C					1		Nitrosodiphenylamine, N-	86-30-6	1.6E+01	5.2E+01	0.05.04	1.2E+01					
2.2E+01 6.7F+00	I 6.3E-03 C C 1.9E-03 C		V		0.04	1	1 Yes 1 Yes	Nitrosomethylethylamine, N- Nitrosomorpholine [N-]	10595-95-6 59-89-2	3.5E-03 1.2E-02	6.4E-01 5.3E+00	8.9E-04	7.1E-04 1.2E-02					
9.4E+00	C 2.7E-03 C				0.36	_	ı yes 1 yes	Nitrosomorpholine [N-] Nitrosopiperidine [N-]	59-89-2 100-75-4	1.2E-02 8.3E-03	1.1E+00		1.2E-02 8.2E-03					
2.1E+00					-0.19		1 Yes	Nitrosopyrrolidine, N-	930-55-2	3.7E-02	1.0E+01		3.7E-02					
2.12.00	. 0.11 07 1	1.0E-04	х			1		Nitrotoluene, m-	99-08-1	3.7 6 02	1.02.01		3.72 02	2.0E+00	1.4E+01		1.7E+00	
2.2E-01	P	9.0E-04	P V				1 Yes	Nitrotoluene, o-	88-72-2	3.5E-01	2.8E+00		3.1E-01	1.8E+01	1.5E+02		1.6E+01	
1.6E-02	Р	4.0E-03	Р		2.37	1	1 Yes	Nitrotoluene, p-	99-99-0	4.9E+00	3.4E+01		4.3E+00	8.0E+01	6.2E+02		7.1E+01	
		3.0E-04	X 2.0E-02 P V			1		Nonane, n-	111-84-2					6.0E+00		4.2E+01	5.3E+00	
		4.0E-02	I		2.3		1 Yes	Norflurazon	27314-13-2					8.0E+02	2.0E+04		7.7E+02	
		3.0E-03	!		8.71		.3 No	Octabromodiphenyl Ether	32536-52-0					6.0E+01	c or		6.0E+01	
		5.0E-02	T		0.16	1	1 Yes	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	2691-41-0					1.0E+03	6.3E+05		1.0E+03	

	H = HEAST; F = See FAQ; J = New Jersey; O = EPA Office of Water; E = see user guide Section 2.3		
notice) ; c = cancer; n = noncancer; * = where: n SL  Toxicity and Chemical-specific Information	100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may 6  Contaminant	cceed ceiling limit (See User Guide); s = Concentration may Carcinogenic Target Risk (TR) = 1E-06	exceed Csat (See User Guide)  Noncancer CHILD Hazard Index (HI) = 1
k RfD k kV			Ingestion SL Dermal SL Inhalation SL Noncarcinogenic SL
SFO e IUR e (mg/kg- e RfC <sub>i</sub> e o muta-		Ingestion SL Dermal SL Inhalation SL Carcinogenic SL TR=1E-06 TR=1E-06 TR=1E-06 TR=1E-06	. Child Child Child Child THQ=1 THQ=1 THQ=1 THI=1 MCL
(mg/kg-day) <sup>-1</sup> y (ug/m <sup>3</sup> ) <sup>-1</sup> y day) y (mg/m <sup>3</sup> ) y I gen LOGP GIABS FA In E	·	,,,	(μg/L) (μg/L) (μg/L) (μg/L) (ug/L)
2.0E-03 H -1.01 1 1 Ye 5.0E-02 I 3.73 1 0.9 Ye	Octamethylpyrophosphoramide 152-16- Oryzalin 19044-8		4.0E+01 1.4E+05 4.0E+01 1.0E+03 4.1E+03 8.1E+02
5.0E-02   5.75   0.9   16			1.0E+03 4.1E+03 8.1E+02 1.0E+02 9.0E+01 4.7E+01
2.5E-02 I -0.47 1 1 Ye	Oxamyl 23135-2		5.0E+02 5.1E+05 5.0E+02 2.0E+02
3.0E-03 I 4.73 1 0.8 Ye 1.3E-02 I 3.2 1 0.9 Ye	Oxyfluorfen 42874-0 Paclobutrazol 76738-6		6.0E+01 6.7E+01 3.2E+01 2.6E+02 1.7E+03 2.3E+02
4.5E-03 I -4.5 1 1 N	Paraquat Dichloride 1910-42		9.0E+01 9.0E+01
6.0E-03 H 3.83 1 0.9 Ye 5.0E-02 H V 3.83 1 1 Ye	Parathion 56-38-2 Pebulate 1114-71	2	1.2E+02 3.0E+02 8.6E+01 1.0E+03 1.3E+03 5.6E+02
4.0E-02 I 5.2 1 0.9 Ye	Pendimethalin 40487-4		8.0E+02 2.4E+02 1.8E+02
2.0E-03 I V 6.84 1 0.6 N	Pentabromodiphenyl Ether 32534-8		4.0E+01 4.0E+01
1.0E-04 I 7.66 1 0.6 N 8.0E-04 I V 5.17 1 0.9 Ye	Pentabromodiphenyl ether, 2,2',4,4',5- (BDE-99) 60348-6 Pentachlorobenzene 608-93-		2.0E+00 1.6E+01 3.9E+00 2.0E+00 3.2E+00
9.0E-02 P V 3.22 1 1 Ye	Pentachloroethane 76-01-7	8.7E-01 2.5E+00 6.5E-01	
2.6E-01 H 3.0E-03 I V 4.64 1 0.9 Ye 4.0E-01 I 5.1E-06 C 5.0E-03 I 5.12 1 0.9 Ye	Pentachloronitrobenzene 82-68-8 Pentachlorophenol 87-86-5	3.0E-01 2.0E-01 1.2E-01 1.9E-01 5.2E-02 4.1E-02	6.0E+01 4.4E+01 2.6E+01 1.0E+02 2.9E+01 2.3E+01 1.0E+00
4.0E-03 X 2.0E-03 P 2.38 1 1 Ye	Pentaerythritol tetranitrate (PETN) 78-11-5	1.9E+01 4.3E+02 1.9E+01	4.0E+01 9.6E+02 3.9E+01
1.0E+00 P V 3.39 1 1 Ye	Pentane, n- 109-66- Perchlorates		2.1E+03 2.1E+03
7.0E-04 I 1 1 Ye	~Ammonium Perchlorate 7790-98	9	1.4E+01 3.2E+03 1.4E+01
7.0E-04 I 1 1 Ye	~Lithium Perchlorate 7791-03 ~Perchlorate and Perchlorate Salts 14797-7		1.4E+01 3.2E+03 1.4E+01 1.4E+01 3.2E+03 1.4E+01 1.5E+01(F)
7.0E-04   1 1 1 Ye	Perchlorate and Perchlorate Salts 14/9/-/ Potassium Perchlorate 7778-74		1.4E+01 3.2E+03 1.4E+01 1.5E+01(F) 1.4E+01 1.6E+03 1.4E+01
7.0E-04 I 1 1 Ye	~Sodium Perchlorate 7601-89	<mark>o</mark>	1.4E+01 3.2E+03 1.4E+01
2.0E-02 P V 2.41 1 1 Ye 5.0E-02 I 6.5 1 0.6 N	Perfluorobutane Sulfonate         375-73-           Permethrin         52645-5		4.0E+02 8.3E+03 3.8E+02 1.0E+03 1.0E+03
2.2E-03 C 6.3E-07 C 1.58 1 1 Ye	Phenacetin 62-44-2	3.5E+01 1.1E+03 3.4E+01	
2.5E-01   3.59 1 0.9 Ye	Phenmedipham 13684-6		5.0E+03 1.9E+04 4.0E+03
3.0E-01 I 2.0E-01 C 1.46 1 1 Ye 5.0E-04 X 4.15 1 1 Ye	Phenol 108:95- Phenothiazine 192:84-2		6.0E+03 1.4E+05 5.8E+03 1.0E+01 7.6E+00 4.3E+00
6.0E-03 I -0.33 1 1 Ye	Phenylenediamine, m- 108:45-		1.2E+02 4.8E+04 1.2E+02
4.7E-02 H 0.15 1 1 Ye 1.9E-01 H -0.3 1 1 Ye	Phenylenediamine, o- 95-54-5 Phenylenediamine, p- 106-50-	1.7E+00 2.9E+02 1.6E+00	3.8E+03 1.4E+06 3.8E+03
1.9E-03 H 3.09 1 1 Ye	Phenylphenol, 2- 90-43-7	4.0E+01 1.2E+02 3.0E+01	
2.0E-04 H 3.56 1 0.9 Ye 3.0E-04 I V -0.71 1 1	Phorate Phosgene 75-75-44-5		4.0E+00 1.2E+01 3.0E+00
2.0E-02 I 2.78 1 1 Ye	Phosmet (732111-		4.0E+02 5.3E+03 3.7E+02
4.9E+01 P 1 1 Ye	Phosphates, Indraanic   Aluminum metaphosphate   13476-8		9.7E+05 2.2E+08 9.7E+05
4.9E+01 P 1 0 Ye	~Aluminum metaphospitate (1) 13776-8 ~Ammonium polyphosphate (68333-7		9.7E+05 2.2E+08 9.7E+05
4.9E+01 P 1 1 Ye	**Calcium pyrophosphate 7790-76		9.7E+05 2.2E+08 9.7E+05
4.9E+01 P 1 1 Ye 4.9E+01 P 1 1 Ye	~Diammonium phosphate 7783-28 ~Dicalcium phosphate 7757-93		9.7E+05     2.2E+08     9.7E+05       9.7E+05     2.2E+08     9.7E+05
4.9E+01 P 1 1 Ye	~Dimagnesium phosphate 7782-75	4	9.7E+05 2.2E+08 9.7E+05
4.9E+01 P 1 1 Ye 4.9E+01 P 1 1 Ye	**Dipotassium phosphate 7758-11 **Disodium phosphate 7558-79		9.7E+05 2.2E+08 9.7E+05 9.7E+05 2.2E+08 9.7E+05
4.9E+01 P 1 1 Ye	~Monoaluminum phosphate 13530-5	1-2	9.7E+05 2.2E+08 9.7E+05
4.9E+01 P 1 1 Ye 4.9E+01 P 1 1 Ye	~Monoammonium phosphate 7722-76 ~Monocalcium phosphate 7758-23		9.7E+05 2.2E+08 9.7E+05 9.7E+05 2.2E+08 9.7E+05
4.9E+01 P 1 1 Ye	~Monomagnesium phosphate 7757-86		9.7E+05 2.2E+08 9.7E+05
4.9E+01 P 1 1 Ye 4.9E+01 P 1 1 Ye			9.7E+05 2.2E+08 9.7E+05
4.9E+01 P 1 1 Ye 4.9E+01 P 1 1 Ye	~Monosodium phosphate 7558-80 ~Polyphosphoric acid 8017-16		9.7E+05 2.2E+08 9.7E+05 9.7E+05 2.2E+08 9.7E+05
4.9E+01 P 1 0.9 Ye	~Potassium tripolyphosphate 13845-3	i-8	9.7E+05 2.2E+08 9.7E+05
4.9E+01 P 1 1 Ye 4.9E+01 P 1 1 Ye	~Sodium acid pyrophosphate 7758-16 ~Sodium aluminum phosphate (acidic) 7785-88		9.7E+05 2.2E+08 9.7E+05 9.7E+05 2.2E+08 9.7E+05
4.9E+01 P 1 0 Ye	~Sodium aluminum phosphate (anhydrous) 10279-5	<mark>-1</mark>	9.7E+05 2.2E+08 9.7E+05
4.9E+01 P 1 0.8 Ye 4.9E+01 P 1 0.9 Ye	~Sodium aluminum phosphate (tetrahydrate) 10305-7 ~Sodium hexametaphosphate 10124-5		9.7E+05 2.2E+08 9.7E+05 9.7E+05 2.2E+08 9.7E+05
4.9E+01 P 1 1 Ye	~Sodium polyphosphate 68915-3	.1	9.7E+05 2.2E+08 9.7E+05
4.9E+01 P 1 1 Ye	~Sodium trimetaphosphate 7785-84		9.7E+05 2.2E+08 9.7E+05
4.9E+01 P 1 1 Ye 4.9E+01 P 1 1 Ye	~Sodium tripolyphosphate 7758-29 ~Tetrapotassium phosphate 7320-34	5	9.7E+05 2.2E+08 9.7E+05 9.7E+05 2.2E+08 9.7E+05
4.9E+01 P 1 1 Ye			9.7E+05 2.2E+08 9.7E+05

Key: I = IRIS; P = PPRTV; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #27); H										ied (See User Guide	for Arsenic
notice) ; c = cancer; n = noncancer; * = where: n SL <  Toxicity and Chemical-specific Information	LOOX c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentrat	ion may excee			uide); s = Co rget Risk (TR		exceed Csat			ard Index (HI) = 1	
Toxicity and chemical-specific miorination	Contaminant		Cart	inogenic ra	iget Nisk (TN	) = 1L-00	Ingestion SI	IDermal SI	Inhalation SL	Noncarcinogenic S	
k k RfD <sub>o</sub> k k v			Ingestion SL	Dermal SL I	Inhalation SL	Carcinogenic SL	Child	Child	Child	Child	
SFO e IUR e (mg/kg- e RfC <sub>i</sub> e o muta-			TR=1E-06	TR=1E-06	TR=1E-06	TR=1E-06	THQ=1	THQ=1	THQ=1	THI=1	MCL
(mg/kg-day) <sup>-1</sup> y (ug/m <sup>3</sup> ) <sup>-1</sup> y day) y (mg/m <sup>3</sup> ) y I gen LOGP GIABS FA In EPD	? Analyte	CAS No.	(μg/L)	(µg/L)	(μg/L)	(μg/L)	(µg/L)	(μg/L)	(μg/L)	(μg/L)	(ug/L)
4.9E+01 P 1 0.8 Yes	~Trialuminum sodium tetra decahydrogenoctaorthophosphate (dihydrate)	15136-87-5					9.7E+05	2.2E+08		9.7E+05	
4.9E+01 P 1 1 Yes	~Tricalcium phosphate	7758-87-4					9.7E+05	2.2E+08		9.7E+05	
4.9E+01 P 1 1 Yes	~Trimagnesium phosphate	7757-87-1					9.7E+05	2.2E+08		9.7E+05	
4.9E+01 P 1 1 Yes	~Tripotassium phosphate	7778-53-2					9.7E+05	2.2E+08		9.7E+05	
4.9E+01 P 1 1 Yes	~Trisodium phosphate	7601-54-9					9.7E+05	2.2E+08		9.7E+05	
3.0E-04   3.0E-04   V -0.27   1   Yes	Phosphine	7803-51-2					6.0E+00	1.4E+03	6.3E-01	5.7E-01	
4.9E+01 P 1.0E-02 I 1 1 Yes	Phosphoric Acid	7664-38-2					9.7E+05	2.2E+08		9.7E+05	
2.0E-05 I V 3.08 1 1 Yes	Phosphorus, White Phthalates	7723-14-0					4.0E-01	9.1E+01		4.0E-01	
4.45.00	,	447.04.7	5.55.00			F CF 00	4.05.00			4.05.00	5.05.00
1.4E-02   2.4E-06 C 2.0E-02   7.6   1 0.8 No	~Bis(2-ethylhexyl)phthalate	117-81-7	5.6E+00			5.6E+00	4.0E+02			4.0E+02	6.0E+00
1.0E+00 I 4.15 1 0.9 Yes 1.0E-01 I 4.5 1 0.9 Yes	~Butylphthalyl Butylglycolate ~Dibutyl Phthalate	85-70-1 84-74-2					2.0E+04 2.0E+03	4.1E+04 1.6E+03		1.3E+04 9.0E+02	
8.0E-01   2.42 1 1 Yes	~Diethyl Phthalate	84-66-2					1.6F+04	2.0E+05		1.5E+04	
	~Direthylterephthalate	120-61-6					2.0E+03	2.0E+05 2.7E+04		1.9E+03	
1.0E-01 I V 2.25 1 1 Yes 1.0F-02 P 8.1 1 0 No	**Octvl Phthalate. di-N-	117-84-0					2.0E+03 2.0F+02	2.75+04		2.0E+03	
1.0E+00 H 2 1 1 Yes	~Phthalic Acid, P-	100-21-0					2.0E+02	3.3E+05		1.9E+04	+
1.0E+00 H 2 1 1 Yes 2.0E+00 I 2.0E-02 C 1.6 1 1 Yes	~Phthalic Acid, P- ~Phthalic Anhydride	100-21-0 85-44-9					4.0E+04	3.3E+05 1.1E+06		1.9E+04 3.9E+04	
7.0E-02   1.9 1 1 Yes	Picloram	85-44-9 1918-02-1					1.4E+03	4.3E+04		1.4E+03	5.0E+02
1.0E-04 X 0.93 1 1 Yes		96-91-3					2.0E+00	2.1E+02		2.0E+00	5.02.02
9.0E-04 X 0.93 1 1 Yes	Picramic Acid (2-Amino-4,6-dinitrophenol) Picric Acid (2,4,6-Trinitrophenol)	96-91-3 88-89-1					1.8E+01	1.2E+03		1.8E+01	
9.0E-04 X 1.44 1 1 Yes 1.0E-02 I 4.2 1 0.9 Yes	Pirimiphos, Methyl	29232-93-7					2.0E+01	3.1E+02		1.8E+01 1.2E+02	
3.0E+01 C 8.6E-03 C 7.0E-06 H 1 0 No	Polybrom in ated Biphenyls	59536-65-1	2.6E-03			2.6E-03	1.4E-01	5.12.02		1.4E-01	+
3.02.01 C 3.02.03 C 7.02-00 H	Polychlorinated Biphenyls (PCBs)	3330-03-1	2.02-03			2.01-03	1.41-01			1.46-01	
7.0E-02 S 2.0E-05 S 7.0E-05 I V 5.69 1 0 No	~Arodor 1016	12674-11-2	1.1E+00		2.8E-01	2.2E-01	1.4E+00			1.4E+00	
2.0E+00 S 5.7E-04 S V 4.65 1 1 Yes	~Arodor 1221	11104-28-2	3.9E-02	1.2E-02	9.8E-03	4.7E-03	1.12.00			1.12.00	+
2.0E+00 S 5.7E-04 S V 4.4 1 1 Yes	~Arodor 1232	11141-16-5	3.9E-02	1.2E-02 1.2E-02	9.8E-03	4.7E-03					Al .
2.0E+00 S 5.7E-04 S V 6.34 1 0.7 No	"Arodor 1242"	53469-21-9	3.9E-02	1.22 02	9.8E-03	7.8E-03					Al .
2.0E+00 S 5.7E-04 S V 6.2 1 0 No	~Aroclor 1248	12672-29-6	3.9E-02		9.8E-03	7.8E-03					_
2.0E+00 S 5.7E-04 S 2.0E-05 I V 6.5 1 0.5 No	*Arodor 1254	11097-69-1	3.9E-02		9.8E-03	7.8E-03	4.0E-01			4.0E-01	
2.0E+00 S 5.7E-04 S V 7.55 1 0 No	~Arodor 1260	11096-8245	3.9E-02		9.8E-03	7.8E-03	4.02 01			4.02 01	
6.0E-04 X V 6.34 1 0.7 No	~Arodor 5460	11126-42-4					1.2E+01			1.2E+01	_
3.9E+00 E 1.1E-03 E 2.3E-05 E 1.3E-03 E V 8.27 1 0 No	~Heptachlorobiphenyl, 2,3,3',4,4',5,5'- (PCB 189)	39635-31-9	2.0E-02		4.9E-03	4.0F-03	4.7E-01		2.8E+00	4.0E-01	
3.9E+00 E 1.1E-03 E 2.3E-05 E 1.3E-03 E V 7.5 1 0 No	~Hexachlorobiphenyl, 2,3',4,4',5,5'- (PCB 167)	52663-72-6	2.0E-02		4.9E-03	4.0E-03	4.7E-01		2.8E+00	4.0E-01	Al .
3.9E+00 E 1.1E-03 E 2.3E-05 E 1.3E-03 E V 7.6 1 0 No	~Hexachlorohiphenyl, 2, 3, 3', 4, 4', 5', (PCB 157).	-69782-90-7	2.0E-02		4.9E-03	4.0E-03	4.7E-01		2.8E+00	4.0E-01	_
3.9E+00 E 1.1E-03 E 2.3E-05 E 1.3E-03 E V 7.6 1 0 No	~Hexachlorobīphehyī, 2,3,3',4,4',5-(POB 456)	38380-08-4	2.0E-02		4.9E-03	4.0E-03	4.7E-01		2.8E+00	4.0E-01	Al .
3.9E+03 E 1.1E+00 E 2.3E-08 E 1.3E-06 E V 7.41 1 0.1 No	~Hexachlorobiphenyl, 3,3',4,4',5,5' (PCB 169)	32774-16-6	2.0E-05		4.9E-06	4.0E-06	4.7E-04		2.8E-03	4.0E-04	
3.9E+00 E 1.1E-03 E 2.3E-05 E 1.3E-03 E V 6.98 1 0.4 No	~Pentachlorobiphenyl, 2, 3,4,4',5! (PCB 123)	65510-44-3	2.0F-02		4.9E-03	4.0E-03	4.7E-01		2.8E+00	4.0F-01	1
3.9E+00 E 1.1E-03 E 2.3E-05 E 1.3E-03 E V 7.12 1 0.3 No	"Pentachlorobiphenyl, 2)3],4,4',5\ [PCB'118]	-31508-00-6	2.0E-02		4.9E-03	4.0E-03	4.7E-01		2.8E+00	4.0E-01	
3.9E+00 E 1.1E-03 E 2.3E-05 E 1.3E-03 E V 6.79 1 0.5 No	"Pentachlorobiphenyl, 2,3,3',4,4'- (PCB 105)	32598-14-4	2.0E-02		4.9E-03	4.0E-03	4.7E-01		2.8E+00	4.0E-01	
3.9E+00 E 1.1E-03 E 2.3E-05 E 1.3E-03 E V 6.98 1 0.4 No	~Pentachlorobiphenyl, 2,3,4,4',5- (PCB 114)	74472-37-0	2.0E-02		4.9E-03	4.0E-03	4.7E-01		2.8E+00	4.0E-01	
1.3E+04 E 3.8E+00 E 7.0E-09 E 4.0E-07 E V 6.98 1 0.4 No	~Pentachlorobiphenyl, 3,3',4,4',5- (PCB 126)	57465-28-8	6.0E-06		1.5E-06	1.2E-06	1.4E-04		8.3E-04	1.2E-04	
2.0E+00   5.7E-04   V 7.1 1 0.7	~Polychlorinated Biphenyls (high risk)	1336-36-3									
4.0E-01   1.0E-04   V 7.1 1 0.7 No	~Polychlorinated Biphenyls (low risk)	1336-36-3	1.9E-01		5.6E-02	4.4E-02					5.0E-01
7.0E-02   2.0E-05   V 7.1 1 0.7	~Polychlorinated Biphenyls (lowest risk)	1336-36-3									
1.3E+01 E 3.8E-03 E 7.0E-06 E 4.0E-04 E 6.63 1 0.6 No	~Tetrachlorobiphenyl, 3,3',4,4'- (PCB 77)	32598-13-3	6.0E-03			6.0E-03	1.4E-01			1.4E-01	
3.9E+01 E 1.1E-02 E 2.3E-06 E 1.3E-04 E V 6.34 1 0.7 No	~Tetrachlorobiphenyl, 3,4,4',5- (PCB 81)	70362-50-4	2.0E-03		4.9E-04	4.0E-04	4.7E-02		2.8E-01	4.0E-02	
6.0E-04 I 10.46 1 0 No	Polymeric Methylene Diphenyl Diisocyanate (PMDI)	9016-87-9									
	Polynuclear Aromatic Hydrocarbons (PAHs)										
6.0E-02 I V 3.92 1 1 Yes	~Acenaphthene	83-32-9					1.2E+03	9.6E+02		5.3E+02	
3.0E-01 I V 4.45 1 1 Yes	~Anthracene	120-12-7					6.0E+03	2.5E+03		1.8E+03	
7.3E-01 E 1.1E-04 C V M 5.76 1 1 No	~Benz[a]anthracene	56-55-3	3.4E-02		1.8E-02	1.2E-02					
1.2E+00 C 1.1E-04 C 6.11 1 0.9 No	~Benzo(j)fluoranthene	205-82-3	6.5E-02			6.5E-02					
7.3E+00 I 1.1E-03 C M 6.13 1 1 No	~Benzo[a]pyrene	50-32-8	3.4E-03			3.4E-03					2.0E-01
7.3E-01 E 1.1E-04 C M 5.78 1 1 No	~Benzo[b]fluoranthene	205-99-2	3.4E-02			3.4E-02					
7.3E-02 E 1.1E-04 C M 6.11 1 0.9 No	~Benzo[k]fluoranthene	207-08-9	3.4E-01			3.4E-01					
8.0E-02 I V 3.9 1 1 Yes	~Chloronaphthalene, Beta-	91-58-7					1.6E+03	1.4E+03		7.5E+02	
7.3E-03 E 1.1E-05 C M 5.81 1 1 No	~Chrysene	218-01-9	3.4E+00			3.4E+00					
7.3E+00 E 1.2E-03 C M 6.75 1 0.6 No	~Dibenz[a,h]anthracene	53-70-3	3.4E-03			3.4E-03					
1.2E+01 C 1.1E-03 C 7.71 1 0.3 No	~Dibenzo(a,e)pyrene	192-65-4	6.5E-03			6.5E-03					
2.5E+02 C 7.1E-02 C M 5.8 1 0.9 No	~Dimethylbenz(a)anthracene, 7,12-	57-97-6	1.0E-04			1.0E-04					
4.0E-02 I 5.16 1 1 No	~Fluoranthene	206-44-0					8.0E+02			8.0E+02	
4.0E-02 I V 4.18 1 1 Yes	~Fluorene	86-73-7					8.0E+02	4.6E+02		2.9E+02	
7.3E-01 E 1.1E-04 C M 6.7 1 0.6 No	~Indeno[1,2,3-cd]pyrene	193-39-5	3.4E-02			3.4E-02					
2.9E-02 P 7.0E-02 A V 3.87 1 1 Yes	~Methylnaphthalene, 1-	90-12-0	2.7E+00	2.0E+00		1.1E+00	1.4E+03	1.1E+03		6.2E+02	

Key: I = IRIS;	; P = PPRTV; A = AT								= HEAST; F = See FAQ; J = New Jersey; O = EPA Office of Water; E = see user guide Se									ed (See User Guide f	for Arsenic
	Tovi		notice) ; c = ca emical-specifi			er; * = wh	iere: n	SL < 1	00X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentrat Contaminant	ion may excee			Guide); s = Coi arget Risk (TR)		exceed Csat (			rd Index (HI) = 1	
	11	city and cin	ennical-specifi	ic iiiioiiiia	tion	1 1			Containinant		Cart	inogenic ra	arget Nisk (TN)	- 1L-00	Ingestion SL	Dermal SL	Inhalation SL	Noncarcinogenic SL	
	k k	RfD <sub>o</sub>	k I	k v							Ingestion SL	Dermal SL	Inhalation SL	Carcinogenic SL	Child	Child	Child	Child	
SFO	e IUR e	(mg/kg-	e RfC <sub>i</sub>	e o muta	-						TR=1E-06	TR=1E-06	TR=1E-06	TR=1E-06	THQ=1	THQ=1	THQ=1	THI=1	MCL
(mg/kg-day)	<sup>-1</sup> y (ug/m <sup>3</sup> ) <sup>-1</sup> y	day)	y (mg/m <sup>3</sup> )	y I gen	LOGP	GIABS	FA II	EPD?	Analyte	CAS No.	(μg/L)	(µg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(ug/L)
		4.0E-03	1	V	3.86			Yes	~Methylnaphthalene, 2-	91-57-6					8.0E+01	6.5E+01		3.6E+01	
		2.0E-02	I 3.0E-03	I V	3.3			Yes	~Naphthalene	91-20-3			1.7E-01	1.7E-01	4.0E+02	7.0E+02	6.3E+00	6.1E+00	
1.2E+00	C 1.1E-04 C	3.0E-02		٧	4.75 4.88			Yes Yes	~Nitropyrene, 4- ~Pyrene	57835-92-4 129-00-0	6.5E-02	2.7E-02		1.9E-02	6.0E+02	1.5E+02		1.2E+02	
			P	•	-0.33	1		Yes	Potassium Perfluorobutane Sulfonate	29420-49-3					4.0E+02	2.8E+05		4.0E+02	
1.5E-01	1	9.0E-03	1		4.1	1		Yes	Prochloraz	67747-09-5	5.2E-01	1.4E+00		3.8E-01	1.8E+02	5.1E+02		1.3E+02	
		6.0E-03	Н	V	5.58	1	0.8	Yes	Profluralin	26399-36-0					1.2E+02	3.3E+01		2.6E+01	
		1.5E-02	1		2.99	1	1	Yes	Prometon	1610-18-0					3.0E+02	1.6E+03		2.5E+02	
		4.0E-03	1		3.51			Yes	Prometryn	7287-19-6					8.0E+01	2.3E+02		6.0E+01	
		1.3E-02	1		2.18 1.52			Yes	Propachlor	1918-16-7					2.6E+02 8.0E+01	4.3E+03		2.5E+02	
		4.0E-03 5.0E-03	<u> </u>		3.07			Yes	Propanediol, 1,2- Propanil	114-26-1 709-98-8					1.0F+02	3.6E+03 4.4E+02		7.8E+01 8.2E+01	
		2.0F-02	i		5.07			Yes	Propagite	2312-35-8					4.0F+02	2.7E+02		1.6F+02	
		2.0E-03	1	V	-0.38	_		Yes	Propargyl Alcohol	107-19-7					4.0E+01	1.2E+04		4.0E+01	
		2.0E-02	T		2.93	1	1	Yes	Propazine	139-40-2					4.0E+02	2.4E+03		3.4E+02	
		2.0E-02	1		2.6			Yes	Propham	122-42-9					4.0E+02	2.8E+03		3.5E+02	
		1.3E-02	1		3.72			Yes	Propiconazole	60207-90-1					2.6E+02	1.1E+03		2.1E+02	
		4.05.04	8.0E-03		0.59			Yes	Propionaldehyde	123-38-6					2.05.02	1.05.00	1.7E+01	1.7E+01	
		1.0E-01	X 1.0E+00 X 3.0E+00 (		3.69 1.77	-		Yes Yes	Propyl benzene Propylene	103-65-1 115-07-1					2.0E+03	1.8E+03	2.1E+03 6.3E+03	6.6E+02 6.3E+03	
		2.0E+01		•	-0.92			Yes	Propylene Glycol	57-55-6					4.0E+05	3.2E+08	0.32103	4.0E+05	
		2.02.01	2.7E-04 /	A	1.83			Yes	Propylene Glycol Dinitrate	6423-43-4					4.02.03	3.22.08		4.02.03	
		7.0E-01	H 2.0E+00		-0.49			Yes	Propylene Glycol Monomethyl Ether	107-98-2					1.4E+04	3.9E+06	4.2E+03	3.2E+03	
2.4E-01	I 3.7E-06 I		3.0E-02	I V	0.03	1	1	Yes	Propylene Oxide	75-56-9	3.2E-01	4.7E+01	1.5E+00	2.7E-01			6.3E+01	6.3E+01	
		7.5E-02	1		3.43			Yes	Propyzamide	23950-58-5						5.5E+03		1.2E+03	
		1.0E-03	ļ	V	0.65			Yes	Pyridine C	110-86-1					2.0E+01	1.5E+03		2.0E+01	
2.05.00		5.0E-04	1		4.44			Yes	Quinalphos (// )	13593-03-8	2.65.02	2.05.04		2.45.02	1.0E+01	1.0E+01		5.1E+00	
3.0E+00	'	9.0E-03	1		2.03 4.28			Yes Yes	Quinoline Quizalofop-ethyl	91-22-5 76578-14-8	2.6E-02	2.9E-01		2.4E-02	1.8E+02	3.8E+02		1.2E+02	
		J.OL 03	3.0E-02 /	Δ	4.20			Yes	Refractory Ceramic Fibers	NA.					1.01.02	3.02.102		1.21.02	
		3.0E-02	1	•	6.14		-	Yes	Resmethrin	10453-86-8					6.0E+02	7.6E+01		6.7E+01	
		5.0E-02	Н	V	4.88	1	0.8	Yes	Ronnel	299-84-3					1.0E+03	6.8E+02		4.1E+02	
		4.0E-03	1		4.1	1	0.9	Yes	Rotenone	83-79-4					8.0E+01	2.6E+02		6.1E+01	
2.2E-01	C 6.3E-05 C			M	3.45			Yes	Safrole Carrest O O CO	-94-59-7	1.1E-01	6.0E-01		9.6E-02					
		5.0E-03	<u> </u>	_				Yes	Selenious Acid (	7783-00-8					1.0E+02	2.3E+04		1.0E+02	
			I 2.0E-02 ( C 2.0E-02 (					Yes Yes	Selenium Selenium Sulfide	7782-49-2 7445-34-6					1.0E+02 1.0E+02	2.3E+04 2.3E+04		1.0E+02 1.0E+02	5.0E+01
		9.0E-03	C 2.0E-02 (	L	4.38	_	-	Yes	Sethoxydim	<b>-740</b> 51-80-2					1.8E+03	2.4E+03		1.0E+03	
			3.0E-03 (	С				Yes	Silica (crystalline, respirable)	7631-86-9									
		5.0E-03	1					Yes	Silver	7440-22-4					1.0E+02	1.5E+03		9.4E+01	
1.2E-01	Н	5.0E-03	1		2.18			Yes	Sim azine	122-34-9	6.5E-01	9.3E+00		6.1E-01	1.0E+02	1.6E+03		9.4E+01	4.0E+00
		1.3E-02	T		0.37	_	-	Yes	Sodium Acifluorfen	62476-59-9					2.6E+02	2.1E+05		2.6E+02	
E OF 01	C 15F01 C	4.0E-03	C 205.04 (	с м				Yes	Sodium Azide	26628-22-8	E 05 03	2 25 01		4.15.03	8.0E+01	1.8E+04		8.0E+01	
	C 1.5E-01 C		C 2.0E-04 (	C IVI	1./2	0.025		Yes	Sodium Dichromate	10588-01-9	5.0E-02	2.3E-01		4.1E-02	4.0E+02	2.3E+03		3.4E+02	
2.7E-01	11	3.0E-02 5.0E-02	A 1.3E-02 (	С	-1.43			Yes Yes	Sodium Diethyldithiocarbamate Sodium Fluoride	148-18-5 7681-49-4	2.9E-01	8.5E+02		2.9E-01	6.0E+02 1.0E+03	1.9E+06 2.3E+05		6.0E+02 1.0E+03	
		2.0E-05	/ 1.3L-02 (		-3.78			No	Sodium Fluoroacetate	62-74-8					4.0E-01	2.32+03		4.0E-01	
		1.0E-03	Н				1	Yes	Sodium Metavanadate	13718-26-8					2.0E+01	4.6E+03		2.0E+01	
		0.02 0.	P				1	Yes	Sodium Tungstate	13472-45-2					1.6E+01	3.6E+03		1.6E+01	
		8.0E-04	Р					Yes	Sodium Tungstate Dihydrate	10213-10-2					1.6E+01	3.6E+03		1.6E+01	
	H	3.0E-02	0.005.01		3.53			Yes	Stirofos (Tetrachlorovinphos)	961-11-5	3.2E+00	1.9E+01		2.8E+00	6.0E+02	3.8E+03		5.2E+02	
5.0E-01	C 1.5E-01 C	2.0E-02 6.0E-01	C 2.0E-04 (	с м				Yes Yes	Strontium Chromate Strontium, Stable	7789-06-2 7440-24-6	5.0E-02	2.3E-01		4.1E-02	4.0E+02 1.2E+04	2.3E+03 2.7E+06		3.4E+02 1.2E+04	
		3.0E-04	1		1.93	1		Yes	Strychnine	57-24-9					6.0E+00	3.2E+02		5.9E+00	
			I 1.0E+00	I V	2.95			Yes	Styrene	100-42-5					4.0E+03	1.0E+04	2.1E+03	1.2E+03	1.0E+02
		3.0E-03	Р		3.1			Yes	Styrene-Acrylonitrile (SAN) Trimer	NA NA					6.0E+01	2.4E+02	-	4.8E+01	
			P 2.0E-03	Х	-0.77			Yes	Sulfolane	126-33-0					2.0E+01	1.7E+04		2.0E+01	
		8.0E-04			3.9			Yes	Sulfonylbis(4-chlorobenzene), 1,1'-	80-07-9					1.6E+01	3.5E+01		1.1E+01	
			1.0E-03 (						Sulfur Trioxide	7446-11-9							2.1E+00	2.1E+00	
2 55 02	I 7.1E-06 I	E 0E 02	1.0E-03 (	L	4.82		-	Yes	Sulfuric Acid Sulfurous acid, 2-chloroethyl 2-[4-(1,1-dimethylethyl)phenoxy]-1-methylethyl ester	7664-93-9	3.1E+00	2 25+00		1.3E+00	1.0E+03	8.2E+02		4.5E+02	
2.3t-U2	1 /.1E-UD	3.0E-02	Н		3.3			Yes Yes	Sulfurous acid, 2-chloroethyl 2-[4-(1,1-dimethylethyl)phenoxy]-1-methylethyl ester TCMTB	21564-17-0	3.1c+00	2.32+00		1.55+00	6.0E+03	8.2E+02 2.4E+03		4.5E+02 4.8E+02	
		7.0E-02	T		1.79			Yes	Tebuthiuron	34014-18-1					1.4E+03	4.7E+04		1.4E+03	
		2.0E-02	Н		5.96				Temephos	3383-96-8					4.0E+02			4.0E+02	
-											-				•				

					= HEAST; F = See FAQ; J = New Jersey; O = EPA Office of Water; E = see user guide Se									ed (See User Guide	for Arsenic
	otice) ; c = cancer; n mical-specific Inforn		* = where:	n SL < 1	00X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentrat Contaminant	ion may excee			iuide); s = Co irget Risk (TR)		exceed Csat (			rd Index (HI) = 1	
Toxicity and che	illical specific illion	nation			Contaminant		Care	inogenie ra	inger Nisk (TN	- 12 00	Ingestion SL	Dermal SL	Inhalation SL	Noncarcinogenic SL	
k k RfD <sub>o</sub>	k k v						Ingestion SL	Dermal SL	Inhalation SL	Carcinogenic SL	Child	Child	Child	Child	
SFO e IUR e (mg/kg-	e RfC <sub>i</sub> e o mu	ıta-					TR=1E-06	TR=1E-06	TR=1E-06	TR=1E-06	THQ=1	THQ=1	THQ=1	THI=1	MCL
(mg/kg-day) <sup>-1</sup> y (ug/m <sup>3</sup> ) <sup>-1</sup> y day)	y (mg/m³) y I ge	en LOGP (	GIABS FA	In EPD?	Analyte	CAS No.	(μg/L)	(µg/L)	(μg/L)	(µg/L)	(μg/L)	(μg/L)	(µg/L)	(μg/L)	(ug/L)
1.3E-02	I	1.89	1 1	Yes	Terbacil	5902-51-2					2.6E+02	7.0E+03	-	2.5E+02	
2.5E-05	H V	4.48	1 0.9	Yes	Terbufos	13071-79-9					5.0E-01	4.5E-01		2.4E-01	
1.0E-03	L	3.74	1 0.9	Yes	Terbutryn	886-50-0					2.0E+01	4.1E+01		1.3E+01	
1.0E-04	I	****	1 0.6	No	Tetrabromodiphenyl ether, 2,2',4,4'- (BDE-47)	5436-43-1					2.0E+00			2.0E+00	
3.0E-04	I V	4.64	1 1	Yes	Tetrachlorobenzene, 1,2,4,5-	95-94-3					6.0E+00	2.4E+00		1.7E+00	
2.6E-02   7.4E-06   3.0E-02	I V		1 1	Yes	Tetrachloroethane, 1,1,1,2-	630-20-6	3.0E+00	1.1E+01	7.6E-01	5.7E-01	6.0E+02	2.4E+03		4.8E+02	
2.0E-01   5.8E-05 C 2.0E-02			1 1	Yes	Tetrachloroethane, 1,1,2,2-	79-34-5	3.9E-01	3.3E+00	9.7E-02	7.6E-02	4.0E+02	3.6E+03	0.05.04	3.6E+02	F 05 00
2.1E-03   2.6E-07   6.0E-03 3.0E-02	I 4.0E-02 I V	3.4 4.45	1 1 1 0.9	Yes	Tetrachloroethylene Tetrachlorophenol, 2,3,4,6-	127-18-4 58-90-2	3.7E+01	6.5E+01	2.2E+01	1.1E+01	1.2E+02 6.0E+02	2.3E+02 3.9E+02	8.3E+01	4.1E+01 2.4E+02	5.0E+00
2.0E+01 H	' v			Yes	Tetrachlorotoluene, p- alpha, alpha-	5216-25-1	3.9E-03	2.0E-03		1.3E-03	0.UE+U2	3.96+02		2.46+02	
5.0E-04	· ·	3.99	1 0.9	Yes	Tetraethyl Dithiopyrophosphate	3689-24-5	3.52 05	2.02 03		1.52 03	1.0E+01	2.4E+01		7.1E+00	1
3.02 04	8.0E+01 I V		1 1	Yes	Tetrafluoroethane, 1,1,1,2-	811-97-2					1.02.01	2.42.01	1.7F+05	1.7F+05	
2.0E-03	P	1.64	1 1	Yes	Tetryl (Trinitrophenylmethylnitramine)	479-45-8					4.0E+01	2.5E+03	1.72.03	3.9E+01	
7.0E-06	Х		1 1	Yes	Thallium (I) Nitrate	10102-45-1					1.4E-01	3.2E+01		1.4E-01	
	X		1 1	Yes	Thallium (Soluble Salts)	7440-28-0					2.0E-01	4.6E+01		2.0E-01	2.0E+00
	x v	-0.17	1 1	Yes	Thallium Acetate	563-68-8					1.2E-01	1.0E+02		1.2E-01	
	X V	-0.86	1 1	Yes	Thallium Carbonate	6533-73-9					4.0E-01	3.7E+03		4.0E-01	
5.52 55	х		1 1	Yes	Thallium Chloride	7791-12-0					1.2E-01	2.7E+01		1.2E-01	
	X		1 0.9	Yes	Thallium Sulfate	7446-18-6					4.0E-01	9.1E+01		4.0E-01	
1.3E-02	I Total		1 1	Yes	Thifensulfuron-methyl	79277-27-3					2.6E+02	3.5E+04		2.6E+02	
1.0E-02	I		1 0.9		Thiohencarh	28249-77-6 111-48-8					2.0E+02	7.7E+02		1.6E+02	
7.0E-02	Х		1 1	Yes	Thiodiglycol						1.4E+03	9.7E+05		1.4E+03	
3.0E-04	H		1 1	Yes	Thirdney Mathel	39196-18-4					6.0E+00	4.4E+01		5.3E+00	
8.0E-02 5.0E-03			1 1	Yes Yes	Thiophanate, Methyl Thiram	23564-05-8 137-26-8					1.6E+03 1.0E+02	2.1E+05 4.0E+03		1.6E+03 9.8E+01	
	1	1.75			Tie	7440-31-5									
6.0E-01	1.0E-04 A V		1 1 1	Yes	Titanium Tetrachloride	7550-45-0					1.2E+04	2.7E+06	2.1E-01	1.2E+04 2.1E-01	
8 0F-02	I 5.0E+00 I V	2.73	1 1	Yes	Toluene Toluene Toluene	108-88-3					1.6F+03	5.3E+03	1.0E+04	1.1E+03	1.0E+03
	X	0.16	1 1	Yes	Toluene-2,5-diamihe	95-70-5	4.3E-01	8.2E+01		4.3E-01	4.0E+00	8.3E+02	1.02.01	4.0E+00	1.02.05
3.0E-02 P 4.0E-03	• •		1 1	Yes	Toluidine, p- U U V	106-49-0	2.6E+00	6.8E+01		2.5F+00	8.0F+01	2.3E+03		7.7E+01	
3.0E+00	P V	6.1	1 1	No	Total Petroleum Hydrocarbons (Aliphatic High)	NA					6.0E+04			6.0E+04	
	6.0E-01 P V	3.9	1 1	Yes	Total Petroleum Hydrocarbons (Aliphatic Low)	NA							1.3E+03	1.3E+03	
1.0E-02	X 1.0E-01 P V	5.65	1 1	No	Total Petroleum Hydrocarbons (Aliphatic Medium)	NA					2.0E+02		2.1E+02	1.0E+02	
4.0E-02	P	5.16	1 1	No	Total Petroleum-Hydrocarbons (Aromatic-High)	-NA					8.0E+02			8.0E+02	
4.0E-03	P 3.0E-02 P V	2.13	1 1	Yes	Total Petroleum Hydrocarbons (Aromátic Low)	NA i					8.0E+01	6.1E+02	6.3E+01	3.3E+01	
	P 3.0E-03 P V		1 1	Yes	Total Petroleum Hydrocarbons (Aromatic Medium)	NΑ					8.0E+01	9.0E+01	6.3E+00	5.5E+00	
1.1E+00   3.2E-04		5.9	1 0.8	No	Toxaphene // CCCCC	8001-35-2	7.1E-02			7.1E-02					3.0E+00
7.5E-03	I		1 0.5	No	Tralomethrin (4) (4) (4) (5)	_66841-25-6					1.5E+02			1.5E+02	
3.0E-04	A V	4.1	1 0.9	Yes	Tri-n-butyltin	688-73-3					6.0E+00	9.9E+00 5.3E+08		3.7E+00	
8.0E+01	^		1 1	Yes	Triacetin	102-76-1					1.6E+06	0.02.00		1.6E+06	
3.0E-02 1.3E-02	I V	2.77 4.6	1 1 1 0.9	Yes	Trialdimefon Triallate	43121-43-3 2303-17-5					6.0E+02 2.6F+02	6.9E+03 2.2E+02		5.5E+02 1.2F+02	
1.3E-02 1.0E-02	V	4.6 1.1	1 0.9	Yes	Triasulfuron	2303-17-5 82097-50-5					2.6E+02 2.0E+02	6.0F+04		1.2E+02 2.0E+02	
8.0E-03	1	0.78	1 1	Yes	Tribenuron-methyl	101200-48-0	$\vdash$				1.6E+02	5.0E+03		1.6E+02	
5.0E-03	I V		1 0.9		Tribromobenzene, 1,2,4-	615-54-3					1.0E+02	8.1E+01		4.5E+01	
9.0E-03 P 1.0E-02	P	4		Yes	Tributyl Phosphate	126-73-8	8.7E+00	1.3E+01		5.2E+00	2.0E+02	3.3E+02		1.2E+02	
3.0E-04	Р		1 0	No	Tributyltin Compounds	NA					6.0E+00			6.0E+00	
3.0E-04	I	4.05	1 1	Yes	Tributyltin Oxide	56-35-9					6.0E+00	9.5E+01		5.7E+00	
3.0E+01	I 3.0E+01 H V	3.16	1 1	Yes	Trichloro-1,2,2-trifluoroethane, 1,1,2-	76-13-1					6.0E+05	1.9E+06	6.3E+04	5.5E+04	
7.0E-02 I 2.0E-02	I .	1.33	1 1	Yes	Trichloroacetic Acid	76-03-9	1.1E+00	4.6E+01		1.1E+00	4.0E+02	1.8E+04		3.9E+02	6.0E+01
2.9E-02 H			1 1	Yes	Trichloroaniline HCl, 2,4,6-	33663-50-2	2.7E+00	3.7E+03		2.7E+00					
7.0E-03 X 3.0E-05	X	0.00	1 1	Yes	Trichloroaniline, 2,4,6-	634-93-5	1.1E+01	2.0E+01		7.1E+00	6.0E-01	1.2E+00		4.0E-01	
8.0E-04		4.05	1 1	Yes	Trichlorobenzene, 1,2,3-	87-61-6					1.6E+01	1.3E+01		7.0E+00	
	I 2.0E-03 P V		1 1	Yes	Trichlorobenzene, 1,2,4-	120-82-1	2.7E+00	2.0E+00		1.2E+00	2.0E+02	1.6E+02	4.2E+00	4.0E+00	7.0E+01
	I 5.0E+00 I V	2.49	1 1	Yes	Trichloroethane, 1,1,1-	71-55-6					4.0E+04	2.5E+05	1.0E+04	8.0E+03	2.0E+02
	I 2.0E-04 X V	1.89	1 1	Yes	Trichloroethane, 1,1,2-	79-00-5	1.4E+00	2.0E+01	3.5E-01	2.8E-01	8.0E+01	1.3E+03	4.2E-01	4.1E-01	5.0E+00
4.6E-02   4.1E-06   5.0E-04 3.0F-01	I 2.0E-03 I V N	VI 2.42 2.53	1 1 1 1	Yes	Trichloroethylene Trichlorofluoromethane	79-01-6 75-69-4	1.2E+00	7.4E+00	9.6E-01	4.9E-01	1.0E+01 6.0F+03	6.9E+01 3.6F+04	4.2E+00	2.8E+00 5.2E+03	5.0E+00
	· V			Yes							0.02.00				
1.0E-01 1.1E-02   3.1E-06   1.0E-03	D	3.72 3.69	1 1	Yes Yes	Trichlorophenol, 2,4,5- Trichlorophenol, 2,4,6-	95-95-4 88-06-2	7.1E+00	9.8F+00		4.1F+00	2.0E+03 2.0F+01	2.9E+03 3.0E+01		1.2E+03 1.2F+01	
1.1E-02   3.1E-06   1.0E-03 1.0E-02	I	3.69	1 1 1 1 1	Yes	Trichlorophenoxyacetic Acid, 2,4,5-	93-76-5	7.12+00	J.0E+UU		4.12+00	2.0E+01 2.0F+02	3.0E+01 8.7E+02		1.2E+01 1.6E+02	
8.0E-03	1	3.8	1 0.9	Yes	Trichlorophenoxypropionic acid, -2,4,5	93-70-3					1.6E+02	3.6E+02		1.1E+02	5.0E+01
5.0E-03	I V	2.43	1 1	Yes	Trichloropropane, 1,1,2-	598-77-6					1.0E+02	7.5E+02		8.8E+01	3.02.01
	I 3.0E-04 I V N		1 1	Yes	Trichloropropane, 1,2,3-	96-18-4	8.4E-04	7.3E-03		7.5E-04	8.0E+01	7.7E+02	6.3E-01	6.2E-01	

Key: I = IRIS; P = PPRTV; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #27); notice) : c = cancer: n = noncancer: * = where: n St.	I = HEAST; F = See FAQ; J = New Jersey; O = EPA Office of Water; E = see user guide Section 100X c St.; ** = where n St < 10X c St.; SSL values are based on DAF=1; m = Concentration r									ied (See User Guide f	for Arsenic
Toxicity and Chemical-specific Information	Contaminant		Card	Carcinogenic Target Risk (TR) = 1E-06				Noncano	er CHILD Haza	ard Index (HI) = 1	
SFO   k	? Analyte (	CAS No.	Ingestion SL TR=1E-06 (μg/L)	Dermal SL TR=1E-06 (μg/L)		Carcinogenic SL TR=1E-06 (μg/L)	Ingestion SL Child THQ=1 (µg/L)	Dermal SL Child THQ=1 (µg/L)	Inhalation SL Child THQ=1 (µg/L)	Noncarcinogenic SL Child THI=1 (µg/L)	MCL (ug/L)
3.0E-03 X 3.0E-04 P V 2.78 1 1 Yes	· · · · · · · · · · · · · · · · · · ·	-19-5	(µg/ L)	(µg/ L)	(µg/ L)	(μg/ L)	6.0E+01	2.6E+02	6.3E-01	6.2E-01	(ug/L)
2.0E-02 A 5.11 1 0.8 Yes 3.0E-03 I 5.18 1 0.8 Yes	Tricresyl Phosphate (TCP) 133	30-78-5 138-08-2					4.0E+02 6.0E+01	2.6E+02 2.6E+01	0.52 01	1.6E+02 1.8E+01	
7.0E-03   V 1.45 1 1 Yes		1-44-8							1.5E+01	1.5E+01	
2.0E+00 P -1.75 1 1 Yes 2.0E+01 P V 1.74 1 1 Yes		.2-27-6 !0-46-2					4.0E+04	1.8E+08	4.2E+04	4.0E+04 4.2E+04	
7.7E-03 I 7.5E-03 I V 5.34 1 0.8 Yes		82-09-8	1.0E+01	3.4E+00		2.6E+00	1.5E+02	5.5E+01		4.0E+01	
2.0E-02 P 1.0E-02 P -0.65 1 1 Yes	Trimethyl Phosphate 512	.2-56-1	3.9E+00	2.8E+03		3.9E+00	2.0E+02			2.0E+02	
5.0E-03 P V 3.66 1 1 Yes		6-73-8							1.0E+01	1.0E+01	
7.0E-03 P V 3.63 1 1 Yes		5-63-6 08-67-8					2.05.02	2.05.02	1.5E+01	1.5E+01	
1.0E-02 X V 3.42 1 1 Yes 1.0E-02 X V 4.08 1 1 Yes		167-70-8					2.0E+02 2.0E+02	2.8E+02 9.6E+01		1.2E+02 6.5E+01	
3.0E-02 I 1.18 1 1 Yes	Trinitrobenzene, 1,3,5- 99-	9-35-4					6.0E+02	4.7E+04		5.9E+02	
3.0E-02 I 5.0E-04 I 1.6 1 1 Yes		8-96-7	2.6E+00	1.1E+02		2.5E+00	1.0E+01	4.5E+02		9.8E+00	
2.0E-02 P 2.83 1 1 Yes	Triphenylphosphine Oxide ) 791	1-28-6					4.0E+02	3.8E+03		3.6E+02	
2.0E-02 A 3.65 1 0.9 Yes		674-87-8 674-84-5					4.0E+02	3.2E+03		3.6E+02	
1.0E-02 X 2.59 1 1 Yes 2.3E+00 C 6.6E-04 C V 4.29 1 1 No		6-72-7	3.4E-02		8.5E-03	6.8E-03	2.0E+02	3.8E+03		1.9E+02	
2.0E-02 P 7.0E-03 P 1.44 1 1 Yes		5-96-8	3.9E+00	3.0E+02		3.8E+00	1.4E+02	1.2E+04		1.4E+02	
3.2E-03 P 1.0E-01 P 9.49 1 0 No		3-42-2	2.4E+01			2.4E+01	2.0E+03			2.0E+03	
8.0E-04 P 1 1 Yes		140-33-7					1.6E+01	3.6E+03		1.6E+01	
3.0E-03   4.0E-05 A	Uranium (Soluble-Salts)	`.					6.0E+01	1.4E+04		6.0E+01	3.0E+01
1.0E+00 C 2.9E-04 C M -0.15 1 1 Yes 8.3E-03 P 9.0E-03 I 7.0E-06 P 0.026 1 Yes		-79-6 14-62-1	2.5E-02	6.1E+00		2.5E-02	1.8E+02	1.1E+03		1.5E+02	
5.0E-03 S 1.0E-04 A 0.026 1 Yes	1,	40-62-2					1.0E+02	6.0E+02		8.6E+01	
1.0E-03 I V 3.84 1 1 Yes		29-77-7					2.0E+01	2.5E+01		1.1E+01	
2.5E-02 I 3.1 1 0.9 Yes		471-44-8					5.0E+02	3.7E+03		4.4E+02	
1.0E+00 H 2.0E-01 I V 0.73 1 1 Yes	· ·	08-05-4			4.05.04	4.05.04	2.0E+04	1.4E+06	4.2E+02	4.1E+02	
3.2E-05 H 3.0E-03 I V 1.57 1 1 Yes 7.2E-01 I 4.4E-06 I 3.0E-03 I 1.0E-01 I V M 1.62 1 1 Yes		93-60-2 5-01-4	2.1E-02	2.8E-01	1.8E-01 3.4E-01	1.8E-01 1.9E-02	6.0E+01	8.9E+02	6.3E+00 2.1E+02	6.3E+00 4.4E+01	2.0E+00
3.0E-04   2.7 1 1 Yes		-81-2	2.11-02	2.02 01	3.42 01	1.52 02	6.0E+00	8.4E+01	2.11.102	5.6E+00	2.02.100
2.0E-01 S 1.0E-01 S V 3.15 1 1 Yes		06-42-3					4.0E+03	7.6E+03	2.1E+02	1.9E+02	
2.0E-01 S 1.0E-01 S V 3.2 1 1 Yes	Xylene, m- 108	8-38-3					4.0E+03	7.1E+03	2.1E+02	1.9E+02	
2.0E-01 S 1.0E-01 S V 3.12 1 1 Yes		i-47-6					4.0E+03	8.0E+03	2.1E+02	1.9E+02	
2.0E-01   1.0E-01   V 3.16 1 1 Yes 3.0E-04   1 1 Yes		30-20-7 14-84-7					4.0E+03	7.5E+03 2.3E+03	2.1E+02	1.9E+02	1.0E+04
3.0E-04   1 1 Yes 3.0E-01   1 1 Yes		40-66-6					6.0E+00 6.0E+03	2.3E+03 2.3E+06		6.0E+00 6.0E+03	
5.0E-02 I 1.3 1 1 Yes		122-67-7					1.0E+03	9.7E+04		9.9E+02	
8.0E-05 X 1 1 Yes		40-67-7						3.6E+02		1.6E+00	

Toxicity and Chemical-specific	Contaminant	uiuc), 5 Coiice	Carcinogenic Target Risk (TR) = 1E-06	
k k v			Carcinogenic SL	Noncarcinogenic SL
IUR e RfC <sub>i</sub> e o muta-			TR=1E-06	HI=1
(ug/m <sup>3</sup> ) <sup>-1</sup> y (mg/m <sup>3</sup> ) y I gen	Analyte	CAS No.	(ug/m³)	(μg/m³)
	Acephate	30560-19-1		
2.2E-06   9.0E-03   V	Acetaldehyde	75-07-0	1.3E+00	9.4E+00
245.04.4.1/	Acetochlor	34256-82-1		2.25.04
3.1E+01 A V	Acetone	67-64-1		3.2E+04
2.0E-03 X 6.0E-02 I V	Acetone Cyanohydrin Acetonitrile	75-86-5 75-05-8		2.1E+00 6.3E+01
V	Acetophenone	98-86-2		0.52101
1.3E-03 C	Acetylaminofluorene, 2-	53-96-3	2.2E-03	
2.0E-05   V	Acrolein	107-02-8	2.22 03	2.1E-02
1.0E-04   6.0E-03   M	Acrylamide	79-06-1	1.0E-02	6.3E+00
1.0E-03 I V	Acrylic Acid	79-10-7		1.0E+00
6.8E-05   2.0E-03   V	Acrylonitrile	107-13-1	4.1E-02	2.1E+00
6.0E-03 P	Adiponitrile	111-69-3		6.3E+00
	Alachlor	15972-60-8		
	Aldicarb	116-06-3		
	Aldicarb Sulfone	1646-88-4		
	Aldicarb sulfoxide	1646-87-3		
4.9E-03 I V	Aldrin	309-00-2	5.7E-04	
1.0E-04 X V	Allyl Alcohol	107-18-6		1.0E-01
6.0E-06 C 1.0E-03 I V	Allyl Chloride	107-05-1	4.7E-01	1.0E+00
5.0E-03 P	Aluminum Aluminum Phacabida	7429-90-5		5.2E+00
	Aluminum Phosphide	20859-73-8		
6.0E-03 C	Ametryn Aminobiphenyl, 4-	834-12-8 92-67-1	4.7E-04	
6.0E-03 C	Aminophenol-m	591-27-5	4.7E-04	
	Aminophenol, p-	123-30-8		
	Amitraz	33089-61-1		
1.0E-01   V	Ammonia	7664-41-7		1.0E+02
1.02-01 1 V	Ammonium Sulfamate	7773-06-0		1.02102
3.0E-03 X V	Amyl Alcohol, tert-	75-85-4		3.1E+00
1.6E-06 C 1.0E-03 I	Aniline	62-53-3	1.8E+00	1.0E+00
	Anthraquinone, 9,10-	84-65-1		
	Antimony (metallic)	7440-36-0		
	Antimony Pentoxide	1314-60-9		
	Antimony Tetroxide	1332-81-6		
2.0E-04 I	Antimony Tridxide	1309-64-4		2.1E-01
4.3E-03 I 1.5E-05 C	Arsenic, Inorganic	/7440-38-2	6.5E-04	1.6E-02
5.0E-05 I	Arsine	7784-42-1		5.2E-02
	Asulam	3337-71-1		
	Atrazine	1912-24-9		
2.5E-04 C	Auramine	492-80-8	1.1E-02	
	Avermectin B1	65195-55-3		
1.0E-02 A	Azinphos-methyl	86-50-0		1.0E+01
3.1E-05 I V	Azobenzene	103-33-3	9.1E-02	7.25.02
7.0E-06 P	Azodicarbonamide	123-77-3		7.3E-03
5.0E-04 H 1.5E-01 C 2.0E-04 C M	Barium Barium Chromate	7440-39-3 10294-40-3	6.8E-06	5.2E-01 2.1E-01
1.5E-01 C 2.0E-04 C IVI	Benfluralin	1861-40-1	0.6E-00	Z.1E-U1
	Benomyl	17804-35-2		
	Bensulfuron-methyl	83055-99-6		
	Bentazon	25057-89-0		
V	Benzaldehyde	100-52-7		
7.8E-06   3.0E-02   V	Benzene Benzene	71-43-2	3.6E-01	3.1E+01
	Benzenediamine-2-methyl sulfate, 1,4-	6369-59-1		
V	Benzenethiol	108-98-5		
6.7E-02 I M	Benzidine	92-87-5	1.5E-05	
	Benzoic Acid	65-85-0		
V	Benzotrichloride	98-07-7		
4.05.05.03.03.03.03	Benzyl Alcohol	100-51-6	5.75.02	4.05.00
4.9E-05 C 1.0E-03 P V	Benzyl Chloride	100-44-7	5.7E-02	1.0E+00
2.4E-03   2.0E-05	Beryllium and compounds	7440-41-7	1.2E-03	2.1E-02
	Bifenox Biphenthrin	42576-02-3 82657-04-3		
4.0E-04 X V	Biphenyl, 1,1'-	92-52-4		4.2E-01
4.0E-04 X V V	Bis(2-chloro-1-methylethyl) ether	92-52-4 108-60-1		4.ZE-U1
V	Bis(2-chloroethoxy)methane	111-91-1		
3.3E-04 I V	Bis(2-chloroethyl)ether	111-44-4	8.5E-03	
6.2E-02 I V	Bis(chloromethyl)ether	542-88-1	4.5E-05	
	-1	50 -		

Toxicity and Chemical-specific	Contaminant	a.ac,, 5 cocc	Carcinogenic Target Risk (TR) = 1E-06	
k k v			Carcinogenic SL	Noncarcinogenic SL
IUR e RfC <sub>i</sub> e o muta-			TR=1E-06	HI=1
(ug/m <sup>3</sup> ) <sup>-1</sup> y (mg/m <sup>3</sup> ) y l gen	Analyte	CAS No.	(ug/m³)	(μg/m³)
	Bisphenol A	80-05-7		
2.0E-02 H	Boron And Borates Only	7440-42-8		2.1E+01
2.0E-02 P V	Boron Trichloride	10294-34-5		2.1E+01
1.3E-02 C V	Boron Trifluoride	7637-07-2		1.4E+01
	Bromate	15541-45-4		
6.0E-04 X V	Bromo-2-chloroethane, 1-	107-04-0	4.7E-03	
6.0E-02 I V	Bromobenzene	108-86-1		6.3E+01
4.0E-02 X V	Bromochloromethane	74-97-5		4.2E+01
3.7E-05 C V	Bromodichloromethane	75-27-4	7.6E-02	
1.1E-06 I V	Bromoform	75-25-2	2.6E+00	
5.0E-03 I V	Bromomethane	74-83-9		5.2E+00
V	Bromophos	2104-96-3		
V	Bromoxynil Octoberts	1689-84-5		
3.0E-05   2.0E-03   V	Bromoxynil Octanoate Butadiene, 1,3-	1689-99-2 106-99-0	9.4E-02	2.1E+00
3.0E-03 1 2.0E-03 1 V	Butanol, N-	71-36-3	9.46-02	2.1E+00
•	Butyl Benzyl Phthalate	85-68-7		
3.0E+01 P V	Butyl alcohol, sec-	78-92-2		3.1E+04
3.0E101 1 V	Butylate	2008-41-5		5.12.104
5.7E-08 C	Butylated hydroxyanisole	25013-16-5	4.9E+01	
	Butylated hydroxytoluene	128-37-0		
V	Butylbenzene, n-	104-51-8		
V	Butylbenzene, sec-	135-98-8		
V	Butylbenzene, tert-	98-06-6		
	Cacodylic Acid	75-60-5		
1.8E-03 I 1.0E-05 A	Cadmium (Diet)	7440-43-9		
1.8E-03   1.0E-05 A	Cadmium (Water)	7440-43-9	1.6E-03	1.0E-02
1.5E-01 C 2.0E-04 C M	Calcium Chromate.	13765-19-0	6.8E-06	2.1E-01
2.2E-03 C	Captolactam   Captafol   Captafol	105-60-2	6.55.00	2.3E+00
4.3E-05 C 6.6E-07 C	Captafol Captan	2425-06-1 133-06-2	6.5E-02 4.3E+00	
6.6E-07 C	Carbaryl	63-25-2	4.3E+00	
	Carbofuran	1563-66-2		
7.0E-01 I V	Carbon Disulfide	75-15-0		7.3E+02
6.0E-06   1.0E-01   V	Carbon Tetrachloride	56-23-5	4.7E-01	1.0E+02
1.0E-01 P V	Carbonyl Sulfide	463-58-1	4.72 01	1.0E+02
	Carbosulfān ( )	55285-14-8		
	Carboxin	5234-68-4		
9.0E-04 I	Ceric oxide	1306-38-3		9.4E-01
V	Chloral Hydrate U Called Calle	/302-17-0		
	Chloramben	133-90-4		
	Chloranil	118-75-2		
1.0E-04   7.0E-04   V	Chlordane	12789-03-6	2.8E-02	7.3E-01
4.6E-03 C	Chlordecone (Kepone)	143-50-0	6.1E-04	
	Chlorimuson Ethyl	470-90-6 90982-32-4		
1.5E-04 A V	Chlorimuron, Ethyl- Chlorine	7782-50-5		1 55 01
1.5E-04 A V 2.0E-04 I V	Chlorine Dioxide	7782-50-5 10049-04-4		1.5E-01 2.1E-01
2.02 07 1 0	Chlorite (Sodium Salt)	7758-19-2		Z.IL VI
5.0E+01 I V	Chloro-1,1-difluoroethane, 1-	75-68-3		5.2E+04
3.0E-04   2.0E-02   V	Chloro-1,3-butadiene, 2-	126-99-8	9.4E-03	2.1E+01
	Chloro-2-methylaniline HCl, 4-	3165-93-3		
7.7E-05 C	Chloro-2-methylaniline, 4-	95-69-2	3.6E-02	
V	Chloroacetaldehyde, 2-	107-20-0		
	Chloroacetic Acid	79-11-8		
3.0E-05 I	Chloroacetophenone, 2-	532-27-4		3.1E-02
	Chloroaniline, p-	106-47-8		5.05.00
5.0E-02 P V	Chlorobenzene	108-90-7	0.45.00	5.2E+01
3.1E-05 C	Chlorobenzilate	510-15-6	9.1E-02	
3.0E-01 P V	Chlorobenzoic Acid, p- Chlorobenzotrifluoride, 4-	74-11-3 98-56-6		3.1E+02
3.0E-01 P V				5.1E+UZ
5.0E+01 I V	Chlorobutane, 1- Chlorodifluoromethane	109-69-3 75-45-6		5.2E+04
5.0E+01 1 V V	Chloroethanol, 2-	75-45-6 107-07-3		3.ZE+U4
2.3E-05 I 9.8E-02 A V	Chloroform	67-66-3	1.2E-01	1.0E+02
9.0E-02 I V	Chloromethane	74-87-3	1,22 01	9.4E+01
6.9E-04 C V	Chloromethyl Methyl Ether	107-30-2	4.1E-03	
1.0E-05 X	Chloronitrobenzene, o-	88-73-3		1.0E-02

Toxicity and Chemical-specific	L values are based on DAF=1; m = Concentration may exceed ceiling limit (see User GL Contaminant	nacj, s – conce	Carcinogenic Target Risk (TR) = 1E-06	
b by	Contaminant		Carcinogenic SL	Noncarcinogenic SL
IUR e RfC <sub>i</sub> e o muta			TR=1E-06	HI=1
		CACNA		
(ug/m³) <sup>-1</sup> y (mg/m³) y I gen		CAS No.	(ug/m³)	(μg/m³)
6.0E-04 P	Chloronitrobenzene, p-	100-00-5		6.3E-01
V	Chlorophenol, 2-	95-57-8		
4.0E-04 C V	Chloropicrin	76-06-2		4.2E-01
8.9E-07 C	Chlorothalonil	1897-45-6	3.2E+00	
V	Chlorotoluene, o-	95-49-8		
V	Chlorotoluene, p-	106-43-4		
6.9E-02 C	Chlorozotocin	54749-90-5	4.1E-05	
	Chlorpropham	101-21-3		
	Chlorpyrifos	2921-88-2		
	Chlorpyrifos Methyl	5598-13-0		
	Chlorsulfuron	64902-72-3		
	Chlorthal-dimethyl	1861-32-1		
	Chlorthiophos	60238-56-4		
	Chromium(III), Insoluble Salts	16065-83-1		
8.4E-02 S 1.0E-04 I M	Chromium(VI)	18540-29-9	1.2E-05	1.0E-01
	Chromium, Total	7440-47-3		
	Clofentezine	74115-24-5		
9.0E-03 P 6.0E-06 P	Cobalt	7440-48-4	3.1E-04	6.3E-03
6.2E-04 I V M	Coke Oven Emissions	8007-45-2	1.6E-03	5.52 03
5.22 54 T	Copper	7440-50-8	1.02 03	
6.0E-01 C	Cresol, m-	108-39-4		6.3E+02
6.0E-01 C	Cresol, o-	95-48-7		6.3E+02
6.0E-01 C	Cresol, p-	95-48-7 106-44-5		6.3E+02 6.3E+02
0.0L-01 C				0.52702
6.05.010	Cresol, p-chloro-m- Cresols	59-50-7		6.35.03
6.0E-01 C V	Cresois Crotonaldehyde, trans-	1319-77-3 123-73-9		6.3E+02
	·			4.25, 02
4.0E-01 I V	Cumene	98-82-8		4.2E+02
6.3E-05 C	Cupferron	135-20-6 21725-46-2	4.5E-02	
	Cyanazine			
	Cyanides 1	(500,040		
	**Calcium Cylanide	592-01-8		
	~Copper Cyanide	-544-92-3		
8.0E-04 S V	~Cyanide (CN-) \\ \\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	57-12-5		8.3E-01
V	~Cyanogen !-!	460-19-5		
V	~Cyanogen Bromide	506-68-3		
V	~Cyanogen Chloride	506-77-4		
8.0E-04 I V	~Hydrogen Cyanide	74-90-8		8.3E-01
	~Potassium Cyanide	151-50-8		
	~Potassium Silver Cylahide	506-61-6		
	Silver Cyanide	506-64-9		
	~Sodium Cyarlide	143-33-9		
	~Thiocyanates U U C	NA		
V	~Thiocyanic Acid	463-56-9		
	~Zinc Cyanide	557-21-1		
6.0E+00 I V	Cyclohexane	110-82-7		6.3E+03
	Cyclohexane, 1,2,3,4,5-pentabromo-6-chloro-	87-84-3		
7.0E-01 P V	Cyclohexanone	108-94-1		7.3E+02
1.0E+00 X V	Cyclohexene	110-83-8		1.0E+03
V	Cyclohexylamine	108-91-8		
	Cyfluthrin	68359-37-5		
	Cyhalothrin	68085-85-8		
	Cypermethrin	52315-07-8		
	Cyromazine	66215-27-8		
6.9E-05 C	DDD	72-54-8	4.1E-02	
9.7E-05 C V	DDE, p,p'-	72-55-9	2.9E-02	
9.7E-05 I	DDT	50-29-3	2.9E-02	
	Dalapon	75-99-0		
5.1E-06 C	Daminozide	1596-84-5	5.5E-01	
	Decabromodiphenyl ether, 2,2',3,3',4,4',5,5',6,6'- (BDE-209)	1163-19-5	2.52.02	
	Demeton	8065-48-3		
	Di(2-ethylhexyl)adipate	103-23-1		
	Diallate	2303-16-4		
	Diazinon	333-41-5		
V	Dibenzothiophene	132-65-0		
6.0E-03 P 2.0E-04 I V M	Dibromo-3-chloropropane, 1,2-	96-12-8	1.7E-04	2.1E-01
V			1.72 04	2.11. 01
	Dibromobenzene, 1,3-	108-36-1		
V V	Dibromobenzene, 1,4- Dibromochloromethane	106-37-6 124-48-1		
V	Distribution of the tribute	124-40-1		

Toxicity and Chemical-specific	Contaminant	Carcinogenic Target Risk (TR) = 1E-06 Noncancer Hazard Index (HI) = 1			
k k v			Carcinogenic SL	Noncarcinogenic SL	
IUR e RfC <sub>i</sub> e o muta		0.01	TR=1E-06	HI=1	
(ug/m³) <sup>-1</sup> y (mg/m³) y I gen	Analyte	CAS No.	(ug/m³)	(μg/m³)	
6.0E-04   9.0E-03   V	Dibromoethane, 1,2-	106-93-4	4.7E-03	9.4E+00	
4.0E-03 X V	Dibromomethane (Methylene Bromide) Dibutyltin Compounds	74-95-3 NA		4.2E+00	
4.2E-03 P V	Dicamba Dichloro-2-butene, 1,4-	1918-00-9 764-41-0	6.7E-04		
4.2E-03 P V	Dichloro-2-butene, cis-1,4-	1476-11-5	6.7E-04 6.7E-04		
4.2E-03 P V	Dichloro-2-butene, trans-1,4-	110-57-6	6.7E-04		
4.22 03 1	Dichloroacetic Acid	79-43-6	0.72 04		
2.0E-01 H V	Dichlorobenzene, 1,2-	95-50-1		2.1E+02	
1.1E-05 C 8.0E-01 I V	Dichlorobenzene, 1,4-	106-46-7	2.6E-01	8.3E+02	
3.4E-04 C	Dichlorobenzidine, 3,3'-	91-94-1	8.3E-03		
	Dichlorobenzophenone, 4,4'-	90-98-2			
1.0E-01 X V	Dichlorodifluoromethane	75-71-8		1.0E+02	
1.6E-06 C V	Dichloroethane, 1,1-	75-34-3	1.8E+00		
2.6E-05 I 7.0E-03 P V	Dichloroethane, 1,2-	107-06-2	1.1E-01	7.3E+00	
2.0E-01 I V	Dichloroethylene, 1,1-	75-35-4		2.1E+02	
V	Dichloroethylene, 1,2-cis-	156-59-2			
V	Dichloroethylene, 1,2-trans-	156-60-5			
	Dichlorophenol, 2,4-	120-83-2			
	Dichlorophenoxy Acetic Acid, 2,4-	94-75-7			
1.05.05.02.4.05.02.4.14	Dichlorophenoxy)butyric Acid, 4-(2,4-	94-82-6	3.05.04	4.25.00	
1.0E-05 C 4.0E-03 I V	Dichloropropane, 1,2-	78-87-5	2.8E-01	4.2E+00	
V	Dichloropropane, 1,3- Dichloropropanol, 2,3-	142-28-9 616-23-9			
4.0E-06   2.0E-02   V	Dichloropropene, 1,3-	542-75-6	7.0E-01	2.1E+01	
8.3E-05 C 5.0E-04 I	Dichlorvos	62-73-7	3.4E-02	5.2E-01	
0.52 05 0 5.02 04 1	Dicrotophos	141-66-2	3.42 02	5.22 01	
3.0E-04 X V	Dicyclopentadiene	77-73-6		3.1E-01	
4.6E-03 I	Dieldrin	60-57-1	6.1E-04		
3.0E-04 C 5.0E-03 I	Diesel Engine Exhaust	NAC	9.4E-03	5.2E+00	
2.0E-04 P	Diethanolamirle ) ,	111-42-2		2.1E-01	
1.0E-04 P	Diethylene Glycol Monobutyl Ether	112-34-5		1.0E-01	
3.0E-04 P	Diethylene Glycol Monoethyl Ether	111-90-0		3.1E-01	
V	Diethylformamide Communication	617-84-5			
1.0E-01 C	Diethylstilbestrol	56-53-1	2.8E-05		
	Difenzoquat	43222-48-6			
	Diflubenzuron	35367-38-5			
4.0E+01   V 1.3E-05 C V	DifluoroEtbane, T.1-	75-37-6	2.2E-01	4.2E+04	
1.3E-05 C V 7.0E-01 P V	Dihydrosafrole Diisopropyl Ether	94-58-6	2.2E-01	7.25.02	
7.0E-01 P V	produced delegated by // COSSES	1445-75-6		7.3E+02	
V	Dimethipin -	55290-64-7			
	Dimethoate	60-51-5	-		
	Dimethoxybenzidine, 3,3'-	119-90-4			
	Dimethyl methylphosphonate	756-79-6			
1.3E-03 C	Dimethylamino azobenzene [p-]	60-11-7	2.2E-03		
	Dimethylaniline HCl, 2,4-	21436-96-4			
	Dimethylaniline, 2,4-	95-68-1			
V	Dimethylaniline, N,N-	121-69-7			
	Dimethylbenzidine, 3,3'-	119-93-7			
3.0E-02   V	Dimethylformamide	68-12-2		3.1E+01	
2.0E-06 X V	Dimethylhydrazine, 1,1-	57-14-7	4.05.55	2.1E-03	
1.6E-01 C V	Dimethylphonol 3.4	540-73-8 105-67-9	1.8E-05		
	Dimethylphenol, 2,4- Dimethylphenol, 2,6-				
	Dimethylphenol, 3,4-	576-26-1 95-65-8			
1.3E-05 C V	Dimethylvinylchloride	513-37-1	2.2E-01		
	Dinitro-o-cresol, 4,6-	534-52-1			
	Dinitro-o-cyclohexyl Phenol, 4,6-	131-89-5			
	Dinitrobenzene, 1,2-	528-29-0			
	Dinitrobenzene, 1,3-	99-65-0			
	Dinitrobenzene, 1,4-	100-25-4			
	Dinitrophenol, 2,4-	51-28-5			
	Dinitrotoluene Mixture, 2,4/2,6-	NA			
8.9E-05 C	Dinitrotoluene, 2,4-	121-14-2	3.2E-02		
	Dinitrotoluene, 2,6-	606-20-2			
	Dinitrotoluene, 2-Amino-4,6-	35572-78-2			
	Dinitrotoluene, 4-Amino-2,6-	19406-51-0			

Toxicity and Chemical-specific	. values are based on DAF=1; m = Concentration may exceed ceiling limit  Contaminant	(See Oser Guide), s - Corice	Carcinogenic Target Risk (TR) = 1E-06	
Toxicity and Chemical-specific	Containinant		Carcinogenic SL	
k k v			· ·	Noncarcinogenic SL
IUR e RfC <sub>i</sub> e o muta-			TR=1E-06	HI=1
(ug/m <sup>3</sup> ) <sup>-1</sup> y (mg/m <sup>3</sup> ) y I gen	Analyte	CAS No.	(ug/m³)	(μg/m³)
	Dinitrotoluene, Technical grade	25321-14-6		
	Dinoseb	88-85-7		
5.0E-06   3.0E-02   V	Dioxane, 1,4-	123-91-1	5.6E-01	3.1E+01
	Dioxins			
1.3E+00 I	~Hexachlorodibenzo-p-dioxin, Mixture	NA	2.2E-06	
3.8E+01 C 4.0E-08 C V	~TCDD, 2,3,7,8-	1746-01-6	7.4E-08	4.2E-05
3.52.61 € 4.62 66 € 7	Diphenamid	957-51-7	7.42 00	4.22 03
	Diphenyl Sulfone	127-63-9		
2.2E-04 I	Diphenylamine Diphenylhydrazine, 1,2-	122-39-4	1.3E-02	
2.2E-04 I		122-66-7	1.3E-U2	
	Diquat	85-00-7		
1.4E-01 C	Direct Black 38	1937-37-7	2.0E-05	
1.4E-01 C	Direct Blue 6	2602-46-2	2.0E-05	
1.4E-01 C	Direct Brown 95	16071-86-6	2.0E-05	
	Disulfoton	298-04-4		
V	Dithiane, 1,4-	505-29-3		
	Diuron	330-54-1		
	Dodine	2439-10-3		
V	EPTC	759-94-4		
V	Endosulfan	115-29-7		
·	Endothall	145-73-3		
	Endrin	72-20-8		
1.2E-06   1.0E-03   V	Epichlorohydrin	106-89-8	2.3E+00	1.0E+00
			2.35+00	
2.0E-02 I V	Epoxybutane, 1,2- Ethanol, 2-(2-methoxyethoxy)-	106-88-7 111-77-3		2.1E+01
	Ethephon	16672-87-0		
	Ethion	563-12-2		
6.0E-02 P V	Ethoxyethanol Acetate, 2-	111-15-9		6.3E+01
2.0E-01 I V	Ethoxyethanol, 2,	110-80-5		2.1E+02
7.0E-02 P V	Ethyl Acetate	// //141-78-6		7.3E+01
8.0E-03 P V	Ethyl Acrylate CTTTTTT	-1 <u>40</u> -88-5		8.3E+00
1.0E+01 I V	Ethyl Chloride (Chloroethane)	75-00-3		1.0E+04
V	Ethyl Ether U U V callas Usass	60-29-7		
3.0E-01 P V	Ethyl Methacrylate	97-63-2		3.1E+02
	Ethyl-p-nitrophenyl Phosphonate	2104-64-5		
2.5E-06 C 1.0E+00 I V	Ethylbenzene	100-41-4	1.1E+00	1.0E+03
	Ethylene Cyanohydrin	109-78-4	-1-2 00	
V	Ethylene Diamine	107-15-3		
4.0E-01 C	Ethylene Glycol	107-21-1		4.2E+02
1.6E+00 I	Ethylene Glydol Monobutyl Ether	111-76-2		1.7E+03
8.8E-05 C 3.0E-02 C V			3.2E-02	3.1E+01
1.3E-05 C	Ethylene Oxide Ethylene Thiourea	75-21-8 96-45-7		3.11-01
			2.2E-01	
1.9E-02 C V	Ethyleneimine  Ethyleneimine	151-56-4	1.5E-04	
	Ethylphthalyl Ethyl Glycolate	84-72-0		
	Fenamiphos	22224-92-6		
	Fenpropathrin	39515-41-8		
	Fenvalerate	51630-58-1		
	Fluometuron	2164-17-2		
1.3E-02 C	Fluoride	16984-48-8		1.4E+01
1.3E-02 C	Fluorine (Soluble Fluoride)	7782-41-4		1.4E+01
	Fluridone	59756-60-4		
	Flurprimidol	56425-91-3		
	Flusilazole	85509-19-9		
	Flutolanil	66332-96-5		
	Fluvalinate	69409-94-5		
	Folpet	133-07-3		
	Fomesafen	72178-02-0		
	Fonofos	944-22-9		
1.3E-05   9.8E-03 A V	Formaldehyde	50-00-0	2.2E-01	1.0E+01
3.0E-04 X V		64-18-6	2.26-01	
3.UE-U4 X V	Formic Acid			3.1E-01
	Fosetyl-AL	39148-24-8		
	Furans			
V	~Dibenzofuran	132-64-9		
V	~Furan	110-00-9		
2.0E+00 I V	~Tetrahydrofuran	109-99-9		2.1E+03
	Furazolidone	67-45-8		
5.0E-02 H V	Furfural	98-01-1		5.2E+01
4.3E-04 C	Furium	531-82-8	6.5E-03	
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Toxicity and Chemical-specific	. Values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Gu  Contaminant	idej, s – Corice	Carcinogenic Target Risk (TR) = 1E-06	
Toxicity and Chemical-specific	Contaminant		Carcinogenic SL	Noncarcinogenic SL
IUR e RfC <sub>i</sub> e o muta-			TR=1E-06	HI=1
2 1 2 2 2 2	Analyte	CAS No.	(ug/m³)	(μg/m³)
				(μg/111 )
8.6E-06 C	Furmecyclox Clufficinate Ammonium	60568-05-0 77182-82-2	3.3E-01	
0.05.05.0	Glufosinate, Ammonium			0.25.02
8.0E-05 C	Glutaraldehyde	111-30-8		8.3E-02
1.0E-03 H V	Glycidyl	765-34-4		1.0E+00
	Glyphosate	1071-83-6		
V	Guanidine	113-00-8		
	Guanidine Chloride	50-01-1		
	Haloxyfop, Methyl	69806-40-2		
1.3E-03 I V	Heptachlor	76-44-8	2.2E-03	
2.6E-03 I V	Heptachlor Epoxide	1024-57-3	1.1E-03	
V	Hexabromobenzene	87-82-1		
	Hexabromodiphenyl ether, 2,2',4,4',5,5'- (BDE-153)	68631-49-2		
4.6E-04 I V	Hexachlorobenzene	118-74-1	6.1E-03	
2.2E-05 I V	Hexachlorobutadiene	87-68-3	1.3E-01	
1.8E-03 I	Hexachlorocyclohexane, Alpha-	319-84-6	1.6E-03	
5.3E-04 I	Hexachlorocyclohexane, Beta-	319-85-7	5.3E-03	
3.1E-04 C	Hexachlorocyclohexane, Gamma- (Lindane)	58-89-9	9.1E-03	
5.1E-04 I	Hexachlorocyclohexane, Technical	608-73-1	5.5E-03	
2.0E-04 I V	Hexachlorocyclopentadiene	77-47-4		2.1E-01
1.1E-05 C 3.0E-02 I V	Hexachloroethane	67-72-1	2.6E-01	3.1E+01
	Hexachlorophene	70-30-4		
	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	121-82-4		
1.0E-05 I V	Hexamethylene Diisocyanate, 1,6-	822-06-0		1.0E-02
	Hexamethylphosphoramide	680-31-9		
7.0E-01 I V	Hexane, N-	110-54-3		7.3E+02
	Hexanedioic Acid	124-04-9		
3.0E-02 I V	Hexanone, 2-	591-78-6		3.1E+01
	Hexazinone	51235-04-2		
	Hexythiazox [	-78587-05-0		
	Hydramethylnon L_// common L_//	-67485-29-4		
4.9E-03   3.0E-05 P V	Hydrazine	302-01-2	5.7E-04	3.1E-02
4.9E-03 I	Hydrazine \$ulfate	10034-93-2	5.7E-04	
2.0E-02 I V	Hydrogen Chloride	7647-01-0		2.1E+01
1.4E-02 C V	Hydrogen Fluoride	7664-39-3		1.5E+01
2.0E-03 I V	Hydrogen Sulfide	7783-06-4		2.1E+00
	Hydroquinone	123-31-9		
	Imazalif F [] [] (F)	35554-44-0		
	Imazaquin	81335-37-7		
	Imazethapyr	81335-77-5		
	lodine	7553-56-2		
	Iprodione 'L'	36734-19-7		
	Iron	7439-89-6		
V	Isobutyl Alcohol	78-83-1		
2.0E+00 C	Isophorone	78-59-1		2.1E+03
V	Isopropalin	33820-53-0		
2.0E-01 P V	Isopropanol	67-63-0		2.1E+02
	Isopropyl Methyl Phosphonic Acid	1832-54-8		
	Isoxaben	82558-50-7		
3.0E-01 A V	JP-7	NA		3.1E+02
	Lactofen	77501-63-4		
	Lead Compounds			
1.5E-01 C 2.0E-04 C M	~Lead Chromate	7758-97-6	6.8E-06	2.1E-01
1.2E-05 C	~Lead Phosphate	7446-27-7	2.3E-01	
8.0E-05 C	~Lead acetate	301-04-2	3.5E-02	
	~Lead and Compounds	7439-92-1		1.5E-01
1.2E-05 C	~Lead subacetate	1335-32-6	2.3E-01	
V	~Tetraethyl Lead	78-00-2		
V	Lewisite	541-25-3		
	Linuron	330-55-2		
	Lithium	7439-93-2		
	МСРА	94-74-6		
	МСРВ	94-81-5		
	МСРР	93-65-2		
	Malathion	121-75-5		
7.0E-04 C	Maleic Anhydride	108-31-6		7.3E-01
	Maleic Hydrazide	123-33-1		
	Malononitrile	109-77-3		
	Mancozeb	8018-01-7		
	<u> </u>			

Carcinogenic SL   TR=1E-06   (ug/m³)   V   V   ug/m²   ug/m²   v   ug/m²   ug/m²   v   ug/m²   ug/m²   v   ug/m²   ug/m²   v   ug/m²   ug/m²   v   ug/m²   ug/m²   v   ug/m²   ug/m²	Noncarcinogenic SL HI=1 (μg/m³)  5.2E-02  3.1E-01 3.1E-01  3.1E+01
Cas No.   (ug/m³)   v   (mg/m³)   v   mg/m³   v   mg	(μg/m³)  5.2E-02  3.1E-01  3.1E-01  3.1E+01
Maneb   12427-38-2   5.0E-05   Manganese (Diet)   7439-96-5   5.0E-05   Manganese (Non-diet)   7439-96-5   7439-96-5   7439-96-5   7439-96-5   7439-96-5   7439-96-5   7439-96-5   7439-96-5   7439-96-5   7439-96-5   7439-97-6   7439-	3.1E-01 3.1E-01 3.1E-01
S.OE-05   Manganese (Diet)   7439-96-5   7439-96-5   7439-96-5   7439-96-5   7439-96-5   7439-96-5   7439-96-5   7439-96-5   7439-96-5   7439-96-5   7439-96-5   7439-96-5   7439-96-5   7439-96-5   7439-96-5   7439-96-6   7439-96-6   7439-97-6	3.1E-01 3.1E-01 3.1E+01
S.OE-05   Manganese (Non-diet)   7439-96-5	3.1E-01 3.1E-01 3.1E+01
Mephosfolan   950-10-7   Mepiquat Chloride   24307-26-4   Mercury Compounds   7487-94-7   3.0E-04   V   Mercury (elemental)   7439-97-6   7439-97-6   7487-94-7   7439-97-6   7487-94-7   7439-97-6   7487-94-7   7439-97-6	3.1E-01 3.1E-01 3.1E+01
Mepiquat Chloride   Mercury Compounds   Mercury Compounds   3.0E-04   S   Mercuric Chloride (and other Mercury salts)   7487-94-7   3.0E-04   I V   Mercury (elemental)   7439-97-6   Methoxychlor   7487-94-7	3.1E-01 3.1E+01
Mercury Compounds   3.0E-04   S   "Mercuric Chloride (and other Mercury salts)   7487-94-7   3.0E-04   I   V   "Mercury (elemental)   7439-97-6   "Methyl Mercury   22967-92-6   Thenylmercuric Acetate   62-38-4   V   Merphos   150-50-5   Merphos Oxide   78-48-8   The property   7837-19-1   78	3.1E-01 3.1E+01
3.0E-04 S	3.1E-01 3.1E+01
3.0E-04   V	3.1E-01 3.1E+01
"Methyl Mercury       22967-92-6         "Phenylmercuric Acetate       62-38-4         V       Merphos       150-50-5         Merphos Oxide       78-48-8         3.0E-02 P V       Metalaxyl       57837-19-1         Methacrylonitrile       126-98-7         Methamidophos       10265-92-6         2.0E+01 I V       Methanol       67-56-1         Methidathion       950-37-8         Methomyl       16752-77-5         1.4E-05 C       Methoxy-5-nitroaniline, 2-       99-59-2       2.0E-01         Methoxychlor       72-43-5       1.0E-03 P V       Methoxyethanol Acetate, 2-       110-49-6	3.1E+01
"Phenylmercuric Acetate       62-38-4         Werphos       150-50-5         Merphos Oxide       78-48-8         3.0E-02 P V       Metalaxyl       57837-19-1         Methacrylonitrile       126-98-7         Methamidophos       10265-92-6         2.0E+01 I V       Methanol       67-56-1         Methidathion       950-37-8         Methomyl       16752-77-5         1.4E-05 C       Methoxy-5-nitroaniline, 2-       99-59-2         Methoxychlor       72-43-5         1.0E-03 P V       Methoxyethanol Acetate, 2-       110-49-6	
Merphos   150-50-5   Merphos Oxide   78-48-8	
Merphos Oxide   78-48-8	
Metalaxyl   57837-19-1   126-98-7   Methacrylonitrile   126-98-7   Methamidophos   10265-92-6     2.0E+01   V   Methanidophos   67-56-1   Methamidophos   950-37-8   Methomyl   16752-77-5     1.4E-05   C   Methoxy-5-nitroaniline, 2-   Methoxy-5-nitroaniline, 2-   Methoxy-6-nitroaniline, 2-   Methoxy-6-ni	
3.0E-02   P   V   Methacrylonitrile   126-98-7   10265-92-6	
2.0E+01   V Methanol 67-56-1 Methidathion 950-37-8 Methomyl 16752-77-5  1.4E-05   C Methoxy-5-nitroaniline, 2- 99-59-2 Action 72-43-5 Methoxychlor 72-43-5 Methoxychlor 72-43-5 Methoxycthanol Acetate, 2- 110-49-6	2 1F+04
Methidathion Methidathion Methodyl     950-37-8 16752-77-5       1.4E-05 C Methoxy-5-nitroaniline, 2- Methoxychlor     99-59-2 2.0E-01       1.0E-03 P V Methoxyethanol Acetate, 2-     110-49-6	2 1F+∩4
Methomyl     16752-77-5       1.4E-05 C     Methoxy-5-nitroaniline, 2- Methoxychlor     99-59-2 72-43-5       1.0E-03 P V     Methoxyethanol Acetate, 2-       110-49-6	2.12.04
1.4E-05 C       Methoxy-5-nitroaniline, 2-       99-59-2       2.0E-01         Methoxychlor       72-43-5         1.0E-03 P V       Methoxyethanol Acetate, 2-       110-49-6	
Methoxychlor         72-43-5           1.0E-03 P V         Methoxyethanol Acetate, 2-         110-49-6	
1.0E-03 P V Methoxyethanol Acetate, 2- 110-49-6	
2.0E-02 I V Methoxyethanol, 2- 109-86-4	1.0E+00
	2.1E+01
V Methyl Acetate 79-20-9	- 12 - 1
2.0E-02 P V Methyl Acrylate 96-33-3	2.1E+01
5.0E+00   V   Methyl Ethyl Ketone (2-Butanone)   78-93-3	5.2E+03
1.0E-03 X 2.0E-05 X V Methyl Hydrazine 60-34-4 2.8E-03 3.0E+00   V Methyl Isobutyl Ketone (4-methyl-2-pentanone) 108-10-1	2.1E-02
3.0E+00   V   Methyl Isobutyl Ketone (4-methyl-2-pentanone)   108-10-1   1.0E-03   C   Methyl-Isocyanate	3.1E+03
7.0E-01   V Methyl Methacrylate   80-62-6	1.0E+00
Methyl Parathion	7.3E+02
Methyl Phosphonic Acid 993-13-5	
4.0E-02 H V Methyl Styrene (Mixed Isomers) 25013-15-4	4.2E+01
2.8E-05 C Methyl methanesulfonate 66-27-3 1.0E-01	4.22101
2.6E-07 C 3.0E+00   V Methyl tert-Butyl Ether (MTBE) 1634-04-4 1.1E+01	3.1E+03
Methyl-1,4-benzenediamine dihydrochloride, 2- 615-45-2	
Methyl=5-Nitroaniline, 2-	
2.4E-03 C Methyl-N-ntro-N-ntrosoguanidine, N- 70-25-7 1.2E-03	
3.7E-05 C Methylaniline Hydro <u>chloride, 2</u> 636-21-5 7.6E-02	
Methylarsohic acid // control 124-58-3	
Methylbehzene,144-diamine monothydrockloride, 2- cml lbs () 74612-12-7	
Methylbenzene-1,4-diamine sulfate, 2- 615-50-9	
6.3E-03 C M Methylcholanthrene, 3- 56-49-5 1.6E-04	
1.0E-08   6.0E-01   V M Methylene Chloride 75-09-2 1.0E+02	6.3E+02
4.3E-04 C M Methylene-bis(2-chloroaniline), 4,4'- 101-14-4 2.4E-03 1.3E-05 C Methylene-bis(N,N-dimethyl) Aniline, 4,4'- 101-61-1 2.2E-01	
4.6E-04 C 2.0E-02 C Methylenebisbenzenamine, 4,4'- 101-77-9 6.1E-03	2.1E+01
4.6E-04 C 2.0E-02 C Internylenebisbenzenamine, 4,4-  6.0E-04 I Methylenediphenyl Diisocyanate 101-68-8	6.3E-01
V Methylstyrene, Alpha- 98-83-9	0.51-01
Metolachlor 51218-45-2	
Metribuzin 21087-64-9	
Metsulfuron-methyl 74223-64-6	
V Mineral oils 8012-95-1	
5.1E-03 C V Mirex 2385-85-5 5.5E-04	
Molinate 2212-67-1	
Molybdenum 7439-98-7	
Monochloramine 10599-90-3	
Monomethylaniline 100-61-8	
Myclobutanil 88671-89-0	
N,N'-Diphenyl-1,4-benzenediamine 74-31-7 V Naled 300-76-5	
1.0E-01 P V Naphtha, High Flash Aromatic (HFAN) 64742-95-6	1.0E+02
1.0E-01 P V Naphtha, High Flash Aromatic (HFAN) 64/42-95-6 0.0E+00 C Naphthylamine, 2- 91-59-8	1.0E+02
Napropamide 15299-99-7	
2.6E-04 C 1.4E-05 C Nickel Acetate 373-02-4 1.1E-02	1.5E-02
2.6E-04 C 1.4E-05 C Nickel Carbonate 3333-67-3 1.1E-02	1.5E-02 1.5E-02
2.6E-04 C 1.4E-05 C V Nickel Carbonyl 13463-39-3 1.1E-02	1.5E-02
2.6E-04 C 1.4E-05 C Nickel Hydroxide 12054-48-7 1.1E-02	1.5E-02
2.6E-04 C 2.0E-05 C Nickel Oxide 1313-99-1 1.1E-02	

Toxicity and Chemical-specific	. Values are based on DAF=1; m = Concentration may exceed ceiling limit (See U  Contaminant	ser duidej, s – conce	Carcinogenic Target Risk (TR) = 1E-06	
Toxicity and Chemical-specific	Contaminant			
k k v			Carcinogenic SL	Noncarcinogenic SL
IUR e RfC <sub>i</sub> e o muta-			TR=1E-06	HI=1
(ug/m <sup>3</sup> ) <sup>-1</sup> y (mg/m <sup>3</sup> ) y I gen	Analyte	CAS No.	(ug/m³)	(μg/m³)
2.4E-04   1.4E-05 C	Nickel Refinery Dust	NA	1.2E-02	1.5E-02
2.6E-04 C 9.0E-05 A	Nickel Soluble Salts	7440-02-0	1.1E-02	9.4E-02
4.8E-04   1.4E-05 C	Nickel Subsulfide	12035-72-2	5.8E-03	1.5E-02
2.6E-04 C 1.4E-05 C	Nickelocene	1271-28-9	1.1E-02	1.5E-02
	Nitrate	14797-55-8		
	Nitrate + Nitrite (as N)	NA		
	Nitrite	14797-65-0		
5.0E-05 X	Nitroaniline, 2-	88-74-4		5.2E-02
6.0E-03 P	Nitroaniline, 4-	100-01-6		6.3E+00
4.0E-05   9.0E-03   V	Nitrobenzene	98-95-3	7.0E-02	9.4E+00
4.0L-03 1 9.0L-03 1 V			7.0E-02	5.4L+00
	Nitrocellulose	9004-70-0		
	Nitrofurantoin	67-20-9		
3.7E-04 C	Nitrofurazone	59-87-0	7.6E-03	
	Nitroglycerin	55-63-0		
	Nitroguanidine	556-88-7		
8.8E-06 P 5.0E-03 P V	Nitromethane	75-52-5	3.2E-01	5.2E+00
2.7E-03 H 2.0E-02 I V	Nitropropane, 2-	79-46-9	1.0E-03	2.1E+01
7.7E-03 C M	Nitroso-N-ethylurea, N-	759-73-9	1.3E-04	
3.4E-02 C M	Nitroso-N-methylurea, N-	684-93-5	3.0E-05	
1.6E-03 I V	Nitroso-di-N-butylamine, N-	924-16-3	1.8E-03	
2.0E-03 C	Nitroso-di-N-propylamine, N-	621-64-7	1.4E-03	
8.0E-04 C	Nitrosodiethanolamine, N-	1116-54-7	3.5E-03	
4.3E-02   M	Nitrosodiethylamine, N-	55-18-5	2.4E-05	4.05.00
1.4E-02   4.0E-05 X V M	Nitrosodimethylamine, N-	62-75-9	7.2E-05	4.2E-02
2.6E-06 C	Nitrosodiphenylamine, N-	86-30-6	1.1E+00	
6.3E-03 C V	Nitrosomethylethylamine, N-	10595-95-6	4.5E-04	
1.9E-03 C	Nitrosomorpholine [N-]	59-89-2	1.5E-03	
2.7E-03 C	Nitrosopiperidine [N-]	100-75-4	1.0E-03	
6.1E-04 I	Nitrosopyrrelidine, N <sub>7</sub>	930-55-2	4.6E-03	
0.12 04 1	Nitrotoluene) m-	99-08-1	4.02 03	
V		1 1 1 1		
V	11 1 11	-88-72-2		
	Nitrotoluene p- \\\ CTTTTD	99-99-0		
2.0E-02 P V	Nonane, n- U U V CELLED LESSES NOS	111,84-2		2.1E+01
	Norflurazon	27314-13-2		
	Octabromodiphenyl Ether	32536-52-0		
	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	2691-41-0		
	Octamethylpycophosphoramide	152-16-9		
	() ( ) ( ) ( ) ( ) ( ) ( ) ( )	/		
	Oryzalin // \\	19044-88-3		
	Oxadiazon	19666-30-9		
	Oxamyl     \	23135-22-0		
	Oxyfluorfen ( )	42874-03-3		
	Paclobutrazol	76738-62-0		
	Paraguat Dichloride	1910-42-5		
	•			
.,	Parathion Park Luc	56-38-2		
V	Pebulate	1114-71-2		
	Pendimethalin	40487-42-1		
V	Pentabromodiphenyl Ether	32534-81-9		
	Pentabromodiphenyl ether, 2,2',4,4',5- (BDE-99)	60348-60-9		
V	Pentachlorobenzene	608-93-5		
V	Pentachloroethane	76-01-7		
v	Pentachloronitrobenzene	82-68-8		
5.1E-06 C	Pentachlorophenol	87-86-5	5.5E-01	
5.12 00 0	·		J.JL 01	
	Pentaerythritol tetranitrate (PETN)	78-11-5		
1.0E+00 P V	Pentane, n-	109-66-0		1.0E+03
	Perchlorates			
	~Ammonium Perchlorate	7790-98-9		
	~Lithium Perchlorate	7791-03-9		
	~Perchlorate and Perchlorate Salts	14797-73-0		
	~Potassium Perchlorate	7778-74-7		
	~Sodium Perchlorate	7601-89-0		
V				
V	Perfluorobutane Sulfonate	375-73-5		
	Permethrin	52645-53-1		
6.3E-07 C	Phenacetin	62-44-2	4.5E+00	
	Phenmedipham	13684-63-4		
2.0E-01 C	Phenol	108-95-2		2.1E+02
2.02.02.0	Phenothiazine	92-84-2		2.12.02
	Phenylenediamine, m-	108-45-2		
	Phenylenediamine, o-	95-54-5		

Toxicity and Chemical-specific	L values are based on DAF=1; m = Concentration may exceed ceiling limit (See Os Contaminant	ser duide), s = conce	Carcinogenic Target Risk (TR) = 1E-06	
Toxicity and Chemical-specific	Contaminant		Carcinogenic SL	Noncarcinogenic SL
IUR e RfC <sub>i</sub> e o muta			TR=1E-06	HI=1
		CACNIC		
(ug/m <sup>3</sup> ) <sup>-1</sup> y (mg/m <sup>3</sup> ) y I gen	Analyte	CAS No.	(ug/m³)	(μg/m³)
	Phenylenediamine, p-	106-50-3		
	Phenylphenol, 2-	90-43-7		
	Phorate	298-02-2		
3.0E-04 I V	Phosgene	75-44-5		3.1E-01
	Phosmet	732-11-6		
	Phosphates, Inorganic	42776 00 0		
	~Aluminum metaphosphate	13776-88-0		
	~Ammonium polyphosphate	68333-79-9		
	~Calcium pyrophosphate	7790-76-3		
	~Diammonium phosphate	7783-28-0		
	~Dicalcium phosphate	7757-93-9		
	~Dimagnesium phosphate ~Dipotassium phosphate	7782-75-4 7758-11-4		
	~Disodium phosphate	7558-79-4		
	~Monoaluminum phosphate	13530-50-2		
	~Monoammonium phosphate	7722-76-1		
	~Monocalcium phosphate	7758-23-8		
	~Monomagnesium phosphate	7757-86-0		
	~Monopotassium phosphate	7778-77-0		
	~Monosodium phosphate	7558-80-7		
	~Polyphosphoric acid	8017-16-1		
	~Potassium tripolyphosphate	13845-36-8		
	~Sodium acid pyrophosphate	7758-16-9		
	~Sodium aluminum phosphate (acidic)	7785-88-8		
	~Sodium aluminum phosphate (anhydrous)	10279-59-1		
	~Sodium aluminum phosphate (tetrahydrate)	10305-76-7		
	~Sodium hexametaphosphate	10124-56-8		
	~Sodium polyphosphate	68915-31-1		
	~Sodium(trimetaphosphate)	7785-84-4		
	~Sodium tripolyphosphate//	7758-29-4		
	~Tetrapotassium phosphaté.	7320-34-5		
	~Tetrasodium pyrophosphate	7722-88-5		
	~Trialuminum sodium tetra decahydrogenoctaorthophosphate (dihydrate)	15136-87-5		
	~Tricalcium phosphate	7758-87-4		
	~Trimagnesium phosphate	7757-87-1		
	*Tripotassium phosphate	7778-53-2		
3.0E-04 I V	~Trisodium-phosphate Phosphine	7601-54-9 7803-51-2		3.1E-01
1.0E-02	Phosphoric Acid	7664-38-2		1.0E+01
1.0E-02 T	burning the 11 11 V // C000000 11 V	77723-14-0		1.0E+01
V	Phthalates O \	17/23-14-0		
2.4E-06 C	~Bis(2-ethylhexyl)phthalate	117-81-7	1.2E+00	
2.42 00 0	~Butylphthalyl Butylglycolate	85-70-1	1.22.00	
	~Dibutyl Phthalate	84-74-2		
_	~Diethyl Phthalate	84-66-2		
V	~Dimethylterephthalate	120-61-6		
	~Octyl Phthalate, di-N-	117-84-0		
	~Phthalic Acid, P-	100-21-0		
2.0E-02 C	~Phthalic Anhydride	85-44-9		2.1E+01
	Picloram	1918-02-1		
	Picramic Acid (2-Amino-4,6-dinitrophenol)	96-91-3		
	Picric Acid (2,4,6-Trinitrophenol)	88-89-1		
	Pirimiphos, Methyl	29232-93-7		
8.6E-03 C	Polybrominated Biphenyls	59536-65-1	3.3E-04	
2.05.05.0	Polychlorinated Biphenyls (PCBs)	12674 44 2	1.45.04	
2.0E-05 S V	~Aroclor 1016	12674-11-2	1.4E-01	
5.7E-04 S V 5.7E-04 S V	~Aroclor 1221	11104-28-2	4.9E-03	
5.7E-04 S V 5.7E-04 S V	~Aroclor 1232 ~Aroclor 1242	11141-16-5 53469-21-9	4.9E-03 4.9E-03	
5.7E-04 S V	~Aroclor 1248	12672-29-6	4.9E-03	
J./ L 'U4 J V	~Aroclor 1248	11097-69-1	4.9E-03 4.9E-03	
5.7F-04. S. V.	711 OCIO1 1234	11097-69-1	4.9E-03 4.9E-03	
5.7E-04 S V 5.7E-04 S V	~Aroclor 1260			
5.7E-04 S V	~Aroclor 1260 ~Aroclor 5460			
5.7E-04 S V V	~Aroclor 5460	11126-42-4		1.4F+00
5.7E-04 S V V 1.1E-03 E 1.3E-03 E V	~Aroclor 5460 ~Heptachlorobiphenyl, 2,3,3',4,4',5,5'- (PCB 189)	11126-42-4 39635-31-9	2.5E-03	1.4E+00 1.4E+00
5.7E-04 S V V 1.1E-03 E 1.3E-03 E V 1.1E-03 E 1.3E-03 E V	~Aroclor 5460 ~Heptachlorobiphenyl, 2,3,3',4,4',5,5'- (PCB 189) ~Hexachlorobiphenyl, 2,3',4,4',5,5'- (PCB 167)	11126-42-4 39635-31-9 52663-72-6	2.5E-03 2.5E-03	1.4E+00
5.7E-04 S V V 1.1E-03 E 1.3E-03 E V	~Aroclor 5460 ~Heptachlorobiphenyl, 2,3,3',4,4',5,5'- (PCB 189)	11126-42-4 39635-31-9	2.5E-03	

Toxicity and Chemical-specific	Contaminant		Carcinogenic Target Risk (TR) = 1E-06	
k k v			Carcinogenic SL	Noncarcinogenic SL
IUR e RfC <sub>i</sub> e o muta-			TR=1E-06	HI=1
(ug/m³) <sup>-1</sup> y (mg/m³) y I gen	Analyte	CAS No.	(ug/m³)	(μg/m³)
1.1E-03 E 1.3E-03 E V	~Pentachlorobiphenyl, 2',3,4,4',5- (PCB 123)	65510-44-3	2.5E-03	1.4E+00
1.1E-03 E 1.3E-03 E V 1.1E-03 E 1.3E-03 E V	~Pentachlorobiphenyl, 2,3',4,4',5- (PCB 118) ~Pentachlorobiphenyl, 2,3,3',4,4'- (PCB 105)	31508-00-6 32598-14-4	2.5E-03 2.5E-03	1.4E+00 1.4E+00
1.1E-03 E 1.3E-03 E V		74472-37-0	2.5E-03	1.4E+00
3.8E+00 E 4.0E-07 E V	~Pentachlorobiphenyl, 2,3,4,4',5- (PCB 114) ~Pentachlorobiphenyl, 3,3',4,4',5- (PCB 126)	57465-28-8	2.5E-03 7.4E-07	4.2E-04
5.7E-04 I V	~Polychlorinated Biphenyls (high risk)	1336-36-3	4.9E-03	4.21-04
1.0E-04 I V	~Polychlorinated Biphenyls (low risk)	1336-36-3	2.8E-02	
2.0E-05 I V	~Polychlorinated Biphenyls (lowest risk)	1336-36-3	1.4E-01	
3.8E-03 E 4.0E-04 E	~Tetrachlorobiphenyl, 3,3',4,4'- (PCB 77)	32598-13-3	7.4E-04	4.2E-01
1.1E-02 E 1.3E-04 E V	~Tetrachlorobiphenyl, 3,4,4',5- (PCB 81)	70362-50-4	2.5E-04	1.4E-01
6.0E-04 I	Polymeric Methylene Diphenyl Diisocyanate (PMDI)	9016-87-9		6.3E-01
	Polynuclear Aromatic Hydrocarbons (PAHs)			
V	~Acenaphthene	83-32-9		
V	~Anthracene	120-12-7	0.25.02	
1.1E-04 C V M	~Benz[a]anthracene	56-55-3	9.2E-03	
1.1E-04 C	~Benzo(j)fluoranthene	205-82-3	2.6E-02	
1.1E-03 C M 1.1E-04 C M	~Benzo[a]pyrene	50-32-8 205-99-2	9.2E-04 9.2E-03	
1.1E-04 C M	~Benzo[b]fluoranthene ~Benzo[k]fluoranthene	205-99-2		
1.1E-04 C M	~Eenzo[k]fluorantnene ~Chloronaphthalene, Beta-	207-08-9 91-58-7	9.2E-03	
1.1E-05 C M	~Chrysene	91-58-7 218-01-9	9.2E-02	
1.2E-03 C M	~Dibenz[a,h]anthracene	53-70-3	8.4E-04	
1.1E-03 C	~Dibenzo(a,e)pyrene	192-65-4	8.4E-04 2.6E-03	
7.1E-02 C M	~Dimethylbenz(a)anthracene, 7,12-	57-97-6	1.4E-05	
	~Fluoranthene	206-44-0		
V	~Fluorene	86-73-7		
1.1E-04 C M	~Indeno[1,2,3-cd]pyrene	193-39-5	9.2E-03	
V	~Methylnaphthalene, 1-	90-12-0		
V	~Methylnaghthalene, 2-	91-57-6		
3.4E-05 C 3.0E-03 I V	~Naphthalene/ CCCCCO	- 91-20-3	8.3E-02	3.1E+00
1.1E-04 C	~Nitropyrene, 4-	57835-92-4	2.6E-02	
V	"Pyrene [] [] [] Calling Library []	-129-00-0		
	Potassium Perfluorobutane Sulfonate	29420-49-3		
	Prochloraz	67747-09-5		
V	Profluralin	26399-36-0		
	Prometon	1610-18-0		
	Prometryn (1)	7287-19-6		
	Propachlor	1918-16-7		
	Propanediol, 1,2-	114-26-1		
	Propanil U U U XXXX CLD 0 XXX	709-98-8		
V	Propargite Propargite Alcohol	2312-35-8 107-19-7		
	Propargyl Alcohol			
	Propazine Propham	139-40-2		
	Propiconazole	122-42-9 60207-90-1		
8.0E-03 I V	Propionaldehyde	123-38-6		8.3E+00
1.0E+00 X V	Propyl benzene	103-65-1		8.3E+00 1.0E+03
3.0E+00 X V	Propylene	115-07-1		3.1E+03
	Propylene Glycol	57-55-6		
2.7E-04 A	Propylene Glycol Dinitrate	6423-43-4		2.8E-01
2.0E+00 I V	Propylene Glycol Monomethyl Ether	107-98-2		2.1E+03
3.7E-06   3.0E-02   V	Propylene Oxide	75-56-9	7.6E-01	3.1E+01
	Propyzamide	23950-58-5		
V	Pyridine	110-86-1		
	Quinalphos	13593-03-8		
	Quinoline	91-22-5		
	Quizalofop-ethyl	76578-14-8		
3.0E-02 A	Refractory Ceramic Fibers	NA		3.1E+01
V	Resmethrin	10453-86-8		
V	Ronnel	299-84-3		
6.35.05.0	Rotenone	83-79-4	1 65 02	
6.3E-05 C M	Safrole Selenious Acid	94-59-7 7783-00-8	1.6E-02	
2.0E-02 C	Selenium Selenium	7782-49-2		2.1E+01
2.0E-02 C 2.0E-02 C	Selenium Selenium Sulfide	7782-49-2 7446-34-6		2.1E+01 2.1E+01
2.UE-U2 C	Sethoxydim	7446-34-6		2.16+01
3.0E-03 C	Silica (crystalline, respirable)	7631-86-9		3.1E+00
3.0E-03 C	Silver	7440-22-4		3.1LTUU
	JIIVCI	/440-22-4		

Toxicity and Chemical-specific	. Values are based on DAF=1; m = Concentration may exceed ceiling limit (see User Gu  Contaminant	ue), s – conce	Carcinogenic Target Risk (TR) = 1E-06	
Toxicity and chemical-specific	Contaminant		Carcinogenic SL	Noncarcinogenic SL
IUR e RfC <sub>i</sub> e o muta-			TR=1E-06	_
				HI=1
(ug/m <sup>3</sup> ) <sup>-1</sup> y (mg/m <sup>3</sup> ) y I gen	Analyte	CAS No.	(ug/m³)	(μg/m³)
	Simazine	122-34-9		
	Sodium Acifluorfen	62476-59-9		
	Sodium Azide	26628-22-8		
1.5E-01 C 2.0E-04 C M	Sodium Dichromate	10588-01-9	6.8E-06	2.1E-01
	Sodium Diethyldithiocarbamate	148-18-5		
1.3E-02 C	Sodium Fluoride	7681-49-4		1.4E+01
1.52 52 6	Sodium Fluoroacetate	62-74-8		1112.01
	Sodium Metavanadate	13718-26-8		
	Sodium Tungstate			
	<u> </u>	13472-45-2		
	Sodium Tungstate Dihydrate	10213-10-2		
	Stirofos (Tetrachlorovinphos)	961-11-5		
1.5E-01 C 2.0E-04 C M	Strontium Chromate	7789-06-2	6.8E-06	2.1E-01
	Strontium, Stable	7440-24-6		
	Strychnine	57-24-9		
1.0E+00 I V	Styrene	100-42-5		1.0E+03
	Styrene-Acrylonitrile (SAN) Trimer	NA		
2.0E-03 X	Sulfolane	126-33-0		2.1E+00
	Sulfonylbis(4-chlorobenzene), 1,1'-	80-07-9		
1.0E-03 C V	Sulfur Trioxide	7446-11-9		1.0E+00
				1.0E+00
1.0E-03 C	Sulfuric Acid	7664-93-9	4.05.01	1.0E+00
7.1E-06 I	Sulfurous acid, 2-chloroethyl 2-[4-(1,1-dimethylethyl)phenoxy]-1-methylethyl ester	140-57-8	4.0E-01	
	ТСМТВ	21564-17-0		
	Tebuthiuron	34014-18-1		
	Temephos	3383-96-8		
	Terbacil	5902-51-2		
V	Terbufos	13071-79-9	· ·	
	Terbutryn	886-50-0		
	Tetrabromodiphenyl ether, 2,2',4,4'- (BDE-47),	5436-43-1		
V	Tetrachloropenzene, 1,2,4,5-	95-94-3		
7.4E-06 I V	Tanah (1997)	630-20-6	3.8E-01	
5.8E-05 C V	Tetrachloroethane, 1,1,2,2,-	79/34-5	4.8E-02	
		/		4.25.04
2.6E-07   4.0E-02   V	Tetrachloroethylene	127-18-4	1.1E+01	4.2E+01
	Tetrachlorophenol, 2,3,4,6-	58-90-2		
V	Tetrachlorotoluene, p- alpha, alpha-	5216-25-1		
	Tetraethyl Dithiopyrophosphate	3689-24-5		
8.0E+01 I V	Tetrafluoroethane, 1,1,1,2-	811-97-2		8.3E+04
	Tetryl (Trinitrophenylmethylnitramine)	479-45-8		
_	Thallium (I) Nitrate	10102-45-1		
	Thallium (Sollyble Salts)	7440-28-0		
V	Thallium Acetate	563-68-8		
	Thallium Carbonate	6533-73-9		
ľ	Thallium Chloride	7791-12-0		
	Thallium Sulfate	7446-18-6		
			-	
	Thifensulfuron-methyl	79277-27-3		
	Thiobencarb	28249-77-6		
	Thiodiglycol	111 48 8		
	Thiofanox	39196-18-4		
	Thiophanate, Methyl	23564-05-8		
	Thiram	137-26-8		
	Tin	7440-31-5		
1.0E-04 A V	Titanium Tetrachloride	7550-45-0		1.0E-01
5.0E+00 I V	Toluene	108-88-3		5.2E+03
	Toluene-2,5-diamine	95-70-5		
	Toluidine, p-	106-49-0		
V	Total Petroleum Hydrocarbons (Aliphatic High)	NA		
				6.25.02
6.0E-01 P V	Total Petroleum Hydrocarbons (Aliphatic Low)	NA		6.3E+02
1.0E-01 P V	Total Petroleum Hydrocarbons (Aliphatic Medium)	NA		1.0E+02
	Total Petroleum Hydrocarbons (Aromatic High)	NA		
3.0E-02 P V	Total Petroleum Hydrocarbons (Aromatic Low)	NA		3.1E+01
3.0E-03 P V	Total Petroleum Hydrocarbons (Aromatic Medium)	NA		3.1E+00
3.2E-04 I	Toxaphene	8001-35-2	8.8E-03	
	Tralomethrin	66841-25-6		
V	Tri-n-butyltin	688-73-3		
•	Triacetin	102-76-1		
.,	Triadimefon	43121-43-3		
V	Triallate	2303-17-5		
	Triasulfuron	82097-50-5		
	Tribenuron-methyl	101200-48-0		

Toxicity and Chemical-specific	. values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Gu Contaminant	alacj, s – conce	Carcinogenic Target Risk (TR) = 1E-0	
roxicity and chemical-specific	Contaminant		Carcinogenic SL	Noncarcinogenic SL
IUR e RfC <sub>i</sub> e o muta-			TR=1E-06	HI=1
		CACNI		
(ug/m <sup>3</sup> ) <sup>-1</sup> y (mg/m <sup>3</sup> ) y I gen	Analyte	CAS No.	(ug/m³)	(μg/m³)
V	Tribromobenzene, 1,2,4-	615-54-3		
	Tributyl Phosphate	126-73-8		
	Tributyltin Compounds	NA		
	Tributyltin Oxide	56-35-9		
3.0E+01 H V	Trichloro-1,2,2-trifluoroethane, 1,1,2-	76-13-1		3.1E+04
	Trichloroacetic Acid	76-03-9		
	Trichloroaniline HCl, 2,4,6-	33663-50-2		
	Trichloroaniline, 2,4,6-	634-93-5		
V	Trichlorobenzene, 1,2,3-	87-61-6		
2.0E-03 P V	Trichlorobenzene, 1,2,4-	120-82-1		2.1E+00
5.0E+00 I V	Trichloroethane, 1,1,1-	71-55-6		5.2E+03
1.6E-05   2.0E-04 X V	Trichloroethane, 1,1,2-	79-00-5	1.8E-01	2.1E-01
4.1E-06   2.0E-03   V M	Trichloroethylene	79-01-6	4.8E-01	2.1E+00
V	Trichlorofluoromethane	75-69-4		
	Trichlorophenol, 2,4,5-	95-95-4		
3.1E-06 I	Trichlorophenol, 2,4,6-	88-06-2	9.1E-01	
	Trichlorophenoxyacetic Acid, 2,4,5-	93-76-5		
	Trichlorophenoxypropionic acid, -2,4,5	93-72-1		
V	Trichloropropane, 1,1,2-	598-77-6		
3.0E-04 I V M	Trichloropropane, 1,2,3-	96-18-4		3.1E-01
3.0E-04 P V	Trichloropropene, 1,2,3-	96-19-5		3.1E-01
	Tricresyl Phosphate (TCP)	1330-78-5		
	Tridiphane	58138-08-2		
7.0E-03 I V	Triethylamine (TT)	121-44-8		7.3E+00
	Triethylene Glycol	112-27-6		
2.0E+01 P V	Trifluoroethane, 1,1,1	420-46-2		2.1E+04
V	Trifluralin , \\\\\	- 1582-09-8		
	Trimethyl Phosphate	512-56-1		
5.0E-03 P V	Trimethylbenzene, 1,2,3-	526-73-8		5.2E+00
7.0E-03 P V	Trimethylbenzene, 1,2,4-	95-63-6		7.3E+00
7.02 03 1 V	Trimethylbenzene, 1,3,5-	108-67-8		7.52.00
v	Trimethylpentene, 2,4,4-11	25167-70-8		
	Trinitrobenzene, 1,3,5	99-35-4		
	Transportation of Courts	118-96-7		
	Triphenylphosphine Oxide	791-28-6		
	Tris(1,3-Dichloro-2-propyl) Phosphate	13674-87-8		
	Tris(1-chloro-2-propyl)phosphate	13674-84-5		
6.6E-04 C V	Tris(2,3-dibromopropyl)phosphate	126-72-7	4.3E-03	
	Tris(2-chloroethyl)phosphate	115-96-8	52 03	
	Tris(2-ethylhexyl)phosphate	78-42-2		
	Tungsten	78-42-2 7440-33-7		
4.0E-05 A	Uranium (Soluble Salts)	NA		4.2E-02
2.9E-04 C M	Urethane	51-79-6	3.5E-03	4.2L-02
8.3E-03 P 7.0E-06 P	Vanadium Pentoxide	1314-62-1	3.4E-04	7.3E-03
1.0E-04 A	Vanadium and Compounds	7440-62-2	2.72.01	1.0E-01
1.0E-04 A V	Vernolate	1929-77-7		1.0E-01
v	Vinclozolin	50471-44-8		
2.0E-01   V	Vinyl Acetate	108-05-4		2.1E+02
3.2E-05 H 3.0E-03 I V	Vinyl Bromide	593-60-2	8.8E-02	3.1E+00
4.4E-06   1.0E-01   V M	Vinyl Chloride	75-01-4	1.7E-01	1.0E+02
00 1 1.01 01 1 7 171	Warfarin	81-81-2	1.71.01	1.51.02
1.0F.01.5.V		106-42-3		1.05+02
1.0E-01 S V 1.0E-01 S V	Xylene, P- Xylene, m-	106-42-3 108-38-3		1.0E+02 1.0E+02
1.0E-01 S V	Xylene, o-	95-47-6 1330-20-7		1.0E+02
1.0E-01 I V	Xylenes Zing Phosphida			1.0E+02
	Zinc Phosphide	1314-84-7		
	Zinc and Compounds	7440-66-6		
	Zineb Zirconium	12122-67-7		
	LUCCODUUM	7440-67-7		

						cer; * = w	here: n	< 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Co	oncentration may ex					may exceed						
	T	oxicity and Che	mical-specif	ic Informat	tion			Contaminant		Car	cinogenic Ta	rget Risk (TF	R) = 1E-06				zard Index (HI) = 1		Protection of	Groundwater
	1.1		. 1	.								Inhalation		Ingestion SI	Dermal SL	SL	Noncarcinogenic SL			
SFO	k IUR	k n/o	RfC <sub>i</sub>	k v						Ingestion SI		SL	Carcinogenic SL	Child	Child	Child	Child		Risk-based	MCL-based
	e IUK (	e RfD <sub>o</sub>		e o muta-	1					TR=1E-06	TR=1E-06	TR=1E-06	TR=1E-06	THQ=1	THQ=1	THQ=1	THI=1	MCL	SSL	SSL
ng/kg-day) <sup>-1</sup>	y (ug/m²) ²	y (mg/kg-day)	y (mg/m³)	y I gen	-00.		A In EF		CAS No.	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(ug/L)	(mg/kg)	(mg/kg)
8.7E-03	1	4.0E-03	I		-0.85		1 Ye	Acephate	30560-19-1	9.0E+00	1.2E+04		8.9E+00	8.0E+01	1.1E+05		8.0E+01		2.0E-03	
	2.2E-06		9.0E-03	I V			1 Ye		75-07-0			2.6E+00	2.6E+00			1.9E+01	1.9E+01		5.2E-04	
		2.0E-02	I		3.03		.9 Ye		34256-82-1					4.0E+02	2.9E+03		3.5E+02		2.8E-01	
		9.0E-01	I 3.1E+01 /		-0.24		1 Ye		67-64-1					1.8E+04	4.4E+06	6.4E+04	1.4E+04		2.9E+00	
			2.0E-03		-0.03	-	1 Ye	Acetone Cyanohydrin	75-86-5											
			6.0E-02	I V	-0.34		1 Ye	Acetonitrile	75-05-8							1.3E+02	1.3E+02		2.6E-02	
		1.0E-01	I	V	1.58		1 Ye	Acetophenone	98-86-2					2.0E+03	4.6E+04		1.9E+03		5.8E-01	
3.8E+00	C 1.3E-03				3.12		1 Ye	Acetylaminofluorene, 2-	53-96-3	2.1E-02	6.7E-02		1.6E-02						7.2E-05	
			I 2.0E-05		-0.01	1	1 Ye	Acrolein	107-02-8					1.0E+01	1.7E+03	4.2E-02	4.2E-02		8.4E-06	
5.0E-01	I 1.0E-04		I 6.0E-03		-0.67	1	1 Ye	Acrylamide	79-06-1	5.0E-02	2.3E+01		5.0E-02	4.0E+01	2.1E+04		4.0E+01		1.1E-05	
			I 1.0E-03	I V	0.35	1	1 Ye	Acrylic Acid	79-10-7					1.0E+04	1.1E+06	2.1E+00	2.1E+00		4.2E-04	
5.4E-01	I 6.8E-05	I 4.0E-02	A 2.0E-03	I V	0.25	1	1 Ye	Acrylonitrile	107-13-1	1.4E-01	1.4E+01	8.3E-02	5.2E-02	8.0E+02	8.9E+04	4.2E+00	4.1E+00		1.1E-05	
			6.0E-03 I	P	-0.32	1	1 Ye	Adiponitrile	111-69-3											
5.6E-02	С	1.0E-02	I .		3.52		.9 Ye	Alachlor	15972-60-8	1.4E+00	4.4E+00		1.1E+00	2.0E+02	6.9E+02		1.6E+02	2.0E+00	8.7E-04	1.7E-03
		1.0E-03	I .		1.13		1 Ye	Aldicarb	116-06-3					2.0E+01	1.4E+03		2.0E+01	3.0E+00	4.9E-03	7.5E-04
		1.0E-03			-0.57		1 Ye	Aldicarb Sulfone	1646-88-4					2.0E+01	2.4E+04		2.0E+01	2.0E+00	4.4E-03	4.4E-04
					-0.78		1 Ye	Aldicarb sulfoxide	1646-87-3									4.0E+00		8.8E-04
1.7F+01	I 4.9E-03	3.0E-05	1	V	6.5	1	1 No	Aldrin	309-00-2	4.6E-03		1.1E-03	9.2E-04	6.0E-01			6.0E-01	7.02.00	1.5E-04	0.02 04
	03		I 1.0E-04	v v	0.17	1	1 Ye	Allyl Alcohol	107-18-6	-1.02 03		1.12.03	3.22 03	1.0E+02	1.3E+04	2.1E-01	2.1E-01		4.2E-05	
2 1E 02	C 6.0E-06		1.0E-04		1.93		1 fe 1 Ye	Allyl Chloride	107-18-6	3.7E+00	3.5E+01	9.4E-01	7.3E-01	1.02+02	1.3E+04	2.1E+00	2.1E+00		4.2E-05 2.3E-04	
2.1L-U2	C 0.0E-00		1.0E-03 P 5.0E-03 I		1.93	1		Aluminum	7429-90-5	3.72+00	3.32+01	5.4E-U1	7.5E-U1	2.0F+04	4.6F+06	2.12+00	2.1E+00 2.0E+04		2.3E-04 3.0E+04	
		4.0E-04	J.UE-U3 I				1 Ye		20859-73-8					8.0F+00	1.8F+03		8.0E+00		3.UETU4	
					2	-		Aluminum Phosphide						0.02.00					4.00 00	
2.45.04	C C C C C C C C C C C C C C C C C C C	9.0E-03	1		2.98		1 Ye	Ametryn	834-12-8	2.75.02	1.55.03		2.05.02	1.8E+02	9.8E+02		1.5E+02		1.6E-01	
2.1t+01	C 6.0E-03				2.86		1 Ye	Aminobiphenyl, 4-	92-67-1	3.7E-03	1.5E-02		3.0E-03	4.65.55	2.05.55		4.6		1.5E-05	
		8.0E-02	Ρ		0.21		1 Ye	Aminophenol, m-	591-27-5					1.6E+03	2.8E+05		1.6E+03		6.1E-01	
		2.02 02	P .		0.04		1 Ye	Aminophenol, p-	123-30-8					4.0E+02	9.1E+04		4.0E+02		1.5E-01	
		2.5E-03	I		5.5		.9 Ye		33089-61-1		_			5.0E+01	9.8E+00		8.2E+00		4.2E+00	
			1.0E-01	I V	0.23	1	1	Ammonia	7664-41-7											
		2.0E-01	I			1		Ammonium Su <del>lfamate</del>	7773-06-6					4.0E+03	9.1E+05		4.0E+03			
			3.0E-03	K V	0.89	1	1 Ye	Amyl Alcohol, tert	75-85-4							6.3E+00	6.3E+00		1.3E-03	
5.7E-03	I 1.6E-06	C 7.0E-03	P 1.0E-03	1	0.9	1	1 Ye	Aniline	62 53 3	1.4E+01	6.9E+02		1.3E+01	1.4E+02	7.7E+03		1.4E+02		4.6E-03	
4.0E-02	P	2.0E-03	X		3.39	1 0	.9 Ye	Anthraquinone, 9,10-	84-65-1	1.9E+00	5.1E+00		1.4E+00	4.0E+01	1.1E+02		3.0E+01		1.4E-02	
		4.0E-04	I			0.15	1 Ye	Antimony (metallic)	7440-36-0					8.0E+00	2.7E+02		7.8E+00	6.0E+00	3.5E-01	2.7E-01
		5.0E-04	Н			0.15	1 Ye	Antimony Pentoxide	1314-60-9					1.0E+01	3.4E+02		9.7E+00			
		4.0E-04	н			0.15	1 Ye	Antimony Tetroxide	1332-81-6					8.0E+00	2.7E+02		7.8E+00			
			2.0E-04	1			1 Ye		1309-64-4											
1.5E+00	I 4.3E-03	I 3.0E-04	I 1.5E-05			1	1 Ye		7,440-38-2	5.2E-02	9.7E+00		5.2E-02	6.0E+00	1.4E+03		6.0E+00	1.0E+01	1.5E-03	2.9E-01
			C 5.0E-05			1		Arsine STEP 1 1 A	7784-42-1	5.22 52				7.0E-02	1.6E+01		7.0E-02			
		5.0E-02	1		-0.27		1 Ye	Asulam // \\	3337.71-1					1.0E+03	8.0E+05		1.0E+03		2.6E-01	
2.3E-01	_	3.5E-02	<del></del>		2.61		1 Ye	Atrazine	1912 24-9	3.4E-01	2.8E+00		3.0E-01	7.0E+02	6.2E+03		6.3E+02	3.0E+00	2.0E-04	2.0E-03
	C 2.5E-04				2.98	1 0		Auramine \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	492-80-8	8.9E-02	2.7E-01		6.7E-02	7.02.102	0.22103		0.52102	3.02.100	6.1F-04	2.02-03
0.01-01	C 2.3L-04	4.0E-04			4.48		1 No	Avermectin B1	65195-55-3	0.56-02	2.71-01		0.71-02	8.0E+00			8.0E+00		1.4E+01	
			A 1.0E-02 /		2.75		1 Ye		86-50-0					6.0E+01	8.3E+02		5.6E+01		1.7F-02	
1 15 01	I 3.1E-05		A 1.0L-02 /	v	3.82		1 Ye	Azinphos-methyl Azobenzene	103-33-3	7.1E-01	7.3E-01	1.8E-01	1.2E-01	0.02.01	0.52102		3.02.101		9.3E-04	
1.11-01	1 3.12-03		P 7.0F-06 I	-	-1.7		1 Ye			7.1E-U1	7.52-01	1.02-01	1.21-01	2.0E+04	6.8F+07		2.0F+04		6.8F+00	
								Azodicarbonamide	123-77-3						0.00			2.05.02	0.00.00	0.25.04
F 0F 01	C 155.01		I 5.0E-04 I				1 Ye 1 Ye		7440-39-3	E 05 52	2.25.04		4.15.02	4.0E+03	6.4E+04		3.8E+03	2.0E+03	1.6E+02	8.2E+01
5.UE-U1	C 1.5E-01	C 2.0E-02 3.0E-01	C 2.0E-04 (	M C	5.29	0.025		Barium Chromate	10294-40-3 1861-40-1	5.0E-02	2.3E-01		4.1E-02	4.0E+02 6.0E+03	2.3E+03 2.4E+03		3.4E+02 1.7E+03		5.6E+01	
				٧																
		5.0E-02 2.0F-01			2.12		1 Ye	Benomyl Bensulfuron-methyl	17804-35-2 83055-99-6					1.0E+03 4.0F+03	3.0E+04 2.4F+05		9.7E+02 3.9F+03		8.5E-01 1.0F+00	
						1	1 Ye													
		3.0E-02			2.34	1	1 Ye	Bentazon	25057-89-0					6.0E+02	9.4E+03		5.7E+02		1.2E-01	
		1.0E-01		V	1.48		1 Ye	Benzaldehyde	100-52-7					2.0E+03	4.9E+04		1.9E+03		4.3E-01	
	1 7.8E-06		I 3.0E-02	ı V	2.13		1 Ye	Benzene	71-43-2	1.4E+00	9.8E+00	7.2E-01	4.6E-01	8.0E+01	6.1E+02	6.3E+01	3.3E+01	5.0E+00	2.3E-04	2.6E-03
1.0E-01	Х	3.0E-04	Х		-3.727		1 No	Benzenediamine-2-methyl sulfate, 1,4-	6369-59-1	7.8E-01			7.8E-01	6.0E+00			6.0E+00		2.2E-04	
		1.0E-03	Р	V	2.52		1 Ye	Benzenethiol	108-98-5					2.0E+01	1.0E+02		1.7E+01		1.1E-02	
2.3E+02	I 6.7E-02		I	M	1.34		1 Ye	Benzidine	92-87-5	1.1E-04	5.0E-03		1.1E-04	6.0E+01	3.0E+03		5.9E+01		2.8E-07	
		4.0E+00	1		1.87		1 Ye	Benzoic Acid	65-85-0					8.0E+04	1.2E+06		7.5E+04		1.8E+01	
1.3E+01	1			V	3.9		1 Ye	Benzotrichloride	98-07-7	6.0E-03	6.0E-03		3.0E-03						6.6E-06	
		1.0E-01			1.1	1	1 Ye	Benzyl Alcohol	100-51-6					2.0E+03	8.9E+04		2.0E+03		4.8E-01	
1.7E-01	I 4.9E-05	C 2.0E-03	P 1.0E-03 I	V	2.3	1	1 Ye	Benzyl Chloride	100-44-7	4.6E-01	3.4E+00	1.1E-01	8.9E-02	4.0E+01	3.2E+02	2.1E+00	2.0E+00		9.8E-05	
	2.4E-03		I 2.0E-05			0.007	1 Ye	Beryllium and compounds	7440-41-7					4.0E+01	6.4E+01		2.5E+01	4.0E+00	2.0E+01	3.2E+00
		9.0E-03	Р		4.48	1 0		Bifenox	42576-02-3					1.8E+02	2.3E+02		1.0E+02		7.6E-01	
		1.5E-02	I .		6		0 Ye	Biphenthrin	82657-04-3					3.0E+02			3.0E+02		1.4E+03	
8.0E-03	1		I 4.0E-04	( V	4.01		1 Ye	Biphenyl, 1,1'-	92-52-4	9.7E+00	6.5E+00		3.9E+00	1.0E+04	7.3E+03	8.3E-01	8.3E-01		8.7E-03	
3.02-03		4.0E-02	1	v	2.48		1 Ye	Bis(2-chloro-1-methylethyl) ether	108-60-1	3.72.00	0.52.100		3.32.00	8.0E+02	6.5E+03	U.JL-01	7.1E+02		2.6E-01	
		3.0E-03	P	•	1.3		1 Ye	Bis(2-chloroethoxy)methane	111-91-1					6.0E+01	3.0E+03		5.9E+01		1.4E-02	
1.1E+00	I 3.3E-04			V	1.29		1 Ye	Bis(2-chloroethyl)ether	111-44-4	7.1E-02	2.7E+00	1.7E-02	1.4E-02	0.02.101	5.02.103		J.JL101		3.6E-06	
	1 6.2E-02			V	0.57	1		Bis(chloromethyl)ether	542-88-1	3.5E-04	3.4E-02	9.1E-05	7.2E-05						1.7E-08	
2.2E+UZ	1 U.ZE-UZ	5.0F-02		٧	3.32		1 Ye 1 Ye		542-88-1 80-05-7	3.3E-04	3.4E-UZ	5.1E-U5	7.2E-U3	1.0F+03	3.2F+03		7.7F+02		1.7E-08 5.8F+01	
		0.00	1 2 0		3.32										0.20				0.00	
			I 2.0E-02 I				1 Ye		7440-42-8					4.0E+03	9.1E+05		4.0E+03		1.3E+01	
			P 2.0E-02 I		1.16	1	1 Ye	Boron Trichloride	10294-34-5					4.0E+04	9.1E+06	4.2E+01	4.2E+01			
			C 1.3E-02 (	CV	0.22	1	1 Ye		7637-07-2					8.0E+02	1.8E+05	2.7E+01	2.6E+01			
		4.0E-03	1			1	1 Ye	Bromate	15541-45-4	1.1E-01	2.1E+01		1.1E-01	8.0E+01	1.8E+04		8.0E+01	1.0E+01	8.5E-04	7.7E-02
7.0E-01																				
	X 6.0E-04	X	I 6.0E-02	V	1.92 2.99	1	1 Ye	Bromo-2-chloroethane, 1-	107-04-0 108-86-1	3.9E-02	5.7E-01	9.4E-03	7.4E-03	1.6E+02	5.4E+02	1.3E+02	6.2E+01		2.1E-06 4.2E-02	

Key: I = IRI	s; P = PPRTV; A	= ATSDR; C =	Cal EPA; X = A	APPENDIX	PPRTV SCRI	EEN (See	e FAQ #2 rhere: n S	r); H = HEAST; F = See FAQ; J = New Jersey; O = EPA Office of Water; E = see user g L < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Con	uide Section 2.3.5	i; L = see user	r guide on le	ead; M = mut	tagen; S = see use	r guide Section	on 5; V = vola Csat (See Us	atile; R = RB er Guide)	A applied (See User G	iuide for Ars	enic notice) ; c =	cancer; n =
	To	xicity and Ch	emical-specifi	c Informat		.,		Contaminant	,			arget Risk (T					zard Index (HI) = 1		Protection of	Groundwater
			l. I.									Inhalation		Ingestion SI	Dermal SL	SL	Noncarcinogenic SL			
SEO	k IUR e	RfD <sub>o</sub>	k RfC <sub>i</sub> e	v o muta-						Ingestion SI TR=1E-06	TR=1E-06	SL TR=1E-06	Carcinogenic SL TR=1E-06	. Child THQ=1	Child THQ=1	Child THQ=1	Child THI=1	MCL	Risk-based SSL	MCL-based SSL
(mg/kg-day) <sup>-1</sup>	v (ug/m <sup>3</sup> ) <sup>-1</sup> v	(mg/kg-day)			LOGP (	GIABS E	A In FP	Analyte	CAS No.	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(ug/L)	(mg/kg)	(mg/kg)
(mg/ kg ddy)	71(08/ / 17	(116/16 004)	4.0E-02 >		1.41	1 :		,	74-97-5	(P6/ -/	(146/ -/	(P6/ C/	(1467-7)	(P6/ -/	(146/17)	8.3E+01	8.3E+01	(48/17	2.1E-02	(1118/118/
6.2E-02	I 3.7E-05 C	2.0E-02	1	V		1			75-27-4	1.3E+00	1.9E+01	1.5E-01	1.3E-01	4.0E+02	6.5E+03		3.8E+02	8.0E+01(F)	3.7E-05	2.2E-02
7.9E-03	I 1.1E-06 I		1	٧	2.4	1 :			75-25-2	9.9E+00	1.4E+02	5.1E+00	3.3E+00	4.0E+02	6.2E+03		3.8E+02	8.0E+01(F)	8.7E-04	2.1E-02
		1.4E-03	I 5.0E-03 I		1.19		1 Yes		74-83-9					2.8E+01	1.0E+03	1.0E+01	7.5E+00		1.9E-03	
		5.0E-03 2.0E-02	H	V	5.21 2.8		.8 Yes		2104-96-3 1689-84-5					1.0E+02 4.0E+02	5.5E+01 1.8E+03		3.5E+01 3.3E+02		1.5E-01 2.8E-01	
		2.0E-02	<u> </u>	V			.8 Yes		1689-99-2					4.0E+02	2.1E+02		1.4E+02		1.2E+00	
3.4E+00	C 3.0E-05 I	2.02.02	2.0E-03 I	v		1 :			106-99-0	2.3E-02	1.6E-01	1.9E-01	1.8E-02	4.02.02	2.12.02	4.2E+00	4.2E+00		9.9E-06	
		1.0E-01	1	V	0.88	1 :	1 Yes	Butanol, N-	71-36-3					2.0E+03	1.0E+05		2.0E+03		4.1E-01	
1.9E-03	Р	2.0E-01	1		4.73	1 0			85-68-7	4.1E+01	2.7E+01		1.6E+01	4.0E+03	2.9E+03		1.7E+03		2.4E-01	
		2.0E+00 5.0E-02	P 3.0E+01 F	v	0.61 4.15	1 :		Butyl alcohol, sec- Butylate	78-92-2 2008-41-5					4.0E+04 1.0E+03	3.0E+06 8.5E+02	6.3E+04	2.4E+04 4.6E+02		5.0E+00 4.5E-01	
2.0E-04	C 5.7E-08 C			v	3.5		.8 Yes		25013-16-5	3.9E+02	2.5E+02		1.5E+02	1.0E+03	8.3E+UZ		4.0E+UZ		4.5E-01 2.9E-01	
	P 5.72-00 C	3.0E-01	Р				1 Yes	Butylated hydroxytoluene	128-37-0	2.2E+01	4.0E+00		3.4E+00	6.0E+03	1.2E+03		1.0E+03		1.0E-01	
		5.0E-02	Р	V	4.38	1 :	1 No	Butylbenzene, n-	104-51-8					1.0E+03			1.0E+03		3.2E+00	
		1.0E-01	Х	V	4.57	1 :		Butylbenzene, sec-	135-98-8					2.0E+03			2.0E+03		5.9E+00	
			X	V		1 :			98-06-6					2.0E+03	1.1E+03		6.9E+02		1.6E+00	
	1.8E-03 I	2.0E-02 1.0E-03	A I 1.0E-05 A		0.36	0.025		Cacodylic Acid Cadmium (Diet)	75-60-5 7440-43-9					4.0E+02	6.7E+04		4.0E+02		1.2E-01	
	1.8E-03 I		1 1.0E-05 A			0.025			7440-43-9					1.0E+01	1.1E+02		9.2E+00	5.0E+00	6.9E-01	3.8E-01
5.0E-01	C 1.5E-01 C		C 2.0E-04 C			0.025			13765-19-0	5.0E-02	2.3E-01		4.1E-02	4.0E+02	2.3E+03		3.4E+02			
		5.0E-01	I 2.2E-03 (	3	-0.19		1 Yes		105-60-2					1.0E+04	9.0E+05		9.9E+03		2.5E+00	
	C 4.3E-05 C		1			1 0			2425-06-1	5.2E-01	1.8E+00		4.0E-01	4.0E+01	1.5E+02		3.2E+01 2.4F+03		7.1E-04	
2.3E-03	C 6.6E-07 C	1.3E-01 1.0E-01	+		2.8	1 :	<ol> <li>Yes</li> <li>Yes</li> </ol>	Captan Carbaryl	133-06-2 63-25-2	3.4E+01	3.6E+02		3.1E+01	2.6E+03 2.0E+03	3.0E+04 2.4E+04		2.4E+03 1.8E+03		2.2E-02 1.7E+00	
		5.0E-03	<u>'</u>			1 :			1563-66-2					1.0E+02	1.4E+03		9.4E+01	4.0E+01	3.7E-02	1.6E-02
			I 7.0E-01 I	V	1.94	1			75-15-0					2.0E+03	2.0E+04	1.5E+03	8.1E+02		2.4E-01	
7.0E-02	I 6.0E-06 I	4.0E-03	I 1.0E-01 I	V	2.83		1 Yes	Carbon Tetrachloride	56-23-5	1.1E+00	4.3E+00	9.4E-01	4.6E-01	8.0E+01	3.4E+02	2.1E+02	4.9E+01	5.0E+00	1.8E-04	1.9E-03
			1.0E-01 F	V		1 :		Carbonyl Sulfide	463-58-1							2.1E+02	2.1E+02		5.1E-01	
		1.0E-02 1.0E-01	<u> </u>		5.57 2.14		.8 Yes 1 Yes		55285-14-8 5234-68-4					2.0E+02 2.0E+03	6.9E+01 4.1E+04		5.1E+01 1.9E+03		1.2E+00 1.0E+00	
		1.02-01	9.0E-04 I		2.14	1 :			1306-38-3					2.02+03	4.16704		1.51-03		1.02+00	
		1.0E-01	1	V	0.99	1		Chloral Hydrate /	302-17-0					2.0E+03	1.5E+05		2.0E+03		4.0E-01	
		1.5E-02	1		1.9		1 Yes	Chloramben	133-90-4					3.0E+02	7.4E+03		2.9E+02		7.0E-02	
4.0E-01						1 :			118-75-2	1.9E-01	3.5E+00		1.8E-01						1.5E-04	
	I 1.0E-04 I		1 7.0E-04 I	V	6.26 5.41	1 0	.7 No	the state of the s	12789-03/6/	2.2E-01	C EE 03	5.6E-02	4.5E-02 3.5E-03	1.0E+01 6.0E+00	5.4E+00	1.5E+00	1.3E+00 2.9E+00	2.0E+00	3.0E-03 1.2E-04	1.4E-01
1.0E+01	1 4.6E-03 C	7.0E-04	A			1 0			470-90-6	7.8E-03	6.5E-03		3.5E-U3	1.4E+01	5.4E+00 5.6E+01		2.9E+00 1.1E+01		1.2E-04 3.1E-02	
		2.0E-02	î		2.5	1 :			90982-32-4					4.0E+02	1.5E+04		3.9E+02		1.3E-01	
			I 1.5E-04 A		0.85	1 :	1 Yes	Chlorine	7782-50-5					2.0E+03	4.6E+05	3.0E-01	3.0E-01		1.4E-04	
			I 2.0E-04 I	V		1 :		emornic bronders, provided the	10049-04-4					6.0E+02	1.4E+05	4.2E-01	4.2E-01			
		3.0E-02	5.0E+01 I	V	2.05	1 :	1 Yes	Chlorite (Sodium Salt)	7758-19-2		_			6.0E+02	1.4E+05	1.0E+05	6.0E+02	1.0E+03	5.2E+01	
	3.0E-04 I	2 OF-02	H 2.0E-02 I			1 :	<ol> <li>Yes</li> <li>Yes</li> </ol>		75-68-3 126-99-8			1.9E-02	1.9E-02	4.0E+02	1.8E+03	4.2E+01	1.0E+05 3.7E+01		9.9E-06	
4.6E-01	Н	2.02.02	2.02 02	·	2.27	1			3165-93-3	1.7E-01	5.1E+02	1.52 02	1.7E-01	4.02.02	1.02.03	4.22.01	3.72.01		1.5E-04	
	P 7.7E-05 C	3.0E-03	Х		2.27		1 Yes	Chloro-2-methylaniline, 4-	95-69-2	7.8E-01	6.6E+00		7.0E-01	6.0E+01	5.6E+02		5.4E+01		4.0E-04	
2.7E-01	Х			V	0.09	1 :		Chloroacetaldehyde, 2-	107-20-0	2.9E-01	4.6E+01		2.9E-01						5.8E-05	
			3.0E-05 I		1.93	1 :		anno a decire a nero	79-11-8									6.0E+01		1.2E-02
2.0E-01	Р	4.0F-03	3.UE-U5 I			1 :			532-27-4 106-47-8	3.9E-01	5.9E+00		3.7E-01	8.0E+01	1.3E+03		7.6E+01		1.6F-04	
2.02-01		2.0E-02	I 5.0E-02 F	V	2.84		1 Yes		108-90-7	3.96-01	J.JL 100		5.72-01	4.0E+01	1.3E+03	1.0E+02	7.8E+01	1.0E+02	5.3E-02	6.8E-02
1.1E-01	C 3.1E-05 C		1		4.74		.8 Yes		510-15-6	/.1E-U1	5.6E-01		3.1E-01	4.0E+02	3.5E+02		1.9E+02		1.0E-03	
			X			1 :		Chlorobenzoic Acid, p-	74-11-3					6.0E+02	3.4E+03		5.1E+02		1.3E-01	
			P 3.0E-01 F	V V	3.6 2.64	1 :	<ol> <li>Yes</li> <li>Yes</li> </ol>		98-56-6					6.0E+01	9.3E+01	6.3E+02	3.5E+01		1.2E-01 2.6F-01	
		4.UE-UZ	5.0E+01 I	•	1.08		1 Yes 1 Yes		109-69-3 75-45-6					8.0E+02	3.1E+03	1.0E+05	6.4E+02 1.0E+05		2.6E-01 4.3E+01	
		2.0E-02	P	v	0.03	1		Chloroethanol, 2-	107-07-3					4.0E+02	7.7E+04	1.02.03	4.0E+02		8.1E-02	
3.1E-02	C 2.3E-05 I	1.0E-02	I 9.8E-02 A	V	1.97	1 :	1 Yes	Chloroform	67-66-3	2.5E+00	2.9E+01	2.4E-01	2.2E-01	2.0E+02	2.5E+03	2.0E+02	9.7E+01	8.0E+01(F)	6.1E-05	2.2E-02
2.45			9.0E-02 I	V		1 :		Chloromethane	74-87-3			0.4===				1.9E+02	1.9E+02		4.9E-02	
	C 6.9E-04 C		D 10505	, V	0.32 2.24	1 :			107-30-2	3.2E-02	3.7E+00	8.1E-03	6.5E-03	6.05+04	6.45+03		E FF. 01		1.4E-06	
3.0E-01 6.3E-03	P	3.0E-03 1.0E-03	P 1.0E-05 > P 6.0E-04 F			1 :	<ol> <li>Yes</li> <li>Yes</li> </ol>		88-73-3 100-00-5	2.6E-01 1.2E+01	2.6E+00 9.7E+01		2.4E-01 1.1E+01	6.0E+01 2.0E+01	6.4E+02 1.7E+02		5.5E+01 1.8E+01		2.2E-04 1.0F-02	
0.JL-0J		5.0E-03	I	V	2.15	1	1 Yes		95-57-8	1.22.01	5., 2.01		1.12.101	1.0E+02	1.0E+03		9.1E+01		7.4E-02	
			4.0E-04 C	V	2.09		1 Yes		76-06-2							8.3E-01	8.3E-01		2.5E-04	
3.1E-03	C 8.9E-07 C		1			1 0			1897-45-6	2.5E+01	1.6E+02		2.2E+01	3.0E+02	2.1E+03		2.6E+02		5.0E-02	
		2.0E-02	X	V	3.42	1 :		Chlorotoluene, o-	95-49-8					4.0E+02	5.8E+02		2.4E+02		2.3E-01 2.4E-01	
2.4F+02	C 6.9E-02 C		^	٧	3.33 -1.02	1 :			106-43-4 54749-90-5	3.2E-04	1.0E+00		3.2E-04	4.0E+02	6.6E+02		2.5E+02		2.4E-01 7.1E-08	
2.72.02	2 0.52-02 0	2.0E-01	1		3.51		.9 Yes		101-21-3	5.22-04	1.01.00		5.22-04	4.0E+03	9.8E+03		2.8E+03		2.6E+00	
			Α		4.96	1 0	.8 Yes		2921-88-2					2.0E+01	1.5E+01		8.4E+00		1.3E-01	
			Н		4.31		.9 Yes	Chlorpyrifos Methyl	5598-13-0					2.0E+02	2.9E+02		1.2E+02		5.5E-01	
		5.0E-02	-		2		1 Yes		64902-72-3					1.0E+03	5.7E+04		9.9E+02		8.3E-01	
		1.0E-02 8.0F-04	H				.9 Yes		1861-32-1 60238-56-4					2.0E+02 1.6E+01	3.3E+02 3.4E+00		1.2E+02 2.8E+00		1.5E-01 7.3F-02	
		1.5E+00	1			0.013			16065-83-1					3.0E+01	8.9E+04		2.2E+04		4.0E+07	

Key: I = IR	IS; P = PPRTV	; A = ATSDR; C =	= Cal EPA; X =	= APPENDIX				H = HEAST; F = See FAQ; J = New Jersey; O = EPA Office of Water; E = see user guide S 100X c St; ** = where n St < 10X c St; SSL values are based on DAF=1; m = Concentra									A applied (See User G	uide for Ars	enic notice) ; c =	cancer; n =
		Toxicity and Ch	nemical-speci	ific Informa				Contaminant				arget Risk (TR)			Noncance	er CHILD Ha	zard Index (HI) = 1		Protection of G	Groundwater
	b.	b.	L.	k v						Ingestion SL	Dermal SI	Inhalation SL	Carcinogenic SL	Ingestion SI Child	Dermal SL Child	SL Child	Noncarcinogenic SL Child		Risk-based	MCL-based
SFO	e IUR	e RfD <sub>o</sub>	e RfC <sub>i</sub>	e o muta	1-					TR=1E-06	TR=1E-06		TR=1E-06	THQ=1	THQ=1	THQ=1	THI=1	MCL	SSL	SSL
(mg/kg-day)	y (ug/m <sup>3</sup> ) <sup>-1</sup>	y (mg/kg-day	y (mg/m <sup>3</sup> )	y I gen	LOGP	GIABS FA	In EPD?	Analyte	CAS No.	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(µg/L)	(ug/L)	(mg/kg)	(mg/kg)
5.0E-01	J 8.4E-02	S 3.0E-03	I 1.0E-04	I M		0.025 1			18540-29-9	5.0E-02	1.2E-01		3.5E-02	6.0E+01	1.7E+02		4.4E+01		6.7E-04	
		1.3E-02			3.1	0.013 1 0.9			7440-47-3 74115-24-5					2.6E+02	2.1E+03		2.3E+02	1.0E+02	1.4E+01	1.8E+05
	9.0E-03		P 6.0E-06	P	3.1	1 1			7440-48-4					6.0E+00	3.4E+03		6.0E+00		2.7E-01	
	6.2E-04			V M		1 0		Coke Oven Emissions 8	3007-45-2					0.02.00						
		4.02 02	Н			1 1	Yes		7440-50-8					8.0E+02	1.8E+05		8.0E+02	1.3E+03	2.8E+01	4.6E+01
		5.0E-02 5.0F-02	I 6.0E-01 I 6.0E-01		1.96 1.95	1 1 1 1	Yes		108-39-4 95-48-7					1.0E+03 1.0E+03	1.2E+04 1.2E+04		9.3E+02 9.3E+02		7.4E-01 7.5F-01	
			A 6.0E-01	C	1.95	1 1	Yes Yes		106-44-5					2.0E+03	2.5E+04		1.9E+03		1.5E+00	
		1.0E-01			3.1	1 1	Yes		59-50-7					2.0E+03	5.2E+03		1.4E+03		1.7E+00	
			A 6.0E-01	С	1.95	1 0.9		Cresols 1	1319-77-3					2.0E+03	6.7E+03		1.5E+03		1.3E+00	
1.9E+00	Н	1.0E-03	P	V	0.6 3.66	1 1	Yes		123-73-9 98-82-8	4.1E-02	2.7E+00		4.0E-02	2.0E+01	1.5E+03	0.25.02	2.0E+01		8.2E-06 7.4E-01	
2.2F-01	C 6.3E-05		I 4.0E-01	1 V		1 1			135-20-6	3.5E-01	1.3E+04		3.5E-01	2.0E+03	1.9E+03	8.3E+02	4.5E+02		6.1E-04	
8.4E-01		2.0E-03	Н		2.22	1 1			21725-46-2	9.3E-02	1.6E+00		8.8E-02	4.0E+01	7.6E+02		3.8E+01		4.1E-05	
								Cyanides												
		1.0E-03				1 1	Yes Yes		592-01-8					2.0E+01	4.6E+03		2.0E+01			
		5.0E-03 6.0E-04	I 8.0E-04	s v		1 1	Yes		544-92-3 57-12-5					1.0E+02 1.2E+01	2.3E+04 2.7E+03	1.7E+00	1.0E+02 1.5E+00	2.0E+02	1.5E-02	2.0E+00
		1.0E-03	1 0.UE-U4	V V	0.07	1 1	Yes		460-19-5					2.0E+01	5.1E+03	1.72+00	2.0E+01	2.02+02	1.56-02	2.02+00
		9.0E-02	1	V		1 1	Yes	~Cyanogen Bromide 5	506-68-3					1.8E+03	1.6E+06		1.8E+03			
		5.0E-02		V		1 1			506-77-4					1.0E+03	5.8E+05		1.0E+03			
		6.0E-04 2.0E-03	I 8.0E-04	I V	-0.25	1 1	Yes Yes		74-90-8 151-50-8					1.2E+01 4.0E+01	2.7E+03 4.6E+03	1.7E+00	1.5E+00 4.0E+01		1.5E-02	
		5.0E-03	<u> </u>			0.04 1			506-61-6					4.0E+01 1.0E+02	4.6E+03 4.6E+02		8.2E+01			
		1.0E-01	I			0.04 1		~Silver Cyanide	506-64-9					2.0E+03	1.8E+04		1.8E+03			
		1.0E-03	1			1 1	Yes		143-33-9					2.0E+01	4.6E+03		2.0E+01	2.0E+02		
		2.0E-04 2.0E-04	P X	v	0.58	1 0 1 1	Yes Yes		NA 463-56-9					4.0E+00 4.0E+00	9.1E+02 9.1E+02		4.0E+00 4.0E+00			
		5.0E-04	ì	v	0.58	1 1	Yes		557-21-1					1.0E+03	3.8E+05		1.0E+03			
			6.0E+00	I V	3.44	1 1	Yes		110-82-7							1.3E+04	1.3E+04		1.3E+01	
2.3E-02	Н				4.72	1 0.9	Yes	Cyclohexane, 1,2,3,4,5-pentabromo-6-chloro-	87-84-3	3.4E+00	8.3E+00		2.4E+00						1.4E-02	
		5.0E+00 5.0E-03	I 7.0E-01		0.81	1 1	Yes		108-94-1					1.0E+05	6.5E+06	1.5E+03	1.4E+03		3.4E-01	
		5.0E-03 2.0E-01	P 1.0E+00	X V	2.86 1.49	1 1			110-83-8					1.0E+02 4.0E+03	2.5E+02 9.3E+04	2.1E+03	7.0E+01 3.8E+03		4.6E-02 1.0E+00	
		2.5E-02	i		5.95	1 0.7		Cyfluthrin	68359-37-5					5.0E+02	1.6E+02		1.2E+02		3.1E+01	
		5.0E-03	T		6.9	1 0.5	No		68085-85-8					1.0E+02			1.0E+02		6.9E+01	
		1.0E-02 7.5E-03	1		6.6 -0.061	1 0.7			52315-07-8					2.0E+02	1 25 - 04		2.0E+02		3.2E+01 3.8F-02	
2.4E-01	I 6.9E-05				-0.061 6.02	1 1	Yes		66215-27-8 72-54-8	3.2E-01	3.5E-02		3.2E-02	1.5E+02	1.2E+04		1.5E+02		3.8E-02 7.5E-03	
3.4E-01	1 9.7E-05			V	6.51	1 0.8			72-55-9	2.3E-01	3.32-02	5.8E-02	4.6E-02						1.1E-02	
3.4E-01	I 9.7E-05	I 5.0E-04	I		6.91	1 0.7	No	DOT	50-29-3	2.3E-01			2.3E-01	1.0E+01			1.0E+01		7.7E-02	
4.05.05		3.0E-02	1		0.78	1 1	Yes		75-99-0	1.05.65	4.25.65		4.25.00	6.0E+02	5.5E+04		6.0E+02	2.0E+02	1.2E-01	4.1E-02
1.8E-02 7.0E-04	C 5.1E-06	C 1.5E-01 7.0E-03			-1.5 12.11	1 1 1 1	Yes No		1596-84-5 1163-19-5	4.3E+00 1.1E+02	1.3E+04		4.3E+00 1.1E+02	3.0E+03 1.4E+02	1.0E+07		3.0E+03 1.4E+02		9.5E-04 6.2E+01	
7.32-04		4.0E-05	i		3.21	1 0.8			8065-48-3	1.12+02			1.12.102	8.0E-01	8.8E-01		4.2E-01		0.22.101	
1.2E-03	1	6.0E-01	1		6.11	1 0	Yes	Di(2-ethylhexyl)adipate	103-23-1	6.5E+01			6.5E+01	1.2E+04			1.2E+04	4.0E+02	4.7E+00	2.9E+01
6.1E-02	Н				4.49		Yes		2303-16-4	1.3E+00	9.2E-01		5.4E-01						8.0E-04	
		7.0E-04 1.0E-02	A X	V	3.81 4.38	1 0.9 1 1			333-41-5 132-65-0					1.4E+01 2.0E+02	3.9E+01 9.6E+01		1.0E+01 6.5E+01		6.5E-02 1.2E+00	
8.0E-01	P 6.0E-03		P 2.0E-04	IV M	2.96	1 1	Yes		96-12-8	3.1E-02	1.7E-01	3.4E-04	3.3E-04	4.0E+02	2.4E+01	4.2E-01	3.7E-01	2.0E-01	1.4E-07	8.6E-05
		4.0E-04	Х	٧	3.75	1 0.9			108-36-1					8.0E+00	1.6E+01		5.3E+00		5.1E-03	
8.4E-02		1.0E-02		٧	3.79 2.16	1 0.9 1 1			106-37-6	0.25.04	1.45:04		0.75.04	2.0E+02	3.7E+02		1.3E+02	8.0E+01(F)	1.2E-01	2.45.02
8.4E-02 2.0E+00	I 6.0E-04	2.0E-02 I 9.0E-03	I 9.0E-03	V I V	1.96	1 1	Yes Yes		124-48-1 106-93-4	9.3E-01 3.9E-02	1.4E+01 7.1E-01	9.4E-03	8.7E-01 7.5E-03	4.0E+02 1.8E+02	6.7E+03 3.6E+03	1.9E+01	3.8E+02 1.7E+01	8.0E+01(F) 5.0E-02	2.3E-04 2.1E-06	2.1E-02 1.4E-05
2.00	1 0.0E-04	. 5.05-03	4.0E-03		1.96	1 1			74-95-3	3.32-02	7.12-01	J.42-03	7.52-05	1.02+02	J.ULTU3	8.3E+00	8.3E+00	3.02-02	2.1E-06 2.1E-03	1.42-03
		3.0E-04	Р			1 0	No		NA					6.0E+00			6.0E+00			
		3.0E-02	I		2.21	1 1	Yes		1918-00-9					6.0E+02	1.0E+04		5.7E+02		1.5E-01	
	4.2E-03 4.2E-03			V	2.6	1 1	Yes Yes		764-41-0 1476-11-5			1.3E-03 1.3E-03	1.3E-03 1.3E-03						6.6E-07 6.2E-07	
	4.2E-03			V	2.6	1 1			110-57-6			1.3E-03	1.3E-03						6.2E-07	
5.0E-02	1	4.0E-03			0.92	1 1		Dichloroacetic Acid	79-43-6	1.6E+00	9.6E+01		1.5E+00	8.0E+01	5.4E+03		7.9E+01	6.0E+01	3.1E-04	1.2E-02
			I 2.0E-01		3.43	1 1	Yes		95-50-1					1.8E+03	2.9E+03	4.2E+02	3.0E+02	6.0E+02	3.0E-01	5.8E-01
5.4E-03	C 1.1E-05 I 3.4E-04		A 8.0E-01	I V	3.44 3.51	1 1	Yes		106-46-7 91-94-1	1.4E+01 1.7E-01	2.1E+01 4.5E-01	5.1E-01	4.8E-01	1.4E+03	2.2E+03	1.7E+03	5.7E+02	7.5E+01	4.6E-04 8.2E-04	7.2E-02
4.5E-01	1 3.4E-U4	9.0E-03	х		4.44	1 0.9			91-94-1 90-98-2	1.72-01	4.32-01		1.3E-01	1.8E+02	1.4E+02		7.8E+01		8.2E-04 4.7E-01	
		2.0E-01	I 1.0E-01	X V	2.16	1 1	Yes		75-71-8					4.0E+03	3.8E+04	2.1E+02	2.0E+02		3.0E-01	
	C 1.6E-06	C 2.0E-01	P	V	1.79	1 1	Yes	Dichloroethane, 1,1-	75-34-3	1.4E+01	1.8E+02	3.5E+00	2.8E+00	4.0E+03	5.8E+04		3.8E+03		7.8E-04	
9.1E-02	I 2.6E-05		X 7.0E-03		1.48	1 1	Yes		107-06-2	8.6E-01	1.8E+01	2.2E-01	1.7E-01	1.2E+02	2.8E+03	1.5E+01	1.3E+01	5.0E+00	4.8E-05	1.4E-03
		5.0E-02 2.0E-03	I 2.0E-01	ı V	2.13 1.86	1 1	Yes Yes		75-35-4 156-59-2					1.0E+03 4.0E+01	8.5E+03 3.6E+02	4.2E+02	2.8E+02 3.6E+01	7.0E+00 7.0E+01	1.0E-01 1.1E-02	2.5E-03 2.1E-02
		2.0E-03 2.0E-02	i	v	2.09	1 1	Yes		156-60-5					4.0E+01 4.0E+02	3.6E+02		3.6E+01	1.0E+01	1.1E-02 1.1E-01	3.1E-02
		3.0E-03	1		3.06	1 1		Dichlorophenol, 2,4-	120-83-2					6.0E+01	1.9E+02		4.6E+01		5.4E-02	
		1.0E-02	1		2.81	1 1			94-75-7					2.0E+02	1.4E+03		1.7E+02	7.0E+01	4.5E-02	1.8E-02
		8.0E-03			3.53	1 0.9	Yes	Dichlorophenoxy)butyric Acid, 4-(2,4-	94-82-6					1.6E+02	4.8E+02		1.2E+02		1.1E-01	

Key: 1 = 1					noncance	EEN (See F er; * = whe	FAQ #27) ere: n SL	H = HEAST; $F = See FAQ$ ; $J = New Jersey$ ; $O = EPA Office of Water$ ; $E = see user guide Section 2.3.5; 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may e$	ceed ceiling	limit (See Us	er Guide); s	= Concentration	guide Section	Csat (See Use	er Guide)		uide for Ars		
	Te	oxicity and Ch	emical-specifi	c Informat	ion			Contaminant	Car	rcinogenic Ta		t) = 1E-06				zard Index (HI) = 1		Protection of G	Groundwater
	1.1										Inhalation		Ingestion SL	Dermal SL	SL	Noncarcinogenic SL			
SFO	k IUR	k	k RfC <sub>i</sub> i	( V					Ingestion SI		SL	Carcinogenic SL	Child	Child	Child	Child		Risk-based	MCL-based
		e RfD <sub>o</sub>		o muta-	1				TR=1E-06		TR=1E-06	TR=1E-06	THQ=1	THQ=1	THQ=1	THI=1	MCL	SSL	SSL
(mg/kg-day)		y (mg/kg-day)					In EPD?	Analyte CAS No.	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(ug/L)	(mg/kg)	(mg/kg)
3.6E-02	C 1.0E-05 (		A 4.0E-03		1.98	1 1		Dichloropropane, 1,2- 78-87-5	2.2E+00	2.4E+01	5.6E-01	4.4E-01	1.8E+03	2.2E+04	8.3E+00	8.3E+00	5.0E+00	1.5E-04	1.7E-03
			P	V		1 1	Yes	Dichloropropane, 1,3- 142-28-9					4.0E+02	4.6E+03		3.7E+02		1.3E-01	
		3.0E-03	1		0.78	1 1	Yes	Dichloropropanol, 2,3- 616-23-9					6.0E+01	5.0E+03		5.9E+01		1.3E-02	
1.0E-01	I 4.0E-06		I 2.0E-02		2.04	1 1	Yes	Dichloropropene, 1,3- 542-75-6	7.8E-01	7.8E+00	1.4E+00	4.7E-01	6.0E+02	6.6E+03	4.2E+01	3.9E+01		1.7E-04	
2.9E-01	I 8.3E-05 (		I 5.0E-04			1 1		Dichlorvos 62-73-7	2.7E-01	1.4E+01		2.6E-01	1.0E+01	5.6E+02		9.9E+00		8.1E-05	
		1.0E-04	1		0	1 1	Yes	Dicrotophos 141-66-2					2.0E+00	1.1E+03		2.0E+00		4.7E-04	
			P 3.0E-04 )	( V		1 1		Dicyclopentadiene 77-73-6					1.6E+03	3.5E+03	6.3E-01	6.3E-01		2.2E-03	
1.6E+01	I 4.6E-03		1		5.4		Yes	Dieldrin 60-57-1	4.9E-03	2.7E-03		1.8E-03	1.0E+00	6.1E-01		3.8E-01		7.1E-05	
	3.0E-04 (		5.0E-03			1 0		Diesel Engine Exhaust NA											
			P 2.0E-04 F		-1.43	1 1		Diethanolamine 111-42-2					4.0E+01	8.4E+04		4.0E+01		8.1E-03	
			P 1.0E-04 F			1 1	Yes	Diethylene Glycol Monobutyl Ether 112-34-5					6.0E+02	8.7E+04		6.0E+02		1.3E-01	
		6.0E-02	P 3.0E-04 F	•	-0.54	1 1	Yes	Diethylene Glycol Monoethyl Ether 111-90-0					1.2E+03	7.8E+05		1.2E+03		2.4E-01	
		1.0E-03	Р	٧	0.05	1 1	Yes	Diethylformamide 617-84-5					2.0E+01	4.3E+03		2.0E+01		4.1E-03	
3.5E+02	C 1.0E-01 (	С			5.07	1 0.9	Yes	Diethylstilbestrol 56-53-1	2.2E-04	6.6E-05		5.1E-05						2.8E-05	
		8.0E-02	1		0.65	1 1		Difenzoquat 43222-48-6					1.6E+03	7.3E+05		1.6E+03			
		2.0E-02	1		3.88	1 0.9	Yes	Diflubenzuron 35367-38-5					4.0E+02	1.0E+03		2.9E+02		3.3E-01	
		2.02.02	4.0E+01	v		1 1		Difluoroethane, 1,1- 75-37-6					1.02.02		8.3E+04	8.3E+04		2.8F+01	
4.4F-02	C 1.3E-05 (	С	-1.01.01	v	3.58	1 1	Yes	Dihydrosafrole 94-58-6	1.8E+00	2.3E+00	4.3E-01	3.0E-01			0.52.104	J.JL 104		1.9E-04	
-1.46-02	C 1.3E-03 (	-	7.0E-01 F		1.52	1 1		Diisopropyl Ether 108-20-3	1.01.00	2.32.100	-1.JL-01	J.UL-U1			1.5E+03	1.5E+03		3.7E-01	
		8.0E-02	7.UE-U1 F										1.6E+03	1 25 - 05	1.5E+U3	1.5E+03 1.6E+03		3.7E-01 4.5E-01	
		8.0E-02 2.0E-02		V	1.03 -0.17	1 1							1.6E+03 4.0E+02	1.3E+05 2.4E+05		1.6E+03 4.0E+02		4.5E-01 8.8E-02	
			-																
		2.0E-04	1		0.78	1 1		Dimethoate 60-51-5					4.0E+00	6.4E+02		4.0E+00		9.0E-04	
1.6E+00					1.81	1 1		Dimethoxybenzidine, 3,3'- 119-90-4	4.9E-02	1.6E+00		4.7E-02						5.8E-05	
1.7E-03		6.0E-02	Р		-0.61	1 1	Yes	Dimethyl methylphosphonate 756-79-6	4.6E+01	2.8E+04		4.6E+01	1.2E+03	8.1E+05		1.2E+03		9.7E-03	
	C 1.3E-03 (	С			4.58	1 1		Dimethylamino azobenzene [p-] 60-11-7	1.7E-02	7.2E-03		5.0E-03						2.2E-05	
5.8E-01						1 1		Dimethylaniline HCl, 2,4- 21436-96-4	1.3E-01	5.2E+02		1.3E-01						1.2E-04	
2.0E-01	P	2.0E-03	X		1.68	1 1	Yes	Dimethylaniline, 2,4- 95-68-1	3.9E-01	7.1E+00		3.7E-01	4.0E+01	8.0E+02		3.8E+01		2.1E-04	
		2.0E-03	I	٧	2.31	1 1	Yes	Dimethylaniline, N,N- 121-69-7					4.0E+01	3.1E+02		3.5E+01		1.3E-02	
1.1E+01	P				2.34	1 1		Dimethylbenzidine, 3,3'- 119-93-7	7.1E-03	8.5E-02		6.5E-03						4.3E-05	
		1.0E-01	P 3.0E-02	V	-1.01	1 1	Yes	Dimethylformamide 68-12-2					2.0E+03	1.8E+06	6.3E+01	6.1E+01		1.2E-02	
			X 2.0E-06 X		-1.19	1 1		Dimethylhydrazine, 1,1- 57-14-7					2.0E+00	3.5E+03	4.2E-03	4.2E-03		9.3E-07	
5 5F+02	C 1.6E-01 (		X 2.02 00 7	v		1 1		Dimethylhydrazine, 1,2- 540-73-8	1.4F-04	5.0E-02	3 5F-05	2.8E-05	2.02.00	3.32.03	4.LL 03	4.22 03		6.5E-09	
3.31.102	C 1.0L-01 (	2.0E-02		•	2.3	1 1	Yes	Dimethylphenol, 2,4- 105-67-9	1.46-04	J.0L-02	3.32-03	2.02-03	4.0E+02	3.1E+03		3.6E+02		4.2E-01	
		6.0F-04	•		2.36	1 1		Dimethylphenol, 2;61 576-26-1					1.2E+01	8.5E+01		1.1E+01		1.3F-02	
			:			1 1		Dimethylphenol, 3,4 95-66-8										2.1E-02	
4.55.03	C 1.3E-05 (	1.0E-03	1		2.23	1 1	Yes Yes	Dimethylvinylchloride 513-37-1	1.7E+00	6.5E+00	4.3E-01	3.3E-01	2.0E+01	1.7E+02		1.8E+01		2.1E-02 2.4E-04	
4.5E-02	C 1.3E-05 C			V					1.7E+00	0.5E+00	4.3E-U1	3.3E-U1							
			X		2.13	1 1		Dinitro-o-cresol, 4,6					1.6E+00	2.6E+01		1.5E+00		2.6E-03	
		2.0E-03	1			1 0.9		Dinitro-o-cyclohexyl Phenol, 4,6- 131-89-5					4.0E+01	5.4E+01		2.3E+01		7.7E-01	
		1.0E-04	Р		1.69	1 1		Dinitrobenzene, 1,2- 528-29-0					2.0E+00	5.3E+01		1.9E+00		1.8E-03	
		1.0E-04	1			1 1		Dinitrobenzene, 1,3- 99-65-0					2.0E+00	7.3E+01		2.0E+00		1.8E-03	
		1.02 04	P			1 1	Yes	Dinitrobenzene, 1,4- 100-25-4					2.0E+00	7.6E+01		2.0E+00		1.8E-03	
		2.0E-03	1		1.67	1 1	Yes	Dinitrophenol, 2,4 51 28-5					4.0E+01	1.2E+03		3.9E+01		4.4E-02	
6.8E-01	1				2.18	1 1	Yes	Dinitrotoluene Mixture, 2,4/2,6- NA:	1.1E-01	1.5E+00		1.1E-01						1.5E-04	
3.1E-01	C 8.9E-05 (		T.		1.98	1 1		Dinitrotoluene, 2,4- 121-14-2	2.5E-01	4.3E+00		2.4E-01	4.0E+01	7.5E+02		3.8E+01		3.2E-04	
1.5E+00	P	3.0E-04	X		2.1	1 1	Yes	Dinitrotoluene, 2,6- \ 606-20-2	5.2E-02	7.4E-01		4.9E-02	6.0E+00	9.3E+01		5.7E+00		6.7E-05	
		2.0E-03	S		1.84	1 1	Yes	Dinitrotoluene, 2-Amino-4,6- 35572-78-2					4.0E+01	1.0E+03		3.9E+01		3.0E-02	
		2.0E-03	S		1.84	1 1	Yes	Dinitrotoluene, 4-Amino-2,6-					4.0E+01	1.0E+03		3.9E+01		3.0E-02	
4.5E-01	х		X		2.18		Yes	Dinitrotoluene, Technical grade 25321-14-6	1.7E-01	2.6E-01		1.0E-01	1.8E+01	3.0E+01		1.1E+01		1.4E-04	
		1.0E-03	1		3.56	1 0.9		Dinoseb 88-85-7					2.0E+01	5.4E+01		1.5E+01	7.0E+00	1.3E-01	6.2E-02
1.0F-01	I 5.0E-06		I 3.0E-02	v		1 1		Dioxane, 1,4- 123-91-1	7.8E-01	2.3F+02	1.1E+00	4.6E-01	6.0E+02	1.9E+05	6.3E+01	5.7E+01		9.4E-05	
1.02 01	. 5.52 50	. 5.02 02	. 5.02 02		0.27			Dioxins 123-91-1	7.02-01	2.32.02	1.12.00	-1.02 01	0.02.02		3.52.01	3.72.01		3.12 03	
6.2E+03	I 1.3E+00	1			8.21	1 0	No	"Hexachlorodibenzo-p-dioxin, Mixture NA	1.3E-05	_		1.3E-05						1.8E-05	
	C 3.8E+01 (		I 4.0E-08 (	· v		1 0.5		"Hexachiorodibenzo-p-dioxin, Mixture NA "TCDD, 2.3,7.8- 1746-01-6	6.0E-07		1.5E-07	1.3E-05 1.2E-07	1.4F-05		8.3E-05	1.2F-05	3.0E-05	5.9F-08	1.5F-05
1.3E+05	C 3.8E+U1 (	3.0E-10	1 4.UE-U8 (	. v	2.17	1 0.5	Yes	TICDD, 2,3,7,8- 1746-01-6 Diphenamid 957-51-7	0.0E-07		1.3E-U/	1.2E-07	6.0E+02	4.2E+03	0.32-03	5.3E+02	5.02-05	5.9E-08 5.2E+00	1.3E-U5
			V															3.6F-02	
			X		2.4	1 1		Diphenyl Sulfone 127-63-9					1.6E+01	2.0E+02		1.5E+01		0.00	
		2.5E-02	1		3.5	1 1		Diphenylamine 122-39-4					5.0E+02	8.4E+02		3.1E+02		5.8E-01	
8.0E-01	I 2.2E-04				2.94	1 1	Yes	Diphenylhydrazine, 1,2- 122-66-7	9.7E-02	3.9E-01		7.8E-02						2.5E-04	
		2.2E-03	1		-4.6	1 1		Diquat 85-00-7					4.4E+01			4.4E+01	2.0E+01	8.3E-01	3.8E-01
	C 1.4E-01 (					1 1	No	Direct Black 38 1937-37-7	1.1E-02			1.1E-02						5.3E+00	
	C 1.4E-01 (				2.6	1 1	No	Direct Blue 6 2602-46-2	1.1E-02			1.1E-02						1.7E+01	
6.7E+00	C 1.4E-01 (	С			-6.53	1 1	No	Direct Brown 95 16071-86-6	1.2E-02			1.2E-02							
		4.0E-05	1			1 0.9		Disulfoton 298-04-4					8.0E-01	1.3E+00		5.0E-01		9.4E-04	
		1.0E-02	1	V	0.77	1 1	Yes	Dithiane, 1,4- 505-29-3					2.0E+02	1.6E+04		2.0E+02		9.7E-02	
		2.0E-03	T.		2.68	1 1	Yes	Diuron 330-54-1					4.0E+01	3.6E+02		3.6E+01		1.5E-02	
		4.0E-03	1			1 1		Dodine 2439-10-3					8.0E+01	1.1E+04		8.0E+01		4.1E-01	
		2.5E-02	1	V	3.21	1 1	Yes	EPTC 759-94-4					5.0E+02	1.5E+03		3.8E+02		2.0E-01	
			1	V	3.83	1 0.9		Endosulfan 115-29-7					1.2E+02	6.3E+02		1.0E+02		1.4F+00	
						1 1		Endothall 145-73-3					4.0E+02	8.5E+03		3.8E+02	1.0E+02	9.2E-02	2.4E-02
		6.0E-03 2.0E-02			5.2		Yes	Endotrali 145-75-5 Endrin 72-20-8						3.7F+00		2.3E+00	2.0E+02	9.2E-02 9.2E-02	8.1E-02
		2.0E-02	i														2.UL+UU	J.4Ľ*U2	0.1E-UZ
		2.0E-02 3.0E-04	1					Partition of the state of the s	7.0	7.05.00		2.05.55	6.0E+00		245.55			4.55.00	
9.9E-03	I 1.2E-06	2.0E-02 3.0E-04	P 1.0E-03		0.45	1 1	Yes	Epichlorohydrin 106-89-8	7.9E+00	7.9E+02	4.7E+00	2.9E+00	1.2E+02	1.3E+04	2.1E+00	2.0E+00		4.5E-04	
9.9E-03	I 1.2E-06	2.0E-02 3.0E-04 I 6.0E-03	P 1.0E-03   2.0E-02		0.45 0.86	1 1 1 1	Yes Yes	Epoxybutane, 1,2- 106-88-7	7.9E+00	7.9E+02	4.7E+00	2.9E+00	1.2E+02	1.3E+04	2.1E+00 4.2E+01	2.0E+00 4.2E+01		9.2E-03	
9.9E-03	I 1.2E-06	2.0E-02 3.0E-04 I 6.0E-03 4.0E-02			0.45 0.86 -1.18	1 1 1 1 1 1	Yes Yes Yes	Epoxybutane, 1,2- 106-88-7 Ethanol, 2-(2-methoxyethoxy)- 111-77-3	7.9E+00	7.9E+02	4.7E+00	2.9E+00	1.2E+02 8.0E+02	1.3E+04 3.9E+05		2.0E+00 4.2E+01 8.0E+02		9.2E-03 1.6E-01	
9.9E-03	I 1.2E-06	2.0E-02 3.0E-04 I 6.0E-03 4.0E-02 5.0E-03	2.0E-02 P		0.45 0.86 -1.18 -0.22	1 1 1 1 1 1 1 1	Yes Yes Yes	Epoxybutane, 1,2-         106-88-7           Ethanol, 2-{2-methoxyethoxy}-         111-77-3           Ethephon         16672-87-0	7.9E+00	7.9E+02	4.7E+00	2.9E+00	1.2E+02 8.0E+02 1.0E+02	1.3E+04 3.9E+05 4.2E+04		2.0E+00 4.2E+01 8.0E+02 1.0E+02		9.2E-03 1.6E-01 2.1E-02	
9.9E-03	I 1.2E-06	2.0E-02 3.0E-04 1 6.0E-03 4.0E-02 5.0E-03 5.0E-04		ı v	0.45 0.86 -1.18 -0.22	1 1 1 1 1 1	Yes Yes Yes Yes Yes	Epoxybutane, 1,2- 106-88-7 Ethanol, 2-(2-methoxyethoxy)- 111-77-3	7.9E+00	7.9E+02	4.7E+00	2.9E+00	1.2E+02 8.0E+02 1.0E+02	1.3E+04 3.9E+05		2.0E+00 4.2E+01 8.0E+02		9.2E-03 1.6E-01	

Key: I = IR	IS; P = PPRTV; A	= ATSDR; C =	Cal EPA; X = APPE					H = HEAST; F = See FAQ; J = New Jersey; O = EPA Office of Water; E = see user guid									A applied (See User G	uide for Ars	enic notice) ; c =	cancer; n =
	т.	i ais a a d Ch.	emical-specific Info		ancer; *	= whe	re: n SL «	< 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concer Contaminant	ntration may ex					may exceed (			zard Index (HI) = 1		Protection of 0	Canadanatas
		oxicity and the	emicai-specific inic	rmation				Contaminant		Cari	linogenic ra	rget Risk (TF	() = 1E-UB	Ingestion SL	Dermal SL	SL SL	Noncarcinogenic SL		Protection of C	Jroundwater
	k k		k k v							Ingestion SL	Dermal SL	SL	Carcinogenic SL	Child	Child	Child	Child		Risk-based	MCL-based
SFO	e IUR e	RfD <sub>o</sub>	e RfC <sub>i</sub> e o r	nuta-							TR=1E-06	TR=1E-06	TR=1E-06	THQ=1	THQ=1	THQ=1	THI=1	MCL	SSL	SSL
(mg/kg-day)"	1 y (ug/m <sup>3</sup> ) <sup>-1</sup> y	(mg/kg-day)	, , G , ,	gen LOGP		-	In EPD?	Analyte	CAS No.	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(ug/L)	(mg/kg)	(mg/kg)
			P 2.0E-01 I V	-0.32				Ethoxyethanol, 2-	110-80-5 141-78-6					1.8E+03	6.3E+05	4.2E+02	3.4E+02		6.8E-02	
			I 7.0E-02 P V P 8.0E-03 P V	0.73 1.32	_	1	Yes Yes	Ethyl Acetate Ethyl Acrylate	141-78-6 140-88-5					1.8E+04 1.0E+02	1.2E+06 3.0E+03	1.5E+02 1.7E+01	1.4E+02 1.4E+01		3.1E-02 3.2E-03	
		3.02-03	1.0E+01   V	1.43				Ethyl Chloride (Chloroethane)	75-00-3					1.01.102	3.02.103	2.1E+04	2.1E+04		5.9E+00	
		2.0E-01	I V	0.89				Ethyl Ether	60-29-7					4.0E+03	2.0E+05		3.9E+03		8.8E-01	
			3.0E-01 P V	1.94	1	1	Yes	Ethyl Methacrylate	97-63-2							6.3E+02	6.3E+02		1.5E-01	
		1.0E-05	1	4.78	_	0.8		Ethyl-p-nitrophenyl Phosphonate	2104-64-5					2.0E-01	1.6E-01		8.9E-02		2.8E-03	
1.1E-02	C 2.5E-06 C	7.0E-01	I 1.0E+00 I V	3.15 -0.94				Ethylbenzene Ethylene Cyanohydrin	100-41-4 109-78-4	7.1E+00	1.2E+01	2.2E+00	1.5E+00	2.0E+03 1.4E+03	3.8E+03	2.1E+03	8.1E+02 1.4E+03	7.0E+02	1.7E-03 2.8E-01	7.9E-01
		9.0E-02	P V	-0.94		1	Yes	Ethylene Diamine	107-15-3					1.4E+03	1.1E+06		1.4E+03		4.2E-01	
			I 4.0E-01 C	-1.36			Yes	Ethylene Glycol	107-13-3					4.0E+04	5.7E+07		4.0E+04		8.1E+00	
			I 1.6E+00 I	0.83		1	Yes	Ethylene Glycol Monobutyl Ether	111-76-2					2.0E+03	1.4E+05		2.0E+03		4.1E-01	
3.1E-01	C 8.8E-05 C		3.0E-02 C V	-0.3	1	1	Yes	Ethylene Oxide	75-21-8	2.5E-01	5.4E+01	6.4E-02	5.1E-02			6.3E+01	6.3E+01		1.1E-05	
	C 1.3E-05 C		T	-0.66		1	Yes	Ethylene Thiourea	96-45-7	1.7E+00	1.0E+03		1.7E+00	1.6E+00	1.0E+03		1.6E+00		3.6E-04	
6.5E+01	C 1.9E-02 C		. V	-0.28		1	Yes	Ethyleneimine	151-56-4	1.2E-03	2.5E-01	3.0E-04	2.4E-04						5.2E-08	
		3.0E+00 2.5F-04		2.19 3.23		1 0.9	Yes	Ethylphthalyl Ethyl Glycolate Fenamiohos	84-72-0 22224-92-6					6.0E+04 5.0E+00	1.5E+06 3.4F+01		5.8E+04 4.4F+00		1.3E+02 4.4F-03	
		2.5E-04 2.5E-02	i	5.7	1			Fenpropathrin	39515-41-8					5.0E+00 5.0E+02	7.3E+01		6.4E+01		2.9E+00	
		2.5E-02	T.	6.2				Fenvalerate	51630-58-1					5.0E+02			5.0E+02		3.2E+02	
		1.3E-02	T	2.42		1	Yes	Fluometuron	2164-17-2					2.6E+02	3.4E+03		2.4E+02		1.9E-01	
			C 1.3E-02 C		1	1	Yes	Fluoride	16984-48-8					8.0E+02	1.8E+05		8.0E+02		1.2E+02	
			I 1.3E-02 C	2.00	1			Fluorine (Soluble Fluoride)	7782-41-4					1.2E+03	2.7E+05		1.2E+03	4.0E+03	1.8E+02	6.0E+02
		8.0E-02 2.0F-02		3.16 3.34		0.9		Fluridone Flurorimidol	59756-60-4 56425-91-3					1.6E+03 4.0E+02	1.4E+04 2.4E+03		1.4E+03 3.4F+02		1.6E+02 1.6F+00	
		7.0E-04	i -	3.34				Flusilazole	85509-19-9					1.4E+01	5.0E+01		1.1E+01		1.8E+00	
		6.0E-02	i	3.7	1			Flutolanil	66332-96-5					1.2E+03	4.5E+03		9.5E+02		5.0E+00	
		1.0E-02	1	6.81				Fluvalinate	69409-94-5					2.0E+02			2.0E+02		2.9E+02	
3.5E-03	1	1.0E-01	1	2.85	_		Yes	Folpet	133-07-3	2.2E+01	2.1E+02		2.0E+01	2.0E+03	2.1E+04		1.8E+03		4.7E-03	
1.9E-01	1	2.05.02		2.9			Yes	Fomesafen	72178-02-0	4.1E-01	9.1E+00		3.9E-01	4.05.04	6.05.04		2.45.04		1.3E-03	
	1.3E-05 I	2.0E-03 2.0E-01	I 9.8E-03 A V	3.94 0.35			Yes	Fonofos Formaldehyde	944-22-9 50-00-0			4.3E-01	4.3E-01	4.0E+01 4.0E+03	6.3E+01 3.2E+05	2.0E+01	2.4E+01 2.0E+01		4.7E-02 8.7E-05	
	1.31-03		P 3.0E-04 X V	-0.54				Formic Acid	64-18-6			4.3L*U1	4.3E-01	1.8E+04	6.4E+06	6.3E-01	6.3E-01		1.3E-04	
		3.0E+00		-2.4		1	No	Fosetyl-AL	39148-24-8					6.0E+04	0.42.00	0.52 01	6.0E+04		7.9E+02	
								Furans	N/m											
		1.0E-03		4.12				*Dibenzofuran	132-64-9					2.0E+01	1.3E+01		7.9E+00		1.5E-01	
		1.0E-03	I V	1.34		1	Yes	Furan	110-00-9					2.0E+01	4.8E+02		1.9E+01		7.3E-03	
3.8E+00		9.0E-01	I 2.0E+00 I V	0.46 -0.04			Yes	*Tetrahydrofuran	109-99-9 67-45-8	2.1E-02	1.0E+01		2.0E-02	1.8E+04	1.7E+06	4.2E+03	3.4E+03		7.5E-01 3.9E-05	
3.8E+UU	п	3.0F-03	I 5.0F-02 H V	0.41		1	Yes Yes	Furfural	98-01-1	2.16-02	1.0E+01		2.UE-U2	6.0E+01	7.1E+03	1.0F+02	3.8E+01		8.1E-03	
1.5E+00	C 4.3E-04 C	0.02.00	7 3.02 02 11 7	1.8			Yes	Furium	531-82-8	5.2E-02	1.9E+00		5.1E-02	0.02.101	7.12.03	1.02.02	3.02.101		6.9E-05	
3.0E-02	I 8.6E-06 C			4.38	1	0.9	Yes	Furmecyclox	60568-05-0	2.6E+00	2.0E+00		1.1E+00						1.2E-03	
		4.0E-04		-4.81		1	No	Glufosinate, Ammonium	77182-82-2					8.0E+00			8.0E+00		1.8E-03	
			8.0E-05 C	-0.33				Glutaraldehyde // \	111-30-8											
		4.0E-04 1.0E-01	I 1.0E-03 H V	-0.12 -3.4		1	Yes No	Glycidyl Glyphosate	765-34-4 1071-83-6					8.0E+00 2.0E+03	1.8E+03	2.1E+00	1.7E+00 2.0E+03	7.0E+02	3.3E-04 8.8E+00	3.1E+00
		1.0E-01	X V	-1.63			Yes	Guanidine	113-00-8					2.0E+02	4.2E+05		2.0E+02	7.02102	4.5E-02	3.12.00
		2.0E-02	P	-3.56		1		Guanidine Chloride	50-01-1					4.0E+02			4.0E+02		-1.52 02	
		5.0E-05	I	4.07	1	0.9	Yes	Haloxyfop, Methyl	69806-40-2					1.0E+00	3.1E+00		7.6E-01		8.4E-03	
	I 1.3E-03 I		I V	6.1				Heptachlor	76-44-8	1.7E-02	2.3E-03	4.3E-03	1.4E-03	1.0E+01	1.5E+00		1.3E+00	4.0E-01	1.2E-04	3.3E-02
9.1E+00	I 2.6E-03 I		I V	4.98				Heptachlor Epoxide	1024-57-3	8.6E-03	7.1E-03	2.2E-03	1.4E-03	2.6E-01	2.4E-01		1.2E-01	2.0E-01	2.8E-05	4.1E-03
		2.0E-03 2.0E-04	V	6.07	1	0.7	No No	Hexa bromobenzene	87-82-1 68631-49-2					4.0E+01 4.0E+00			4.0E+01 4.0E+00		2.3E-01	
1.6E+00	I 4.6E-04 I	2.0E-04 8.0E-04	I V	5.73	_	0.9		Hexabromodiphenyl ether, 2,2',4,4',5,5'- (BDE-153) Hexachlorobenzene	68631-49-2 118-74-1	4.9E-02		1.2E-02	9.8E-03	4.0E+00 1.6E+01			4.0E+00 1.6E+01	1.0E+00	1.2E-04	1.3E-02
7.8E-02	1 2.2E-05 I	1.0E-03	P V	4.78				Hexachlorobutadiene	87-68-3	1.0E+00	4.4E-01	2.6E-01	1.4E-01	2.0E+01	9.5E+00		6.5E+00	1.02.00	2.7E-04	1.51-02
6.3E+00	I 1.8E-03 I	8.0E-03	A	3.8				Hexachlorocyclohexane, Alpha-	319-84-6	1.2E-02	1.8E-02		7.2E-03	1.6E+02	2.5E+02		9.7E+01		4.2E-05	
1.8E+00	I 5.3E-04 I			3.78				Hexachlorocyclohexane, Beta-	319-85-7	4.3E-02	6.1E-02		2.5E-02						1.5E-04	
	C 3.1E-04 C	3.0E-04	I .	3.72			Yes	Hexachlorocyclohexane, Gamma- (Lindane)	58-89-9	7.1E-02	1.0E-01		4.2E-02	6.0E+00	9.3E+00		3.6E+00	2.0E-01	2.4E-04	1.2E-03
1.8E+00	I 5.1E-04 I	6 DE 02	I 2.0E-04 I V	4.14 5.04			Yes Yes	Hexachlorocyclohexane, Technical Hexachlorocyclopentadiene	608-73-1 77-47-4	4.3E-02	6.1E-02		2.5E-02	1.2E+02	4.2E+01	4.2E-01	4.1E-01	5.0E+01	1.5E-04 1.3E-03	1.6E-01
4.0E-02	I 1.1E-05 C		I 3.0E-02 I V	4.14		0.9	Yes	Hexachloroethane	77-47-4 67-72-1	1.9E+00	1.7E+00	5.1E-01	3.3E-01	1.2E+02 1.4E+01	4.2E+01 1.4E+01	4.2E-01 6.3E+01	4.1E-01 6.2E+00	3.02+01	2.0E-04	1.05-01
		3.0E-04	1	7.54			No	Hexachlorophene	70-30-4					6.0E+00			6.0E+00		8.1E+00	
1.1E-01	1	3.0E-03	1	0.87			Yes	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	121-82-4	7.1E-01	8.6E+01		7.0E-01	6.0E+01	8.0E+03		6.0E+01		2.7E-04	
			1.0E-05 I V	3.2	1	1	Yes	Hexamethylene Diisocyanate, 1,6-	822-06-0							2.1E-02	2.1E-02		2.1E-04	
		4.0E-04		0.28			Yes	Hexamethylphosphoramide	680-31-9					8.0E+00	2.0E+03	1.55.00	8.0E+00		1.8E-03	
		2.0E+00	7.0E-01 I V	3.9 0.08	1	1	Yes Yes	Hexane, N- Hexanedioic Acid	110-54-3 124-04-9					4.0E+04	1.1E+07	1.5E+03	1.5E+03 4.0E+04		1.0E+01 9.9E+00	
			I 3.0E-02 I V	1.38			Yes	Hexanone, 2-	591-78-6					1.0E+02	2.8E+03	6.3E+01	3.8E+01		8.8E-03	
		3.3E-02	1	1.85	_	_	Yes	Hexazinone	51235-04-2					6.6E+02	2.4E+04		6.4E+02		3.0E-01	
		2.5E-02	I	5.57			Yes	Hexythiazox	78587-05-0					5.0E+02	1.4E+02		1.1E+02		5.0E-01	
		3.0E-04	1	2.31			Yes	Hydramethylnon	67485-29-4					6.0E+00	5.1E+02		5.9E+00		2.1E+03	
	I 4.9E-03 I		3.0E-05 P V	-2.07	1	1	Yes	Hydrazine	302-01-2	2.6E-02 2.6F-02	1.1E+02 4.9F+00	1.1E-03	1.1E-03			6.3E-02	6.3E-02			
3.UE+00	I 4.9E-03 I		2.0E-02 I V		1	1	Yes	Hydrazine Sulfate Hydrogen Chloride	10034-93-2 7647-01-0	2.bE-02	4.9E+00		2.6E-02			4.2E+01	4.2E+01			
		4.0F-02	C 1.4E-02 C V	0.23		1		Hydrogen Chloride Hydrogen Fluoride	7664-39-3					8.0E+02	1.8E+05	4.2E+01 2.9E+01	4.2E+01 2.8E+01			
		02	2.0E-03 I V	0.23	_			Hydrogen Sulfide	7783-06-4							4.2E+00	4.2E+00			

Key: I = IRIS; P = PPRTV;	A = ATSDR; C =	Cal EPA; X = APPENDIX F	PPRTV SCR	tEEN (See	FAQ #27)	; H = HEAST; F = See FAQ; J = New Jersey; O = EPA Office of Water; E = see user guid < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concen	e Section 2.3.5	; L = see user	guide on le	ead; M = muta	igen; S = see user	guide Section	on 5; V = vola	atile; R = RB	A applied (See User G	uide for Ars	enic notice) ; c =	: cancer; n =
Т	oxicity and Che	mical-specific Informati	ion	cı, <b>w</b>	ere. II be	Contaminant	crucion may co	Car	cinogenic Ta	arget Risk (TR	) = 1E-06	пау сиссеа	Noncano	er CHILD Ha	zard Index (HI) = 1		Protection of	Groundwater
										Inhalation		Ingestion SI	Dermal SL	SL	Noncarcinogenic SL			
SFO e IUR	k e RfD <sub>o</sub>	k RfCi e o muta-						Ingestion SL		SL TD-15 OC	Carcinogenic SL	Child	Child	Child	Child	MCI	Risk-based	MCL-based
(mg/kg-day) <sup>-1</sup> y (ug/m <sup>3</sup> ) <sup>-1</sup>	y (mg/kg-day)	c comuta	LOGP	GIABS FA	In FPD?	Analyte	CAS No.	TR=1E-06 (μg/L)	TR=1E-06 (µg/L)	TR=1E-06 (μg/L)	TR=1E-06 (μg/L)	THQ=1 (µg/L)	THQ=1 (μg/L)	THQ=1 (µg/L)	THI=1 (μg/L)	MCL (ug/L)	SSL (mg/kg)	SSL (mg/kg)
6.0E-02 P	4.0E-02	y (((1)g/11) / y   1   gen	0.59	1 1		Hydroquinone	123-31-9	1.3E+00	1.2E+02	(µ8/ L)	1.3E+00	8.0E+02	7.9E+04	(48/ -)	7.9E+02	(48/1)	8.8E-04	(1116/116)
0.02.02	1.3E-02	I		1 0.9		Imazalil	35554-44-0	1.52.00	1.22.02		1.52.00	2.6E+02	6.8E+02		1.9E+02		3.2E+00	
	2.5E-01	I	1.86	1 1		Imazaquin	81335-37-7					5.0E+03	2.6E+05		4.9E+03		2.5E+01	
	2.5E-01	1	1.49	1 1	Yes	Imazethapyr	81335-77-5					5.0E+03	7.2E+04		4.7E+03		4.1E+00	
		A		1 1		lodine	7553-56-2					2.0E+02	4.6E+04		2.0E+02		1.2E+01	
	4.0E-02	1	3		Yes	Iprodione	36734-19-7					8.0E+02	9.1E+03		7.4E+02		2.3E-01	
	7.0E-01 3.0E-01	P I V	0.76	1 1		Iron Isobutyl Alcohol	7439-89-6 78-83-1					1.4E+04 6.0E+03	3.2E+06 3.6E+05		1.4E+04 5.9E+03		3.5E+02 1.2E+00	
9.5E-04 I		1 2.0E+00 C	1.7	1 1		Isophorone	78-59-1	8.2E+01	1.6E+03		7.8E+01	4.0E+03	8.6E+04		3.8E+03		2.6E-02	
	1.5E-02	I V	5.8	1 0.8		Isopropalin	33820-53-0					3.0E+02	4.6E+01		4.0E+01		9.2E-01	
		P 2.0E-01 P V	0.05	1 1		Isopropanol	67-63-0					4.0E+04	6.5E+06	4.2E+02	4.1E+02		8.4E-02	
	1.0E-01	1	0.27	1 1		Isopropyl Methyl Phosphonic Acid	1832-54-8					2.0E+03	3.9E+05		2.0E+03		4.3E-01	
	5.0E-02	T	3.94	1 0.9		Isoxaben	82558-50-7					1.0E+03	2.7E+03		7.3E+02		2.0E+00	
		3.0E-01 A V		1 0		JP-7	NA							6.3E+02	6.3E+02			
	2.0E-03	<u> </u>	4.81	1 0.9	9 Yes	Lactofen	77501-63-4					4.0E+01	6.7E+01		2.5E+01		1.2E+00	
E 0 E 0 1 C 1 E F 0 1	C 2.0E.02	C 2.0E.04 C		0.025 1	Voc	Lead Compounds ~Lead Chromate	7758-97-6	5.0E-02	2.3E-01		4.1F-02	4.05.02	2 25:02		2.45+02			
5.0E-01 C 1.5E-01 8.5E-03 C 1.2E-05		C 2.0E-04 C M		0.025 1		~Lead Chromate ~Lead Phosphate	7/58-97-6 7446-27-7	5.0E-02 9.2E+00	2.3E-01 1.7E+03		4.1E-02 9.1E+00	4.02+02	2.3E+03		3.4E+02			
2.8E-01 C 8.0E-05			-0.08	1 1		~Lead acetate	301-04-2	2.8E-01	2.8E+02		2.8E-01							
2.52.01 0 0.52.05	-		0.00	1 1		~Lead and Compounds	7439-92-1	2.02.01	2.02.02		2.02.01				1.5E+01	1.5E+01		1.4E+01
8.5E-03 C 1.2E-05	С		-4	1 1		~Lead subacetate	1335-32-6	9.2E+00			9.2E+00							
	1.0E-07	I V	4.15	1 0.9		~Tetraethyl Lead	78-00-2					2.0E-03	3.8E-03		1.3E-03		4.7E-06	
	5.0E-06	P V	2.56	1 1		Lewisite	541-25-3					1.0E-01	9.1E-01		9.0E-02		3.8E-05	
	2.0E-03		3.2	1 0.9		Linuron	330-55-2					4.0E+01	2.0E+02		3.3E+01		2.9E-02	
	2.0E-03	P	2.25	1 1		Lithium	7439-93-2					4.0E+01	9.1E+03		4.0E+01		1.2E+01	
	5.0E-04 1.0E-02		3.25 2.79	1 1	Yes Yes	МСРА МСРВ	94-74-6 94-81-5					1.0E+01 2.0E+02	3.0E+01 5.5E+02		7.5E+00 1.5E+02		2.0E-03 5.8E-02	
	1.0E-02	1	3.13	1 1		MCPP	93-65-2					2.0E+02 2.0E+01	7.1E+01		1.6E+01		4.7E-03	
	2.0F-02	i		1 1		Malathion	121-75-5					4.0E+02	1.1F+04		3.9E+02		1.0E-01	
	1.0E-01	I 7.0E-04 C	1.62	1 1		Maleic Anhydride	108-31-6					2.0E+03	3.8E+04		1.9E+03		3.9E-01	
	5.0E-01	I	-0.84	1 1	Yes	Maleic Hydrazide	123-33-1					1.0E+04	8.9E+06		1.0E+04		2.1E+00	
	1.0E-04	P		1 1		Malononitrile	109-77-3					2.0E+00	9.2E+02		2.0E+00		4.1E-04	
	3.0E-02	Н	1.33	1 0.9		Mancozeb	8018-01-7		_			6.0E+02	4.9E+03		5.4E+02		7.6E-01	
	5.0E-03	1	0.62	1 1		Maneb )	12427-38-2					1.0E+02	3.6E+03		9.8E+01		1.4E-01	
		I 5.0E-05 I S 5.0E-05 I		1 1 0.04 1		Manganese (Diet) Manganese (Non-diet)	7439-96-5 7439-96-5					4.8E+02	4.4E+03		4.3E+02		2.8E+01	
		3 5.0E-05 I	1.04	1 1		Mephosfolan (Non-qiet)	950-10-2					1.8E+00	2.5E+02		1.8E+00		2.6E-03	
	3.0E-03	п	-2.82	1 1		Mepiguat Chloride	24307-26-4					6.0E+00	2.5E+U2		6.0E+02		2.0E-03 2.0E-01	
	3.02-02		-2.02		140	Mercury Compounds	24307-20-4					0.02102			0.02102		2.02-01	
	3.0E-04	I 3.0E-04 S	-0.22	0.07 1	Yes	"Mercuric Chloride (and other Mercury salts)	7487-94-7		_			6.0E+00	9.6E+01		5.7E+00	2.0E+00		
		3.0E-04 I V		1 1		"Mercury (elemental)	7439-97-6							6.3E-01	6.3E-01	2.0E+00	3.3E-02	1.0E-01
	1.0E-04	l .		1 1	Yes	"Methyl Mercury"	22967-92-6					2.0E+00	4.6E+02		2.0E+00			
	8.0E-05	I	0.71	1 1		"Phenylmercuric Acetate	62-38-4					1.6E+00	5.7E+02		1.6E+00		5.0E-04	
	3.0E-05	I V		1 0.3		Merphos \ \ //	150-50-5					6.0E-01	0.05.03		6.0E-01		5.9E-02	
	3.0E-05 6.0E-02		5.7 1.65		Yes Yes	Merphos Oxide	78-48-8					6.0E-01 1.2E+03	9.9E-02 6.4E+04		8.5E-02 1.2E+03		4.2E-04 3.3E-01	
		I 3.0E-02 P V	0.68	1 1		Metalaxyl Methacrylonitrile	57837-19-1 126-98-7					2.0E+00	1.3E+02	6.3E+01	1.2E+03 1.9E+00		3.3E-01 4.4E-04	
	5.0E-05	1	-0.8	1 1		Methamidophos	10265-92-6					1.0E+00	1.0E+03	J.JL 101	1.0E+00		2.1E-04	
		I 2.0E+01 I V	-0.77	1 1		Methanol	67-56-1					4.0E+04	1.8E+07	4.2E+04	2.0E+04		4.1E+00	
	1.0E-03	I		1 1		Methidathion	950-37-8					2.0E+01	5.8E+02		1.9E+01		4.7E-03	
	2.5E-02	I	0.6	1 1		Methomyl	16752-77-5					5.0E+02	6.8E+04		5.0E+02		1.1E-01	
4.9E-02 C 1.4E-05			1.47	1 1		Methoxy-5-nitroaniline, 2-	99-59-2	1.6E+00	5.4E+01		1.5E+00						5.3E-04	
	5.0E-03	I		1 0.8		Methoxychlor	72-43-5					1.0E+02	5.9E+01	245	3.7E+01	4.0E+01	2.0E+00	2.2E+00
		P 1.0E-03 P V	0.1	1 1		Methoxyethanol Acetate, 2-	110-49-6					1.6E+02	3.5E+04	2.1E+00	2.1E+00		4.2E-04	
	5.0E-03 1.0E+00	P 2.0E-02 I V	-0.77 0.18	1 1		Methoxyethanol, 2- Methyl Acetate	109-86-4 79-20-9					1.0E+02 2.0E+04	6.3E+04 2.9E+06	4.2E+01	2.9E+01 2.0E+04		6.0E-03 4.1E+00	
	1.02+00	X V 2.0E-02 P V	0.18	1 1		Methyl Acetate Methyl Acrylate	79-20-9 96-33-3					2.02+04	2.52+00	4.2E+01	4.2E+01		4.1E+00 8.9E-03	
	6.0E-01	I 5.0E+00 I V	0.29	1 1		Methyl Ethyl Ketone (2-Butanone)	78-93-3					1.2E+04	1.5E+06	1.0E+04	5.6E+03		1.2E+00	
1.0E-03		P 2.0E-05 X V		1 1		Methyl Hydrazine	60-34-4			5.6E-03	5.6E-03	2.0E+01	1.5E+04	4.2E-02	4.2E-02		1.3E-06	
		3.0E+00 I V	1.31	1 1		Methyl Isobutyl Ketone (4-methyl-2-pentanone)	108-10-1							6.3E+03	6.3E+03		1.4E+00	
		1.0E-03 C V	0.79	1 1		Methyl Isocyanate	624-83-9							2.1E+00	2.1E+00		5.9E-04	
		I 7.0E-01 I V		1 1		Methyl Methacrylate	80-62-6					2.8E+04	7.7E+05	1.5E+03	1.4E+03		3.0E-01	
	2.5E-04	1	2.86	1 1	Yes	Methyl Parathion	298-00-0					5.0E+00	4.1E+01		4.5E+00		7.4E-03	
	6.0E-02	X 405.03 II V	-0.7	1 1		Methyl Phosphonic Acid	993-13-5					1.2E+03	1.2E+06	0.35.04	1.2E+03		2.4E-01	
9.9E-02 C 2.8E-05		H 4.0E-02 H V	3.44 -0.66	1 0.8	3 Yes Yes	Methyl Styrene (Mixed Isomers) Methyl methanesulfonate	25013-15-4 66-27-3	7.9E-01	4.8E+02		7.9E-01	1.2E+02	4.3E+01	8.3E+01	2.3E+01		3.8E-02 1.6E-04	
1.8E-03 C 2.6E-07		3.0E+00 I V	0.94	1 1		Methyl tert-Butyl Ether (MTBE)	1634-04-4	4.3E+01	2.0E+03	2.2E+01	1.4E+01			6.3E+03	6.3E+03		3.2E-03	
1.02-03 C 2.02-07	3.0E-04		-2.06	1 1		Methyl-1,4-benzenediamine dihydrochloride, 2-	615-45-2	4.52.101	2.02.03	2.21.01	1.41.01	6.0E+00	5.9E+04	J.JL 1 UJ	6.0E+00		3.6E-03	
9.0E-03 P	2.0E-02		1.87	1 1		Methyl-5-Nitroaniline, 2-	99-55-8	8.7E+00	1.4E+02		8.2E+00	4.0E+02	7.3E+03		3.8E+02		4.6E-03	
8.3E+00 C 2.4E-03			-0.92	1 1		Methyl-N-nitro-N-nitrosoguanidine, N-	70-25-7	9.4E-03	1.1E+01		9.4E-03						3.2E-06	
1.3E-01 C 3.7E-05	С		1.62	1 1		Methylaniline Hydrochloride, 2-	636-21-5	6.0E-01	3.9E+03		6.0E-01						2.6E-04	
	1.0E-02		-1.18	1 1	Yes	Methylarsonic acid	124-58-3					2.0E+02	3.6E+05		2.0E+02			
	2.0E-04			1 0		Methylbenzene,1-4-diamine monohydrochloride, 2-	74612-12-7					4.0E+00			4.0E+00			
1.0E-01 X	3.0E-04		6.62	1 0		Methylbenzene-1,4-diamine sulfate, 2-	615-50-9	7.8E-01			7.8E-01	6.0E+00			6.0E+00		2.25.02	
2.2E+01 C 6.3E-03	L	M	6.42	1 0.8	NO No	Methylcholanthrene, 3-	56-49-5	1.1E-03			1.1E-03						2.2E-03	

ncy	IS; P = PPRTV; A	= ATSDR; C =	Cal EPA; X =	APPENDIX I				:7); H = HEAST; F = See FAQ; J = New Jersey; O = EPA Offi SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are									A applied (See User G	uide for Arse	enic notice) ; c =	cancer; n =
	To	xicity and Ch	emical-specif	ic Informat				Contamina				arget Risk (TR			Noncance	r CHILD Ha	zard Index (HI) = 1		Protection of G	Groundwater
	1.1 1.			. 1 1							Dermal SI	Inhalation	6	Ingestion SI Child	Dermal SL Child	SL Child	Noncarcinogenic SL Child		Risk-based	MCL-based
SFO	e IUR e	RfD <sub>o</sub>	RfC <sub>i</sub>	k V e o muta-						Ingestion SL TR=1E-06	TR=1E-06	SL TR=1E-06	Carcinogenic SL TR=1E-06	THQ=1	THQ=1	THQ=1	THI=1	MCL	SSL	SSL SSL
(mg/kg-day) <sup>-1</sup>		(mg/kg-day)		y I gen	LOGP	GIABS FA	A In E	D? Analyte	CAS No.	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(ug/L)	(mg/kg)	(mg/kg)
2.0E-03	I 1.0E-08 I		I 6.0E-01		1.25	1 1	Ye		75-09-2	1.3E+01	3.5E+02	2.0E+02	1.1E+01	1.2E+02	3.7E+03	1.3E+03	1.1E+02	5.0E+00	2.9E-03	1.3E-03
1.0E-01	P 4.3E-04 C		Р	M	3.91	1 0.			101-14-4	2.5E-01	4.3E-01		1.6E-01	4.0E+01	7.5E+01		2.6E+01		1.8E-03	
4.6E-02	I 1.3E-05 C				4.37	1 1			101-61-1	1.7E+00	6.7E-01		4.8E-01						2.7E-03	
1.6E+00	C 4.6E-04 C		2.0E-02		1.59	1 1			101-77-9	4.9E-02	1.7E+00		4.7E-02						2.1E-04	
		7.0E-02	6.0E-04 H	I V	5.22 3.48	1 0. 1 1	9 Υε . Υε		101-68-8 98-83-9					1.4E+03	1.7E+03		7.8E+02		1.3E+00	
		1.5E-01	1		3.13	1 1			51218-45-2					3.0E+03	2.6E+04		2.7E+03		3.2E+00	
		2.5E-02	i		1.7	1 1			21087-64-9					5.0E+02	1.8E+04		4.9E+02		1.5E-01	
		2.5E-01	1		2.2	1 1	. Ye		74223-64-6					5.0E+03	2.4E+05		4.9E+03		1.9E+00	
		3.0E+00	Р	٧	6.1	1 1			8012-95-1					6.0E+04			6.0E+04		2.4E+03	
1.8E+01	C 5.1E-03 C		1	V	6.89	1 0.			2385-85-5	4.3E-03		1.1E-03	8.8E-04	4.0E+00			4.0E+00		6.3E-04	
		2.0E-03	<del>!</del>		3.21	1 1			2212-67-1					4.0E+01	1.2E+02		3.0E+01		1.7E-02	
		5.0E-03 1.0E-01				1 1			7439-98-7 10599-90-3					1.0E+02 2.0E+03	2.3E+04 4.6E+05		1.0E+02 2.0E+03	4.0E+03	2.0E+00	
		2.0E-03	P		1.66	1 1			100-61-8					4.0E+01	7.5E+02		3.8E+01	4.02703	1.4E-02	
		2.5E-02	i		2.94	1 1			88671-89-0					5.0E+02	4.7E+03		4.5E+02		5.6E+00	
		3.0E-04	Х		4.04	1 0.	9 Ye	N,N'-Diphenyl-1,4-benzenediamine	74-31-7					6.0E+00	8.9E+00		3.6E+00		3.7E-01	
		2.0E-03	1	٧	1.38	1 1		Naled	300-76-5					4.0E+01	6.8E+03		4.0E+01		1.8E-02	
			X 1.0E-01	٧ -		1 (			64742-95-6					6.0E+02		2.1E+02	1.5E+02			
1.8E+00	C 0.0E+00 C				2.28 3.36	1 1			91-59-8	4.3E-02	3.6E-01		3.9E-02	2.05.02	0.05+02		1.55.03		2.0E-04	
	2 6E-04 C	1.0E-01 1.1E-02	C 1 /F-05		-1.38	1 0.	9 Υε . Υε		15299-99-7 373-02-4					2.0E+03 2.2E+02	9.0E+03 6.8E+05		1.6E+03 2.2E+02		1.1E+01	
		1.1E-02			-2.12	1 1			3333-67-3					2.2E+02 2.2E+02	1.4E+06		2.2E+02 2.2E+02			
		1.1E-02				1 0			13463-39-3			2.2E-02	2.2E-02	2.2E+02		2.9E-02	2.9E-02			
	2.6E-04 C	1.1E-02	C 1.4E-05	2		0.04 1	. Ye	Nickel Hydroxide	12054-48-7					2.2E+02	2.0E+03		2.0E+02			
			C 2.0E-05			0.04 1			1313-99-1					2.2E+02	2.0E+03		2.0E+02			
	2.4E-04 I		C 1.4E-05			0.04			NA					2.2E+02	1.0E+04		2.2E+02		3.2E+01	
4.75.00	2.6E-04 C		I 9.0E-05			0.04 1			7440-02-0		4.75.00		4.55.03	4.0E+02	1.8E+04		3.9E+02		2.6E+01	
1./E+00	C 4.8E-04 I		C 1.4E-05 C 1.4E-05			0.04 1			12035-72-2 1271-28-9	4.06-02	1.7E+00		4.5E-02	2.2E+02 2.2E+02	1.0E+04		2.2E+02 2.2E+02			
	2.02 04 0	1.6E+00	1	-		1 1			14797-55-8		_			3.2E+04	7.3E+06		3.2E+04	1.0E+04		
						1 (			NA					0.22.01				1.0E+04		
		1.0E-01	1			1 1	. Ye	Nitrite	14797-65-0					2.0E+03	4.6E+05		2.0E+03	1.0E+03		
			X 5.0E-05		1.85	1 1			88-74-4					2.0E+02	3.4E+03		1.9E+02		8.0E-02	
2.0E-02			P 6.0E-03		1.39	1 1			100-01-6	3.9E+00	1.2E+02	1.4F-01	3.8E+00	8.0E+01	2.8E+03		7.8E+01		1.6E-03	
	4.0E-05 I		I 9.0E-03	I V	1.85 -4.56	1 1	. Ye		98:95-3			1.4E-01	1.4E-01	4.0E+01	6.2E+02	1.9E+01	1.3E+01		9.2E-05 1.3E+04	
		3.0E+03 7.0E-02	Н		-4.56 -0.47	1 1			67-29-9					6.0E+07 1.4E+03	1.6E+06		6.0E+07 1.4E+03		6.1E-01	
1.3E+00	C 3.7E-04 C		п		0.23	1 1			59-87-0	6.0E-02	1.7E+01		6.0E-02	1.46703	1.02+00		1.46+03		5.4E-05	
1.7E-02	Р	1.0E-04	Р		1.62	1 1	. Ye	Nitroglycerin	55-63-0	4.6E+00	1.8E+02		4.5E+00	2.0E+00	8.7E+01		2.0E+00		8.5E-04	
		1.0E-01	1		-0.89	1 1	. Ye		556-88-7					2.0E+03	1.8E+06		2.0E+03		4.8E-01	
	8.8E-06 P		5.0E-03		-0.35	1 1			75-52-5			6.4E-01	6.4E-01			1.0E+01	1.0E+01		1.4E-04	
	2.7E-03 H		2.0E-02		0.93	1 1			79.46-9			2.1E-03	2.1E-03			4.2E+01	4.2E+01		5.5E-07	
2.7E+01 1.2E+02	C 7.7E-03 C C 3.4E-02 C			M M	0.23 -0.03	1 1	. Y∈		759-73-9 684-93-5	9.3E-04 2.1E-04	1.5E-01 4.6E-02		9.2E-04 2.1E-04						2.2E-07 4.6E-08	
5.4E+00	I 1.6E-03 I	•		V	2.63	1 1			924-16-3	1.4E-02	7.9E-02	3.5E-03	2.7E-03						5.5E-06	
7.0E+00	1 2.0E-03 C			•	1.36	1 1			621-64-7	1.4E-02 1.1E-02	3.5E-01	J.JE*03	1.1E-02						8.1E-06	
2.8E+00	I 8.0E-04 C				-1.28	1 1			1116-54-7	2.8E-02	8.1E+01		2.8E-02						5.6E-06	
1.5E+02	I 4.3E-02 I			М	0.48	1 1	. Ye	Nitrosodiethylamine, N-	55-18-5	1.7E-04	1.7E-02		1.7E-04						6.1E-08	
5.1E+01	I 1.4E-02 I	8.0E-06	P 4.0E-05	V M	-0.57	1 1			62-75-9	4.9E-04	2.0E-01	1.4E-04	1.1E-04	1.6E-01	7.4E+01	8.3E-02	5.5E-02		2.8E-08	
4.9E-03	1 2.6E-06 C			.,	3.13	1 1	. Ye	the same of the sa	86-30-6	1.6E+01	5.2E+01	0.05.03	1.2E+01						6.7E-02	
2.2E+01 6.7E+00	I 6.3E-03 C C 1.9E-03 C			٧	0.04 -0.44	1 1			10595-95-6 5 <del>9</del> -89-2	3.5E-03 2.2E-02	6.4E-01 5.3E+00	8.9E-04	7.1E-04 1.2E-02						2.0E-07 2.8E-06	
	C 2.7E-03 C				0.36	1 1			100-75-4	8.3E-03	1.1E+00		8.2E-03						2.8E-06 4.4E-06	
2.1E+00	I 6.1E-04 I				-0.19	1 1			930-55-2	3.7E-02	1.0E+01		3.7E-02						1.4E-05	
		1.0E-04			2.45	1 1	. Ye	Nitrotoluene, m-	99-08-1					2.0E+00	1.4E+01		1.7E+00		1.6E-03	
2.2E-01	Р	3.0E 04	Р	٧	2.3	1 1			88-72-2	3.5E-01	2.8E+00		3.1E-01	1.8E+01	1.5E+02		1.6E+01		3.0E-04	
1.6E-02	Р	4.0E-03	P		2.37	1 1			99-99-0	4.9E+00	3.4E+01		4.3E+00	8.0E+01	6.2E+02		7.1E+01		4.0E-03	
		3.0E-04 4.0E-02	X 2.0E-02	ν V	5.65 2.3	1 1			111-84-2 27314-13-2					6.0E+00 8.0F+02	2.0E+04	4.2E+01	5.3E+00		7.5E-02 5.0E+00	
		4.0E-02 3.0E-03			8.71	1 0.			2/314-13-2 32536-52-0					8.0E+02 6.0E+01	2.UE+U4		7.7E+02 6.0E+01		5.0E+00 1.2F+01	
		5.0E-03			0.16	1 0.								1.0E+01	6.3E+05		1.0E+01		1.2E+01 1.3E+00	
		2.0E-02	H		-1.01	1 1			152-16-9					4.0E+01	1.4E+05		4.0E+01		9.6E-03	
		5.0E-02	I		3.73	1 0.			19044-88-3					1.0E+03	4.1E+03		8.1E+02		1.5E+00	
		5.0E-03	I		4.8	1 0.	8 Ye	Oxadiazon	19666-30-9					1.0E+02	9.0E+01		4.7E+01		4.8E-01	
		2.5E-02	I		-0.47	1 1			23135-22-0					5.0E+02	5.1E+05		5.0E+02	2.0E+02	1.1E-01	4.4E-02
		3.0E-03	I		4.73		8 Ye		42874-03-3					6.0E+01	6.7E+01		3.2E+01		2.5E+00	
		1.3E-02 4.5E-03			3.2 -4.5	1 0. 1 1			76738-62-0 1910-42-5					2.6E+02 9.0E+01	1.7E+03		2.3E+02 9.0E+01		4.6E-01 1.2E+00	
			H		3.83				56-38-2						3 0E+03		8.6E+01		4.3E-01	
			Н	v	3.83	1 0. 1 1			56-38-2 1114-71-2					1.2E+02 1.0E+03	3.0E+02 1.3E+03		8.6E+01 5.6E+02		4.3E-01 4.5E-01	
			i	•	5.2		9 Ye		40487-42-1					8.0E+02	2.4E+02		1.8E+02		2.1E+00	
		4.0E-02																		
		2.0E-03	i	٧	6.84	1 0.			32534-81-9					4.0E+01			4.0E+01		1.8E+00	
			I I	V	6.84 7.66 5.17	1 0. 1 0. 1 0.	6 N	Pentabromodiphenyl ether, 2,2',4,4',5- (BDE-99)	32534-81-9 60348-60-9 608-93-5					4.0E+01 2.0E+00 1.6E+01	3.9E+00		4.0E+01 2.0E+00 3.2E+00		1.8E+00 8.7E-02 2.4E-02	

									t = HEAST; F = See FAQ; J = New Jersey; O = EPA Office of Water; E = see user guide Sectic 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration		eed ceiling	limit (See L	Jser Guide); s	= Concentration				A applied (See Oser O	uide for Arsi	enic notice, , c =	- cancer, ii -
	Toxicity and	Chem	ical-specific Informa	ition					Contaminant		Car	cinogenic T	arget Risk (TR	= 1E-06				zard Index (HI) = 1	_	Protection of C	Groundwater
	1.1	1.	1.1									Dermal SI	Inhalation		Ingestion SI Child	Dermal SL Child	SL Child	Noncarcinogenic SL Child		Risk-based	MCL-based
SFO	e IUR e RfD	K	RfC <sub>i</sub> e o muta	a-							Ingestion SL TR=1E-06	TR=1E-06	SL TR=1E-06	Carcinogenic SL TR=1E-06	THQ=1	THQ=1	THQ=1	THI=1	MCL	SSL SSL	SSL SSL
(mg/kg-day)	<sup>1</sup> y (ug/m <sup>3</sup> ) <sup>-1</sup> y (mg/kg-da	v) v	(mg/m³) y I gen		iP GI	ABS FA	In E	PD?	Analyte CA	AS No.	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(ug/L)	(mg/kg)	(mg/kg)
9.0E-02	P	,,,,	V	3.2		1 1			Pentachloroethane 76-01	01-7	8.7E-01	2.5E+00	1 1707 7	6.5E-01			11-02-7	11-01-7		3.1E-04	
2.6E-01	H 3.0E-03	- 1	V	4.6	4	1 0.9			Pentachloronitrobenzene 82-68	8-8	3.0E-01	2.0E-01		1.2E-01	6.0E+01	4.4E+01		2.6E+01		1.5E-03	
4.0E-01	I 5.1E-06 C 5.0E-03			5.13		1 0.9			Pentachlorophenol 87-86		1.9E-01	5.2E-02		4.1E-02	1.0E+02	2.9E+01		2.3E+01	1.0E+00	4.2E-04	1.0E-02
4.0E-03	X 2.0E-03			2.3		1 1			Pentaerythritol tetranitrate (PETN) 78-11		1.9E+01	4.3E+02		1.9E+01	4.0E+01	9.6E+02		3.9E+01		2.8E-02	
			1.0E+00 P V	3.3	9	1 1	Ye		Pentane, n- 109-6	-66-0							2.1E+03	2.1E+03		1.0E+01	
	7.05.04	_							Perchlorates	0.00.0					4.45.04	2.25.02		4.45.04			
	7.0E-04 7.0F-04					1 1				0-98-9 1-03-9					1.4E+01 1.4E+01	3.2E+03 3.2E+03		1.4E+01 1.4F+01			
	7.0E-04					1 1		es ~		97-73-0					1.4E+01	3.2E+03		1.4E+01	1.5E+01(F)		
	7.0E-04					1 1				8-74-7					1.4E+01	1.6E+03		1.4E+01	1.52.01(1)		
	7.0E-04					1 1				1-89-0					1.4E+01	3.2E+03		1.4E+01			
	2.0E-02	Р	V	2.4	1	1 1	Ye	es P	Perfluorobutane Sulfonate 375-7						4.0E+02	8.3E+03		3.8E+02		2.1E-01	
	5.0E-02	- 1		6.5		1 0.6				45-53-1					1.0E+03			1.0E+03		2.4E+02	
2.2E-03	C 6.3E-07 C			1.5		1 1			Phenacetin 62-44		3.5E+01	1.1E+03		3.4E+01						9.7E-03	
	2.5E-01			3.5			) Ye			84-63-4					5.0E+03	1.9E+04		4.0E+03		2.1E+01	
	3.0E-01		2.0E-01 C	1.4		1 1			Phenol 108-9						6.0E+03	1.4E+05		5.8E+03		3.3E+00	
	5.0E-04 6.0E-03			4.15 -0.3		1 1			Phenothiazine 92-84 Phenylenediamine, m- 108-4						1.0E+01 1.2E+02	7.6E+00 4.8E+04		4.3E+00 1.2E+02		1.4E-02 3.2E-02	
4.7E-02				0.1		1 1			Phenylenediamine, o- 95-54		1.7E+00	2.9E+02		1.6E+00	1.21.102	7.02.104		1.21.02		4.4E-04	
4.71-02	1.9E-01	н		-0.3		1 1			Phenylenediamine, p- 106-5		1.72.00	2.52.02		1.02.00	3.8E+03	1.4E+06		3.8E+03		1.0E+00	
1.9E-03				3.0		1 1			Phenylphenol, 2- 90-43		4.0E+01	1.2E+02		3.0E+01						4.1E-01	
	2.0E-04	Н		3.5		1 0.9	) Ye		Phorate 298-0	-02-2					4.0E+00	1.2E+01		3.0E+00		3.4E-03	
			3.0E-04 I V	-0.7	1	1 1		P	Phosgene 75-44	14-5											
	2.0E-02	- 1		2.7	8	1 1	Ye		Phosmet 732-1	-11-6					4.0E+02	5.3E+03		3.7E+02		8.2E-02	
									Phosphates, Inorganic	76.00.5					0.75	2.25		0.77			
	4.9E+01 4.9F+01					1 1			'Aluminum metaphosphate 13770' 'Ammonium polyphosphate 6833:	76-88-0 33-79-9					9.7E+05 9.7F+05	2.2E+08 2.2F+08		9.7E+05 9.7F+05			
	4.9E+01 4.9E+01					1 1				0-76-3					9.7E+05	2.2E+08 2.2E+08		9.7E+05 9.7E+05			
	4.9E+01					1 1				3-28-0					9.7E+05 9.7E+05	2.2E+08 2.2E+08		9.7E+05 9.7E+05			
	4.9E+01					1 1				7-93-9					9.7E+05	2.2E+08		9.7E+05			
	4.9E+01					1 1	Ye			2-75-4					9.7E+05	2.2E+08		9.7E+05			
	4.9E+01	P				1 1	Ye	es 🗝	Dipotassium phosphate 7758	8-11-4					9.7E+05	2.2E+08		9.7E+05			
	4.9E+01					1 1				8-79 <u>-4</u>					9.7E+05	2.2E+08		9.7E+05			
	4.9E+01					1 1				30-50-2					9.7E+05	2.2E+08		9.7E+05			
	4.9E+01					1 1				2.76-1					9.7E+05	2.2E+08		9.7E+05			
	4.9E+01 4.9E+01					1 1				8-23-8 7-86-0					9.7E+05 9.7E+05	2.2E+08 2.2E+08		9.7E+05 9.7E+05			
	4.9E+01 4.9E+01					1 1 1 1			Monomagnesium phosphate 7778 7778	7-86-0, 8-77-0					9.7E+05 9.7E+05	2.2E+08 2.2E+08		9.7E+05 9.7E+05			
	4.9E+01					1 1				8-80-7					9.7E+05 9.7E+05	2.2E+08 2.2E+08		9.7E+05			
	4.9E+01					1 1				7-16-1					9.7E+05	2.2E+08		9.7E+05			
	4.9E+01	P				1 0.9	9 Ye	es 🗠	Potassium tripolyphosphate 1384	45-36-8					9.7E+05	2.2E+08		9.7E+05			
	4.9E+01					1 1				8-16-9					9.7E+05	2.2E+08		9.7E+05			
	4.9E+01					1 1				5 88-8					9.7E+05	2.2E+08		9.7E+05			
	4.9E+01					1 0			Sodium aluminum phosphate (anhydrous) 1027	79-59-1					9.7E+05	2.2E+08		9.7E+05			
	4.9E+01 4.9E+01					1 0.8				05-76-7					9.7E+05	2.2E+08		9.7E+05			
	4.9E+01 4.9E+01					1 0.9 1 1				24-56-8 15-31-1					9.7E+05 9.7E+05	2.2E+08 2.2E+08		9.7E+05 9.7E+05			
	4.9E+01					1 1				5-84-4					9.7E+05	2.2E+08		9.7E+05			
	4.9E+01					1 1				8-29-4					9.7E+05	2.2E+08		9.7E+05			
	4.9E+01	Р				1 1				0-34-5					9.7E+05	2.2E+08		9.7E+05			
	4.9E+01					1 1	Ye	es 🕶	Tetrasodium pyrophosphate 7722	2-88-5					9.7E+05	2.2E+08		9.7E+05			
	4.9E+01					1 0.8				36-87-5					9.7E+05	2.2E+08		9.7E+05			
	4.9E+01					1 1				8-87-4					9.7E+05	2.2E+08		9.7E+05			
	4.9E+01					1 1				7-87-1					9.7E+05	2.2E+08		9.7E+05			
	4.9E+01 4.9F+01					1 1				8-53-2 1-54-9					9.7E+05 9.7F+05	2.2E+08 2.2E+08		9.7E+05 9.7F+05			
	4.9E+01 3.0E-04		3.0E-04 I V	-0.2		1 1				3-51-2					6.0E+00	2.2E+08 1.4E+03	6.3E-01	5.7E-01			
	4.9E+01		1.0E-02 I	0.2		1 1				4-38-2					9.7E+05	2.2E+08		9.7E+05			
	2.0E-05		V	3.0		1 1				3-14-0					4.0E-01	9.1E+01		4.0E-01		1.5E-03	
									Phthalates												
1.4E-02	I 2.4E-06 C 2.0E-02			7.6	-	1 0.8			Bis(2-ethylhexyl)phthalate 117-8		5.6E+00			5.6E+00	4.0E+02			4.0E+02	6.0E+00	1.3E+00	1.4E+00
	1.0E+00			4.1			) Ye		Butylphthalyl Butylglycolate 85-70	70-1					2.0E+04	4.1E+04		1.3E+04		3.1E+02	
	1.0E-01			4.5		1 0.9			Dibutyl Phthalate 84-74						2.0E+03	1.6E+03		9.0E+02		2.3E+00	
	8.0E-01 1.0E-01		V	2.4		1 1 1 1			Diethyl Phthalate 84-66 Dimethylterephthalate 120-6						1.6E+04 2.0E+03	2.0E+05 2.7E+04		1.5E+04 1.9E+03		6.1E+00 4.9E-01	
	1.0E-01 1.0E-02		V	8.1		1 1			Octyl Phthalate, di-N- 117-8						2.0E+03 2.0F+02	2.71+04		2.0E+02		4.9E-01 5.7E+01	
	1.0E+00			2		1 1			Phthalic Acid, P- 100-2						2.0E+04	3.3E+05		1.9E+04		6.8E+00	
			2.0E-02 C	1.6		1 1			Phthalic Anhydride 85-44						4.0E+04	1.1E+06		3.9E+04		8.5E+00	
	7.0E-02			1.9		1 1			Picloram 1918						1.4E+03	4.3E+04		1.4E+03	5.0E+02	3.8E-01	1.4E-01
	1.0E-04	Х		0.9		1 1	Ye	es P	Picramic Acid (2-Amino-4,6-dinitrophenol) 96-91	91-3					2.0E+00	2.1E+02		2.0E+00		1.3E-03	
	9.0E-04	Х		1.4	4	1 1	Ye	es P	Picric Acid (2,4,6-Trinitrophenol) 88-89	89-1					1.8E+01	1.2E+03		1.8E+01		8.4E-02	
	1.0E-02			4.2			) Ye			32-93-7					2.0E+02	3.1E+02		1.2E+02		1.2E-01	
									Olybrominated Biphenyls 5953	36-65-1	2.6E-03			2.6E-03	1.4E-01			1.4E-01			
3.0E+01	C 8.6E-03 C 7.0E-06	Н				1 0	N			30-03-1	2.01-03				1.42-01			1.46-01			
	C 8.6E-03 C 7.0E-06 S 2.0E-05 S 7.0E-05		V			1 0		P	Polychlorinated Biphenyls (PCBs)	74-11-2	1.1E+00		2.8E-01	2.2E-01	1.4E+00			1.4E+00		2.1E-02	

Key: I = IRI	S; P = PPRTV; A	a = ATSDR; C =	Cal EPA; X = Al					; H = HEAST; F = See FAQ; J = New Jersey; O = EPA Office of Water; E = see user guic < 100X c St.; ** = where n St < 10X c St.; SSt values are based on DAF=1; m = Conce									A applied (See User G	uide for Ars	enic notice) ; c =	cancer; n =
	To	oxicity and Ch	emical-specific			., - wiii	ere. II Je	Contaminant	intration may e.		cinogenic Ta			nay exceed			zard Index (HI) = 1		Protection of 0	Groundwater
	I.I I.											Inhalation		Ingestion SI	Dermal SL	SL	Noncarcinogenic SL			
SFO	k IUR e	RfD <sub>o</sub>	k RfC <sub>i</sub> e	o muta-						Ingestion SL TR=1E-06	Dermal SL TR=1E-06	SL TR=1E-06	Carcinogenic SL TR=1E-06	Child THQ=1	Child THQ=1	Child THQ=1	Child THI=1	MCL	Risk-based SSL	MCL-based SSL
	y (ug/m <sup>3</sup> ) <sup>-1</sup> y	(mg/kg-day)			LOGP G	SIABS FA	In EPD	Analyte	CAS No.	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(ug/L)	(mg/kg)	(mg/kg)
	S 5.7E-04 S			٧		1 1		~Aroclor 1221	11104-28-2	3.9E-02	1.2E-02	9.8E-03	4.7E-03						8.0E-05	
2.0E+00	S 5.7E-04 S	;		V	4.4	1 1	Yes	~Aroclor 1232	11141-16-5	3.9E-02	1.2E-02	9.8E-03	4.7E-03						8.0E-05	
	S 5.7E-04 S			V		1 0.7		~Aroclor 1242 ~Aroclor 1248	53469-21-9	3.9E-02 3.9E-02		9.8E-03 9.8E-03	7.8E-03 7.8E-03						1.2E-03 1.2E-03	
	S 5.7E-04 S			V		1 0.5		~Aroclor 1248 ~Aroclor 1254	12672-29-6 11097-69-1	3.9E-02 3.9E-02		9.8E-03 9.8E-03	7.8E-03 7.8E-03	4.0E-01			4.0E-01		2.1E-03	
	S 5.7E-04 S			v		1 0		~Aroclor 1260	11096-82-5	3.9E-02		9.8E-03	7.8E-03	4.02.01			4.02.01		5.5E-03	
			Х	٧	6.34	1 0.7		~Aroclor 5460	11126-42-4					1.2E+01			1.2E+01		2.0E+00	
	E 1.1E-03 E		E 1.3E-03 E			1 0		~Heptachlorobiphenyl, 2,3,3',4,4',5,5'- (PCB 189)	39635-31-9	2.0E-02		4.9E-03	4.0E-03	4.7E-01		2.8E+00	4.0E-01		2.8E-03	
	E 1.1E-03 E		E 1.3E-03 E		7.5	1 0		~Hexachlorobiphenyl, 2,3',4,4',5,5'- (PCB 167)	52663-72-6	2.0E-02		4.9E-03	4.0E-03	4.7E-01		2.8E+00	4.0E-01		1.7E-03	
	E 1.1E-03 E		E 1.3E-03 E			1 0		~Hexachlorobiphenyl, 2,3,3',4,4',5'- (PCB 157) ~Hexachlorobiphenyl, 2,3,3',4,4',5- (PCB 156)	69782-90-7 38380-08-4	2.0E-02 2.0F-02		4.9E-03 4.9F-03	4.0E-03 4.0E-03	4.7E-01 4.7F-01		2.8E+00 2.8F+00	4.0E-01 4.0F-01		1.7E-03 1.7E-03	
3.9E+03	E 1.1E+00 E		E 1.3E-06 E			1 0.1		~Hexachlorobiphenyl, 3,3',4,4',5,5'- (PCB 169)	32774-16-6	2.0E-05		4.9E-06	4.0E-06	4.7E-01		2.8E-03	4.0E-04		1.7E-06	
3.9E+00	E 1.1E-03 E	2.3E-05	E 1.3E-03 E	٧	6.98	1 0.4	No.	~Pentachlorobiphenyl, 2',3,4,4',5- (PCB 123)	65510-44-3	2.0E-02		4.9E-03	4.0E-03	4.7E-01		2.8E+00	4.0E-01		1.0E-03	
	E 1.1E-03 E		E 1.3E-03 E			1 0.3		~Pentachlorobiphenyl, 2,3',4,4',5- (PCB 118)	31508-00-6	2.0E-02		4.9E-03	4.0E-03	4.7E-01		2.8E+00	4.0E-01		1.0E-03	
	E 1.1E-03 E		E 1.3E-03 E			1 0.5		~Pentachlorobiphenyl, 2,3,3',4,4'- (PCB 105)	32598-14-4	2.0E-02		4.9E-03	4.0E-03	4.7E-01		2.8E+00	4.0E-01		1.0E-03	
3.9E+00 1.3E+04	E 1.1E-03 E E 3.8E+00 E		E 1.3E-03 E E 4.0E-07 E			1 0.4 1 0.4		~Pentachlorobiphenyl, 2,3,4,4',5- (PCB 114) ~Pentachlorobiphenyl, 3,3',4,4',5- (PCB 126)	74472-37-0 57465-28-8	2.0E-02 6.0E-06		4.9E-03 1.5E-06	4.0E-03 1.2E-06	4.7E-01 1.4E-04		2.8E+00 8.3E-04	4.0E-01 1.2E-04		1.0E-03 3.0E-07	
	I 5.7E-04 I	7.05-05	2 4.02-07 E	v		1 0.4		~Polychlorinated Biphenyls (high risk)	1336-36-3	0.0E-00		1.55-00	1.25-00	1.46-04		0.52-04	1.25-04		3.02-07	
4.0E-01	I 1.0E-04 I			V	7.1	1 0.7		~Polychlorinated Biphenyls (low risk)	1336-36-3	1.9E-01		5.6E-02	4.4E-02					5.0E-01	6.8E-03	7.8E-02
	I 2.0E-05 I			V		1 0.7		~Polychlorinated Biphenyls (lowest risk)	1336-36-3											
			E 4.0E-04 E			1 0.6		~Tetrachlorobiphenyl, 3,3',4,4'- (PCB 77)	32598-13-3	6.0E-03		4.05.07	6.0E-03	1.4E-01		2.05.04	1.4E-01		9.4E-04	
3.9E+01	E 1.1E-02 E	2.3E-06	E 1.3E-04 E 6.0E-04 I	٧		1 0.7 1 0		~Tetrachlorobiphenyl, 3,4,4',5- (PCB 81) Polymeric Methylene Diphenyl Dijsocyanate (PMDI)	70362-50-4 9016-87-9	2.0E-03		4.9E-04	4.0E-04	4.7E-02		2.8E-01	4.0E-02		6.2E-05	
			U.UE*U4		10.40	. 0	INO	Polynuclear Aromatic Hydrocarbons (PAHs)	3010-07-9											
		6.0E-02	T	٧	3.92	1 1	Yes	~Acenaphthene	83-32-9					1.2E+03	9.6E+02		5.3E+02		5.5E+00	
		3.0E-01		V		1 1		~Anthracene	120-12-7					6.0E+03	2.5E+03		1.8E+03		5.8E+01	
	E 1.1E-04 C	-		V M		1 1		~Benz[a]anthracene	56-55-3	3.4E-02		1.8E-02	1.2E-02						4.3E-03	
	C 1.1E-04 C			М		1 0.9		"Benzo(j)fluoranthene "Benzo(a)pyrene	205-82-3 50-32-8	6.5E-02 3.4E-03			6.5E-02 3.4E-03					2.0E-01	7.8E-02 4.0E-03	2.4E-01
	E 1.1E-04 (			M	5.78	1 1		~Benzo[b]fluoranthene	205-99-2	3.4E-02			3.4E-02					2.0E-01	4.1E-02	2.4E-U1
	E 1.1E-04 C	1		М	6.11	1 0.9	) No	"Benzo[k]fluoranthene	207-08-9	3.4E-01			3.4E-01						4.0E-01	
		8.0E-02	1	V		1 1		"Chloronaphthalene, Beta-	91-58-7					1.6E+03	1.4E+03		7.5E+02		3.9E+00	
7.3E-03	E 1.1E-05 C			М	5.81	1 1	No	*Chrysene	218-01-9	3.4E+00			3.4E+00						1.2E+00	
	E 1.2E-03 C			М		1 0.6		"Dibenz(a,h)anthracene "Dibenzo(a,e)pyrene	53-70-3 192-65-4	3.4E-03 6.5E-03			3.4E-03 6.5E-03						1.3E-02 8.4E-02	
	C 7.1E-03 C			М		1 0.3		"Dimethylbenz(a)anthracene, 7,12	57-97-6	1.0E-04			1.0E-04						9.9E-05	
		4.0E-02	ī		5.16	1 1		"Fluoranthene	206-44-0	2100 01				8.0E+02			8.0E+02		8.9E+01	
		4.0E-02	1	V		1 1	Yes	~Fluorene	86-73-7					8.0E+02	4.6E+02		2.9E+02		5.5E+00	
	E 1.1E-04 C			М	6.7	1 0.6		Yindeno(1,2,3-cd)pyrene	193-39-5	3.4E-02			3.4E-02						1.3E-01	
2.9E-02	Р	7.0E-02 4.0E-03	A	V	3.87	1 1		"Methylnaphthalene, 1-	90-12-0	2.7E+00	2.0E+00		1.1E+00	1.4E+03 8.0E+01	1.1E+03 6.5E+01		6.2E+02 3.6E+01		6.0E-03 1.9E-01	
	3.4E-05 (		I 3.0E-03 I	V		1 1		"Methylnaphthalene, 2" "Naphthalene	91-37-6 91-20-3			1.7E-01	1.7E-01	4.0E+01	7.0E+02	6.3F+00	6.1E+01		1.9E-01 5.4E-04	
1.2E+00	C 1.1E-04 C		1 3.02 03 1	•		1 0.9		"Nitropyrene, 4-	57835-92-4	6.5E-02	2.7E-02	1.72 01	1.9E-02	4.02.702	7.02.02	0.52.00	0.12.00		3.3E-03	
		3.0E-02	1	V		1 1	Yes	"Pyrene	129-00-0					6.0E+02	1.5E+02		1.2E+02		1.3E+01	
		2.0E-02	P		-0.33	1 1	Yes	Potassium Perfluorobutane Sulfonate	29420-49-3					4.0E+02	2.8E+05		4.0E+02			
1.5E-01	1	9.0E-03	1	.,		1 0.9		Prochloraz	67747-09-5	5.2E-01	1.4E+00		3.8E-01	1.8E+02	5.1E+02		1.3E+02		1.9E-03	
		6.0E-03 1.5E-02	1	v		1 0.8		Profluralin Prometon	26399-36-0 1610-18-0					1.2E+02 3.0E+02	3.3E+01 1.6E+03		2.6E+01 2.5E+02		1.6E+00 1.2E-01	
		4.0E-03	ī			1 0.9		Prometryn	7287-19-6					8.0E+01	2.3E+02		6.0E+01		9.1E-02	
		1.3E-02	T			1 1		Propachlor	1918-16-7					2.6E+02	4.3E+03		2.5E+02		1.5E-01	
		4.0E-03	I			1 1	Yes	Propanediol, 1,2-	114-26-1					8.0E+01	3.6E+03		7.8E+01		2.5E-02	
		5.0E-03	1			1 1		Propanil	709-98-8					1.0E+02	4.4E+02		8.2E+01		4.5E-02	
		2.0E-02 2.0E-03		v		1 0.8		Propargite Propargyl Alcohol	2312-35-8 107-19-7					4.0E+02 4.0E+01	2.7E+02 1.2E+04		1.6E+02 4.0E+01		1.2E+01 8.2E-03	
		2.0E-03	i	•		1 1		Propazine Propazine	139-40-2					4.0E+01	2.4E+03		3.4E+02		3.1E-01	
		2.0E-02	1			1 1		Propham	122-42-9					4.0E+02	2.8E+03		3.5E+02		2.2E-01	
		1.3E-02	1				Yes	Propiconazole	60207-90-1					2.6E+02	1.1E+03		2.1E+02		6.9E-01	
		4.0= =:	8.0E-03 I			1 1		Propionaldehyde	123-38-6					2.05.51	4.05	1.7E+01	1.7E+01		3.4E-03	
		1.0E-01	X 1.0E+00 X 3.0E+00 C			1 1	Yes Yes	Propyl benzene Propylene	103-65-1 115-07-1					2.0E+03	1.8E+03	2.1E+03 6.3E+03	6.6E+02 6.3E+03		1.2E+00 6.0E+00	
		2.0E+01	PP	•		1 1		Propylene Glycol	57-55-6					4.0E+05	3.2E+08	0.52.03	4.0E+05		8.1E+01	
			2.7E-04 A			1 1		Propylene Glycol Dinitrate	6423-43-4											
		7.0E-01	H 2.0E+00 I		-0.49	1 1	Yes	Propylene Glycol Monomethyl Ether	107-98-2					1.4E+04	3.9E+06	4.2E+03	3.2E+03		6.5E-01	
2.4E-01	I 3.7E-06 I	7.55.05	3.0E-02 I	V	0.03	1 1		Propylene Oxide	75-56-9	3.2E-01	4.7E+01	1.5E+00	2.7E-01	4.55.65	F FF . 05	6.3E+01	6.3E+01		5.6E-05	
		7.5E-02 1.0F-03		v		1 0.9		Propyzamide Pyridine	23950-58-5 110-86-1					1.5E+03 2.0E+01	5.5E+03 1.5E+03		1.2E+03 2.0E+01		1.2E+00 6.8E-03	
		5.0E-04	<del></del>	•	0.00	1 0.9		Quinalphos	13593-03-8					1.0E+01	1.5E+03 1.0E+01		5.1E+00		4.3E-02	
3.0E+00	1	3.02.04				1 1		Quinoline	91-22-5	2.6E-02	2.9E-01		2.4E-02	1.02.01	2.02.02		3.12.00		7.8E-05	
		9.0E-03	1		4.28	1 0.9		Quizalofop-ethyl	76578-14-8					1.8E+02	3.8E+02		1.2E+02		1.9E+00	
			3.0E-02 A			1 0		Refractory Ceramic Fibers	NA											
		3.0E-02 5.0F-02	1	V		1 0.7		Resmethrin	10453-86-8					6.0E+02	7.6E+01		6.7E+01		4.2E+01	
		5.0E-02 4.0E-03	H	٧	4.88	1 0.8		Ronnel Rotenone	299-84-3 83-79-4					1.0E+03 8.0E+01	6.8E+02 2.6E+02		4.1E+02 6.1E+01		3.7E+00 3.2E+01	
2.2E-01	C 6.3E-05 C			М		1 1		Safrole	94-59-7	1.1E-01	6.0E-01		9.6E-02	0.02+01	2.01702		0.15701		5.9E-05	
		5.0E-03	1			1 1		Selenious Acid	7783-00-8					1.0E+02	2.3E+04		1.0E+02			

SFO (mg/kg-day) <sup>-1</sup>			-u. c. A, A	= APPENDIX	PRTV SCF noncano	REEN (S cer; * =	ee FAC where:	(#27); : n SL <	H = HEAST; F = See FAQ; J = New Jersey; O = EPA Office of Water; E = see user guide Section 2.3 $100X c SL$ ; ** = where n SL < $10X c SL$ ; SSL values are based on DAF=1; m = Concentration may	.3.5; L = see user y exceed ceiling	r guide on I limit (See L	lead; M = mut User Guide); s	agen; S = see use = Concentration	r guide Section may exceed	on 5; V = vola Csat (See Use	tile; R = RB er Guide)	A applied (See User G	uide for Ars	enic notice) ; c =	cancer; n =
	To	oxicity and Ch	emical-spe	cific Informat	ion				Contaminant	Car	rcinogenic T	Farget Risk (TF	) = 1E-06		Noncance	er CHILD Ha	zard Index (HI) = 1		Protection of G	Groundwater
												Inhalation		Ingestion SI	Dermal SL	SL	Noncarcinogenic SL			
	k IUR A	RfD <sub>o</sub>	k RfCi	kv						Ingestion SI		L SL	Carcinogenic SL	Child	Child	Child	Child		Risk-based	MCL-based
(Hig/kg-day)	c	(mg/kg-day)		e o muta-	LOGP	GIABS	FA In	EDD3	Analyte CAS No.	TR=1E-06	TR=1E-06 (µg/L)	TR=1E-06 (μg/L)	TR=1E-06	THQ=1	THQ=1	THQ=1	THI=1 (µg/L)	MCL (ug/L)	SSL	SSL
	y (ug/m ) y	5.0E-03	1 2.0E-02		LUGP				Selenium 7782-49-2		(µg/L)	(µg/L)	(μg/L)	(μg/L) 1.0E+02	(μg/L)	(μg/L)	(μg/L) 1.0E+02		(mg/kg) 5.2E-01	(mg/kg) 2.6E-01
			C 2.0E-02					Yes Yes	Selenium 7/82-49-2 Selenium Sulfide 7446-34-6					1.0E+02 1.0E+02	2.3E+04 2.3E+04		1.0E+02 1.0E+02	5.0E+01	5.2E-01	2.6E-U1
		9.0E-02	L 2.0E-02		4.38		0.9		Sethoxydim 74051-80-1					1.8E+03	2.4E+03		1.0E+03		9.3E+00	
			3.0E-03	l C		1		Yes	Silica (crystalline, respirable) 7631-86-9											
		5.0E-03	1					Yes	Silver 7440-22-4					1.0E+02	1.5E+03		9.4E+01		8.0E-01	
1.2E-01	Н	5.0E-03	1		2.18	1	1	Yes	Simazine 122-34-9	6.5E-01	9.3E+00		6.1E-01	1.0E+02	1.6E+03		9.4E+01	4.0E+00	3.0E-04	2.0E-03
		1.3E-02	1		0.37	1	1	Yes	Sodium Acifluorfen 62476-59-	9-9				2.6E+02	2.1E+05		2.6E+02		2.1E+00	
		4.0E-03	1			1	1	Yes	Sodium Azide 26628-22-					8.0E+01	1.8E+04		8.0E+01			
5.0E-01	C 1.5E-01 C	2.0E-02	C 2.0E-04	С М		0.025	1	Yes	Sodium Dichromate 10588-01-	1-9 5.0E-02	2.3E-01		4.1E-02	4.0E+02	2.3E+03		3.4E+02			
2.7E-01	Н	3.0E-02	1		-1.43			Yes	Sodium Diethyldithiocarbamate 148-18-5		8.5E+02		2.9E-01	6.0E+02	1.9E+06		6.0E+02			
			A 1.3E-02	. C				Yes	Sodium Fluoride 7681-49-4	4				1.0E+03	2.3E+05		1.0E+03			
		2.0E-05	1		-3.78				Sodium Fluoroacetate 62-74-8					4.0E-01			4.0E-01		8.1E-05	
		1.0E-03	Н			1		Yes	Sodium Metavanadate 13718-26-					2.0E+01	4.6E+03		2.0E+01			
		8.0E-04	P					Yes	Sodium Tungstate 13472-45-					1.6E+01	3.6E+03		1.6E+01			
2.45.05		8.0E-04	P		2.52	1		Yes	Sodium Tungstate Dihydrate 10213-10-		4.05.61		2.05.05	1.6E+01	3.6E+03		1.6E+01		0.25.02	
2.4E-02	H	3.0E-02	0.000		3.53				Stirofos (Tetrachlorovinphos) 961-11-5		1.9E+01		2.8E+00	6.0E+02	3.8E+03		5.2E+02		8.2E-03	
5.0E-01	C 1.5E-01 C		C 2.0E-04	с м		0.025			Strontium Chromate 7789-06-2		2.3E-01		4.1E-02	4.0E+02	2.3E+03		3.4E+02		4.25.02	
		6.0E-01			1.00	1		Yes	Strontium, Stable 7440-24-6	U				1.2E+04	2.7E+06		1.2E+04		4.2E+02	
		3.0E-04	I 1.0E+0		1.93				Strychnine         57-24-9           Stvrene         100-42-5					6.0E+00	3.2E+02 1.0E+04	2.45.02	5.9E+00 1.2E+03	1.0E+02	6.5E-02 1.3E+00	1.1E-01
		2.0E-01 3.0E-03	I 1.0E+0	) I V	2.95 3.1			Yes Yes	Styrene 100-42-5 Styrene-Acrylonitrile (SAN) Trimer NA					4.0E+03 6.0E+01	1.0E+04 2.4E+02	2.1E+03	1.2E+03 4.8E+01	1.UE+02	1.3E+00	1.1E-01
					-0.77			Yes	Sulfolane 126-33-0					2.0E+01	1.7E+04		2.0E+01		4.4F-03	
		1.0E-03 8.0E-04	P 2.0E-03		-0.77 3.9	_		Yes Yes	Sulfonylbis(4-chlorobenzene), 1,1'- 80-07-9					2.0E+01 1.6E+01	1.7E+04 3.5E+01		2.0E+01 1.1E+01		4.4E-03 6.5E-02	
		0.UE-U4	1.0E-03	L C V	5.9			Yes Yes	Sulfur Trioxide 7446-11-9	9				1.02+01	3.JE+U1	2.1F+00	1.1E+01 2.1E+00		0.52-02	
			1.0E-03					Yes	Sulfuri Prioxide 7446-11-9 Sulfuric Acid 7664-93-9	_						2.16+00	2.15+00			
2.5F-02	I 7.1E-06 I	5.0E-02	H 1.0E-0:		4.82			Yes	Sulfurous acid, 2-chloroethyl 2-[4-(1,1-dimethylethyl)phenoxy]-1-methylethyl 140-57-8		2.3E+00		1.3E+00	1.0E+03	8.2E+02		4.5E+02		1.5E-02	
2.51-02	1 7.12-00 1	3.0E-02	н		3.3			Yes	TCMTB 21564-17-4		2.31.00		1.32.100	6.0E+02	2.4E+03		4.8E+02		3.3E+00	
		7.0E-02	1		1.79	1		Yes	Tebuthiuron 34014-18-					1.4E+03	4.7E+04		1.4E+03		3.9E-01	
			H					No	Temephos 3383-96-8					4.0F+02	4.72.04		4.0E+02		7.6F+01	
		1.3E-02	ï		1.89	1		Yes	Terbacil 5902-51-2	2				2.6E+02	7.0E+03		2.5E+02		7.5E-02	
			Н	V	4.48	1		Yes	Terbufos 13071-79-					5.0E-01	4.5E-01		2.4E-01		5.2E-04	
		1.0E-03	1		3.74			Yes	Terbutryn 886-50-0					2.0E+01	4.1E+01		1.3E+01		1.9E-02	
		1.0E-04	1		6.77			No	Tetrabromodiphenyl ether, 2,2,4,4'- (BDE-47) 5436-43-1	D				2.0E+00			2.0E+00		5.4E-02	
		3.0E-04	1	V	4.64	1		Yes	Tetrachlorobenzene 1,2,45 95-94-3					6.0E+00	2.4E+00		1.7E+00		7.9E-03	
2.6E-02	I 7.4E-06 I	3.0E-02	1	V	2.93	1		Yes	Tetrachloroethane, 1,1,1,2 630-20-6	3.0E+00	1.1E+01	7.6E-01	5.7E-01	6.0E+02	2.4E+03		4.8E+02		2.2E-04	
2.0E-01	I 5.8E-05 C		1	V	2.39			Yes	Tetrachloroethane, 1,1,2,2- \ /9-34-5	3.9E-01	3.3E+00	9.7E-02	7.6E-02	4.0E+02	3.6E+03		3.6E+02		3.0E-05	
2.1E-03	I 2.6E-07 I	6.0E-03	I 4.0E-02	2 I V	3.4	1	1	Yes	Tetrachloroethylene 127-18-4	3.7E+01	6.5E+01	2.2E+01	1.1E+01	1.2E+02	2.3E+02	8.3E+01	4.1E+01	5.0E+00	5.1E-03	2.3E-03
		3.0E-02	1		4.45			Yes	Tetrachlorophenol, 2,3,4,6- 58-90-2					6.0E+02	3.9E+02		2.4E+02		1.5E+00	
2.0E+01	Н			V	4.54			Yes	Tetrachlorotoluene, p- alpha, alpha, alpha- 5216-25-1	1 3.9E-03	2.0E-03		1.3E-03						4.5E-06	
		5.0E-04	1		3.99		0.9		Tetraethyl Dithiopyrophosphate 3689-24-5	5				1.0E+01	2.4E+01		7.1E+00		5.2E-03	
			8.0E+0	LIV	1.68	1	1		Tetrafluoroethane, 1,1,1,2							1.7E+05	1.7E+05		9.3E+01	
		2.0E-03	Р		1.64	1		Yes	Tetryl (Trinitrophehylmethylnitramine) / 479-45-8					4.0E+01	2.5E+03		3.9E+01		3.7E-01	
			Х					Yes	Thallium (I) Nitrate 103/02-45-	5-1				1.4E-01	3.2E+01		1.4E-01			
			X					Yes	Thallium (Soluble Salts) 7440-28-0					2.0E-01	4.6E+01		2.0E-01	2.0E+00	1.4E-02	1.4E-01
		0.00	X	V	-0.17			Yes	Thallium Acetate U U U 563-68-8					1.2E-01	1.0E+02		1.2E-01			
			X	V	-0.86			Yes	Thallium Carbonate 6533-73-9					4.0E-01	3.7E+03		4.0E-01			
			X				1 0.9	Yes	Thallium Chloride 7791-12-0					1.2E-01 4.0E-01	2.7E+01 9.1E+01		1.2E-01 4.0E-01			
			X		1.50				Thallium Sulfate 7446-18-6		_								7.05.00	
		1.3E-02 1.0F-02			1.56 3.4			Yes	Thifensulfuron-methyl 79277-27-					2.6E+02	3.5E+04		2.6E+02		7.8E-02 5.5E-01	
		1.0E-02 7.0E-02	X		3.4 -0.63	1		Yes Yes	Thiobencarb 28249-77- Thiodielycol 111-48-8					2.0E+02 1.4E+03	7.7E+02 9.7E+05		1.6E+02 1.4E+03		5.5E-01 2.8E-01	
			<u>^</u>		2.16			Yes	Thiodiglycol 111-48-8 Thiodinox 39196-18-		_			6.0E+00	4.4E+01		5.3E+00		1.8E-03	
		8.0F-02	1					Yes Yes	Thiophanate, Methyl 23564-05-					1.6F+03	4.4E+01 2.1F+05		5.3E+00 1.6F+03		1.8E-03 1.4F+00	
		5.0E-02	i		1.73	_		Yes	Thiram 23504-05-0					1.0E+03 1.0E+02	4.0E+03		9.8E+01		1.4E-01	
		6.0E-01	Н					Yes	Tin 7440-31-5					1.2E+04	2.7E+06		1.2E+04		3.0E+03	
		0.02 01	1.0E-04	AV				Yes	Titanium Tetrachloride 7550-45-0					1.22.04	,	2.1E-01	2.1E-01		3.02.03	
		8.0E-02	I 5.0E+0		2.73	1		Yes	Toluene 108-88-3					1.6E+03	5.3E+03	1.0E+04	1.1E+03	1.0E+03	7.6E-01	6.9E-01
1.8E-01	Х		X		0.16			Yes	Toluene-2,5-diamine 95-70-5	4.3E-01	8.2E+01		4.3E-01	4.0E+00	8.3E+02		4.0E+00		1.3E-04	
			X					Yes	Toluidine, p- 106-49-0	2.6E+00	6.8E+01		2.5E+00	8.0E+01	2.3E+03		7.7E+01		1.1E-03	
3.0E-02		3.0E+00	Р	V	6.1			No	Total Petroleum Hydrocarbons (Aliphatic High) NA					6.0E+04			6.0E+04		2.4E+03	
3.0E-02			6.0E-01	L P V	3.9	1	1	Yes	Total Petroleum Hydrocarbons (Aliphatic Low) NA							1.3E+03	1.3E+03		8.8E+00	
3.0E-02		1.0E-02	X 1.0E-0		5.65			No	Total Petroleum Hydrocarbons (Aliphatic Medium) NA					2.0E+02		2.1E+02	1.0E+02		1.5E+00	
3.0E-02		4.0E-02	Р		5.16	1	1	No	Total Petroleum Hydrocarbons (Aromatic High) NA					8.0E+02			8.0E+02		8.9E+01	
3.0E-02			P 3.0E-02		2.13	1	1	Yes	Total Petroleum Hydrocarbons (Aromatic Low) NA					8.0E+01	6.1E+02	6.3E+01	3.3E+01		1.7E-02	
3.0E-02			D 2	PV	3.58			Yes	Total Petroleum Hydrocarbons (Aromatic Medium) NA					8.0E+01	9.0E+01	6.3E+00	5.5E+00		2.3E-02	
		4.0E-03	P 3.0E-03						Toxaphene 8001-35-2				7.1E-02							
	I 3.2E-04 I	4.0E-03	и 3.0E-03		5.9			No										3.0E+00	1.1E-02	4.6E-01
	I 3.2E-04 I	4.0E-03 7.5E-03	1		7.56	1	0.5	No	Tralomethrin 66841-25-					1.5E+02			1.5E+02	3.0E+00	5.8E+01	4.6E-01
	I 3.2E-04 I	4.0E-03 7.5E-03 3.0E-04	I A	v	7.56 4.1	1	0.5 0.9	No Yes	Tri-n-butyltin 688-73-3					6.0E+00	9.9E+00		3.7E+00	3.0E+00	5.8E+01 8.2E-02	4.6E-01
	I 3.2E-04 I	4.0E-03 7.5E-03 3.0E-04 8.0E+01	1	v	7.56 4.1 0.25	1 1 1	0.5 0.9 1	No Yes Yes	Tri-n-butyltin         688-73-3           Triacetin         102-76-1					6.0E+00 1.6E+06	5.3E+08		3.7E+00 1.6E+06	3.0E+00	5.8E+01 8.2E-02 4.5E+02	4.6E-01
	1 3.2E-04 I	4.0E-03 7.5E-03 3.0E-04 8.0E+01 3.0E-02	I A		7.56 4.1 0.25 2.77	1 1 1	0.5 0.9 1	No Yes Yes Yes	Tri-n-butyltin         688-73-3           Triacetin         102-76-1           Triadimefon         43121-43-	3-3				6.0E+00 1.6E+06 6.0E+02	5.3E+08 6.9E+03		3.7E+00 1.6E+06 5.5E+02	3.0E+00	5.8E+01 8.2E-02 4.5E+02 4.4E-01	4.6E-01
	1 3.2E-04 I	7.5E-03 3.0E-04 8.0E+01 3.0E-02 1.3E-02	I A	v	7.56 4.1 0.25 2.77 4.6	1 1 1 1	0.5 0.9 1 1 0.9	No Yes Yes Yes Yes	Tri-n-butyltin         688-73-3           Triacetin         102-76-1           Triadimefon         4312-43-2           Triallate         2303-17-5	3-3 5				6.0E+00 1.6E+06 6.0E+02 2.6E+02	5.3E+08 6.9E+03 2.2E+02		3.7E+00 1.6E+06 5.5E+02 1.2E+02	3.0E+00	5.8E+01 8.2E-02 4.5E+02 4.4E-01 2.6E-01	4.6E-01
	I 3.2E-04 I	4.0E-03 7.5E-03 3.0E-04 8.0E+01 3.0E-02 1.3E-02 1.0E-02	I A		7.56 4.1 0.25 2.77 4.6 1.1	1 1 1 1 1	0.5 0.9 1 1 0.9	No Yes Yes Yes Yes Yes	Tri-n-butyltin         688-73-3           Triacetin         102-76-1           Triadimefon         43121-43-3           Triallate         2303-17-5           Triasuffuron         82097-50-3	3-3 5 9-5				6.0E+00 1.6E+06 6.0E+02 2.6E+02 2.0E+02	5.3E+08 6.9E+03 2.2E+02 6.0E+04		3.7E+00 1.6E+06 5.5E+02 1.2E+02 2.0E+02	3.0E+00	5.8E+01 8.2E-02 4.5E+02 4.4E-01 2.6E-01 2.1E-01	4.6E-01
	1 3.2E-04 I	4.0E-03 7.5E-03 3.0E-04 8.0E+01 3.0E-02 1.3E-02 1.0E-02 8.0E-03	I A	v	7.56 4.1 0.25 2.77 4.6 1.1	1 1 1 1 1 1	0.5 0.9 1 1 0.9 1	No Yes Yes Yes Yes Yes	Tri-n-butyltin         688-73-3           Triacetin         102-76-1           Triadimefon         43121-43-1           Triallate         2303-17-5           Triasulfuron         82097-50-1           Tribenuron-methyl         101200-48	3-3 5 9-5 18-0				6.0E+00 1.6E+06 6.0E+02 2.6E+02 2.0E+02 1.6E+02	5.3E+08 6.9E+03 2.2E+02 6.0E+04 5.0E+03		3.7E+00 1.6E+06 5.5E+02 1.2E+02 2.0E+02 1.6E+02	3.0E+00	5.8E+01 8.2E-02 4.5E+02 4.4E-01 2.6E-01 2.1E-01 6.1E-02	4.6E-01
		7.5E-03 3.0E-04 8.0E+01 3.0E-02 1.3E-02 1.0E-02	I A		7.56 4.1 0.25 2.77 4.6 1.1	1 1 1 1 1 1 1	0.5 0.9 1 1 0.9 1	No Yes Yes Yes Yes Yes Yes	Tri-n-butyltin         688-73-3           Triacetin         102-76-1           Triadimefon         43121-43-3           Triallate         2303-17-5           Triasuffuron         82097-50-3	3-3 5 0-5 18-0	1.3E+01		5.2E+00	6.0E+00 1.6E+06 6.0E+02 2.6E+02 2.0E+02	5.3E+08 6.9E+03 2.2E+02 6.0E+04		3.7E+00 1.6E+06 5.5E+02 1.2E+02 2.0E+02	3.0E+00	5.8E+01 8.2E-02 4.5E+02 4.4E-01 2.6E-01 2.1E-01	4.6E-01

Key: I = IRIS; P = PPRTV; A = ATSDR; C = Cal EPA; X = A					; H = HEAST; F = See FAQ; J = New Jersey; O = EPA Office of Water; E = see user guide Section 2 < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration m;									A applied (See User Gu	uide for Ars	enic notice) ; c =	cancer; n =
Toxicity and Chemical-specifi		arreer,	- Wilei	e. II JE	Contaminant	dy excee			rget Risk (TR)		ilay exceed			ard Index (HI) = 1		Protection of	Groundwater
									Inhalation		Ingestion SL	Dermal SL	SL	Noncarcinogenic SL			
k k k	v						5000.0	Dermal SL	SL	Carcinogenic SL	Child	Child	Child	Child		Risk-based	MCL-based
SFO e IUR e RfD <sub>o</sub> e RfC <sub>i</sub> e	o muta-							TR=1E-06	TR=1E-06	TR=1E-06	THQ=1	THQ=1	THQ=1	THI=1	MCL	SSL	SSL
(mg/kg-day) <sup>-1</sup> y (ug/m <sup>3</sup> ) <sup>-1</sup> y (mg/kg-day) y (mg/m <sup>3</sup> ) y	l gen LOGI	_	-	In EPD	Analyte CAS N	lo.	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(ug/L)	(mg/kg)	(mg/kg)
3.0E-04 P			0		Tributyltin Compounds NA						6.0E+00			6.0E+00			
3.0E-04 I	4.05			Yes	Tributyltin Oxide 56-35-9						6.0E+00	9.5E+01		5.7E+00		2.9E+02	
3.0E+01   3.0E+01				Yes	Trichloro-1,2,2-trifluoroethane, 1,1,2-		4.45.00	4.05.04		4.45.00	6.0E+05	1.9E+06	6.3E+04	5.5E+04	C 05 : 04	1.4E+02	4 35 03
7.0E-02 I 2.0E-02 I 2.9E-02 H	1.33		1	Yes	Trichloroacetic Acid 76-03-9 Trichloroaniline HCl, 2,4,6- 33663-51		1.1E+00 2.7E+00	4.6E+01 3.7E+03		1.1E+00 2.7E+00	4.0E+02	1.8E+04		3.9E+02	6.0E+01	2.2E-04 7.4E-03	1.2E-02
7.0E-03 X 3.0E-05 X	3.52			Yes	Trichloroaniline, 2,4,6- 53603-51			2.0E+01		7.1E+00	6.0E-01	1.2E+00		4.0E-01		7.4E-03 3.6E-03	
8.0E-04 X	V 4.05			Yes	Trichlorobenzene, 1,2,3- 87-61-6	, ,	1.11.101	2.01.01		7.12100	1.6E+01	1.3E+01		7.0E+00		2.1E-02	
2.9E-02 P 1.0E-02 I 2.0E-03 F				Yes	Trichlorobenzene, 1,2,4- 120-82-1	1 2	2.7E+00	2.0E+00		1.2E+00	2.0E+02	1.6E+02	4.2E+00	4.0E+00	7.0E+01	3.4E-03	2.0E-01
2.0E+00 I 5.0E+00				Yes	Trichloroethane, 1,1,1- 71-55-6						4.0E+04	2.5E+05	1.0E+04	8.0E+03	2.0E+02	2.8E+00	7.0E-02
5.7E-02   1.6E-05   4.0E-03   2.0E-04 )	V 1.89	) 1	1	Yes	Trichloroethane, 1,1,2- 79-00-5	1	1.4E+00	2.0E+01	3.5E-01	2.8E-01	8.0E+01	1.3E+03	4.2E-01	4.1E-01	5.0E+00	8.9E-05	1.6E-03
4.6E-02   4.1E-06   5.0E-04   2.0E-03	V M 2.42	2 1	1	Yes	Trichloroethylene 79-01-6	1	1.2E+00	7.4E+00	9.6E-01	4.9E-01	1.0E+01	6.9E+01	4.2E+00	2.8E+00	5.0E+00	1.8E-04	1.8E-03
3.0E-01 I	V 2.53		1	Yes	Trichlorofluoromethane 75-69-4						6.0E+03	3.6E+04		5.2E+03		3.3E+00	
1.0E-01 I	3.72		1	Yes	Trichlorophenol, 2,4,5- 95-95-4						2.0E+03	2.9E+03		1.2E+03		4.4E+00	
1.1E-02   3.1E-06   1.0E-03 P	3.69		1		Trichlorophenol, 2,4,6-	7	7.1E+00	9.8E+00		4.1E+00	2.0E+01	3.0E+01		1.2E+01		1.5E-02	
1.0E-02 I	3.31			Yes	Trichlorophenoxyacetic Acid, 2,4,5- 93-76-5						2.0E+02	8.7E+02		1.6E+02		6.8E-02	
8.0E-03 I	3.8		0.9	Yes	Trichlorophenoxypropionic acid2.4.5 93-72-1						1.6E+02	3.6E+02		1.1E+02	5.0E+01	6.1E-02	2.8E-02
5.0E-03   3.0E+01   4.0E-03   3.0E-04	V 2.43 V M 2.27		1	Yes	Trichloropropane, 1,1,2- 598-77-6 Trichloropropane, 1,2,3- 96-18-4		8.4E-04	7.3E-03		7.5E-04	1.0E+02 8.0E+01	7.5E+02 7.7E+02	6.3E-01	8.8E+01 6.2E-01		3.5E-02 3.2E-07	
3.0E-03 X 3.0E-04 F				Yes	Trichloropropene, 1,2,3- 96-18-4  Trichloropropene, 1,2,3- 96-19-5	_	0.4E+U4	7.3E-U3		7.5E-U4	6.0E+01	7.7E+02 2.6E+02	6.3E-01	6.2E-01		3.2E-07 3.1E-04	
3.0E-03 X 3.0E-04 F 2.0E-02 A	V 2.78				Tricresyl Phosphate (TCP) 1330-78						4.0E+01	2.6E+02 2.6E+02	6.3E-U1	1.6E+02		3.1E-04 1.5E+01	
3.0E-03 I	5.18			Yes	Tridiphane 58138.0						6.0E+01	2.6E+01		1.8E+01		1.3E-01	
7.0E-03			1	Yes	Triethylamine 121/444						0.02.01	2.02.01	1.5E+01	1.5E+01		4.4E-03	
2.0E+00 P	-1.75			Yes	Triethylene Glycol 112-27-3						4.0E+04	1.8E+08	1.52.01	4.0E+04		8.8E+00	
2.0E+01 F				Yes	Trifluoroethane, 1,1,1- 420-46-								4.2E+04	4.2E+04		1.3E+02	
7.7E-03 I 7.5E-03 I	V 5.34	1	0.8	Yes	Trifluralin \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	1-8/	1.0E+01	3.4E+00		2.6E+00	1.5E+02	5.5E+01		4.0E+01		8.4E-02	
2.0E-02 P 1.0E-02 P	-0.65	5 1	1	Yes	Trimethyl Phosphate 512-56-		3.9E+00	2.8E+03		3.9E+00	2.0E+02	1.6E+05		2.0E+02		8.6E-04	
5.0E-03 F			1	Yes	Trimethylbenzene, 1,2,3- 526-73-8	8							1.0E+01	1.0E+01		1.5E-02	
7.0E-03 F				Yes	Trimethylbenzene, 1,2,4- 95-63-6								1.5E+01	1.5E+01		2.1E-02	
1.0E-02 X	V 3.42			Yes	Trimethylbenzene, 1,3,5- 108-67-8						2.0E+02	2.8E+02		1.2E+02		1.7E-01	
1.0E-02 X	V 4.08			Yes	Trimethylpentene, 2,4,4-1 25167-7	_					2.0E+02	9.6E+01		6.5E+01		2.2E-01	
3.0E-02 I 3.0E-02 I 5.0E-04 I	1.18		1	Yes	Trinitrobenzene, 13,5- 99-35-4		3.55.00	1.15.03		2.5E+00	6.0E+02	4.7E+04 4.5E+02		5.9E+02 9.8E+00		2.1E+00 1.5E-02	
3.0E-02 1 5.0E-04 1 2.0E-02 P	1.6 2.83		1	Yes	Trinitrotoluene, 2,4,5- Triphenylphosphine Oxide		2.6E+00	1.1E+02		2.5E+00	1.0E+01 4.0E+02	4.5E+02 3.8E+03		3.6E+02		1.5E-02 1.5E+00	
2.0E-02 P	3.65		0.9	Yes	Tris(1,3-Dichloro-2-propyl) Phosphate 13674-8						4.0E+02	3.2E+03		3.6E+02		8.0E+00	
1.0E-02 X	2.59		1		Tris(1-chloro-2-propyl)phosphate 13674-8						2.0E+02	3.8E+03		1.9E+02		6.5E-01	
2.3E+00 C 6.6E-04 C	V 4.29		1	No	Tris(2,3-dibromopropyl)phosphate 126-72-7		3.4E-02		8.5E-03	6.8E-03						1.3E-04	
2.0E-02 P 7.0E-03 P	1.44	1	1	Yes	Tris(2-chloroethyl)phosphate 115-96-8		3.9E+00	3.0E+02		3.8E+00	1.4E+02	1.2E+04		1.4E+02		3.8E-03	
3.2E-03 P 1.0E-01 P	9.49	1	0	No	Tris(2-ethylhexyl)phosphate 78-42-2		2.4E+01			2.4E+01	2.0E+03			2.0E+03		1.2E+02	
8.0E-04 P		1	1	Yes	Tungsten 7440-33	1-7					1.6E+01	3.6E+03		1.6E+01		2.4E+00	
3.0E-03 I 4.0E-05 A		1	1	Yes	Uranium (Soluble Salts) NA						6.0E+01	1.4E+04		6.0E+01	3.0E+01	2.7E+01	1.4E+01
1.0E+00 C 2.9E-04 C	M -0.15			Yes	Urethane 51-79-6		2.5E-02	6.1E+00		2.5E-02						5.6E-06	
8.3E-03 P 9.0E-03 I 7.0E-06 F			6 1	Yes	Vanadium Pentoxide 1314-62-						1.8E+02	1.1E+03		1.5E+02		0.65.04	
5.0E-03 S 1.0E-04 A	V 3.84	0.02		Yes	Vanadium and Compounds 7440-62- Vernolate 1929-77-						1.0E+02 2.0E+01	6.0E+02 2.5E+01		8.6E+01 1.1E+01		8.6E+01 8.9E-03	
1.0E-03 I 2.5E-02 I	V 3.84				Vinclozolin 50471-4						5.0E+01	3.7E+03		4.4E+02		8.9E-03 3.4E-01	
1.0E+00 H 2.0E-01			1	Yes	Vinyl Acetate 108-05-4						2.0E+04	1.4E+06	4.2E+02	4.1E+02		8.7E-02	
3.2E-05 H 3.0E-03			1	Yes	Vinyl Bromide 593-60-2				1.8E-01	1.8E-01	2.02.04		6.3E+00	6.3E+00		5.1E-05	
7.2E-01   4.4E-06   3.0E-03   1.0E-01				Yes	Vinyl Chloride 75-01-4		2.1E-02	2.8E-01	3.4E-01	1.9E-02	6.0E+01	8.9E+02	2.1E+02	4.4E+01	2.0E+00	6.5E-06	6.9E-04
3.0E-04 I	2.7	1	1	Yes	Warfarin 81-81-2						6.0E+00	8.4E+01		5.6E+00		5.9E-03	
2.0E-01 S 1.0E-01 S			1	Yes	Xylene, P- 106-42-3						4.0E+03	7.6E+03	2.1E+02	1.9E+02		1.9E-01	
2.0E-01 S 1.0E-01 S			1	Yes	Xylene, m- 108-38-3						4.0E+03	7.1E+03	2.1E+02	1.9E+02		1.9E-01	
2.0E-01 S 1.0E-01 S			1	Yes	Xylene, o- 95-47-6						4.0E+03	8.0E+03	2.1E+02	1.9E+02		1.9E-01	
2.0E-01   1.0E-01	V 3.16	1	1	Yes	Xylenes 1330-20-						4.0E+03	7.5E+03	2.1E+02	1.9E+02	1.0E+04	1.9E-01	9.9E+00
3.0E-04 I		1	1	Yes	Zinc Phosphide 1314-84						6.0E+00	2.3E+03		6.0E+00		2.75.07	
3.0E-01 I		1	-	Yes	Zinc and Compounds 7440-66						6.0E+03	2.3E+06		6.0E+03		3.7E+02	
5.0E-02 I 8.0E-05 X	1.3	1		Yes	Zineb 12122-6: Zirconium 7440-67-						1.0E+03 1.6E+00	9.7E+04 3.6E+02		9.9E+02 1.6E+00		2.9E+00 4.8E+00	
0.UE*U3 X		1	1	162	/440-6/·	-					1.05700	J.UE + UZ		1.02*00		4.0ETUU	

Key: I = IRIS; P = PP						See FAQ; J = New Jersey; O = EPA Office of Water; E = see user guide Section 2.3.5 where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may ex								ied (See User (	iuide for Arsenic
	Toxicity a	nd Chemical-spec				Contaminant	0	Car	cinogenic Ta	rget Risk (TR)	= 1E-06		Noncancer	Hazard Index (	,
SEO a II	IUR o (mg/kg	k k v	auta.		Cost PEF VF			Ingestion SI	Dermal SL	Inhalation SL	Carcinogenic SL	Ingestion SL	Dermal SL I	Inhalation SL 1	Noncarcinogenic SL
	IUR e (mg/kg- g/m <sup>3</sup> ) <sup>-1</sup> y day)	. [ [ ]	nuta- gen GIABS	ABS	(mg/kg) (m³/kg) (m³/kg)	Analyte	CAS No.	TR=1E-06 (mg/kg)	TR=1E-06 (mg/kg)	TR=1E-06 (mg/kg)	TR=1E-06 (mg/kg)	THQ=1 (mg/kg)	THQ=1 (mg/kg)	THQ=1 (mg/kg)	THI=1 (mg/kg)
8.7E-03 I	4.0E-03	1	1	0.1	1.4E+09	Acephate	30560-19-1	3.8E+02	8.9E+02		2.6E+02	4.7E+03	1.1E+04	, 0 0,	3.3E+03
2.2	2E-06 I	9.0E-03 I V	1		1.1E+05 1.4E+09 8.7E+03	Acetaldehyde	75-07-0			4.9E+01	4.9E+01			3.4E+02	3.4E+02
	2.0E-02	I	1	0.1	1.4E+09	Acetochlor	34256-82-1					2.3E+04	5.5E+04		1.6E+04
	9.0E-01	I 3.1E+01 A V 2.0E-03 X	1 1	0.1	1.1E+05 1.4E+09 1.4E+04 1.4F+09	Acetone Acetone Cyanohydrin	67-64-1 75-86-5					1.1E+06		1.8E+06 1.2E+07	6.7E+05 1.2E+07
		6.0E-02 I V	1	0.1	1.3E+05 1.4E+09 1.3E+04		75-05-8							3.4E+03	3.4E+03
	1.0E-01	I V	1		2.5E+03 1.4E+09 6.0E+04	Acetophenone	98-86-2					1.2E+05			1.2E+05
3.8E+00 C 1.3		I 2.0E-05 I V	1 1	0.1	1.4E+09 2.3E+04 1.4E+09 6.9E+03	Acetylaminofluorene, 2-	53-96-3 107-02-8	8.6E-01	2.0E+00	1.3E+04	6.0E-01	5.8E+02		6.1E-01	6.0E-01
5.0E-01 I 1.0	0E-04 I 2.0E-03		M 1	0.1	2.3E+04 1.4E+09 6.9E+03 1.4E+09	Acrylamide	79-06-1	6.5E+00	1.5E+01	1.7E+05	4.6E+00	2.3E+03	5.5E+03	3.6E+07	1.6E+03
3.0E-01 I 1.0		I 1.0E-03 I V	1	0.1	1.1E+05 1.4E+09 9.5E+04		79-10-7	0.52+00	1.52+01	1.75+05	4.0E+00	5.8E+05	3.35+03	4.2E+02	4.2E+02
5.4E-01 I 6.8	8E-05 I 4.0E-02	A 2.0E-03 I V	1		1.1E+04 1.4E+09 7.7E+03	Acrylonitrile	107-13-1	6.1E+00		1.4E+00	1.1E+00	4.7E+04		6.7E+01	6.7E+01
		6.0E-03 P	1	0.1	1.4E+09	Adiponitrile	111-69-3							3.6E+07	3.6E+07
5.6E-02 C	1.0E-02 1.0F-03	1	1	0.1	1.4E+09 1.4E+09	Alachlor Aldicarb	15972-60-8 116-06-3	5.8E+01	1.4E+02		4.1E+01	1.2E+04 1.2F+03	2.8E+04 2.8E+03		8.2E+03 8.2E+02
	1.0E-03	<u>.</u>	1	0.1	1.4E+09	Aldicarb Sulfone	1646-88-4					1.2E+03	2.8E+03		8.2E+02
			1	0.1	1.4E+09	Aldicarb sulfoxide	1646-87-3								
1.7E+01 I 4.9	9E-03 I 3.0E-05	I V	1		1.4E+09 1.7E+06		309-00-2	1.9E-01		4.3E+00	1.8E-01	3.5E+01			3.5E+01
2.15.02		1 1.0E-04 X V	1		1.1E+05 1.4E+09 3.4E+04		107-18-6 107-05-1	1.6E+02		3.35.00	3 35.00	5.8E+03		1.5E+01	1.5E+01
2.1E-02 C 6.0		1.0E-03 I V P 5.0E-03 P	1 1		1.4E+03 1.4E+09 1.6E+03 1.4E+09	Aluminum	7429-90-5	1.01.02		3.2E+00	3.2E+00	1.2E+06		6.9E+00 3.0E+07	6.9E+00 1.1E+06
	4.0E-04	I	1		1.4E+09	Aluminum Phosphide	20859-73-8					4.7E+02			4.7E+02
	9.0E-03	L	1	0.1	1.4E+09	Ametryn	834-12-8					1.1E+04	2.5E+04		7.4E+03
2.1E+01 C 6.0			1	0.1	1.4E+09	Aminophenol m-	92-67-1	1.6E-01	3.7E-01	2.8E+03	1.1E-01				
	8.0E-02 2.0E-02	P D	1	0.1	1.4E+09 1.4E+09	Aminophorology (FF)	591-27-5 123-30-8					9.3E+04 2.3E+04	2.2E+05 5.5E+04		6.6E+04 1.6E+04
	2.5E-03	Ī	1	0.1	1.4E+09	Amitraz   CEEEE3   CEEEE3	33089-61-1					2.9E+03	6.9E+03		2.1E+03
		1.0E-01 I V	1			Ammonia	7664-41-7								
	2.0E-01		1		1.4E+09	Ammonium Sulfamate	7773-06-0					2.3E+05			2.3E+05
F 7F 02   1 4 6	6E-06 C 7.0E-03	3.0E-03 X V P 1.0E-03 I	1	0.1	1.4E+04 1.4E+09 2.6E+04	Amyl Alconol, tert-	75-85-4 62-53-3	5.7E+02	1 45.02	1.05.07	4.0E+02	8.2E+03	1.05.04	3.4E+02 6.0E+06	3.4E+02
5.7E-03 I 1.6 4.0E-02 P	2.0E-03		1 1	0.1	1.4E+09 1.4E+09	Anthraquinone, 9,10-	84-65-1	8.2E+01	1.4E+03 1.9E+02	1.0E+07	5.7E+01	8.2E+03 2.3E+03	1.9E+04 5.5E+03	6.UE+U6	5.7E+03 1.6E+03
	4.0E-04	L	0.15		1.4E+09	Antimony (metallic)	7440-36-0					4.7E+02			4.7E+02
	5.0E-04	Н	0.15		1.4E+09	Antimony Pentoxide	1314-60-9					5.8E+02			5.8E+02
	4.0E-04	H 2.0E-04 I	0.15 0.15		1.4E+09 1.4E+09	Antimony Tetroxide Antimony Trioxide	1332-81-6 1309-64-4					4.7E+02		1.2E+06	4.7E+02 1.2E+06
1.5E+00 I 4.3	3E-03 I 3.0E-04	I 1.5E-05 C	1	0.03	1.4E+09	Arsenic, Inorganic	7440-38-2	3.6E+00	1.7E+01	3.9E+03	3.0E+00	5.8E+02	2.8E+03	8.9E+04	4.8E+02
		C 5.0E-05 I	1		1.4E+09	Arsine	7784-42-1	0.02.00				4.1E+00		3.0E+05	4.1E+00
	5.0E-02	I .	1	0.1	1.4E+09	Asulam	3337-71-1					5.8E+04	1.4E+05		4.1E+04
2.3E-01 C	3.5E-02	I	1	0.1 0.1	1.4E+09	Atrazine Auramine	1912-24-9	1.4E+01	3.4E+01	6.7E+04	1.0E+01	4.1E+04	9.7E+04		2.9E+04
8.8E-01 C 2.5	5E-04 C 4.0E-04	I.	1 1	0.1	1.4E+09 1.4E+09	Avermectin B1	492-80-8 65195-55-3	3.7E+00	8.8E+00	6.7E+U4	2.6E+00	4.7E+02	1.1E+03		3.3E+02
	3.0E-03	A 1.0E-02 A	1	0.1	1.4E+09	Azinphos-methyl	86-50-0					3.5E+03	8.3E+03	6.0E+07	2.5E+03
1.1E-01   3.1		V	1		1.4E+09 5.2E+05		103-33-3	3.0E+01		2.1E+02	2.6E+01	4 05	2.05	4.05.	
		P 7.0E-06 P	0.07	0.1	1.4E+09 1.4E+09	Azodicarbonamide Barium	123-77-3					1.2E+06 2.3E+05	2.8E+06	4.2E+04 3.0E+06	4.0E+04 2.2E+05
5.0E-01 C 1.5			0.07 M 0.025		1.4E+09 1.4E+09	Barium Barium Chromate	7440-39-3 10294-40-3	6.5E+00		1.1E+02	6.2E+00	2.3E+05 2.3E+04		3.0E+06 1.2E+06	2.2E+05 2.3E+04
5.52.51 5 1.5	3.0E-01	I V	1		1.4E+09 3.1E+05		1861-40-1				2.22.00	3.5E+05			3.5E+05
	5.0E-02	I	1	0.1	1.4E+09	Benomyl	17804-35-2					5.8E+04	1.4E+05		4.1E+04
	2.0E-01 3.0E-02	1	1	0.1	1.4E+09 1.4F+09	Bensulfuron-methyl Bentazon	83055-99-6 25057-89-0					2.3E+05 3.5E+04	5.5E+05 8.3E+04		1.6E+05 2.5E+04
	1.0E-01	I V	1	0.1	1.4E+09 1.2E+03 1.4E+09 2.3E+04		100-52-7					1.2E+05	8.3LTU4		1.2E+05
	8E-06 I 4.0E-03	I 3.0E-02 I V	1		1.8E+03 1.4E+09 3.5E+03	Benzene	71-43-2	5.9E+01		5.6E+00	5.1E+00	4.7E+03		4.6E+02	4.2E+02
1.0E-01 X	5.02 01	х	1	0.1	1.4E+09	Benzenediamine-2-methyl sulfate, 1,4-	6369-59-1	3.3E+01	7.7E+01		2.3E+01	3.5E+02	8.3E+02		2.5E+02
2.25.02	1.0E-03	P V	1	0.1	1.3E+03 1.4E+09 1.9E+04		108-98-5	1.45.03	2.45.02	2.55.02	1.05.03	1.2E+03	0.25.02		1.2E+03
2.3E+02 I 6.7	7E-02 I 3.0E-03 4.0E+00	I	M 1	0.1	1.4E+09 1.4E+09	Benzidine Benzoic Acid	92-87-5 65-85-0	1.4E-02	3.4E-02	2.5E+02	1.0E-02	3.5E+03 4.7E+06	8.3E+03 1.1E+07		2.5E+03 3.3E+06
1.3E+01 I		V	1	J.1	3.2E+02 1.4E+09 6.8E+04		98-07-7	2.5E-01			2.5E-01				
	1.0E-01		1	0.1	1.4E+09	Benzyl Alcohol	100-51-6					1.2E+05	2.8E+05		8.2E+04
		P 1.0E-03 P V	1		1.5E+03 1.4E+09 2.6E+04	· · ·	100-44-7	1.9E+01		6.4E+00	4.8E+00	2.3E+03		1.1E+02	1.1E+02
2.4	4E-03 I 2.0E-03 9.0E-03	I 2.0E-05 I	0.007 1	0.1	1.4E+09 1.4E+09	Beryllium and compounds Bifenox	7440-41-7 42576-02-3			6.9E+03	6.9E+03	2.3E+03 1.1E+04	2.5E+04	1.2E+05	2.3E+03 7.4E+03
	1.5E-02	i	1	0.1	1.4E+09 1.4E+09	Biphenthrin	82657-04-3					1.1E+04 1.8E+04	4.1E+04		1.2E+04
8.0E-03 I	5.0E-01	I 4.0E-04 X V	1		1.4E+09 1.1E+05	Biphenyl, 1,1'-	92-52-4	4.1E+02			4.1E+02	5.8E+05		2.0E+02	2.0E+02
	4.0E-02	I V	1		1.0E+03 1.4E+09 3.5E+04	Bis(2-chloro-1-methylethyl) ether	108-60-1					4.7E+04			4.7E+04

Key: I = IRIS; P = PPRTV; A	= ATSDR; C =					See FAQ; J = New Jersey; O = EPA Office of Water; E = see user guide Section 2.3.5 where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may ex								ed (See User G	iuide for Arsenic
	Toxicity	y and Chemical-specific Info		where. If Si	1 100X C 3E,	Contaminant	ccca cciiiig iiiiic			rget Risk (TR)			,	Hazard Index (	HI) = 1
SFO e IUR	k RfD <sub>o</sub> e (mg/kg-	k k v e RfC <sub>i</sub> e o muta-		Coat	PEF VF			Ingestion SL TR=1E-06	Dermal SL TR=1F-06	Inhalation SL TR=1E-06	Carcinogenic SL TR=1E-06	Ingestion SL THQ=1	Dermal SL I THQ=1	nhalation SL N THQ=1	Noncarcinogenic SL THI=1
(mg/kg-day) <sup>-1</sup> y (ug/m <sup>3</sup> ) <sup>-1</sup>	y day)	c comuta	GIABS ABS	- Jul	(m <sup>3</sup> /kg) (m <sup>3</sup> /kg	Analyte	CAS No.	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
	3.0E-03	Р	1 0.1		1.4E+09	Bis(2-chloroethoxy)methane	111-91-1		•			3.5E+03	8.3E+03		2.5E+03
1.1E+00   3.3E-04	l ·	V	1			Bis(2-chloroethyl)ether	111-44-4	3.0E+00		1.6E+00	1.0E+00				
2.2E+02 I 6.2E-02	5.0E-02	ı	1 0.1	4.2E+U3	1.4E+09 1.9E+0: 1.4E+09	Bis(chloromethyl)ether Bisphenol A	542-88-1 80-05-7	1.5E-02		3.7E-04	3.6E-04	5.8E+04	1.4E+05		4.1E+04
	2.0E-01	I 2.0E-02 H	1		1.4E+09	Boron And Borates Only	7440-42-8					2.3E+05		1.2E+08	2.3E+05
	2.0E+00	P 2.0E-02 P V	1		1.4E+09	Boron Trichloride	10294-34-5					2.3E+06		1.2E+08	2.3E+06
7.0E-01 I	4.0E-02 4.0E-03	C 1.3E-02 C V	1		1.4E+09 1.4E+09	Boron Trifluoride Bromate	7637-07-2 15541-45-4	4.7F+00			4.7F+00	4.7E+04 4.7E+03		7.7E+07	4.7E+04 4.7E+03
2.0E+00 X 6.0E-04		' V	1			Bromo-2-chloroethane, 1-	107-04-0	1.6E+00		1.2E-01	1.1E-01	4.71.03			4.72+03
	8.0E-03	I 6.0E-02 I V	1			Bromobenzene	108-86-1					9.3E+03		2.2E+03	1.8E+03
5 25 22 1 2 75 25		4.0E-02 X V	1			Bromochloromethane	74-97-5	E 05 04		4.05.00	4.05.00	2.25.04		6.3E+02	6.3E+02
6.2E-02   3.7E-05 7.9E-03   1.1E-06		I V	1		1.4E+09 4.0E+0: 1.4E+09 9.7E+0:	Bromodichloromethane Bromoform	75-27-4 75-25-2	5.3E+01 4.1E+02		1.3E+00 1.1E+02	1.3E+00 8.6E+01	2.3E+04 2.3E+04			2.3E+04 2.3E+04
	1.4E-03	I 5.0E-03 I V	1	3.6E+03	1.4E+09 1.4E+03	Bromomethane	74-83-9					1.6E+03		3.1E+01	3.0E+01
	5.0E-03	H V	1		1.4E+09 1.2E+0		2104-96-3					5.8E+03			5.8E+03
	2.0E-02	1	1 0.1		1.4E+09	Bromoxynil	1689-84-5					2.3E+04	5.5E+04		1.6E+04
3.4E+00 C 3.0E-05	2.0E-02	I V 2.0E-03 I V	1		1.4E+09 4.7E+0! 1.4E+09 8.7E+0!	Bromoxynil Octanoate Butadiene, 1.3-	1689-99-2 106-99-0	9.6E-01		3.5E-01	2.6E-01	2.3E+04		7.6E+00	2.3E+04 7.6E+00
5.12.00 € 5.02.05	1.0E-01		1		1.4E+09 3.0E+04		71-36-3	3.02 01		3.32 01	2.02.01	1.2E+05			1.2E+05
1.9E-03 P	2.0E-01	1	1 0.1		1.4E+09	Butyl Benzyl Phthalate	85-68-7	1.7E+03	4.1E+03		1.2E+03	2.3E+05	5.5E+05		1.6E+05
		P 3.0E+01 P V	1			Butyl alcohol, sec-	78-92-2 2008-41-5					2.3E+06		3.8E+06	1.5E+06
2.0E-04 C 5.7E-08	5.0E-02	ı V	1 0.1		1.4E+09 8.6E+04	Butylate Butylated hydroxyanisole	25013-16-5	1.6E+04	3.9E+04	2.9E+08	1.1E+04	5.8E+04			5.8E+04
3.6E-03 P	3.0F-01	Р	1 0.1		1.4E+09 1.4E+09	Butylated hydroxytoluene	128-37-0		2.1F+03	2.95+06	6.4F+02	3.5F+05	8.3E+05		2.5E+05
	5.0E-02	P V	1			Butylbenzene, n-	104-51-8					5.8E+04			5.8E+04
	1.0E-01	X V	1		1.4E+09 7.4E+03		//135-98-8					1.2E+05			1.2E+05
	1.0E-01 2.0F-02	X V	1 0.1		1.4E+09 7.4E+03 1.4F+09	Butylbenzene tert/ CCCCCC Cacodylic Acid	98-06-6 75-60-5					1.2E+05 2.3F+04	5.5F+04		1.2E+05 1.6F+04
1.8E-03		7.	0.025 0.001		1.4E+09 1.4E+09	Cadmium (Diet)	7440-43-9			9.3E+03	9.3E+03	1.2E+03	6.9E+03	6.0E+04	9.8E+02
1.8E-03			0.05 0.001		1.46+03	Cadmium (Water)	7440-43-9			J.JL+03	5.31.403	1.21+03	0.51+03	0.01-04	3.8L+02
5.0E-01 C 1.5E-01			0.025		1.4E+09	Calcium Chromate	13765-19-0	6.5E+00		1.1E+02	6.2E+00	2.3E+04		1.2E+06	2.3E+04
	5.0E-01	I 2.2E-03 C	1 0.1		1.4E+09	Caprolactam	105-60-2					5.8E+05	1.4E+06	1.3E+07	4.0E+05
1.5E-01 C 4.3E-05 2.3E-03 C 6.6E-07		1	1 0.1 1 0.1		1.4E+09 1.4E+09	Captar Services (1)	2425-06-1	2.2E+01 1.4E+03	5.2E+01 3.4E+03	3.9E+05 2.5E+07	1.5E+01 1.0E+03	2.3E+03 1.5E+05	5.5E+03 3.6E+05		1.6E+03 1.1E+05
2.52 05 0 0.02 07	1.0E-01	<u>.</u>	1 0.1		1.4E+09	Carbaryl	63-25-2	1.42103	5. 12 - 03	2.52.07	1.02.03	1.2E+05	2.8E+05		8.2E+04
	5.0E-03	1	1 0.1		1.4E+09	Carbofuran	1563-66-2					5.8E+03	1.4E+04		4.1E+03
	1.0E-01	I 7.0E-01 I V	1			Carbon Disulfide	75-15-0					1.2E+05		3.6E+03	3.5E+03
7.0E-02 I 6.0E-06	I 4.0E-03	I 1.0E-01 I V 1.0E-01 P V	1		1.4E+09 1.5E+03	Carbon Tetrachloride Carbonyl Sulfide	56-23-5 463-58-1	4.7E+01		3.1E+00	2.9E+00	4.7E+03		6.5E+02 2.8E+02	5.7E+02 2.8E+02
	1.0E-02	1.0E-01 P V	1 0.1		1.4E+09 6.5E+02 1.4E+09	Carbonyl Sulfide Carbosulfan	463-58-1 55285-14-8					1.2E+04	2.8E+04	2.8E+UZ	8.2E+03
	1.0E-01	T	1 0.1		1.4E+09	Carboxin	5234-68-4					1.2E+05	2.8E+05		8.2E+04
		9.0E-04 I	1		1.4E+09	Ceric oxide	1306-38-3					4.05.55		5.4E+06	5.4E+06
	1.0E-01	I V	1 01			Chloral Hydrate	302-17-0					1.2E+05	4.45.04		1.2E+05
4.0E-01 H	1.5E-02		1 0.1 1 0.1		1.4E+09 1.4E+09	Chloramben Chloranil	133-90-4 118-75-2	8.1E+00	1.9E+01		5.7E+00	1.8E+04	4.1E+04		1.2E+04
3.5E-01 I 1.0E-04	5.0E-04	I 7.0E-04 I V	1 0.04		1.4E+09 9.0E+0!		12789-03-6	9.3E+00	5.5E+01	1.1E+02	7.5E+00	5.8E+02	3.4E+03	2.8E+03	4.2E+02
1.0E+01 I 4.6E-03			1 0.1		1.4E+09	Chlordecone (Kepone)	143-50-0	3.3E-01	7.7E-01	3.6E+03	2.3E-01	3.5E+02	8.3E+02		2.5E+02
	7.0E-04 2.0E-02	A	1 0.1 1 0.1		1.4E+09 1.4E+09	Chlorfenvinphos Chlorimuron, Ethyl-	470-90-6 90982-32-4					8.2E+02 2.3E+04	1.9E+03 5.5E+04		5.7E+02 1.6E+04
	1.0E-01	I 1.5E-04 A V	1 0.1		1.4E+09 1.4E+09 1.2E+03		7782-50-5					1.2E+05	J.3E+U4	7.8E-01	7.8E-01
	3.0E-01	I 2.0E-04 I V	1		1.4E+09 1.2E+0: 1.4E+09	Chlorine Dioxide	10049-04-4					3.5E+04		1.2E+06	3.4E+04
	3.0E-02	1	1		1.4E+09	Chlorite (Sodium Salt)	7758-19-2					3.5E+04			3.5E+04
		5.0E+01 I V	1			Chloro-1,1-difluoroethane, 1-	75-68-3							2.3E+05	2.3E+05
3.0E-04 4.6E-01 H	1 2.0E-02	H 2.0E-02 I V	1 1 0.1		1.4E+09 1.1E+03 1.4E+09	Chloro-1,3-butadiene, 2- Chloro-2-methylaniline HCl, 4-	126-99-8 3165-93-3	7.1E+00	1.7E+01	4.4E-02	4.4E-02 5.0E+00	2.3E+04		9.4E+01	9.4E+01
1.0E-01 P 7.7E-05	C 3.0E-03	X	1 0.1		1.4E+09	Chloro-2-methylaniline, 4-	95-69-2	3.3E+01	7.7E+01	2.2E+05	2.3E+01	3.5E+03	8.3E+03		2.5E+03
2.7E-01 X		v	1	1.2E+04	1.4E+09 1.6E+04	Chloroacetaldehyde, 2-	107-20-0	1.2E+01			1.2E+01				
			1 0.1		1.4E+09	Chloroacetic Acid	79-11-8								
3.0F.01 D	4.05.03	3.0E-05 I	1 0.1		1.4E+09	Chloroacetophenone, 2-	532-27-4	1.65.01	3.05.01		1.15.01	4.75.03	1.15.04	1.8E+05	1.8E+05
2.0E-01 P	4.0E-03 2.0E-02	I I 5.0E-02 P V	1 0.1 1		1.4E+09 1.4E+09 6.5E+03	Chloroaniline, p- Chlorobenzene	106-47-8 108-90-7	1.6E+01	3.9E+01		1.1E+01	4.7E+03 2.3E+04	1.1E+04	1.4E+03	3.3E+03 1.3E+03
1.1E-01 C 3.1E-05	C 2.0E-02	T	1 0.1		1.4E+09	Chlorobenzilate	510-15-6	3.0E+01	7.0E+01	5.4E+05	2.1E+01	2.3E+04	5.5E+04		1.6E+04
	3.0E-02		1 0.1		1.4E+09	Chlorobenzoic Acid, p-	74-11-3					3.5E+04	8.3E+04		2.5E+04
	3.0E-03	P 3.0E-01 P V	1			Chlorobenzotrifluoride, 4-	98-56-6					3.5E+03		8.9E+03	2.5E+03
1	4.0E-02	P V	1	7.3E+02	1.4E+09 1.8E+03	Chlorobutane, 1-	109-69-3					4.7E+04			4.7E+04

		Toxicity	notice) ; c = cancer; n = i and Chemical-specific Inf		* = where: n	SL < 100X c SL; ** =	where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exc Contaminant	ceed ceiling limit			centration ma get Risk (TR) =				azard Index (H	I) = 1
	k k	RfD <sub>o</sub>	k k v						Ingestion SL	Dermal SL Ir	nhalation SL C	Carcinogenic SL	Ingestion SL	Dermal SL II	halation SL No	oncarcinogenic S
SFO mg/kg-day) <sup>-:</sup>	e IUR e y (ug/m³)-1 y	(mg/kg- day)	e RfC <sub>i</sub> e o muta- y (mg/m³) y I gen	GIABS AI	C <sub>sat</sub> aBS (mg/kg	PEF VF (m <sup>3</sup> /kg) (m <sup>3</sup> /kg)	Analyte	CAS No.	TR=1E-06 (mg/kg)	TR=1E-06 (mg/kg)	TR=1E-06 (mg/kg)	TR=1E-06 (mg/kg)	THQ=1 (mg/kg)	THQ=1 (mg/kg)	THQ=1 (mg/kg)	THI=1 (mg/kg)
		2.0E-02	5.0E+01 I V P V	1		3 1.4E+09 9.4E+02 5 1.4E+09 7.8E+04	Chlorodifluoromethane Chloroethanol. 2-	75-45-6 107-07-3					2.3E+04		2.1E+05	2.1E+05 2.3E+04
3.1E-02	C 2.3E-05 I		I 9.8E-02 A V	1	2.5E+0	3 1.4E+09 2.6E+03	Chloroform	67-66-3	1.1E+02		1.4E+00	1.4E+00	1.2E+04		1.1E+03	1.0E+03
2.4E+00	C 6.9E-04 C		9.0E-02 I V V	1		3 1.4E+09 1.2E+03 3 1.4E+09 5.3E+03	Chloromethane Chloromethyl Methyl Ether	74-87-3 107-30-2	1.4E+00		9.5E-02	8.9E-02			4.6E+02	4.6E+02
3.0E-01	P	3.0E-03	P 1.0E-05 X	1 0		1.4E+09	Chloronitrobenzene, o-	88-73-3	1.1E+01	2.6E+01		7.7E+00	3.5E+03	8.3E+03	6.0E+04	2.4E+03
6.3E-03	Р	1.0E-03 5.0E-03	P 6.0E-04 P I V	1 0	).1 2.2E+0	1.4E+09 1.4E+09 1.2E+05	Chloronitrobenzene, p- Chlorophenol, 2-	100-00-5 95-57-8	5.2E+02	1.2E+03		3.6E+02	1.2E+03 5.8E+03	2.8E+03	3.6E+06	8.2E+02 5.8E+03
3.1E-03	C 8.9E-07 C	1 55 02	4.0E-04 C V	1 1 0	6.2E+0 ).1	2 1.4E+09 4.7E+03 1.4E+09	Chloropicrin Chlorothalonil	76-06-2 1897-45-6	1.1E+03	2.5E+03	1.9E+07	7.4E+02	1.8E+04	4.1E+04	8.2E+00	8.2E+00 1.2E+04
3.1L 03	C 0.5E 07 C	2.0E-02	i v	1	9.1E+0	2 1.4E+09 8.1E+03	Chlorotoluene, o-	95-49-8	1.12.03	2.32.03	1.52.07	7.42102	2.3E+04	4.12.104		2.3E+04
2.4E+02	C 6.9E-02 C	2.0E-02	x v	1 0	2.5E+0 ).1	2 1.4E+09 7.3E+03 1.4E+09	Chlorotoluene, p- Chlorozotocin	106-43-4 54749-90-5	1.4E-02	3.2E-02	2.4E+02	9.6E-03	2.3E+04			2.3E+04
		2.0E-01	1	1 0	).1	1.4E+09	Chlorpropham	101-21-3					2.3E+05	5.5E+05		1.6E+05
		1.02 05	A H		).1 ).1	1.4E+09 1.4E+09	Chlorpyrifos Chlorpyrifos Methyl	2921-88-2 5598-13-0					1.2E+03 1.2E+04	2.8E+03 2.8E+04		8.2E+02 8.2E+03
		5.0E-02	1	1 0	).1	1.4E+09	Chlorsulfuron	64902-72-3					5.8E+04	1.4E+05		4.1E+04
		1.0E-02 8.0E-04		1 0	).1 ).1	1.4E+09 1.4E+09	Chlorthal-dimethyl Chlorthiophos	1861-32-1 60238-56-4					1.2E+04 9.3E+02	2.8E+04 2.2E+03		8.2E+03 6.6E+02
5.0F-01	J 8.4E-02 S	1.5E+00		0.013		1.4E+09 1.4E+09	Chromium(III), Insoluble Salts Chromium(VI)	16065-83-1	6.5E+00		2.0E+02	6.3E+00	1.8E+06		6.0E+05	1.8E+06
3.UE-U1	J 0.4E-UZ 3			0.013		1.4E+09	Chromium, Total	18540-29-9 7440 47 3	0.3E+00		2.0E+02	0.5E+00	3.5E+03		0.00+05	3.5E+03
	9.0E-03 P	1.3E-02 3.0F-04	P 6.0E-06 P	1 0	0.1	1.4E+09 1.4E+09	Clofentezine Cobalt	74115-24-5 7440-48-4			1.9E+03	1.9E+03	1.5E+04 3.5E+02	3.6E+04	3.6E+04	1.1E+04 3.5E+02
	6.2E-04 I		V M	1			Coke Oven Emissions	8007-45-2 7440-50-8			1.52.05	1.52.03			3.02.04	
		4.0E-02 5.0E-02	I 6.0E-01 C	1 0	0.1	1.4E+09 1.4E+09	Copper (Cresol, 655, 100, 100, 100, 100, 100, 100, 100, 1	7440-50-8					4.7E+04 5.8E+04	1.4E+05	3.6E+09	4.7E+04 4.1E+04
		5.0E-02	I 6.0E-01 C	1 0	0.1	1.4E+09	Cresol, o-	95-48-7					5.8E+04	1.4E+05	3.6E+09	4.1E+04
		1.0E-01	A 6.0E-01 C		0.1	1.4E+09 1.4E+09	Cresol, p-chloro-m-i	- <del>10</del> 6-44-5 59-50-7	_				1.2E+05 1.2E+05	2.8E+05 2.8E+05	3.6E+09	8.2E+04 8.2E+04
1.9E+00	н		A 6.0E-01 C	1 0 1	1.75+0	1.4E+09	Cresols IJ U V CELED CEEED SEED Crotonaldehyde, trans-	1319-77-3 123-73-9	1.7E+00			1.7E+00	1.2E+05 1.2E+03	2.8E+05	3.6E+09	8.2E+04 1.2E+03
			I 4.0E-01 I V	1	2.7E+0	2 1.4E+09 6.2E+03		98-82-8					1.2E+05		1.1E+04	9.9E+03
	C 6.3E-05 C H	2.0E-03	н	1 0	).1 ).1	1.4E+09 1.4E+09	Cupferron Cyanazine Cyanazine	135-20-6 21725-46-2	1.5E+01 3.9E+00	3.5E+01 9.2E+00	2.6E+05	1.0E+01 2.7E+00	2.3E+03	5.5E+03		1.6E+03
							Cyanides	Ì								
		1.0E-03 5.0E-03	1	1		1.4E+09 1.4E+09	~Calcium Cyahide // Copper Cyanide // Copp	592-01-8 544-92-3					1.2E+03 5.8E+03			1.2E+03 5.8E+03
		6.0E-04 1.0E-03	I 8.0E-04 S V	1	9.7E+0	5 1.4E+09 3.5E+03 1.4E+09	~Cyanide (CN-) ~Cyanogen	57-12-5 460-19-5					7.0E+02 1.2E+03		1.2E+01	1.2E+01 1.2E+03
		9.0E-02	i V	1		1.4E+09	~Cyanogen Bromide	506-68-3					1.1E+05			1.1E+05
		5.0E-02 6.0E-04	I V I 8.0E-04 I V	1	1.0E+0	1.4E+09 7 1.4E+09 5.2E+04	~Cyanogen Chloride ~Hydrogen Cyanide	506-77-4 74-90-8					5.8E+04 7.0E+02		1.8E+02	5.8E+04 1.5E+02
		2.0E-03	1	1	1.02.10	1.4E+09	~Potassium Cyanide	151-50-8					2.3E+03			2.3E+03
		5.0E-03 1.0E-01	I I	0.04		1.4E+09 1.4E+09	∼Potassium Silver Cyanide ∼Silver Cyanide	506-61-6 506-64-9					5.8E+03 1.2E+05			5.8E+03 1.2E+05
		1.0E-03 2.0E-04	I	1		1.4E+09 1.4E+09	~Sodium Cyanide	143-33-9 NA					1.2E+03 2.3E+02			1.2E+03 2.3E+02
		2.0E-04	X V	1		1.4E+09	∼Thiocyanates ∼Thiocyanic Acid	463-56-9					2.3E+02			2.3E+02
		5.0E-02	6.0E+00 I V	1	1 2F+0	1.4E+09 2 1.4E+09 1.0E+03	~Zinc Cyanide	557-21-1 110-82-7					5.8E+04		2.7E+04	5.8E+04 2.7E+04
2.3E-02	Н	F. 0.F		1 0	).1	1.4E+09	Cyclohexane, 1,2,3,4,5-pentabromo-6-chloro-	87-84-3	1.4E+02	3.4E+02		1.0E+02				
		5.0E+00 5.0E-03	P 1.0E+00 X V	1		3 1.4E+09 4.2E+04 2 1.4E+09 1.5E+03		108-94-1 110-83-8					5.8E+06 5.8E+03		1.3E+05 6.4E+03	1.3E+05 3.1E+03
		2.0E-01 2.5E-02	I V	1		5 1.4E+09 7.5E+04 1.4E+09	Cyclohexylamine	108-91-8 68359-37-5					2.3E+05	6.9E+04		2.3E+05
		5.0E-03	T .		0.1	1.4E+09 1.4E+09	Cyfluthrin Cyhalothrin	68085-85-8					2.9E+04 5.8E+03	1.4E+04		2.1E+04 4.1E+03
		1.0E-02 7.5E-03	I		).1 ).1	1.4E+09 1.4E+09	Cypermethrin Cyromazine	52315-07-8 66215-27-8					1.2E+04 8.8E+03	2.8E+04 2.1E+04		8.2E+03 6.2E+03
2.4E-01	I 6.9E-05 C	52 05		1 0	).1	1.4E+09	DDD	72-54-8	1.4E+01	3.2E+01	2.4E+05	9.6E+00	0.02103	2.22.704		0.22103
3.4E-01 3.4E-01	I 9.7E-05 C I 9.7E-05 I	5.0E-04	V	1 1 0.	.03	1.4E+09 2.1E+06 1.4E+09	DDE, p,p'- DDT	72-55-9 50-29-3	9.6E+00 9.6E+00	7.6E+01	2.7E+02 1.7E+05	9.3E+00 8.5E+00	5.8E+02	4.6E+03		5.2E+02
		3.0E-02	1	1 0	0.1	1.4E+09	Dalapon	75-99-0					3.5E+04	8.3E+04		2.5E+04
1.8E-02	C 5.1E-06 C	1.5E-01 7.0E-03	1		).1 ).1	1.4E+09 1.4E+09	Daminozide Decabromodiphenyl ether, 2,2',3,3',4,4',5,5',6,6'- (BDE-209)	1596-84-5 1163-19-5	1.8E+02 4.7E+03	4.3E+02 1.1E+04	3.3E+06	1.3E+02 3.3E+03	1.8E+05 8.2E+03	4.1E+05 1.9E+04		1.2E+05 5.7E+03

Key. I – IKIS	5, F = PPK I V, A = A		notice) ; c = cancer; n = non	cancer; * =		See FAQ; J = New Jersey; O = EPA Office of Water; E = see user guide Section 2.3.5 where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may ex-		(See User Gu	ide); s = Concer	ntration ma	y exceed Csat (	See User Guio	ie)		
		Toxicity a	and Chemical-specific Inforn	nation		Contaminant			cinogenic Targe					Hazard Index (F	
SFO	k IUR e	KTD <sub>o</sub>	e RfC <sub>i</sub> e o muta-		Cost PEF VF			Ingestion SL		alation SL C	Carcinogenic SL	Ingestion SL	Dermal SL	nhalation SL N	loncarcinogenic
ng/kg-day) <sup>-1</sup>	e 10k e y (ug/m³)-1 y	(mg/kg- day)	c comuta	ABS ABS	C <sub>sat</sub> PEF VF (mg/kg) (m <sup>3</sup> /kg) (m <sup>3</sup> /kg)	Analyte	CAS No.	TR=1E-06 (mg/kg)		R=1E-06 mg/kg)	TR=1E-06 (mg/kg)	THQ=1 (mg/kg)	THQ=1 (mg/kg)	THQ=1 (mg/kg)	THI=1 (mg/kg)
iig/kg-uay)						- 11		(IIIg/ kg)	(IIIg/kg) (I	ilig/kg)	(IIIg/kg)			(IIIg/kg)	
4.25.02		4.0E-05	1 1		1.4E+09	Demeton	8065-48-3	2.75.02	C 45.03		4.05.03	4.7E+01	1.1E+02		3.3E+01
1.2E-03 6.1E-02	H	6.0E-01	1 1		1.4E+09 1.4E+09	Di(2-ethylhexyl)adipate Diallate	103-23-1 2303-16-4	2.7E+03 5.4E+01	6.4E+03 1.3E+02		1.9E+03 3.8E+01	7.0E+05	1.7E+06		4.9E+05
0.1E-UZ		7.05.04						3.4E+U1	1.3E+02		3.00+01	0.25.02	1.05.03		F 7F.02
		7.0E-04 1.0E-02			1.4E+09	Diazinon	333-41-5					8.2E+02	1.9E+03		5.7E+02
8.0E-01			X V 1 P 2.0E-04 I V M 1	-		Dibenzothiophene Dibromo-3-chloropropane, 1,2-	132-65-0 96-12-8	4.1E+00	6	5.5E-02	6.4E-02	1.2E+04 2.3E+02		2.8E+01	1.2E+04 2.5E+01
8.0L-01								4.1L+00		J.JL-02	0.4L-02			2.8L+01	
		4.0E-04	X V 1	_	1.6E+02 1.4E+09 1.9E+04		108-36-1					4.7E+02			4.7E+02
8.4F-02		1.0E-02 2.0E-02	I V 1		1.4E+09 2.2E+04 8.0E+02 1.4E+09 8.0E+03	Dibromobenzene, 1,4-	106-37-6 124-48-1	3.9F+01			3.9E+01	1.2E+04 2.3E+04			1.2E+04 2.3E+04
								0.01		05.04				2.45.02	
2.0E+00	I 6.0E-04 I	9.0E-03	1 9.0E-03 I V 1 4.0E-03 X V 1		1.3E+03 1.4E+09 8.6E+03	Dibromoethane, 1,2- Dibromomethane (Methylene Bromide)	106-93-4 74-95-3	1.6E+00	1	L.8E-01	1.6E-01	1.1E+04		3.4E+02 9.9E+01	3.3E+02 9.9E+01
		3.0E-04	4.0E-03 X V 1		2.8E+03 1.4E+09 5.6E+03 1.4E+09	Dibutyltin Compounds	74-95-3 NA					3.5E+02	8.3E+02	9.9E+01	9.9E+01 2.5E+02
			r 1		1.4E+09	Dicamba									
		3.0E-02	-			Dicambe .	1918-00-9			45.00	0.45.00	3.5E+04	8.3E+04		2.5E+04
	4.2E-03 P 4.2E-03 P		V 1 V 1		5.5E+02 1.4E+09 3.2E+03	Dichloro-2-butene, 1,4- Dichloro-2-butene, cis-1,4-	764-41-0 1476-11-5			9.4E-03 3.2E-02	9.4E-03 3.2E-02				
			V 1												
F 0F 02	4.2E-03 P	4.05.00	V 1			Dichloro-2-butene, trans-1,4-	110-57-6	6.55.04		3.2E-02	3.2E-02	4.75.00	4.45.04		2.25.02
5.0E-02		4.0E-03	I 2.0E-01 H V 1		1.4E+09	Dichloroacetic Acid	79-43-6	6.5E+01	1.5E+02		4.6E+01	4.7E+03	1.1E+04	1.05±04	3.3E+03
E 45 00					3.8E+02 1.4E+09 1.2E+04		95-50-1	5.45.05		25 04	4.45.04	1.1E+05		1.0E+04	9.3E+03
		7.0E-02	A 8.0E-01 I V 1	-	1.4E+09 1.0E+04		106-46-7	6.1E+02		.2E+01	1.1E+01	8.2E+04		3.7E+04	2.5E+04
4.5E-01	I 3.4E-04 C	0.05.03	1		1.4E+09	Dichlorobenzidine, 3,3'-	91-94-1 90-98-2	7.3E+00	1.7E+01 4	.9E+04	5.1E+00	1.15.04	2 55 - 04		7.45.03
			X 1		1.4E+09	Dichlorobenzophenone, 4,4'-						1.1E+04	2.5E+04	0.75	7.4E+03
			I 1.0E-01 X V 1	-	8.5E+02 1.4E+09 8.4E+02		75-71-8	5.75 -				2.3E+05		3.7E+02	3.7E+02
		2.0E-01	P V 1 X 7.0F-03 P V 1		1.7E+03 1.4E+09 2.1E+03		75-34-3	5.7E+02		.6E+01	1.6E+01	2.3E+05		4.45.03	2.3E+05 1.4F+02
9.1E-02					3.0E+03 1.4E+09 4.6E+03	C, /-	107-06-2	3.6E+01		2.2E+00	2.0E+00	7.0E+03		1.4E+02	
			I 2.0E-01 I V 1	_	1.2E+03 1.4E+09 1.2E+03		75-35-4					5.8E+04		1.0E+03	1.0E+03
		2.0E-03	I V 1	-	2.4E+03 1.4E+09 2.5E+03		156-59-2					2.3E+03			2.3E+03 2.3F+04
		2.0E-02				Dichloroethylene, 1,2 trans CTTTT	156-60-5					2.3E+04			
		3.0E-03	1 1		1.4E+09	Dichlorophenol, 2,4	120-83-2					3.5E+03	8.3E+03		2.5E+03
		1.0E-02	1		1.4E+09	Dichlorophenoxy Acetic Acid, 2,4-	94-75-7 94-82-6					1.2E+04	5.5E+04		9.6E+03
		8.0E-03	1 1	0.1	1.4E+09	Dichlorophenoxy)butyric Acid, 4-(2,4-						9.3E+03	2.2E+04		6.6E+03
3.6E-02			A 4.0E-03 I V 1	l	1.4E+03 1.4E+09 3.8E+03		78-87-5	9.1E+01	4	l.6E+00	4.4E+00	1.1E+05		6.6E+01	6.6E+01
		2.0E-02	P V 1		1.5E+03 1.4E+09 6.8E+03		142-28-9					2.3E+04	0.05.00		2.3E+04
		3.0E-03	1 1		1.4E+09	Dichloropropanol, 2,3-	616-23-9					3.5E+03	8.3E+03		2.5E+03
1.0E-01			I 2.0E-02 I V 1		1.6E+03 1.4E+09 3.6E+03		542-75-6	3.3E+01		.1E+01	8.2E+00	3.5E+04		3.1E+02	3.1E+02
2.9E-01	I 8.3E-05 C		I 5.0E-04 I 1		1.4E+09	Dichlorvos // CIIII	62-73-7	1.1E+01	2.7E+01 2	.0E+05	7.9E+00	5.8E+02	1.4E+03	3.0E+06	4.1E+02
		1.0E-04	1 1		1.4E+09	Dicrotophosi U U NEXX ELD U X	141-66-2					1.2E+02	2.8E+02		8.2E+01
			P 3.0E-04 X V 1		2.6E+02 1.4E+09 4.1E+03		77-73-6					9.3E+04		5.4E+00	5.4E+00
1.6E+01		5.0E-05	1 1		1.4E+09	Dieldrin	60-57-1	2.0E-01	4.8E-01 3	.6E+03	1.4E-01	5.8E+01	1.4E+02		4.1E+01
	3.0E-04 C		5.0E-03 I 1			Diesel Engine Exhaust	NA								
			P 2.0E-04 P 1		1.4E+09	Diethanolamine	111-42-2					2.3E+03	5.5E+03	1.2E+06	1.6E+03
			P 1.0E-04 P 1		1.4E+09	Diethylene Glycol Monobutyl Ether	112-34-5					3.5E+04	8.3E+04	6.0E+05	2.4E+04
			P 3.0E-04 P 1	0.1	1.4E+09	Diethylene Glycol Monoethyl Ether	111-90-0					7.0E+04	1.7E+05	1.8E+06	4.8E+04
		1.0E-03	P V 1	1	1.1E+05 1.4E+09 1.4E+05		617-84-5					1.2E+03			1.2E+03
3.5E+02	C 1.0E-01 C		1		1.4E+09	Diethylstilbestrol	56-53-1	9.3E-03	2.2E-02 1	7E+02	6.6E-03				
		8.0E-02	1 1		1.4E+09	Difenzoquat	43222-48-6					9.3E+04	2.2E+05		6.6E+04
		2.0E-02	1 1		1.4E+09	Diflubenzuron	35367-38-5					2.3E+04	5.5E+04		1.6E+04
			4.0E+01 I V 1		1.4E+03 1.4E+09 1.2E+03		75-37-6							2.0E+05	2.0E+05
4.4E-02	C 1.3E-05 C		V 1	1	1.4E+09 1.2E+05	•	94-58-6	7.4E+01	1	.2E+02	4.5E+01				
			7.0E-01 P V 1	l	2.3E+03 1.4E+09 3.1E+03		108-20-3							9.4E+03	9.4E+03
		8.0E-02	I V 1			Diisopropyl Methylphosphonate	1445-75-6					9.3E+04			9.3E+04
		2.0E-02	1 1		1.4E+09	Dimethipin	55290-64-7					2.3E+04	5.5E+04		1.6E+04
		2.0E-04	1 1	0.1	1.4E+09	Dimethoate	60-51-5					2.3E+02	5.5E+02		1.6E+02
	P		1		1.4E+09	Dimethoxybenzidine, 3,3'-	119-90-4	2.0E+00	4.8E+00		1.4E+00				
1.7E-03	Р	6.0E-02	P 1		1.4E+09	Dimethyl methylphosphonate	756-79-6	1.9E+03	4.5E+03		1.4E+03	7.0E+04	1.7E+05		4.9E+04
4.6E+00	C 1.3E-03 C		1		1.4E+09	Dimethylamino azobenzene [p-]	60-11-7	7.1E-01	1.7E+00 1	.3E+04	5.0E-01				
	Н		1	0.1	1.4E+09	Dimethylaniline HCl, 2,4-	21436-96-4	5.6E+00	1.3E+01		4.0E+00				
2.0E-01	P	2.0E-03	X 1	0.1	1.4E+09	Dimethylaniline, 2,4-	95-68-1	1.6E+01	3.9E+01		1.1E+01	2.3E+03	5.5E+03		1.6E+03
		2.0E-03	I V 1	1	8.3E+02 1.4E+09 3.1E+04	Dimethylaniline, N,N-	121-69-7					2.3E+03			2.3E+03
1.1E+01			1	0.1	1.4E+09	Dimethylbenzidine, 3,3'-	119-93-7	3.0E-01	7.0E-01		2.1E-01				
		1.0E-01	P 3.0E-02 I V 1		1.1E+05 1.4E+09 1.3E+05	Dimethylformamide	68-12-2					1.2E+05		1.7E+04	1.5E+04
			X 2.0E-06 X V 1	1	1.7E+05 1.4E+09 2.8E+04	Dimethylhydrazine, 1,1-	57-14-7					1.2E+02		2.4E-01	2.4E-01
5.5E+02	C 1.6E-01 C		V 1	l	1.9E+05 1.4E+09 1.7E+05		540-73-8	5.9E-03	1	L.3E-02	4.1E-03				
		2.0E-02	1 1		1.4E+09	Dimethylphenol, 2,4-	105-67-9					2.3E+04	5.5E+04		1.6E+04
		6.0E-04	I 1	0.1	1.4E+09	Dimethylphenol, 2,6-	576-26-1					7.0E+02	1.7E+03		4.9E+02

		Toxicity	and Chemical-specific			where: n SL < 100X C SL; ** =	where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may Contaminant	exceed ceiling limit			ncentration m arget Risk (TR)			,	Hazard Index (F	H) = 1
	k k	RtD <sub>o</sub>	k k v						Ingestion SI	Dermal SL	Inhalation SL	Carcinogenic SL	Ingestion SL	Dermal SL	nhalation SL N	loncarcinogenic
SFO	e IUR e -1 y (ug/m³)-1 y	(mg/kg- day)	e RfC <sub>i</sub> e o mu y (mg/m³) y I ge		ABS	C <sub>sat</sub> PEF VF (mg/kg) (m <sup>3</sup> /kg) (m <sup>3</sup> /kg)	Analyte	CAS No.	TR=1E-06	TR=1E-06	TR=1E-06 (mg/kg)	TR=1E-06 (mg/kg)	THQ=1	THQ=1	THQ=1 (mg/kg)	THI=1
ng/kg-day) <sup>-</sup> 4.5E-02	C 1.3E-05 C	uayj	y (mg/m³) y I ge	1 GIABS	ADS	1.3E+03 1.4E+09 9.5E+02	7.7	513-37-1	(mg/kg) 7.3E+01	(mg/kg)	9.0E-01	8.9E-01	(mg/kg)	(mg/kg)	(IIIg/ kg)	(mg/kg)
4.3E-UZ	C 1.3E-03 C	0.05.05	V	1	0.1	1.4E+09	Dinitro-o-cresol. 4.6-		7.3E+01		9.06-01	8.9E-U1	0.25.04	2.25.02		C CE - 01
		8.0E-05	X		0.1			534-52-1					9.3E+01	2.2E+02		6.6E+01
		2.0E-03 1.0E-04	I D	1	0.1	1.4E+09 1.4E+09	Dinitro-o-cyclohexyl Phenol, 4,6- Dinitrobenzene, 1,2-	131-89-5 528-29-0					2.3E+03 1.2F+02	5.5E+03 2.8E+02		1.6E+03 8.2E+01
		1.0E-04	<del>'</del>	1	0.1	1.4E+09	Dinitrobenzene, 1,3-	99-65-0					1.2E+02	2.8E+02		8.2E+01
		1.0E-04 1.0E-04	I D	1	0.1	1.4E+09	Dinitrobenzene, 1,4-	100-25-4					1.2E+02 1.2E+02	2.8E+02		8.2E+01
		2.0E-03	í	1	0.1	1.4E+09	Dinitrophenol, 2,4-	51-28-5					2.3E+03	5.5E+03		1.6E+03
6.8E-01		2.02 03	•	1	0.1	1.4E+09	Dinitrotoluene Mixture, 2,4/2,6-	NA NA	4.8F+00	1.1E+01		3.4E+00	2.52.05	3.32.03		1.02.03
	C 8.9E-05 C	2 UE-U3	1	_	0.102	1.4E+09	Dinitrotoluene, 2,4-	121-14-2	1.1F+01	2.4E+01	1.9F+05	7.4E+00	2.3F+03	5.4E+03		1.6E+03
1.5E+00	P 0.5E 05 C	3.0E-04	X		0.099	1.4E+09	Dinitrotoluene, 2,6-	606-20-2	2.2E+00	5.2E+00	1.52.05	1.5E+00	3.5E+02	8.4E+02		2.5E+02
		2.0E-03	\$		0.006	1.4E+09	Dinitrotoluene, 2-Amino-4,6-	35572-78-2					2.3E+03	9.2E+04		2.3E+03
		2.0E-03	S		0.009	1.4E+09	Dinitrotoluene, 4-Amino-2,6-	19406-51-0					2.3E+03	6.1E+04		2.3E+03
4.5E-01	х	9.0E-04	X	1	0.1	1.4E+09	Dinitrotoluene, Technical grade	25321-14-6	7.3E+00	1.7E+01		5.1E+00	1.1E+03	2.5E+03		7.4E+02
		1.0E-03	1	1	0.1	1.4E+09	Dinoseb	88-85-7					1.2E+03	2.8E+03		8.2E+02
1.0E-01	I 5.0E-06 I		I 3.0E-02 I V	1		1.2E+05 1.4E+09 4.0E+04		123-91-1	3.3E+01		9.7E+01	2.4E+01	3.5E+04		5.2E+03	4.5E+03
01		02		•		2 22 22.03 1.02.04	Dioxins		0.02.01							
6.2E+03	I 1.3E+00 I			1	0.03	1.4E+09	~Hexachlorodibenzo-p-dioxin, Mixture	NA	5.3E-04	4.2E-03	1.3E+01	4.7E-04				
	C 3.8E+01 C	7.0E-10	I 4.0E-08 C V	1	0.03	1.4E+09 2.0E+06		1746-01-6	2.5E-05	2.0E-04	6.3E-04	2.2E-05	8.2E-04	6.4E-03	3.4E-01	7.2E-04
		3.0E-02	1	1	0.1	1.4E+09	Diphenamid	957-51-7					3.5E+04	8.3E+04		2.5E+04
		8.0E-04	X	1	0.1	1.4E+09	Diphenyl Sulfone	127-63-9					9.3E+02	2.2E+03		6.6E+02
		2.5E-02	1	1	0.1	1.4E+09	Diphenylamine	122-39-4					2.9E+04	6.9E+04		2.1E+04
8.0E-01	I 2.2E-04 I	2.52 02		1	0.1	1.4E+09	Diphenylhydrazine, 1,2-	122-66-7	4.1E+0)	9.7E+00	7.6E+04	2.9E+00	2.52.04	3.32.04		2.12.04
		2.2E-03	T	1	0.1	1.4E+09	Diquat	85-00-7					2.6E+03	6.1E+03		1.8E+03
7.1E+00	C 1.4E-01 C			1	0.1	1.4E+09	Direct Black 38	1937-37-7	4.6E-01	1.1E+00	1.2E+02	3.2E-01				
	C 1.4E-01 C			1	0.1	1.4E+09	Direct Blue 6	2602-46-2	4.4E-01	1.0E+00	1.2E+02	3.1E-01				
6.7F+00	C 1.4E-01 C			1	0.1	1.4E+09	Direct Brown 95	16071-86-6	4.9E-01	1.2E+00	1.2E+02	3.4E-01				
		4.0E-05	1	1	0.1	1.4E+09	Disulfoton Trum (FTS)	298-04-4					4.7E+01	1.1E+02		3.3E+01
		1.0E-02	I V	1		1.4E+09 4.5E+04	Dithiane, 1,4-	505-29-3					1.2E+04			1.2E+04
		2.0E-03	1	1	0.1	1.4E+09	Diuron CCC	330-54-1	_				2.3E+03	5.5E+03		1.6E+03
		4.0E-03	i	1	0.1	1.4E+09	Dodine \\\\	2439-10-3					4.7E+03	1.1E+04		3.3E+03
		2.5E-02	I V	1		1.4E+09 1.2E+05		759-94-4					2.9E+04			2.9E+04
		6.0E-03	I V	1		1.4E+09 4.1E+05	Endosulfan	115-29-7	_				7.0E+03			7.0E+03
		2.0F-02	i	1	0.1	1.4E+09	Endothall	145-73-3					2.3E+04	5.5E+04		1.6F+04
		3.0E-04	i	1	0.1	1.4E+09	Endrin	72-20-8					3.5E+02	8.3E+02		2.5E+02
9.9F-03	I 1.2E-06 I	6.0E-03	P 1.0E-03 I V	1		1.1E+04 1.4E+09 1.9E+04	Epichlorohydrin (	106-89-8	3.3E+02		1.9E+02	1.2E+02	7.0E+03		8.3E+01	8.2E+01
			2.0E-02 I V	1		1.5E+04 1.4E+09 7.7E+03		106-88-7							6.7E+02	6.7E+02
		4.0E-02	Р	1	0.1	1.4E+09	Ethanol, 2-(2-methoxyethoxy)-	111-77-3					4.7E+04	1.1E+05		3.3E+04
		5.0E-03	1	1	0.1	1.4E+09	Ethephon	16672-87-0					5.8E+03	1.4E+04		4.1E+03
		5.0E-04	1	1	0.1	1.4E+09	Ethion	563-12-2					5.8E+02	1.4E+03		4.1E+02
		1.0E-01	P 6.0E-02 P V	1		2.4E+04 1.4E+09 6.2E+04		111-15-9					1.2E+05		1.6E+04	1.4E+04
		9.0E-02	P 2.0E-01 I V	1		1.1E+05 1.4E+09 9.8E+04		110-80-5					1.1E+05		8.6E+04	4.7E+04
		9.0E-01	I 7.0E-02 P V	1		1.1E+04 1.4E+09 8.6E+03		141-78-6					1.1E+06		2.6E+03	2.6E+03
		5.0E-03	P 8.0E-03 P V	1		2.5E+03 1.4E+09 6.3E+03		140-88-5					5.8E+03		2.2E+02	2.1E+02
			1.0E+01 I V	1		2.1E+03 1.4E+09 1.3E+03	Ethyl Chloride (Chloroethane)	75-00-3							5.7E+04	5.7E+04
		2.0E-01	I V	1		1.0E+04 1.4E+09 3.1E+03	Ethyl Ether	60-29-7					2.3E+05			2.3E+05
			3.0E-01 P V	1		1.1E+03 1.4E+09 5.8E+03	Ethyl Methacrylate	97-63-2							7.6E+03	7.6E+03
		1.0E-05	1	1	0.1	1.4E+09	Ethyl-p-nitrophenyl Phosphonate	2104-64-5					1.2E+01	2.8E+01		8.2E+00
1.1E-02	C 2.5E-06 C	1.0E-01	I 1.0E+00 I V	1		4.8E+02 1.4E+09 5.7E+03		100-41-4	3.0E+02		2.8E+01	2.5E+01	1.2E+05		2.5E+04	2.0E+04
		7.0E-02	P	1	0.1	1.4E+09	Ethylene Cyanohydrin	109-78-4					8.2E+04	1.9E+05		5.7E+04
		9.0E-02	P V	1		1.9E+05 1.4E+09 1.8E+05	Ethylene Diamine	107-15-3					1.1E+05			1.1E+05
			I 4.0E-01 C	1	0.1	1.4E+09	Ethylene Glycol	107-21-1					2.3E+06	5.5E+06	2.4E+09	1.6E+06
		1.0E-01	I 1.6E+00 I	1	0.1	1.4E+09	Ethylene Glycol Monobutyl Ether	111-76-2					1.2E+05	2.8E+05	9.5E+09	8.2E+04
	C 8.8E-05 C		3.0E-02 C V	1		1.2E+05 1.4E+09 6.1E+03	Ethylene Oxide	75-21-8	1.1E+01		8.5E-01	7.9E-01			8.0E+02	8.0E+02
	C 1.3E-05 C	8.0E-05	1	1	0.1	1.4E+09	Ethylene Thiourea	96-45-7	7.3E+01	1.7E+02	1.3E+06	5.1E+01	9.3E+01	2.2E+02		6.6E+01
6.5E+01	C 1.9E-02 C		V	1		1.5E+05 1.4E+09 2.4E+04	Ethyleneimine	151-56-4	5.0E-02		1.5E-02	1.2E-02				
		3.0E+00	1	1	0.1	1.4E+09	Ethylphthalyl Ethyl Glycolate	84-72-0					3.5E+06	8.3E+06		2.5E+06
		2.5E-04	1	1	0.1	1.4E+09	Fenamiphos	22224-92-6					2.9E+02	6.9E+02		2.1E+02
		2.5E-02	T	1	0.1	1.4E+09	Fenpropathrin	39515-41-8					2.9E+04	6.9E+04		2.1E+04
		2.5E-02	1	1	0.1	1.4E+09	Fenvalerate	51630-58-1					2.9E+04	6.9E+04		2.1E+04
		1.3E-02	1	1	0.1	1.4E+09	Fluometuron	2164-17-2					1.5E+04	3.6E+04		1.1E+04
			C 1.3E-02 C	1		1.4E+09	Fluoride	16984-48-8					4.7E+04		7.7E+07	4.7E+04
		6.0E-02	I 1.3E-02 C	1		1.4E+09	Fluorine (Soluble Fluoride)	7782-41-4					7.0E+04		7.7E+07	7.0E+04
		8.0E-02	1	1	0.1	1.4E+09	Fluridone	59756-60-4					9.3E+04	2.2E+05		6.6E+04
		2.0E-02	1	1	0.1	1.4E+09	Flurprimidol	56425-91-3					2.3E+04	5.5E+04		1.6E+04
		7.0E-04		-	0.1	1.4E+09	Flusilazole	85509-19-9					8.2E+02	1.9E+03		5.7E+02

Key: I = IR	RIS; P = PPRTV; A = ATSD						See FAQ; J = New Jersey; O = EPA Office of Water; E = see user guide Section 2.3.5; L = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed								ied (See User G	uide for Arsenic
	To		and Chemical-specific Inforr			,	Contaminant		Carc	inogenic Tar	get Risk (TR)	= 1E-06		Noncancer	Hazard Index (H	
SFO	k k Rt	D <sub>o</sub>	k k v k v e n muta-			et PEF VF			Ingestion SL	Dermal SL II	nhalation SL	Carcinogenic SL	Ingestion SL	Dermal SL	Inhalation SL No	oncarcinogenic SL
(mg/kg-day)	(8	/kg- ay)	e RTC <sub>i</sub> e o muta- y (mg/m³) y I gen GIA	BS A	.BS (mg/	kg) (m³/kg) (m³/kg)	Analyte	CAS No.	TR=1E-06 (mg/kg)	TR=1E-06 (mg/kg)	TR=1E-06 (mg/kg)	TR=1E-06 (mg/kg)	THQ=1 (mg/kg)	THQ=1 (mg/kg)	THQ=1 (mg/kg)	THI=1 (mg/kg)
	6.0I 1.0I		1 :		).1 ).1	1.4E+09 1.4E+09		66332-96-5 69409-94-5					7.0E+04 1.2E+04	1.7E+05 2.8E+04		4.9E+04 8.2E+03
3.5E-03 1.9E-01		E-01	1		0.1	1.4E+09 1.4E+09		133-07-3 72178-02-0	9.3E+02 1.7E+01	2.2E+03 4.1E+01		6.6E+02 1.2E+01	1.2E+05	2.8E+05		8.2E+04
1.31-01	2.01	E-03	1	. 0	).1	1.4E+09	Fonofos 9	944-22-9	1.72+01	4.11.701			2.3E+03	5.5E+03		1.6E+03
	1.3E-05 I 2.0I 9.0I		I 9.8E-03 A V :			+04 1.4E+09 7.8E+04 +05 1.4E+09 9.3E+04		50-00-0 64-18-6			7.3E+01	7.3E+01	2.3E+05 1.1E+06		3.3E+03 1.2E+02	3.3E+03 1.2E+02
	3.08	+00	1 :	. 0		1.4E+09	Fosetyl-AL 3	39148-24-8					3.5E+06	8.3E+06		2.5E+06
		E-03	x v		.03	1.4E+09 2.0E+05		132-64-9					1.2E+03	9.2E+03		1.0E+03
	1.01		I V :			+03 1.4E+09 2.6E+03 +05 1.4E+09 1.2E+04		110-00-9 109-99-9					1.2E+03 1.1E+06	9.2E+03 8.3E+06	1.1E+05	1.0E+03 9.6E+04
3.8E+00	Н			. 0	).1	1.4E+09	Furazolidone 6	67-45-8	8.6E-01	2.0E+00		6.0E-01		8.32+00		
1.5E+00		E-03	I 5.0E-02 H V		1.0E-	+04 1.4E+09 4.9E+04 1.4E+09		98-01-1 531-82-8	2.2E+00	5.2E+00	3.9E+04	1.5E+00	3.5E+03		1.1E+04	2.6E+03
3.0E-02	I 8.6E-06 C		1	. 0	).1	1.4E+09	Furmecyclox 6	60568-05-0	1.1E+02	2.6E+02	1.9E+06	7.7E+01				
	4.01	E-04	8.0E-05 C		0.1	1.4E+09 1.4E+09		77182-82-2 111-30-8					4.7E+02	1.1E+03	4.8E+05	3.3E+02 4.8E+05
	4.01		I 1.0E-03 H V		1.1E-	+05 1.4E+09 8.4E+04	Glycidyl 7	765-34-4					4.7E+02		3.7E+02	2.1E+02
	1.01	E-01 E-02	X V		).1	1.4E+09 1.4E+09 1.5E+05		1071-83-6 113-00-8					1.2E+05 1.2E+04	2.8E+05		8.2E+04 1.2E+04
		E-02 E-02	P :	. 0		1.4E+09 1.5E+05 1.4E+09	Guanidine Chloride 5	50 01 1					2.3E+04	5.5E+04		1.2E+04 1.6E+04
4.5E+00	5.0I I 1.3E-03 I 5.0I		I V		).1	1.4E+09 1.4E+09 4.8E+05	7 17	69806-40-2 76-44-8	7.3E-01		4.5E+00	6.3E-01	5.8E+01 5.8E+02	1.4E+02		4.1E+01 5.8E+02
9.1E+00			I V					1024-57-3	3.6E-01		4.0E+00	3.3E-01	1.5E+01			1.5E+01
	2.01	E-03	I V :		0.1	1.4E+09 3.8E+05		87-82-1 68 <mark>631,</mark> 49-2					2.3E+03	5.5E+02		2.3E+03
1.6E+00	I 4.6E-04 I 8.0I	E-04 E-04	I V			1.4E+09 6.8E+04	Hexachlorobenzene ) // \/ /1	118-74-1	2.0E+0)		1.8E+00	9.6E-01	2.3E+02 9.3E+02	5.5E+U2		1.6E+02 9.3E+02
7.8E-02 6.3E+00	I 2.2E-05 I 1.0I	E-03 E-03	P V :		1.7E-	+01 1.4E+09 1.1E+04 1.4E+09		87-68-3 319-84-6	4.2E+01 5.2E-01	1 25.00	6.0E+00	5.3E+00	1.2E+03 9.3E+03	2.2E+04		1.2E+03 6.6E+03
1.8E+00		E-U3	A .			1.4E+09	Hexachlorocyelbhexane, Beta	319-85-7	1.8E+0)	1.2E+00 4.3E+00	9.3E+03 3.1E+04	3.6E-01 1.3E+00	9.56+05	2.25+04		0.02+03
1.1E+00 1.8E+00	C 3.1E-04 C 3.0I	-04	1		04	1.4E+09 1.4E+09		58-89-9 608-73-1	3.0E+0) 1.8E+0)	1.8E+01 4.3E+00	5.4E+04 3.3E+04	2.5E+00	3.5E+02	2.1E+03		3.0E+02
	6.01		I 2.0E-04 I V			+01 1.4E+09 8.5E+03	Hexachlorocyclopentadiene 7	77-47-4		4.55+00		1.3E+00	7.0E+03		7.5E+00	7.5E+00
4.0E-02	I 1.1E-05 C 7.0I	E-04 E-04	I 3.0E-02 I V		).1	1.4E+09 8.0E+03 1.4E+09		67-72-1 70-30-4	8.2E+01		8.9E+00	8.0E+00	8.2E+02 3.5E+02	8.3E+02	1.1E+03	4.6E+02 2.5E+02
1.1E-01		E-03	1 :	. 0.0	015	1.4E+09	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	121-82-4	3.0E+01	4.7E+02		2.8E+01	3.5E+03	5.5E+04		3.3E+03
	4.0	E-04	1.0E-05   V			+03 1.4E+09 3.0E+05 1.4E+09		822-06-0 680-31-9					4.7E+02	1.1E+03	1.3E+01	1.3E+01 3.3E+02
			7.0E-01 I V		1.4E-	+02 1.4E+09 8.3E+02	Hexane, N-	110-54-3							2.5E+03	2.5E+03
		+00 E-03	P : 1 3.0E-02   V : 2		).1 3.3F-	1.4E+09 +03 1.4E+09 1.3E+04		124-04-9 591-78-6					2.3E+06 5.8E+03	5.5E+06	1.7E+03	1.6E+06 1.3E+03
	3.31	E-02	1	. 0	).1	1.4E+09	Hexazinone 5	51235-04-2					3.9E+04	9.1E+04	_,,_,	2.7E+04
	2.51	E-02 E-04	1 :		).1	1.4E+09 1.4E+09	•	78587-05-0 67485-29-4	_				2.9E+04 3.5E+02	6.9E+04 8.3E+02		2.1E+04 2.5E+02
3.0E+00	I 4.9E-03 I		3.0E-05 P V			1.4E+09	Hydrazine 3	302-01-2	1.1E+00		3.4E+03	1.1E+00			1.8E+05	1.8E+05
3.0E+00	I 4.9E-03 I		2.0E-02 I V			1.4E+09 1.4E+09		10034-93-2 7647-01-0	1.1E+00		3.4E+03	1.1E+00			1.2E+08	1.2E+08
	4.01	E-02	C 1.4E-02 C V			1.4E+09	Hydrogen Fluoride 7	7664-39-3					4.7E+04		8.3E+07	4.7E+04
6.0E-02	р 4 о	E-02	2.0E-03 I V		).1	1.4E+09 1.4E+09	7-1-6-1-1-1-1	7783-06-4 123-31-9	5.5E+01	1.3E+02		3.8E+01	4.7E+04	1.1E+05	1.2E+07	1.2E+07 3.3E+04
5.52 02	1.31	E-02	1	. 0	).1	1.4E+09	Imazalil 3	35554-44-0	2.22.01			2.22.02	1.5E+04	3.6E+04		1.1E+04
		E-01 E-01	1 :		).1	1.4E+09 1.4E+09		81335-37-7 81335-77-5					2.9E+05 2.9E+05	6.9E+05 6.9E+05		2.1E+05 2.1E+05
	1.0	E-02	A			1.4E+09	lodine 7	7553-56-2					1.2E+04			1.2E+04
	4.0I 7.0I	E-02 E-01	P :	. 0	).1	1.4E+09 1.4E+09		36734-19-7 7439-89-6					4.7E+04 8.2E+05	1.1E+05		3.3E+04 8.2E+05
	3.01	E-01	I V			+04 1.4E+09 2.8E+04	Isobutyl Alcohol 7	78-83-1					3.5E+05			3.5E+05
9.5E-04		E-01 E-02	1 2.0E+00 C		0.1	1.4E+09 1.4E+09 4.2E+05		78-59-1 33820-53-0	3.4E+03	8.1E+03		2.4E+03	2.3E+05 1.8E+04	5.5E+05	1.2E+10	1.6E+05 1.8E+04
	2.08	+00	P 2.0E-01 P V			+05 1.4E+09 2.8E+04	Isopropanol 6	67-63-0					2.3E+06		2.4E+04	2.4E+04
		E-01 E-02	1 :		).1	1.4E+09 1.4E+09		1832-54-8 82558-50-7					1.2E+05 5.8E+04	2.8E+05 1.4E+05		8.2E+04 4.1E+04
			3.0E-01 A V			1.4E+09	JP-7 N	NA							1.8E+09	1.8E+09
	2.01	E-03	1 :	. 0	0.1	1.4E+09	Lactofen 7	77501-63-4					2.3E+03	5.5E+03		1.6E+03

			See FAQ; J = New Jersey; O = EPA Office of Water; E = see user guide Section 2.3.5; L = see where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed cei					olied (See User G	uide for Arsenic
	nical-specific Information		Contaminant		Carcinogenic Target Risk (TR) = 1E-0		Noncancer	Hazard Index (H	
SFO e IUR e (mg/kg- e Rf0	k v	C <sub>sat</sub> PEF VF				genic SL Ingest .E-06 THO	ion SL Dermal SL Q=1 THQ=1	Inhalation SL No THQ=1	oncarcinogenic SL THI=1
SFO e IUR e (mg/kg- e RTC (mg/kg-day) <sup>-1</sup> y (ug/m <sup>3</sup> ) <sup>-1</sup> y day) y (mg/	- C O mata	-sat	Analyte C/	CAS No.		/kg) (mg		(mg/kg)	(mg/kg)
			Lead Compounds						
5.0E-01 C 1.5E-01 C 2.0E-02 C 2.0E- 8.5E-03 C 1.2E-05 C	04 C M 0.025 1	1.4E+09 1.4E+09		58-97-6		+00 2.3E +02	+04	1.2E+06	2.3E+04
8.5E-03 C 1.2E-05 C 2.8E-01 C 8.0E-05 C				16-27-7 L-04-2		+02			
2.8E-01 C 8.0E-05 C	1 0.1	1.4E+09 1.4E+09		1-04-2 39-92-1	1.2E+01 2.8E+01 2.1E+05 8	+00			8.0E+02
8.5E-03 C 1.2E-05 C	1 0.1			35-32-6	3.8E+02 9.1E+02 1.4E+06 2.1	+02			0.02102
1.0E-07 I	V 1	2.4E+00 1.4E+09 1.9E+03	~Tetraethyl Lead 78-0	00-2		1.28	E-01		1.2E-01
5.0E-06 P	V 1	3.8E+02 1.4E+09 2.6E+04		1-25-3		5.8E			5.8E+00
2.0E-03 I	1 0.1			)-55-2		2.3E			1.6E+03
2.0E-03 P 5.0E-04 I	1 1 0.1	1.4E+09 1.4E+09		39-93-2 74-6		2.38	:+03 :+02		2.3E+03 4.1E+02
1.0E-02 I	1 0.1		MCPB 94-8			1.28			8.2E+03
1.0E-03 I	1 0.1	1.4E+09	MCPP 93-6	65-2		1.28	+03 2.8E+03		8.2E+02
2.0E-02 I	1 0.1		Malathion 121-	L-75-5		2.3E			1.6E+04
1.0E-01 I 7.0E-			•	3-31-6		1.28		4.2E+06	8.0E+04
5.0E-01 I	1 0.1			3-33-1			+05 1.4E+06		4.1E+05
1.0E-04 P 3.0E-02 H	1 0.1 1 0.1			9-77-3 18-01-7		1.2E 3.5E	+02 2.8E+02 +04 8.3E+04		8.2E+01 2.5E+04
5.0E-03 I	1 0.1			127-38-2			+03 1.4E+04		4.1E+03
1.4E-01   5.0E-		2.12.03		39-96-5		3.00	2.12.04		
2.4E-02 S 5.0E-		1.4E+09	Manganese (Non-diet) 7439	39-96-5		2.88		3.0E+05	2.6E+04
9.0E-05 H	1 0.1			0-10-7			+02 2.5E+02		7.4E+01
3.0E-02 I	1 0.1	1.4E+09	Mepiquat Chloride 2430 Mercury Compounds	307-26-4		3.5E	+04 8.3E+04		2.5E+04
3.0E-04 I 3.0E-	04 S 0.07	1.4E+09		37-94-7		3 50	+02	1.8E+06	3.5E+02
	04 J V 1	3.1E+00 1.4E+09 3.5E+04		39-97-6		3.30	.+02	4.6E+01	4.6E+01
1.0E-04 I	1	1.4E+09		967-92-6		1.28	+02		1.2E+02
8.0E-05 I	1 0.1	1.4E+09		38-4		9.38	+01 2.2E+02		6.6E+01
3.0E-05 I	V 1	1.4E+09 1.9E+06		-50-5		3.5E			3.5E+01
3.0E-05 I	1 0.1			48-8		3.58			2.5E+01
6.0E-02   1.0E-04   3.0E-	1 0.1 02 P V 1	1.4E+09 4.6E+03 1.4E+09 6.8E+03		37-19-1 5-98-7			+04 1.7E+05 +02	8.9F+02	4.9E+04 1.0E+02
5.0E-05 I	1 0.1			265-92-6			+01 1.4E+02	0.52102	4.1E+01
2.0E+00   2.0E+	01 I V 1	1.1E+05 1.4E+09 2.9E+04	Methanol 67-5	56-1		2.3E	+06	2.5E+06	1.2E+06
1.0E-03 I	1 0.1			)-37-8		1.28			8.2E+02
2.5E-02 I	1 0.1			752-77-5		2.9E	+04 6.9E+04		2.1E+04
4.9E-02 C 1.4E-05 C 5.0E-03 I	1 0.1 1 0.1			59-2 43-5	6.7E+01 1.6E+02 1.2E+06 4.	+01	+03 1.4E+04		4.1E+03
8.0E-03 P 1.0E-				45-5 0-49-6		9.38		5.4E+02	5.1E+02
5.0E-03 P 2.0E-		1.1E+05 1.4E+09 1.0E+05		9-86-4		5.88		8.8E+03	3.5E+03
1.0E+00 X	V 1	2.9E+04 1.4E+09 8.1E+03		20-9		1.28			1.2E+06
	02 P V 1	6.8E+03 1.4E+09 7.0E+03		33-3				6.1E+02	6.1E+02
6.0E-01   5.0E-				93-3	5.05.0:	7.0E		2.7E+05	1.9E+05
1.0E-03 X 1.0E-03 P 2.0E- 3.0E-	05 X V 1 00 I V 1	1.8E+05 1.4E+09 5.0E+04 3.4E+03 1.4E+09 1.1E+04		34-4 3-10-1	6.2E-01 6.	E-01 1.2E	:+03	4.4E+00 1.4E+05	4.4E+00 1.4E+05
	03 C V 1	1.0E+04 1.4E+09 4.4E+03		1-83-9				1.9E+01	1.9E+01
1.4E+00 I 7.0E-	01 I V 1	2.4E+03 1.4E+09 6.3E+03	Methyl Methacrylate 80-6	62-6		1.6E		1.9E+04	1.9E+04
2.5E-04 I	1 0.1		•	3-00-0			+02 6.9E+02		2.1E+02
6.0E-02 X	1 0.1			3-13-5		7.0E			4.9E+04
6.0E-03 H 4.0E- 9.9F-02 C 2.8F-05 C	02 H V 1 1 0.1	3.9E+02 1.4E+09 2.4E+04 1.4F+09		013-15-4 27-3	3.3E+01 7.8E+01 6.0E+05 2.3	7.0E	:+03	4.3E+03	2.6E+03
******	00 I V 1	8.9E+03 1.4E+09 4.9E+03	11.7	34-04-4		+01		6.4E+04	6.4E+04
3.0E-04 X	1 0.1			5-45-2	2.52.02		+02 8.3E+02	0. 12 . 04	2.5E+02
9.0E-03 P 2.0E-02 X	1 0.1	1.4E+09	Methyl-5-Nitroaniline, 2- 99-5	55-8	3.6E+02 8.6E+02 2.6		+04 5.5E+04		1.6E+04
8.3E+00 C 2.4E-03 C	1 0.1		Methyl-N-nitro-N-nitrosoguanidine, N- 70-2			-01			
1.3E-01 C 3.7E-05 C 1.0E-02 A	1 0.1 1 0.1			5-21-5 1-58-3	2.5E+01 5.9E+01 4.5E+05 1.8	:+01	+04 2.8F+04		8.2E+03
1.0E-02 A 2.0E-04 X	1 0.1		,	512-12-7			+04 2.8E+04 +02 5.5E+02		8.2E+03 1.6E+02
1.0E-01 X 3.0E-04 X	1 0.1			5-50-9	3.3E+01 7.7E+01 2.:		+02 5.5E+02 +02 8.3E+02		2.5E+02
2.2E+01 C 6.3E-03 C	M 1 0.1		Methylcholanthrene, 3- 56-4			-01	2.22.02		
2.0E-03   1.0E-08   6.0E-03   6.0E-		3.3E+03 1.4E+09 2.2E+03		09-2		+03 7.0E		5.8E+03	3.2E+03
1.0E-01 P 4.3E-04 C 2.0E-03 P	M 1 0.1			L-14-4			+03 5.5E+03		1.6E+03
4.6E-02   1.3E-05 C	1 0.1			1-61-1		+01		4.25.00	4.25.00
1.6E+00 C 4.6E-04 C 2.0E- 6.0E-	02 C 1 0.1 04 I 1 0.1			L-77-9 L-68-8	2.0E+00 4.8E+00 3.6E+04 1.4	+00		1.2E+08 3.6E+06	1.2E+08 3.6E+06
6.UE-	υ <del>ν</del> ι 1 0.1	1.46+09	местуленешриенугопосуанате 101-	1-00-0				3.0E+Ub	3.00+06

Key: I = IRIS; P = PPRTV; A	= ATSDR; C =					see FAQ; J = New Jersey; O = EPA Office of Water; E = see user guide Section 2.3.5;							ied (See User (	uide for Arsenic
	Tarrista			* = where: n SL < 100X	c SL; ** =	where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exc	eed ceiling limit						Unnered Index. (	
0.1	I OXICIT	y and Chemical-specific In	itormation			Contaminant		Car	cinogenic Target Risk (TR		In an at law Ci	Noncancer	Hazard Index (	AI) = 1
SEO O IUR	K KID <sub>o</sub>	RfC: 0 0 muta		C . PFF	VF			Ingestion SL	Dermai SL Innaiation Si	L Carcinogenic SL	Ingestion SL	Dermai SL	innalation SL I	ioncarcinogenic S
	e (mg/kg-	e i e o illuta-		- sat				TR=1E-06	TR=1E-06 TR=1E-06	TR=1E-06	THQ=1	THQ=1	THQ=1	THI=1
(mg/kg-day) <sup>-1</sup> y (ug/m <sup>3</sup> ) <sup>-1</sup> y	y day)	y (mg/m³) y I gen	GIABS AE	1 0 0 1 1 0		Analyte	CAS No.	(mg/kg)	(mg/kg) (mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
	7.0E-02	H V	1	5.0E+02 1.4E+09	1.3E+04	Methylstyrene, Alpha-	98-83-9				8.2E+04			8.2E+04
	1.5E-01	1	1 0.	.1 1.4E+09		Metolachlor	51218-45-2				1.8E+05	4.1E+05		1.2E+05
	2.5E-02	1	1 0.	.1 1.4F+09		Metribuzin	21087-64-9				2.9E+04	6.9E+04		2.1E+04
	2.5E-01	i	1 0.			Metsulfuron-methyl	74223-64-6				2.9E+05	6.9E+05		2.1E+05
	3.0E+00	D V	1	3.4E-01 1.4E+09	1 /F±03	Mineral oils	8012-95-1				3.5E+06			3.5E+06
1.8E+01 C 5.1E-03 C		i v	1	1.4E+09			2385-85-5	1.8E-01	2.1E+00	1.7E-01	2.3E+02			2.3E+02
1.81-01 C 3.11-03 C	2.0E-04	· ·	1 0.		8.0L+03	Molinate	2212-67-1	1.61-01	2.11+00	1.71-01	2.3E+02 2.3E+03	5.5E+03		1.6E+03
		-										3.3E+03		
	5.0E-03	1	1	1.4E+09		Molybdenum	7439-98-7				5.8E+03			5.8E+03
	1.0E-01	1	1	1.4E+09		Monochloramine	10599-90-3				1.2E+05			1.2E+05
	2.0E-03	Р	1 0.			Monomethylaniline	100-61-8				2.3E+03	5.5E+03		1.6E+03
	2.5E-02		1 0.	.1 1.4E+09		Myclobutanil	88671-89-0				2.9E+04	6.9E+04		2.1E+04
	3.0E-04	X	1 0.	.1 1.4E+09		N,N'-Diphenyl-1,4-benzenediamine	74-31-7				3.5E+02	8.3E+02		2.5E+02
	2.0E-03	I V	1	1.4E+09	5.7E+04	Naled	300-76-5				2.3E+03			2.3E+03
	3.0E-02	X 1.0E-01 P V	1	1.4E+09		Naphtha, High Flash Aromatic (HFAN)	64742-95-6				3.5E+04		6.0E+08	3.5E+04
1.8E+00 C 0.0E+00 C			1 0.			Naphthylamine, 2-	91-59-8	1.8E+00	4.3F+00	1.3E+00				
	1.0F-01	1	1 0.			Napronamide	15299-99-7	1.02.00	52.00	1.52.00	1.2F+05	2.8E+05		8.2E+04
2.6E-04 (		C 1.4E-05 C							6.4E+04	6.45.04			0.25,04	
			1 0.			Nickel Acetate	373-02-4			6.4E+04	1.3E+04	3.0E+04	8.3E+04	8.1E+03
2.6E-04 (		C 1.4E-05 C	1 0.			Nickel Carbonate	3333-67-3		6.4E+04	6.4E+04	1.3E+04	3.0E+04	8.3E+04	8.1E+03
2.6E-04 (		C 1.4E-05 C V	1	1.4E+09		Nickel Carbonyl	13463-39-3		6.4E+04	6.4E+04	1.3E+04		8.3E+04	1.1E+04
2.6E-04 (	C 1.1E-02	C 1.4E-05 C	0.04	1.4E+09		Nickel Hydroxide	12054-48-7		6.4E+04	6.4E+04	1.3E+04		8.3E+04	1.1E+04
2.6E-04 (	C 1.1E-02	C 2.0E-05 C	0.04	1.4E+09		Nickel Oxide	1313-99-1		6.4E+04	6.4E+04	1.3E+04		1.2E+05	1.2E+04
2.4E-04	I 1.1E-02	C 1.4E-05 C	0.04	1.4E+09		Nickel Refinery Dust	NA		6.9E+04	6.9E+04	1.3E+04		8.3E+04	1.1E+04
2.6E-04 (	C 2.0E-02	I 9.0E-05 A	0.04	1.4E+09		Nickel Soluble Salts	7440-02-0		6.4E+04	6.4E+04	2.3E+04		5.4E+05	2.2E+04
1.7E+00 C 4.8E-04		C 1.4F-05 C	0.04	1.4E+09		Nickel Subsulfide	12035-72-2	1.9E+00	3.5E+04	1.9E+00	1.3E+04		8.3E+04	1.1E+04
	C 1.1E-02	C 1.4E-05 C	1 0.			Nickelocene	1271-28-9	1.52.00	6.4E+04	6.4E+04	1.3E+04 1.3E+04	3.0E+04	8.3E+04	8.1E+03
2.00 04 (		1				Nitrate			5.12104	0.12.07		2.02.07	2.02.0.	
	1.6E+00	T.	1	1.4E+09			14797-55-8				1.9E+06			1.9E+06
			1	1.4E+09		Nitrate ₹.Nitrite (as N)	NACI							
	1.0E-01		1	1.4E+09		Nitrite     / / / /	14797-65-0				1.2E+05			1.2E+05
	1.0E-02	X 5.0E-05 X	1 0.	.1 1.4E+09		Nitroaniline, 2-	4-4د88				1.2E+04	2.8E+04	3.0E+05	8.0E+03
2.0E-02 P	4.0E-03	P 6.0E-03 P	1 0.	.1 1.4E+09		Nitroaniline, 4-	100-01-6	1.6E+02	3.9E+02	1.1E+02	4.7E+03	1.1E+04	3.6E+07	3.3E+03
4.0E-05	I 2.0E-03	I 9.0E-03 I V	1	3.1E+03 1.4E+09	7.3E+04	Nitrobenzene U W CELLES CEEES	98-95-3		2.2E+01	2.2E+01	2.3E+03		2.9E+03	1.3E+03
	3.0E+03	D	1 0.		_	Nitrocellulose	9004-70-0				3.5E+09	8.3E+09		2.5E+09
	7.0E-02		1 0.			Nitrofurantoin	67-20-9					1.9E+05		5.7E+04
1.3E+00 C 3.7E-04 C		П	1 0.			Nitrofurazione	59-87-0	2.5E+00	5.9E+00 4.5E+04	1.8E+00	0.2E+U4	1.95+05		3.7E+U4
					_									
1.7E-02 P	1.0E-04		1 0.			Nitroglycecin	55-63-0	1.9E+02	4.5E+02	1.4E+02	1.2E+02	2.8E+02		8.2E+01
	1.0E-01		1 0.			Nitroguanidine	556-88-7				1.2E+05	2.8E+05		8.2E+04
8.8E-06 F	Р	5.0E-03 P V	1	1.8E+04 1.4E+09			75-52-5		2.4E+01	2.4E+01			3.7E+02	3.7E+02
2.7E-03 H		2.0E-02 I V	1	4.9E+03 1.4E+09		Nitropropage, 2-	79-46-9		6.0E-02	6.0E-02			1.2E+03	1.2E+03
2.7E+01 C 7.7E-03 C	С	M	1 0.	.1 1.4E+09		Nitroso-N-ethylurea; N-	759-73-9	1.2E-01	2.9E-01 2.2E+03	8.5E-02				
1.2E+02 C 3.4E-02 C	C	M	1 0.	.1 1.4E+09		Nitroso-N-methylurea, N-	684-93-5	2.7E-02	6.4E-02 4.9E+02	1.9E-02				
5.4E+00   1.6E-03		V	1	1.4E+09	2.4F+05	Nitroso-di-N-butylamine, N-	924-16-3	6.1E-01	1.9E+00	4.6E-01				
7.0E+00   2.0E-03 (	_	•	1 0.			Nitroso-di-N-propylamine, N-	621-64-7	4.7F-01	1.1E+00 8.3E+03	3.3E-01				
2.8E+00   8.0E-04 (			1 0.			Nitrosodiethanolamine, N-	1116-54-7	1.2E+00	2.8E+00 2.1E+04	8.2F-01				
	_				_									
1.5E+02   4.3E-02		M	1 0.			Nitrosodiethylamine, N-	55-18-5	2.2E-02	5.2E-02 3.9E+02	1.5E-02	0.05			
5.1E+01   1.4E-02		P 4.0E-05 X V M	1			Nitrosodimethylamine, N-	62-75-9	6.4E-02	7.2E-02	3.4E-02	9.3E+00		1.4E+01	5.7E+00
4.9E-03 I 2.6E-06 (			1 0.			Nitrosodiphenylamine, N-	86-30-6	6.7E+02	1.6E+03 6.4E+06	4.7E+02				
2.2E+01   6.3E-03 (		V	1	1.1E+05 1.4E+09		Nitrosomethylethylamine, N-	10595-95-6	1.5E-01	2.4E-01	9.1E-02				
6.7E+00 C 1.9E-03 C	C		1 0.			Nitrosomorpholine [N-]	59-89-2	4.9E-01	1.2E+00 8.8E+03	3.4E-01				
9.4E+00 C 2.7E-03 C	C		1 0.	.1 1.4E+09		Nitrosopiperidine [N-]	100-75-4	3.5E-01	8.2E-01 6.2E+03	2.4E-01				
2.1E+00   6.1E-04			1 0.	.1 1.4E+09		Nitrosopyrrolidine, N-	930-55-2	1.6E+00	3.7E+00 2.7E+04	1.1E+00				
	1.0E-04	X	1 0.			Nitrotoluene, m-	99-08-1				1.2F+02	2.8F+02		8.2F+01
2.2E-01 P	9.0E-04	P V	1 0.	1.5E+03 1.4E+09			88-72-2	1.5E+01		1.5E+01	1.1E+03	2.02.02		1.1E+03
1.6E-02 P		D	1 0.			•	99-99-0		4 9E±02			1 15:04		
1.0E-UZ P	4.0E-03	r v 20502.0.v			4.05.55	Nitrotoluene, p-		2.0E+02	4.8E+02	1.4E+02	4.7E+03	1.1E+04	0.45.04	3.3E+03
		X 2.0E-02 P V	1	6.9E+00 1.4E+09	1.UE+03	Nonane, n-	111-84-2				3.5E+02	4.45.05	9.1E+01	7.2E+01
	4.0E-02	T.	1 0.			Norflurazon	27314-13-2				4.7E+04	1.1E+05		3.3E+04
	3.0E-03	1	1 0.			Octabromodiphenyl Ether	32536-52-0				3.5E+03	8.3E+03		2.5E+03
	5.0E-02	I	1 0.0	006 1.4E+09		Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	2691-41-0				5.8E+04	2.3E+06		5.7E+04
	2.0E-03	Н	1 0.	.1 1.4E+09		Octamethylpyrophosphoramide	152-16-9				2.3E+03	5.5E+03		1.6E+03
	5.0E-02	1	1 0.			Oryzalin	19044-88-3				5.8E+04	1.4E+05		4.1E+04
	5.0E-02		1 0.			Oxadiazon	19666-30-9				5.8E+03	1.4E+04		4.1E+03
	2.5E-02		1 0.			Oxamyl	23135-22-0				2.9E+04	6.9E+04		4.1E+03 2.1E+04
	3.0E-03	T.	1 0.			Oxyfluorfen	42874-03-3				3.5E+03	8.3E+03		2.5E+03
	1.3E-02	1	1 0.			Paclobutrazol	76738-62-0				1.5E+04	3.6E+04		1.1E+04
	4.5E-03	1	1 0.			Paraquat Dichloride	1910-42-5				5.3E+03	1.2E+04		3.7E+03
	6.0E-03	Н	1 0.	.1 1.4E+09		Parathion	56-38-2				7.0E+03	1.7E+04		4.9E+03

•	113, F - FFRTV, A -			ncancer; * =		See FAQ; J = New Jersey; O = EPA Office of Water; E = see user guide Section where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration r  Contaminant		(See User Gu	ide); s = Con		ay exceed Csat (	(See User Gui	de)	Hazard Index (I	
	161 161	RED RED	and Chemical-specific infor	mation		Contaminant		Ingestion SI	Dormal SI III	nhalation SI	= 1E-Ub	Ingestion SI	Noncancer	hazard index (i	oncarcinogenic:
SFO mg/kg-day)	e IUR e y (ug/m <sup>3</sup> ) <sup>-1</sup> y	(mg/kg- day)	e RfC <sub>i</sub> e o muta- y (mg/m³) y I gen Gi	ABS ABS	C <sub>sat</sub> PEF VF (mg/kg) (m <sup>3</sup> /kg) (m <sup>3</sup> /kg)	Analyte	CAS No.	TR=1E-06 (mg/kg)	TR=1E-06 (mg/kg)	TR=1E-06 (mg/kg)	TR=1E-06 (mg/kg)	THQ=1 (mg/kg)	THQ=1 (mg/kg)	THQ=1 (mg/kg)	THI=1 (mg/kg)
		5.0E-02 4.0E-02	• • • • • • • • • • • • • • • • • • • •	1 1 0.1	1.4E+09 4.5E+04 1.4E+09	Pebulate Pendimethalin	1114-71-2 40487-42-1			<u> </u>		5.8E+04 4.7E+04	1.1E+05		5.8E+04 3.3E+04
		2.0E-03 1.0E-04		1 1 0.1	3.1E-01 1.4E+09 5.1E+05 1.4E+09	Pentabromodiphenyl Ether Pentabromodiphenyl ether, 2,2',4,4',5- (BDE-99)	32534-81-9 60348-60-9					2.3E+03 1.2E+02	2.8E+02		2.3E+03 8.2E+01
		8.0E-04	I V	1	1.4E+09 8.1E+04	Pentachlorobenzene	608-93-5					9.3E+02	2.8L+02		9.3E+02
9.0E-02 2.6E-01	Н	3.0E-03	I V	1	4.6E+02 1.4E+09 9.7E+03 1.4E+09 4.3E+05	Pentachloronitrobenzene	76-01-7 82-68-8	3.6E+01 1.3E+01			3.6E+01 1.3E+01	3.5E+03			3.5E+03
4.0E-01 4.0E-03	I 5.1E-06 C	5.0E-03 2.0E-03		1 0.25 1 0.1	1.4E+09 1.4E+09	Pentachlorophenol Pentaerythritol tetranitrate (PETN)	87-86-5 78-11-5	8.2E+00 8.2E+02	7.7E+00 1.9E+03	3.3E+06	4.0E+00 5.7E+02	5.8E+03 2.3E+03	5.5E+03 5.5E+03		2.8E+03 1.6E+03
4.02 03	^	2.00 03		1	3.9E+02 1.4E+09 7.8E+02		109-66-0	0.22.102	1.52.05		3.72102	2.32103	3.32.03	3.4E+03	3.4E+03
		7.0E-04	•	1	1.4E+09	~Ammonium Perchlorate	7790-98-9					8.2E+02			8.2E+02
		7.0E-04 7.0E-04		1	1.4E+09 1.4E+09	~Lithium Perchlorate ~Perchlorate and Perchlorate Salts	7791-03-9 14797-73-0					8.2E+02 8.2E+02			8.2E+02 8.2E+02
		7.0E-04 7.0E-04		1	1.4E+09 1.4E+09	~Potassium Perchlorate ~Sodium Perchlorate	7778-74-7					8.2E+02 8.2E+02			8.2E+02
		2.0E-02		1	1.4E+09 1.4E+09 1.3E+05		7601-89-0 375-73-5					2.3E+04			8.2E+02 2.3E+04
2.25.02	C 6.3E-07 C	5.0E-02		1 0.1 1 0.1	1.4E+09 1.4E+09	Permethrin Phenacetin	52645-53-1 62-44-2	1.5E+03	3.55.03	2.6E+07	1.0E+03	5.8E+04	1.4E+05		4.1E+04
2.2L-03	C 0.3L-07 C	2.5E-01	1	1 0.1	1.4E+09	Phenmedipham	13684-63-4	1.31.403	3.3L+03	2.01-07	1.01+03	2.9E+05	6.9E+05		2.1E+05
		3.0E-01 5.0E-04		1 0.1 1 0.1	1.4E+09 1.4E+09	Phenol Phenothiazine	108-95-2 92-84-2					3.5E+05 5.8E+02	8.3E+05 1.4F+03	1.2E+09	2.5E+05 4.1E+02
		6.0E-03		1 0.1	1.4E+09	Phenylenediamine, m-	108-45-2					7.0E+03	1.7E+04		4.9E+03
4.7E-02		1.9E-01		1 0.1 1 0.1	1.4E+09 1.4E+09	Phenylenediamine, o- Phenylenediamine p-	95-54-5 106-50-3	7.0E+01	1.6E+02		4.9E+01	2.2E+05	5.2E+05		1.6E+05
1.9E-03	Н	2.0E-04		1 0.1	1.4E+09 1.4E+09	Phonylphenol, 2-	90-43-7	1.7E+03	4.0E+03		1.2E+03	2.3E+02	5.5E+02		1.6E+02
		2.0E-02		1 1 0.1	1.6E+03 1.4E+09 9.8E+02 1.4E+09	Phosgene Phosmet Phosm	75-44-5 -732-11-6					2.3E+04	5.5E+04	1.3E+00	1.3E+00 1.6E+04
		4.9E+01	Р	1	1.4E+09	Phosphates, Inorganic ~Aluminum metaphosphate	13776-88-0					5.7E+07			5.7E+07
		4.9E+01 4.9E+01		1	1.4E+09 1.4E+09	~Ammonium polyphosphate ~Calcium pyroghosphate []	68333-79-9 7790-76-3					5.7E+07 5.7E+07			5.7E+07 5.7E+07
		4.9E+01	P	1	1.4E+09	~Diammonium phosphate // /	7783-28-0					5.7E+07			5.7E+07
		4.9E+01 4.9E+01		1	1.4E+09 1.4E+09	~Dicalcium phosphate	7757-93-9	-				5.7E+07 5.7E+07			5.7E+07 5.7E+07
		4.9E+01 4.9F+01		1	1.4E+09 1.4F+09	*Dipotassium phosphate  *Disodium phosphate	7758-11-4 7558-79-4					5.7E+07 5.7F+07			5.7E+07 5.7F+07
		4.9E+01	•	1	1.4E+09	~Monoaluminum phosphate	13530-50-2					5.7E+07			5.7E+07
		4.9E+01 4.9E+01		1	1.4E+09 1.4E+09	~Monoammonium phosphate ~Monocalcium phosphate	7722-76-1 7758-23-8					5.7E+07 5.7E+07			5.7E+07 5.7E+07
		4.9E+01	P	1	1.4E+09	~Monomagnesium phosphate	7757-86-0					5.7E+07			5.7E+07
		4.9E+01 4.9E+01	· ·	1	1.4E+09 1.4E+09	~Monopotassium phosphate ~Monosodium phosphate	7778-77-0 7558-80-7					5.7E+07 5.7E+07			5.7E+07 5.7E+07
		4.9E+01		1	1.4E+09	~Polyphosphoric acid	8017-16-1					5.7E+07			5.7E+07
		4.9E+01 4.9E+01	P	1	1.4E+09 1.4E+09	~Potassium tripolyphosphate ~Sodium acid pyrophosphate	13845-36-8 7758-16-9					5.7E+07 5.7E+07			5.7E+07 5.7E+07
		4.9E+01 4.9E+01	•	1	1.4E+09 1.4E+09	~Sodium aluminum phosphate (acidic) ~Sodium aluminum phosphate (anhydrous)	7785-88-8 10279-59-1					5.7E+07 5.7E+07			5.7E+07 5.7E+07
		4.9E+01	P	1	1.4E+09	~Sodium aluminum phosphate (tetrahydrate)	10305-76-7					5.7E+07			5.7E+07
		4.9E+01 4.9E+01		1	1.4E+09 1.4E+09	~Sodium hexametaphosphate ~Sodium polyphosphate	10124-56-8 68915-31-1					5.7E+07 5.7E+07			5.7E+07 5.7E+07
		4.9E+01 4.9E+01		1	1.4E+09 1.4E+09	~Sodium trimetaphosphate	7785-84-4 7758-29-4					5.7E+07 5.7E+07			5.7E+07
		4.9E+01	P	1	1.4E+09	~Sodium tripolyphosphate ~Tetrapotassium phosphate	7320-34-5					5.7E+07			5.7E+07 5.7E+07
		4.9E+01 4.9E+01		1	1.4E+09 1.4E+09	~Tetrasodium pyrophosphate ~Trialuminum sodium tetra decahydrogenoctaorthophosphate (dihydrate	7722-88-5 ) 15136-87-5					5.7E+07 5.7E+07			5.7E+07 5.7E+07
		4.9E+01	P	1	1.4E+09	~Tricalcium phosphate	7758-87-4					5.7E+07			5.7E+07
		4.9E+01 4.9E+01	•	1	1.4E+09 1.4E+09	~Trimagnesium phosphate ~Tripotassium phosphate	7757-87-1 7778-53-2					5.7E+07 5.7E+07			5.7E+07 5.7E+07
		4.9E+01		1	1.4E+09 1.4E+09	~Trisodium phosphate Phosphine	7601-54-9 7803-51-2					5.7E+07 3.5E+02		1.8E+06	5.7E+07 3.5E+02
		4.9E+01	P 1.0E-02 I	1	1.4E+09	Phosphoric Acid	7664-38-2					5.7E+07		6.0E+07	2.9E+07
		2.0E-05	I V	1	1.4E+09 6.9E+03	Phosphorus, White	7723-14-0					2.3E+01			2.3E+01

Key: I = IRIS; P = PPRTV; A	= ATSDR; C =					= See FAQ; J = New Jersey; O = EPA Office of Water; E = see user guide Section 2								ied (See User (	Guide for Arsenic
	Tovicit	notice) ; c = ca v and Chemical-s			; * = wnere: n SL < 100X c SL; '	= where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration ma Contaminant	ay exceed ceiling limit			ncentration n				Hazard Index (	HI\ = 1
lkl lk	RtD <sub>o</sub>	k k	v I	madon		Contaminant		Ingestion SL	Dermal SL	Inhalation SL	Carcinogenic SL	Ingestion SL	Dermal SL	Inhalation SL	Noncarcinogenic SL
SFO e IUR e	(mg/kg-	e RfC <sub>i</sub> e	o muta-		C <sub>sat</sub> PEF VI			TR=1E-06	TR=1E-06	TR=1E-06	TR=1E-06	THQ=1	THQ=1	THQ=1	THI=1
(mg/kg-day) <sup>-1</sup> y (ug/m <sup>3</sup> ) <sup>-1</sup> y	day)	y (mg/m³) y	I gen G	IABS A	ABS $(mg/kg)$ $(m^3/kg)$ $(m^3/kg)$	g) Analyte	CAS No.	(mg/kg)							
1.4E-02   2.4E-06 C	2.0E-02	1		1	0.1 1.4E+09	~Bis(2-ethylhexyl)phthalate	117-81-7	2.3E+02	5.5E+02	6.9E+06	1.6E+02	2.3E+04	5.5E+04		1.6E+04
	1.0E+00	1		1	D.1 1.4E+09	~Butylphthalyl Butylglycolate	85-70-1					1.2E+06	2.8E+06		8.2E+05
	1.0E-01	1		1	0.1 1.4E+09	~Dibutyl Phthalate	84-74-2					1.2E+05	2.8E+05		8.2E+04
	8.0E-01	I		1	0.1 1.4E+09	~Diethyl Phthalate	84-66-2					9.3E+05	2.2E+06		6.6E+05
	1.0E-01	1	V	1		04 ~Dimethylterephthalate	120-61-6					1.2E+05			1.2E+05
	1.0E-02	Р			0.1 1.4E+09	~Octyl Phthalate, di-N-	117-84-0					1.2E+04	2.8E+04		8.2E+03
	1.0E+00				0.1 1.4E+09	~Phthalic Acid, P-	100-21-0					1.2E+06	2.8E+06	4 25 22	8.2E+05
	2.0E+00 7.0E-02				0.1 1.4E+09 0.1 1.4E+09	~Phthalic Anhydride Picloram	85-44-9 1918-02-1					2.3E+06 8.2E+04	5.5E+06 1.9E+05	1.2E+08	1.6E+06 5.7E+04
	1.0E-04				0.1 1.4E+09	Picramic Acid (2-Amino-4,6-dinitrophenol)	96-91-3					1.2E+02	2.8E+02		8.2E+01
	9.0E-04				0.1 1.4E+09	Picric Acid (2-Arinito-4,0-diniti ophenol)	88-89-1					1.1E+03	2.5E+03		7.4E+02
	1.0E-02	Î			0.1 1.4E+09	Pirimiphos, Methyl	29232-93-7					1.2E+04	2.8E+04		8.2E+03
3.0E+01 C 8.6E-03 C	7.0E-06	Н		1	0.1 1.4E+09	Polybrominated Biphenyls	59536-65-1	1.1E-01	2.6E-01	1.9E+03	7.7E-02	8.2E+00	1.9E+01		5.7E+00
						Polychlorinated Biphenyls (PCBs)									
7.0E-02 S 2.0E-05 S	7.0E-05	1	V			05 ~Aroclor 1016	12674-11-2	4.7E+01	7.9E+01	4.4E+02	2.7E+01	8.2E+01	1.4E+02		5.1E+01
2.0E+00 S 5.7E-04 S			V			05 ~Aroclor 1221	11104-28-2	1.6E+00	2.8E+00	4.4E+00	8.3E-01				
2.0E+00 S 5.7E-04 S			V			25 ~Aroclor 1232	11141-16-5	1.6E+00	2.8E+00	2.4E+00	7.2E-01				
2.0E+00 S 5.7E-04 S			•		1.4E+09 5.9E		53469-21-9	1.6E+00	2.8E+00	1.3E+01	9.5E-01				
2.0E+00 S 5.7E-04 S			V		.14 1.4E+09 6.3E		12672-29-6	1.6E+00	2.8E+00	1.3E+01	9.5E-01	2.25	2.05.51		
2.0E+00 S 5.7E-04 S 2.0E+00 S 5.7E-04 S					1.4E+09 8.4E 1.14 1.4E+09 1.3E		11097-69-1	1.6E+00 1.6E+00	2.8E+00 2.8E+00	1.8E+01 2.8E+01	9.7E-01 9.9E-01	2.3E+01	3.9E+01		1.5E+01
2.0E+00 S 5.7E-04 S					_		11096-82-5	1.02+00	2.00+00	2.00+01	9.96-01	7.05.03	1 25 . 02		4.45.03
3.9E+00 E 1.1E-03 E	6.0E-04	X E 1.3E-03 E			1.4E+09 9.6E 1.14 1.4E+09 3.3E	05 ^Aroclor 5460 06 ^Heptachlorobiphenyl, 2,3,3',4,4',5,5'- (PCB 189)	11126-42-4 39635-31-9	8.4E-01	1.4E+00	3.6E+01	5.2E-01	7.0E+02 2.7E+01	1.2E+03 4.6E+01	1.9E+04	4.4E+02 1.7E+01
3.9E+00 E 1.1E-03 E 3.9E+00 E 1.1E-03 E		E 1.3E-03 E				76 "Heptachlorobiphenyl, 2,3,3,4,4,5,5 - (PCB 189) 76 "Hexachlorobiphenyl, 2,3',4,4',5,5'- (PCB 167)	52663-72-6	8.4E-01 8.4E-01	1.4E+00 1.4E+00	3.6E+01 2.4E+01	5.2E-01 5.2E-01	2.7E+01 2.7E+01	4.6E+01 4.6E+01	1.9E+04 1.3E+04	1.7E+01 1.7E+01
3.9E+00 E 1.1E-03 E					.14 1.4E+09 1.5E		69782-90-7	8.4E-01	1.4E+00	1.6E+01	5.1E-01	2.7E+01	4.6E+01	8.5E+03	1.7E+01
3.9E+00 E 1.1E-03 E					.14 1.4E+09 1.5E		38380-08-4	8.4E-01	1.4E+00	1.7E+01	5.1E-01	2.7E+01	4.6E+01	9.0E+03	1.7E+01
3.9E+03 E 1.1E+00 E						06 ~Hexachlorobiphenyl, \$,3',4,4',5,5'- (PCB 169)	32774-16-6	8.4E-04	1.4E-03	2.4E-02	5.2E-04	2.7E-02	4.6E-02	1.3E+01	1.7E-02
3.9E+00 E 1.1E-03 E	2.3E-05	E 1.3E-03 E	V	1 (	1.4E+09 1.0E	06 ~Pentachlorobiphenyl, 2'-3',4',5- (PCB-123)	65510-44-3	8.4E-01	1.4E+00	1.1E+01	5.0E-01	2.7E+01	4.6E+01	6.0E+03	1.7E+01
3.9E+00 E 1.1E-03 E					.14 1.4E+09 8.3E		31508-00-6	8.4E-01	1.4E+00	8.9E+00	5.0E-01	2.7E+01	4.6E+01	4.8E+03	1.7E+01
3.9E+00 E 1.1E-03 E		E 1.3E-03 E				05 ~Pentachlordbiphenyl, 2,3,3(4,4'- (PCB 105),' ' (	32598-14-4	8.4E-01	1.4E+00	9.1E+00	5.0E-01	2.7E+01	4.6E+01	4.9E+03	1.7E+01
3.9E+00 E 1.1E-03 E					.14 1.4E+09 1.5E		74472-37-0	8.4E-01	1.4E+00	1.6E+01	5.1E-01	2.7E+01	4.6E+01	8.6E+03	1.7E+01
1.3E+04 E 3.8E+00 E	7.0E-09	E 4.0E-07 E	V		1.4E+09 1.0E		57465-28-8	2.5E-04	4.2E-04	3.3E-03	1.5E-04	8.2E-03	1.4E-02	1.8E+00	5.1E-03
2.0E+00   5.7E-04			V		1.4E+09 5.3E	7 7 7 9 7	1336-36-3	1.6E+00	2.8E+00	1.1E+01	9.4E-01				
4.0E-01   1.0E-04   7.0E-02   2.0E-05			V		).14 ).14	"Polychlorinated Biphenyls (low risk)	1336-36-3								
1.3E+01 E 3.8E-03 E	7.0F-06		•		1.14 1.14 1.4E+09	Tetrachlorobiphenyl, 3,3-4,4" (PCB 77)	32598-13-3	2 5F-01	4.2F-01	4 4F+03	1.6F-01	8.2F+00	1.4F+01	2.4F+06	5.1F+00
3.9E+01 E 1.1E-02 E						05 ~Tetrachlorobiphenyl, 8,4,4',\$-(PCB'81)	70362-50-4	8.4E-02	1.4E-01	7.8E-01	4.9E-02	2.7E+00	4.6E+00	4.2E+02	1.7E+00
3,32,01 2 1,12,02 2	2.52 00	6.0E-04 I	•		0.1 1.4E+09	Polymeric Methylene Diphenyl Diisocyanate (PMDI)	9016-87-9	0112 02	1.12.01	7.02.01		2.72.00		3.6E+06	3.6E+06
						Polynuclear Aromatic Hydrocarbons (PAHs)									
	6.0E-02	I	V	1 (	.13 1.4E+09 1.4E	05 ~Acenaphthene	83-32-9	_				7.0E+04	1.3E+05		4.5E+04
	3.0E-01		V		.13 1.4E+09 5.2E	05 ~Anthracene	120-12-7					3.5E+05	6.4E+05		2.3E+05
7.3E-01 E 1.1E-04 C			*		.13 1.4E+09 4.4E	06 ~Benz[a]anthracene	56-55-3	4.5E+00	8.1E+00	4.9E+02	2.9E+00				
1.2E+00 C 1.1E-04 C					.13 1.4E+09	~Benzo(j)fluoranthene	205-82-3	2.7E+00	5.0E+00	1.5E+05	1.8E+00				
7.3E+00   1.1E-03 C					.13 1.4E+09	~Benzo[a]pyrene	50-32-8	4.5E-01	8.1E-01	1.5E+04	2.9E-01				
7.3E-01 E 1.1E-04 C					1.13 1.4E+09	~Benzo[b]fluoranthene	205-99-2	4.5E+00	8.1E+00	1.5E+05	2.9E+00				
7.3E-02 E 1.1E-04 C			V M		1.4E+09	~Benzo[k]fluoranthene	207-08-9	4.5E+01	8.1E+01	1.5E+05	2.9E+01	0.35.04	1 75.05		6.05.04
7.3E-03 E 1.1E-05 C	8.0E-02		-		1.4E+09 8.0E 1.13 1.4E+09	04 ~Chloronaphthalene, Beta- ~Chrysene	91-58-7 218-01-9	4.5F+02	8.1E+02	1.5F+06	2.9F+02	9.3E+04	1.7E+U5		6.0E+04
7.3E+00 E 1.2E-03 C					1.13 1.4E+09	~Dibenz[a,h]anthracene	53-70-3	4.5E-01	8.1E-01	1.4E+04	2.9E-01				
1.2E+01 C 1.1E-03 C			ivi		1.13 1.4E+09	~Dibenz(a,e)pyrene	192-65-4	2.7F-01	5.0F-01	1.4E+04 1.5E+04	1.8E-01				
2.5E+02 C 7.1E-02 C			М		1.4E+09	~Dimethylbenz(a)anthracene, 7,12-	57-97-6	1.3E-02	2.4E-02	2.3E+02	8.4E-03				
	4.0E-02	ı		1 (	.13 1.4E+09	~Fluoranthene	206-44-0					4.7E+04	8.5E+04		3.0E+04
	4.0E-02	1	V	1 (	.13 1.4E+09 2.8E	O5 ~Fluorene	86-73-7					4.7E+04	8.5E+04		3.0E+04
7.3E-01 E 1.1E-04 C			М	1 (	.13 1.4E+09	~Indeno[1,2,3-cd]pyrene	193-39-5	4.5E+00	8.1E+00	1.5E+05	2.9E+00				
2.9E-02 P	7.0E-02		V		.13 3.9E+02 1.4E+09 5.9E		90-12-0	1.1E+02	2.0E+02		7.3E+01	8.2E+04	1.5E+05		5.3E+04
	4.0E-03					04 ~Methylnaphthalene, 2-	91-57-6			4 75	4.70	4.7E+03	8.5E+03	6.45	3.0E+03
	2.0E-02	I 3.0E-03 I			1.4E+09 4.6E		91-20-3	0.75	E 0E	1.7E+01	1.7E+01	2.3E+04	4.2E+04	6.1E+02	5.9E+02
1.2E+00 C 1.1E-04 C					1.4E+09	~Nitropyrene, 4-	57835-92-4	2.7E+00	5.0E+00	1.5E+05	1.8E+00	2.55.01	C 45.01		2.25.04
	3.0E-02 2.0F-02	P	-		0.13 1.4E+09 2.4E 0.1 1.4F+09	Potassium Perfluorobutane Sulfonate	129-00-0 29420-49-3					3.5E+04 2.3F+04	6.4E+04 5.5E+04		2.3E+04 1.6F+04
1.5E-01 I	9.0E-03				0.1 1.4E+09	Prochloraz	67747-09-5	2.2E+01	5.2E+01		1.5E+01	1.1E+04	2.5E+04		7.4E+03
1.31-01	6.0E-03	H	V	1	1.4E+09 4.2E		26399-36-0	2.26+01	J.ZL+U1		1.52+01	7.0E+03	2.JL+04		7.4E+03 7.0E+03
	1.5E-02	ï	•		0.1 1.4E+09 4.2E	Prometon	1610-18-0					1.8E+04	4.1E+04		1.2E+04
	4.0E-03				0.1 1.4E+09	Prometryn	7287-19-6					4.7E+03	1.1E+04		3.3E+03
	1.3E-02				0.1 1.4E+09	Propachlor	1918-16-7					1.5E+04	3.6E+04		1.1E+04

Key: I = IRIS; P = PPRTV; A					See FAQ; $J = New Jersey$ ; $O = EPA Office of Water$ ; $E = see user guide Section 2.3.5$ ; $L = see user guide Section 2.3$ ; $L = see user gui$							lied (See User G	uide for Arsenic
		and Chemical-specific Infor		·	Contaminant	Ū	Carc	inogenic Target Risk (TR)	= 1E-06		Noncancer	Hazard Index (F	
SFO e IUR	k RfD <sub>o</sub>	k k v e RfC <sub>i</sub> e o muta-		Cost PEF VF			Ingestion SL	Dermal SL Inhalation SL	Carcinogenic SI	Ingestion SL	Dermal SL	Inhalation SL N	oncarcinogenic SI
mg/kg-day) <sup>-1</sup> y (ug/m <sup>3</sup> ) <sup>-1</sup>	e (mg/kg- y day)	c comuta	IABS ABS	C <sub>sat</sub> PEF VF (mg/kg) (m <sup>3</sup> /kg) (m <sup>3</sup> /kg)	Analyte	CAS No.	TR=1E-06 (mg/kg)	TR=1E-06 TR=1E-06 (mg/kg) (mg/kg)	TR=1E-06 (mg/kg)	THQ=1 (mg/kg)	THQ=1 (mg/kg)	THQ=1 (mg/kg)	THI=1 (mg/kg)
	4.0E-03		1 0.1	1.4E+09		14-26-1	(6/6/	(8/8/	(***6/**6/	4.7E+03	1.1E+04	(8/ 1.8/	3.3E+03
	5.0E-03		1 0.1	1.4E+09	1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	09-98-8				5.8E+03	1.4E+04		4.1E+03
	2.0E-02		1 0.1	1.4E+09		2312-35-8				2.3E+04	5.5E+04		1.6E+04
	2.0E-03	I V	1	1.1E+05 1.4E+09 6.3E+04		.07-19-7				2.3E+03			2.3E+03
	2.0E-02	I	1 0.1	1.4E+09		139-40-2				2.3E+04	5.5E+04		1.6E+04
	2.0E-02		1 0.1	1.4E+09		22-42-9				2.3E+04	5.5E+04		1.6E+04
	1.3E-02		1 0.1	1.4E+09	The second second	0207-90-1				1.5E+04	3.6E+04	2.45.02	1.1E+04
	1.05.01		1	3.3E+04 1.4E+09 8.9E+03 2.6E+02 1.4E+09 7.0E+03		123-38-6 103-65-1				1.2E+05		3.1E+02 3.1E+04	3.1E+02 2.4E+04
	1.01-01		1	3.5E+02 1.4E+09 7.0E+02		15-07-1				1.21+03		9.3E+03	9.3E+03
	2.0E+01		1 0.1	1.4E+09		7-55-6				2.3E+07	5.5E+07		1.6E+07
		2.7E-04 A	1 0.1	1.4E+09		6423-43-4						1.6E+06	1.6E+06
	7.0E-01	H 2.0E+00 I V	1	1.1E+05 1.4E+09 7.8E+04		.07-98-2				8.2E+05		6.9E+05	3.7E+05
2.4E-01   3.7E-06			1	7.8E+04 1.4E+09 1.0E+04		75-56-9	1.4E+01	3.4E+01	9.7E+00			1.4E+03	1.4E+03
	7.5E-02		1 0.1	1.4E+09		3950-58-5				8.8E+04	2.1E+05		6.2E+04
	1.0E-03		1 0.1	5.3E+05 1.4E+09 5.5E+04		10-86-1				1.2E+03	1 45 00		1.2E+03
3.0E+00 I	5.0E-04		1 0.1 1 0.1	1.4E+09 1.4E+09		.3593-03-8 )1-22-5	1.1E+00	2.65+00	7.7E-01	5.8E+02	1.4E+03		4.1E+02
3.0E+00 I	9.0E-03		1 0.1	1.4E+09 1.4E+09		11-22-5 16578-14-8	1.16+00	2.00+00	7.7E-U1	1.1E+04	2.5E+04		7.4E+03
			1	1.4E+09		NA						1.8E+08	1.8E+08
	3.0E-02		1 0.1	1.4E+09		.0453-86-8				3.5E+04	8.3E+04		2.5E+04
	5.0E-02		1	1.4E+09 4.7E+05		99-84-3				5.8E+04			5.8E+04
	4.0E-03		1 0.1	1.4E+09		33-79-4				4.7E+03	1.1E+04		3.3E+03
2.2E-01 C 6.3E-05			1 0.1	1.4E+09		94-59-7	1.5E+01	3.5E+01 2.6E+05	1.0E+01				
	5.0E-03		1	1.4E+09		7783-00-8				5.8E+03			5.8E+03
			1	1.4E+09		7782-49-2 7 <b>446-34</b> -6				5.8E+03		1.2E+08	5.8E+03 5.8E+03
	5.0E-03 9.0E-02		1 0.1	1.4E+09 1.4E+09		74051-80-2				5.8E+03 1.1E+05	2.5E+05	1.2E+08	7.4E+04
	3.02.02	•	1	1.4E+09	1, 1, 7, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,	631-86-9	_			1.12.05	2.52.05	1.8E+07	1.8E+07
	5.0E-03		0.04	1.4E+09		440-22-4				5.8E+03		1.02.07	5.8E+03
1.2E-01 H	5.0E-03		1 0.1	1.4E+09		122-34-9	2.7E+01	6.4E+01	1.9E+01	5.8E+03	1.4E+04		4.1E+03
	1.3E-02	I	1 0.1	1.4E+09		52476-59-9				1.5E+04	3.6E+04		1.1E+04
	4.0E-03		1	1.4E+09		26628-22-8				4.7E+03			4.7E+03
5.0E-01 C 1.5E-01			.025	1.4E+09		10588-01-9	6.5E+0C	1.1E+02	6.2E+00	2.3E+04		1.2E+06	2.3E+04
2.7E-01 H	3.0E-02 5.0E-02		1 0.1	1.4E+09 1.4E+09		48-18-5 681-49-4	1.2E+01	2.9E+01	8.5E+00	3.5E+04 5.8E+04	8.3E+04	7 75 . 07	2.5E+04 5.8E+04
	2.0E-05		1 0.1	1.4E+09		2-74-8				2.3E+01	5.5E+01	7.7E+07	1.6E+01
			1	1.4E+09		8718-26-8				1.2E+03	3.32.01		1.2E+03
	8.0E-04		1	1.4E+09		13472-45-2				9.3E+02			9.3E+02
	8.0E-04	P	1	1.4E+09	Sodium Tungstate Dihydrate 1	10213-10-2				9.3E+02			9.3E+02
2.4E-02 H	3.0E-02		1 0.1	1.4E+09		961-11-5	1.4E+02	3.2E+02	9.6E+01	3.5E+04	8.3E+04		2.5E+04
5.0E-01 C 1.5E-01	C 2.0E-02 6.0F-01		.025	1.4E+09		7789-06-2	6.5E+0C	1.1E+02	6.2E+00	2.3E+04 7.0F+05		1.2E+06	2.3E+04 7.0F+05
			1 01	1.4E+09		7440-24-6	_				0.25.02		
	3.0E-04 2.0E-01		1 0.1	1.4E+09 8.7E+02 1.4E+09 9.4E+03		57-24-9 100-42-5				3.5E+02 2.3E+05	8.3E+02	4.1E+04	2.5E+02 3.5E+04
	3.0E-01		1 0.1	8.7E+02 1.4E+09 9.4E+03 1.4E+09		100-42-5 NA				3.5E+03	8.3E+03	4.11.704	2.5E+04 2.5E+03
			1 0.1	1.4E+09		.26-33-0				1.2E+03	2.8E+03	1.2E+07	8.2E+02
		Р	1 0.1	1.4E+09	Sulfonylbis(4-chlorobenzene), 1,1'- 8	80-07-9				9.3E+02	2.2E+03		6.6E+02
		1.0E-03 C V	1	1.4E+09		446-11-9						6.0E+06	6.0E+06
			1	1.4E+09		664-93-9						6.0E+06	6.0E+06
2.5E-02 I 7.1E-06			1 0.1 1 0.1	1.4E+09 1.4E+09	Sulfurous acid, 2-chloroethyl 2-[4-(1,1-dimethylethyl)phenoxy]-1-methylethyl ester 1. TCMTB 2	.40-57-8 21564-17-0	1.3E+02	3.1E+02 2.3E+06	9.2E+01	5.8E+04 3.5E+04	1.4E+05 8.3E+04		4.1E+04 2.5E+04
	3.0E-02 7.0E-02		1 0.1	1.4E+09 1.4E+09	-	4014-18-1				3.5E+04 8.2E+04	1.9E+05		5.7E+04
	7.0E-02 2.0F-02		1 0.1	1.4E+09 1.4E+09		34014-18-1 3383-96-8				8.2E+04 2.3F+04	1.9E+05 5.5F+04		5.7E+04 1.6F+04
	1.3E-02	**	1 0.1	1.4E+09		5902-51-2				1.5E+04	3.6E+04		1.1E+04
	2.5E-05	H V	1	3.1E+01 1.4E+09 2.6E+05		3071-79-9				2.9E+01			2.9E+01
	1.0E-03		1 0.1	1.4E+09	Terbutryn 8	886-50-0				1.2E+03	2.8E+03		8.2E+02
	1.0E-04	1	1 0.1	1.4E+09		436-43-1				1.2E+02	2.8E+02		8.2E+01
	3.0E-04	•	1	1.4E+09 5.1E+04		95-94-3				3.5E+02			3.5E+02
2.6E-02   7.4E-06 2.0F-01   5.8F-05			1			30-20-6	1.3E+02	9.4E+00	8.8E+00	3.5E+04			3.5E+04
		•	1	1.9E+03 1.4E+09 1.5E+04		79-34-5	1.6E+01	3.2E+00	2.7E+00	2.3E+04		4.15.03	2.3E+04
2.1E-03 I 2.6E-07	1 6.0E-03 3.0E-02		1 0.1	1.7E+02 1.4E+09 2.4E+03 1.4E+09		127-18-4 58-90-2	1.6E+03	1.1E+02	1.0E+02	7.0E+03 3.5E+04	8.3E+04	4.1E+02	3.9E+02 2.5E+04
2.0E+01 H	3.UE-UZ		1 0.1			68-90-2 6216-25-1	1.6E-01		1.6E-01	3.JE+U4	0.31704		2.JL+U4
	5.0E-04	T	1 0.1	1.4E+09	11 1 1 1 1 1	689-24-5				5.8E+02	1.4E+03		4.1E+02
					, , , , , , , , , , , , , , , , , , , ,								

Key: I = IRIS; P = PPRTV; A					See FAQ; J = New Jersey; O = EPA Office of Water; E = see user guide Section 2.3.5 where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may ex							lied (See User G	iuide for Arsenic
		and Chemical-specific Infor			Contaminant		Card	inogenic Target Risk	TR) = 1E-06		Noncancer	Hazard Index (	
SFO P IUR P	(mg/kg-	k k v e RfC <sub>i</sub> e o muta-		C <sub>sat</sub> PEF VF			Ingestion SL TR=1E-06	Dermal SL Inhalation TR=1E-06 TR=1E-0		Ingestion SL THQ=1	Dermal SL THQ=1	Inhalation SL N THQ=1	loncarcinogenic SL THI=1
(mg/kg-day) <sup>-1</sup> y (ug/m <sup>3</sup> ) <sup>-1</sup> y	day)	c comuta	IABS ABS	(mg/kg) (m³/kg) (m³/kg)	Analyte	CAS No.	(mg/kg)	(mg/kg) (mg/kg		(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
	2.0F-03		1 1 0.0007	2.1E+03 1.4E+09 1.2E+03 1.4F+09		811-97-2 479-45-8				2.3F+03	8.5E+05	4.3E+05	4.3E+05 2.3F+03
	7.0E-06	•	1 0.0007	1.4E+09	Tetryl (Trinitrophenylmethylnitramine) Thallium (I) Nitrate	10102-45-1				8.2F+00	0.35+03		8.2F+00
	1.0E-05		1	1.4E+09	Thallium (Soluble Salts)	7440-28-0				1.2E+01			1.2E+01
	6.0E-06 2.0E-05		1	1.4E+09 1.4E+09	Thallium Acetate	563-68-8				7.0E+00			7.0E+00
			1	1.4E+09 1.4E+09	Thallium Carbonate Thallium Chloride	6533-73-9 7791-12-0				2.3E+01 7.0E+00			2.3E+01 7.0E+00
	2.02 05	**	1	1.4E+09	Thallium Sulfate	7446-18-6				2.3E+01			2.3E+01
	1.3E-02 1.0E-02		1 0.1 1 0.1	1.4E+09 1.4E+09	Thifensulfuron-methyl Thiobencarb	79277-27-3 28249-77-6				1.5E+04 1.2E+04	3.6E+04 2.8E+04		1.1E+04 8.2E+03
	7.0E-02		1 0.0075	1.4E+09	Thiodiglycol	111-48-8				8.2E+04	2.6E+06		7.9E+04
	3.0E-04	**	1 0.1	1.4E+09	Thiofanox	39196-18-4				3.5E+02	8.3E+02		2.5E+02
	8.0E-02 5.0E-03		1 0.1 1 0.1	1.4E+09 1.4E+09	Thiophanate, Methyl Thiram	23564-05-8 137-26-8				9.3E+04 5.8E+03	2.2E+05 1.4E+04		6.6E+04 4.1E+03
	6.0E-01	Н	1	1.4E+09	Tin	7440-31-5				7.0E+05			7.0E+05
	8.0E-02		1	1.4E+09 8.2E+02 1.4E+09 4.3E+03	Titanium Tetrachloride Toluene	7550-45-0 108-88-3				9.3F+04		6.0E+05 9.4E+04	6.0E+05 4.7E+04
1.8E-01 X			1 0.1	1.4E+09	Toluene-2,5-diamine	95-70-5	1.8E+01	4.3E+01	1.3E+01	2.3E+02	5.5E+02		1.6E+02
3.0E-02 P			1 0.1	1.4E+09	Toluidine, p-	106-49-0	1.1E+02	2.6E+02	7.7E+01	4.7E+03	1.1E+04		3.3E+03
	3.0E+00			3.4E-01 1.4E+09 1.1E+03 1.4E+02 1.4E+09 8.3E+02		NA NA				3.5E+06		2.2E+03	3.5E+06 2.2E+03
		X 1.0E-01 P V	1	6.9E+00 1.4E+09 1.0E+03	Total Petroleum Hydrocarbons (Aliphatic Medium)	NA				1.2E+04		4.6E+02	4.4E+02
	4.0E-02 4.0E-03		1 0.1	1.4E+09	Total Petroleum Hydrocarbons (Aromatic High)	NA NA				4.7E+04 4.7E+03	1.1E+05	4.6E+02	3.3E+04 4.2E+02
			1		Total Petroleum Hydrocarbons (Aromatic Low) Total Petroleum Hydrocarbons (Aromatic Medium)	NA NA				4.7E+03 4.7E+03		4.6E+02 6.9E+02	6.0E+02
1.1E+00   3.2E-04			1 0.1	1.4E+09	Toxaphene	8001-35-2	3.0E+00	7.0E+00 5.2E+04	2.1E+00				
	7.5E-03 3.0E-04	•	1 0.1	1.4E+09 1.4E+09 3.4E+03	Tralomethrin Tri-n-butyltin	66841-25-6 688-73-3				8.8E+03 3.5E+02	2.1E+04		6.2E+03 3.5E+02
	8.0E+01		1 0.1	1.4E+09	Triacetin FNA cooper	102-76-1				9.3E+07	2.2E+08		6.6E+07
	3.0E-02	T v	1 0.1	1.4E+09	Triadimefon [] [] () (==================================	43121-43-3				3.5E+04	8.3E+04		2.5E+04
	1.3E-02 1.0E-02	I V	1 0.1	1.4E+09 3.6E+05 1.4E+09	Triallate Triasulfuron	2303-17-5 82097-50-5				1.5E+04 1.2E+04	2.8E+04		1.5E+04 8.2E+03
	8.0E-03	•	1 0.1	1.4E+09	Tribenuron-methyl	101200-48-0				9.3E+03	2.2E+04		6.6E+03
9.0E-03 P	5.0E-03 1.0E-02		1 0.1	1.4E+09 4.8E+04 1.4E+09	Tribromobenzene, 1,2,4- Tributyl Phosphate	615-54-3 / 126-73-8	3.6E+02	8 6F+02	2.6E+02	5.8E+03 1.2E+04	2.8E+04		5.8E+03 8.2E+03
3.02.03	3.0E-04		1 0.1	1.4E+09	Tributyltin Compounds	NA NA	5.02.02	0.02.02	2.02.02	3.5E+02	8.3E+02		2.5E+02
	3.0E-04 3.0E+01		1 0.1 1	1.4E+09	Tributyltin Oxide	56-35-9				3.5E+02 3.5E+07	8.3E+02	1.7E+05	2.5E+02
7.0E-02 I	2.0E-02		1 0.1	1.4E+09	Trichloro-1,2,2-trifluoroethane, 1,1,2-	76-03-9	4.7E+01	1.1E+02	3.3E+01	2.3E+04	5.5E+04	1.76+05	1.7E+05 1.6E+04
2.9E-02 H			1 0.1	1.4E+09	Trichloroaniline HCl, 2,4,6-	33663-50-2	1.1E+02	2.7E+02	7.9E+01				
7.0E-03 X	3.0E-05 8.0E-04	X	1 0.1	1.4E+09 1.4E+09 3.2E+04	Trichloroaniline, 2,4,6- Trichlorobenzene, 1,2,3-	634-93-5 87-61-6	4.7E+02	1.1E+03	3.3E+02	3.5E+01 9.3E+02	8.3E+01		2.5E+01 9.3E+02
2.9E-02 P		I 2.0E-03 P V	1	4.0E+02 1.4E+09 3.0E+04		120-82-1	1.1E+02		1.1E+02	1.2E+04		2.6E+02	9.3E+02 2.6E+02
5.75.00				6.4E+02 1.4E+09 1.7E+03		71-55-6			5.05.65	2.3E+06		3.6E+04	3.6E+04
5.7E-02   1.6E-05   4.6E-02   4.1E-06	4.0E-03 5.0E-04	I 2.0E-04 X V I 2.0E-03 I V M		2.2E+03 1.4E+09 7.2E+03 6.9E+02 1.4E+09 2.2E+03	Trichloroethane, 1,1,2 Trichloroethylene	79 00 5 79-01-6	5.7E+01 7.1E+01	5.5E+0 6.6E+0		4.7E+03 5.8E+02		6.3E+00 1.9E+01	6.3E+00 1.9E+01
	3.0E-01	I V	1	1.2E+03 1.4E+09 1.0E+03	Trichlorofluoromethane	75-69-4				3.5E+05			3.5E+05
1.1E-02   3.1E-06	1.0E-01 1.0E-03		1 0.1 1 0.1	1.4E+09 1.4E+09	Trichlorophenol, 2,4,5- Trichlorophenol, 2,4,6-	95-95-4 88-06-2	3.0E+02	7.0E+02 5.4E+0	5 2.1E+02	1.2E+05 1.2E+03	2.8E+05 2.8E+03		8.2E+04 8.2E+02
1.1E-02   3.1E-06	1.0E-03 1.0E-02		1 0.1	1.4E+09 1.4E+09	Trichlorophenoxyacetic Acid, 2,4,5-	93-76-5	3.02+02	7.01+02 5.41+0	2.15+02	1.2E+03 1.2E+04	2.8E+03 2.8E+04		8.2E+02 8.2E+03
	8.0E-03	1	1 0.1	1.4E+09	Trichlorophenoxypropionic acid, -2,4,5	93-72-1				9.3E+03	2.2E+04		6.6E+03
3.0E+01 I	5.0E-03 4.0E-03	I V I 3.0E-04 I V M		1.3E+03 1.4E+09 1.5E+04 1.4E+03 1.4E+09 1.6E+04		598-77-6 96-18-4	1.1E-01		1.1E-01	5.8E+03 4.7E+03		2.1E+01	5.8E+03 2.1E+01
			1	3.1E+02 1.4E+09 2.3E+03		96-19-5				3.5E+03		3.1E+00	3.1E+00
	2.0E-02 3.0E-03		1 0.1 1 0.1	1.4E+09 1.4E+09	Tricresyl Phosphate (TCP) Tridiphane	1330-78-5 58138-08-2				2.3E+04 3.5E+03	5.5E+04 8.3E+03		1.6E+04 2.5E+03
	3.01-03			2.8E+04 1.4E+09 1.6E+04	•	121-44-8				3.32+03	0.31+03	4.8E+02	4.8E+02
	2.0E+00	P	1 0.1	1.4E+09	Triethylene Glycol	112-27-6				2.3E+06	5.5E+06		1.6E+06
7.7E-03 I	7.5E-03		1	4.8E+03 1.4E+09 7.1E+02 1.4E+09 5.1E+05		420-46-2 1582-09-8	4.2E+02		4.2E+02	8.8F+03		6.2E+04	6.2E+04 8.8F+03
2.0E-02 P	1.0E-02	P	1 0.1	1.4E+09	Trimethyl Phosphate	512-56-1		3.9E+02	1.1E+02	1.2E+04	2.8E+04		8.2E+03
				2.9E+02 1.4E+09 9.4E+03		526-73-8						2.1E+02	2.1E+02
	1.0E-02			2.2E+02 1.4E+09 7.9E+03 1.8E+02 1.4E+09 6.6E+03		95-63-6 108-67-8				1.2E+04		2.4E+02	2.4E+02 1.2E+04
	1.0E-02	**		3.0E+01 1.4E+09 1.0E+03		25167-70-8				1.2E+04			1.2E+04

Key: I = IR	IS; P = PPRTV; A =	ATSDR; C =							See FAQ; J = New Jersey; O = EPA Office of Water; E = see user guide Section 2.3.5; L where n SL < 10X c SL: SSL values are based on DAF=1: m = Concentration may exce								ied (See User	Guide for Arsenic
-		Toxicity	and Chemical-spe		,	WIICIC. II	3E \ 100A	C JL,	Contaminant	ca ceiiiig iiiiic	Carcinogenic Target Risk (TR) = 1E-06			.,	Noncancer Hazard Index (HI) = 1			(HI) = 1
	k k	RfD <sub>o</sub>	k kv		Ī								0 , ,	Carcinogenic SL				,
SFO	e IUR e	(mg/kg-	e RfC <sub>i</sub> e o	muta-		C <sub>sat</sub>	PEF	VF			TR=1E-06	TR=1E-06	TR=1E-06	TR=1E-06	THQ=1	THQ=1	THQ=1	THI=1
(mg/kg-day)	<sup>-1</sup> y (ug/m <sup>3</sup> ) <sup>-1</sup> y	day)	y (mg/m³) y I	gen GIABS	ABS	(mg/kg)	(m <sup>3</sup> /kg)	(m <sup>3</sup> /kg)	Analyte	CAS No.	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
		3.0E-02	T	1	0.019		1.4E+09		Trinitrobenzene, 1,3,5-	99-35-4					3.5E+04	4.4E+05		3.2E+04
3.0E-02	1	5.0E-04	1	1	0.032		1.4E+09		Trinitrotoluene, 2,4,6-	118-96-7	1.1E+02	8.0E+02		9.6E+01	5.8E+02	4.3E+03		5.1E+02
		2.0E-02	P	1	0.1		1.4E+09		Triphenylphosphine Oxide	791-28-€					2.3E+04	5.5E+04		1.6E+04
		2.0E-02	Α	1	0.1		1.4E+09		Tris(1,3-Dichloro-2-propyl) Phosphate	13674-87-8					2.3E+04	5.5E+04		1.6E+04
		1.0E-02	X	1	0.1		1.4E+09		Tris(1-chloro-2-propyl)phosphate	13674-84-5					1.2E+04	2.8E+04		8.2E+03
2.3E+00	C 6.6E-04 C		V	1		4.7E+02	1.4E+09	9.0E+05	Tris(2,3-dibromopropyl)phosphate	126-72-7	1.4E+00		1.7E+01	1.3E+00				
2.0E-02	Р	7.0E-03	Р	1	0.1		1.4E+09		Tris(2-chloroethyl)phosphate	115-96-8	1.6E+02	3.9E+02		1.1E+02	8.2E+03	1.9E+04		5.7E+03
3.2E-03	P	1.0E-01	P	1	0.1		1.4E+09		Tris(2-ethylhexy))phosphate	78-42-2	1.0E+03	2.4E+03		7.2E+02	1.2E+05	2.8E+05		8.2E+04
		8.0E-04	P	1			1.4E+09		Tungsten //	7440-33-7					9.3E+02			9.3E+02
		3.0E-03	I 4.0E-05 A	1			1.4E+09		Uranium (Soluble Salts)	NA					3.5E+03		2.4E+05	3.5E+03
1.0E+00	C 2.9E-04 C			M 1	0.1		1.4E+09			51-79/6	3.3E+00	7.7E+00	5.7E+04	2.3E+00				
	8.3E-03 P	9.0E-03	I 7.0E-06 P	0.026			1.4E+09		Vanadium Pentoxide	1314-62-1			2.0E+03	2.0E+03	1.1E+04		4.2E+04	8.4E+03
		5.0E-03	S 1.0E-04 A	0.026			1.4E+09		Vanadium and Compounds	7440-62-2					5.9E+03		6.0E+05	5.8E+03
		1.0E-03	I V	1					Vernolate	1929-77-7					1.2E+03			1.2E+03
		2.5E-02	1	1	0.1		1.4E+09		Vindozolin	50471-44-8					2.9E+04	6.9E+04		2.1E+04
		1.0E+00	H 2.0E-01 I V	1		2.8E+03	1.4E+09	4.4E+03	Vinyl Acetate	108-05-4					1.2E+06		3.9E+03	3.8E+03
	3.2E-05 H		3.0E-03 I V						Vinyl Bromide / / /	593-60-2			5.2E-01	5.2E-01			1.8E+01	1.8E+01
7.2E-01	I 4.4E-06 I	3.0E-03	I 1.0E-01 I V	M 1		3.9E+03	1.4E+09	9.6E+02	Vinyl Chloride	75-01-4	4.5E+00		2.7E+00	1.7E+00	3.5E+03		4.2E+02	3.7E+02
		3.0E-04	T	1	0.1		1.4E+09		Warfarin	81-81-2					3.5E+02	8.3E+02		2.5E+02
			S 1.0E-01 S V						Xylene, P-	106-42-3					2.3E+05		2.4E+03	2.4E+03
		2.0E-01	S 1.0E-01 S V	1		3.9E+02	1.4E+09	5.5E+03	Xylene, m-	108-38-3					2.3E+05		2.4E+03	2.4E+03
		2.0E-01	S 1.0E-01 S V	1		4.3E+02	1.4E+09	6.5E+03	Xylene, o-	95-47-6					2.3E+05		2.8E+03	2.8E+03
		2.0E-01	I 1.0E-01 I V	1		2.6E+02	1.4E+09			1330-20-7					2.3E+05		2.5E+03	2.5E+03
		3.0E-04		1			1.4E+09		Zinc Phosphide	1314-84-7					3.5E+02			3.5E+02
		3.0E-01	1	1			1.4E+09		Zinc and Compounds	7440-66-6					3.5E+05			3.5E+05
		5.0E-02	1	1	0.1		1.4E+09		Zineb	12122-67-7					5.8E+04	1.4E+05		4.1E+04
		8.0E-05	X	1			1.4E+09		Zirconium	7440-67-7					9.3E+01			9.3E+01

	L values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Co		
Toxicity and Chemical-specific	Contaminant	Carcinogenic Target Risk (TR) = 1E-06	
k k v		Carcinogenic SL	Noncarcinogenic SL
IUR e RfC <sub>i</sub> e o muta		TR=1E-06	HI=1
ug/m³) <sup>-1</sup> y (mg/m³) y l gen	Analyte CAS No	(ug/m³)	(μg/m³)
	Acephate 30560-19		
2.2E-06   9.0E-03   V	Acetaldehyde 75-07-0	5.6E+00	3.9E+01
1.2E-00 1 5.0E-05 1 V	Acetochlor 34256-82		3.52101
3.1E+01 A V	Acetone 67-64-1		1.4E+05
2.0E-03 X	Acetone Cyanohydrin 75-86-5		8.8E+00
6.0E-02 I V	Acetonitrile 75-05-8		2.6E+02
V	Acetophenone 98-86-2		
L.3E-03 C	Acetylaminofluorene, 2- 53-96-3	9.4E-03	
2.0E-05 I V	Acrolein 107-02-8	3.12 03	8.8E-02
		4.25.04	
L.OE-04 I 6.0E-03 I M	Acrylamide 79-06-1	1.2E-01	2.6E+01
1.0E-03 I V	Acrylic Acid 79-10-7		4.4E+00
5.8E-05   2.0E-03   V	Acrylonitrile 107-13-1	1.8E-01	8.8E+00
6.0E-03 P	Adiponitrile 111-69-3		2.6E+01
	Alachlor 15972-60	3	
	Aldicarb 116-06-3		
	Aldicarb Sulfone 1646-88-4		
105.02	Aldicarb sulfoxide 1646-87-3	2.55.00	
1.9E-03 I V	Aldrin 309-00-2	2.5E-03	
1.0E-04 X V	Allyl Alcohol 107-18-6		4.4E-01
5.0E-06 C 1.0E-03 I V	Allyl Chloride 107-05-1	2.0E+00	4.4E+00
5.0E-03 P	Aluminum 7429-90-5		2.2E+01
	Aluminum Phosphide 20859-73	3	
	Ametryn 834-12-8		
5.0E-03 C	Aminobiphenyl, 4- 92-67-1	2.0E-03	
J.UL-U3 C		2.0E-03	
	Aminophenol, m- 591-27-5		
	Aminophenol, p=117111 (723-30-8		
	Amitraz // \33089-61		
1.0E-01   V	Ammonia 7564-41-5	``	4.4E+02
	Ammonium Sulfamate \\ 7773-06-0		
2 OF O2 V V	Amyl Alcohol, tert-	/	1.3E+01
3.0E-03 X V			
I.6E-06 C 1.0E-03 I	Aniline 62-53-3	7.7E+00	4.4E+00
	Anthraquinone, 9,10-		
	Antimony (metallic) 7440-36-0		
	Antimony Pentoxide		
	Antimony Tetrovide (1339 81.6		
2.0E-04 I	Antimony Trioxide 1339-64-4		8.8E-01
		2.22.22	
1.3E-03   1.5E-05 C	Arsenic, Inorganic \ \7440,38-2	2.9E-03	6.6E-02
5.0E-05 I	Arsine U U U \(\tau_{\tau_1}\tau_2\tau_1\tau_1\tau_1\tau_2\tau_1\tau_1\tau_2\tau_1\tau_1\tau_2\tau_1\tau_1\tau_1\tau_2\tau_1\t		2.2E-01
	Asulam 3337-71-1		
	Atrazine 1912-24-9		
2.5E-04 C	Auramine 492-80-8	4.9E-02	
	Avermectin B1 65195-55		
1.05.02.1			4.45.04
1.0E-02 A	Azinphos-methyl 86-50-0		4.4E+01
3.1E-05 I V	Azobenzene 103-33-3	4.0E-01	
7.0E-06 P	Azodicarbonamide 123-77-3		3.1E-02
5.0E-04 H	Barium 7440-39-3		2.2E+00
L.5E-01 C 2.0E-04 C M	Barium Chromate 10294-40		8.8E-01
V	Benfluralin 1861-40-1		
	Benomyl 17804-35		
	Bensulfuron-methyl 83055-99		
	Bentazon 25057-89		
V	Bentazon         25057-89           Benzaldehyde         100-52-7		
	Bentazon 25057-89	1.6E+00	1.3E+02
	Bentazon         25057-89           Benzaldehyde         100-52-7		1.3E+02
7.8E-06   3.0E-02   V	Bentazon       25057-89         Benzaldehyde       100-52-7         Benzene       71-43-2         Benzenediamine-2-methyl sulfate, 1,4-       6369-59-1		1.3E+02
7.8E-06 I 3.0E-02 I V	Bentazon       25057-89         Benzaldehyde       100-52-7         Benzene       71-43-2         Benzenediamine-2-methyl sulfate, 1,4-       6369-59-1         Benzenethiol       108-98-5	1.6E+00	1.3E+02
7.8E-06 I 3.0E-02 I V	Bentazon       25057-89         Benzaldehyde       100-52-7         Benzene       71-43-2         Benzenediamine-2-methyl sulfate, 1,4-       6369-59-2         Benzenethiol       108-98-5         Benzidine       92-87-5		1.3E+02
7.8E-06 I 3.0E-02 I V 5.7E-02 I	Bentazon       25057-89         Benzaldehyde       100-52-7         Benzene       71-43-2         Benzenediamine-2-methyl sulfate, 1,4-       6369-59-2         Benzenethiol       108-98-5         Benzidine       92-87-5         Benzoic Acid       65-85-0	1.6E+00	1.3E+02
7.8E-06 I 3.0E-02 I V	Bentazon     25057-89       Benzaldehyde     100-52-7       Benzene     71-43-2       Benzenediamine-2-methyl sulfate, 1,4-     6369-59-2       Benzenethiol     108-98-5       Benzidine     92-87-5       Benzoic Acid     65-85-0       Benzotrichloride     98-07-7	1.6E+00	1.3E+02
7.8E-06 I 3.0E-02 I V 5.7E-02 I	Bentazon     25057-89       Benzaldehyde     100-52-7       Benzene     71-43-2       Benzenediamine-2-methyl sulfate, 1,4-     6369-59-2       Benzenethiol     108-98-5       Benzidine     92-87-5       Benzoic Acid     65-85-0       Benzotrichloride     98-07-7       Benzyl Alcohol     100-51-6	1.6E+00 1.8E-04	
7.8E-06 I 3.0E-02 I V  5.7E-02 I	Bentazon     25057-89       Benzaldehyde     100-52-7       Benzene     71-43-2       Benzenediamine-2-methyl sulfate, 1,4-     6369-59-2       Benzenethiol     108-98-5       Benzidine     92-87-5       Benzoic Acid     65-85-0       Benzotrichloride     98-07-7	1.6E+00	1.3E+02 4.4E+00
7.8E-06 I 3.0E-02 I V 5.7E-02 I	Bentazon     25057-89       Benzaldehyde     100-52-7       Benzene     71-43-2       Benzenediamine-2-methyl sulfate, 1,4-     6369-59-2       Benzenethiol     108-98-5       Benzidine     92-87-5       Benzoic Acid     65-85-0       Benzotrichloride     98-07-7       Benzyl Alcohol     100-51-6	1.6E+00 1.8E-04	
7.8E-06 I 3.0E-02 I V 5.7E-02 I V  V 1.9E-05 C 1.0E-03 P V	Bentazon     25057-89       Benzaldehyde     100-52-7       Benzene     71-43-2       Benzenediamine-2-methyl sulfate, 1,4-     6369-59-3       Benzenethiol     108-98-5       Benzidine     92-87-5       Benzoic Acid     65-85-0       Benzotrichloride     98-07-7       Benzyl Alcohol     100-51-6       Benzyl Chloride     100-44-7       Beryllium and compounds     7440-41-7	1.6E+00 1.8E-04 2.5E-01 5.1E-03	4.4E+00
7.8E-06 I 3.0E-02 I V 6.7E-02 I V M V 1.9E-05 C 1.0E-03 P V	Bentazon     25057-89       Benzaldehyde     100-52-7       Benzene     71-43-2       Benzenediamine-2-methyl sulfate, 1,4-     6369-59-2       Benzenethiol     108-98-5       Benzidine     92-87-5       Benzoic Acid     65-85-0       Benzotrichloride     98-07-7       Benzyl Alcohol     100-51-6       Benzyl Chloride     100-44-7       Beryllium and compounds     7440-41-7       Bifenox     42576-02	1.6E+00 1.8E-04 2.5E-01 5.1E-03	4.4E+00
7.8E-06 I 3.0E-02 I V 5.7E-02 I V M 4.9E-05 C 1.0E-03 P V 2.4E-03 I 2.0E-05 I	Bentazon     25057-89       Benzaldehyde     100-52-7       Benzene     71-43-2       Benzenediamine-2-methyl sulfate, 1,4-     6369-59-2       Benzenethiol     108-98-5       Benzidine     92-87-5       Benzoic Acid     65-85-0       Benzotrichloride     98-07-7       Benzyl Alcohol     100-51-6       Benzyl Chloride     100-44-7       Beryllium and compounds     7440-41-7       Bifenox     42576-02       Biphenthrin     82657-04	1.6E+00 1.8E-04 2.5E-01 5.1E-03	4.4E+00 8.8E-02
7.8E-06 I 3.0E-02 I V 5.7E-02 I V M 1.9E-05 C 1.0E-03 P V 2.4E-03 I 2.0E-05 I	Bentazon     25057-89       Benzaldehyde     100-52-7       Benzene     71-43-2       Benzenediamine-2-methyl sulfate, 1,4-     6369-59-2       Benzenethiol     108-98-5       Benzidine     92-87-5       Benzoic Acid     65-85-0       Benzotrichloride     98-07-7       Benzyl Alcohol     100-51-6       Benzyl Chloride     100-44-7       Beryllium and compounds     7440-41-7       Bifenox     42576-02       Biphenthrin     82657-04       Biphenyl, 1,1'-     92-52-4	1.6E+00 1.8E-04 2.5E-01 5.1E-03	4.4E+00
7.8E-06 I 3.0E-02 I V 5.7E-02 I V M 4.9E-05 C 1.0E-03 P V 2.4E-03 I 2.0E-05 I	Bentazon       25057-89         Benzaldehyde       100-52-7         Benzene       71-43-2         Benzenediamine-2-methyl sulfate, 1,4-       6369-59-2         Benzenethiol       108-98-5         Benzidine       92-87-5         Benzoic Acid       65-85-0         Benzotrichloride       98-07-7         Benzyl Alcohol       100-51-6         Berzyl Chloride       100-44-7         Beryllium and compounds       7440-41-7         Bifenox       42576-02         Biphenthrin       82657-04         Biphenyl, 1,1'-       92-52-4         Bis(2-chloro-1-methylethyl) ether       108-60-1	1.6E+00 1.8E-04 2.5E-01 5.1E-03	4.4E+00 8.8E-02
7.8E-06 I 3.0E-02 I V 5.7E-02 I V M 5.7E-02 I V M 4.0E-04 X V	Bentazon     25057-89       Benzaldehyde     100-52-7       Benzene     71-43-2       Benzenediamine-2-methyl sulfate, 1,4-     6369-59-2       Benzenethiol     108-98-5       Benzidine     92-87-5       Benzoic Acid     65-85-0       Benzotrichloride     98-07-7       Benzyl Alcohol     100-51-6       Benzyl Chloride     100-44-7       Beryllium and compounds     7440-41-7       Bifenox     42576-02       Biphenthrin     82657-04       Biphenyl, 1,1'-     92-52-4	1.6E+00 1.8E-04 2.5E-01 5.1E-03	4.4E+00 8.8E-02
7.8E-06 I 3.0E-02 I V 5.7E-02 I V M 1.9E-05 C 1.0E-03 P V 2.4E-03 I 2.0E-05 I	Bentazon       25057-89         Benzaldehyde       100-52-7         Benzene       71-43-2         Benzenediamine-2-methyl sulfate, 1,4-       6369-59-2         Benzenethiol       108-98-5         Benzidine       92-87-5         Benzoic Acid       65-85-0         Benzotrichloride       98-07-7         Benzyl Alcohol       100-51-6         Berzyl Chloride       100-44-7         Beryllium and compounds       7440-41-7         Bifenox       42576-02         Biphenthrin       82657-04         Biphenyl, 1,1'-       92-52-4         Bis(2-chloro-1-methylethyl) ether       108-60-1	1.6E+00 1.8E-04 2.5E-01 5.1E-03	4.4E+00 8.8E-02

Touchy and Cleaner Appeal   Controlled   Con	Toxicity and Chemical-specific	. values are based on DAF=1; m = Concentration may exceed ceiling limit (See Use Contaminant	i Guide), s – Conce		
March   Marc	Toxicity and Chemical-Specific	Contaminant			
Outward	K REC KV			~	~
2.0   2.0   1     2.0   2.0   1     2.0   2.0   1     2.0	-   -   -   -   -   -				
2.65 Cut   V	(ug/m³) <sup>-1</sup> y (mg/m³) y I gen	Analyte		(ug/m³)	(μg/m³)
2 0.07 2   7   7   8 cm   Second Printende   10254-55   8 55-01   10264   10254-55   1		Bisphenol A	80-05-7		
2.05-22   FV   Serio Michaele   1025-455   S.74-31   S.54-32   S.74-32   S	2.0E-02 H	Boron And Borates Only	7440-42-8		8.8E+01
1.5-03 C V   Somo frithinoride   737-072	2.0E-02 P V		10294-34-5		8.8E+01
Society   V   Strong-Allored Burnels   1954-19, 4					
AGE NO   1					
	6.05.04. V			2.05.02	
AB - 10   X   X   X   X   X   X   X   X   X				2.0E-02	2.65.02
37-60   C					
13-06					1.8E+02
Second   V					
Section   Sect	1.1E-06 I V	Bromoform	75-25-2	1.1E+01	
Second   S	5.0E-03 I V	Bromomethane	74-83-9		2.2E+01
Second   100   1	V	Bromophos	2104-96-3		
38-65   20-63   V		Bromoxynil	1689-84-5		
30-8-05   2 06-90   V   V   Startieries, 1.3-   1.5-00	V	·			
No.				4 1E 01	8 8E+00
3.05 + Ol P V   V   Duylate Abox No. sec   78 + 92   1.35 + 05				4.1L-01	8.8L+00
3.85-9.1 P V V Sulylachol, acc	V				
Section   Sect					
S7F-08   C					1.3E+05
Butylated hydroxytoluene   128-37-0		Butylate	2008-41-5		
V   Sylpherane, n-	5.7E-08 C	Butylated hydroxyanisole	25013-16-5	2.2E+02	
V   Sylpherane, n-		Butylated hydroxytoluene	128-37-0		
No.	V				
Secondary   Seco		· ·			
Carbon   C	•				
1.8E-0.5   1.0E-0.5 A   Cadmium (Otel)   740-0.43   7	V				
18-01   1.0F-05   A   Cadmium/Water    2440-43-9   3.8F-03   3.8	1.05.02				
1.5E-0.1   C   2.0E-0.4   C   M   Galcium Chromate				6.05.22	4.45.55
2,2E-03 C C C C C C C C C C C C C C C C C C C					
4.8E.03 C C Captain 139.06.2 1.9E-01  Corbon Buildie 7,0E-01   V Corbon Buildie 7515-0 1.9E-01  6.0E-06   1.0E-01   V Corbon Buildie 7515-0 1.0E-01   V Corbon Sudide			<del></del>	8.2E-05	
Captan   Carbon   C	2.2E-03 C	Caprolactam	1 1 1 1 1		9.6E+00
Carbon   C	4.3E-05 C			2.9E-01	
Carbon Function	6.6E-07 C	Captan \\'\	133-06-2	1.9E+01	
Carbon Function		Carbaryl	63-25-2		
		•			
6.0E-06   1.0E-01   V   Carbon Tetrachloride   56-23-5   2.0E+00   4.4E+02	7.0F-01 I V				3 1F+03
1.0E-01 P V   Carbony Sulfide				3 0E+00	
SZSE\$148   SZSE\$149   SZSE\$149				2.02+00	
Second   V	1.0E-01 P V				4.4E+02
Society   Control Hydrate   Society   Societ			11 11		
Note		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			
Chloramben   133-90-4			1 1 1		3.9E+00
18-75   19-00-04   1	V	Chloral Hydrate ( c-1 1-5 (	302-17-0		
1.0E-04   7.0E-04   V   Chlordecone (Kepone)   1.0E-04   V   Chlordecone (Kepone)   1.0E-04   V   Chlorie vinjhos (Alove)   1.0E-04   V   Chlorie vinjhos (Alove)   1.0E-04   V   Chlorie Dioxide (Alove)		Chloramben	133-90-4		
1.0E-04   7.0E-04   V   Chlordecone (Kepone)   1.0E-04   V   Chlordecone (Kepone)   1.0E-04   V   Chlorie vinjhos (Alove)   1.0E-04   V   Chlorie vinjhos (Alove)   1.0E-04   V   Chlorie Dioxide (Alove)		Chloranil	118-75-2		
4.6E-03   C	1.0E-04   7.0E-04   V			1.2E-01	3.1E+00
Chlorienvinphos					
Chlorimuron, Ethyl-				2., 2 03	
1.5E-04   A   V   Chlorine Dioxide					
Chlorine Dioxide Chlorite (Sodium Salt)	4.55.04.4.17	<del> -</del>			C 45 04
Chloride (Sodium Salt)					
S.OE+01   V   Chloro-1,1-difluoroethane, 1-   75-68-3   2.2E+05   3.0E-04   2.0E-02   V   Chloro-1,3-butadiene, 2-   126-99-8   3.0E-04   126-99-8   3.0E-04   126-99-8   3.0E-04   126-99-8   3.0E-04   126-99-8   3.0E-05   V   Chloro-2-methylaniline, 4-   95-69-2   1.6E-01	2.0E-04 I V				8.8E-01
3.0E-04   1 2.0E-02   1 V					
Chloro-2-methylaniline HCl, 4-   3165-93-3   1.6E-01					
7.7E-05 C	3.0E-04   2.0E-02   V			4.1E-02	8.8E+01
Chloroacetic Acid   107-20-0		Chloro-2-methylaniline HCl, 4-	3165-93-3		
Chloroacetic Acid   79-11-8	7.7E-05 C	Chloro-2-methylaniline, 4-	95-69-2	1.6E-01	
Chloroacetic Acid   79-11-8	V				
3.0E-05   Chloroactophenone, 2- Chloroactiline, p- Chlorobenzene   106-47-8 Chlorobenzene   108-90-7   106-47-8 Chlorobenzene   108-90-7   108-90-7   108-90-7   108-90-7   108-90-7   108-90-7   108-90-7   108-90-7   108-90-7   108-90-7   108-90-7   108-90-7   108-90-7   108-90-7   108-90-7   108-90-7   108-90-7   109-90-7   10					
Chloroaniline, p-Chlorobenzene   106-47-8   108-90-7   106-47-8   108-90-7   108-90-7   108-90-7   108-90-7   108-90-7   108-90-7   108-90-7   108-90-7   108-90-7   108-90-7   108-90-7   109-69-3   108-90-7   109-69-3	3 0F-05 I				1 3F-01
S.OE-O2   P V V   Chlorobenzene   108-90-7   108-90-7     2.2E+02     3.1E-05   C   Chlorobenzoic Acid, p-	3.32 03 1				1.52 01
3.1E-05 C Chlorobenzilate S10-15-6 Chlorobenzic Acid, p- 74-11-3 74-11	5.0F-02 P V				2 2F+02
Chlorobenzoic Acid, p-				4.05.04	2.22.02
Solid   P V   Chlorobenzotrifluoride, 4-   98-56-6	3.1E-U5 C			4.UE-U1	
V	0.05.01.5.11				4.05.00
S.OE+O1   V   Chlorodifluoromethane   75-45-6   Chlorodifluoromethane   75-45-6   Chlorodifluoromethane   107-07-3		· ·			1.3E+03
V     Chloroethanol, 2-     107-07-3     107-07-3       2.3E-05 I 9.8E-02 A V 9.0E-02 I V 9.0E-02 I V 0.0Form     67-66-3     5.3E-01     4.3E+02       6.9E-04 C V 0.0Formethyl Methyl Ether     74-87-3     3.9E+02       6.9E-04 C V 0.0Formethyl Methyl Ether     107-30-2     1.8E-02	V		109-69-3		
2.3E-05   1 9.8E-02 A V   Chloroform   67-66-3   5.3E-01   4.3E+02   9.0E-02   V   Chloromethane   74-87-3   3.9E+02   6.9E-04   C   V   Chloromethyl Methyl Ether   107-30-2   1.8E-02	5.0E+01 I V	Chlorodifluoromethane	75-45-6		2.2E+05
2.3E-05     I 9.8E-02     A V     Chloroform     67-66-3     5.3E-01     4.3E+02       9.0E-02     I V     Chloromethane     74-87-3     3.9E+02       6.9E-04     C     V     Chloromethyl Methyl Ether     107-30-2     1.8E-02	V	Chloroethanol, 2-	107-07-3		
9.0E-02 I V Chloromethane 74-87-3 3.9E+02 6.9E-04 C V Chloromethyl Methyl Ether 107-30-2 1.8E-02	2.3E-05   9.8E-02 A V	·		5.3E-01	4.3E+02
6.9E-04 C V Chloromethyl Methyl Ether 107-30-2 1.8E-02				5.52.02	
				1 8F-02	3.52102
1.UE-US A LUDIOFONITODENZENE, O- 88-73-3 4.4F-02		· · · ·		1.02-02	4.45.03
	1.UE-U3 X	Ciliofonia obenzene, o-	08-73-3		4.4E-UZ

Toxicity and Chemical-specific	values are based on DAF=1; m = Concentration may exceed ceiling limit (See Us Contaminant	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Carcinogenic Target Risk (TR) = 1E-0	
b b v	Contaminant		Carcinogenic SL	Noncarcinogenic SL
IUR e RfC <sub>i</sub> e o muta-			TR=1E-06	HI=1
		01011		
(ug/m <sup>3</sup> ) <sup>-1</sup> y (mg/m <sup>3</sup> ) y I gen	Analyte	CAS No.	(ug/m³)	(μg/m³)
	Chloronitrobenzene, p-	100-00-5		2.6E+00
	Chlorophenol, 2-	95-57-8		
4.0E-04 C V	Chloropicrin	76-06-2		1.8E+00
8.9E-07 C	Chlorothalonil	1897-45-6	1.4E+01	
V	Chlorotoluene, o-	95-49-8		
	Chlorotoluene, p-	106-43-4		
•	Chlorozotocin	54749-90-5	1.8E-04	
	Chlorpropham	101-21-3	1.02 04	
	Chlorpyrifos	2921-88-2		
	Chlorpyrifos Methyl	5598-13-0		
	Chlorsulfuron	64902-72-3		
	Chlorthal-dimethyl	1861-32-1		
	Chlorthiophos	60238-56-4		
	Chromium(III), Insoluble Salts	16065-83-1		
8.4E-02 S 1.0E-04 I M	Chromium(VI)	18540-29-9	1.5E-04	4.4E-01
	Chromium, Total	7440-47-3		
	Clofentezine	74115-24-5		
	Cobalt	7440-48-4	1.4E-03	2.6E-02
	Coke Oven Emissions	8007-45-2	2.0E-02	2.02.02
	Copper	7440-50-8	2.01-02	
		108-39-4		2.6E+03
	Cresol, m-			
	Cresol, o-	95-48-7		2.6E+03
	Cresol, p-	106-44-5		2.6E+03
	Cresol, p-chloro-m-	59-50-7		
	Cresols	1319-77-3		2.6E+03
	Crotonaldehyde, trans-	123-73-9		
4.0E-01 I V	Çumene	98-82-8		1.8E+03
6.3E-05 C	Cupferron	135-20-6	1.9E-01	
	Çyanazine	21725-46-2		
	Cyanides	1000		
	~Calcium Cyanide	592-01-8		
	~Copper Cyanide	544-92-3		
8.0E-04 S V	"Cyanide (CN-)	,57-12-5		3.5E+00
V	~Cyanogen U U \\ (=====)	460-19-5		3.52.700
v	"Cyanogen Bromide	506-68-3		
V		506-77-4		
	~Cyanogen Chloride			2.55.00
8.0E-04 I V	~Hydrogen Cyanide	74-90-8 1 <del>5</del> 1-50-8		3.5E+00
	~Potassium Cyanide			
	~Potassium Silver Cyahide	/ /506-61-6		
	~Silver Cyanide	506-64-9		
	~Sodium Cyanide // CTTTTT	143-83-9		
	"Thiocyanates U U U SCIENCE CELLED (	L) NA.		
V	~Thiocyanic Acid	463-56-9		
	~Zinc Cyanide	557-21-1		
6.0E+00 I V	Cyclohexane	110-82-7		2.6E+04
	Cyclohexane, 1,2,3,4,5-pentabromo-6-chloro-	87-84-3		
	Cyclohexanone	108-94-1		3.1E+03
	Cyclohexene	110-83-8		4.4E+03
	Cyclohexylamine	108-91-8		2.03
	Cyfluthrin	68359-37-5		
	Cyhalothrin	68085-85-8		
	Cypermethrin Cyromazine	52315-07-8		
	•	66215-27-8	4.0	
	DDD	72-54-8	1.8E-01	
	DDE, p,p'-	72-55-9	1.3E-01	
	DDT	50-29-3	1.3E-01	
	Dalapon	75-99-0		
	Daminozide	1596-84-5	2.4E+00	
	Decabromodiphenyl ether, 2,2',3,3',4,4',5,5',6,6'- (BDE-209)	1163-19-5		
	Demeton	8065-48-3		
	Di(2-ethylhexyl)adipate	103-23-1		
	Diallate	2303-16-4		
	Diazinon	333-41-5		
	Dibenzothiophene	132-65-0		
	Dibromo-3-chloropropane, 1,2-	96-12-8	2.0E-03	8.8E-01
			2.01-03	5.6L-01
	Dibromobenzene, 1,3-	108-36-1		
	Dibromobenzene, 1,4-	106-37-6		
V	Dibromochloromethane	124-48-1		

Contingency	Toxicity and Chemical-specific	Contaminant	aide), s conce	Carcinogenic Target Risk (TR) = 1E-06	
18	k k v				
Secret   V   Observation Debtylers arounded   196-94   206-92   196-92					
A.C0 X V   Observation (Methylene bounds)   74-95-1   1.84-01					
20,000   1				2.0E-02	
A 2-0   P   V	4.0E-03 X V				1.8E+01
42.50   P   V   000000-2000000   2.500000   2.500000   2.5000000000   2.5000000000000000000000000000000000000		, ,			
Age   Column   Colu	4.05.00.0			2.05.02	
A					
Decknown   Decknown   1.16-00   1.					
2.06 O. I. W. Uschlorobenzen, J. S. 10.0 (10.46.7) 13.1-10. S. 59-103	4.2E-03 P V			2.9E-03	
11.60   C   8.6 Gol   V   Dictionophromic, 3-7   91-94-1   3.6 C-2	2.0E-01 H V				8.8E+02
3.6 C   C   Dichlorobenziden, 3;   Signature   Signa				1.1F+00	
Dickloropersophenom, 4.1+   90.982					332.55
16:00   C			90-98-2		
28.60   7.06-03   P V	1.0E-01 X V	Dichlorodifluoromethane	75-71-8		4.4E+02
2.05.01   V   V   Ochborochlyens, 1,2-tile   155-99-2   Ochborochlyens, 1,2-tile   155-99-2   Ochborochlyens, 1,2-tile   155-99-2   Ochborochlyens, 1,2-tile   156-99-2   Ochborochlyens, 1,2-tile   156-99-2   Ochborochlyens, 2,4-tile   109-83-2   Ochborophenocy, 4,4-tile   109-83-2   Ochborophenocy, 4,4-tile   109-83-2   Ochborophenocy, 4,4-tile   142-4   94-81-6   Ochborophenocy, 1,4-tile   142-2-9   Ochboropheno	1.6E-06 C V	Dichloroethane, 1,1-	75-34-3	7.7E+00	
V   Onkhorcethylene, 1,2-tans-   156-50-5	2.6E-05 I 7.0E-03 P V	Dichloroethane, 1,2-	107-06-2	4.7E-01	3.1E+01
Ochtorothylene, 12 trans	2.0E-01 I V	Dichloroethylene, 1,1-	75-35-4		8.8E+02
Dichrosphenol, 24   106-80   200-82		Dichloroethylene, 1,2-cis-			
Dichlorophenoy, Acetic, Acid, 42,4- 944-26     Dichlorophenoy, Dichloropheno	V				
Diction Copheron Syllaytic Acid, 4-(2,4-   94-82-6   94-82-6   126-00   18E-01   106-05 C 4.06-83   V   Diction propagane, 1,3-   142-28-9   142-28-9   142-28-9   142-28-9   146-06   126-02   V   Diction propagane, 1,3-   142-28-9   142-28-9   146-06   126-02   V   Diction propagane, 1,3-   142-28-9   146-06   146-02   146-					
106 05 C 4 0F 03 1 V   Dichropropage, 12   128-01   128					
V   Dichropropane, 1,3   147,289		The state of the s			
District			1.2E+00	1.8E+01	
ABF-60   1 20F-02   V   Opt-throughpurs, 13-   23-27-9-   3.16-00   8.88-01   22-60   0   0   0   0   0   0   0   0   0	V				
Safe 05   C   Suff-o4     Dichlorous   Dic				0.17.00	
Decretophos   141.6-2					
3.0E-04 X V   Dicyclopentalene   77-73-6	8.3E-05 C 5.0E-04 I			1.5E-U1	2.2E+00
A6F-03	2 0E 04 V V				1.25±00
30E-04   C   50E-03   F   C   50E-04   P   Deth-lose (Spcol Mondoutly Ether   11242				2 7F-03	1.31+00
2.0F-04 P					2.2E+01
1.0E-04 P		St. the colonies			
3.0E-04 P		[ ] [ [ [ ] ] [ ] [ ] [ ] [ ] [ ] [ ] [	the second second	Y	
1.0E-01   C	3.0E-04 P		111-90-0	)	
Difference   1	V	Diethylformamide (-)	617-84-5		
1.3E-05   C   V   Diffuence thane, 13—   1.5E+05   1.5	1.0E-01 C	Diethylstilbestrol		1.2E-04	
4.0E-01 I V Diffuoresthane, 15		Difenzoquat	43222-48-6		
1.3E-05 C V DikopropylEther		g			
7.0E-01 P V   Diisopropy Ether   108-20-5     3.1E-03     3.1E-03					1.8E+05
V   Diisopropyl Methylphosphonate   1445-75/6   55290-64-7				9.4E-01	
Dimethigh   Dimetholate   Dimetholate   Dimetholate   Dimethoxybenzidine, 3,3'   119-90-4   Dimethylmethylphosphonate   756-79-6   Dimethylmethylphosphonate   756-79-6   Dimethylmethylphosphonate   756-79-6   Dimethylmethylphosphonate   756-79-6   Dimethylmethylphosphonate   Dimethylmethylphosphonate   Dimethylmethylphosphonate   Dimethylmethylphosphonate   Dimethylphosphonate   Dimethylphonate   Dimethylphonat			1 1 1 1		3.1E+03
Dimethoate   Dimethoatine, 2.4-   Dimethoatine	V				
Dimethylyhosphonate					
1.3E-03   C   Dimethylmethylphosphonate   756-79-6					
1.3E-03   C					
Dimethylaniline HCl, 2,4-Dimethylaniline, 2,4-Dimitroblene, 2,6-Dimethylaniline, 2,4-Dimitroblene, 2,6-Dimitroblene, 2,4-Dimitroblene, 2,6-Dimitroblene, 2,4-Dimitroblene, 2,6-Dimitroblene, 2,4-Dimitroblene, 2,4-Dimitroblene, 2,6-Dimitroblene, 2,4-Dimitroblene, 2,4-Dimitroblene	1.3E-03 C			9.4F-03	
Dimethylaniline, 2,4-   Dimethylaniline, N,N-   121-69-7   Dimethylaniline, N,N-   119-93-7   Dimethylaniline, N,N-   119-93-7   Dimethylaniline, N,N-   119-93-7   Dimethylaniline, N,N-   Dimethyl					
Dimethylbenzidine, 3,3'-   119-93-7   Dimethylbenzidine, 3,3'-   119-93-7   Dimethylbenzidine, 3,3'-   Dimethylbenzidine, 3,3'-   Dimethylbenzidine, 3,3'-   Dimethylphrommide   68-12-2   1.3E+02			95-68-1		
3.0E-02   V   Dimethylhdrazine, 1,1-   57-14-7   8.8E-03     1.6E-01   C	V	Dimethylaniline, N,N-	121-69-7		
2.0E-06 X V Dimethylhydrazine, 1,1- 57-14-7					
1.6E-01       C       V       Dimethylhydrazine, 1,2-Dimethylphenol, 2,4-Dimethylphenol, 2,4-Dimethylphenol, 2,6-Dimethylphenol, 2,6-Dimethylphenol, 3,4-Dimethylphenol, 3,4-Dimethylphenol, 3,4-Dimethylphenol, 3,4-Dimethylphenol, 3,4-Dimethylphenol, 3,4-Dimethylphenol, 3,4-Dimethylphenol, 3,4-Dimethylphenol, 3,4-Dimethylphenol, 3,6-Dimethylphenol, 3,6-Dimethylphenol, 4,6-Dimethylphenol, 4,6-Dimethylphenol, 4,6-Dimethylphenol, 4,6-Dimethylphenol, 4,6-Dimethylphenol, 4,6-Dimethylphenol, 2,4-Dimethylphenol,	3.0E-02 I V	· · · · · · · · · · · · · · · · · · ·	68-12-2		1.3E+02
Dimethylphenol, 2,4-   105-67-9   105-67-9     105-67-9     105-67-9     105-67-9     105-67-9     105-67-9     105-67-9     105-67-9     105-67-9     105-67-9   105-67-9     105-67-9					8.8E-03
Dimethylphenol, 2,6-   Dimethylphenol, 3,4-   95-65-8     95-65-8     9.4E-01     9.4E-0	1.6E-01 C V			7.7E-05	
Dimethylphenol, 3,4-   Dimethyloride   Dimet					
1.3E-05       C       V       Dimethylvinylchloride       513-37-1       9.4E-01         1.3E-05       Dinitro-o-cresol, 4,6-       534-52-1       131-89-5         Dinitro-o-cyclohexyl Phenol, 4,6-       131-89-5       131-89-5         Dinitrobenzene, 1,2-       528-29-0       100-25-4         Dinitrobenzene, 1,3-       100-25-4       100-25-4         Dinitrobenzene, 1,4-       100-25-4       51-28-5         Dinitrobluene Mixture, 2,4/2,6-       NA         8.9E-05       Dinitrobluene Mixture, 2,4/2,6-       NA         Dinitrobluene, 2,4-       121-14-2       1.4E-01         Dinitrobluene, 2,6-       606-20-2					
Dinitro-o-cresol, 4,6-   534-52-1   Dinitro-o-cyclohexyl Phenol, 4,6-   131-89-5   Dinitrobenzene, 1,2-   528-29-0	1 2 E 0 5 C V			9.4F.01	
Dinitro-o-cyclohexyl Phenol, 4,6-Dinitrobenzene, 1,2-Dinitrobenzene, 1,2-Dinitrobenzene, 1,3-Dinitrobenzene, 1,3-Dinitrobenzene, 1,4-Dinitrophenol, 2,4-Dinitrophenol, 2,4-Dinitrotoluene, 2,4-Dinitrotoluene, 2,6-Dinitrotoluene, 2,6-Dinitrotoluen	1.52-05 €			3.42 01	
Dinitrobenzene, 1,2-       528-29-0         Dinitrobenzene, 1,3-       99-65-0         Dinitrobenzene, 1,4-       100-25-4         Dinitrophenol, 2,4-       51-28-5         Dinitrotoluene Mixture, 2,4/2,6-       NA         8.9E-05 C       Dinitrotoluene, 2,4-         Dinitrotoluene, 2,6-       606-20-2         Dinitrotoluene, 2-Amino-4,6-       35572-78-2					
Dinitrobenzene, 1,3-   99-65-0   100-25-4					
Dinitrobenzene, 1,4-   100-25-4   51-28-5					
B.9E-05     C       Dinitrotoluene Mixture, 2,4/2,6-     NA       B.9E-05     Dinitrotoluene, 2,4-       Dinitrotoluene, 2,6-     606-20-2       Dinitrotoluene, 2-Amino-4,6-     35572-78-2					
8.9E-05     C     Dinitrotoluene, 2,4- Dinitrotoluene, 2,6-     121-14-2 G06-20-2     1.4E-01       Dinitrotoluene, 2-Amino-4,6-     35572-78-2     35572-78-2					
8.9E-05     C     Dinitrotoluene, 2,4- Dinitrotoluene, 2,6-     121-14-2 G06-20-2     1.4E-01       Dinitrotoluene, 2-Amino-4,6-     35572-78-2     35572-78-2		Dinitrotoluene Mixture, 2,4/2,6-	NA		
Dinitrotoluene, 2-Amino-4,6- 35572-78-2	8.9E-05 C		121-14-2	1.4E-01	
		Dinitrotoluene, 2,6-	606-20-2		
Dinitrotoluene, 4-Amino-2,6- 19406-51-0					
		Dinitrotoluene, 4-Amino-2,6-	19406-51-0		

	values are based on DAF=1; m = Concentration may exceed ceiling limit (See U	ser duide), s – conce		
Toxicity and Chemical-specific	Contaminant		Carcinogenic Target Risk (TR) = 1E-06	
k k v			Carcinogenic SL	Noncarcinogenic SL
IUR e RfC <sub>i</sub> e o muta-			TR=1E-06	HI=1
(ug/m <sup>3</sup> ) <sup>-1</sup> y (mg/m <sup>3</sup> ) y I gen	Analyte	CAS No.	(ug/m³)	(μg/m³)
	Dinitrotoluene, Technical grade	25321-14-6		
	Dinoseb	88-85-7		
5.0E-06 I 3.0E-02 I V	Dioxane, 1,4-	123-91-1	2.5E+00	1.3E+02
	Dioxins			
1.3E+00 I	~Hexachlorodibenzo-p-dioxin, Mixture	NA	9.4E-06	
3.8E+01 C 4.0E-08 C V	~TCDD, 2,3,7,8-	1746-01-6	3.2E-07	1.8E-04
3.8E+01 C 4.0E-08 C V		957-51-7	5.2E-07	1.6E-04
	Diphenamid			
	Diphenyl Sulfone	127-63-9		
	Diphenylamine	122-39-4		
2.2E-04 I	Diphenylhydrazine, 1,2-	122-66-7	5.6E-02	
	Diquat	85-00-7		
1.4E-01 C	Direct Black 38	1937-37-7	8.8E-05	
1.4E-01 C	Direct Blue 6	2602-46-2	8.8E-05	
1.4E-01 C	Direct Brown 95	16071-86-6	8.8E-05	
	Disulfoton	298-04-4		
V	Dithiane, 1,4-	505-29-3		
	Diuron	330-54-1		
	Dodine	2439-10-3		
V	EPTC	759-94-4		
V				
V	Endosulfan Endoshall	115-29-7		
	Endothall Endothal	145-73-3		
105.06	Endrin	72-20-8		
1.2E-06   1.0E-03   V	Epichlorohydrin	106-89-8	1.0E+01	4.4E+00
2.0E-02 I V	Epoxybutane, 1,2	106 88 7		8.8E+01
	Ethanol, 2-(2-methoxyethoxy)-	111-77-3		
	Ethephon	16672-87-0		
	Ethion	563-12-2		
6.0E-02 P V	Ethoxyethanol Acetate, 2-	111-15-9		2.6E+02
2.0E-01 I V	Ethoxyethanol, 25000 (5000)	110-80-5		8.8E+02
7.0E-02 P V	Ethyl Acetate	141-78-6		3.1E+02
8.0E-03 P V	Ethyl Acrylate	140-88-5		3.5E+01
1.0E+01   V	Ethyl Chloride (Chloroethane)	75-00-3	; ;	4.4E+04
1.0E101 1 V	Ethyl Ether U U U Callata Caraca	60-29-7	*	4.42104
3.0E-01 P V	Ethyl Methacrylate	97-63-2		1.3E+03
3.0L-01 F V	Ethyl-p-nitrophenyl Phosphonate	2104-64-5		1.31+03
2.5E-06 C 1.0E+00 I V	Ethylbenzene	100-41-4	4.9E+00	4.4E+03
	Ethylene Cyanohydrin	109-78-4		
V	Ethylene Diamine	107-15-3		
4.0E-01 C	Ethylene drycol	107-21-1		1.8E+03
1.6E+00 I	Ethylene Glycol Monobutyl Ether	111-75,2		7.0E+03
8.8E-05 C 3.0E-02 C V	Ethylene Oxide	75-21-8	1.4E-01	1.3E+02
1.3E-05 C	Ethylene Thiourea	96-45-7	9.4E-01	
1.9E-02 C V	Ethyleneimine	151-56-4	6.5E-04	
	Ethylphthalyl Ethyl Glycolate	84-72-0		
	Fenamiphos	22224-92-6		
	Fenpropathrin	39515-41-8		
	Fenvalerate	51630-58-1		
	Fluometuron	2164-17-2		
1.3E-02 C	Fluoride	16984-48-8		5.7E+01
1.3E-02 C	Fluorine (Soluble Fluoride)	7782-41-4		
1.3E-U2 C				5.7E+01
	Fluridone	59756-60-4		
	Flurprimidol	56425-91-3		
	Flusilazole	85509-19-9		
	Flutolanil	66332-96-5		
	Fluvalinate	69409-94-5		
	Folpet	133-07-3		
	Fomesafen	72178-02-0		
	Fonofos	944-22-9		
1.3E-05 I 9.8E-03 A V	Formaldehyde	50-00-0	9.4E-01	4.3E+01
3.0E-04 X V	Formic Acid	64-18-6		1.3E+00
	Fosetyl-AL	39148-24-8		
	Furans			
V	~Dibenzofuran	132-64-9		
v	~Furan	110-00-9		
2.0E+00 I V	~Tetrahydrofuran	109-99-9		8.8E+03
2.UE+UU 1 V				0.0E+U3
5 OF 02 H V	Furazolidone Furfural	67-45-8 98-01-1		2.2E+02
5.0E-02 H V				Z.ZE+UZ
4.3E-04 C	Furium	531-82-8	2.9E-02	

	. values are based on DAF=1; m = Concentration may exceed ceiling limit (See Use)	Guidej, 3 - Correc		
Toxicity and Chemical-specific	Contaminant		Carcinogenic Target Risk (TR) = 1E-06	
k k v			Carcinogenic SL	Noncarcinogenic SL
IUR e RfC <sub>i</sub> e o muta-			TR=1E-06	HI=1
ug/m <sup>3</sup> ) <sup>-1</sup> y (mg/m <sup>3</sup> ) y I gen	Analyte	CAS No.	(ug/m³)	(μg/m³)
8.6E-06 C	Furmecyclox	60568-05-0	1.4E+00	
	Glufosinate, Ammonium	77182-82-2		
8.0E-05 C	Glutaraldehyde	111-30-8		3.5E-01
1.0E-03 H V	Glycidyl	765-34-4		4.4E+00
	Glyphosate	1071-83-6		
V	Guanidine	113-00-8		
	Guanidine Chloride	50-01-1		
	Haloxyfop, Methyl	69806-40-2		
1.3E-03 I V	Heptachlor	76-44-8	9.4E-03	
2.6E-03 I V	Heptachlor Epoxide	1024-57-3	4.7E-03	
V V	Hexabromobenzene	87-82-1	4.72-03	
•	Hexabromodiphenyl ether, 2,2',4,4',5,5'- (BDE-153)	68631-49-2		
1.6E-04 I V	Hexachlorobenzene	118-74-1	2.7E-02	
2.2E-05 I V	Hexachlorobutadiene	87-68-3	5.6E-01	
1.8E-03	Hexachlorocyclohexane, Alpha-	319-84-6	6.8E-03	
5.3E-04 I	Hexachlorocyclohexane, Beta-	319-85-7	2.3E-02	
3.1E-04 C	Hexachlorocyclohexane, Gamma- (Lindane)	58-89-9	4.0E-02	
5.1E-04 I	Hexachlorocyclohexane, Technical	608-73-1	2.4E-02	
2.0E-04 I V	Hexachlorocyclopentadiene	77-47-4		8.8E-01
1.1E-05 C 3.0E-02 I V	Hexachloroethane	67-72-1	1.1E+00	1.3E+02
	Hexachlorophene	70-30-4		
	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	121-82-4		
1.0E-05 I V	Hexamethylene Diisocyanate, 1,6-	822-06-0		4.4E-02
	Hexamethylphosphoramide	680-31-9		
7.0E-01 I V	Hexane, N-	110-54-3		3.1E+03
	Hexanedioic Acid	124-04-9		
3.0E-02 I V	Hexanone, 2-	591-78-6		1.3E+02
	Hexazinone	51235-04-2		
	Hexythiazox Company (1997)	-78587-05-0-	Ð	
	Hydramethylnon L	67485-29-4 -		
4.9E-03   3.0E-05 P V	Hudrazino Estat	302-01-2	2.5E-03	1.3E-01
4.9E-03 I	Hydrazine Sulfate	10034-93-2	2.5E-03	
2.0E-02 I V	Hydrogen Chloride	7647-01-0		8.8E+01
1.4E-02 C V	Hydrogen Fluoride	7664-39-3		6.1E+01
2.0E-03 I V	Hydrogen Sulfide	7783-06-4		8.8E+00
2.02 03 1 1	Hydroquinone	123-31-9		0.02.00
	Imazalil FIGURE O O CARN	35554-44-0		
	Imazaquin // \\	81335-37-7		
	Imazethapyr	81335-77-5		
	lodine	,-, 7,553-56-2		
	Iprodione U U V C	36734-19-7		
.,	Iron	7439-89-6		
2.05±00. C	Isobutyl Alcohol	78-83-1		9.85.03
2.0E+00 C	Isophorone	78-59-1		8.8E+03
V	Isopropalin	33820-53-0		
2.0E-01 P V	Isopropanol	67-63-0		8.8E+02
	Isopropyl Methyl Phosphonic Acid	1832-54-8		
	Isoxaben	82558-50-7		
3.0E-01 A V	JP-7	NA		1.3E+03
	Lactofen	77501-63-4		
	Lead Compounds			
1.5E-01 C 2.0E-04 C M	~Lead Chromate	7758-97-6	8.2E-05	8.8E-01
1.2E-05 C	~Lead Phosphate	7446-27-7	1.0E+00	
3.0E-05 C	~Lead acetate	301-04-2	1.5E-01	
	~Lead and Compounds	7439-92-1		
1.2E-05 C	~Lead subacetate	1335-32-6	1.0E+00	
V	~Tetraethyl Lead	78-00-2		
V	Lewisite	541-25-3		
	Linuron	330-55-2		
	Lithium	7439-93-2		
	мсра	94-74-6		
	мсрв	94-81-5		
	МСРР	93-65-2		
	Malathion	121-75-5		
7.0E-04 C	Maleic Anhydride	108-31-6		3.1E+00
7.02-04-0	· · · · · · · · · · · · · · · · · · ·			3.11.100
	Maleic Hydrazide	123-33-1		
	Malononitrile	109-77-3		
	Mancozeb	8018-01-7		

Toxicity and Chemical-specific	Contaminant	alacjj s collec	Carcinogenic Target Risk (TR) = 1E-06	
k k v			Carcinogenic SL	Noncarcinogenic SL
IUR e RfC <sub>i</sub> e o muta-			TR=1E-06	HI=1
(ug/m³) <sup>-1</sup> y (mg/m³) y I gen	Analyte	CAS No.	(ug/m³)	(μg/m³)
	Maneb	12427-38-2		
5.0E-05 I	Manganese (Diet)	7439-96-5		
5.0E-05 I	Manganese (Non-diet)	7439-96-5		2.2E-01
	Mephosfolan	950-10-7		
	Mepiquat Chloride Mercury Compounds	24307-26-4		
2.05.04.6		7407.04.7		4.05.00
3.0E-04 S	~Mercuric Chloride (and other Mercury salts)	7487-94-7		1.3E+00
3.0E-04 I V	~Mercury (elemental) ~Methyl Mercury	7439-97-6 22967-92-6		1.3E+00
	~Phenylmercuric Acetate	62-38-4		
V	Merphos	150-50-5		
v v	Merphos Oxide	78-48-8		
	Metalaxyl	57837-19-1		
3.0E-02 P V	Methacrylonitrile	126-98-7		1.3E+02
3.0E-02 1 V	Methamidophos	10265-92-6		1.50102
2.0E+01 I V	Methanol	67-56-1		8.8E+04
2.02.01 1 4	Methidathion	950-37-8		0.02104
	Methomyl	16752-77-5		
1.4E-05 C	Methoxy-5-nitroaniline, 2-	99-59-2	8.8E-01	
	Methoxychlor	72-43-5	5.52.52	
1.0E-03 P V	Methoxyethanol Acetate, 2-	110-49-6		4.4E+00
2.0E-02   V	Methoxyethanol, 2-	109-86-4		8.8E+01
V	Methyl Acetate	79-20-9		
2.0E-02 P V	Methyl Acrylate	96-33-3		8.8E+01
5.0E+00 I V	Methyl Ethyl Ketone (2-Butanone)	78-93-3		2.2E+04
1.0E-03 X 2.0E-05 X V	Methyl Hydrazine	60-34-4	1.2E-02	8.8E-02
3.0E+00 I V	Methyl Isobutyl Ketone (4-methyl-2-pentanone)	108-10-1		1.3E+04
1.0E-03 C V	Methyl Isocyanate	624-83-9		4.4E+00
7.0E-01 I V	Methyl Methacrylate	80-62-6		3.1E+03
	Methyl Parathion	298-00-0	-0	
	Methyl Phosphonic Acid	993-13-5		
4.0E-02 H V	Methyl Styrene (Mixed Isomers)	25013-15-4		1.8E+02
2.8E-05 C	Methyl methanesulfonate \\\	66-27/3	4.4E-01	
2.6E-07 C 3.0E+00 I V	Methyl tert-Butyl Ether (MTBE)	1634-04-4	4.7E+01	1.3E+04
	Methyl-1,4-benzenediamine dihydrochloride, 2-	615-45-2		
	Methyl-5-Nitroaniline, 2-	99-55-8		
2.4E-03 C	Methyl-N-nitro-N-nitrosoguanidine, N-	70-25-7	5.1E-03	
3.7E-05 C	Methylaniline Hydrochloride; 2-	63,6-21-5	3.3E-01	
	Methylarsonic acid	124-58-3		
	Methylbenzene,1-4-diamine mondfiydrochloride, 2-	74612-12-7		
6.3E-03 C M	Methylbenzene-1,4-diamine sulfate, 2- Methylcholanthrene, 3-	615-50-9 / 56-49-5	1.9E-03	
1.0E-08   6.0E-01   V M	Methylene Chloride	75-09-2	1.2E+03	2.6E+03
4.3E-04 C M	Methylene-bis(2-chloroaniline), 4,4'-	101-14-4	2.9E-02	2.6E+03
1.3E-05 C	Methylene-bis(N,N-dimethyl) Aniline, 4,4'-	101-14-4	9.4E-01	
4.6E-04 C 2.0E-02 C	Methylenebisbenzenamine, 4,4'-	101-77-9	2.7E-02	8.8E+01
4.0L-04 C 2.0L-02 C 6.0E-04 I	Methylenediphenyl Diisocyanate	101-77-5	2.72 02	2.6E+00
V	Methylstyrene, Alpha-	98-83-9		
	Metolachlor	51218-45-2		
	Metribuzin	21087-64-9		
	Metsulfuron-methyl	74223-64-6		
V	Mineral oils	8012-95-1		
5.1E-03 C V	Mirex	2385-85-5	2.4E-03	
	Molinate	2212-67-1		
	Molybdenum	7439-98-7		
	Monochloramine	10599-90-3		
	Monomethylaniline	100-61-8		
	Myclobutanil	88671-89-0		
	N,N'-Diphenyl-1,4-benzenediamine	74-31-7		
V	Naled	300-76-5		
1.0E-01 P V	Naphtha, High Flash Aromatic (HFAN)	64742-95-6		4.4E+02
0.0E+00 C	Naphthylamine, 2-	91-59-8		
265 04 0 :	Napropamide	15299-99-7		
2.6E-04 C 1.4E-05 C	Nickel Acetate	373-02-4	4.7E-02	6.1E-02
2.6E-04 C 1.4E-05 C	Nickel Carbonate	3333-67-3	4.7E-02	6.1E-02
2.6E-04 C 1.4E-05 C V	Nickel Carbonyl	13463-39-3	4.7E-02	6.1E-02
2.6E-04 C 1.4E-05 C	Nickel Hydroxide	12054-48-7	4.7E-02	6.1E-02
2.6E-04 C 2.0E-05 C	Nickel Oxide	1313-99-1	4.7E-02	8.8E-02

Toxicity and Chemical-specific Contaminant		Carcinogenic Target Risk (TR) = 1E-06	Noncancer Hazard Index (HI) = 1
k k v		Carcinogenic SL	Noncarcinogenic SL
IUR e RfCi e o muta-		TR=1E-06	HI=1
(ug/m³) <sup>-1</sup> y (mg/m³) y I gen Analyte	CAS No.	(ug/m³)	(μg/m³)
2.4E-04 I 1.4E-05 C Nickel Refinery Dust	NA	5.1E-02	6.1E-02
2.6E-04 C 9.0E-05 A Nickel Soluble Salts	7440-02-0	4.7E-02	3.9E-01
4.8E-04   1.4E-05 C Nickel Subsulfide	12035-72-2	2.6E-02	6.1E-02
2.6E-04 C 1.4E-05 C Nickelocene	1271-28-9	4.7E-02	6.1E-02
Nitrate	14797-55-8	32	0.12 02
Nitrate + Nitrite (as N)	NA		
Nitrite	14797-65-0		
5.0E-05 X Nitroaniline, 2-	88-74-4		2.2E-01
6.0E-03 P Nitroaniline, 4-	100-01-6		2.6E+01
4.0E-05   9.0E-03   V Nitrobenzene	98-95-3	3.1E-01	3.9E+01
Nitrocellulose	9004-70-0		
Nitrofurantoin	67-20-9		
3.7E-04 C Nitrofurazone	59-87-0	3.3E-02	
Nitroglycerin	55-63-0		
Nitroguanidine	556-88-7		
8.8E-06 P 5.0E-03 P V Nitromethane	75-52-5	1.4E+00	2.2E+01
2.7E-03 H 2.0E-02 I V Nitropropane, 2-	79-46-9	4.5E-03	8.8E+01
7.7E-03 C M Nitroso-N-ethylurea, N-	759-73-9	1.6E-03	
3.4E-02 C M Nitroso-N-methylurea, N-	684-93-5	3.6E-04	
	924-16-3	7.7E-03	
2.0E-03 C Nitroso-di-N-propylamine, N-	621-64-7	6.1E-03	
8.0E-04 C Nitrosodiethanolamine, N-	1116-54-7	1.5E-02	
4.3E-02 I M Nitrosodiethylamine, N-	55-18-5	2.9E-04	
1.4E-02   4.0E-05 X V M Nitrosodimethylamine, N-	62-75-9	8.8E-04	1.8E-01
2.6E-06 C Nitrosodiphenylamine, N-	86-30-6	4.75+00	
6.3E-03 C V Nitrosomethylethylamine, N-	10595-95-6	1.9₹-03	
1.9E-03 C Nitrosomorpholine [N-]	59-89-2	6.5೬-03	
2.7E-03 C Nitrosopiperidine [N-]	100-75-4	4.5ᡛ-03	
6.1E-04   Nitrosopyrrolidine, N-	930-55-2	2.01-02	
Nitrotoluene, m-	99-08-1		
V Nitrotoluene, o-	88-72-2	,	
Nitrotoluene, p-	99-99-0	1	
2.0E-02 P V Nonane, n-	111-84-2	) <u> </u>	8.8E+01
Norflurazon (L) (3 (CELEE) (ECCE)	27314-13-2	Z	0.0E101
Octabromodiphenyl Ether	32536-52-0		
Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	2691-41-0		
Octamethylpyrophosphoramide	152-16-9		
Oryzalin ()	19044=88-3		
Oxadiazon	19666-30-9		
Oxamyl	23135-22-D		
Oxyfluorfen	42874-03/3		
Paclobutrazol	76738-62-0		
Paraquat Dichloride	1910-42-5		
Parathion	56-38-2		
V Pebulate	1114-71-2		
Pendimethalin	40487-42-1		
V Pentabromodiphenyl Ether	32534-81-9		
Pentabromodiphenyl ether, 2,2',4,4',5- (BDE-99)	60348-60-9		
V Pentachlorobenzene	608-93-5		
V Pentachloroethane	76-01-7		
	76-01-7 82-68-8		
	82-68-8 87-86-5	2.4E+00	
· · · · · · · · · · · · · · · · · · ·		Z.4E+UU	
Pentaerythritol tetranitrate (PETN)	78-11-5		4.45.00
1.0E+00 P V Pentane, n-	109-66-0		4.4E+03
Perchlorates			
~Ammonium Perchlorate	7790-98-9		
~Lithium Perchlorate	7791-03-9		
~Perchlorate and Perchlorate Salts	14797-73-0		
~Potassium Perchlorate	7778-74-7		
~Sodium Perchlorate	7601-89-0		
V Perfluorobutane Sulfonate	375-73-5		
Permethrin	52645-53-1		
6.3E-07 C Phenacetin	62-44-2	1.9E+01	
Phenmedipham	13684-63-4		
2.0E-01 C Phenol	108-95-2		8.8E+02
Phenothiazine	92-84-2		0.02.02
Phenylenediamine, m-	108-45-2		
Phenylenediamine, o-	95-54-5		

RfC <sub>1</sub>   R	= 1E-06   Noncancer Hazard Index (HI) = 1   Noncarcinogenic SL   HI=1   (µg/m³)
IUR (ug/m³)*1       e RfC <sub>i</sub> (mg/m³)       e o (mg/m³)       muta- (ug/m³)       Analyte       CAS No.       (ug/m³)         Phenylenediamine, p- Phenylphenol, 2-       Phenylphenol, 2-       90-43-7         Phorate       298-02-2	HI=1
(ug/m³)¹¹ y (mg/m³) y 1 gen     Analyte     CAS No. (ug/m³)       Phenylenediamine, p-Phenylphenol, 2-Phorate     106-50-3 90-43-7       Phorate     298-02-2	
Phenylenediamine, p-       106-50-3         Phenylphenol, 2-       90-43-7         Phorate       298-02-2	(μg/111 )
Phenylphenol, 2-         90-43-7           Phorate         298-02-2	
Phorate 298-02-2	
3.0E-04   V   Phosgene	1.3E+00
Phosmet 732-11-6	
Phosphates, Inorganic	
~Aluminum metaphosphate 13776-88-0	
~Ammonium polyphosphate 68333-79-9	
~Calcium pyrophosphate 7790-76-3	
~Diammonium phosphate 7783-28-0	
~Dicalcium phosphate 7757-93-9	
~Dimagnesium phosphate 7782-75-4	
~Dipotassium phosphate 7758-11-4	
~Disodium phosphate 7558-79-4	
~Monoaluminum phosphate 13530-50-2	
~Monoammonium phosphate 7722-76-1	
~Monocalcium phosphate 7758-23-8	
~Monomagnesium phosphate 7757-86-0	
~Monopotassium phosphate 7778-77-0	
~Monosodium phosphate 7558-80-7	
~Polyphosphoric acid 8017-16-1	
~Potassium tripolyphosphate 13845-36-8	
~Sodium acid pyrophosphate 7758-16-9	
~Sodjum aluminum phosphate (acidic) 7785-88-8	
~Sodium aluminum phosphate (anhydrous) 10279-59-1	
~Sodium aluminum phosphate (tetrahydrate) 10305-76-7	
~Sodium hexametaphosphate 10124-56-8	
~Sodium polyphosphate 68915-31-1	
~Sodium trimetaphosphate 7785-84-4	
~Sodium tripolyphosphate / /7758;29-4 /	
~Tetrapotassium phosphate 7320-34-5	
~Tetrasodium pyrophosphate \\ C===== \\ 7722-88-5 \\ \	
"Trialuminum sodium tetra decahydrogenoctaorthophosphate (dihydrate) 15136-87-5	
~Tricalcium phosphate 7758-87-4	
~Trimagnesium phosphate 7757-87-1	
~Tripotassium phosphate 7778-53-2	
~Trisodium phosphate 7601-54-9	
3.0E-04   V   Phosphine 7803-51-2	1.3E+00
1.0E-02   Phosphoric Acid 7664-38-2	4.4E+01
V Phosphorus, White 7723-14-0	
Phthalates U U U C C C C C	
2.4E-06 C "Bis(2-ethylhexyl)phthalate 117-81-7 5.1E+00	
~Butylphthalyl Butylglycolate 85-70-1	
~Dibutyl Phthalate 84-74-2	
~Diethyl Phthalate 84-66-2	
V "Dimethylterephthalate 120-61-6	
~Octyl Phthalate, di-N- 117-84-0	
~Phthalic Acid, P- 100-21-0	
2.0E-02 C Phthalic Anhydride 85-44-9	8.8E+01
Picloram 1918-02-1	
Picramic Acid (2-Amino-4,6-dinitrophenol) 96-91-3	
Picric Acid (2,4,6-Trinitrophenol)	
Pirimiphos, Methyl 29232-93-7	
8.6E-03 C Polybrominated Biphenyls 59536-65-1 1.4E-03	
Polychlorinated Biphenyls (PCBs)	
2.0E-05 S V ~Aroclor 1016 12674-11-2 6.1E-01	
5.7E-04 S V ~Aroclor 1221 11104-28-2 2.1E-02	
5.7E-04 S V ~Aroclor 1232 11141-16-5 2.1E-02	
5.7E-04 S V ~Aroclor 1242 53469-21-9 2.1E-02	
5.7E-04 S V ~Aroclor 1248 12672-29-6 2.1E-02	
5.7E-04 S V ~Aroclor 1254 11097-69-1 2.1E-02	
5.7E-04 S V ~Aroclor 1260 11096-82-5 2.1E-02	
V ~Aroclor 5460 11126-42-4	
1.1E-03 E 1.3E-03 E V ~Heptachlorobiphenyl, 2,3,3',4,4',5,5'- (PCB 189) 39635-31-9 1.1E-02	5.8E+00
1.1E-03 E 1.3E-03 E V	5.8E+00
1.1E-03 E 1.3E-03 E V	5.8E+00
1.1E-03 E 1.3E-03 E V	5.8E+00
1.1E+00 E 1.3E-06 E V ~Hexachlorobiphenyl, 3,3',4,4',5,5'- (PCB 169) 32774-16-6 1.1E-05	5.8E-03

Dec	Toxicity and Chemical-specific	Contaminant	ucj, s – conce	Carcinogenic Target Risk (TR) = 1E-06	
March   Marc	k k v			Carcinogenic SL	Noncarcinogenic SL
11.00   1.00					
1.16.00   F. 1.5.00   F. V   Percentificacy planes   2.34.4.5   CPR 18]   3100.00   1.17-02   5.87-00   1.11-02   5.87-00	(ug/m <sup>3</sup> ) <sup>-1</sup> y (mg/m <sup>3</sup> ) y I gen	Analyte	CAS No.	(ug/m³)	(μg/m³)
11:00 E 1.34-01 E V Percentionologomy 2.34.6 (2011) 12:00 E 1.34-01 E V Percentionologomy 2.34.6 (2011) 13:00 E 3.98-00 E 3.04-00 E 3.04	1.1E-03 E 1.3E-03 E V		65510-44-3	1.1E-02	5.8E+00
1.15-00   E   V					
186.00   E. V.   V					
1.7   0.   V   V   V   V   V   V   V   V   V					
10.504   V					1.8E-03
20.656   V   Polychrichrated Diplements (novertrials)   1135-13-3   11-01					
38-09   E   Petrochronophoroly, 35,54-6 (PEP7)   \$25991-53   \$32-09   \$18-00					
11-0-1   C   12-0-1   C   V   Personal consideration   A   C   C   C   C   C   C   C   C   C					1.95+00
Section   Polymeric Methylene Diplemy Discognance (PMM)   Polymeric Arramatic Pytrocarbona (PARs)   Polymeric Arramatic Pytrocarbona (PARs)   Polymeric Pytr					
Polymorphe   Pol				1.1E-03	
V	6.0E-04 T		9010-87-9		2.6E+00
11-00   C	V		83-32-0		
116-04   C		·			
11-04   C				1.1F-01	
11-60   C					
11-04   C		***			
11E-01   C		5 51 7			
18-6   C					
11.E-0.5 C					
11-16-3   C   M   Observo(a, plymen   192-654   11-16-02   175-04   1-16-02   1-16-04   1-16-0				1.1E+00	
116-03 C   M   Oberazo(a, plyme   192-654   116-02   176-04   116-02   176-04   116-04   176-04   116-04   176-04   11	1.2E-03 C M	~Dibenz[a,h]anthracene	53-70-3	1.0E-02	
Table   C					
1.15-04 C		~Dimethylbenz(a)anthracene, 7,12-			
1.1E-04   C   M   Indeen(1.2,3-cd)pyrene   193.39-5   1.1E-01		~Fluoranthene	206-44-0		
New York	V				
3.8E-05 C 3.0E-03 V - Methyhaphthalene, 2		~Indeno[1,2,3-cd]pyrene	193-39-5	1.1E-01	
3.8E-05   C   3.0E-02   V		~Methylnaphthalene, 1-	90-12-0		
1.1E-04 C				E5	
Procession Perfluorobutane Sufforte   129-000   24920-403   2492		Naphulalene	1 1 1 1		1.3E+01
Prochar   Prochar   Prochar   Prochar   Prochar   Prochar   Prochar   Prochar   Prometon   Propertor   Proparediol, 1,2-		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		1.1E-01	
Proclicia   Profile   Properties   Propert	V	11/10/2		<i>))</i>	
Profited   26399-36-0   Prometry   7287-19-6   Prometry   7287-19-6   Prometry   7287-19-6   Propendio   12-1   Propendio   Prop		27 65 65 (11111)			
Prometry   Prometry   Prometry   Prometry   Propage	V				
Properties	V				
Proparior   Prop					
Propared		Annual Control of the	10 mm		
Propagite					
Propargite					
Proparie		1 1 1 1 1 1 1 1 1 2 2 2 2 2 2 2 2 2 2 2	11 //		
Propham Propionazole   122-42-9   122-42-9   122-42-9   122-42-9   122-42-9   122-42-9   122-42-9   122-42-9   122-42-9   122-38-6   3.5E+01   4.4E+03   4	V				
Proplam		Propazine	139-40-2		
Rote					
1.0E+00   X   V   Propylene   103-65-1   1.3E+04   1.3E+05   1.3			60207-90-1		
1.0E+00   X   V   Propyle benzene   103-65-1   1.3E+04   1.3E+03	8.0E-03 I V	Propionaldehyde	123-38-6		3.5E+01
Propylene Glycol   S7-55-6					
2.7E-04   A   Propylene Glycol Dinitrate   6423-43-4   1.2E+00	3.0E+00 C V				1.3E+04
2.0E+00   V   Propylene Glycol Monomethyl Ether   107-98-2   8.8E+03     3.0E-02   V   Propylene Oxide   Propylene Oxi					
3.7E-06   1 3.0E-02   1 V Proplene Oxide					
Propyzamide					
Note	3.7E-06   3.0E-02   V			3.3E+00	1.3E+02
Quinalphos	V				
Quinoline	V				
Quizalofop-ethyl   76578-14-8					
3.0E-02   A   Refractory Ceramic Fibers   NA   1.3E+02					
6.3E-05     C     Selenium Sulfide Sele	3.0F-02 A				1,3E+02
V       Ronnel       299-84-3       Common C	,,				
6.3E-05       C       Kotenone       83-79-4         M Safrole Selnious Acid       94-59-7       1.9E-01         2.0E-02       C       Selenium Sulfide Selnium Seln	V				
6.3E-05 C M Safrole 94-59-7 1.9E-01 783-00-8  2.0E-02 C Selenium Sulfide 784-34-6 2 Selenium Sulfide 74051-80-2  3.0E-03 C Silica (crystalline, respirable) 7631-86-9 1.9E-01 8.8E+01 8.8E+01 8.8E+01 94-59-7 94051-80-2		Rotenone			
Selenious Acid     7783-00-8       2.0E-02 C     Selenium     7782-49-2     8.8E+01       2.0E-02 C     Selenium Sulfide Sethoxydim     7446-34-6 74051-80-2     8.8E+01       3.0E-03 C     Silica (crystalline, respirable)     7631-86-9     1.3E+01	6.3E-05 C M			1.9E-01	
2.0E-02     C     Selenium Sulfide Sethoxydim     7446-34-6 74051-80-2     8.8E+01       3.0E-03     C     Silica (crystalline, respirable)     7631-86-9     1.3E+01					
Sethoxydim         74051-80-2           3.0E-03         C         Silica (crystalline, respirable)         7631-86-9         1.3E+01	2.0E-02 C	Selenium	7782-49-2		8.8E+01
3.0E-03 C Silica (crystalline, respirable) 7631-86-9 1.3E+01					
			74051-80-2		
Silver 7440-22-4	3.0E-03 C	Silica (crystalline, respirable)			1.3E+01
		Silver	7440-22-4		

oxicity and Chemical-specific	values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Gu Contaminant		Carcinogenic Target Risk (TR) = 1E-06	Noncancer Hazard Index (HI
k k v			Carcinogenic SL	Noncarcinogenic SL
UR e RfC <sub>i</sub> e o muta-			TR=1E-06	HI=1
m <sup>3</sup> ) <sup>-1</sup> y (mg/m <sup>3</sup> ) y I gen	Analyte	CAS No.	(ug/m³)	(μg/m <sup>3</sup> )
	Simazine	122-34-9		
	Sodium Acifluorfen	62476-59-9		
	Sodium Azide	26628-22-8		
E-01 C 2.0E-04 C M	Sodium Dichromate	10588-01-9	8.2E-05	8.8E-01
	Sodium Diethyldithiocarbamate	148-18-5		
1.3E-02 C	Sodium Fluoride	7681-49-4		5.7E+01
1.52 02 0	Sodium Fluoroacetate	62-74-8		3.72.01
	Sodium Metavanadate	13718-26-8		
	Sodium Tungstate	13472-45-2		
	Sodium Tungstate Dihydrate	10213-10-2		
F.01 C 2.0F.04 C M	Stirofos (Tetrachlorovinphos)	961-11-5	9.35.05	0.05.01
E-01 C 2.0E-04 C M	Strontium Chromate Strontium, Stable	7789-06-2 7440-24-6	8.2E-05	8.8E-01
	Strychnine	57-24-9		
1.0E+00 I V	Styrene	100-42-5		4.4E+03
	Styrene-Acrylonitrile (SAN) Trimer	NA		
2.0E-03 X	Sulfolane	126-33-0		8.8E+00
	Sulfonylbis(4-chlorobenzene), 1,1'-	80-07-9		
1.0E-03 C V	Sulfur Trioxide	7446-11-9		4.4E+00
1.0E-03 C	Sulfuric Acid	7664-93-9		4.4E+00
E-06 I	Sulfurous acid, 2-chloroethyl 2-[4-(1,1-dimethylethyl)phenoxy]-1-methylethyl ester		1.7E+00	
	тсмтв	21564-17-0		
	Tebuthiuron	34014-18-1		
	Temephos	3383-96-8		
	Terbacil	5902-51-2		
V	Terbufos	13071-79-9		
	Terbutryn	886-50-0		
	Tetrabromodiphenyl-ether,-2,2',4,4'-(BDE-47)	5436-43-1	<del>-</del> ->	
V	Tetrachlorobenzene, 1,2,4,5-	95-94-3		
E-06 I V	T-10-06 (2-0-16-0-16-0-16-0-16-0-16-0-16-0-16-0-1	630-20-6	1.7E+00	
E-05 C V	Tetrachloroethane, 1,1,2,2	79-84-5	2.1E-01	
E-07 I 4.0E-02 I V	Tetrachloroethylene	127-18-4	4.7E+01	1.8E+02
207 1 4.02 02 1 0	Tetrachlorophenol, 2,3,4,6-	58-90-2	4.72.01	1.02102
V	Tetrachlorotoluene, p- alpha, alpha-	5216-25-1		
v				
0.05.04.1.1/	Tetraethyl Dithiopyrophosphate	3689-24-5		2.55.05
8.0E+01 I V	Tetrafluoroethane, 1,1,1,2	81,1,97-2 \ 479-45-8		3.5E+05
	Tetryl (Trinitrophenylmethylnitrar <u>nine)</u>			
	Thallium (I) Nitrate	10102-45-1		
.,		7440-28-0		
V	Thallium Acetate	563-68-8		
V	Thallium Carbonate	6533-73-9		
	Thallium Chloride	7791-12-0		
	Thallium Sulfate	7446-18-6		
	Thifensulfuron-methyl	79277-27-3		
	Thiobencarb	28249-77-6		
	Thiodiglycol	111-48-8		
	Thiofanox	39196-18-4		
	Thiophanate, Methyl	23564-05-8		
	Thiram	137-26-8		
	Tin	7440-31-5		
1.0E-04 A V	Titanium Tetrachloride	7550-45-0		4.4E-01
5.0E+00 I V	Toluene	108-88-3		2.2E+04
	Toluene-2,5-diamine	95-70-5		
	Toluidine, p-	106-49-0		
V	Total Petroleum Hydrocarbons (Aliphatic High)	NA		
6.0E-01 P V	Total Petroleum Hydrocarbons (Aliphatic Low)	NA		2.6E+03
1.0E-01 P V	Total Petroleum Hydrocarbons (Aliphatic Medium)	NA		4.4E+02
1.02 01 1	Total Petroleum Hydrocarbons (Aromatic High)	NA		1.42.02
3.0E-02 P V	Total Petroleum Hydrocarbons (Aromatic Low)	NA		1.3E+02
DULTUZ P V	Total Petroleum Hydrocarbons (Aromatic Low)  Total Petroleum Hydrocarbons (Aromatic Medium)	NA NA		1.3E+02 1.3E+01
	Toxaphene	NA 8001-35-2	3.8E-02	1.3E+U1
3.0E-03 P V		8001-35-2	5.0E-UZ	
3.0E-03 P V	•	CC0 ** * * * *		
3.0E-03 P V E-04 I	Tralomethrin	66841-25-6		
3.0E-03 P V	Tralomethrin Tri-n-butyltin	688-73-3		
3.0E-03 P V E-04 I	Tralomethrin Tri-n-butyltin Triacetin	688-73-3 102-76-1		
3.0E-03 P V E-04 I	Tralomethrin Tri-n-butyltin Triacetin Triadimefon	688-73-3 102-76-1 43121-43-3		
3.0E-03 P V E-04 I	Tralomethrin Tri-n-butyltin Triacetin	688-73-3 102-76-1		

Toxicity and Chemical-specific	. values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guid Contaminant		Carcinogenic Target Risk (TR) = 1E-06	
k k v	Contaminant		Carcinogenic SL	Noncarcinogenic SL
IUR e RfC <sub>i</sub> e o muta-			TR=1E-06	HI=1
ug/m <sup>3</sup> ) <sup>-1</sup> y (mg/m <sup>3</sup> ) y I gen	Analyte	CAS No.	(ug/m³)	(μg/m <sup>3</sup> )
v V	·	615-54-3	(ug/III )	(µg/III )
V		126-73-8		
		126-73-8 NA		
		56-35-9		
3.0E+01 H V		76-13-1		1.3E+05
3.0L+01 11 V		76-03-9		1.32+03
		33663-50-2		
		634-93-5		
V	2 2 2 2 2 2 7 7 2	87-61-6		
2.0E-03 P V		120-82-1		8.8E+00
5.0E+00 I V		71-55-6		2.2E+04
1.6E-05   2.0E-04 X V		79-00-5	7.7E-01	8.8E-01
4.1E-06   2.0E-03   V M		79-01-6	3.0E+00	8.8E+00
4.1L-00 1 2.0L-03 1 V W		75-69-4	5.02100	0.02100
v -		95-95-4		
3.1E-06 I		88-06-2	4.0E+00	
J.1L JU 1		93-76-5	4.02+00	
		93-72-1		
V		598-77-6		
3.0E-04 I V M		96-18-4		1.3E+00
3.0E-04 P V	1 1 1 1 1 1 1	96-19-5		1.3E+00
5.02 07 1		1330-78-5		1.52,00
		58138-08-2		
7.0E-03 I V		121,44-8		3.1E+01
7.02.05	Triothylana Glycol	112-27-6		5.12.01
2.0E+01 P V	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	420-46-2		8.8E+04
V		1582-09-8		
· ·	- 12 13 13 13 13 13 13 13 13 13 13 13 13 13	512-56-1		
5.0E-03 P V		526-73-8		2.2E+01
7.0E-03 P V	· · · · · · · · · · · · · · · · · · ·	95-63-6		3.1E+01
V		108-67-8		
V		25167-70-8		
		99-35-4		
		11,8-96-7		
		791-28-6		
	Tris(1,3-Dichloro-2-propyl) Phosphate	13674-87-8		
		13674-84-5		
6.6E-04 C V		126-72-7	1.9E-02	
	Tris(2-chloroethyl)phosphate	115-96-8		
		78-42-2		
		7440-33-7		
4.0E-05 A	Uranium (Soluble Salts)	NA		1.8E-01
2.9E-04 C M		51-79-6	4.2E-02	
8.3E-03 P 7.0E-06 P	Vanadium Pentoxide	1314-62-1	1.5E-03	3.1E-02
1.0E-04 A	Vanadium and Compounds	7440-62-2		4.4E-01
V		1929-77-7		
	Vinclozolin .	50471-44-8		
2.0E-01 I V		108-05-4		8.8E+02
3.2E-05 H 3.0E-03 I V		593-60-2	3.8E-01	1.3E+01
4.4E-06 I 1.0E-01 I V M	,	75-01-4	2.8E+00	4.4E+02
		81-81-2		
1.0E-01 S V		106-42-3		4.4E+02
1.0E-01 S V		108-38-3		4.4E+02
1.0E-01 S V		95-47-6		4.4E+02
1.0E-01 I V		1330-20-7		4.4E+02
	Zinc Phosphide	1314-84-7		
	Zinc and Compounds	7440-66-6		
	Zineb	7440-66-6 12122-67-7 7440-67-7		

Contaminant		Molecular Weight		Vol	atility Paramete	rc		Melting	g Point	De	nsity	Diffusivity in Air and Water	Soil Partition Coe	fficients	Water Partition	Water Solubility	Tapwater Dermal Parameters
			H,	HLC						Density		Dia Diw	K <sub>d</sub> K <sub>oc</sub>		log K <sub>ow</sub>	S	B T <sub>event</sub> t* K <sub>p</sub>
Analyte	CAS No.	MW MW Ref	(	itm-m³/mole)	H` and HLC Ref		VP Ref	MP	MP Ref	101 - 1	Density Ref	(cm <sup>2</sup> /s) (cm <sup>2</sup> /s) D <sub>ia</sub> and D <sub>iw</sub> Ref	(L/kg) K <sub>d</sub> Ref (L/kg		(unitless) log K <sub>ow</sub> Ref	(mg/L) S Ref	(unitless) (hr/event) (hr) (cm/hr) KPREF
Acetaldehyde	30560-19-1 75-07-0	1.8E+02 PHYSPROP 4.4E+01 PHYSPROP	2.0E-11 2.7E-03	5.0E-13 6.7E-05	EPI PHYSPROP	1.7E-06 PH 9.0E+02 PH		I.8E+01 P I.2E+02 P		1.4E+00 7.8E-01	CRC89 CRC89	3.7E-02 8.0E-06 EPA WATER9 1.3E-01 1.4E-05 EPA WATER9	1.0E+ 1.0E+		-8.5E-01 PHYSPROP -3.4E-01 PHYSPROP	8.2E+05 PHYSPROP 1.0E+06 PHYSPROP	2.1E-04 1.1E+00 2.7E+00 4.0E-05 EPI 1.3E-03 1.9E-01 4.5E-01 5.3E-04 EPI
Acetochlor	34256-82-1	2.7E+02 PHYSPROP	9.1E-07	2.2E-08	PHYSPROP	2.8E-05 PH		.1E+01 I		1.1E+00	PubChem	2.2E-02 5.6E-06 EPA WATER9	3.0E+	02 EPI	3.0E+00 PHYSPROP	2.2E+02 PHYSPROP	3.1E-02 3.4E+00 8.2E+00 5.0E-03 EPI
Acetone Acetone Cyanohydrin	67-64-1 75-86-5	5.8E+01 PHYSPROP 8.5E+01 PHYSPROP	1.4E-03 8.1E-08	3.5E-05 2.0E-09	PHYSPROP			9.5E+01 P		7.8E-01 9.3F-01	CRC89	1.1E-01 1.2E-05 EPA WATER9 8.6E-02 1.0E-05 EPA WATER9	2.4E+ 1.0F+		-2.4E-01 PHYSPROP -3.0F-02 PHYSPROP	1.0E+06 PHYSPROP	1.5E-03 2.2E-01 5.3E-01 5.1E-04 EPI 1.8E-03 3.2E-01 7.6E-01 5.0E-04 EPI
Acetonitrile	75-05-8	4.1E+01 PHYSPROP	1.4E-03	3.5E-05	PHYSPROP			1.4E+01 P		7.9E-01	CRC89	1.3E-01 1.4E-05 EPA WATER9	4.7E+		-3.4E-01 PHYSPROP	1.0E+06 PHYSPROP	1.4E-03 1.8E-01 4.3E-01 5.5E-04 EPI
Acetophenone	98-86-2	1.2E+02 PHYSPROP	4.3E-04	1.0E-05	PHYSPROP			.0E+01 P		1.0E+00	CRC89	6.5E-02 8.7E-06 EPA WATER9	5.2E+		1.6E+00 PHYSPROP	6.1E+03 PHYSPROP	1.6E-02 5.0E-01 1.2E+00 3.7E-03 EPI
Acetylaminofluorene, 2- Acrolein	53-96-3 107-02-8	2.2E+02 PHYSPROP 5.6E+01 PHYSPROP	7.8E-09 5.0E-03	1.9E-10 1.2E-04	PHYSPROP	9.4E-08 PH 2.7E+02 PH		.9E+02 P 3.8E+01 P		8.4F-01	CRC89	5.2E-02 6.0E-06 EPA WATER9 1.1E-01 1.2E-05 EPA WATER9	2.2E+ 1.0F+		3.1E+00 PHYSPROP -1.0E-02 PHYSPROP	5.5E+00 PHYSPROP	7.2E-02 1.9E+00 4.5E+00 1.2E-02 RAGSE 2.2E-03 2.2E-01 5.2E-01 7.5E-04 FPI
Acrylamide	79-06-1	7.1E+01 PHYSPROP	7.0E-08	1.7E-09	EPI		HYSPROP 8	.5E+01 P	PHYSPROP	1.2E+00	LANGE	1.1E-01 1.3E-05 EPA WATER9	5.7E+		-6.7E-01 PHYSPROP	3.9E+05 PHYSPROP	7.3E-04 2.6E-01 6.3E-01 2.2E-04 EPI
Acrylic Acid	79-10-7	7.2E+01 PHYSPROP	1.5E-05	3.7E-07	EPI	4.0E+00 PH		.3E+01 P		1.1E+00	CRC89	1.0E-01 1.2E-05 EPA WATER9	1.4E+		3.5E-01 PHYSPROP	1.0E+06 PHYSPROP	3.4E-03 2.7E-01 6.4E-01 1.1E-03 EPI
Acrylonitrile Adiponitrile	107-13-1 111-69-3	5.3E+01 PHYSPROP 1.1E+02 PHYSPROP	5.6E-03 4.9E-08	1.4E-04 1.2E-09	PHYSPROP	1.1E+02 PH 6.8E-04 PH	HYSPROP -8 HYSPROP 1	0F+00 P		8.0E-01 9.7E-01	CRC89	1.1E-01 1.2E-05 EPA WATER9 7.1E-02 9.0E-06 EPA WATER9	8.5E+ 2.0E+		2.5E-01 PHYSPROP -3.2E-01 PHYSPROP	7.5E+04 PHYSPROP	3.3E-03 2.1E-01 5.0E-01 1.2E-03 EPI 9.5E-04 4.2E-01 1.0E+00 2.4E-04 EPI
Alachlor	15972-60-8	2.7E+02 PHYSPROP	3.4E-07	8.3E-09	PHYSPROP		HYSPROP 4	.0E+01 P	PHYSPROP	1.1E+00	CRC89	2.3E-02 5.7E-06 EPA WATER9	3.1E+		3.5E+00 PHYSPROP	2.4E+02 PHYSPROP	6.6E-02 3.4E+00 8.2E+00 1.1E-02 EPI
Aldicarb	116-06-3	1.9E+02 PHYSPROP	5.9E-08	1.4E-09	EPI			.9E+01 P		1.2E+00	CRC89	3.2E-02 7.2E-06 EPA WATER9	2.5E+		1.1E+00 PHYSPROP	6.0E+03 PHYSPROP	4.0E-03 1.2E+00 2.9E+00 7.6E-04 EPI
Aldicarb Sulfone Aldicarb sulfoxide	1646-88-4 1646-87-3	2.2E+02 PHYSPROP 2.1E+02 PHYSPROP	1.4E-07 4.0E-08	3.4E-09 9.7E-10	EPI EPI			.4E+02 P				5.2E-02 6.1E-06 EPA WATER9 5.4E-02 6.4E-06 EPA WATER9	1.0E+ 1.0E+		-5.7E-01 PHYSPROP -7.8E-01 PHYSPROP	1.0E+04 PHYSPROP 2.8E+04 PHYSPROP	2.1E-04 1.8E+00 4.4E+00 3.7E-05 EPI 1.8E-04 1.5E+00 3.6E+00 3.3E-05 EPI
Aldrin	309-00-2	3.6E+02 PHYSPROP	1.8E-03	4.4E-05	PHYSPROP	1.2E-04 PH	HYSPROP 1	.0E+02 P	PHYSPROP :		PubChem	2.3E-02 5.8E-06 EPA WATER9	8.2E+	04 EPI	6.5E+00 PHYSPROP	1.7E-02 PHYSPROP	2.2E+00 1.2E+01 4.8E+01 2.9E-01 EPI
Allyl Alcohol	107-18-6 107-05-1	5.8E+01 PHYSPROP 7.7E+01 PHYSPROP	2.0E-04 4.5E-01	5.0E-06	PHYSPROP EPI	2.6E+01 PH 3.7E+02 PH		L.3E+02 P		8.5E-01 9.4E-01	CRC89 CRC89	1.1E-01 1.2E-05 EPA WATER9	1.9E+		1.7E-01 PHYSPROP 1.9E+00 PHYSPROP	1.0E+06 PHYSPROP	2.8E-03 2.2E-01 5.3E-01 9.6E-04 EPI 3.8E-02 2.8E-01 6.8E-01 1.1E-02 EPI
Allyl Chloride Aluminum	7429-90-5	2.7E+01 PHYSPROP 2.7E+01 CRC89	4.5E-U1	1.1E-02	EPI				CRC89	9.4E-01 2.7E+00	CRC89	9.4E-02 1.1E-05 EPA WATER9	4.0E+ 1.5E+03 BAES	OI EN	1.9E+00 PHYSPROP	3.4E+03 PHYSPROP	2.0E-03 1.5E-01 3.6E-01 1.0E-03 RAGSE
Aluminum Phosphide	20859-73-8	5.8E+01 PHYSPROP								2.4E+00	CRC89						2.9E-03 2.2E-01 5.3E-01 1.0E-03 RAGSE
Ametryn Aminohiphenyl, 4	834-12-8 92-67-1	2.3E+02 PHYSPROP 1.7E+02 PHYSPROP	9.9E-08	2.4E-09 1.5E-07	EPI PHYSPROP	2.7E-06 PH 1.2F-04 PH		.8E+01 P				5.1E-02 6.0E-06 EPA WATER9 6.2E-02 7.3E-06 EPA WATER9	4.3E+ 2.5F+		3.0E+00 PHYSPROP	2.1E+02 PHYSPROP	4.6E-02 2.0E+00 4.7E+00 7.9E-03 EPI 7.0E-02 9.3E-01 2.2E+00 1.4E-02 EPI
Aminobiphenyi, 4- Aminophenol, m-	92-67-1 591-27-5	1.7E+02 PHYSPROP 1.1E+02 PHYSPROP	8.1E-09	1.5E-07 2.0E-10	PHYSPROP		11311101 3	.4E+01 P				8.3E-02 9.7E-06 EPA WATER9	2.5E+ 9.0E+		2.9E+00 PHYSPROP 2.1E-01 PHYSPROP	2.7E+04 PHYSPROP	7.0E-02 9.3E-01 2.2E+00 1.4E-02 EPI 2.1E-03 4.3E-01 1.0E+00 5.3E-04 EPI
Aminophenol, p-	123-30-8	1.1E+02 PHYSPROP	1.5E-08	3.6E-10	EPI	4.0E-05	EPI 1	.9E+02 P	PHYSPROP			8.3E-02 9.7E-06 EPA WATER9	9.0E+	01 EPI	4.0E-02 PHYSPROP	1.6E+04 PHYSPROP	1.6E-03 4.3E-01 1.0E+00 4.1E-04 EPI
Amitraz Ammonia	33089-61-1 7664-41-7	2.9E+02 PHYSPROP 1.7E+01 PHYSPROP	4.0E-04 6.6E-04	9.9E-06 1.6E-05	PHYSPROP			7.8E+01 P		1.1E+00 7.0E-01	CRC89	2.2E-02 5.4E-06 EPA WATER9 2.3E-01 2.2E-05 EPA WATER9	2.6E+	05 EPI	5.5E+00 PHYSPROP 2.3E-01 OTHER	1.0E+00 PHYSPROP 4.8E+05 PHYSPROP	1.1E+00 4.6E+00 1.8E+01 1.6E-01 EPI 1.6E-03 1.3E-01 3.1E-01 1.0E-03 RAGSE
Ammonia Ammonium Sulfamate	7664-41-7 7773-06-0	1.7E+01 PHYSPROP 1.1E+02 CRC89	0.0E-U4	1.05-05	PHYSPKUP			.3E+01 P		7.0E-01 1.8E+00		2.5E-01 Z.ZE-US EPA WATER9			2.52-UI UIHER	1.3E+06 PERRY	1.6E-03 1.3E-01 3.1E-01 1.0E-03 RAGSE 4.1E-03 4.6E-01 1.1E+00 1.0E-03 RAGSE
Amyl Alcohol, tert-	75-85-4	8.8E+01 PHYSPROP	5.6E-04	1.4E-05	PHYSPROP	1.7E+01 PH	HYSPROP -9	9.1E+00 P	PHYSPROP	8.1E-01	CRC89	7.9E-02 9.1E-06 EPA WATER9	4.1E+		8.9E-01 PHYSPROP	1.1E+05 PHYSPROP	7.1E-03 3.3E-01 7.9E-01 2.0E-03 EPI
Aniline Anthraguinone. 9.10-	62-53-3 84-65-1	9.3E+01 PHYSPROP 2.1E+02 PHYSPROP	8.3E-05 9.6E-07	2.0E-06 2.4E-08	PHYSPROP EPI	6.7E-01 PH 1.2E-07 PH		5.0E+00 P		1.0E+00	CRC89	8.3E-02 1.0E-05 EPA WATER9 5.4E-02 6.3E-06 EPA WATER9	7.0E+ 5.0E+		9.0E-01 PHYSPROP 3.4E+00 PHYSPROP	3.6E+04 PHYSPROP 1.4E+00 PHYSPROP	6.9E-03 3.5E-01 8.4E-01 1.9E-03 EPI 1.1E-01 1.5E+00 3.7E+00 1.9E-02 EPI
Anthraquinone, 9,10- Antimony (metallic)	7440-36-0	1.2E+02 PHYSPROP	9.6E-07	2.4E-08	EPI			.3E+02 P		6.7E+00	CRC89	5.4E-02 6.3E-06 EPA WATER9	4.5E+01 SSL	U3 EPI	3.4E+UU PHYSPKUP	1.4E+00 PHYSPROP	4.3E-03 5.3E-01 1.3E+00 1.9E-02 EPI
Antimony Pentoxide	1314-60-9	3.2E+02 CRC89								3.8E+00	CRC89					3.0E+03 CRC89	6.9E-03 6.8E+00 1.6E+01 1.0E-03 RAGSE
Antimony Tetroxide Antimony Trioxide	1332-81-6 1309-64-4	3.1E+02 EPI 2.9E+02 EPI						.7F+02	CPCSO	6.6E+00 5.6E+00	CRC89 CRC89						6.7E-03 5.5E+00 1.3E+01 1.0E-03 RAGSE 6.6E-03 4.5E+00 1.1E+01 1.0E-03 RAGSE
Arsenic, Inorganic	7440-38-2	7.8E+01 PHYSPROP					2	.7E+02	CRC89	4.9E+00	CRC89		2.9E+01 SSL				3.4E-03 2.9E-01 6.9E-01 1.0E-03 RAGSE
Arsine	7784-42-1	7.8E+01 PHYSPROP						L.2E+02 P		3.2E+00	CRC89					2.0E+05 PERRY	3.4E-03 2.9E-01 6.9E-01 1.0E-03 RAGSE
Asulam Atrazine	3337-71-1 1912-24-9	2.3E+02 PHYSPROP	7.0E-11 9.6E-08	1.7E-12 2.4E-09	PHYSPROP	1.4E-06 PH		.4E+02 P		1.2F+00	DubChom	5.1E-02 5.9E-06 EPA WATER9	2.8E+		-2.7E-01 PHYSPROP	5.0E+03 PHYSPROP	3.1E-04 2.0E+00 4.9E+00 5.3E-05 EPI 3.0E-02 1.7E+00 4.1E+00 5.2E-03 EPI
Auramine	492-80-8	2.7E+02 PHYSPROP	1.5E-07	3.6E-09	PHYSPROP			.4E+02 P		1.25+00	rubChem	4.6E-02 5.3E-06 EPA WATER9	4.5E+		3.0E+00 PHYSPROP	5.4E+01 PHYSPROP	7.0E-02 3.3E+00 7.9E+00 1.1E-02 RAGSE
Avermectin B1	65195-55-3	8.8E+02 PHYSPROP	5.4E-26	1.3E-27	PHYSPROP	1.5E-30 PH		.5E+02	EPI			2.1E-02 2.4E-06 EPA WATER9	8.8E+		4.5E+00 PHYSPROP	3.5E-04 PHYSPROP	2.1E-04 8.4E+03 2.0E+04 1.8E-05 EPI
Azinphos-methyl Azobenzene	86-50-0 103-33-3	3.2E+02 PHYSPROP 1.8E+02 PHYSPROP	9.8E-07 5.5E-04	2.4E-08 1.4E-05	EPI EPI	1.6E-06 PH 3.6E-04 PH		.3E+01 P	PHYSPROP :	1.4E+00 1.2F+00	CRC89 PERRY	2.3E-02 6.0E-06 EPA WATER9 3.6E-02 7.5E-06 EPA WATER9	5.2E+ 3.8F+		2.8E+00 PHYSPROP 3.8E+00 PHYSPROP	2.1E+01 PHYSPROP 6.4E+00 PHYSPROP	1.2E-02 6.3E+00 1.5E+01 1.8E-03 EPI 2.7E-01 1.1E+00 2.6E+00 5.1E-02 EPI
Azodicarbonamide	123-77-3	1.2E+02 PHYSPROP	3.4E-11	8.2E-13	EPI	1.9E-10 PH		.1E+02		1.7E+00		8.3E-02 1.2E-05 EPA WATER9	7.0E+		-1.7E+00 PHYSPROP	3.5E+01 PHYSPROP	1.1E-04 4.7E-01 1.1E+00 2.6E-05 EPI
Barium	7440-39-3	1.4E+02 PHYSPROP							PHYSPROP	3.6E+00	CRC89		4.1E+01 SSL				4.5E-03 6.3E-01 1.5E+00 1.0E-03 RAGSE
Barium Chromate Benfluralin	10294-40-3 1861-40-1	2.5E+02 CRC89 3.4E+02 PHYSPROP	1.2F-02	2.9F-04	FPI	6.5F-05 PH		.4E+03 i.6E+01 P			CRC89 ChemNet	2.2E-02 5.5E-06 EPA WATER9	1.6E+	04 FPI	5.3E+00 PHYSPROP	2.6E+00 CRC89 1.0E-01 PHYSPROP	6.1E-03 2.8E+00 6.6E+00 1.0E-03 RAGSE 4.8E-01 7.9E+00 1.9E+01 6.8E-02 EPI
Benomyl	17804-35-2	2.9E+02 PHYSPROP	2.0E-10	4.9E-12	PHYSPROP		HYSPROP 1	.4E+02	EPI			4.3E-02 5.1E-06 EPA WATER9	3.4E+		2.1E+00 PHYSPROP	3.8E+00 PHYSPROP	6.2E-03 4.4E+00 1.1E+01 9.4E-04 EPI
Bensulfuron-methyl Bentazon	83055-99-6 25057-89-0	4.1E+02 PHYSPROP 2.4E+02 PHYSPROP	1.5E-13 8.9E-08	3.8E-15 2.2E-09	EPI EPI	2.1E-14 PH 3.5E-06 PH	HYSPROP 1	.9E+02 P	PHYSPROP			3.4E-02 4.0E-06 EPA WATER9 4.9E-02 5.7E-06 EPA WATER9	2.8E+ 1.0E+		2.2E+00 PHYSPROP 2.3E+00 PHYSPROP	1.2E+02 PHYSPROP	1.7E-03 2.1E+01 5.0E+01 2.2E-04 EPI 1.5E-02 2.3E+00 5.6E+00 2.5E-03 EPI
Benzaldehyde	100-52-7	1.1E+02 PHYSPROP	1.1E-03	2.7E-05	PHYSPROP		HYSPROP -2	2.6E+01 P		1.0E+00	CRC89	7.4E-02 9.5E-06 EPA WATER9	1.1E+		1.5E+00 PHYSPROP	7.0E+03 PHYSPROP	1.5E-02
Benzene	71-43-2	7.8E+01 PHYSPROP	2.3E-01	5.6E-03	PHYSPROP	9.5E+01 PH	HYSPROP 5	.5E+00 P	PHYSPROP	8.8E-01	CRC89	9.0E-02 1.0E-05 EPA WATER9	1.5E+	02 EPI	2.1E+00 PHYSPROP	1.8E+03 PHYSPROP	5.1E-02 2.9E-01 6.9E-01 1.5E-02 EPI
Benzenediamine-2-methyl sulfate, 1,4- Benzenethiol	6369-59-1 108-98-5	2.2E+02 EPI 1.1E+02 PHYSPROP	8.9E-22 1.4E-02	2.2E-23 3.4E-04	EPI EPI	2.9E-14 1.9E+00 PH		.4E+02 L.5E+01 P	EPI	1.1E+00	CRC89	5.2E-02 6.1E-06 EPA WATER9 7.3E-02 9.5E-06 EPA WATER9	3.8E+		-3.7E+00 EPI 2.5E+00 PHYSPROP	1.0E+06 EPI 8.4E+02 PHYSPROP	1.7E-06 1.8E+00 4.3E+00 3.0E-07 EPI 7.2E-02 4.4E-01 1.0E+00 1.8E-02 EPI
Benzidine	92-87-5	1.8E+02 PHYSPROP	2.1E-09	5.2E-11	PHYSPROP	9.0E-07 PH		.2E+02 P			Yaws 2008	3.5E-02 9.5E-06 EPA WATER9	2.3E+ 1.2E+		1.3E+00 PHYSPROP	3.2E+02 PHYSPROP	5.9E-03 1.1E+00 2.7E+00 1.1E-03 EPI
Benzoic Acid	65-85-0	1.2E+02 PHYSPROP	1.6E-06	3.8E-08	EPI	7.0E-04 PH	HYSPROP 1	.2E+02 P	PHYSPROP	1.3E+00	CRC89	7.0E-02 9.8E-06 EPA WATER9	1.7E+	01 EPI	1.9E+00 PHYSPROP	3.4E+03 PHYSPROP	2.4E-02 5.1E-01 1.2E+00 5.7E-03 EPI
Benzotrichloride Benzyl Alcohol	98-07-7 100-51-6	2.0E+02 PHYSPROP 1.1E+02 PHYSPROP	1.1E-02 1.4E-05	2.6E-04 3.4E-07	PHYSPROP PHYSPROP	4.1E-01 9.4E-02 PH		5.0E+00 P L.5E+01 P		1.4E+00 1.0E+00	CRC89 CRC89	3.1E-02 7.7E-06 EPA WATER9 7.3E-02 9.4E-06 EPA WATER9	1.0E+ 2.1E+		3.9E+00 PHYSPROP 1.1E+00 PHYSPROP	5.3E+01 PHYSPROP 4.3E+04 PHYSPROP	2.6E-01 1.3E+00 3.1E+00 4.9E-02 EPI 8.4E-03 4.2E-01 1.0E+00 2.1E-03 EPI
Benzyl Alconol Benzyl Chloride	100-51-6	1.3E+02 PHYSPROP 1.3E+02 PHYSPROP	1.4E-05 1.7E-02	3.4E-07 4.1E-04	EPI		HYSPROP -1	1.5E+01 P	PHYSPROP	1.0E+00 1.1E+00	CRC89	6.3E-02 8.8E-06 EPA WATER9	2.1E+ 4.5E+		2.3E+00 PHYSPROP	5.3E+02 PHYSPROP	4.5E-02 5.4E-01 1.0E+00 2.1E-03 EPI 4.5E-02 5.4E-01 1.3E+00 1.0E-02 EPI
Beryllium and compounds	7440-41-7	1.1E+01 PHYSPROP				0.0+30.0	NIOSH 9	.9E+02 P	PHYSPROP	1.9E+00	CRC89		7.9E+02 SSL				1.3E-03 1.2E-01 2.9E-01 1.0E-03 RAGSE
Bifenox Biphenthrin	42576-02-3 82657-04-3	3.4E+02 PHYSPROP 4.2E+02 PHYSPROP	4.4E-06 4.1E-05	1.1E-07 1.0E-06	EPI EPI		HYSPROP 6	.5E+01 P	PHYSPROP	1.2E+00 1.2E+00	PubChem CRC89	2.0E-02 5.0E-06 EPA WATER9 1.8E-02 4.5E-06 EPA WATER9	3.7E+ 2.3E+		4.5E+00 PHYSPROP 6.0E+00 PHYSPROP	4.0E-01 PHYSPROP	1.3E-01 8.7E+00 2.1E+01 1.8E-02 EPI 1.4E+01 2.5E+01 1.1E+02 1.7E+00 EPI
Biphenyl, 1,1'-	92-52-4	1.5E+02 PHYSPROP	1.3E-02	3.1E-04	PHYSPROP			.9E+01 P	PHYSPROP	1.0E+00	CRC89	4.7E-02 7.6E-06 EPA WATER9	5.1E+		4.0E+00 PHYSPROP	7.5E+00 PHYSPROP	4.5E-01 7.7E-01 1.8E+00 9.4E-02 EPI
Bis(2-chloro-1-methylethyl) ether	108-60-1	1.7E+02 PHYSPROP	3.0E-03	7.4E-05	EPI	5.6E-01 PH	HYSPROP -9	9.7E+01 P	PHYSPROP	1.1E+00	CRC89	4.0E-02 7.4E-06 EPA WATER9	8.3E+	O1 EPI	2.5E+00 PHYSPROP	1.7E+03 PHYSPROP	3.8E-02 9.5E-01 2.3E+00 7.6E-03 EPI
Bis(2-chloroethoxy)methane Bis(2-chloroethyl)ether	111-91-1 111-44-4	1.7E+02 PHYSPROP 1.4E+02 PHYSPROP	1.6E-04 7.0E-04	3.9E-06 1.7E-05	EPI EPI	1.3E-01 1.6E+00 PH		3.2E+01 P		1.2E+00	CRC89	6.1E-02 7.1E-06 EPA WATER9 5.7E-02 8.7E-06 EPA WATER9	1.4E+ 3.2E+		1.3E+00 PHYSPROP 1.3E+00 PHYSPROP	7.8E+03 PHYSPROP 1.7E+04 PHYSPROP	6.2E-03 9.8E-01 2.4E+00 1.2E-03 EPI 8.2E-03 6.6E-01 1.6E+00 1.8E-03 EPI
Bis(chloromethyl)ether	542-88-1	1.1E+02 PHYSPROP	1.8E-01	4.4E-03	EPI	2.9E+01 PH		1.2E+01 P		1.2E+00 1.3E+00	CRC89	7.6E-02 1.0E-05 EPA WATER9	9.7E+		5.7E-01 PHYSPROP	2.2E+04 PHYSPROP	3.5E-03 4.6E-01 1.1E+00 1.8E-03 EPI
Bisphenol A	80-05-7	2.3E+02 PHYSPROP	4.1E-10	1.0E-11	PHYSPROP	3.9E-07 PH	HYSPROP 1	.5E+02 P			PubChem	2.5E-02 6.5E-06 EPA WATER9	3.8E+	04 EPI	3.3E+00 PHYSPROP	1.2E+02 PHYSPROP	7.7E-02 2.0E+00 4.8E+00 1.3E-02 EPI
Boron And Borates Only Boron Trichloride	7440-42-8 10294-34-5	1.4E+01 EPI 1.2E+02 PHYSPROP	7.5E-01	1.8E-02		1.0E+00 PH	HYSPROP 1	.1E+03 L.1E+02 P		2.3E+00 4.8E+00	CRC89	1.2E-01 2.2E-05 EPA WATER9	3.0E+00 BAES		1.2E+00 OTHER		1.4E-03 1.3E-01 3.0E-01 1.0E-03 RAGSE 4.2E-03 4.8E-01 1.1E+00 1.0E-03 RAGSE
Boron Trifluoride	7637-07-2	6.8E+01 PHYSPROP		02 02		3.7E+04 PH		1.3E+02 P		2.8E+00	CRC89	1.6E-01 2.2E-05 EPA WATER9			2.2E-01 OTHER	3.3E+06 PHYSPROP	3.2E-03 2.5E-01 6.1E-01 1.0E-03 RAGSE
Bromate	15541-45-4	8.0E+01 EPI											7.5E+00 BAES				3.4E-03 2.9E-01 7.1E-01 1.0E-03 RAGSE
Bromo-2-chloroethane, 1- Bromobenzene	107-04-0 108-86-1	1.4E+02 PHYSPROP 1.6E+02 PHYSPROP	3.7E-02 1.0E-01	9.1E-04 2.5E-03	PHYSPROP PHYSPROP	3.3E+01 PH 4.2E+00 PH		1.7E+01 P 3.1E+01 P		1.7E+00 1.5E+00	CRC89 CRC89	6.6E-02 1.1E-05 EPA WATER9 5.4E-02 9.3E-06 EPA WATER9	4.0E+ 2.3E+		1.9E+00 PHYSPROP 3.0E+00 PHYSPROP	6.9E+03 PHYSPROP 4.5E+02 PHYSPROP	2.1E-02 6.7E-01 1.6E+00 4.6E-03 EPI 9.6E-02 8.0E-01 1.9E+00 2.0E-02 EPI
Bromochloromethane	74-97-5	1.3E+02 PHYSPROP	6.0E-02	1.5E-03	EPI	1.4E+02 PH	HYSPROP -8	3.8E+01 P	PHYSPROP	1.9E+00	CRC89	7.9E-02 1.2E-05 EPA WATER9	2.2E+	01 EPI	1.4E+00 PHYSPROP	1.7E+04 PHYSPROP	1.1E-02 5.6E-01 1.3E+00 2.6E-03 EPI
Bromodichloromethane	75-27-4	1.6E+02 PHYSPROP	8.7E-02	2.1E-03	PHYSPROP	5.0E+01 PH	HYSPROP -5	5.7E+01 P	PHYSPROP	2.0E+00	CRC89	5.6E-02 1.1E-05 EPA WATER9	3.2E+		2.0E+00 PHYSPROP	3.0E+03 PHYSPROP	2.0E-02 8.7E-01 2.1E+00 4.0E-03 EPI
Bromoform Bromomethane	75-25-2 74-83-9	2.5E+02 PHYSPROP 9.5E+01 PHYSPROP	2.2E-02 3.0E-01	5.4E-04 7.3E-03	PHYSPROP	5.4E+00 1.6E+03 PH	EPI 8	0.0E+00 P	PHYSPROP	2.9E+00 1.7E+00	CRC89	3.6E-02 1.0E-05 EPA WATER9 1.0E-01 1.4E-05 EPA WATER9	3.2E+ 1.3E+		2.4E+00 PHYSPROP	3.1E+03 PHYSPROP 1.5E+04 PHYSPROP	1.4E-02 2.7E+00 6.6E+00 2.4E-03 EPI 1.1E-02 3.6E-01 8.6E-01 2.8E-03 EPI
Bromophos	2104-96-3	3.7E+02 PHYSPROP	8.4E-03	2.1E-04	EPI	1.3E-04 PH	HYSPROP 5	.4E+01 P	PHYSPROP		LookChem	2.3E-02 6.1E-06 EPA WATER9	2.0E+	03 EPI	5.2E+00 PHYSPROP	3.0E-01 PHYSPROP	3.0E-01 1.2E+01 2.8E+01 4.0E-02 EPI
Bromoxynil	1689-84-5	2.8E+02 PHYSPROP	5.4E-09	1.3E-10	EPI	4.7E-08 PH		.9E+02 P		1.55.00	I I-Ch	4.5E-02 5.2E-06 EPA WATER9	3.3E+		2.8E+00 PHYSPROP	1.3E+02 PHYSPROP	5.0E-02 3.7E+00 9.0E+00 7.8E-03 EPI
Bromoxynil Octanoate Butadiene, 1.3-	1689-99-2 106-99-0	4.0E+02 PHYSPROP 5.4E+01 PHYSPROP	1.3E-03 3.0E+00	3.2E-05 7.4E-02	EPI EPI			l.6E+01 P L.1E+02 P	PHYSPROP :	1.5E+00 6.1E-01	LookChem CRC89	2.1E-02 5.4E-06 EPA WATER9 1.0E-01 1.0E-05 EPA WATER9	4.3E+ 4.0E+		5.4E+00 PHYSPROP 2.0E+00 PHYSPROP	8.0E-02 PHYSPROP 7.4E+02 PHYSPROP	2.6E-01 1.9E+01 4.6E+01 3.3E-02 EPI 4.6E-02 2.1E-01 5.1E-01 1.6E-02 EPI
Butanol, N-	71-36-3	7.4E+01 PHYSPROP	3.6E-04	8.8E-06	PHYSPROP	6.7E+00 PH		9.0E+01 P	PHYSPROP	8.1E-01	CRC89	9.0E-02 1.0E-05 EPA WATER9	3.5E+	00 EPI	8.8E-01 PHYSPROP	6.3E+04 PHYSPROP	7.6E-03 2.7E-01 6.6E-01 2.3E-03 EPI
Butyl Benzyl Phthalate	85-68-7	3.1E+02 PHYSPROP	5.2E-05	1.3E-06	EPI			3.5E+01 I		1.1E+00	CRC89	2.1E-02 5.2E-06 EPA WATER9	7.2E+		4.7E+00 PHYSPROP	2.7E+00 PHYSPROP	2.6E-01 5.9E+00 1.4E+01 3.9E-02 EPI
Butyl alcohol, sec-	78-92-2	7.4E+01 PHYSPROP	3.7E-04	9.1E-06	PHYSPROP	1.8E+01 PH	HYSPROP -1	L.1E+02 P	PHYSPROP	8.1E-01	CRC89	9.0E-02 1.0E-05 EPA WATER9	2.9E+	00 EPI	6.1E-01 PHYSPROP	1.8E+05 PHYSPROP	5.1E-03 2.7E-01 6.6E-01 1.5E-03 EPI

Contaminant		Molecular Weight		Volatility P	Parameter	S	Melting Poi	nt	Density	Diffusivity in Air and Water	Soil Partition Coefficients	Water Partition	Water Solubility	Tapwater Dermal Parameters
			H,	HLC				Density		Dia Diw	K <sub>d</sub> K <sub>oc</sub>	log K <sub>ow</sub>	S	B τ <sub>event</sub> t* K <sub>p</sub>
Analyte Butylate	CAS No. 2008-41-5	MW Ref 2.2E+02 PHYSPROP	(unitless) (at 3.5E-03	m-m <sup>3</sup> /mole) H` and	HLC Ref	VP VP Ref 1.3E-02 PHYSPROP	MP MP	Ref (g/cm³) PI 9.4E-01	Density Ref CRC89	(cm <sup>2</sup> /s) (cm <sup>2</sup> /s) D <sub>ia</sub> and D <sub>iw</sub> Ref 2.3E-02 5.8E-06 EPA WATER9	(L/kg) K <sub>d</sub> Ref (L/kg) K <sub>oc</sub> Ref 3.9E+02 EPI	(unitless) log K <sub>ow</sub> Ref 4.2E+00 PHYSPROP	(mg/L) S Ref	(unitless) (hr/event) (hr) (cm/hr) KPREF 3.1E-01 1.7E+00 4.2E+00 5.4E-02 EPI
Butylated Butylated hydroxyanisole	25013-16-5	3.6E+02 PHYSPROP			SPROP	2.5E-03 PHYSPROP	5.1E+01 PHYS		CRC89	3.8E-02 4.4E-06 EPA WATER9	3.9E+02 EPI 8.4E+02 EPI	3.5E+00 PHYSPROP	2.1E+02 PHYSPROP	2.4E-01 1.7E+00 4.2E+00 5.4E-02 EPI
Butylated hydroxytoluene	128-37-0	2.2E+02 PHYSPROP			SPROP	5.2E-03 EPI	7.1E+01 PHYS		CRC89	2.3E-02 5.6E-06 EPA WATER9	1.5E+04 EPI	5.1E+00 PHYSPROP	6.0E-01 PHYSPROP	1.3E+00 1.8E+00 7.1E+00 2.2E-01 EPI
Butylbenzene, n-	104-51-8	1.3E+02 PHYSPROP	6.5E-01		EPI	1.1E+00 PHYSPROP	-8.8E+01 PHYS	PROP 8.6E-01		5.3E-02 7.3E-06 EPA WATER9	1.5E+03 EPI	4.4E+00 PHYSPROP	1.2E+01 PHYSPROP	1.0E+00 5.9E-01 2.3E+00 2.3E-01 EPI
Butylbenzene, sec-	135-98-8	1.3E+02 PHYSPROP	7.2E-01		EPI	1.8E+00 PHYSPROP	-8.3E+01 PHYS			5.3E-02 7.3E-06 EPA WATER9	1.3E+03 EPI	4.6E+00 PHYSPROP	1.8E+01 PHYSPROP	1.3E+00 5.9E-01 2.3E+00 3.0E-01 EPI
Butylbenzene, tert- Cacodylic Acid	98-06-6 75-60-5	1.3E+02 PHYSPROP 1.4E+02 PHYSPROP			SPROP	2.2E+00 PHYSPROP 1.0E-07 PHYSPROP	-5.8E+01 PHYS 2.0E+02 PHYS		CRC89	5.3E-02 7.4E-06 EPA WATER9 7.1E-02 8.3E-06 EPA WATER9	1.0E+03 EPI 4.4F+01 EPI	4.1E+00 PHYSPROP 3.6E-01 PHYSPROP	3.0E+01 PHYSPROP	6.6E-01 5.9E-01 2.3E+00 1.5E-01 EPI 2.1E-03 6.2E-01 1.5E+00 4.6E-04 EPI
Cadmium (Diet)	7440-43-9	1.1E+02 PHYSPROP				0.0E+00 NIOSH	3.2E+02 PHYS	PROP 8.7E+00	CRC89		7.5E+01 SSL			4.1E-03 4.5E-01 1.1E+00 1.0E-03 RAGSE
Cadmium (Water)	7440-43-9	1.1E+02 PHYSPROP				0.0E+00 NIOSH	3.2E+02 PHYS		CRC89		7.5E+01 SSL			4.1E-03 4.5E-01 1.1E+00 1.0E-03 RAGSE
Calcium Chromate	13765-19-0	1.6E+02 CRC89					1.0E+03 CR							4.8E-03 7.9E-01 1.9E+00 1.0E-03 RAGSE
Caprolactam Captafol	105-60-2 2425-06-1	1.1E+02 PHYSPROP 3.5E+02 PHYSPROP	1.0E-06 2.0E-07		SPROP EPI	1.6E-03 EPI 1.5E-08 EPI	6.9E+01 PHYS 1.6E+02 PHYS		LANGE	6.9E-02 9.0E-06 EPA WATER9 3.8E-02 4.5E-06 EPA WATER9	2.5E+01 EPI 7.8E+02 EPI	-1.9E-01 YAWS 3.8E+00 PHYSPROP	1.4E+00 PHYSPROP	4.1E-03 4.5E-01 1.1E+00 1.0E-03 EPI 4.1E-02 9.5E+00 2.3E+01 5.8E-03 EPI
Captan	133-06-2	3.0E+02 PHYSPROP			EPI	9.0E-08 PHYSPROP	1.8E+02 PHYS		CRC89	2.6E-02 6.9E-06 EPA WATER9	2.5E+02 EPI	2.8E+00 PHYSPROP	5.1E+00 PHYSPROP	1.6E-02 5.1E+00 1.2E+01 2.3E-03 EPI
Carbaryl	63-25-2	2.0E+02 PHYSPROP			EPI	1.4E-06 PHYSPROP	1.5E+02 PHYS			2.7E-02 7.1E-06 EPA WATER9	3.5E+02 EPI	2.4E+00 PHYSPROP	1.1E+02 PHYSPROP	2.4E-02 1.4E+00 3.4E+00 4.3E-03 EPI
Carbofuran Carbon Disulfide	1563-66-2 75-15-0	2.2E+02 PHYSPROP 7.6E+01 PHYSPROP	1.3E-07		EPI SPROP	4.9E-06 PHYSPROP 3.6E+02 PHYSPROP	1.5E+02 PHYS -1.1E+02 PHYS			2.6E-02 6.6E-06 EPA WATER9 1.1E-01 1.3E-05 EPA WATER9	9.5E+01 EPI 2.2E+01 EPI	2.3E+00 PHYSPROP 1.9E+00 PHYSPROP	3.2E+02 PHYSPROP 2.2E+03 PHYSPROP	1.8E-02 1.8E+00 4.4E+00 3.1E-03 EPI 3.8E-02 2.8E-01 6.7E-01 1.1E-02 EPI
Carbon Distillide Carbon Tetrachloride	75-15-0 56-23-5	1.5E+02 PHYSPROP	1.1E+00		SPROP	1.2E+02 PHYSPROP	-2.3E+01 PHYS			5.7E-02 9.8E-06 EPA WATER9	2.2E+01 EPI 4.4E+01 EPI	2.8E+00 PHYSPROP	7.9E+02 PHYSPROP	7.8E-02 7.6E-01 1.8E+00 1.6E-02 EPI
Carbonyl Sulfide	463-58-1	6.0E+01 PHYSPROP	2.5E+01		EPI	9.4E+03 PHYSPROP	-1.4E+02 PHYS			1.2E-01 1.3E-05 EPA WATER9	1.0E+00 EPI	-1.3E+00 PHYSPROP	1.2E+03 PHYSPROP	2.8E-04 2.3E-01 5.5E-01 9.4E-05 EPI
Carbosulfan	55285-14-8	3.8E+02 PHYSPROP	2.1E-05		EPI	3.1E-07 PHYSPROP	1.8E+02 E			1.8E-02 4.4E-06 EPA WATER9	1.2E+04 EPI	5.6E+00 PHYSPROP	3.0E-01 PHYSPROP	4.3E-01 1.4E+01 3.4E+01 5.8E-02 EPI
Carboxin	5234-68-4	2.4E+02 PHYSPROP	1.3E-08	3.2E-10 E	EPI	1.5E-07 PHYSPROP	9.2E+01 PHYS			5.0E-02 5.8E-06 EPA WATER9	1.7E+02 EPI	2.1E+00 PHYSPROP	1.5E+02 PHYSPROP	1.2E-02 2.2E+00 5.2E+00 2.0E-03 EPI
Ceric oxide Chloral Hydrate	1306-38-3 302-17-0	1.7E+02 CRC89 1.7E+02 PHYSPROP	2 3F <sub>*</sub> 07	5.7E-09 PHY	SPROP	1.5E+01 PHYSPROP	2.5E+03 CR 5.7E+01 PHYS			5.4E-02 1.0E-05 EPA WATER9	1.0E+00 EPI	9.9E-01 PHYSPROP	7 9F+05 PHYSPROP	5.0E-03 9.7E-01 2.3E+00 1.0E-03 RAGSE 4.2E-03 8.9E-01 2.1E+00 8.4E-04 EPI
Chloramben	133-90-4	2.1E+02 PHYSPROP	1.6E-09		EPI	1.0E-07 PHYSPROP	2.0E+02 PHYS		CITCOS	5.4E-02 1.0E-05 EPA WATER9	2.1E+01 EPI	1.9E+00 PHYSPROP	7.9E+05 PHYSPROP	1.1E-02 1.5E+00 3.6E+00 2.0E-03 EPI
Chloranil	118-75-2	2.5E+02 PHYSPROP	1.3E-08	3.3E-10 PHY	SPROP	2.3E-06 PHYSPROP	2.9E+02 PHYS	PROP		4.8E-02 5.7E-06 EPA WATER9	3.1E+02 EPI	2.2E+00 PHYSPROP	2.5E+02 PHYSPROP	1.2E-02 2.5E+00 6.0E+00 1.9E-03 EPI
Chlordane	12789-03-6	4.1E+02 PHYSPROP	2.9E-03		SPROP	1.0E-05 PHYSPROP	4.1E+02 Phys		PubChem	2.1E-02 5.4E-06 EPA WATER9	3.4E+04 EPI	6.3E+00 PHYSPROP	1.3E-02 PHYSPROP	8.3E-01 2.1E+01 8.0E+01 1.1E-01 EPI
Chlordecone (Kepone)	143-50-0	4.9E+02 PHYSPROP	2.2E-06		EPI	2.3E-07 PHYSPROP	3.5E+02 E		CRC89	2.0E-02 4.9E-06 EPA WATER9	1.8E+04 EPI	5.4E+00 PHYSPROP	2.7E+00 PHYSPROP	9.3E-02 5.9E+01 1.4E+02 1.1E-02 EPI
Chlorfenvinphos Chlorimuron, Ethyl-	470-90-6 90982-32-4	3.6E+02 PHYSPROP 4.1F+02 PHYSPROP	1.2E-06 7.4F-14		EPI FPI	7.5E-06 PHYSPROP 4.0E-12 PHYSPROP	-2.0E+01 PHYS			3.8E-02 4.4E-06 EPA WATER9 3.4E-02 4.0E-06 EPA WATER9	1.3E+03 EPI 7.2E+01 EPI	3.8E+00 PHYSPROP 2.5E+00 PHYSPROP	1.2E+02 PHYSPROP	3.7E-02 1.1E+01 2.6E+01 5.1E-03 EPI 2.6E-03 2.2E+01 5.3E+01 3.4E-04 EPI
Chlorine	7782-50-5	7.1E+01 PHYSPROP	4.8E-01	1.2E-02 PHY		5.9E+03 PHYSPROP	-1.0E+02 PHYS	PROP 2.9E+00	CRC89	1.5E-01 2.2E-05 EPA WATER9	2.5E-01 BAES	8.5E-01 OTHER	6.3E+03 PHYSPROP	3.2E-03 2.6E-01 6.3E-01 1.0E-03 RAGSE
Chlorine Dioxide	10049-04-4	6.7E+01 EPI			et HSDB	7.6E+02 Toxnet HSDB	-5.9E+01 CR	2.8E+00		1.6E-01 2.2E-05 EPA WATER9		2		3.2E-03 2.5E-01 6.0E-01 1.0E-03 RAGSE
Chlorite (Sodium Salt)	7758-19-2	9.0E+01 EPI					1.8E+02 CR						6.4E+05 CRC89	3.7E-03 3.4E-01 8.1E-01 1.0E-03 RAGSE
Chloro-1,1-difluoroethane, 1-	75-68-3	1.0E+02 PHYSPROP	2.4E+00		SPROP SPROP	2.5E+03 PHYSPROP 2.2E+02 PHYSPROP	-1.3E+02 PHYS			8.0E-02 1.0E-05 EPA WATER9	4.4E+01 EPI	2.1E+00 PHYSPROP	1.4E+03 PHYSPROP	3.8E-02 3.8E-01 9.2E-01 9.9E-03 EPI 8.6E-02 3.3E-01 7.9E-01 2.4E-02 EPI
Chloro-1,3-butadiene, 2- Chloro-2-methylaniline HCl. 4-	126-99-8 3165-93-3	8.9E+01 PHYSPROP 1.8E+02 PHYSPROP	2.3E+00 6.4E-05		SPROP	4.1E-02 PHYSPROP	-1.3E+02 PHYS		CRC89	8.4E-02 1.0E-05 EPA WATER9 6.0E-02 7.0E-06 EPA WATER9	6.1E+01 EPI 3.5E+02 EPI	2.5E+00 PHYSPROP 2.3E+00 PHYSPROP	8.7E+02 PHYSPROP	9.2E-05 1.0E+00 2.5E+00 1.8E-05 EPI
Chloro-2-methylaniline, 4-	95-69-2	1.4E+02 PHYSPROP			SPROP	4.1E-02 PHYSPROP	3.0E+01 PHYS			7.0E-02 8.2E-06 EPA WATER9	1.8E+02 EPI	2.3E+00 PHYSPROP	9.5E+02 PHYSPROP	3.7E-02 6.5E-01 1.6E+00 8.1E-03 EPI
Chloroacetaldehyde, 2-	107-20-0	7.8E+01 PHYSPROP			SPROP	6.4E+01 PHYSPROP	-1.6E+01 PHYS	PROP 1.2E+00		1.0E-01 1.2E-05 EPA WATER9	1.0E+00 EPI	9.0E-02 PHYSPROP	1.1E+05 PHYSPROP	2.2E-03 2.9E-01 6.9E-01 6.5E-04 EPI
Chloroacetic Acid	79-11-8	9.4E+01 PHYSPROP	3.8E-07		SPROP	6.5E-02 PHYSPROP	6.3E+01 PHYS	PROP 1.4E+00		9.4E-02 1.2E-05 EPA WATER9	1.4E+00 EPI	2.2E-01 PHYSPROP	8.6E+05 PHYSPROP	2.4E-03 3.6E-01 8.5E-01 6.5E-04 EPI
Chloroacetophenone, 2- Chloroaniline, p-	532-27-4 106-47-8	1.5E+02 PHYSPROP 1.3E+02 PHYSPROP	1.4E-04 4.7E-05		SPROP FPI	5.4E-03 PHYSPROP 2.7E-02 PHYSPROP	5.7E+01 PHYS 7.3E+01 PHYS	PROP 1.3E+00 PROP 1.4E+00		5.2E-02 8.7E-06 EPA WATER9 7.0E-02 1.0E-05 EPA WATER9	9.9E+01 EPI 1.1E+02 EPI	1.9E+00 PHYSPROP 1.8F+00 PHYSPROP	1.1E+03 PERRY 3.9E+03 PHYSPROP	1.9E-02 7.7E-01 1.9E+00 4.1E-03 EPI 2.2E-02 5.4E-01 1.3E+00 5.0E-03 EPI
Chlorobenzene	108-47-8	1.1E+02 PHYSPROP	4.7E-05 1.3E-01	3.1E-03 PHY		1.2E+01 PHYSPROP	-4.5E+01 PHYS			7.2E-02 9.5E-06 EPA WATER9	2.3E+02 EPI	2.8E+00 PHYSPROP	5.0E+02 PHYSPROP	1.2E-01 4.5E-01 1.1E+00 2.8E-02 EPI
Chlorobenzilate	510-15-6	3.3E+02 PHYSPROP	3.0E-06	7.2E-08 E	EPI	2.2E-06 PHYSPROP	3.7E+01 PHYS	PROP 1.3E+00		2.2E-02 5.5E-06 EPA WATER9	1.5E+03 EPI	4.7E+00 PHYSPROP	1.3E+01 PHYSPROP	2.3E-01 7.0E+00 1.7E+01 3.3E-02 EPI
Chlorobenzoic Acid, p-	74-11-3	1.6E+02 PHYSPROP			SPROP	2.3E-03 PHYSPROP	2.4E+02 PHYS			5.5E-02 9.5E-06 EPA WATER9	2.7E+01 EPI	2.7E+00 PHYSPROP	7.2E+01 PHYSPROP	5.8E-02 7.9E-01 1.9E+00 1.2E-02 EPI
Chlorobenzotrifluoride, 4-	98-56-6	1.8E+02 PHYSPROP	1.4E+00		SPROP	7.6E+00 PHYSPROP	-3.3E+01 PHYS			3.8E-02 8.0E-06 EPA WATER9	1.6E+03 EPI	3.6E+00 PHYSPROP	2.9E+01 PHYSPROP	1.9E-01 1.1E+00 2.6E+00 3.8E-02 EPI
Chlorobutane, 1- Chlorodifluoromethane	109-69-3 75-45-6	9.3E+01 PHYSPROP 8.6E+01 PHYSPROP	6.8E-01 1.7F+00		SPROP SPROP	1.0E+02 PHYSPROP 7.3E+03 PHYSPROP	-1.2E+02 PHYS			7.8E-02 9.3E-06 EPA WATER9	7.2E+01 EPI 3.2E+01 EPI	2.6E+00 PHYSPROP	1.1E+03 PHYSPROP	1.0E-01 3.5E-01 8.3E-01 2.7E-02 EPI 9.6E-03 3.2E-01 7.7E-01 2.7E-03 EPI
Chloroethanol, 2-	107-07-3	8.1E+01 PHYSPROP	3.1E-05		EPI	7.2E+00 PHYSPROP	-6.8E+01 PHYS			1.0E-01 1.2E-05 EPA WATER9	1.9E+00 EPI	3.0E-02 PHYSPROP	1.0E+06 PHYSPROP	2.0E-03 3.0E-01 7.1E-01 2.7E-03 EPI
Chloroform	67-66-3	1.2E+02 PHYSPROP	1.5E-01	3.7E-03 PHY	SPROP	2.0E+02 PHYSPROP	-6.4E+01 PHYS	PROP 1.5E+00	CRC89	7.7E-02 1.1E-05 EPA WATER9	3.2E+01 EPI	2.0E+00 PHYSPROP	8.0E+03 PHYSPROP	2.9E-02 4.9E-01 1.2E+00 6.8E-03 EPI
Chloromethane	74-87-3	5.0E+01 PHYSPROP			SPROP	4.3E+03 PHYSPROP	-9.8E+01 PHYS			1.2E-01 1.4E-05 EPA WATER9	1.3E+01 EPI	9.1E-01 PHYSPROP	5.3E+03 PHYSPROP	9.0E-03 2.0E-01 4.8E-01 3.3E-03 EPI
Chloromethyl Methyl Ether	107-30-2	8.1E+01 PHYSPROP	1.2E-02		SPROP	3.0E+01 PHYSPROP	-1.0E+02 PHYS		0000	9.5E-02 1.1E-05 EPA WATER9	5.3E+00 EPI	3.2E-01 PHYSPROP	6.9E+04 PHYSPROP	3.1E-03 3.0E-01 7.1E-01 9.1E-04 EPI
Chloronitrobenzene, o- Chloronitrobenzene, p-	88-73-3 100-00-5	1.6E+02 PHYSPROP 1.6E+02 PHYSPROP	3.8E-04 2.0E-04		SPROP SPROP	1.8E-02 EPI 2.2E-02 EPI	3.3E+01 PHYS 8.4E+01 PHYS			5.1E-02 8.8E-06 EPA WATER9 5.0E-02 8.5E-06 EPA WATER9	3.7E+02 EPI 3.6E+02 EPI	2.2E+00 PHYSPROP 2.4E+00 PHYSPROP	4.4E+02 PHYSPROP 2.3E+02 PHYSPROP	3.0E-02 8.0E-01 1.9E+00 6.3E-03 EPI 3.8E-02 8.0E-01 1.9E+00 7.9E-03 EPI
Chlorophenol, 2-	95-57-8	1.3E+02 PHYSPROP	4.6E-04		SPROP	2.5E+00 PHYSPROP	9.8E+00 PHYS			6.6E-02 9.5E-06 EPA WATER9	3.1E+02 EPI	2.2E+00 PHYSPROP	1.1E+04 PHYSPROP	3.5E-02 5.5E-01 1.3E+00 8.0E-03 EPI
Chloropicrin	76-06-2	1.6E+02 PHYSPROP			SPROP	2.4E+01 PHYSPROP	-6.4E+01 PHYS			5.2E-02 9.6E-06 EPA WATER9	4.4E+01 EPI	2.1E+00 PHYSPROP	1.6E+03 PHYSPROP	2.3E-02 8.8E-01 2.1E+00 4.6E-03 EPI
Chlorothalonil	1897-45-6	2.7E+02 PHYSPROP	8.2E-05		SPROP	5.7E-07 PHYSPROP	2.5E+02 PHYS			2.8E-02 7.3E-06 EPA WATER9	1.0E+03 EPI	3.1E+00 PHYSPROP	8.1E-01 PHYSPROP	3.4E-02 3.2E+00 7.8E+00 5.4E-03 EPI
Chlorotoluene, o- Chlorotoluene, p-	95-49-8 106-43-4	1.3E+02 PHYSPROP 1.3E+02 PHYSPROP	1.5E-01 1.8E-01		SPROP	3.4E+00 PHYSPROP 2.7E+00 PHYSPROP	-3.6E+01 PHYS			6.3E-02 8.7E-06 EPA WATER9 6.3E-02 8.7E-06 EPA WATER9	3.8E+02 EPI 3.8E+02 EPI	3.4E+00 PHYSPROP	3.7E+02 PHYSPROP 1.1E+02 PHYSPROP	2.5E-01 5.4E-01 1.3E+00 5.7E-02 EPI 2.2E-01 5.4E-01 1.3E+00 5.0E-02 EPI
Chlorozotocin	54749-90-5	2.7E+02 PHYSPROP	1.8E-01 1.5E-20		SPROP	4.0E-14 PHYSPROP	1.5E+00 PHYS		CUCOS	4.6E-02 5.4E-06 EPA WATER9	3.8E+02 EPI 1.0E+01 EPI	-1.0E+00 PHYSPROP	1.8E+03 PHYSPROP	6.2E-05 3.2E+00 7.8E+00 9.9E-06 EPI
Chlorpropham	101-21-3	2.1E+02 PHYSPROP	2.3E-05		EPI	1.8E-04 PHYSPROP	4.1E+01 PHYS		CRC89	2.6E-02 6.7E-06 EPA WATER9	3.5E+02 EPI	3.5E+00 PHYSPROP	8.9E+01 PHYSPROP	1.2E-01 1.7E+00 4.0E+00 2.1E-02 EPI
Chlorpyrifos	2921-88-2	3.5E+02 PHYSPROP	1.2E-04	2.9E-06 PHY		2.0E-05 PHYSPROP	4.2E+01 PHYS			3.8E-02 4.5E-06 EPA WATER9	7.3E+03 EPI	5.0E+00 PHYSPROP	1.1E+00 PHYSPROP	2.4E-01 9.7E+00 2.3E+01 3.3E-02 EPI
Chlorpyrifos Methyl Chlorsulfuron	5598-13-0 64902-72-3	3.2E+02 PHYSPROP 3.6E+02 PHYSPROP			EPI FPI	4.2E-05 PHYSPROP 2.3E-11 PHYSPROP	4.3E+01 PHYS 1.8E+02 PHYS			4.0E-02 4.7E-06 EPA WATER9 3.8E-02 4.4E-06 EPA WATER9	2.2E+03 EPI 3.2E+02 EPI	4.3E+00 PHYSPROP 2.0E+00 PHYSPROP	4.8E+00 PHYSPROP	1.2E-01 6.7E+00 1.6E+01 1.8E-02 EPI 2.4E-03 1.1E+01 2.5E+01 3.3E-04 EPI
Chlorsulfuron Chlorthal-dimethyl	1861-32-1	3.5E+02 PHYSPROP			EPI	2.3E-11 PHYSPROP 2.5E-06 PHYSPROP	1.8E+02 PHYS			4.0E-02 4.4E-06 EPA WATER9	3.2E+02 EPI 5.1E+02 EPI	4.3E+00 PHYSPROP	5.0E-01 PHYSPROP	1.1E-01 7.6E+00 1.8E+01 1.5E-02 EPI
Chlorthiophos	60238-56-4	3.6E+02 PHYSPROP			SPROP	4.0E-01 PHYSPROP	8.6E+01 E	PI		3.7E-02 4.4E-06 EPA WATER9	1.3E+04 EPI	5.8E+00 PHYSPROP	3.0E-01 PHYSPROP	7.7E-01 1.1E+01 4.3E+01 1.1E-01 EPI
Chromium(III), Insoluble Salts	16065-83-1	5.2E+01 EPI							CRC89		1.8E+06 SSL			2.8E-03 2.1E-01 4.9E-01 1.0E-03 RAGSE
Chromium (VI)	18540-29-9 7440-47-3	5.2E+01 EPI 5.2E+01 PHYSPROP					1.9E+03 PHYS	PROP 7.2E+00	CRC89		1.9E+01 SSL		1.7E+06 CRC89	5.5E-03 2.1E-01 4.9E-01 2.0E-03 RAGSE 2.8E-03 2.1E-01 4.9E-01 1.0E-03 RAGSE
Chromium, Total Clofentezine	7440-47-3 74115-24-5	3.0E+02 PHYSPROP	1.6E-08	3.9E-10 E	EPI	9.8E-10 PHYSPROP	1.9E+03 PHYS 1.8E+02 PHYS		CKC89	4.2E-02 4.9E-06 EPA WATER9	1.8E+06 SSL 3.0E+04 EPI	3.1E+00 PHYSPROP	1.0E+00 PHYSPROP	2.4E-03 2.1E-01 4.9E-01 1.0E-03 RAGSE 2.4E-02 5.2E+00 1.3E+01 3.6E-03 EPI
Cobalt	7440-48-4	5.9E+01 EPI				0.0E+00 NIOSH	1.5E+03 CR	89 8.9E+00	CRC89		4.5E+01 BAES			1.2E-03 2.2E-01 5.4E-01 4.0E-04 RAGSE
Coke Oven Emissions	8007-45-2		4.5E-01	1.1E-02 Toxne	et HSDB	9.5E+01 Toxnet HSDB				1.0E-01 1.2E-05 EPA WATER9	1.6E+04			
Copper	7440-50-8	6.4E+01 PHYSPROP				0.0E+00 NIOSH	1.1E+03 PHYS				3.5E+01 BAES			3.1E-03 2.4E-01 5.7E-01 1.0E-03 RAGSE
Cresol, m- Cresol, o-	108-39-4 95-48-7	1.1E+02 PHYSPROP 1.1E+02 PHYSPROP	3.5E-05 4.9E-05		SPROP SPROP	1.1E-01 PHYSPROP 3.0E-01 EPI	1.2E+01 PHYS 3.0E+01 PHYS			7.3E-02 9.3E-06 EPA WATER9 7.3E-02 9.3E-06 EPA WATER9	3.0E+02 EPI 3.1E+02 EPI	2.0E+00 PHYSPROP 2.0E+00 PHYSPROP	2.3E+04 PHYSPROP 2.6E+04 PHYSPROP	3.1E-02 4.2E-01 1.0E+00 7.8E-03 EPI 3.1E-02 4.2E-01 1.0E+00 7.7E-03 EPI
Cresol, p-	106-44-5	1.1E+02 PHYSPROP	4.1E-05		SPROP	1.1E-01 PHYSPROP	3.6E+01 PHYS			7.2E-02 9.2E-06 EPA WATER9	3.0E+02 EPI	1.9E+00 PHYSPROP	2.2E+04 PHYSPROP	3.0E-02 4.2E-01 1.0E+00 7.7E-03 EPI
Cresol, p-chloro-m-	59-50-7	1.4E+02 PHYSPROP		2.5E-06 E	EPI	5.0E-02 PHYSPROP	6.7E+01 PHYS	PROP		7.0E-02 8.1E-06 EPA WATER9	4.9E+02 EPI	3.1E+00 PHYSPROP	3.8E+03 PHYSPROP	1.3E-01 6.6E-01 1.6E+00 2.9E-02 EPI
Cresols	1319-77-3	3.2E+02 PHYSPROP			SPROP	1.7E-01 PHYSPROP	3.0E+01 E			4.0E-02 4.7E-06 EPA WATER9	3.1E+02 EPI	2.0E+00 PHYSPROP	9.1E+03 PHYSPROP	5.3E-02 6.9E+00 1.7E+01 7.7E-03 EPI
Crotonaldehyde, trans-	123-73-9 98-82-8	7.0E+01 PHYSPROP 1.2E+02 PHYSPROP	7.9E-04 4.7E-01		SPROP :	3.0E+01 PHYSPROP	-7.6E+01 PHYS	PROP 8.5E-01	CRC89	9.6E-02 1.1E-05 EPA WATER9 6.0E-02 7.9E-06 EPA WATER9	1.8E+00 EPI 7.0E+02 EPI	6.0E-01 PHYSPROP 3.7E+00 PHYSPROP	1.5E+05 PHYSPROP 6.1E+01 PHYSPROP	5.1E-03 2.6E-01 6.2E-01 1.6E-03 EPI 3.8E-01 5.0E-01 1.2E+00 9.0E-02 EPI
Cumene Cupferron	98-82-8 135-20-6	1.2E+02 PHYSPROP 1.6E+02 PHYSPROP			SPROP SPROP	4.5E+00 PHYSPROP 6.3E-05 PHYSPROP	-9.6E+01 PHYS 1.6E+02 PHYS		CKC89	6.0E-02 7.9E-06 EPA WATER9 6.6E-02 7.7E-06 EPA WATER9	7.0E+02 EPI 7.6E+02 EPI	3.7E+00 PHYSPROP -1.7E+00 PHYSPROP	6.1E+01 PHYSPROP 6.1E+05 PHYSPROP	8.0E-06 7.8E-01 1.2E+00 9.0E-02 EPI 8.0E-06 7.8E-01 1.9E+00 1.7E-06 EPI
Cyanazine	21725-46-2	2.4E+02 PHYSPROP	1.1E-10	2.6E-12	EPI	1.4E-07 PHYSPROP	1.7E+02 PHYS			4.9E-02 5.7E-06 EPA WATER9	1.3E+02 EPI	2.2E+00 PHYSPROP	1.7E+02 PHYSPROP	1.2E-02 2.3E+00 5.6E+00 2.1E-03 EPI
Cyanides														
~Calcium Cyanide	592-01-8 544-92-3	9.2E+01 PHYSPROP					4.75.02 01.00	PROP 2.9E+00	CRC89					3.7E-03 3.4E-01 8.3E-01 1.0E-03 RAGSE
~Copper Cyanide ~Cyanide (CN-)	544-92-3 57-12-5	9.0E+01 PHYSPROP 2.6E+01 PHYSPROP	9 9F_01	2.4E-02 PHY	SPROP	3.1E+02 PHYSPROP	4.7E+02 PHYS		CRC89 CHEM GUIDE	2.1E-01 2.5E-05 EPA WATER9	9.9E+00 SSL		9.5E+04 PHYSPROP	3.6E-03 3.3E-01 8.0E-01 1.0E-03 RAGSE 2.0E-03 1.5E-01 3.5E-01 1.0E-03 RAGSE
~Cyanogen	460-19-5	5.2E+01 PHYSPROP	2.2E-01		EPI .	4.3E+03 PHYSPROP	-2.8E+01 PHYS			1.2E-01 1.4E-05 EPA WATER9	J.J.C. 00 JJC	7.0E-02 PHYSPROP	9.5E+03 YAWS	2.5E-03 2.1E-01 4.9E-01 8.9E-04 RAGSE
~Cyanogen Bromide	506-68-3	1.1E+02 PHYSPROP	1.0E+00	2.5E-02 E	EPI	1.2E+02 PHYSPROP	5.2E+01 PHYS	PROP 2.0E+00	CRC89	9.8E-02 1.4E-05 EPA WATER9				1.0E-03 4.1E-01 9.9E-01 2.6E-04 RAGSE
~Cyanogen Chloride	506-77-4	6.1E+01 PHYSPROP	7.9E-02	1.9E-03 YA	AWS	1.2E+03 PHYSPROP	-6.6E+00 PHYS	PROP 1.2E+00	CRC89	1.2E-01 1.4E-05 EPA WATER9			6.0E+04 PHYSPROP	1.2E-03 2.3E-01 5.6E-01 3.9E-04 RAGSE
		_											·	

Contaminant		Molecular Weight		Vol	atility Paramete	**		Mol	ting Point	D 0	nsity	Diffusivity in Air and Water	Soil Partition Coefficients	Water Partition	Water Solubility	Tapwater Dermal Parameters
			H,	HLC						Density		Dia Diw	K <sub>d</sub> K <sub>oc</sub>	log K <sub>ow</sub>	S	B τ <sub>event</sub> t* K <sub>p</sub>
Analyte	CAS No. 74-90-8	MW MW Ref 2.7E+01 PHYSPROP	(4	tm-m³/mole)	H' and HLC Ref	VP	VP Ref	MP	MP Ref	(g/cm³) 6.9E-01	Density Ref CRC89	(cm <sup>2</sup> /s) (cm <sup>2</sup> /s) D <sub>ia</sub> and D <sub>iw</sub> Ref 1.7E-01 1.7E-05 EPA WATER9	(L/kg) K <sub>d</sub> Ref (L/kg) K <sub>oc</sub> Ref	(unitless) log K <sub>ow</sub> Ref -2.5E-01 PHYSPROP		(unitless) (hr/event) (hr) (cm/hr) KPREF 2.0E-03 1.5E-01 3.6E-01 1.0E-03 RAGSE
~Hydrogen Cyanide ~Potassium Cyanide	74-90-8 151-50-8	6.5E+01 PHYSPROP	5.4E-03	1.3E-04	PHYSPROP	7.4E+02 0.0E+00	PHYSPROP NIOSH	-1.3E+0 6.3E+02	1 PHYSPROP 2 PHYSPROP	1.6E+00	CRC89	1./E-01 1./E-05 EPA WATER9	9.9E+00 SSL	-2.5E-01 PHYSPROP	1.0E+06 PHYSPROP 7.2E+05 PHYSPROP	6.2E-03 2.4E-01 5.8E-01 2.0E-03 RAGSE
~Potassium Silver Cyanide	506-61-6	2.0E+02 PHYSPROP														1.1E-02 1.4E+00 3.3E+00 2.0E-03 RAGSE
~Silver Cyanide ~Sodium Cyanide	506-64-9 143-33-9	1.3E+02 PHYSPROP 4.9E+01 PHYSPROP				0.0F+00	NIOSH	3.2E+02	2 PHYSPROP 2 PHYSPROP	4.0E+00 1.6E+00	CRC89				2.3E+01 PHYSPROP 5.8F+05 CRC89	4.5E-03 5.9E-01 1.4E+00 1.0E-03 RAGSE 2.7E-03 2.0E-01 4.7E-01 1.0E-03 RAGSE
~Thiocyanates	NA NA	4.52.101 1111511101				0.02.00	1410511	5.02.10.	- monto	1.02.100	CITCOS				3.0E-03 CRC03	1.0E-03 RAGSE
~Thiocyanic Acid	463-56-9	5.9E+01 PHYSPROP				4.7E+00	PPRTV	5.0E+00		1.1E+00	PPRTV	1.2E-01 1.4E-05 EPA WATER9		5.8E-01 OTHER		3.0E-03 2.3E-01 5.4E-01 1.0E-03 RAGSE
~Zinc Cyanide Cyclohexane	557-21-1 110-82-7	1.2E+02 PHYSPROP 8.4E+01 PHYSPROP	6.1E+00	1.5E-01	PHYSPROP	9.7E+01	PHYSPROP	8.0E+01	1 PERRY D PHYSPROP	1.9E+00 7.7E-01	CRC89 CRC89	8.0E-02 9.1E-06 EPA WATER9	1.5E+02 EPI	3.4E+00 PHYSPROP	4.7E+00 CRC89 5.5E+01 PHYSPROP	2.5E-03 4.8E-01 1.1E+00 6.0E-04 RAGSE 3.6E-01 3.1E-01 7.5E-01 1.0E-01 EPI
Cyclohexane, 1,2,3,4,5-pentabromo-6-chloro-	87-84-3	5.1E+02 PHYSPROP	3.9E-05	9.6E-07	PHYSPROP		PHYSPROP		2 CRC89		CNCOS	3.0E-02 3.5E-06 EPA WATER9	2.8E+03 EPI	4.7E+00 PHYSPROP	5.5E-02 PHYSPROP	2.5E-02 7.9E+01 1.9E+02 2.8E-03 EPI
Cyclohexanone	108-94-1	9.8E+01 PHYSPROP	3.7E-04	9.0E-06	PHYSPROP		PHYSPROP		1 PHYSPROP	9.5E-01	CRC89	7.7E-02 9.4E-06 EPA WATER9	1.7E+01 EPI	8.1E-01 PHYSPROP	2.5E+04 PHYSPROP	5.8E-03 3.7E-01 8.9E-01 1.5E-03 EPI
Cyclohexene Cyclohexylamine	110-83-8 108-91-8	8.2E+01 PHYSPROP 9.9E+01 PHYSPROP	1.9E+00 1.7E-04	4.6E-02 4.2E-06	PHYSPROP PHYSPROP		PHYSPROP		2 PHYSPROP 1 PHYSPROP	8.1E-01 8.2E-01	NIOSH CRC89	8.3E-02 9.5E-06 EPA WATER9 7.1E-02 8.5E-06 EPA WATER9	1.5E+02 EPI 3.2E+01 EPI	2.9E+00 PHYSPROP 1.5E+00 PHYSPROP	2.1E+02 PHYSPROP 1.0E+06 PHYSPROP	1.5E-01 3.0E-01 7.3E-01 4.3E-02 EPI 1.6E-02 3.8E-01 9.1E-01 4.3E-03 EPI
Cyfluthrin	68359-37-5	4.3E+02 PHYSPROP	1.2E-06	2.9E-08	EPI	1.5E-10	PHYSPROP		1 PHYSPROP	0.2E-U1	ChCos	3.3E-02 3.9E-06 EPA WATER9	1.3E+05 EPI	6.0E+00 PHYSPROP		4.1E-01 2.8E+01 6.8E+01 5.2E-02 EPI
Cyhalothrin		4.5E+02 PHYSPROP	6.1E-05	1.5E-06	EPI	1.5E-09	EPI	4.9E+01				3.2E-02 3.8E-06 EPA WATER9	3.4E+05 EPI	6.9E+00 PHYSPROP		1.7E+00 3.5E+01 1.4E+02 2.1E-01 EPI
Cypermethrin Cyromazine	52315-07-8 66215-27-8	4.2E+02 PHYSPROP 1.7E+02 PHYSPROP	1.7E-05 2.3E-12	4.2E-07 5.7E-14	EPI EPI		PHYSPROP PHYSPROP		1 PHYSPROP 2 PHYSPROP	1.3E+00	CRC89	1.9E-02 4.7E-06 EPA WATER9 6.3E-02 7.3E-06 EPA WATER9	8.0E+04 EPI 2.9E+01 EPI	6.6E+00 PHYSPROP -6.1E-02 PHYSPROP	4.0E-03 PHYSPROP	6.0E-01 2.3E+01 9.1E+01 7.7E-02 EPI 4.0E-03 9.0E-01 2.2E+00 8.0E-04 EPI
DDD	72-54-8		2.7E-04	6.6E-06	PHYSPROP		PHYSPROP	_	2 PHYSPROP			4.1E-02 4.7E-06 EPA WATER9	1.2E+05 EPI	6.0E+00 PHYSPROP		1.7E+00 6.5E+00 2.6E+01 2.5E-01 EPI
DDE, p,p'-	72-55-9	3.2E+02 PHYSPROP	1.7E-03	4.2E-05	PHYSPROP	6.0E-06	EPI		1 PHYSPROP	1.4E+00	LookChem	2.3E-02 5.9E-06 EPA WATER9	1.2E+05 EPI	6.5E+00 PHYSPROP	4.0E-02 PHYSPROP	3.7E+00 6.4E+00 2.7E+01 5.5E-01 EPI
DDT	50-29-3		3.4E-04	8.3E-06	PHYSPROP		PHYSPROP	_	2 PHYSPROP	4.45.00	cncoo	3.8E-02 4.4E-06 EPA WATER9	1.7E+05 EPI	6.9E+00 PHYSPROP		4.5E+00 1.0E+01 4.4E+01 6.3E-01 EPI
Dalapon Daminozide	75-99-0 1596-84-5	1.4E+02 PHYSPROP 1.6E+02 PHYSPROP	2.3E-06 1.7E-08	5.7E-08 4.2E-10	EPI EPI	1.5E-01 2.0E-04	EPI PHYSPROP		0 PHYSPROP 2 PHYSPROP	1.4E+00	CRC89	6.0E-02 9.4E-06 EPA WATER9 6.4E-02 7.5E-06 EPA WATER9	3.2E+00 EPI 1.0E+01 EPI	7.8E-01 PHYSPROP -1.5E+00 PHYSPROP	5.0E+05 PHYSPROP 1.0E+05 PHYSPROP	3.7E-03 6.6E-01 1.6E+00 8.2E-04 EPI 9.7E-05 8.3E-01 2.0E+00 2.0E-05 EPI
Decabromodiphenyl ether, 2,2',3,3',4,4',5,5',6,6'- (BDE-209	1163-19-5	9.6E+02 PHYSPROP	4.9E-07	1.2E-08	PHYSPROP		PHYSPROP		2 PHYSPROP	3.0E+00	IRIS	1.9E-02 4.8E-06 EPA WATER9	2.8E+05 EPI	1.2E+01 PHYSPROP		8.6E+00 2.5E+04 1.1E+05 7.3E-01 EPI
Demeton	8065-48-3	5.2E+02 PHYSPROP	1.6E-04	3.8E-06	PHYSPROP	3.4E-04	PHYSPROP			1.1E+00	PubChem	1.6E-02 3.8E-06 EPA WATER9		3.2E+00 PHYSPROP	6.7E+02 PHYSPROP	6.6E-02 8.2E+01 2.0E+02 7.6E-03 RAGSE
Di(2-ethylhexyl)adipate Diallate	103-23-1 2303-16-4	3.7E+02 PHYSPROP 2.7E+02 PHYSPROP	1.8E-05 1.6E-04	4.3E-07 3.8E-06	PHYSPROP EPI		PHYSPROP PHYSPROP		1 PHYSPROP 1 PHYSPROP	9.2E-01	CRC89	1.7E-02 4.2E-06 EPA WATER9 4.5E-02 5.3E-06 EPA WATER9	3.6E+04 EPI 6.4E+02 EPI	6.1E+00 PHYSPROP 4.5E+00 PHYSPROP		2.4E+01 1.3E+01 5.8E+01 3.2E+00 EPI 2.9E-01 3.4E+00 8.2E+00 4.6E-02 EPI
Diazinon	333-41-5	3.0E+02 PHYSPROP	4.6E-06	1.1E-07	PHYSPROP	9.0E-05	PHYSPROP	8.8E+01	1 EPI	1.1E+00	CRC89	2.1E-02 5.2E-06 EPA WATER9	3.0E+03 EPI	3.8E+00 PHYSPROP	4.0E+01 PHYSPROP	7.0E-02 5.3E+00 1.3E+01 1.0E-02 EPI
Dibenzothiophene	132-65-0	1.8E+02 PHYSPROP	1.4E-03	3.4E-05	EPI	2.1E-04	EPI		1 PHYSPROP		ChemNet	3.6E-02 7.6E-06 EPA WATER9	9.2E+03 EPI	4.4E+00 PHYSPROP	1.5E+00 PHYSPROP	6.2E-01 1.1E+00 4.5E+00 1.2E-01 EPI
Dibromo-3-chloropropane, 1,2-	96-12-8 108-36-1	2.4E+02 PHYSPROP 2.4E+02 PHYSPROP	6.0E-03 5.1E-02	1.5E-04 1.2E-03	EPI EPI	5.8E-01 2.7E-01	PHYSPROP		PHYSPROP	2.1E+00 2.0E+00	CRC89 CRC89	3.2E-02 8.9E-06 EPA WATER9 3.1E-02 8.5E-06 EPA WATER9	1.2E+02 EPI 3.8E+02 EPI	3.0E+00 PHYSPROP 3.8E+00 PHYSPROP		4.1E-02 2.2E+00 5.3E+00 6.9E-03 EPI 1.4E-01 2.2E+00 5.3E+00 2.3E-02 EPI
Dibromobenzene, 1,3- Dibromobenzene, 1,4-	108-36-1	2.4E+02 PHYSPROP 2.4E+02 PHYSPROP	5.1E-02 3.7E-02	1.2E-03 8.9E-04	EPI		PHYSPROP		0 PHYSPROP 1 PHYSPROP	2.0E+00 2.3E+00	CRC89	3.1E-02 8.5E-06 EPA WATER9 3.3E-02 9.3E-06 EPA WATER9	3.8E+02 EPI 3.8E+02 EPI	3.8E+00 PHYSPROP  3.8E+00 PHYSPROP	6.8E+01 PHYSPROP 2.0E+01 PHYSPROP	1.4E-01 2.2E+00 5.3E+00 2.3E-02 EPI 1.4E-01 2.2E+00 5.3E+00 2.5E-02 EPI
Dibromochloromethane	124-48-1	2.1E+02 PHYSPROP	3.2E-02	7.8E-04	PHYSPROP	5.5E+00	PHYSPROP		1 PHYSPROP	2.5E+00	CRC89	3.7E-02 1.1E-05 EPA WATER9	3.2E+01 EPI	2.2E+00 PHYSPROP		1.6E-02 1.5E+00 3.7E+00 2.9E-03 EPI
Dibromoethane, 1,2-	106-93-4	1.9E+02 PHYSPROP	2.7E-02	6.5E-04	PHYSPROP	1.1E+01	PHYSPROP		PHYSPROP	2.2E+00	CRC89	4.3E-02 1.0E-05 EPA WATER9	4.0E+01 EPI	2.0E+00 PHYSPROP		1.5E-02 1.2E+00 2.8E+00 2.8E-03 EPI
Dibromomethane (Methylene Bromide) Dibutyltin Compounds	74-95-3 NA	1.7E+02 PHYSPROP	3.4E-02	8.2E-04	PHYSPROP	4.4E+01	PHYSPROP	-5.3E+0	1 PHYSPROP	2.5E+00	CRC89	5.5E-02 1.2E-05 EPA WATER9	2.2E+01 EPI	1.7E+00 PHYSPROP	1.2E+04 PHYSPROP	1.1E-02 9.9E-01 2.4E+00 2.2E-03 EPI
Dicamba	1918-00-9	2.2E+02 PHYSPROP	8.9E-08	2.2E-09	EPI	1.3E-05	PHYSPROP	1.2E+02	2 PHYSPROP	1.6E+00	CRC89	2.9E-02 7.8E-06 EPA WATER9	2.9E+01 EPI	2.2E+00 PHYSPROP	8.3E+03 PHYSPROP	1.5E-02 1.8E+00 4.4E+00 2.7E-03 EPI
Dichloro-2-butene, 1,4-	764-41-0		3.5E-01	8.5E-03	PHYSPROP	3.0E+00	EPI		PHYSPROP	1.2E+00	LANGE	6.7E-02 9.3E-06 EPA WATER9	1.3E+02 EPI	2.6E+00 PHYSPROP	5.8E+02 PHYSPROP	7.1E-02 5.3E-01 1.3E+00 1.7E-02 EPI
Dichloro-2-butene, cis-1,4- Dichloro-2-butene, trans-1.4-	1476-11-5 110-57-6	1.3E+02 PHYSPROP 1.3E+02 PHYSPROP	2.7E-02 2.7E-02	6.6E-04	EPI EPI		PHYSPROP		1 PHYSPROP D PHYSPROP	1.2E+00 1.2E+00	CRC89 CRC89	6.7E-02 9.3E-06 EPA WATER9 6.6E-02 9.3E-06 EPA WATER9	1.3E+02 EPI 1.3E+02 EPI	2.6E+00 PHYSPROP 2.6E+00 PHYSPROP	5.8E+02 PHYSPROP	7.1E-02 5.3E-01 1.3E+00 1.7E-02 EPI 7.1E-02 5.3E-01 1.3E+00 1.7E-02 EPI
Dichloroacetic Acid	79-43-6		3.4E-07	8.4E-09	PHYSPROP		PHYSPROP		1 PHYSPROP	1.6E+00	CRC89	7.2E-02 1.1E-05 EPA WATER9	2.3E+00 EPI	9.2E-01 PHYSPROP	1.0E+06 PHYSPROP	5.3E-03 5.5E-01 1.3E+00 1.7E-02 EPI
Dichlorobenzene, 1,2-	95-50-1	1.5E+02 PHYSPROP	7.8E-02	1.9E-03	PHYSPROP	1.4E+00	PHYSPROP		1 PHYSPROP	1.3E+00	CRC89	5.6E-02 8.9E-06 EPA WATER9	3.8E+02 EPI	3.4E+00 PHYSPROP	1.6E+02 PHYSPROP	2.1E-01 7.0E-01 1.7E+00 4.5E-02 EPI
Dichlorobenzene, 1,4-	106-46-7	1.5E+02 PHYSPROP	9.9E-02 1.2E-09	2.4E-03	PHYSPROP		PHYSPROP		1 PHYSPROP	1.2E+00	CRC89	5.5E-02 8.7E-06 EPA WATER9	3.8E+02 EPI 3.2F+03 EPI	3.4E+00 PHYSPROP		2.1E-01 7.0E-01 1.7E+00 4.5E-02 EPI 7.8E-02 2.8E+00 6.6E+00 1.3E-02 EPI
Dichlorobenzidine, 3,3'- Dichlorobenzophenone, 4.4'-	91-94-1 90-98-2	2.5E+02 PHYSPROP 2.5E+02 PHYSPROP	4.4E-05	2.8E-11 1.1E-06	PHYSPROP		PHYSPROP PHYSPROP		2 PHYSPROP 2 PHYSPROP	1.5E+00	CRC89	4.7E-02 5.5E-06 EPA WATER9 2.6E-02 6.9E-06 EPA WATER9	3.2E+03 EPI 2.9E+03 EPI	3.5E+00 PHYSPROP 4.4E+00 PHYSPROP	8.3E-01 PHYSPROP	3.3E-01 2.7E+00 6.6E+00 1.3E-02 EPI
Dichlorodifluoromethane	75-71-8	1.2E+02 PHYSPROP	1.4E+01	3.4E-01	PHYSPROP	4.8E+03	PHYSPROP		2 PHYSPROP	1.5E+00	PERRY	7.6E-02 1.1E-05 EPA WATER9	4.4E+01 EPI	2.2E+00 PHYSPROP	2.8E+02 PHYSPROP	3.8E-02 5.0E-01 1.2E+00 9.0E-03 EPI
Dichloroethane, 1,1- Dichloroethane, 1,2-	75-34-3 107-06-2	9.9E+01 PHYSPROP	2.3E-01 4.8F-02	5.6E-03 1.2E-03	PHYSPROP		PHYSPROP		1 PHYSPROP	1.2E+00 1.2E+00	CRC89	8.4E-02 1.1E-05 EPA WATER9	3.2E+01 EPI 4.0F+01 EPI	1.8E+00 PHYSPROP		2.6E-02 3.8E-01 9.0E-01 6.8E-03 EPI 1.6E-02 3.8E-01 9.0E-01 4.2E-03 EPI
Dichloroethane, 1,2- Dichloroethylene, 1,1-	75-35-4	9.9E+01 PHYSPROP 9.7E+01 PHYSPROP	4.8E-02 1.1E+00	2.6E-02	PHYSPROP	7.9E+01 6.0E+02	PHYSPROP		1 PHYSPROP 2 PHYSPROP	1.2E+00 1.2E+00	CRC89	8.6E-02 1.1E-05 EPA WATER9 8.6E-02 1.1E-05 EPA WATER9	4.0E+01 EPI 3.2E+01 EPI	1.5E+00 PHYSPROP 2.1E+00 PHYSPROP	2.4E+03 PHYSPROP	1.6E-02 3.8E-01 9.0E-01 4.2E-03 EPI 4.4E-02 3.7E-01 8.8E-01 1.2E-02 EPI
Dichloroethylene, 1,2-cis-	156-59-2	9.7E+01 PHYSPROP	1.7E-01	4.1E-03	PHYSPROP	2.0E+02	PHYSPROP	-8.0E+0	1 PHYSPROP	1.3E+00	CRC89	8.8E-02 1.1E-05 EPA WATER9	4.0E+01 EPI	1.9E+00 PHYSPROP	6.4E+03 PHYSPROP	4.2E-02 3.7E-01 8.8E-01 1.1E-02 EPI
Dichloroethylene, 1,2-trans-	156-60-5	9.7E+01 PHYSPROP	3.8E-01	9.4E-03	PHYSPROP	3.3E+02	EPI	0.02.0	1 PHYSPROP	1.3E+00 1.4F+00	CRC89	8.8E-02 1.1E-05 EPA WATER9	4.0E+01 EPI	2.1E+00 PHYSPROP	4.5E+03 PHYSPROP	4.2E-02 3.7E-01 8.8E-01 1.1E-02 EPI
Dichlorophenol, 2,4- Dichlorophenoxy Acetic Acid, 2,4-	120-83-2 94-75-7	1.6E+02 PHYSPROP 2.2E+02 PHYSPROP	1.8E-04 1.4E-06	4.3E-06 3.5E-08	EPI EPI		PHYSPROP		1 PHYSPROP 2 PHYSPROP	1.4E+00 1.4E+00	PERRY PubChem	2.8E-02 7.3E-06 EPA WATER9	4.9E+02 EPI 3.0E+01 EPI	3.1E+00 PHYSPROP 2.8E+00 PHYSPROP	5.6E+03 PHYSPROP 6.8E+02 PHYSPROP	1.0E-01 8.6E-01 2.1E+00 2.1E-02 EPI 3.8E-02 1.8E+00 4.4E+00 6.6E-03 EPI
Dichlorophenoxy)butyric Acid, 4-{2,4-	94-82-6	2.5E+02 PHYSPROP	9.4E-08	2.3E-09	PHYSPROP		PHYSPROP		2 PHYSPROP		ChemNet	2.6E-02 6.7E-06 EPA WATER9	3.7E+02 PubChem	3.5E+00 PHYSPROP		8.4E-02 2.6E+00 6.3E+00 1.4E-02 EPI
Dichloropropane, 1,2-	78-87-5	1.1E+02 PHYSPROP	1.2E-01	2.8E-03	PHYSPROP		PHYSPROP		2 PHYSPROP	1.2E+00	PERRY	7.3E-02 9.7E-06 EPA WATER9	6.1E+01 EPI	2.0E+00 PHYSPROP	2.8E+03 PHYSPROP	3.1E-02 4.5E-01 1.1E+00 7.5E-03 EPI
Dichloropropane, 1,3- Dichloropropanol, 2,3-	142-28-9 616-23-9	1.1E+02 PHYSPROP 1.3E+02 PHYSPROP	4.0E-02 1.5E-07	9.8E-04 3.6E-09	PHYSPROP PHYSPROP		PHYSPROP PHYSPROP	-1.0E+0	2 PHYSPROP 1 EPI	1.2E+00 1.4E+00	CRC89 CRC89	7.4E-02 9.8E-06 EPA WATER9 6.8E-02 9.9E-06 EPA WATER9	7.2E+01 EPI 5.6E+00 EPI	2.0E+00 PHYSPROP 7.8E-01 PHYSPROP	2.8E+03 PHYSPROP	3.2E-02 4.5E-01 1.1E+00 7.8E-03 EPI 4.3E-03 5.5E-01 1.3E+00 9.8E-04 EPI
Dichloropropene, 1,3-	542-75-6		1.5E-01	3.6E-03	PHYSPROP		PHYSPROP	_	1 PHYSPROP	1.2E+00	LANGE	7.6E-02 1.0E-05 EPA WATER9	7.2E+01 EPI	2.0E+00 PHYSPROP		3.4E-02 4.4E-01 1.1E+00 8.3E-03 EPI
Dichlorvos	62-73-7	2.2E+02 PHYSPROP	2.4E-05	5.7E-07	EPI		PHYSPROP		1 PHYSPROP	1.4E+00	CRC89	2.8E-02 7.3E-06 EPA WATER9	5.4E+01 EPI	1.4E+00 PHYSPROP	8.0E+03 PHYSPROP	4.6E-03 1.8E+00 4.4E+00 8.0E-04 EPI
Dicrotophos Dicyclopentadiene	141-66-2 77-73-6	2.4E+02 PHYSPROP 1.3E+02 PHYSPROP	2.1E-09 2.6E+00	5.0E-11 6.3E-02	PHYSPROP	1.6E-04 2.3E+00	PHYSPROP	7.9E+01	1 EPI 0 PHYSPROP	1.2E+00 9.3E-01	CRC89 LANGE	2.5E-02 6.4E-06 EPA WATER9 5.6E-02 7.8E-06 EPA WATER9	1.7E+01 EPI 1.5E+03 EPI	0.0E+00 PHYSPROP 3.2E+00 PHYSPROP		4.3E-04 2.2E+00 5.4E+00 7.3E-05 EPI 1.6E-01 5.8E-01 1.4E+00 3.6E-02 EPI
Dieldrin	60-57-1	3.8E+02 PHYSPROP	4.1E-04	1.0E-05	PHYSPROP		PHYSPROP		2 PHYSPROP	1.8E+00	CRC89	2.3E-02 6.0E-06 EPA WATER9	2.0E+04 EPI	5.4E+00 PHYSPROP		2.4E-01 1.4E+01 3.4E+01 3.3E-02 EPI
Diesel Engine Exhaust	NA															
Diethanolamine Diethylene Glycol Monobutyl Ether	111-42-2 112-34-5	1.1E+02 PHYSPROP 1.6E+02 PHYSPROP	1.6E-09 2.9E-07	3.9E-11 7.2E-09	EPI PHYSPROP		PHYSPROP PHYSPROP	2.8E+01	1 PHYSPROP 1 PHYSPROP	1.1E+00 9.6E-01	CRC89 CRC89	7.7E-02 9.8E-06 EPA WATER9 4.1E-02 7.0E-06 EPA WATER9	1.0E+00 EPI 1.0E+01 EPI	-1.4E+00 PHYSPROP 5.6E-01 PHYSPROP		1.8E-04 4.1E-01 9.8E-01 4.5E-05 EPI 2.2E-03 8.5E-01 2.0E+00 4.5E-04 EPI
Diethylene Glycol Monoethyl Ether	111-90-0	1.3E+02 PHYSPROP	9.1E-07	7.2E-09 2.2E-08	EPI		PHYSPROP		1 PHYSPROP	9.6E-01 9.9E-01	CRC89	5.6E-02 8.0E-06 EPA WATER9	1.0E+01 EPI 1.0E+00 EPI	-5.4E-01 PHYSPROP		5.4E-04 5.9E-01 1.4E+00 1.2E-04 EPI
Diethylformamide	617-84-5	1.0E+02 PHYSPROP	5.3E-06	1.3E-07	PHYSPROP	1.2E+00	EPI	-7.6E+0	0 EPI	9.1E-01	CRC89	7.3E-02 9.0E-06 EPA WATER9	2.1E+00 EPI	5.0E-02 PHYSPROP	1.0E+06 PHYSPROP	1.8E-03 3.9E-01 9.3E-01 4.6E-04 EPI
Diethylstilbestrol Difenzoguat	56-53-1 43222-48-6	2.7E+02 PHYSPROP 3.6E+02 PHYSPROP	2.4E-10	5.8E-12	PHYSPROP		PHYSPROP PHYSPROP		2 PHYSPROP 2 PHYSPROP			4.6E-02 5.3E-06 EPA WATER9 3.8E-02 4.4E-06 EPA WATER9	2.7E+05 EPI 7.8E+04 EPI	5.1E+00 PHYSPROP 6.5E-01 PHYSPROP	1.2E+01 PHYSPROP 8.2E+05 PHYSPROP	7.2E-01 3.3E+00 1.3E+01 1.1E-01 EPI 2.9E-04 1.1E+01 2.6E+01 4.0E-05 EPI
Diflubenzuron	35367-38-5	3.1E+02 PHYSPROP	1.9E-07	4.6E-09	EPI	9.0E-10	PHYSPROP	2.4F+02	2 PHYSPROP			4.1E-02 4.8E-06 EPA WATER9	4.6E+02 EPI	3.9E+00 PHYSPROP	8.0F-02 PHYSPROP	7.3E-02 5.8E+00 1.4E+01 1.1E-02 EPI
Difluoroethane, 1,1-	75-37-6	6.6E+01 PHYSPROP	8.3E-01	2.0E-02	PHYSPROP	4.6E+03	PHYSPROP	-1.2E+0	2 PHYSPROP	9.0E-01	CRC89	1.0E-01 1.2E-05 EPA WATER9	3.2E+01 EPI	7.5E-01 PHYSPROP	3.2E+03 PHYSPROP	6.6E-03 2.5E-01 5.9E-01 2.1E-03 EPI
Dihydrosafrole Discoveryd 5thor	94-58-6 108-20-3	1.6E+02 PHYSPROP	5.0E-04	1.2E-05 2.6E-03	PHYSPROP		PHYSPROP	4.4E+01	1 EPI	1.1E+00 7.2E-01	PubChem CRC89	4.3E-02 7.4E-06 EPA WATER9 6.5E-02 7.8E-06 EPA WATER9	2.1E+02 EPI 2.3E+01 EPI	3.6E+00 PHYSPROP		2.2E-01 8.7E-01 2.1E+00 4.5E-02 EPI 1.7E-02 3.9E-01 9.4E-01 4.3E-03 EPI
Diisopropyl Ether Diisopropyl Methylphosphonate	108-20-3 1445-75-6	1.0E+02 PHYSPROP 1.8E+02 PHYSPROP	1.0E-01 1.8E-03	2.6E-03 4.4E-05	PHYSPROP EPI		PHYSPROP		1 PHYSPROP 1 EPI		CRC89 TSDR Profile	6.5E-02 7.8E-06 EPA WATER9 3.4E-02 6.6E-06 EPA WATER9	2.3E+01 EPI 4.2E+01 EPI	1.5E+00 PHYSPROP 1.0E+00 PHYSPROP	8.8E+03 PHYSPROP 1.5E+03 PHYSPROP	1.7E-02 3.9E-01 9.4E-01 4.3E-03 EPI 3.8E-03 1.1E+00 2.6E+00 7.4E-04 EPI
Dimethipin	55290-64-7	2.1E+02 PHYSPROP	9.4E-10	2.3E-11	EPI		PHYSPROP	1.7E+02	2 PHYSPROP			5.4E-02 6.3E-06 EPA WATER9	1.0E+01 EPI	-1.7E-01 PHYSPROP		4.5E-04 1.6E+00 3.8E+00 8.0E-05 EPI
Dimethoate	60-51-5	2.3E+02 PHYSPROP	9.9E-09	2.4E-10	EPI		PHYSPROP		1 PHYSPROP	1.3E+00	CRC89	2.6E-02 6.7E-06 EPA WATER9	1.3E+01 EPI	7.8E-01 PHYSPROP		1.6E-03 2.0E+00 4.9E+00 2.7E-04 EPI
Dimethoxybenzidine, 3,3'- Dimethyl methylphosphonate	119-90-4 756-79-6	2.4E+02 PHYSPROP 1.2E+02 PHYSPROP	1.9E-09 5.6E-06	4.7E-11 1.4E-07	PHYSPROP PHYSPROP	1.3E-07 8.3E-01	PHYSPROP PHYSPROP	1.4E+02	2 PHYSPROP 1 FPI	1.2E+00	CRC89	4.9E-02 5.7E-06 EPA WATER9 6.7E-02 9.2E-06 EPA WATER9	5.1E+02 EPI 5.4E+00 EPI	1.8E+00 PHYSPROP -6.1E-01 PHYSPROP	6.0E+01 PHYSPROP	6.4E-03 2.5E+00 5.9E+00 1.1E-03 EPI 5.3E-04 5.2E-01 1.2E+00 1.2E-04 EPI
Dimethylamino azobenzene [p-]	60-11-7		1.6E-08	4.0E-10	PHYSPROP	7.0E-08	EPI	1.2E+02	2 PHYSPROP	2.22.700	C.1.C.0.3	5.1E-02 6.0E-06 EPA WATER9	2.0E+03 EPI	4.6E+00 PHYSPROP	2.3E-01 PHYSPROP	5.4E-01 1.9E+00 4.6E+00 9.4E-02 EPI
Dimethylaniline HCl, 2,4-	21436-96-4		9.5E-05	2.3E-06	PHYSPROP		PHYSPROP	1.6E+02				7.8E-02 9.1E-06 EPA WATER9	3.5E+02 EPI	2.2E+00 PHYSPROP	3.7E+03 PHYSPROP	8.6E-05 5.0E-01 1.2E+00 2.0E-05 EPI
Dimethylaniline, 2,4- Dimethylaniline, N,N-	95-68-1 121-69-7	1.2E+02 PHYSPROP 1.2E+02 PHYSPROP	1.0E-04 2.3E-03	2.5E-06 5.7E-05	PHYSPROP	1.3E-01 7.0E-01	PHYSPROP		1 PHYSPROP D PHYSPROP	9.7E-01 9.6E-01	CRC89 CRC89	6.3E-02 8.4E-06 EPA WATER9 6.3E-02 8.3E-06 EPA WATER9	1.8E+02 EPI 7.9E+01 EPI	1.7E+00 PHYSPROP	6.1E+03 PHYSPROP	1.8E-02 5.0E-01 1.2E+00 4.3E-03 EPI 4.7E-02 5.0E-01 1.2E+00 1.1E-02 EPI
Dimethylaniline, N,N- Dimethylbenzidine, 3,3'-	121-69-7		2.3E-03 2.6E-09	5.7E-05 6.3E-11	PHYSPROP		PHYSPROP		2 PHYSPROP	3.0E-U1	ChC89	5.3E-02 8.3E-06 EPA WATER9	7.9E+01 EPI 3.2E+03 EPI	2.3E+00 PHYSPROP 2.3E+00 PHYSPROP		2.0E-02 1.6E+00 3.9E+00 3.6E-03 EPI
Dimethylformamide	68-12-2	7.3E+01 PHYSPROP	3.0E-06	7.4E-08	PHYSPROP	3.9E+00	PHYSPROP	-6.0E+0	1 PHYSPROP	9.4E-01	CRC89	9.7E-02 1.1E-05 EPA WATER9	1.0E+00 EPI	-1.0E+00 PHYSPROP	1.0E+06 PHYSPROP	4.3E-04 2.7E-01 6.5E-01 1.3E-04 EPI
Dimethylhydrazine, 1,1-	57-14-7	6.0E+01 PHYSPROP	5.3E-04	1.3E-05	PHYSPROP		PHYSPROP		1 PHYSPROP	7.9E-01	CRC89	1.0E-01 1.1E-05 EPA WATER9	1.2E+01 EPI	-1.2E+00 PHYSPROP	1.0E+06 PHYSPROP	2.2E-04 2.3E-01 5.5E-01 7.3E-05 RAGSE
Dimethylphenol, 2.4-	540-73-8 105-67-9	6.0E+01 PHYSPROP 1.2F+02 PHYSPROP	2.8E-06 3.9E-05	7.0E-08 9.5E-07	PHYSPROP		PHYSPROP		0 PHYSPROP 1 PHYSPROP	8.3E-01 9.7F-01	CRC89	1.1E-01 1.2E-05 EPA WATER9 6.2E-02 8.3E-06 EPA WATER9	1.5E+01 EPI 4.9E+02 EPI	-5.4E-01 PHYSPROP 2.3F+00 PHYSPROP	1.0E+06 PHYSPROP	9.5E-04 2.3E-01 5.5E-01 3.2E-04 EPI 4.6E-02 5.1E-01 1.2E+00 1.1E-02 EPI
	103 31-3	TITOFROP	JE JJ	J.J. 07	· · · · · · · · · · · · · · · · · · ·	1.02-01		2.02.10.	- TITISFROP	J., L-01	C11C03	SELECT OF CONTRACTOR	4.5E102 EPI	JE.OU FIIIJFAUP	JE.OJ FINISFROP	12 J.12 01 1.22 00 1.12 02 EFF

Contaminant	Molecular Weight	Volatility Paramete	s	Melting Point E	ensity	Diffusivity in Air and Water	Soil Partition Coefficients	Water Partition	Water Solubility	Tapwater Dermal Parameters
Analyte CAS No.	. MW MW Ref	H` HLC (unitless) (atm-m³/mole) H` and HLC Ref	VP VP Ref	MP MP Ref (g/cm <sup>3</sup> )	Density Ref	Dia Diw (cm²/s) (cm²/s) D <sub>ia</sub> and D <sub>iw</sub> Ref	K <sub>d</sub> K <sub>oc</sub> (L/kg) K <sub>d</sub> Ref (L/kg) K <sub>oc</sub> Ref	log K <sub>ow</sub> (unitless) log K <sub>ow</sub> Ref	S (mg/L) S Ref	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
Dimethylphenol, 2,6- 576-26-1 Dimethylphenol, 3,4- 95-65-8	1.2E+02 PHYSPROP 1.2E+02 PHYSPROP		1.7E-01 EPI 3.6E-02 EPI	4.6E+01 PHYSPROP 6.1E+01 PHYSPROP 9.8E-01	CRC89	7.7E-02 9.0E-06 EPA WATER9 6.3E-02 8.4E-06 EPA WATER9	5.0E+02 EPI 4.9E+02 EPI	2.4E+00 PHYSPROP	6.1E+03 PHYSPROP 4.8E+03 PHYSPROP	5.1E-02 5.1E-01 1.2E+00 1.2E-02 EPI 4.2E-02 5.1E-01 1.2E+00 9.8E-03 EPI
Dimethylvinylchloride 513-37-1	9.1E+01 PHYSPROP	4.5E+00 1.1E-01 PHYSPROP	2.1E+02 PHYSPROP	-1.0E+02 EPI 9.2E-01	CRC89	8.1E-02 9.7E-06 EPA WATER9	6.1E+01 EPI	2.6E+00 PHYSPROP	1.0E+03 PHYSPROP	9.3E-02 3.4E-01 8.1E-01 2.5E-02 EPI
Dinitro-o-cresol, 4,6- 534-52-1 Dinitro-o-cyclohexyl Phenol, 4,6- 131-89-5	2.0E+02 PHYSPROP 2.7E+02 PHYSPROP	2 5.7E-05 1.4E-06 PHYSPROP 2 2.3E-06 5.5E-08 PHYSPROP	1.2E-04 PHYSPROP 4.2E-08 PHYSPROP	8.7E+01 PHYSPROP 1.1E+02 PHYSPROP		5.6E-02 6.5E-06 EPA WATER9 4.6E-02 5.4E-06 EPA WATER9	7.5E+02 EPI 1.7E+04 EPI	2.1E+00 PHYSPROP 4.1E+00 PHYSPROP	2.0E+02 PHYSPROP 1.5E+01 PHYSPROP	1.7E-02 1.4E+00 3.2E+00 3.2E-03 EPI 1.7E-01 3.3E+00 7.8E+00 2.8E-02 EPI
Dinitrobenzene, 1,2- 528-29-0	1.7E+02 PHYSPROP		4.6E-05 EPI	1.2E+02 PHYSPROP 1.3E+00	CRC89	4.5E-02 8.3E-06 EPA WATER9	3.6E+02 EPI	1.7E+00 PHYSPROP	1.3E+02 PHYSPROP	1.2E-02 9.2E-01 2.2E+00 2.4E-03 EPI
Dinitrobenzene, 1,3- Dinitrobenzene, 1,4-  100-25-4	1.7E+02 PHYSPROF 1.7E+02 PHYSPROF	2.0E-06 4.9E-08 PHYSPROP 3.4E-06 8.4E-08 PHYSPROP	9.0E-04 EPI 2.6E-05 PHYSPROP	9.0E+01 PHYSPROP 1.6E+00 1.7E+02 PHYSPROP 1.6E+00	CRC89 CRC89	4.8E-02 9.2E-06 EPA WATER9 4.9E-02 9.4E-06 EPA WATER9	3.5E+02 EPI 3.5E+02 EPI	1.5E+00 PHYSPROP 1.5E+00 PHYSPROP	5.3E+02 PHYSPROP 6.9E+01 PHYSPROP	8.7E-03 9.2E-01 2.2E+00 1.7E-03 EPI 8.3E-03 9.2E-01 2.2E+00 1.7E-03 EPI
Dinitrophenol, 2,4- 51-28-5 Dinitrotoluene Mixture, 2.4/2.6- NA	1.8E+02 PHYSPROP 1.8E+02 EPI	2 3.5E-06 8.6E-08 PHYSPROP 1.6E-05 4.0E-07 EPI	3.9E-04 PHYSPROP 2.2E-03 EPI	1.1E+02 PHYSPROP 1.7E+00 6.0E+01 EPI	CRC89	4.1E-02 9.1E-06 EPA WATER9	4.6E+02 EPI 5.9E+02 EPI	1.7E+00 PHYSPROP 2.2E+00 EPI	2.8E+03 PHYSPROP 2.7E+02 EPI	9.8E-03 1.1E+00 2.7E+00 1.9E-03 EPI 2.2E-02 1.1E+00 2.6E+00 4.2E-03 EPI
Dinitrotoluene Mixture, 2,4/2,6- Dinitrotoluene, 2,4-  121-14-2	1.8E+02 PHYSPROP	2.2E-06 5.4E-08 PHYSPROP	1.5E-04 PHYSPROP	7.1E+01 PHYSPROP 1.3E+00	CRC89	5.9E-02 6.9E-06 EPA WATER9 3.8E-02 7.9E-06 EPA WATER9	5.8E+02 EPI	2.0E+00 PHYSPROP	2.0E+02 PHYSPROP	1.6E-02 1.1E+00 2.6E+00 4.2E-03 EPI
Dinitrotoluene, 2,6- 606-20-2 Dinitrotoluene, 2-Amino-4.6- 35572-78	1.8E+02 PHYSPROP	9 3.1E-05 7.5E-07 EPI 1.3E-09 3.3E-11 PHYSPROP	5.7E-04 PHYSPROP 1.1E-05 PHYSPROP	6.6E+01 PHYSPROP 1.3E+00 1.7E+02 PHYSPROP	CRC89	3.7E-02 7.8E-06 EPA WATER9 5.6E-02 6.6E-06 EPA WATER9	5.9E+02 EPI 2.8E+02 EPI	2.1E+00 PHYSPROP 1.8E+00 PHYSPROP	1.8E+02 PHYSPROP 1.2E+03 PHYSPROP	1.9E-02 1.1E+00 2.6E+00 3.7E-03 EPI 1.1E-02 1.3E+00 3.2E+00 2.0E-03 EPI
Dinitrotoluene, 4-Amino-2,6- 19406-51	0 2.0E+02 PHYSPROP	1.3E-09 3.3E-11 PHYSPROP	1.1E-05 PHYSPROP	1.7E+02 PHYSPROP		5.6E-02 6.6E-06 EPA WATER9	2.8E+02 EPI	1.8E+00 PHYSPROP	1.2E+03 PHYSPROP	1.1E-02 1.3E+00 3.2E+00 2.0E-03 EPI
Dinitrotoluene, Technical grade 25321-14 Dinoseb 88-85-7	6 5.5E+02 PHYSPROP 2.4E+02 PHYSPROP	3.8E-06 9.3E-08 PHYSPROP 1.9E-05 4.6E-07 EPI	4.0E-04 PHYSPROP 7.5E-05 PHYSPROP	6.0E+01 EPI 4.0E+01 PHYSPROP 1.3E+00	CRC89	2.8E-02 3.3E-06 EPA WATER9 2.5E-02 6.5E-06 EPA WATER9	5.9E+02 EPI 4.3E+03 EPI	2.2E+00 PHYSPROP 3.6E+00 PHYSPROP	2.7E+02 PHYSPROP 5.2E+01 PHYSPROP	3.7E-02 1.2E+02 2.9E+02 4.2E-03 EPI 9.7E-02 2.3E+00 5.6E+00 1.6E-02 EPI
Dioxane, 1,4- Dioxins	8.8E+01 PHYSPROF	2.0E-04 4.8E-06 PHYSPROP	3.8E+01 PHYSPROP	1.2E+01 PHYSPROP 1.0E+00		8.7E-02 1.1E-05 EPA WATER9	2.6E+00 EPI	-2.7E-01 PHYSPROP	1.0E+06 PHYSPROP	1.2E-03 3.3E-01 7.9E-01 3.3E-04 EPI
~Hexachlorodibenzo-p-dioxin, Mixture NA ~TCDD, 2.3.7.8- 1746-01-	3.9E+02 EPI 3.2E+02 PHYSPROF	2.3E-04 5.7E-06 EPI 2.0E-03 5.0E-05 EPI	4.4E-11 EPI 1.5E-09 PHYSPROP	2.5E+02 EPI 3.1E+02 PHYSPROP 1.8E+00	PubChem	3.6E-02 4.2E-06 EPA WATER9 4.7E-02 6.8E-06 EPA WATER9	7.0E+05 EPI 2.5E+05 EPI	8.2E+00 EPI 6.8E+00 PHYSPROP	4.0E-06 EPI 2.0E-04 PHYSPROP	2.2E+01 1.6E+01 7.5E+01 2.9E+00 EPI 5.6E+00 6.7E+00 2.9E+01 8.1E-01 EPI
Diphenamid 957-51-7	2.4E+02 PHYSPROP	1.5E-09 3.6E-11 EPI	3.0E-08 PHYSPROP	1.4E+02 PHYSPROP 1.2E+00	CRC89	2.4E-02 6.2E-06 EPA WATER9	4.8E+03 EPI	2.2E+00 PHYSPROP	2.6E+02 PHYSPROP	3.3E-02 2.3E+00 5.5E+00 5.6E-03 EPI
Diphenyl Sulfone 127-63-9 Diphenylamine 122-39-4	2.2E+02 PHYSPROP 1.7E+02 PHYSPROP	2 1.0E-05 2.5E-07 PHYSPROP 2 1.1E-04 2.7E-06 EPI	1.5E-05 PHYSPROP 6.7E-04 PHYSPROP	1.3E+02 PHYSPROP 1.3E+00 5.3E+01 PHYSPROP 1.2E+00	CRC89 CRC89	2.7E-02 6.9E-06 EPA WATER9 4.2E-02 7.6E-06 EPA WATER9	1.1E+03 EPI 8.3E+02 EPI	2.4E+00 PHYSPROP 3.5E+00 PHYSPROP	3.1E+02 PHYSPROP 5.3E+01 PHYSPROP	2.1E-02 1.8E+00 4.2E+00 3.7E-03 EPI 1.9E-01 9.3E-01 2.2E+00 3.7E-02 EPI
Diphenylhydrazine, 1,2         122-66-7           Diquat         85-00-7	1.8E+02 PHYSPROP	2.0E-05 4.8E-07 EPI 5.8E-12 1.4E-13 PHYSPROP	4.4E-04 EPI 1.8E-06 PHYSPROP	1.3E+02 PHYSPROP 1.2E+00 3.4E+02 PHYSPROP 1.2E+00	CRC89	3.4E-02 7.2E-06 EPA WATER9 2.1E-02 5.2E-06 EPA WATER9	1.5E+03 EPI 9.3E+03 EPI	2.9E+00 PHYSPROP	2.2E+02 PHYSPROP 7.1E+05 PHYSPROP	6.8E-02 1.1E+00 2.7E+00 1.3E-02 EPI 1.7E-06 8.9E+00 2.1E+01 2.4E-07 EPI
Direct Black 38 1937-37-	7.8E+02 PHYSPROP	3.4E-38 8.2E-40 PHYSPROP	1.5E-36 PHYSPROP	3.5E+02 EPI	CNCOS	2.2E-02 2.6E-06 EPA WATER9	2.4E+08 EPI	4.9E+00 PHYSPROP	3.0E+03 PHYSPROP 1.4F-04 PHYSPROP	2.2E-03 2.4E+03 5.9E+03 2.1E-04 EPI
Direct Blue 6         2602-46-           Direct Brown 95         16071-86	9.3E+02 PHYSPROF 6 7.6E+02 PHYSPROF	9.1E-44 PHYSPROP	9.5E-39 PHYSPROP 1.4E-41 PHYSPROP	3.5E+02 EPI 3.5E+02 EPI		2.0E-02 2.3E-06 EPA WATER9 2.3E-02 2.7E-06 EPA WATER9	7.9E+08 EPI 7.0E+06 EPI	2.6E+00 PHYSPROP -6.5E+00 PHYSPROP	1.0E+06 PHYSPROP	2.0E-08 1.8E+04 4.2E+04 1.7E-09 EPI 4.1E-11 1.9E+03 4.6E+03 3.9E-12 EPI
Disulfoton 298-04-4 Dithiane, 1,4- 505-29-3	2.7E+02 PHYSPROP 1.2E+02 PHYSPROP		9.8E-05 PHYSPROP 8.0E-02 PHYSPROP	-2.5E+01 PHYSPROP 1.1E+00 1.1E+02 PHYSPROP 1.1E+00	CRC89 ChemNet	2.3E-02 5.7E-06 EPA WATER9 6.8E-02 9.3E-06 EPA WATER9	8.4E+02 EPI 1.5E+02 EPI	4.0E+00 PHYSPROP 7.7E-01 PHYSPROP	1.6E+01 PHYSPROP 3.0E+03 PHYSPROP	1.4E-01 3.6E+00 8.7E+00 2.1E-02 EPI 4.6E-03 5.0E-01 1.2E+00 1.1E-03 EPI
Diuron 330-54-1	2.3E+02 PHYSPROP		6.9E-08 PHYSPROP	1.6E+02 PHYSPROP	Cheminet	5.0E-02 5.9E-06 EPA WATER9	1.1E+02 EPI	2.7E+00 PHYSPROP	4.2E+01 PHYSPROP	2.7E-02 2.1E+00 5.1E+00 4.7E-03 EPI
Dodine 2439-10-: EPTC 759-94-4	2.9E+02 PHYSPROP 1.9E+02 PHYSPROP		1.5E-07 PHYSPROP	1.4E+02 PHYSPROP 6.1E+01 EPI 9.5E-01	CRC89	4.4E-02 5.1E-06 EPA WATER9 2.9E-02 6.4E-06 EPA WATER9	2.5E+03 EPI 1.6E+02 EPI	1.2E+00 PHYSPROP 3.2E+00 PHYSPROP	6.3E+02 PHYSPROP	1.4E-03 4.3E+00 1.0E+01 2.2E-04 EPI 9.7E-02 1.2E+00 2.9E+00 1.8E-02 EPI
Endosulfan 115-29-7	4.1E+02 PHYSPROP	2.7E-03 6.5E-05 PHYSPROP	1.7E-07 PHYSPROP	1.1E+02 PHYSPROP 1.7E+00	CRC89	2.2E-02 5.8E-06 EPA WATER9	6.8E+03 EPI	3.8E+00 PHYSPROP	3.3E-01 PHYSPROP	2.2E-02 2.0E+01 4.8E+01 2.9E-03 EPI
Endothall 145-73-3 Endrin 72-20-8	1.9E+02 PHYSPROP 3.8E+02 PHYSPROP		1.6E-10 PHYSPROP 3.0E-06 PHYSPROP	1.4E+02 PHYSPROP 1.4E+00 2.3E+02 PHYSPROP	CRC89	3.7E-02 8.2E-06 EPA WATER9 3.6E-02 4.2E-06 EPA WATER9	1.9E+01 EPI 2.0E+04 EPI	1.9E+00 PHYSPROP 5.2E+00 PHYSPROP	1.0E+05 PHYSPROP 2.5E-01 PHYSPROP	1.4E-02 1.2E+00 2.8E+00 2.6E-03 EPI 2.4E-01 1.4E+01 3.4E+01 3.3E-02 EPI
Epichlorohydrin 106-89-8	9.3E+01 PHYSPROP	1.2E-03 3.0E-05 EPI	1.6E+01 PHYSPROP	-5.7E+01 PHYSPROP 1.2E+00		8.9E-02 1.1E-05 EPA WATER9	9.9E+00 EPI	4.5E-01 PHYSPROP	6.6E+04 PHYSPROP	3.5E-03 3.5E-01 8.3E-01 9.4E-04 EPI
Epoxybutane, 1,2- 106-88-7 Ethanol, 2-(2-methoxyethoxy)- 111-77-3	7.2E+01 PHYSPROF 1.2E+02 PHYSPROF		1.8E+02 PHYSPROP 2.5E-01 PHYSPROP	-1.5E+02 PHYSPROP 8.3E-01 -1.5E+01 EPI	CRC89	9.3E-02 1.0E-05 EPA WATER9 7.8E-02 9.1E-06 EPA WATER9	9.9E+00 EPI 1.0E+00 EPI	8.6E-01 PHYSPROP -1.2E+00 PHYSPROP	9.5E+04 PHYSPROP 1.0E+06 PHYSPROP	7.5E-03 2.7E-01 6.4E-01 2.3E-03 EPI 7.4E-04 5.0E-01 1.2E+00 1.7E-04 RAGSE
Ethephon 16672-87		2.3E-10 5.7E-12 PHYSPROP	9.8E-08 PHYSPROP	7.4E+01 PHYSPROP 1.2E+00	CRC89	5.5E-02 8.6E-06 EPA WATER9	5.0E+00 EPI	-2.2E-01 PHYSPROP	1.0E+06 PHYSPROP	8.0E-04 6.8E-01 1.6E+00 1.7E-04 EPI
Ethion 563-12-2 Ethoxyethanol Acetate, 2- 111-15-9	3.8E+02 PHYSPROF 1.3E+02 PHYSPROF		1.5E-06 PHYSPROP 2.0E+00 PHYSPROP	-1.3E+01 PHYSPROP 1.2E+00 -6.2E+01 PHYSPROP 9.7E-01	CRC89 CRC89	1.9E-02 4.8E-06 EPA WATER9 5.7E-02 8.0E-06 EPA WATER9	8.8E+02 EPI 4.5E+00 EPI	5.1E+00 PHYSPROP 5.9E-01 PHYSPROP	2.0E+00 PHYSPROP 1.9E+05 PHYSPROP	1.9E-01 1.5E+01 3.6E+01 2.6E-02 EPI 3.1E-03 5.8E-01 1.4E+00 7.0E-04 EPI
Ethoxyethanol, 2- 110-80-5 Ethyl Acetate 141-78-6	9.0E+01 PHYSPROP 8.8E+01 PHYSPROP	1.9E-05 4.7E-07 PHYSPROP 5.5E-03 1.3E-04 PHYSPROP	5.3E+00 PHYSPROP 9.3E+01 PHYSPROP	-7.0E+01 PHYSPROP 9.3E-01 -8.4E+01 PHYSPROP 9.0E-01	CRC89 CRC89	8.2E-02 9.7E-06 EPA WATER9 8.2E-02 9.7E-06 EPA WATER9	1.0E+00 EPI 5.6E+00 EPI	-3.2E-01 PHYSPROP 7.3E-01 PHYSPROP	1.0E+06 PHYSPROP 8.0E+04 PHYSPROP	1.1E-03 3.4E-01 8.1E-01 3.0E-04 EPI 5.5E-03 3.3E-01 7.9E-01 1.5E-03 EPI
Ethyl Acrylate 141-76-6 Ethyl Acrylate 140-88-5	1.0E+02 PHYSPROP		3.9E+01 PHYSPROP	-7.1E+01 PHYSPROP 9.2E-01	CRC89	7.5E-02 9.1E-06 EPA WATER9	1.1E+01 EPI	1.3E+00 PHYSPROP	1.5E+04 PHYSPROP	1.2E-02 3.8E-01 9.2E-01 3.2E-03 EPI
Ethyl Chloride (Chloroethane) 75-00-3 Ethyl Ether 60-29-7	6.5E+01 PHYSPROP 7.4E+01 PHYSPROP	4.5E-01 1.1E-02 PHYSPROP 5.0E-02 1.2E-03 PHYSPROP	1.0E+03 PHYSPROP 5.4E+02 PHYSPROP	-1.4E+02 PHYSPROP 8.9E-01 -1.2E+02 PHYSPROP 7.1E-01	CRC89 CRC89	1.0E-01 1.2E-05 EPA WATER9 8.5E-02 9.4E-06 EPA WATER9	2.2E+01 EPI 9.7E+00 EPI	1.4E+00 PHYSPROP 8.9E-01 PHYSPROP	6.7E+03 PHYSPROP 6.0E+04 PHYSPROP	1.9E-02 2.4E-01 5.8E-01 6.1E-03 EPI 7.8E-03 2.7E-01 6.6E-01 2.4E-03 EPI
Ethyl Methacrylate 97-63-2	1.1E+02 PHYSPROP	2.3E-02 5.7E-04 EPI	2.1E+01 PHYSPROP	-7.5E+01 PHYSPROP 9.1E-01	CRC89	6.5E-02 8.4E-06 EPA WATER9	1.7E+01 EPI	1.9E+00 PHYSPROP	5.4E+03 PHYSPROP	2.9E-02 4.6E-01 1.1E+00 7.0E-03 EPI
Ethyl-p-nitrophenyl Phosphonate 2104-64- Ethylbenzene 100-41-4	3.2E+02 PHYSPROP 1.1E+02 PHYSPROP		9.5E-07 PHYSPROP 9.6E+00 PHYSPROP	3.6E+01 PHYSPROP 1.3E+00 -9.5E+01 PHYSPROP 8.6E-01	CRC89 CRC89	2.2E-02 5.5E-06 EPA WATER9 6.8E-02 8.5E-06 EPA WATER9	1.5E+04 EPI 4.5E+02 EPI	4.8E+00 PHYSPROP 3.2E+00 PHYSPROP	3.1E+00 PHYSPROP 1.7E+02 PHYSPROP	2.5E-01 6.8E+00 1.6E+01 3.6E-02 EPI 2.0E-01 4.1E-01 9.9E-01 4.9E-02 EPI
Ethylene Cyanohydrin 109-78-4 Ethylene Diamine 107-15-3	7.1E+01 PHYSPROP	3.1E-07 7.5E-09 EPI 7.1E-08 1.7E-09 PHYSPROP	8.0E-02 PHYSPROP	-4.6E+01 PHYSPROP 1.0E+00	CRC89	1.0E-01 1.2E-05 EPA WATER9	1.0E+00 EPI 1.5E+01 EPI	-9.4E-01 PHYSPROP	1.0E+06 PHYSPROP	4.8E-04 2.6E-01 6.3E-01 1.5E-04 EPI 9.5E-05 2.3E-01 5.5E-01 3.2E-05 EPI
Ethylene Glycol 107-15-3 Ethylene Glycol 107-21-1	6.2E+01 PHYSPROP		1.2E+01 PHYSPROP 9.2E-02 PHYSPROP	1.1E+01 PHYSPROP 9.0E-01 -1.3E+01 PHYSPROP 1.1E+00	CRC89	1.1E-01 1.2E-05 EPA WATER9 1.2E-01 1.4E-05 EPA WATER9	1.5E+01 EPI 1.0E+00 EPI	-1.4E+00 PHYSPROP	1.0E+06 PHYSPROP 1.0E+06 PHYSPROP	2.7E-04 2.3E-01 5.6E-01 8.8E-05 EPI
Ethylene Glycol Monobutyl Ether 111-76-2 Ethylene Oxide 75-21-8	1.2E+02 PHYSPROP	6.5E-05 1.6E-06 PHYSPROP	8.8E-01 PHYSPROP	-7.5E+01 PHYSPROP 9.0E-01	CRC89	6.3E-02 8.1E-06 EPA WATER9	2.8E+00 EPI 3.2F+00 EPI	8.3E-01 PHYSPROP	1.0E+06 PHYSPROP	5.1E-03 4.8E-01 1.2E+00 1.2E-03 EPI 1.4E-03 1.9E-01 4.5E-01 5.6E-04 EPI
Ethylene Thiourea 96-45-7	1.0E+02 PHYSPROP	5.6E-10 1.4E-11 PHYSPROP	2.0E-06 PHYSPROP	2.0E+02 PHYSPROP		8.7E-02 1.0E-05 EPA WATER9	1.3E+01 EPI	-6.6E-01 PHYSPROP	2.0E+04 PHYSPROP	5.9E-04 3.9E-01 9.4E-01 1.5E-04 EPI
Ethyleneimine 151-56-4 Ethylphthalyl Ethyl Glycolate 84-72-0	4.3E+01 PHYSPROP 2.8E+02 PHYSPROP		2.1E+02 PHYSPROP 2.2E-04 PHYSPROP	-7.8E+01 PHYSPROP 8.3E-01 2.3E+01 EPI	CRC89	1.3E-01 1.4E-05 EPA WATER9 4.4E-02 5.2E-06 EPA WATER9	9.0E+00 EPI 1.0E+03 EPI	-2.8E-01 PHYSPROP 2.2E+00 PHYSPROP	1.0E+06 PHYSPROP 2.2E+02 PHYSPROP	1.5E-03 1.8E-01 4.4E-01 5.8E-04 EPI 7.7E-03 3.9E+00 9.4E+00 1.2E-03 EPI
Fenamiphos 22224-92	6 3.0E+02 PHYSPROP	4.9E-08 1.2E-09 EPI	1.0E-06 PHYSPROP	4.9E+01 PHYSPROP 1.2E+00	CRC89	2.1E-02 5.4E-06 EPA WATER9	4.0E+02 EPI	3.2E+00 PHYSPROP	3.3E+02 PHYSPROP	2.9E-02 5.3E+00 1.3E+01 4.4E-03 EPI
Fenpropathrin 39515-41 Fenvalerate 51630-58		0.00 0.	5.5E-06 PHYSPROP 1.5E-09 PHYSPROP	4.7E+01 PHYSPROP 4.0E+01 PHYSPROP 1.2E+00	CRC89	3.8E-02 4.5E-06 EPA WATER9 1.8E-02 4.4E-06 EPA WATER9	2.2E+04 EPI 3.2E+05 EPI	5.7E+00 PHYSPROP 6.2E+00 PHYSPROP	2.4E-02 PHYSPROP	1.2E+00 9.5E+00 3.7E+01 1.7E-01 EPI 7.4E-01 2.4E+01 9.1E+01 9.4E-02 EPI
Fluoreturon 2164-17- Fluoride 16984-48		1.1E-07 2.6E-09 EPI	9.4E-07 PHYSPROP	1.6E+02 PHYSPROP -2.2F+02 EPI		5.0E-02 5.9E-06 EPA WATER9	2.9E+02 EPI 1.5E+02 BAES	2.4E+00 PHYSPROP	1.1E+02 PHYSPROP 1.7E+00 EPI	1.9E-02 2.1E+00 5.0E+00 3.2E-03 EPI 2.4E-03 1.7E-01 4.1E-01 1.0E-03 RAGSE
Fluorine (Soluble Fluoride) 7782-41-4	3.8E+01 PHYSPROP			-2.2E+02 PHYSPROP 1.6E+00	CRC89		1.5E+02 BAES		1.7E+00 PHYSPROP	2.4E-03 1.7E-01 4.1E-01 1.0E-03 RAGSE
Fluridone         59756-60           Flurprimidol         56425-91			9.8E-08 PHYSPROP 3.6E-07 PHYSPROP	1.5E+02 PHYSPROP 9.5E+01 PHYSPROP		4.0E-02 4.7E-06 EPA WATER9 4.1E-02 4.8E-06 EPA WATER9	5.7E+04 EPI 2.2E+03 EPI	3.2E+00 PHYSPROP 3.3E+00 PHYSPROP	1.2E+01 PHYSPROP 1.1E+02 PHYSPROP	2.0E-02 7.3E+00 1.8E+01 2.8E-03 EPI 3.1E-02 5.9E+00 1.4E+01 4.6E-03 EPI
Flusilazole 85509-19	9 3.2E+02 PHYSPROP	9.2E-08 2.3E-09 PHYSPROP	2.9E-07 PHYSPROP	5.4E+01 PHYSPROP		4.1E-02 4.8E-06 EPA WATER9	8.1E+04 EPI	3.7E+00 PHYSPROP	5.4E+01 PHYSPROP	5.2E-02 6.1E+00 1.5E+01 7.7E-03 EPI
Flutolanil 66332-96 Fluvalinate 69409-94			4.9E-08 PHYSPROP 1.0E-07 PHYSPROP	1.0E+02 PHYSPROP 1.6E+02 EPI		4.0E-02 4.7E-06 EPA WATER9 3.0E-02 3.5E-06 EPA WATER9	2.6E+03 EPI 7.3E+05 EPI	3.7E+00 PHYSPROP 6.8E+00 PHYSPROP	6.5E+00 PHYSPROP 5.0E-03 PHYSPROP	4.8E-02 6.8E+00 1.6E+01 6.9E-03 EPI 6.8E-01 6.9E+01 2.7E+02 7.9E-02 EPI
Folpet 133-07-3 Fomesafen 72178-02	3.0E+02 PHYSPROF 0 4.4E+02 PHYSPROF	2 3.1E-06 7.7E-08 EPI 3.1E-11 7.5E-13 PHYSPROP	1.6E-07 PHYSPROP 7.5E-07 EPI	1.8E+02 EPI 2.2E+02 PHYSPROP 1.3E+00	CRC89	4.3E-02 5.0E-06 EPA WATER9 1.9E-02 4.6E-06 EPA WATER9	1.8E+01 EPI 1.5E+03 EPI	2.9E+00 PHYSPROP 2.9E+00 PHYSPROP	8.0E-01 PHYSPROP 5.0E+01 PHYSPROP	1.8E-02 4.8E+00 1.2E+01 2.7E-03 EPI 3.7E-03 3.0E+01 7.2E+01 4.6E-04 EPI
Fonofos 944-22-9	2.5E+02 PHYSPROP	2.9E-04 7.0E-06 EPI	3.4E-04 PHYSPROP	6.6E-01 EPI 1.2E+00	CRC89	2.4E-02 6.1E-06 EPA WATER9	8.6E+02 EPI	3.9E+00 PHYSPROP	1.6E+01 PHYSPROP	1.6E-01 2.5E+00 6.0E+00 2.7E-02 EPI
Formaldehyde 50-00-0 Formic Acid 64-18-6	3.0E+01 PHYSPROP 4.6E+01 PHYSPROP	2 1.4E-05 3.4E-07 PHYSPROP 6.8E-06 1.7E-07 PHYSPROP	3.9E+03 EPI 4.3E+01 PHYSPROP	-9.2E+01 PHYSPROP 8.2E-01 8.3E+00 PHYSPROP 1.2E+00	CRC89 CRC89	1.7E-01 1.7E-05 EPA WATER9 1.5E-01 1.7E-05 EPA WATER9	1.0E+00 EPI 1.0E+00 EPI	3.5E-01 PHYSPROP -5.4E-01 PHYSPROP	4.0E+05 PHYSPROP 1.0E+06 PHYSPROP	3.8E-03 1.5E-01 3.7E-01 1.8E-03 EPI 9.9E-04 1.9E-01 4.6E-01 3.8E-04 EPI
Fosetyl-AL 39148-24			7.5E-11 PHYSPROP	2.2E+02 PHYSPROP		3.8E-02 4.4E-06 EPA WATER9	6.5E+03 EPI	-2.4E+00 PHYSPROP	1.1E+05 PHYSPROP	3.0E-06 1.0E+01 2.4E+01 4.1E-07 EPI
Furans ~Dibenzofuran 132-64-9	1.7E+02 PHYSPROP		2.5E-03 PHYSPROP	8.7E+01 PHYSPROP 1.1E+00		4.1E-02 7.4E-06 EPA WATER9	9.2E+03 EPI	4.1E+00 PHYSPROP	3.1E+00 PHYSPROP	4.9E-01 9.2E-01 2.2E+00 9.8E-02 EPI
~Furan 110-00-9 ~Tetrahydrofuran 109-99-9	6.8E+01 PHYSPROF	2.2E-01 5.4E-03 EPI	6.0E+02 PHYSPROP	-8.6E+01 PHYSPROP 9.5E-01	CRC89	1.0E-01 1.2E-05 EPA WATER9	8.0E+01 EPI 1.1E+01 EPI	1.3E+00 PHYSPROP	1.0E+04 PHYSPROP	1.6E-02 2.5E-01 6.1E-01 5.1E-03 EPI 4.1E-03 2.7E-01 6.4E-01 1.3E-03 EPI
Furazolidone 67-45-8	2.3E+02 PHYSPROP	1.3E-09 3.3E-11 PHYSPROP	2.6E-06 PHYSPROP	2.6E+02 PHYSPROP		5.1E-02 6.0E-06 EPA WATER9	8.6E+02 EPI	-4.0E-02 PHYSPROP	4.0E+01 PHYSPROP	4.6E-04 1.9E+00 4.6E+00 8.0E-05 EPI
Furfural 98-01-1 Furfum 531-82-8	9.6E+01 PHYSPROP 2.5E+02 EPI	1.5E-04 3.8E-06 EPI 5.4E-14 1.3E-15 EPI	2.2E+00 PHYSPROP 8.8E-09 EPI	-3.8E+01 PHYSPROP 1.2E+00 1.9E+02 EPI	CRC89	8.5E-02 1.1E-05 EPA WATER9 4.7E-02 5.5E-06 EPA WATER9	6.1E+00 EPI 5.8E+02 EPI	4.1E-01 PHYSPROP 1.8E+00 EPI	7.4E+04 PHYSPROP 4.2E+03 EPI	3.2E-03 3.6E-01 8.7E-01 8.5E-04 EPI 5.7E-03 2.8E+00 6.6E+00 9.4E-04 EPI
Furmecyclox 60568-05	0 2.5E+02 PHYSPROP	2.8E-07 6.9E-09 PHYSPROP	8.4E-05 PHYSPROP	3.3E+01 PHYSPROP		4.8E-02 5.6E-06 EPA WATER9	4.3E+02 EPI	4.4E+00 PHYSPROP	3.0E-01 PHYSPROP	3.0E-01 2.7E+00 6.4E+00 5.0E-02 EPI
Glufosinate, Ammonium 77182-82 Glutaraldehyde 111-30-8	2.0E+02 PHYSPROP 1.0E+02 PHYSPROP		9.1E-12 PHYSPROP 6.0E-01 PHYSPROP	2.2E+02 PHYSPROP -3.0E+01 EPI		5.6E-02 6.5E-06 EPA WATER9 8.8E-02 1.0E-05 EPA WATER9	1.0E+01 EPI 1.0E+00 EPI	-4.8E+00 PHYSPROP -3.3E-01 PHYSPROP	1.4E+06 PHYSPROP 2.2E+05 PHYSPROP	1.9E-07 1.4E+00 3.2E+00 3.4E-08 EPI 1.3E-03 3.8E-01 9.2E-01 3.3E-04 EPI
Glycidyl 765-34-4	7.2E+01 PHYSPROP		4.5E+01 PHYSPROP	-6.2E+01 PHYSPROP 1.1E+00	CRC89	1.1E-01 1.3E-05 EPA WATER9		-1.2E-01 PHYSPROP	1.0E+06 PHYSPROP	1.7E-03 2.7E-01 6.4E-01 5.2E-04 EPI

Contaminant		Molecular Weight		Volatility Para	notors		140	Iting Point		ensity	Diffusivity in Air and Water	Soil Partition Coefficients	Water Partition	Water Solubility	Tapwater Dermal Parameters
Contaminant		iviolecular Weight	H'	HLC Volatility Para	neters		Me	nung Point	Density	ensity	Dia Diw Dia Diw	Soil Partition Coefficients  K <sub>d</sub> K <sub>oc</sub>	log K <sub>ow</sub>	S SOlubility	Tapwater Dermal Parameters  B T <sub>event</sub> t* K <sub>p</sub>
Analyte	CAS No.	MW Ref	(unitless) (atr	m-m <sup>3</sup> /mole) H` and HL	Ref VP	VP Ref	MP	MP Ref	(g/cm <sup>3</sup> )	Density Ref	(cm <sup>2</sup> /s) (cm <sup>2</sup> /s) D <sub>ia</sub> and D <sub>iw</sub> Ref	(L/kg) K <sub>d</sub> Ref (L/kg) K <sub>oc</sub> Ref	(unitless) log K <sub>ow</sub> Ref	(mg/L) S Ref	(unitless) (hr/event) (hr) (cm/hr) KPREF
Glyphosate	1071-83-6	1.7E+02 PHYSPROP	8.6E-11	2.1E-12 EPI	9.8E-0	08 PHYSPROP	1.9E+0	2 PHYSPROP			6.2E-02 7.3E-06 EPA WATER9	2.1E+03 USDA ARS	-3.4E+00 PHYSPROP	1.1E+04 PHYSPROP	2.3E-07 9.3E-01 2.2E+00 4.5E-08 EPI
Guanidine	113-00-8	5.9E+01 PHYSPROP		2.3E-11 PHYSPR			5.0E+0	1 PHYSPROP		GuideChem	1.4E-01 1.7E-05 EPA WATER9	1.2E+01 EPI	-1.6E+00 PHYSPROP	1.8E+03 PHYSPROP	1.8E-04 2.3E-01 5.4E-01 6.0E-05 EPI
Guanidine Chloride	50-01-1 69806-40-2	9.6E+01 PHYSPROP 3.8F+02 PHYSPROP		2.2E-18 PHYSPR 3.2F-07 FPI	OP 1.8E-0	06 PHYSPROP		2 PHYSPROP 1 PHYSPROP	1.4E+00	CRC89	9.2E-02 1.2E-05 EPA WATER9	5.5F+03 FPI	-3.6E+00 PHYSPROP 4.1F+00 PHYSPROP	1.0E+06 PHYSPROP	1.5E-07 3.6E-01 8.7E-01 3.9E-08 EPI 4.5E-02 1.3E+01 3.2E+01 6.0E-03 EPI
Haloxyfop, Methyl Heptachlor	76-44-8	3.7E+02 PHYSPROP	1.52 05	2.9E-04 PHYSPR	0.00		0.6E±0	1 PHYSPROF	1.6E+00	CRC89	2.2E-02 5.7E-06 EPA WATER9	4.1E+04 EPI	6.1E+00 PHYSPROP	1 9E-01 PHYSPROP	1.1E+00 1.3E+01 5.0E+01 1.4E-01 EPI
Heptachlor Epoxide	1024-57-3	3.9E+02 PHYSPROP		2.1E-05 PHYSPR			1.6E+0	2 PHYSPROP		LookChem	2.4E-02 6.2E-06 EPA WATER9	1.0E+04 EPI	5.0E+00 PHYSPROP	2.0E-01 PHYSPROP	1.6E-01 1.6E+01 3.8E+01 2.1E-02 EPI
Hexabromobenzene	87-82-1	5.5E+02 PHYSPROP	1.1E-03	2.8E-05 PHYSPR	DP 1.6E-0	08 PHYSPROP	3.3E+0	2 PHYSPROP	3.0E+00	LookChem	2.5E-02 6.6E-06 EPA WATER9	2.8E+03 EPI	6.1E+00 PHYSPROP	1.6E-04 PHYSPROP	1.2E-01 1.3E+02 3.1E+02 1.4E-02 EPI
Hexabromodiphenyl ether, 2,2',4,4',5,5'- (BDE-153)	68631-49-2	6.4E+02 OTHER			5.8E-0						2.5E-02 3.0E-06 EPA WATER9			9.0E-04 IRIS	4.2E+02 1.0E+03
Hexachlorobenzene	118-74-1	2.8E+02 PHYSPROP		1.7E-03 PHYSPR			2.3E+0	2 PHYSPROP	2.0E+00	CRC89	2.9E-02 7.8E-06 EPA WATER9	6.2E+03 EPI	5.7E+00 PHYSPROP	6.2E-03 PHYSPROP	1.6E+00 4.1E+00 1.7E+01 2.5E-01 EPI
Hexachlorobutadiene	87-68-3 319-84-6	2.6E+02 PHYSPROP		1.0E-02 PHYSPR 6.7E-06 PHYSPR			-2.1E+0	D1 PHYSPROF	1.6E+00	CRC89	2.7E-02 7.0E-06 EPA WATER9	8.5E+02 EPI 2.8E+03 EPI	4.8E+00 PHYSPROP	3.2E+00 PHYSPROP	5.0E-01 3.0E+00 7.3E+00 8.1E-02 EPI 1.4E-01 4.5E+00 1.1E+01 2.1E-02 EPI
Hexachlorocyclohexane, Alpha- Hexachlorocyclohexane, Beta-	319-84-6	2.9E+02 PHYSPROP		4.4E-07 PHYSPR				2 PHYSPROF	1.9E+00	CRC89	2.8E-02 7.4E-06 EPA WATER9	2.8E+03 EPI 2.8E+03 EPI	3.8E+00 PHYSPROP	2.4E-01 PHYSPROP	1.4E-01 4.5E+00 1.1E+01 2.1E-02 EPI
Hexachlorocyclohexane, Gamma- (Lindane)	58-89-9	2.9E+02 PHYSPROP		5.1E-06 PHYSPR				2 PHYSPROP	1.52,00	CICOS	4.3E-02 5.1E-06 EPA WATER9	2.8E+03 EPI	3.7E+00 PHYSPROP	7.3E+00 PHYSPROP	1.4E-01 4.5E+00 1.1E+01 2.1E-02 EPI
Hexachlorocyclohexane, Technical	608-73-1	2.9E+02 PHYSPROP		5.1E-06 EPI	3.5E-0	DS EPI	1.1E+0	2 EPI			4.3E-02 5.1E-06 EPA WATER9	2.8E+03 EPI	4.1E+00 EPI	8.0E+00 PHYSPROP	1.4E-01 4.5E+00 1.1E+01 2.1E-02 EPI
Hexachlorocyclopentadiene	77-47-4	2.7E+02 PHYSPROP		2.7E-02 PHYSPR			-9.0E+0	OO PHYSPROP	1.7E+00	CRC89	2.7E-02 7.2E-06 EPA WATER9	1.4E+03 EPI	5.0E+00 PHYSPROP	1.8E+00 PHYSPROP	6.5E-01 3.5E+00 1.4E+01 1.0E-01 EPI
Hexachloroethane	67-72-1	2.4E+02 PHYSPROP		3.9E-03 PHYSPR			1.9E+0	2 PHYSPROP	2.1E+00	CRC89	3.2E-02 8.9E-06 EPA WATER9	2.0E+02 EPI	4.1E+00 PHYSPROP	5.0E+01 PHYSPROP	2.5E-01 2.2E+00 5.3E+00 4.2E-02 EPI
Hexachlorophene	70-30-4	4.1E+02 PHYSPROP		5.5E-13 PHYSPR				2 PHYSPROP			3.5E-02 4.0E-06 EPA WATER9	6.7E+05 EPI	7.5E+00 PHYSPROP	1.4E+02 PHYSPROP	6.5E+00 2.0E+01 8.9E+01 8.4E-01 EPI
Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX) Hexamethylene Diisocyanate, 1,6-	121-82-4 822-06-0	2.2E+02 PHYSPROP 1.7E+02 PHYSPROP		2.0E-11 EPI 4.8E-05 PHYSPR	4.1E-0 OP 3.0E-0			2 PHYSPROF D1 PHYSPROF	1.8E+00 1.1E+00	CRC89 CRC89	3.1E-02 8.5E-06 EPA WATER9 4.0E-02 7.2E-06 EPA WATER9	8.9E+01 EPI 4.8E+03 EPI	8.7E-01 PHYSPROP 3.2E+00 PHYSPROP	6.0E+01 PHYSPROP	1.9E-03 1.8E+00 4.4E+00 3.4E-04 EPI 1.2E-01 9.2E-01 2.2E+00 2.4E-02 EPI
Hexamethylphosphoramide	680-31-9	1.8E+02 PHYSPROP	2.02	2.0E-08 PHYSPR				O PHYSPROF	1.0E+00	CRC89	3.5E-02 6.9E-06 EPA WATER9	1.0E+01 EPI	2.8E-01 PHYSPROP	1.0E+06 PHYSPROP	1.2E-01 9.2E-01 2.2E+00 2.4E-02 EPI
Hexane, N-	110-54-3	8.6E+01 PHYSPROP		1.8E+00 EPI	1.5E+			1 PHYSPROF	6.6E-01	CRC89	7.3E-02 8.2E-06 EPA WATER9	1.3E+02 EPI	3.9E+00 PHYSPROP	9.5E+00 PHYSPROP	7.2E-01 3.2E-01 1.2E+00 2.0E-01 EPI
Hexanedioic Acid	124-04-9	1.5E+02 PHYSPROP	1.9E-10	4.7E-12 EPI	3.2E-0	07 EPI	1.5E+0	2 PHYSPROP	1.4E+00	CRC89	5.8E-02 9.2E-06 EPA WATER9	2.4E+01 EPI	8.0E-02 PHYSPROP	3.1E+04 PHYSPROP	1.2E-03 6.9E-01 1.7E+00 2.7E-04 EPI
Hexanone, 2-	591-78-6	1.0E+02 PHYSPROP		9.3E-05 EPI	1.2E+			01 PHYSPROF	8.1E-01	CRC89	7.0E-02 8.4E-06 EPA WATER9	1.5E+01 EPI	1.4E+00 PHYSPROP	1.7E+04 PHYSPROP	1.4E-02 3.8E-01 9.2E-01 3.6E-03 EPI
Hexazinone	51235-04-2	2.5E+02 PHYSPROP		2.3E-12 EPI 2.4E-08 EPI	2.3E-0	07 EPI		2 PHYSPROF	1.3E+00	CRC89	2.5E-02 6.3E-06 EPA WATER9	1.3E+02 EPI 2.1E+03 EPI	1.9E+00 PHYSPROP	3.3E+04 PHYSPROP	6.2E-03 2.7E+00 6.5E+00 1.0E-03 EPI
Hexythiazox	78587-05-0 67485-29-4	3.5E+02 PHYSPROP 4.9E+02 PHYSPROP			2.6E-0			2 PHYSPROF			3.8E-02 4.4E-06 EPA WATER9	2.1E+03 EPI 1.8E+08 EPI	5.6E+00 PHYSPROP 2.3E+00 PHYSPROP		6.0E-01 1.0E+01 2.4E+01 8.3E-02 EPI 7.7E-04 6.2E+01 1.5E+02 9.0E-05 EPI
Hydramethylnon Hydrazine	302-01-2	3.2E+02 PHYSPROP		2.2E-06 EPI 6.1E-07 PubChe	2.0E-0	08 PHYSPROP 01 PHYSPROP		D PHYSPROF	1.0E+00	CRC89	1.7E-01 1.9E-05 EPA WATER9	1.8E+U8 EPI	-2.1E+00 PHYSPROP	6.0E-03 PHYSPROP	9.5E-05 1.6E-01 3.8E-01 4.4E-05 RAGSE
Hydrazine Sulfate	10034-93-2	1.3E+02 EPI	2.52 55		1.427	JFROP	2.5E+0		1.4E+00	CRC89	LINE OF LINE WATERS			3.1E+04 PERRY	4.4E-03 5.5E-01 1.3E+00 1.0E-03 RAGSE
Hydrogen Chloride	7647-01-0	3.5E+01 EPI		2.0E+06 Toxnet H			-1.1E+0		1.5E+00	CRC89	1.9E-01 2.3E-05 EPA WATER9			6.7E+05 Toxnet HSDB	2.3E-03 1.7E-01 4.0E-01 1.0E-03 RAGSE
Hydrogen Fluoride	7664-39-3	2.0E+01 PHYSPROP		1.0E-04 PHYSPR				01 PHYSPROF	8.2E-01	CRC89	2.2E-01 2.2E-05 EPA WATER9		2.3E-01 OTHER	1.0E+06 PHYSPROP	1.7E-03 1.4E-01 3.3E-01 1.0E-03 RAGSE
Hydrogen Sulfide	7783-06-4	3.4E+01 PHYSPROP		8.6E-03 PhysPro			_	01 PHYSPROP	1.4E+00	CRC89	1.9E-01 2.2E-05 EPA WATER9		2.3E-01 OTHER	3.7E+03 PHYSPROP	2.2E-03 1.6E-01 3.9E-01 1.0E-03 RAGSE
Hydroquinone	123-31-9 35554-44-0	1.1E+02 PHYSPROP		4.7E-11 EPI	2.4E-0		1.7E+0		1.3E+00	CRC89	8.0E-02 1.1E-05 EPA WATER9	2.4E+02 EPI 8.5E+03 EPI	5.9E-01 PHYSPROP 3.8E+00 PHYSPROP	7.2E+04 PHYSPROP	3.8E-03 4.3E-01 1.0E+00 9.3E-04 EPI 7.7E-02 4.9E+00 1.2E+01 1.2E-02 EPI
lmazalil Imazaguin	35554-44-0 81335-37-7	3.0E+02 PHYSPROP 3.1E+02 PHYSPROP		2.6E-09 EPI 6.9E-18 PHYSPR	1.2E-0 OP 1.0E-1			1 PHYSPROF 12 PHYSPROF	1.2E+00	CRC89	2.2E-02 5.7E-06 EPA WATER9 4.1E-02 4.8E-06 EPA WATER9	8.5E+03 EPI 2.4E+03 EPI	1.9E+00 PHYSPROP	1.8E+02 PHYSPROP 9.0E+01 PHYSPROP	3.3E-03 5.8E+00 1.4E+01 4.8E-04 EPI
Imazethapyr	81335-77-5	2.9E+02 PHYSPROP		1.0E-16 PHYSPR	_		_	2 PHYSPROP			4.3E-02 5.1E-06 EPA WATER9	3.4E+02 EPI	1.5E+00 PHYSPROP	1.4E+03 PHYSPROP	1.3E-02 4.4E+00 1.1E+01 2.0E-03 EPI
lodine	7553-56-2	2.5E+02 PHYSPROP			2.3E-0			2 PHYSPROP	4.9E+00	CRC89		6.0E+01 BAES	2.5E+00 PHYSPROP	3.3E+02 PHYSPROP	6.1E-03 2.8E+00 6.7E+00 1.0E-03 RAGSE
Iprodione	36734-19-7	3.3E+02 PHYSPROP	1.3E-07	3.1E-09 PHYSPR			1.4E+0	2 PHYSPROP			4.0E-02 4.6E-06 EPA WATER9	5.3E+01 EPI	3.0E+00 PHYSPROP	1.4E+01 PHYSPROP	1.5E-02 7.4E+00 1.8E+01 2.2E-03 EPI
Iron	7439-89-6	5.6E+01 PHYSPROP			0.0E+		1.5E+0	3 CRC89	7.9E+00	CRC89		2.5E+01 BAES			2.9E-03 2.2E-01 5.2E-01 1.0E-03 RAGSE
Isobutyl Alcohol Isophorone	78-83-1 78-59-1	7.4E+01 PHYSPROP 1.4E+02 PHYSPROP		9.8E-06 PHYSPR 6.6E-06 FPI	OP 1.0E+ 4.4F-0			D2 PHYSPROF D0 PHYSPROF	8.0E-01 9.3E-01	CRC89	9.0E-02 1.0E-05 EPA WATER9	2.9E+00 EPI 6.5E+01 EPI	7.6E-01 PHYSPROP 1.7E+00 PHYSPROP		6.4E-03 2.7E-01 6.6E-01 1.9E-03 EPI 1.6E-02 6.2E-01 1.5E+00 3.5E-03 EPI
Isopropalin	33820-53-0	3.1E+02 PHYSPROP		1.1E-04 EPI	3.0E-0		1 55±0	DO PHISPROP	1.2E+00	ChemNet	5.3E-02 7.5E-06 EPA WATER9 2.1E-02 5.3E-06 EPA WATER9	1.1E+04 EPI	5.8E+00 PHYSPROP	1.1E-01 PHYSPROP	1.4E+00 5.7E+00 2.2E+01 2.1E-01 EPI
Isopropanol	67-63-0	6.0E+01 PHYSPROP		8.1E-06 PHYSPR			-9.0E+0	01 PHYSPROF	7.8E-01	CRC89	1.0E-01 1.1E-05 EPA WATER9	1.5E+00 EPI	5.0E-02 PHYSPROP	1.0E+06 PHYSPROP	2.3E-03 2.3E-01 5.5E-01 7.8E-04 EPI
Isopropyl Methyl Phosphonic Acid	1832-54-8	1.4E+02 PHYSPROP		6.9E-09 PHYSPR			-8.1E+0		7.02 01	Citcos	7.1E-02 8.3E-06 EPA WATER9	7.7E+00 EPI	2.7E-01 PHYSPROP	5.0E+04 PHYSPROP	1.8E-03 6.2E-01 1.5E+00 4.0E-04 EPI
Isoxaben	82558-50-7	3.3E+02 PHYSPROP	5.2E-08	1.3E-09 EPI	4.1E-0	9 PHYSPROP	1.8E+0	2 PHYSPROP			4.0E-02 4.6E-06 EPA WATER9	1.3E+03 EPI	3.9E+00 PHYSPROP	1.4E+00 PHYSPROP	6.2E-02 7.6E+00 1.8E+01 8.9E-03 EPI
JP-7	NA			1.0E-02 EPA HO		01 EPA HCD		01 EPA HCD	7.8E-01	ATSDR Profile			8.0E+00 OTHER	1.0E+01 EPA HCD	
Lactofen	77501-63-4	4.6E+02 PHYSPROP	1.9E-05	4.7E-07 EPI	7.0E-0	08 PHYSPROP	4.5E+0	1 PHYSPROF			3.2E-02 3.7E-06 EPA WATER9	2.3E+04 EPI	4.8E+00 PHYSPROP	1.0E-01 PHYSPROP	5.2E-02 4.1E+01 9.7E+01 6.3E-03 EPI
Lead Compounds ~Lead Chromate	7758-97-6	3.2E+02 CRC89					8 VETU	2 CRC89	6.1E+00	CRC89				1.7E-01 CRC89	6.9E-03 6.8E+00 1.6E+01 1.0E-03 RAGSE
~Lead Phosphate	7446-27-7	8.1E+02 PHYSPROP					1.0E+0	3 PHYSPROF	7.0E+00	CRC89				0.0E+00 CRC89	1.1E-02 3.7E+03 8.8E+03 1.0E-03 RAGSE
~Lead acetate	301-04-2	3.3E+02 PHYSPROP			7.2E-0	04 PHYSPROP	3.3E+0	2 PHYSPROP	3.3E+00	CRC89	3.3E-02 9.5E-06 EPA WATER9	1.0E+00 EPI	-8.0E-02 PHYSPROP	1.6E+03 PHYSPROP	1.4E-04 7.2E+00 1.7E+01 2.1E-05 EPI
~Lead and Compounds	7439-92-1	2.1E+02 EPI			0.0E+		3.3E+0		1.1E+01	CRC89		9.0E+02 BAES			5.5E-04 1.5E+00 3.7E+00 1.0E-04 RAGSE
~Lead subacetate	1335-32-6	8.1E+02 PHYSPROP			3.0E-:		1.6E+0	, LII			2.2E-02 2.6E-06 EPA WATER9	1.0E+01 EPI	-4.0E+00 PHYSPROP	6.3E+04 PHYSPROP	1.1E-09 3.4E+03 8.2E+03 1.0E-10 EPI
~Tetraethyl Lead Lewisite	78-00-2	3.2E+02 PHYSPROP 2.1E+02 PHYSPROP		5.7E-01 PHYSPR 2.2E-04 EPI	OP 2.6E-0 5.8E-0			D2 PHYSPROF 1 PHYSPROF	1.7E+00 1.9E+00	CRC89 CRC89	2.5E-02 6.4E-06 EPA WATER9 3.3E-02 9.1E-06 EPA WATER9	6.5E+02 EPI 1.1E+02 EPI	4.2E+00 PHYSPROP	2.9E-01 PHYSPROP 5.0E+02 PHYSPROP	9.5E-02 6.8E+00 1.6E+01 1.4E-02 EPI 3.0E-02 1.5E+00 3.7E+00 5.4E-03 EPI
Linuron	541-25-3 330-55-2	2.1E+02 PHYSPROP 2.5E+02 PHYSPROP		2.2E-04 EPI 6.3E-09 EPI	1.4E-0		9.3E+0		1.9E+00	CRC89	4.8E-02 5.6E-06 EPA WATER9	1.1E+02 EPI 3.4F+02 FPI	3.2E+00 PHYSPROP	7 SE+01 PHYSPROP	5.1E-02 2.6E+00 6.3E+00 8.4E-03 EPI
Lithium	7439-93-2	6.9E+00 EPI	2.02 07	0.52 05	2.42	50 1111511101	1.8E+0		5.3E-01	CRC89	4.02 02 3.02 00 2171 1771 213	3.0E+02 BAES	3.EE-00 1111311101	7.52.02 1111511101	1.0E-03 1.2E-01 2.8E-01 1.0E-03 RAGSE
MCPA	94-74-6	2.0E+02 PHYSPROP	5.4E-08	1.3E-09 EPI	5.9E-0	06 PHYSPROP		2 PHYSPROF		PubChem	3.1E-02 8.2E-06 EPA WATER9	3.0E+01 EPI	3.3E+00 PHYSPROP	6.3E+02 PHYSPROP	9.2E-02 1.4E+00 3.4E+00 1.7E-02 EPI
МСРВ	94-81-5	2.3E+02 PHYSPROP		2.7E-09 EPI	4.3E-0			2 PHYSPROF			5.1E-02 5.9E-06 EPA WATER9	9.8E+01 EPI	2.8E+00 PHYSPROP		1.0E-01 2.0E+00 4.8E+00 1.7E-02 EPI
MCPP	93-65-2	2.1E+02 PHYSPROP		1.8E-08 PHYSPR			9.5E+0			PubChem	2.7E-02 7.0E-06 EPA WATER9	4.9E+01 EPI	3.1E+00 PHYSPROP	6.2E+02 PHYSPROP	7.4E-02 1.7E+00 4.0E+00 1.3E-02 EPI
Malathion Maleic Aphydride	121-75-5 108-31-6	3.3E+02 PHYSPROP 9.8F+01 PHYSPROP		4.9E-09 PHYSPR 3.9E-06 PHYSPR				0 PHYSPROF	1.2E+00 1.3E+00	CRC89	2.1E-02 5.2E-06 EPA WATER9 8.8E-02 1.1E-05 EPA WATER9	3.1E+01 EPI 1.0E+00 EPI	2.4E+00 PHYSPROP	1.4E+02 PHYSPROP	5.7E-03 7.4E+00 1.8E+01 8.1E-04 EPI 2.0E-02 3.7E-01 8.9E-01 5.3E-03 EPI
Maleic Annydride Maleic Hydrazide	108-31-6	1.1E+02 PHYSPROP		2.7E-11 PHYSPR			0.00	1 PHYSPROF	1.3E+UU	CRC89	8.2E-02 1.1E-05 EPA WATER9	3.3E+00 EPI	-8.4E-01 PHYSPROP	1.6E+05 PERRY 4.5E+03 PHYSPROP	4.2E-04 4.5E-01 1.1E+00 1.0E-04 EPI
Malononitrile	109-77-3	6.6E+01 PHYSPROP		1.3E-07 EPI	2.0E-0			12 PHYSPROF	1.2E+00	CRC89	1.2E-01 1.4E-05 EPA WATER9	3.3E+00 EPI 3.3E+00 EPI	-6.0E-01 PHYSPROP	1.3E+05 PHYSPROP	8.3E-04 2.5E-01 5.9E-01 2.7E-04 EPI
Mancozeb	8018-01-7	5.4E+02 PHYSPROP		1.5E-11 PHYSPR				2 PhysProp		PubChem	2.0E-02 5.1E-06 EPA WATER9	6.1E+02 EPI	1.3E+00 PHYSPROP	6.2E+00 PHYSPROP	6.9E-03 1.1E+02 2.7E+02 7.7E-04 EPI
Maneb	12427-38-2	3.0E+02 PHYSPROP	2.0E-07	4.9E-09 PHYSPR			2.0E+0				4.3E-02 5.0E-06 EPA WATER9	6.1E+02 EPI	6.2E-01 PHYSPROP	6.0E+00 PHYSPROP	5.1E-03 4.7E+00 1.1E+01 7.7E-04 EPI
Manganese (Diet)	7439-96-5	5.5E+01 PHYSPROP			0.0E+			3 PHYSPROP	7.3E+00	CRC89		6.5E+01 BAES			2.9E-03 2.1E-01 5.1E-01 1.0E-03 RAGSE
Manganese (Non-diet)	7439-96-5	5.5E+01 PHYSPROP	4.05.00	4.25.40 DI	0.0E+		_	3 PHYSPROF	7.3E+00	CRC89	4 CF 02 F 2F 0C FD4 WHEEP	6.5E+01 BAES	4.05.00 DUNGSSSS	5.75.04 DUNGGEOR	2.9E-03 2.1E-01 5.1E-01 1.0E-03 RAGSE
Mephosfolan Mepiquat Chloride	950-10-7 24307-26-4	2.7E+02 PHYSPROP 1.5E+02 PHYSPROP		1.2E-10 PHYSPR 4.3E-12 PHYSPR		D5 PHYSPROP D7 PHYSPROP	8.4E+0	)1 EPI )2 PHYSPROF			4.6E-02 5.3E-06 EPA WATER9 6.7E-02 7.9E-06 EPA WATER9	6.4E+02 EPI 6.6E+01 EPI	1.0E+00 PHYSPROP -2.8E+00 PHYSPROP	5.7E+01 PHYSPROP 5.0E+05 PHYSPROP	1.5E-03 3.4E+00 8.1E+00 2.4E-04 EPI 1.4E-05 7.2E-01 1.7E+00 3.0E-06 EPI
Mercury Compounds	24307-20-4	1.5E-102 FITTSPROP	1.31-10	4.52 12 Fillishk	J. / E-(	, riiisrkur	2.2170	- FILISTAUF			O. F. G. F. F. T. VATERS	O.OLTOI EFI	2.02100 FITISPROP	J.J. THISPROP	1.42 03 7.22-01 1.72-00 3.02-00 EPI
~Mercuric Chloride (and other Mercury salts)	7487-94-7	2.7E+02 PHYSPROP					2.8E+0		5.6E+00	CRC89			-2.2E-01 PHYSPROP	6.9E+04 PHYSPROP	6.3E-03 3.5E+00 8.4E+00 1.0E-03 RAGSE
~Mercury (elemental)	7439-97-6	2.0E+02 PHYSPROP	3.5E-01	8.6E-03 PHYSPR	OP 2.0E-0	3 PHYSPROP	-3.9E+0	01 PHYSPROF	1.4E+01	CRC89	3.1E-02 6.3E-06 EPA WATER9	5.2E+01 SSL	6.2E-01 PHYSPROP	6.0E-02 PHYSPROP	5.4E-03 1.4E+00 3.4E+00 1.0E-03 RAGSE
~Methyl Mercury	22967-92-6	2.2E+02 OTHER													5.7E-03 1.7E+00 4.1E+00 1.0E-03 RAGSE
~Phenylmercuric Acetate	62-38-4	3.4E+02 PHYSPROP 3.0F+02 PHYSPROP		5.7E-10 EPI	6.0E-0			2 PHYSPROF	1.0F+00	CRC89	3.9E-02 4.6E-06 EPA WATER9	5.6E+01 EPI 4.9F+04 EPI	7.1E-01 PHYSPROP	4.4E+03 PHYSPROP	4.2E-04 8.1E+00 1.9E+01 6.0E-05 EPI
Merphos Merphos Oxide	150-50-5 78-48-8	3.0E+02 PHYSPROP 3.1E+02 PHYSPROP		2.3E-05 PHYSPR 2.9E-07 PHYSPR				D PHYSPROF CRC89	1.0E+00 1.1E+00	CRC89	2.0E-02 5.0E-06 EPA WATER9 2.0E-02 5.0E-06 EPA WATER9	4.9E+04 EPI 2.4F+03 EPI	7.7E+00 PHYSPROP 5.7E+00 PHYSPROP	3.5E-03 PHYSPROP	2.8E+01 4.9E+00 2.3E+01 4.2E+00 EPI 1.1E+00 6.1E+00 2.4E+01 1.7E-01 EPI
Metalaxyl	57837-19-1	2.8E+02 PHYSPROP		3.0E-09 EPI	5.6E-0		7.1E+0	1 PHYSPROF	1.12.700	C11C03	4.4E-02 5.2E-06 EPA WATER9	3.9E+01 EPI	1.7E+00 PHYSPROP	8.4E+03 PHYSPROP	3.7E-03 3.9E+00 9.3E+00 5.8E-04 EPI
Methacrylonitrile	126-98-7	6.7E+01 PHYSPROP		2.5E-04 EPI	7.1E+		-3.6E+0	1 PHYSPROF	8.0E-01	CRC89	9.6E-02 1.1E-05 EPA WATER9	1.3E+01 EPI	6.8E-01 PHYSPROP	2.5E+04 PHYSPROP	5.9E-03 2.5E-01 6.0E-01 1.9E-03 EPI
Methamidophos	10265-92-6	1.4E+02 PHYSPROP		8.7E-10 PHYSPR	_		4.6E+0	1 PHYSPROF	1.3E+00	CRC89	6.0E-02 9.2E-06 EPA WATER9	5.4E+00 EPI	-8.0E-01 PHYSPROP	1.0E+06 PHYSPROP	3.4E-04 6.5E-01 1.6E+00 7.4E-05 EPI
Methanol	67-56-1	3.2E+01 PHYSPROP		4.6E-06 PHYSPR				01 PHYSPROF	7.9E-01	CRC89	1.6E-01 1.7E-05 EPA WATER9	1.0E+00 EPI	-7.7E-01 PHYSPROP	1.0E+06 PHYSPROP	6.9E-04 1.6E-01 3.8E-01 3.2E-04 EPI
Methidathion Methodal	950-37-8 16752-77-5	3.0E+02 PHYSPROP		7.2E-09 EPI 2.0E-11 EPI	3.4E-0			1 PHYSPROF	1.3E+00	CRC89	4.2E-02 4.9E-06 EPA WATER9	2.1E+01 EPI 1.0E+01 EPI	2.2E+00 PHYSPROP	1.9E+02 PHYSPROP 5.8E+04 PHYSPROP	6.1E-03 5.2E+00 1.2E+01 9.1E-04 EPI 2.4E-03 8.5E-01 2.0E+00 4.8E-04 EPI
Methonyl Methoxy-5-nitroaniline, 2-	16/52-77-5 99-59-2	1.6E+02 PHYSPROP 1.7E+02 PHYSPROP		2.0E-11 EPI 1.3E-08 PHYSPR			1.3E+0	12 PHYSPROF	1.3E+00 1.2E+00	CRC89	4.8E-02 8.4E-06 EPA WATER9 4.3E-02 7.8E-06 EPA WATER9	7.1E+01 EPI	6.0E-01 PHYSPROP 1.5E+00 PHYSPROP	1.2E+02 PHYSPROP	2.4E-03 8.5E-01 2.0E+00 4.8E-04 EPI 8.4E-03 9.2E-01 2.2E+00 1.7E-03 EPI
Methoxychlor	72-43-5	3.5E+02 PHYSPROP		2.0E-07 PHYSPR			8.7E+0	12 PHYSPROF	1.4E+00	CRC89	2.2E-02 5.6E-06 EPA WATER9	7.1E+01 EPI 2.7E+04 EPI	5.1E+00 PHYSPROP	1.2E+02 PHYSPROP	3.1E-01 9.1E+00 2.2E+01 4.3E-02 EPI
Methoxyethanol Acetate, 2-	110-49-6	1.2E+02 PHYSPROP		3.1E-07 EPI	7.0E+			01 PHYSPROF	1.0E+00	CRC89	6.6E-02 8.7E-06 EPA WATER9	2.5E+00 EPI	1.0E-01 PHYSPROP	1.0E+06 PHYSPROP	1.7E-03 4.8E-01 1.2E+00 4.0E-04 EPI
Methoxyethanol, 2-	109-86-4	7.6E+01 PHYSPROP		3.3E-07 PHYSPR			-8.5E+0	01 PHYSPROF	9.6E-01	CRC89	9.5E-02 1.1E-05 EPA WATER9	1.0E+00 EPI	-7.7E-01 PHYSPROP	1.0E+06 PHYSPROP	6.0E-04 2.8E-01 6.7E-01 1.8E-04 EPI
							-								

Contaminant		Molecular Weight		Volat	ility Parameter	rs		Melt	ting Point	Den	sitv	Diffusivity in Air and Water	Soil Partition Coefficients	Water Partition	Water Solubility	Tapwater Dermal Parameters
			H,	HLC	,					Density		Dia Diw	K <sub>d</sub> K <sub>oc</sub>	log K <sub>ow</sub>	S	B τ <sub>event</sub> t* K <sub>p</sub>
Analyte Methyl Acetate	CAS No. 79-20-9	MW MW Ref 7.4E+01 PHYSPROP	(unitless) (at	tm-m³/mole) H	1' and HLC Ref PHYSPROP	VP	VP Ref PHYSPROP	MP	MP Ref 1 PHYSPROP	101 - 1	ensity Ref CRC89	(cm²/s) (cm²/s) D <sub>ia</sub> and D <sub>iw</sub> Ref 9.6E-02 1.1E-05 EPA WATER9	(L/kg) K <sub>d</sub> Ref (L/kg) K <sub>oc</sub> Ref 3.1E+00 EPI	(unitless) log K <sub>ow</sub> Ref 1.8E-01 PHYSPROP	(mg/L) S Ref 2.4E+05 PHYSPROP	(unitless) (hr/event) (hr) (cm/hr) KPREF 2.6E-03 2.7E-01 6.6E-01 7.9E-04 EPI
Methyl Acrylate	96-33-3	8.6E+01 PHYSPROP	8.1E-03	2.0E-04	EPI		PHYSPROP	-7.7E+01	1 PHYSPROP	9.5E-01	CRC89	8.6E-02 1.0E-05 EPA WATER9	5.8E+00 EPI	8.0E-01 PHYSPROP	4.9E+04 PHYSPROP	6.2E-03 3.2E-01 7.7E-01 1.8E-03 EPI
Methyl Ethyl Ketone (2-Butanone)	78-93-3	7.2E+01 PHYSPROP	2.3E-03	5.7E-05	PHYSPROP		PHYSPROP		1 PHYSPROP	8.0E-01	CRC89	9.1E-02 1.0E-05 EPA WATER9	4.5E+00 EPI	2.9E-01 PHYSPROP	2.2E+05 PHYSPROP	3.1E-03 2.7E-01 6.4E-01 9.6E-04 EPI
Methyl Hydrazine Methyl Isobutyl Ketone (4-methyl-2-pentanone)	60-34-4 108-10-1	4.6E+01 PHYSPROP 1.0E+02 PHYSPROP	1.2E-04 5.6E-03	3.0E-06 1.4E-04	PHYSPROP		PHYSPROP		1 PHYSPROP 1 PHYSPROP	8.7E-01 8.0F-01	CRC89	1.3E-01 1.4E-05 EPA WATER9 7.0E-02 8.3E-06 EPA WATER9	1.3E+01 EPI 1.3E+01 EPI	-1.1E+00 PHYSPROP 1.3E+00 PHYSPROP	1.0E+06 PHYSPROP	4.5E-04 1.9E-01 4.6E-01 1.7E-04 EPI 1.2E-02 3.8E-01 9.2E-01 3.2E-03 EPI
Methyl Isocyanate	624-83-9	5.7E+01 PHYSPROP	3.8E-02	9.3E-04	PHYSPROP		PHYSPROP	-4.5E+01	1 PHYSPROP	9.6E-01	CRC89	1.2E-01 1.3E-05 EPA WATER9	4.0E+01 EPI	7.9E-01 PHYSPROP	2.9E+04 PHYSPROP	7.3E-03 2.2E-01 5.3E-01 2.5E-03 EPI
Methyl Methacrylate	80-62-6	1.0E+02 PHYSPROP	1.3E-02	3.2E-04	EPI		PHYSPROP		1 PHYSPROP	9.4E-01	CRC89	7.5E-02 9.2E-06 EPA WATER9	9.1E+00 EPI	1.4E+00 PHYSPROP	1.5E+04 PHYSPROP	1.4E-02 3.8E-01 9.2E-01 3.6E-03 EPI
Methyl Parathion	298-00-0	2.6E+02 PHYSPROP	4.1E-06	1.0E-07	PHYSPROP		PHYSPROP		PHYSPROP	1.4E+00	CRC89	2.5E-02 6.4E-06 EPA WATER9	7.3E+02 EPI	2.9E+00 PHYSPROP	3.8E+01 PHYSPROP	2.6E-02 3.1E+00 7.5E+00 4.2E-03 EPI
Methyl Phosphonic Acid Methyl Styrene (Mixed Isomers)	993-13-5 25013-15-4	9.6E+01 PHYSPROP 3.5E+02 PHYSPROP	5.0E-10 1.1E-01	1.2E-11 2.6E-03	PHYSPROP	3.3E-04 1.5E+00	PHYSPROP	1.1E+02 -8.6E+01	PHYSPROP  EPI	8.9E-01	HSDB	9.1E-02 1.1E-05 EPA WATER9 1.7E-02 4.2E-06 EPA WATER9	1.4E+00 EPI 7.2E+02 EPI	-7.0E-01 PHYSPROP 3.4E+00 PHYSPROP	2.0E+04 PHYSPROP 8.9E+01 PHYSPROP	3.7E-04 3.6E-01 8.7E-01 9.8E-05 EPI 4.8E-01 1.0E+01 2.4E+01 6.6E-02 EPI
Methyl methanesulfonate	66-27-3	1.1E+02 PHYSPROP	1.6E-04	4.0E-06	PHYSPROP		PHYSPROP	2.0E+01	PHYSPROP	1.3E+00	CRC89	7.9E-02 1.1E-05 EPA WATER9	4.3E+00 EPI	-6.6E-01 PHYSPROP	2.0E+05 LANGE	5.6E-04 4.4E-01 1.0E+00 1.4E-04 EPI
Methyl tert-Butyl Ether (MTBE)	1634-04-4	8.8E+01 PHYSPROP	2.4E-02	5.9E-04	PHYSPROP		PHYSPROP		2 PHYSPROP	7.4E-01	CRC89	7.5E-02 8.6E-06 EPA WATER9	1.2E+01 EPI	9.4E-01 PHYSPROP		7.6E-03 3.3E-01 7.9E-01 2.1E-03 EPI
Methyl-1,4-benzenediamine dihydrochloride, 2-	615-45-2 99-55-8	2.0E+02 PHYSPROP	2.6E-16 3.4E-07	6.4E-18 8.3E-09	PHYSPROP		PHYSPROP	2.4E+02	EPI PHYSPROP			5.6E-02 6.6E-06 EPA WATER9	2.0E+02 EPI 1.8E+02 EPI	-2.1E+00 PHYSPROP	1.0E+06 PHYSPROP 1.0E+04 PHYSPROP	2.9E-05 1.3E+00 3.1E+00 5.4E-06 EPI 1.8E-02 7.5E-01 1.8E+00 3.8E-03 EPI
Methyl-5-Nitroaniline, 2- Methyl-N-nitro-N-nitrosoguanidine, N-	70-25-7	1.5E+02 PHYSPROP 1.5E+02 PHYSPROP	3.4E-07 5.0E-11	8.3E-09 1.2E-12	PHYSPROP		PHYSPROP PHYSPROP	1.1E+02				6.7E-02 7.8E-06 EPA WATER9 6.8E-02 8.0E-06 EPA WATER9	1.8E+02 EPI 7.2E+01 EPI	1.9E+00 PHYSPROP -9.2E-01 PHYSPROP		2.7E-04 7.0E-01 1.7E+00 3.8E-03 EPI
Methylaniline Hydrochloride, 2-	636-21-5	1.4E+02 PHYSPROP	8.6E-05	2.1E-06	PHYSPROP		PHYSPROP		PHYSPROP			6.9E-02 8.1E-06 EPA WATER9	1.2E+02 EPI	1.6E+00 PHYSPROP	8.3E+03 PHYSPROP	4.8E-05 6.7E-01 1.6E+00 1.1E-05 EPI
Methylarsonic acid	124-58-3	1.4E+02 PHYSPROP				1.6E-03	PHYSPROP	1.6E+02	PHYSPROP			7.0E-02 8.2E-06 EPA WATER9	4.4E+01 EPI	-1.2E+00 PHYSPROP	2.6E+05 PHYSPROP	1.9E-04 6.4E-01 1.5E+00 4.2E-05 EPI
Methylbenzene,1-4-diamine monohydrochloride, 2-	74612-12-7	1.6E+02 OTHER										6.5E-02 7.6E-06 EPA WATER9				8.1E-01 2.0E+00
Methylbenzene-1,4-diamine sulfate, 2- Methylcholanthrene, 3-	615-50-9 56-49-5	2.2E+02 OTHER 2.7E+02 PHYSPROP	2 1F-04	5.2F-06	FPI	4.3E-08	FPI	1 8F+02	PHYSPROP	1.3E+00	CRC89	5.2E-02 6.1E-06 EPA WATER9 2.4E-02 6.1E-06 EPA WATER9	9.6E+05 EPI	6.4E+00 PHYSPROP	2.9E-03 PHYSPROP	1.8E+00 4.3E+00 5.7E+00 3.3E+00 1.5E+01 9.0E-01 EPI
Methylene Chloride	75-09-2	8.5E+01 PHYSPROP	1.3E-01	3.3E-03	PHYSPROP		PHYSPROP		1 PHYSPROP		CRC89	1.0E-01 1.3E-05 EPA WATER9	2.2E+01 EPI	1.3E+00 PHYSPROP	1.3E+04 PHYSPROP	1.3E-02 3.1E-01 7.5E-01 3.5E-03 EPI
Methylene-bis(2-chloroaniline), 4,4'-	101-14-4	2.7E+02 PHYSPROP	1.7E-09	4.1E-11	PHYSPROP		PHYSPROP		PHYSPROP			4.6E-02 5.4E-06 EPA WATER9	5.7E+03 EPI	3.9E+00 PHYSPROP		1.2E-01 3.3E+00 7.9E+00 2.0E-02 EPI
Methylene-bis(N,N-dimethyl) Aniline, 4,4'	101-61-1	2.5E+02 PHYSPROP	4.4E-08		PHYSPROP		PHYSPROP	0.00	PHYSPROP			4.7E-02 5.5E-06 EPA WATER9	2.7E+03 EPI	4.4E+00 PHYSPROP		5.2E-01 2.8E+00 6.7E+00 8.4E-02 RAGSE 7.5E-03 1.4E+00 3.3E+00 1.4E-03 EPI
Methylenebisbenzenamine, 4,4'- Methylenediphenyl Diisocyanate	101-77-9 101-68-8	2.0E+02 PHYSPROP 2.5E+02 PHYSPROP	2.2E-09 3.7F-05	5.3E-11 9.0F-07	PHYSPROP	2.0E-07 5.0E-06	PHYSPROP		L PHYSPROP PHYSPROP	1.2F+00	CRC89	5.6E-02 6.5E-06 EPA WATER9	2.1E+03 EPI 2.8E+05 EPI	1.6E+00 PHYSPROP 5.2F+00 PHYSPROP	1.0E+03 PHYSPROP 8.3F-01 PHYSPROP	7.5E-03 1.4E+00 3.3E+00 1.4E-03 EPI 1.1E+00 2.7E+00 1.0E+01 1.8E-01 EPI
Methylstyrene, Alpha-	98-83-9	1.2E+02 PHYSPROP		2.6E-03	EPI	1.9E+00	EPI		1 PHYSPROP	9.1E-01	CRC89	6.3E-02 8.2E-06 EPA WATER9	7.0E+02 EPI	3.5E+00 PHYSPROP		2.9E-01 4.8E-01 1.2E+00 7.0E-02 EPI
Metolachlor	51218-45-2	2.8E+02 PHYSPROP	3.7E-07	9.0E-09	PHYSPROP	3.1E-05	PHYSPROP	-6.2E+01	1 PHYSPROP	1.1E+00	CRC89	2.2E-02 5.5E-06 EPA WATER9	4.9E+02 EPI	3.1E+00 PHYSPROP	5.3E+02 PHYSPROP	2.2E-02 4.1E+00 9.8E+00 3.4E-03 EPI
Metribuzin	21087-64-9	2.1E+02 PHYSPROP	4.8E-09 5.4E-15	1.2E-10	EPI		PHYSPROP		PHYSPROP PHYSPROP	1.3E+00	CRC89	2.7E-02 7.1E-06 EPA WATER9	5.3E+01 EPI	1.7E+00 PHYSPROP	1.1E+03 PHYSPROP	7.4E-03 1.7E+00 4.0E+00 1.3E-03 EPI
Metsulfuron-methyl Mineral oils	74223-64-6 8012-95-1	3.8E+02 PHYSPROP 1.7E+02 EPI	5.4E-15 3.3E+02	1.3E-16 8.2E+00	EPI EPI	2.5E-12 1.4E-01	PHYSPROP EPI	1.6E+02	PHYSPROP D EPI	8.8E-01 (	ChemNet	3.6E-02 4.2E-06 EPA WATER9 3.6E-02 6.4E-06 EPA WATER9	9.3E+01 EPI 4.8E+03 EPI	2.2E+00 PHYSPROP 6.1E+00 EPI	9.5E+03 PHYSPROP 3.7E-03 EPI	2.5E-03 1.4E+01 3.4E+01 3.3E-04 EPI 9.8E+00 9.5E-01 4.3E+00 2.0E+00 EPI
Mirex	2385-85-5	5.5E+02 PHYSPROP	3.3E+02 3.3E-02	8.1E-04	PHYSPROP		PHYSPROP	4.9E+02		2.3E+00 (		2.2E-02 5.6E-06 EPA WATER9	4.8E+03 EPI 3.6E+05 EPI	6.1E+00 EPI 6.9E+00 PHYSPROP	8.5E-02 PHYSPROP	4.6E-01 1.2E+02 2.9E+02 5.2E-02 EPI
Molinate	2212-67-1	1.9E+02 PHYSPROP	1.7E-04	4.1E-06	PHYSPROP		PHYSPROP	7.0E+01	L EPI		CRC89	3.2E-02 6.8E-06 EPA WATER9	1.8E+02 EPI	3.2E+00 PHYSPROP		9.9E-02 1.2E+00 2.8E+00 1.9E-02 EPI
Molybdenum	7439-98-7	9.6E+01 PHYSPROP				0.0E+00	NIOSH		PHYSPROP	1.0E+01	CRC89		2.0E+01 BAES			3.8E-03 3.6E-01 8.7E-01 1.0E-03 RAGSE
Monochloramine Monomethylaniline	10599-90-3 100-61-8	5.1E+01 EPI 1.1E+02 PHYSPROP	3 6F <sub>*</sub> 04	8.9E-06	PHYSPROP	4.5E-01	PHYSPROP	-6.6E+01	1 CRC89	9.9E-01	CRC89	7.2E-02 9.1E-06 EPA WATER9	8.2E+01 EPI	1.7E+00 PHYSPROP	5 6F+03 PHYSPROP	2.8E-03 2.0E-01 4.9E-01 1.0E-03 RAGSE 2.0E-02 4.2E-01 1.0E+00 5.0E-03 EPI
Myclobutanil	88671-89-0	2.7E+02 PHYSPROP	1.7E-07	4.3E-09	EPI		PHYSPROP	6.6E+01	PHYSPROP	5.52 01	CITCOS	4.5E-02 5.3E-06 EPA WATER9	6.1E+03 EPI	2.9E+00 PHYSPROP		2.1E-02 3.6E+00 8.7E+00 3.4E-03 EPI
N,N'-Diphenyl-1,4-benzenediamine	74-31-7	2.6E+02 PHYSPROP	8.4E-09	2.1E-10	PHYSPROP	6.4E-09	EPI		PHYSPROP			4.7E-02 5.4E-06 EPA WATER9	5.2E+04 EPI	4.0E+00 PHYSPROP		1.6E-01 3.0E+00 7.2E+00 2.6E-02 EPI
Naled	300-76-5	3.8E+02 PHYSPROP	2.7E-03	6.5E-05	EPI		PHYSPROP	2.7E+01	PHYSPROP	2.0E+00	CRC89	2.5E-02 6.4E-06 EPA WATER9	1.3E+02 EPI	1.4E+00 PHYSPROP	1.5E+00 PHYSPROP	7.1E-04 1.4E+01 3.4E+01 9.4E-05 EPI
Naphtha, High Flash Aromatic (HFAN) Naphthylamine, 2-	64742-95-6 91-59-8	1.4E+02 PHYSPROP	1.8E-02 3.3E-06	4.4E-04 8.1E-08	EPI PHYSPROP	8.5E-02	EPI PHYSPROP	1 15±03	PHYSPROP	1.6E+00	CRC89	6.4E-02 1.0E-05 EPA WATER9	2.5E+03 EPI	2.3E+00 PHYSPROP	3.1E+01 EPI 1.9E+02 PHYSPROP	3.7E-02 6.7E-01 1.6E+00 8.1E-03 EPI
Napropamide	15299-99-7	2.7E+02 PHYSPROP	3.4E-08	8.4E-10	EPI		PHYSPROP	7.5E+01	PHYSPROP	1.02+00	CINCOS	4.5E-02 5.3E-06 EPA WATER9	3.2E+03 EPI	3.4E+00 PHYSPROP		5.1E-02 3.5E+00 8.3E+00 8.0E-03 EPI
Nickel Acetate	373-02-4	1.8E+02 PHYSPROP				1.8E-05	PHYSPROP			1.8E+00	PERRY	4.6E-02 9.7E-06 EPA WATER9		-1.4E+00 PHYSPROP	1.7E+05 PHYSPROP	9.9E-05 1.0E+00 2.5E+00 1.9E-05 EPI
Nickel Carbonate Nickel Carbonyl	3333-67-3 13463-39-3	1.2E+02 PHYSPROP 1.7E+02 CRC89		5.0E-01	MSDS	3.6E-06 3.2E+02	PHYSPROP	-1.9F+01	1 CRC89			7.9E-02 9.2E-06 EPA WATER9		-2.1E+00 PHYSPROP		5.5E-05 4.9E-01 1.2E+00 1.3E-05 EPI
Nickel Hudrovide			2.0E+01	5.UE-U1	IVISUS	3.2E+U2	NIOSH	-1.9E+0.	I CRC89	1.3E+00	CRC89	4.3E-02 8.2E-06 EPA WATER9			1.8E+02 PERRY	9.5E-01 2.3E+00
Nickel Hydroxide Nickel Oxide	12054-48-7 1313-99-1	9.3E+01 OTHER 7.5E+01 EPI	2.0E+01	5.UE-U1	MISDS	3.22+02	NIUSH		1 CRC89		CRC89	4.3E-02 8.2E-06 EPA WATER9			1.8E+02 PERRY	9.5E-01 2.3E+00 3.7E-03 3.5E-01 8.3E-01 1.0E-03 RAGSE 3.3E-03 2.8E-01 6.6E-01 1.0E-03 RAGSE
Nickel Oxide Nickel Refinery Dust	12054-48-7 1313-99-1 NA	9.3E+01 OTHER 7.5E+01 EPI	2.0E+01	5.0E-01	MSDS				3 CRC89	6.7E+00	CRC89	4.3E-02 8.2E-06 EPA WATER9	1.5E+02 BAES		1.8E+02 PERRY	3.7E-03 3.5E-01 8.3E-01 1.0E-03 RAGSE 3.3E-03 2.8E-01 6.6E-01 1.0E-03 RAGSE 2.0E-04 RAGSE
Nickel Oxide Nickel Refinery Dust Nickel Soluble Salts	12054-48-7 1313-99-1 NA 7440-02-0	9.3E+01 OTHER 7.5E+01 EPI 5.9E+01 PHYSPROP	2.0E+01	5.01-01	MISDS	0.0E+00	NIOSH	2.0E+03	3 CRC89	6.7E+00 8.9E+00	CRC89	4.3E-02 8.2E-06 EPA WATER9	1.5E+02 BAES 6.5E+01 SSL		1.8E+02 PERRY	3.7E-03 3.5E-01 8.3E-01 1.0E-03 RAGSE 3.3E-03 2.8E-01 6.6E-01 1.0E-03 RAGSE 2.0E-04 RAGSE 5.9E-04 2.2E-01 5.4E-01 2.0E-04 RAGSE
Nickel Oxide Nickel Refinery Dust Nickel Soluble Salts Nickel Subsulfide	12054-48-7 1313-99-1 NA	9.3E+01 OTHER 7.5E+01 EPI 5.9E+01 PHYSPROP 2.4E+02 CRC89	Z.0E+01	5.01-01	MISDS				3 CRC89 3 CRC89 2 CRC89	6.7E+00 8.9E+00	CRC89				1.8E+02 PERRY	3.7E-03 3.5E-01 8.3E-01 1.0E-03 RAGSE 3.3E-03 2.8E-01 6.6E-01 1.0E-03 RAGSE 2.0E-04 RAGSE 5.9E-04 2.2E-01 5.4E-01 2.0E-04 RAGSE 1.2E-03 2.3E+00 5.6E+00 2.0E-04 RAGSE
Nickel Oxide Nickel Refinery Dust Nickel Soluble Salts	12054-48-7 1313-99-1 NA 7440-02-0 12035-72-2	9.3E+01 OTHER 7.5E+01 EPI 5.9E+01 PHYSPROP	2.01+01	5.0E-01	MISDS			2.0E+03 1.5E+03 7.9E+02	3 CRC89 3 CRC89 2 CRC89	6.7E+00 8.9E+00	CRC89	4.3E-02 8.2E-06 EPA WATER9  5.8E-02 6.7E-06 EPA WATER9			1.8E+02 PERRY	3.7E-03 3.5E-01 8.3E-01 1.0E-03 RAGSE 3.3E-03 2.8E-01 6.6E-01 1.0E-03 RAGSE 2.0E-04 RAGSE 5.9E-04 2.2E-01 5.4E-01 2.0E-04 RAGSE
Nickel Oxide Nickel Refinery Dust Nickel Soluble Salts Nickel Soluble Mickel Nickel Oxide Nickel Oxide Nitrate + Nitrite (as N)	12054-48-7 1313-99-1 NA 7440-02-0 12035-72-2 1271-28-9 14797-55-8 NA	9.3E+01 OTHER 7.5E+01 EPI 5.9E+01 PHYSPROP 2.4E+02 CRC89 1.9E+02 CRC89 6.2E+01 EPI	2.01+01	5.0E-01	MISDS			2.0E+03 1.5E+03 7.9E+02	3 CRC89 3 CRC89 2 CRC89	6.7E+00 8.9E+00	CRC89				1.8E+02 PERRY	3.7E-03 3.5E-01 8.3E-01 1.0E-03 RAGSE 3.3E-03 2.8E-01 6.6E-01 1.0E-03 RAGSE 5.9E-04 2.EE-01 5.6E-01 2.0E-04 RAGSE 1.2E-03 2.3E-00 5.6E-00 2.0E-04 RAGSE 1.2E+00 2.9E+00 5.6E-00 2.0E-04 RAGSE 3.2E+00 5.6E-00 1.0E-03 RAGSE 1.2E-03 2.3E-01 5.6E-01 1.0E-03 RAGSE 1.0E-03 RA
Nickel Coxide Nickel Solitible Salts Nickel Solitible Salts Nickel Solitible Salts Nickel Coxene Nitrate Nitrate + Nitrite (as N) Nitrite	12054-48-7 1313-99-1 NA 7440-02-0 12035-72-2 1271-28-9 14797-55-8 NA 14797-65-0	9.3E+01 OTHER 7.5E+01 EPI 5.9E+01 PHYSPROP 2.4E+02 CRC89 1.9E+02 CRC89 6.2E+01 EPI 4.7E+01 EPI				0.0E+00	NIOSH	2.0E+03 1.5E+03 7.9E+02 1.7E+02	3 CRC89 3 CRC89 2 CRC89 2 CRC89	6.7E+00 8.9E+00 5.9E+00	CRC89 CRC89 CRC89	5.8E-02 6.7E-06 EPA WATER9	6.5E+01 SSL	4 OF AND PHANCOPORD		3.76-03 3.56-01 8.36-01 1.06-03 RAGSE 3.36-03 2.86-01 6.66-01 1.06-03 RAGSE 5.96-04 2.26-01 5.46-01 2.06-04 RAGSE 1.26-03 2.36-00 5.66-02 2.06-04 RAGSE 1.26-03 2.36-00 5.06-01 1.06-03 RAGSE 2.66-03 1.96-01 4.66-01 1.06-03 RAGSE 2.66-03 1.96-01 4.66-01 1.06-03 RAGSE
Nickel Potriery Dust Nickel Soluble Salts Nickel Soluble Salts Nickel Subsulfide Nickel Cocene Nitrate + Nitrite (as N) Nitrite (as N) Nitrotal Nitroaniline, 2-	12054-48-7 1313-99-1 NA 7440-02-0 12035-72-2 1271-28-9 14797-55-8 NA 14797-65-0 88-74-4	9.3E+01 OTHER 7.5E+01 EPI 5.9E+01 PHYSPROP 2.4E+02 CRC89 1.9E+02 CRC89 6.2E+01 EPI 4.7E+01 EPI 1.4E+02 PHYSPROP	2.4E-06	5.9E-08	PHYSPROP	0.0E+00 2.8E-03	NIOSH	2.0E+03 1.5E+03 7.9E+02 1.7E+02	3 CRC89 3 CRC89 2 CRC89 2 CRC89	6.7E+00 8.9E+00 5.9E+00 9.0E-01	CRC89 CRC89 CRC89	5.8E-02 6.7E-06 EPA WATER9 5.2E-02 7.4E-06 EPA WATER9	6.5E+01 SSL 1.1E+02 EPI	1.9E+00 PHYSPROP	1.5E+03 PHYSPROP	3.7E-03 3.5E-01 8.3E-01 1.0E-03 RAGSE 3.3E-03 2.8E-01 6.6E-01 1.0E-03 RAGSE 5.9E-04 2.EE-01 5.6E-01 2.0E-04 RAGSE 1.2E+00 5.0E-01 0.20E-04 RAGSE 1.2E+00 5.0E-01 0.20E-04 RAGSE 1.2E+00 5.0E-01 0.20E-04 RAGSE 1.2E+00 5.0E-01 1.0E-03 RAGSE 2.6E-03 1.9E-01 4.6E-01 1.0E-03 RAGSE 2.6E-03 1.9E-01 4.6E-01 1.0E-03 RAGSE 2.0E-02 6.2E-01 1.5E-00 6.5E-03 EPI
Nickel Coxide Nickel Solitible Salts Nickel Solitible Salts Nickel Solitible Salts Nickel Coxene Nitrate Nitrate + Nitrite (as N) Nitrite	12054-48-7 1313-99-1 NA 7440-02-0 12035-72-2 1271-28-9 14797-55-8 NA 14797-65-0	9.3E+01 OTHER 7.5E+01 EPI 5.9E+01 PHYSPROP 2.4E+02 CRC89 1.9E+02 CRC89 6.2E+01 EPI 4.7E+01 EPI				0.0E+00 2.8E-03 3.2E-06	NIOSH	2.0E+03 1.5E+03 7.9E+02 1.7E+02 7.1E+01 1.5E+02	3 CRC89 3 CRC89 2 CRC89 2 CRC89	6.7E+00 8.9E+00 5.9E+00	CRC89 CRC89 CRC89	5.8E-02 6.7E-06 EPA WATER9	6.5E+01 SSL	1.9E+00 PHYSPROP 1.4E+00 PHYSPROP 1.9E+00 PHYSPROP	1.5E+03 PHYSPROP 7.3E+02 PHYSPROP	3.76-03 3.56-01 8.36-01 1.06-03 RAGSE 3.36-03 2.86-01 6.66-01 1.06-03 RAGSE 5.96-04 2.26-01 5.46-01 2.06-04 RAGSE 1.26-03 2.36-00 5.66-02 2.06-04 RAGSE 1.26-03 2.36-00 5.06-01 1.06-03 RAGSE 2.66-03 1.96-01 4.66-01 1.06-03 RAGSE 2.66-03 1.96-01 4.66-01 1.06-03 RAGSE
Nickel Coxide Nickel Sofinery Dust Nickel Sofinery Dust Nickel Solubie Salts Nickel Some Nickelocene Nitrate Nitrate + Nitrate (as N) Nitrite Nitroaniline, 2- Nitroaniline, 4- Nitrobersene Nitrodelines	12054-48-7 1313-99-1 NA 7440-02-0 12035-72-2 1271-28-9 14797-55-8 NA 14797-65-0 88-74-4 100-01-6 98-95-3	9.3E+01 OTHER 7.5E+01 EPI  5.9E+01 PHYSPROP 2.4E+02 CRC89 6.2E+01 EPI 4.7E+01 EPI 1.4E+02 PHYSPROP 1.4E+02 PHYSPROP 3.9E+02 PHYSPROP 3.9E+02 PHYSPROP	2.4E-06 5.2E-08 9.8E-04 1.3E-21	5.9E-08 1.3E-09 2.4E-05 3.3E-23	PHYSPROP PHYSPROP PHYSPROP PHYSPROP	2.8E-03 3.2E-06 2.5E-01 1.4E-17	NIOSH  PHYSPROP EPI PHYSPROP PHYSPROP	2.0E+03 1.5E+03 7.9E+02 1.7E+02 7.1E+01 1.5E+02 5.7E+00 2.6E+02	3 CRC89 2 CRC89 2 CRC89 2 CRC89 2 PHYSPROP 3 PHYSPROP 5 PHYSPROP 6 PHYSPROP 6 PHYSPROP 7 PHYSPROP 7 EPI	6.7E+00 8.9E+00 5.9E+00 9.0E-01 1.4E+00	CRC89 CRC89 CRC89	5.8E-02 6.7E-06 EPA WATER9  5.2E-02 7.4E-06 EPA WATER9 6.4E-02 9.8E-06 EPA WATER9 6.8E-02 9.4E-06 EPA WATER9 3.6E-02 4.2E-06 EPA WATER9 3.6E-02 4.2E-06 EPA WATER9	1.1E+02 EPI 1.1E+02 EPI 2.3E+02 EPI 2.3E+02 EPI 1.0E+01 EPI	1.4E+00 PHYSPROP 1.9E+00 PHYSPROP -4.6E+00 PHYSPROP	1.5E+03 PHYSPROP 7.3E+02 PHYSPROP 1.0E+06 PHYSPROP	3.7E-03 3.5E-01 8.3E-01 1.0E-03 RAGSE 3.3E-03 2.8E-01 6.6E-01 1.0E-03 RAGSE 5.9E-04 2.EE-01 5.6E-01 2.0E-04 RAGSE 1.2E-03 2.3E-00 5.6E-00 2.0E-04 RAGSE 1.2E-03 2.3E-00 5.6E-00 2.0E-04 RAGSE 1.2E-03 2.3E-00 5.6E-01 1.0E-03 RAGSE 2.6E-03 1.9E-01 4.6E-01 1.0E-03 RAGSE 2.6E-03 1.9E-01 4.6E-01 1.0E-03 RAGSE 2.6E-03 1.9E-01 4.6E-01 1.0E-03 RAGSE 2.6E-03 1.9E-01 4.5E-01 5.E-00 3.E-03 EPI 1.0E-02 5.E-01 1.5E+00 2.2E-03 EPI 1.2E-00 5.E-01 1.5E+00 2.2E-03 EPI 1.2E-00 5.E-01 3.E-01 9.9E-09 EPI 1.2E-00 5.E-01 3.E-01 9.E-01 9.E-0
Nickel Refinery Dust Nickel Refinery Dust Nickel Soluble Salts Nickel Subuselfel Nickel Subsunfide Nickel Comment Nitrate Nitrate - Nitrite (as N) Nitrite Nitroanline, 2- Nitroanline, 4- Nitrobenzene Nitrocellulose Nitrofullose	12054-48-7 1313-99-1 NA 7440-02-0 12035-72-2 1271-28-9 14797-55-8 NA 14797-65-0 88-74-4 100-01-6 98-95-3 9004-70-0 67-20-9	9.3E+01 OTHER 7.5E+01 EPI 5.9E+01 PHYSPROP 2.4E+02 CRC89 1.9E+02 CRC89 6.2E+01 EPI 4.7E+01 EPI 1.4E+02 PHYSPROP 1.2E+02 PHYSPROP 3.9E+02 PHYSPROP 3.9E+02 PHYSPROP 2.4E+02 PHYSPROP	2.4E-06 5.2E-08 9.8E-04 1.3E-21 5.4E-11	5.9E-08 1.3E-09 2.4E-05 3.3E-23 1.3E-12	PHYSPROP PHYSPROP PHYSPROP PHYSPROP	2.8E-03 3.2E-06 2.5E-01 1.4E-17 2.8E-10	PHYSPROP EPI PHYSPROP PHYSPROP PHYSPROP	2.0E+03 1.5E+03 7.9E+02 1.7E+02 7.1E+01 1.5E+02 5.7E+00 2.6E+02 2.6E+02	3 CRC89 2 CRC89 2 CRC89 2 CRC89 4 PHYSPROP 5 PHYSPROP 6 PHYSPROP 7 PHYSPROP 7 PHYSPROP 8 EPI 8 PHYSPROP 9 PHYSPROP	6.7E+00 8.9E+00 5.9E+00 9.0E-01 1.4E+00	CRC89 CRC89 CRC89	5.8E-02 6.7E-06 EPA WATER9  5.2E-02 7.4E-06 EPA WATER9 6.8E-02 9.4E-06 EPA WATER9 3.6E-02 4.2E-06 EPA WATER9 4.9E-02 5.8E-06 EPA WATER9 4.9E-02 5.8E-06 EPA WATER9	1.1E+02 EPI 1.1E+02 EPI 1.1E+02 EPI 2.3E+02 EPI 1.0E+01 EPI 1.2E+02 EPI	1.4E+00 PHYSPROP 1.9E+00 PHYSPROP -4.6E+00 PHYSPROP -4.7E-01 PHYSPROP	1.5E+03 PHYSPROP 7.3E+02 PHYSPROP 2.1E+03 PHYSPROP 1.0E+06 PHYSPROP 8.0E+01 PHYSPROP	3.7E-03 3.5E-01 8.3E-01 1.0E-03 RAGSE 3.3E-03 2.8E-01 6.6E-01 1.0E-03 RAGSE 5.9E-04 RAGSE 5.9E-04 2.EE-01 5.6E-01 2.0E-04 RAGSE 1.2E-00 2.9E-00 2.0E-04 RAGSE 1.2E-00 2.9E-00 3.0E-03 2.3E-01 5.6E-01 1.0E-03 RAGSE 2.6E-03 1.9E-01 1.0E-03 RAGSE 2.0E-02 6.2E-01 1.5E-00 4.5E-03 EPI 1.0E-02 6.2E-01 1.5E-00 4.5E-03 EPI 1.0E-02 6.2E-01 1.5E-00 4.5E-03 EPI 7.5E-08 1.6E-01 3.7E-01 5.9E-03 EPI 7.5E-08 1.6E-01 3.7E-01 5.8E-03 EPI 7.5E-08 1.6E-01 3.7E-01 5.5E-05 EPI 7.5E-01 5.5E-03 EPI 7.5E-01 5.6E-01 5.5E-01 5.5E-01 5.EE-01 5.5E-01 5.EE-01
Nickel Soluble Salts Nickel Soluble Salts Nickel Soluble Salts Nickel Soluble Nickel Soluble Nickel Soluble Nickel Soluble Nitrate Nitrate + Nitrite (as N) Nitrite Nitroaniline, 2- Nitroaniline, 4- Nitroaniline, 4- Nitrocellulose Nitrofurantoin Nitrofurantoin	12054-48-7 1313-99-1 NA 7440-02-0 12035-72-2 1271-28-9 14797-55-8 NA 14797-65-0 88-74-4 100-01-6 98-95-3	9.3E+01 OTHER 7.5E+01 EPI  5.9E+01 PHYSPROP 2.4E+02 CRC89 6.2E+01 EPI 4.7E+01 EPI 1.4E+02 PHYSPROP 1.4E+02 PHYSPROP 3.9E+02 PHYSPROP 3.9E+02 PHYSPROP	2.4E-06 5.2E-08 9.8E-04 1.3E-21 5.4E-11	5.9E-08 1.3E-09 2.4E-05 3.3E-23	PHYSPROP PHYSPROP PHYSPROP PHYSPROP	2.8E-03 3.2E-06 2.5E-01 1.4E-17 2.8E-10	NIOSH  PHYSPROP EPI PHYSPROP PHYSPROP	2.0E+03 1.5E+03 7.9E+02 1.7E+02 7.1E+01 1.5E+02 5.7E+00 2.6E+02 2.6E+02 2.4E+02	3 CRC89 2 CRC89 2 CRC89 2 CRC89 4 PHYSPROP 5 PHYSPROP 6 PHYSPROP 7 PHYSPROP 7 PHYSPROP 8 EPI 8 PHYSPROP 9 PHYSPROP	6.7E+00 8.9E+00 5.9E+00 9.0E-01 1.4E+00 1.2E+00	CRC89 CRC89 CRC89	5.8E-02 6.7E-06 EPA WATER9  5.2E-02 7.4E-06 EPA WATER9 6.4E-02 9.8E-06 EPA WATER9 6.8E-02 9.4E-06 EPA WATER9 3.6E-02 4.2E-06 EPA WATER9 3.6E-02 4.2E-06 EPA WATER9	1.1E+02 EPI 1.1E+02 EPI 2.3E+02 EPI 2.3E+02 EPI 1.0E+01 EPI	1.4E+00 PHYSPROP 1.9E+00 PHYSPROP -4.6E+00 PHYSPROP	1.5E+03 PHYSPROP 7.3E+02 PHYSPROP 1.0E+06 PHYSPROP 8.0E+01 PHYSPROP 8.0E+01 PHYSPROP 2.1E+02 PHYSPROP	3.7E-03 3.5E-01 8.3E-01 1.0E-03 RAGSE 3.3E-03 2.8E-01 6.6E-01 1.0E-03 RAGSE 5.9E-04 2.EE-01 5.6E-01 2.0E-04 RAGSE 1.2E-03 2.3E-00 5.6E-00 2.0E-04 RAGSE 1.2E-03 2.3E-00 5.6E-00 2.0E-04 RAGSE 1.2E-03 2.3E-00 5.6E-01 1.0E-03 RAGSE 2.6E-03 1.9E-01 4.6E-01 1.0E-03 RAGSE 2.6E-03 1.9E-01 4.6E-01 1.0E-03 RAGSE 2.6E-03 1.9E-01 4.6E-01 1.0E-03 RAGSE 2.6E-03 1.9E-01 4.5E-01 5.E-00 3.E-03 EPI 1.0E-02 5.E-01 1.5E+00 2.2E-03 EPI 1.2E-00 5.E-01 1.5E+00 2.2E-03 EPI 1.2E-00 5.E-01 3.E-01 9.9E-09 EPI 1.2E-00 5.E-01 3.E-01 9.E-01 9.E-0
Nickel Refinery Dust Nickel Soluble Salts Nickel Soluble Salts Nickel Soluble Mickel Soluble Nickel Coene Nitrate Nitrate + Nitrite (as N) Nitrite Nitroaniline, 2- Nitroaniline, 4- Nitroaniline, 4- Nitrodeline Mitrofurantoin Nitrocellulose Nitrofurantoin Nitrofuranoie Nitroglycerin Nitroglycerin Nitroglycerin Nitroglycerin Nitroguandine	12054-48-7 1313-99-1 NA 7440-02-0 12035-72-2 1271-28-9 14797-55-8 NA 14797-65-0 88-74-4 100-01-6 98-95-3 9004-70-0 67-20-9 59-87-0 55-63-0 556-88-7	9.38+01 OTHER 7.5E+01 PHYSPROP 2.4E+02 CRC89 1.9E+02 CRC89 6.2E+01 EPI 1.4E+02 PHYSPROP 1.4E+02 PHYSPROP 1.4E+02 PHYSPROP 1.4E+02 PHYSPROP 2.4E+02 PHYSPROP 2.0E+02 PHYSPROP 2.0E+02 PHYSPROP 2.3E+02 PHYSPROP 2.3E+02 PHYSPROP	2.4E-06 5.2E-08 9.8E-04 1.3E-21 1.3E-11 1.3E-11 3.5E-06	5.9E-08 1.3E-09 2.4E-05 3.3E-23 1.3E-12 3.1E-13 8.7E-08 4.5E-16	PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP EPI PHYSPROP	2.8E-03 3.2E-06 2.5E-01 1.4E-17 2.8E-10 4.3E-04 1.4E-11	PHYSPROP EPI PHYSPROP PHYSPROP PHYSPROP PHYSPROP EPI PHYSPROP	2.0E+03 1.5E+03 7.9E+02 1.7E+02 7.1E+01 1.5E+02 5.7E+00 2.6E+02 2.6E+02 2.4E+02	3 CRC89 2 CRC89 2 CRC89 2 CRC89 2 PHYSPROP 3 PHYSPROP 5 PHYSPROP 6 PHYSPROP 6 PHYSPROP 7 EPI 7 PHYSPROP 8 EPI 8 PHYSPROP 9 EPI 8 PHYSPROP 9 EPI 9 PHYSPROP	6.7E+00 8.9E+00 5.9E+00 9.0E-01 1.4E+00 1.2E+00 2.0E+00 2.0E+00	CRC89 CRC89 CRC89 CRC89 CRC89 CRC89 CRC89 CRC89	5.8E-02 6.7E-06 EPA WATER9  5.2E-02 7.4E-06 EPA WATER9 6.4E-02 9.8E-06 EPA WATER9 3.6E-02 4.2E-06 EPA WATER9 4.9F-02 5.8E-06 EPA WATER9 5.6E-02 6.5E-06 EPA WATER9 5.6E-02 6.7F-06 EPA WATER9 1.9E-02 7.7E-06 EPA WATER9 1.0E-01 1.4E-05 EPA WATER9	1.1E+02 EPI 1.1E+02 EPI 1.1E+02 EPI 2.3E+02 EPI 1.0E+01 EPI 1.2E+02 EPI 1.2E+02 EPI 1.2E+02 EPI 2.1E+01 EPI	1.4E+00 PHYSPROP 1.9E+00 PHYSPROP -4.6E+00 PHYSPROP -4.7E-01 PHYSPROP 2.3E-01 PHYSPROP 1.6E+00 PHYSPROP -8.9E-01 PHYSPROP	1.5E+03 PHYSPROP 7.3E+02 PHYSPROP 1.0E+06 PHYSPROP 8.0E+01 PHYSPROP 2.1E+02 PHYSPROP 1.4E+03 PHYSPROP 4.4E+03 PHYSPROP	3.7E-03 3.5E-01 8.3E-01 1.0E-03 RAGSE 3.3E-03 2.8E-01 6.6E-01 1.0E-03 RAGSE 5.9E-04 2.2E-01 5.6E-01 2.0E-04 RAGSE 1.2E-00 5.6E-02 0.2E-04 RAGSE 1.2E-00 2.0E+00 8.2E-02 0.2E-00 8.2E-02 0.2E-00 8.2E-02 0.2E-00 8.2E-02 0.2E-03 8.2E-02 0.2E-03 8.2E-02 0.2E-03 8.2E-03 8.2E-0
Nickel Solubie Salts Nickel Solubie Salts Nickel Solubie Salts Nickel Solubie Mickel Solubie Nickelocene Nitrate Nitrate + Nitrote (as N) Nitrate Nitroaniline, 2- Nitroaniline, 4- Nitrobenzene Nitrodurantoin	12054-48-7 1313-99-1 NA 7440-02-0 12035-72-9 1271-28-9 14797-55-8 NA 14797-65-0 88-74-4 100-01-6 98-95-3 9004-70-0 67-20-9 59-87-0 55-63-0 55-68-7 75-52-5	9.38+01 OTHER 7.58+01 EPI 2.48+02 CRC89 1.98+02 CRC89 1.98+02 CRC89 1.48+01 EPI 1.48+02 PHYSROP 1.28+02 PHYSROP 1.28+02 PHYSROP 2.48+02 PHYSROP 2.48+02 PHYSROP 2.48+02 PHYSROP 2.48+02 PHYSROP 2.48+02 PHYSROP 2.48+02 PHYSROP 1.08+02 PHYSROP 1.08+02 PHYSROP 1.08+02 PHYSROP 1.08+02 PHYSROP 1.08+02 PHYSROP	2.4E-06 5.2E-08 9.8E-04 1.3E-21 5.4E-11 1.3E-11 1.3E-106 1.8E-14 1.2E-03	5.9E-08 1.3E-09 2.4E-05 3.3E-23 1.3E-13 8.7E-08 4.5E-16 2.9E-05	PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP EPI PHYSPROP PHYSPROP PHYSPROP	2.8E-03 3.2E-06 1.4E-17 2.8E-10 4.3E-06 4.0E-04 1.4E-11 3.6E+01	NIOSH  PHYSPROP EPI PHYSPROP PHYSPROP PHYSPROP EPI PHYSPROP PHYSPROP PHYSPROP	2.0E+03 1.5E+03 7.9E+02 1.7E+02 7.1E+01 1.5E+02 5.7E+00 2.6E+02 2.4E+02 1.4E+01 2.4E+02 -2.9E+01	3 CRC89 3 CRC89 2 CRC89 2 CRC89 2 PHYSPROP 2 PHYSPROP 2 PHYSPROP 2 PHYSPROP 2 EPI 1 PHYSPROP 2 EPI 1 PHYSPROP 1 PHYSPROP 2 EPI 1 PHYSPROP	9.0E-01 1.4E+00 1.6E+00 2.0E+00 1.1E+00	CRC89 CRC89 CRC89 CRC89 CRC89 CRC89 CRC89 CRC89 CRC89	5.8E-02 6.7E-06 EPA WATER9  5.2E-02 7.4E-06 EPA WATER9  6.4E-02 9.8E-06 EPA WATER9  6.8E-02 9.4E-06 EPA WATER9  5.6E-02 4.5E-06 EPA WATER9  5.6E-02 5.8E-06 EPA WATER9  5.6E-02 6.5E-06 EPA WATER9  5.6E-02 6.5E-06 EPA WATER9  1.0E-01 1.4E-05 EPA WATER9  1.0E-01 1.4E-05 EPA WATER9  1.DE-01 1.4E-05 EPA WATER9	1.1E+02 EPI 1.1E+02 EPI 1.1E+02 EPI 2.3E+02 EPI 1.0E+01 EPI 1.2E+02 EPI 1.2E+02 EPI 2.1E+01 EPI 1.0E+01 EPI 1.0E+01 EPI	1.4E+00 PHYSPROP 1.9E+00 PHYSPROP -4.6E+00 PHYSPROP -4.7E-01 PHYSPROP 2.3E-01 PHYSPROP -8.9E-01 PHYSPROP -3.5E-01 PHYSPROP	1.55+03 PHYSPROP 7.33+02 PHYSPROP 2.13+03 PHYSPROP 8.05+01 PHYSPROP 8.05+01 PHYSPROP 2.13+02 PHYSPROP 4.45+03 PHYSPROP 4.45+03 PHYSPROP 1.13+05 PHYSPROP	3.7E-03 3.5E-01 8.3E-01 1.0E-03 RAGSE 3.3E-03 2.8E-01 6.6E-01 1.0E-03 RAGSE 5.9E-04 2.2E-01 5.6E-01 2.0E-04 RAGSE 1.2E-00 5.6E-02 2.0E-04 RAGSE 1.2E-00 2.3E-00 2.0E-04 RAGSE 1.2E-00 2.2E-00 2.0E-00 3.0E-03 2.3E-00 5.6E-01 1.0E-03 RAGSE 2.6E-03 1.9E-01 4.6E-01 1.0E-03 RAGSE 2.6E-03 1.9E-01 4.6E-01 1.0E-03 RAGSE 2.0E-02 6.2E-01 1.5E-00 4.5E-03 EPI 2.0E-02 6.2E-01 1.5E-00 2.2E-03 EPI 2.3E-02 5.1E-01 1.2E-00 5.4E-03 EPI 2.3E-02 5.1E-01 1.2E-00 5.4E-03 EPI 2.3E-02 5.1E-01 1.2E-00 3.5E-05 EPI 2.3E-04 2.3E-00 3.2E-00 1.7E-04 EPI 3.3E-00 1.7E-04 EPI 4.1E-04 4.0E-01 9.7E-01 1.1E-04 EPI 4.3E-02 1.5E-01 5.5E-01 4.2E-04 EPI 4.1E-04 4.0E-01 9.7E-01 1.1E-04 EPI 4.3E-03 1.5E-01 1.2E-04 EPI 4.3E-03 1.5E-01 1.2E-04 EPI 4.3E-03 1.5E-01 4.2E-04 EPI 4.3E-03 1.2E-03 1.5E-01 4.2E-04 EPI 4.3E-03 1.5E-01 4.2E-04 EPI 4.3E-03 1.2E-03 1.
Nickel Refiner Dust Nickel Soluble Salts Nickel Soluble Salts Nickel Souble Salts Nickel Souble Salts Nickel Souble Salts Nickel Souble Salts Nitrate + Nitrite (as N) Nitrite Nitrate + Nitrite (as N) Nitrite Nitrotamiline, 2- Nitroaniline, 2- Nitroaniline, 4- Nitrodellulose Nitroderantoin Nitrofurazone Nitrofurazone Nitroguandine Nitromethane Nitromethane Nitromethane Nitromethane	12054-48-7 1313-99-1 NA 7440-02-0 12035-72-2 1271-28-9 14797-55-8 NA 14797-65-0 88-74-4 100-01-6 98-95-3 9004-70-0 67-20-9 59-87-0 55-63-0 556-88-7 75-52-5 79-46-9	9.38+01 OTHER 7.58+01 PHYSPROP 2.4E+02 CRC89 1.98+02 CRC89 1.98+02 PHYSPROP 1.4E+02 PHYSPRO	2.4E-06 5.2E-08 9.8E-04 1.3E-21 5.4E-11 1.3E-13 3.5E-06 1.8E-14 1.2E-03 4.9E-03	5.9E-08 1.3E-09 2.4E-05 3.3E-23 1.3E-12 3.1E-13 8.5E-16 2.9E-05 1.2E-04	PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP EPI PHYSPROP PHYSPROP PHYSPROP EPI	2.8E-03 3.2E-06 2.5E-01 4.3E-06 4.0E-04 1.4E-17 1.6E+01 1.7E+01	NIOSH  PHYSPROP EPI PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP	2.0E+03 7.9E+02 1.7E+02 7.1E+01 1.5E+02 5.7E+00 2.6E+02 2.4E+02 1.4E+01 2.4E+02 -2.9E+01 -9.1E+01	3 CRC89 3 CRC89 2 CRC89 2 CRC89 2 CRC89 4 PHYSPROP 5 PHYSPROP 6 EPI 6 PHYSPROP 7 EPI 7 PHYSPROP 8 EPI 8 PHYSPROP 9 EPI 1 PHYSPROP 1 PHYSPROP 1 PHYSPROP	6.7E+00 8.9E+00 5.9E+00 9.0E-01 1.4E+00 1.2E+00 2.0E+00 2.0E+00	CRC89 CRC89 CRC89 CRC89 CRC89 CRC89 CRC89 CRC89	5.8E-02 6.7E-06 EPA WATER9  5.2E-02 7.4E-06 EPA WATER9 6.4E-02 9.8E-06 EPA WATER9 6.6E-02 9.4E-06 EPA WATER9 9.6E-02 4.2E-06 EPA WATER9 9.6E-02 6.5E-06 EPA WATER9 9.6E-02 6.5E-06 EPA WATER9 1.0E-01 1.4E-05 EPA WATER9 1.2E-01 1.4E-05 EPA WATER9 1.2E-01 1.4E-05 EPA WATER9 1.2E-01 1.4E-05 EPA WATER9 8.5E-02 1.0E-05 EPA WATER9	1.1E+02 EPI 1.1E+02 EPI 1.1E+02 EPI 2.3E+02 EPI 1.0E+01 EPI 1.2E+02 EPI 1.2E+02 EPI 1.2E+02 EPI 1.2E+02 EPI 1.2E+01 EPI 1.0E+01 EPI 3.1E+01 EPI	1.4E+00 PHYSPROP 1.9E+00 PHYSPROP -4.6E+00 PHYSPROP -4.7E-01 PHYSPROP 2.3E-01 PHYSPROP -8.9E-01 PHYSPROP -3.5E-01 PHYSPROP 9.3E-01 PHYSPROP	1.56-03 PHYSPROP 7.38-02 PHYSPROP 1.06-06 PHYSPROP 2.18-02 PHYSPROP 2.18-02 PHYSPROP 4.46-03 PHYSPROP 1.18-03 PHYSPROP 1.18-05 PHYSPROP 1.18-05 PHYSPROP 1.18-05 PHYSPROP	3.7E-03 3.5E-01 8.3E-01 1.0E-03 RAGSE 3.3E-03 2.8E-01 6.6E-01 1.0E-03 RAGSE 5.9E-04 2.2E-01 5.6E-01 2.0E-04 RAGSE 1.2E-00 5.6E-00 2.0E-04 RAGSE 1.2E-00 2.0E-04 RAGSE 1.2E-00 2.0E-04 RAGSE 1.2E-00 2.0E-04 RAGSE 1.0E-03 RAGSE 1.0E-03 RAGSE 2.6E-03 1.9E-01 1.5E-00 4.5E-03 EPI 1.0E-03 RAGSE 2.6E-03 1.9E-01 1.5E-00 4.5E-03 EPI 1.0E-03 RAGSE 2.6E-03 1.5E-00 1.2E-00 5.8E-03 EPI 1.0E-03 RAGSE 2.6E-03 1.2E-00 5.8E-03 EPI 1.2E-00 EPI 1.3E-03 2.0E-00 4.7E-00 9.9E-04 EPI 1.3E-03 2.3E-01 5.5E-01 4.2E-04 EPI 1.3E-03 2.3E-01 5.5E-0
Nickel Solubie Salts Nickel Solubie Salts Nickel Solubie Salts Nickel Solubie Mickel Solubie Nickelocene Nitrate Nitrate + Nitrote (as N) Nitrate Nitroaniline, 2- Nitroaniline, 4- Nitrobenzene Nitrodurantoin	12054-48-7 1313-99-1 NA 7440-02-0 12035-72-9 1271-28-9 14797-55-8 NA 14797-65-0 88-74-4 100-01-6 98-95-3 9004-70-0 67-20-9 59-87-0 55-63-0 55-68-7 75-52-5	9.38+01 OTHER 7.58+01 EPI 2.48+02 CRC89 1.98+02 CRC89 1.98+02 CRC89 1.48+01 EPI 1.48+02 PHYSROP 1.28+02 PHYSROP 1.28+02 PHYSROP 2.48+02 PHYSROP 2.48+02 PHYSROP 2.48+02 PHYSROP 2.48+02 PHYSROP 2.48+02 PHYSROP 2.48+02 PHYSROP 1.08+02 PHYSROP 1.08+02 PHYSROP 1.08+02 PHYSROP 1.08+02 PHYSROP 1.08+02 PHYSROP	2.4E-06 5.2E-08 9.8E-04 1.3E-21 5.4E-11 1.3E-11 1.3E-103 4.9E-03 5.4E-09	5.9E-08 1.3E-09 2.4E-05 3.3E-23 1.3E-13 8.7E-08 4.5E-16 2.9E-05	PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP EPI PHYSPROP PHYSPROP PHYSPROP	2.8E-03 3.2E-06 2.5E-01 1.4E-17 2.8E-10 4.3E-06 4.0E-04 1.4E-11 3.6E+01 1.7E+01 1.8E-02	NIOSH  PHYSPROP EPI PHYSPROP PHYSPROP PHYSPROP EPI PHYSPROP PHYSPROP PHYSPROP	2.0E+03 1.5E+03 7.9E+02 1.7E+02 7.1E+01 1.5E+02 5.7E+00 2.6E+02 2.4E+02 1.4E+01 2.4E+02 -2.9E+01	3 CRC89 3 CRC89 2 CRC89 2 CRC89 2 PHYSPROP 2 PHYSPROP 2 PHYSPROP 2 PHYSPROP 2 PHI 2 PHYSPROP 2 EPI 1 PHYSPROP	9.0E-01 1.4E+00 1.6E+00 2.0E+00 1.1E+00	CRC89 CRC89 CRC89 CRC89 CRC89 CRC89 CRC89 CRC89 CRC89	5.8E-02 6.7E-06 EPA WATER9  5.2E-02 7.4E-06 EPA WATER9  6.4E-02 9.8E-06 EPA WATER9  6.8E-02 9.4E-06 EPA WATER9  5.6E-02 4.5E-06 EPA WATER9  5.6E-02 5.8E-06 EPA WATER9  5.6E-02 6.5E-06 EPA WATER9  5.6E-02 6.5E-06 EPA WATER9  1.0E-01 1.4E-05 EPA WATER9  1.0E-01 1.4E-05 EPA WATER9  1.DE-01 1.4E-05 EPA WATER9	1.1E+02 EPI 1.1E+02 EPI 1.1E+02 EPI 2.3E+02 EPI 1.0E+01 EPI 1.2E+02 EPI 1.2E+02 EPI 2.1E+01 EPI 1.0E+01 EPI 1.0E+01 EPI	1.4E+00 PHYSPROP 1.9E+00 PHYSPROP -4.6E+00 PHYSPROP -4.7E-01 PHYSPROP 2.3E-01 PHYSPROP -8.9E-01 PHYSPROP -3.5E-01 PHYSPROP	1.55-03 PHYSPROP 7.33-02 PHYSPROP 2.13-03 PHYSPROP 8.05-01 PHYSPROP 8.05-01 PHYSPROP 8.05-01 PHYSPROP 4.45-03 PHYSPROP 1.15-05 PHYSPROP 1.15-05 PHYSPROP 1.15-04 PHYSPROP 1.15-04 PHYSPROP	3.7E-03 3.5E-01 8.3E-01 1.0E-03 RAGSE 3.3E-03 2.8E-01 6.6E-01 1.0E-03 RAGSE 5.9E-04 2.2E-01 5.6E-01 2.0E-04 RAGSE 1.2E-00 5.6E-02 2.0E-04 RAGSE 1.2E-00 2.3E-00 2.0E-04 RAGSE 1.2E-00 2.2E-00 2.0E-00 3.0E-03 2.3E-00 5.6E-01 1.0E-03 RAGSE 2.6E-03 1.9E-01 4.6E-01 1.0E-03 RAGSE 2.6E-03 1.9E-01 4.6E-01 1.0E-03 RAGSE 2.0E-02 6.2E-01 1.5E-00 4.5E-03 EPI 2.0E-02 6.2E-01 1.5E-00 2.2E-03 EPI 2.3E-02 5.1E-01 1.2E-00 5.4E-03 EPI 2.3E-02 5.1E-01 1.2E-00 5.4E-03 EPI 2.3E-02 5.1E-01 1.2E-00 3.5E-05 EPI 2.3E-04 2.3E-00 3.2E-00 1.7E-04 EPI 3.3E-00 1.7E-04 EPI 4.1E-04 4.0E-01 9.7E-01 1.1E-04 EPI 4.3E-02 1.5E-01 5.5E-01 4.2E-04 EPI 4.1E-04 4.0E-01 9.7E-01 1.1E-04 EPI 4.3E-03 1.5E-01 1.2E-04 EPI 4.3E-03 1.5E-01 1.2E-04 EPI 4.3E-03 1.5E-01 4.2E-04 EPI 4.3E-03 1.2E-03 1.5E-01 4.2E-04 EPI 4.3E-03 1.5E-01 4.2E-04 EPI 4.3E-03 1.2E-03 1.
Nickel Solubie Salts Nickel Solubie Salts Nickel Solubie Salts Nickel Solubie Mickel Solubie Nickel Solubie Mickel M	12054.48-7 1313-99-1 NA 7440-02-0 12035-72-2 1271-28-9 14797-55-8 NA 14797-65-0 88-74-4 100-01-6 99-95-3 9004-70-0 67-20-9 59-87-0 55-68-7 75-52-5 79-46-9 79-46-9 84-93-3 84-93-3 904-70-9 98-95-3 904-70-9 98-95-3 9	9.38+01 OTHER 7.58+01 EPI 7.58+01 EPI 9.47+02 CKC89 1.98+02 CKC89 1.98+02 CKC89 1.98+02 EPI 1.48+02 EP	2.4E-06 5.2E-08 9.8E-04 1.3E-21 1.3E-11 1.3E-14 1.2E-03 4.9E-03 5.4E-09 4.1E-09 5.4E-09	5.9E-08 1.3E-09 2.4E-05 3.3E-23 1.3E-13 3.1E-13 8.7E-08 4.5E-16 2.9E-05 1.3E-10 9.9E-11 1.3E-05	PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP EPI PHYSPROP EPI PHYSPROP PHYSPROP PHYSPROP	2.8E-03 3.2E-06 2.5E-01 1.4E-17 2.8E-10 4.3E-06 4.0E-04 1.4E-11 3.6E+01 1.7E+01 1.8E-02 2.9E-02 4.7E-02	PHYSPROP EPI PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP	2.0E+03 1.5E+03 1.7E+02 1.7E+02 7.1E+01 1.5E+02 5.7E+00 2.6E+02 2.4E+02 1.4E+01 2.4E+02 -9.1E+01 9.9E+01 1.2E+02 2.8E+01	3 CRC89 3 CRC89 4 CRC89 2 CRC89 2 CRC89 2 PHYSPROP 2 PHYSPROP 2 PHYSPROP 2 PHYSPROP 2 PHYSPROP 2 PHYSPROP 1 PHYSPROP 2 PH 1 PHYSPROP 1 PHYSPROP 2 PH 1 PHYSPROP 2 PH 1 PHYSPROP 2 PH 1 PHYSPROP 3 PH 1 PHYSPROP 4 PH 1 PHYSPROP 5 PH 6	9.0E-01 1.6E+00 2.0E+00 1.1E+00 1.2E+00 9.8E-01 9.0E-01	CRC89	5.8E-02 6.7E-06 EPA WATER9  5.2E-02 7.4E-06 EPA WATER9  6.4E-02 9.8E-06 EPA WATER9  6.8E-02 9.4E-06 EPA WATER9  6.8E-02 9.4E-06 EPA WATER9  4.9E-02 5.8E-06 EPA WATER9  4.9E-02 5.8E-06 EPA WATER9  1.0E-01 1.4E-05 EPA WATER9  1.0E-01 1.4E-05 EPA WATER9  8.5E-02 1.0E-05 EPA WATER9  7.9E-02 9.3E-06 EPA WATER9  7.9E-02 9.3E-06 EPA WATER9  7.9E-02 9.3E-06 EPA WATER9  8.6E-02 1.0E-05 EPA WATER9  8.6E-02 1.0E-05 EPA WATER9  8.6E-02 1.0E-05 EPA WATER9	1.1E+02 EPI 1.1E+02 EPI 1.1E+02 EPI 2.3E+02 EPI 1.0E+01 EPI 1.2E+02 EPI 1.2E+02 EPI 1.2E+02 EPI 1.2E+02 EPI 1.0E+01 EPI 1.0E+01 EPI 2.1E+01 EPI 2.1E+01 EPI 1.1E+01 EPI 1.1E+01 EPI 1.1E+01 EPI 1.1E+01 EPI	1.4E+00 PHYSPROP 1.9E+00 PHYSPROP -4.7E+01 PHYSPROP -4.7E+01 PHYSPROP -8.9E+01 PHYSPROP -3.5E+01 PHYSPROP -3.5E+01 PHYSPROP -3.3E+01 PHYSPROP -3.3E+01 PHYSPROP -3.3E+02 PHYSPROP -3.3E+02 PHYSPROP -3.0E+02 PHYSPROP -2.6E+00 PHYSPROP	1.55-03 PHYSPROP 7.33-02 PHYSPROP 2.15-03 PHYSPROP 8.05-01 PHYSPROP 8.05-01 PHYSPROP 1.45-03 PHYSPROP 1.45-03 PHYSPROP 1.75-04 PHYSPROP 1.75-04 PHYSPROP 1.45-04 PHYSPROP 1.45-04 PHYSPROP 1.45-04 PHYSPROP 1.45-04 PHYSPROP	3.7E-03   3.5E-01   8.3E-01   1.0E-03   RAGSE
Nickel Refinery Dust Nickel Soluble Salts Nickel Soluble Salts Nickel Southe Salts Nickel Subsuffide Nickel Content Nitrate + Nitrite (as N) Nitrite Nitrotal Political Salts Nitrotalnine, 2- Nitrotalnine, 2- Nitrotalnine, 4- Nitrotellulose Nitrot	12034-48.7 1313-99-1 NA 7440-02-2- 12035-72- 1271-28-9 14797-65-0 88.74-4 100-01-6 98-95-3 9004-70-0 67-20-9 58-87-0 55-63-0 55-68-7 75-52-5 79-46-9 759-73-9 924-16-3 924-16-3	9.38+01 OTHER 7.58+01 PHYSPROP 2.48+02 CRC89 1.98+02 CRC89 1.98+02 PHYSPROP 1.48+02 PHYSPROP 1.48+02 PHYSPROP 1.28+02 PHYSPROP 1.28+02 PHYSPROP 1.08+02 PHYSPROP 1.08+02 PHYSPROP 1.08+02 PHYSPROP 1.08+02 PHYSPROP 1.08+02 PHYSPROP 1.28+02 PHYSPRO	2.4E-06 5.2E-08 9.8E-04 1.3E-21 5.4E-11 1.3E-13 1.3E-14 1.2E-03 5.4E-09 4.1E-09 5.4E-04 2.2E-04	5.9E-08 1.3E-09 2.4E-09 2.4E-09 1.3E-12 3.1E-13 8.7E-08 4.5E-16 2.9E-05 1.2E-04 1.3E-10 9.9E-11 1.3E-05 5.4E-06	PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP EPI PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP	2.8E-03 3.2E-06 2.5E-01 1.4E-17 2.8E-10 4.3E-06 4.0E-04 1.4E-11 3.6E+01 1.7E+01 1.7E+01 2.9E-02 4.7E-02 8.6E-02	PHYSPROP	2.0E+03 7.9E+02 1.7E+02 1.7E+02 7.1E+01 1.5E+02 5.7E+00 2.6E+02 2.4E+02 1.4E+01 -9.1E+01 9.9E+01 1.2E+02 2.8E+01 6.8E+00	3 CRC89 3 CRC89 2 CRC89 2 CRC89 2 PHYSPROP 5 PHYSPROP 6 PHYSPROP 7 EPI 1 PHYSPROP 2 EPI 1 PHYSPROP 1 PHYSPROP 2 EPI 1 PHYSPROP 1 PHYSPROP 2 EPI 1 PHYSPROP 2 EPI 1 PHYSPROP 3 EPI 2 EPI 3 EPI 4 EPI 5 EPI 6 EPI 6 EPI 6 EPI 7 EPI 7 EPI 8 EPI 8 EPI 9 EPI 9 EPI	9.0E-01 1.6E+00 2.0E+00 1.1E+00 1.2E+00 9.8E-01 9.0E-01	CRC89	5.8E-02 6.7E-06 EPA WATER9  5.2E-02 7.4E-06 EPA WATER9 6.4E-02 9.8E-06 EPA WATER9 6.8E-02 9.4E-06 EPA WATER9 3.6E-02 4.ZE-06 EPA WATER9 5.6E-02 6.5E-06 EPA WATER9 9.6E-01 1.4E-05 EPA WATER9 1.0E-01 1.0E-05 EPA WATER9 1.0E-02 1.0E-05 EPA	1.1E+02 EPI 1.1E+02 EPI 1.1E+02 EPI 2.3E+02 EPI 1.0E+01 EPI 1.2E+02 EPI 1.2E+02 EPI 2.1E+01 EPI 1.0E+01 EPI 2.1E+01 EPI 2.1E+01 EPI 2.1E+01 EPI 2.1E+01 EPI 2.1E+01 EPI 2.1E+01 EPI 2.1E+02 EPI 2.1E+02 EPI 2.1E+02 EPI 2.1E+03 EPI 2.1E+04 EPI 2.1E+04 EPI 2.1E+05 EPI 2.1E+05 EPI 2.1E+06 EPI 2.1E+07 EPI 2.1E+09 EPI 2.1E+00 EPI 2.1E+0	1.4E+00 PHYSPROP 1.9E+00 PHYSPROP -4.7E-01 PHYSPROP 2.3E-01 PHYSPROP -8.9E-01 PHYSPROP -8.9E-01 PHYSPROP 9.3E-01 PHYSPROP 9.3E-01 PHYSPROP 2.3E-01 PHYSPROP -3.0E-02 PHYSPROP 2.6E+00 PHYSPROP	1.55-03 PHYSPROP 7.78-02 PHYSPROP 2.11-03 PHYSPROP 2.11-03 PHYSPROP 2.11-02 PHYSPROP 4.46-03 PHYSPROP 1.76-04 PHYSPROP	3.7E-03 3.5E-01 8.3E-01 1.0E-03 RAGSE 3.3E-03 2.8E-01 6.6E-01 1.0E-03 RAGSE 5.9E-04 2.2E-01 6.6E-01 1.0E-03 RAGSE 5.9E-04 2.2E-01 5.6E-03 2.0E-04 RAGSE 1.2E-03 2.3E-03 2.0E-04 RAGSE 1.2E-03 2.9E-03 2.0E-03
Nickel Soluble Salts Nickel Soluble Salts Nickel Soluble Salts Nickel Soluble Salts Nickel Soluble Nickelocene Nitrate Nitrate + Nitrite (as N) Nitrite Nitroaniline, 2- Nitroaniline, 2- Nitroaniline, 4- Nitrosolubse Nitrofurazione Nitrofurazione Nitrofurazione Nitrogiyerin Nitrogiyerin Nitrogiyerin Nitrogiyerin Nitrogine-Nethylurea, N- Nitroso-di-N-ethylurea, N- Nitroso-di-N-buolylamine, N- Nitroso-di-N-buolylamine, N- Nitroso-di-N-propylamine, N- Nitroso-di-N- Nitroso-di-N-propylamine, N-	12054-48-7 1312-99-1 NA 7440032-72- 1271-28-9 14797-55-8 NA 14797-65-0 88-74-4 100-01-6 99-95-3 9904-70-6 55-63-0 55-63-0 55-68-7 75-52-5 79-46-9 99-87-0 99-87-0 99-87-0 99-87-0 56-30 56	9.38+01 OTHER 7.58+01 EPI 7.58+01 EPI 9.47+02 CKC89 1.98+02 CKC89 1.98+02 CKC89 1.98+02 EPI 1.48+02 EP	2.4E-06 5.2E-08 9.8E-04 1.3E-21 5.4E-11 1.3E-11 3.5E-06 1.8E-14 1.2E-03 4.9E-03 5.4E-09 4.1E-09 5.4E-04 2.2E-04	5.9E-08 1.3E-09 2.4E-05 3.3E-23 1.3E-12 3.1E-13 8.7E-08 4.5E-16 2.9E-05 1.2E-04 1.3E-10 9.9E-11 1.3E-05 5.4E-06 4.9E-12	PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP EPI PHYSPROP EPI PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP	2.8E-03 3.2E-06 2.5E-01 1.4E-17 2.8E-10 4.3E-06 4.0E-04 1.4E-11 1.7E+01 1.8E-02 2.9E-02 4.7E-02 8.6E-02 5.0E-04	PHYSPROP EPI PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP	2.0E+03 1.5E+03 1.7E+02 1.7E+02 7.1E+01 1.5E+02 5.7E+00 2.6E+02 2.4E+02 1.4E+01 2.4E+02 -9.1E+01 9.9E+01 1.2E+02 2.8E+01	3 CRC89 3 CRC89 2 CRC89 2 CRC89 2 PHYSPROP 5 PHYSPROP 6 PHYSPROP 7 EPI 1 PHYSPROP 2 EPI 1 PHYSPROP 1 PHYSPROP 2 EPI 1 PHYSPROP 1 PHYSPROP 2 EPI 1 PHYSPROP 2 EPI 1 PHYSPROP 3 EPI 2 EPI 3 EPI 4 EPI 5 EPI 6 EPI 6 EPI 6 EPI 7 EPI 7 EPI 8 EPI 8 EPI 9 EPI 9 EPI	9.0E-01 1.6E+00 9.8E-01 9.0E-01 1.4E+00 1.2E+00 9.8E-01 9.8E-01 9.2E-01	CRC89	5.8E-02 6.7E-06 EPA WATER9  5.2E-02 7.4E-06 EPA WATER9  6.4E-02 9.8E-06 EPA WATER9  6.8E-02 9.4E-06 EPA WATER9  6.8E-02 9.4E-06 EPA WATER9  4.9E-02 5.8E-06 EPA WATER9  5.6E-02 6.5E-06 EPA WATER9  5.6E-02 7.7E-06 EPA WATER9  1.0E-01 1.4E-05 EPA WATER9  1.	1.1E+02 EPI 1.1E+02 EPI 1.1E+02 EPI 2.3E+02 EPI 1.0E+01 EPI 1.2E+02 EPI 1.2E+02 EPI 1.2E+02 EPI 1.1E+01 EPI 1.1E+01 EPI 1.1E+01 EPI 1.1E+01 EPI 1.1E+01 EPI 1.1E+01 EPI 1.1E+01 EPI 1.1E+01 EPI 1.1E+02 EPI 2.8E+02 EPI 1.0E+00 EPI	1.4E+00 PHYSPROP 1.9E+00 PHYSPROP 4.6E+00 PHYSPROP 4.7E-01 PHYSPROP 2.3E-01 PHYSPROP 8.9E-01 PHYSPROP 9.3E-01 PHYSPROP 9.3E-01 PHYSPROP 9.3E-01 PHYSPROP 9.3E-01 PHYSPROP 1.3E-00 PHYSPROP 1.4E+00 PHYSPROP 1.4E+00 PHYSPROP 1.3E+00 PHYSPROP 1.3E+00 PHYSPROP	1.55-03 PHYSPROP 7.78-02 PHYSPROP 2.11-03 PHYSPROP 2.11-03 PHYSPROP 2.11-02 PHYSPROP 4.46-03 PHYSPROP 1.76-04 PHYSPROP	3.8-01   3.8-01   1.06-03   RAGSE   3.8-01   2.8-01   1.06-03   RAGSE   3.8-01   2.06-04   RAGSE   5.96-04   2.26-01   5.46-01   2.06-04   RAGSE   1.26-05   2.06-04   RAGSE   1.26-05   2.96-05   2.06-04   RAGSE   1.26-05   2.96-05   2.06-04   RAGSE   1.26-05   2.96-05   2.06-05   3.06-03   2.36-01   5.66-01   1.06-03   RAGSE   2.66-03   1.96-01   4.66-01   1.06-03   RAGSE   2.06-02   6.26-01   1.56-00   2.26-03   PI   2.36-02   6.26-01   1.56-00   2.26-03   PI   2.36-02   5.16-01   1.26-00   5.46-03   PI   2.36-05   5.16-01   1.26-00   5.46-03   PI   2.36-05   5.36-03   5.36-05   PI   2.36-05   5.36-03   7.36-05   7.
Nickel Refinery Dust Nickel Soluble Salts Nickel Soluble Salts Nickel Southe Salts Nickel Subsuffide Nickel Content Nitrate + Nitrite (as N) Nitrite Nitrotal Political Salts Nitrotalnine, 2- Nitrotalnine, 2- Nitrotalnine, 4- Nitrotellulose Nitrot	12034-48.7 1313-99-1 NA 7440-02-2- 12035-72- 1271-28-9 14797-65-0 88.74-4 100-01-6 98-95-3 9004-70-0 67-20-9 58-87-0 55-63-0 55-68-7 75-52-5 79-46-9 759-73-9 924-16-3 924-16-3	9.38+01 OTHER 7.58+01 PHYSPROP 2.48+02 CRC89 1.98+02 CRC89 1.98+02 PHYSPROP 1.48+02 PHYSPROP 1.48+02 PHYSPROP 1.28+02 PHYSPROP 1.28+02 PHYSPROP 1.08+02 PHYSPROP 1.08+02 PHYSPROP 1.08+02 PHYSPROP 1.08+02 PHYSPROP 1.08+02 PHYSPROP 1.28+02 PHYSPRO	2.4E-06 5.2E-08 9.8E-04 1.3E-21 5.4E-11 1.3E-13 1.3E-14 1.2E-03 5.4E-09 4.1E-09 5.4E-04 2.2E-04	5.9E-08 1.3E-09 2.4E-09 2.4E-09 1.3E-12 3.1E-13 8.7E-08 4.5E-16 2.9E-05 1.2E-04 1.3E-10 9.9E-11 1.3E-05 5.4E-06	PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP EPI PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP	2.8E-03 3.2E-06 2.5E-01 1.4E-17 2.8E-10 4.0E-04 1.4E-11 3.6E+01 1.7E+01 1.8E-02 2.9E-02 4.7E-02 8.6E-02 5.0E-04	PHYSPROP	2.0E+03 7.9E+02 1.7E+02 1.7E+02 7.1E+01 1.5E+02 5.7E+00 2.6E+02 2.4E+02 1.4E+01 -9.1E+01 9.9E+01 1.2E+02 2.8E+01 6.8E+00	3 CRC89 3 CRC89 2 CRC89 2 CRC89 2 PHYSPROP 2 PHYSPROP 2 PHYSPROP 2 PHYSPROP 1 PHYSPROP 1 PHYSPROP 1 PHYSPROP 2 PH 1 PHYSPROP 3 PHYSPROP 4 PHYSPROP 5 PH 5 PH 6	9.0E-01 1.6E+00 2.0E+00 1.2E+00 1.2E+00 9.8E-01 9.8E-01 9.2E-01 9.4E-01	CRC89	5.8E-02 6.7E-06 EPA WATER9  5.2E-02 7.4E-06 EPA WATER9 6.4E-02 9.8E-06 EPA WATER9 6.8E-02 9.4E-06 EPA WATER9 3.6E-02 4.ZE-06 EPA WATER9 5.6E-02 6.5E-06 EPA WATER9 9.6E-01 1.4E-05 EPA WATER9 1.0E-01 1.0E-05 EPA WATER9 1.0E-02 1.0E-05 EPA	1.1E+02 EPI 1.1E+02 EPI 1.1E+02 EPI 2.3E+02 EPI 1.0E+01 EPI 1.2E+02 EPI 1.2E+02 EPI 2.1E+01 EPI 1.0E+01 EPI 2.1E+01 EPI 2.1E+01 EPI 2.1E+01 EPI 2.1E+01 EPI 2.1E+01 EPI 2.1E+01 EPI 2.1E+02 EPI 2.1E+02 EPI 2.1E+02 EPI 2.1E+03 EPI 2.1E+04 EPI 2.1E+04 EPI 2.1E+05 EPI 2.1E+05 EPI 2.1E+06 EPI 2.1E+07 EPI 2.1E+09 EPI 2.1E+00 EPI 2.1E+0	1.4E+00 PHYSPROP 1.9E+00 PHYSPROP -4.7E-01 PHYSPROP 2.3E-01 PHYSPROP -8.9E-01 PHYSPROP -8.9E-01 PHYSPROP 9.3E-01 PHYSPROP 9.3E-01 PHYSPROP 2.3E-01 PHYSPROP -3.0E-02 PHYSPROP 2.6E+00 PHYSPROP	1.55-03 PHYSPROP 7.78-02 PHYSPROP 2.11-03 PHYSPROP 2.11-03 PHYSPROP 2.11-02 PHYSPROP 4.46-03 PHYSPROP 1.76-04 PHYSPROP	3.7E-03 3.5E-01 8.3E-01 1.0E-03 RAGSE 3.3E-03 2.8E-01 6.6E-01 1.0E-03 RAGSE 5.9E-04 2.2E-01 6.6E-01 1.0E-03 RAGSE 5.9E-04 2.2E-01 5.6E-03 2.0E-04 RAGSE 1.2E-03 2.3E-03 2.0E-04 RAGSE 1.2E-03 2.9E-03 2.0E-03
Nickel Refiner Pust Nickel Soluble Salts Nickel Soluble Salts Nickel Subus Salts Nickel Subus Salts Nickel Subsulfide Nickelocene Nitrate Nitrate Nitrite (as N) Nitrite Nitroaniline, 2- Nitroaniline, 2- Nitroaniline, 4- Nitroaniline, 4- Nitrobenzene Nitrodellulose Nitrofurzone Nitrofurzone Nitrofurzone Nitroglycerin Nitroguanidine Nitrofurzone Nitrogo-N-nethylurea, N- Nitroso-N-methylurea, N-	12054-87 1313-99-1 NA 7440-05-72-2 1271-28-9 14797-55-8 NA 14797-65-0 88-74-4 100-01-6 98-95-3 9004-70-0 67-20-9 58-87-0 55-68-7 75-52-5 79-46-9 75-73-9 64-91-5 75-73-9 64-7 1116-8-7 151-8-7 151-8-7 151-8-7 151-8-7 151-8-7	9.38+01 OTHER 7.58+01 PHYSPROP 2.48+02 CRC93 1.98+02 CRC93 1.98+02 EPI 1.48+02 PHYSPROP 1.28+02 PHYSPROP 1.08+02 PHYSPROP 1.38+02 PHYSPROP 1.3	2.4E-06 5.2E-08 9.8E-04 1.3E-21 5.4E-11 3.5E-06 1.3E-11 1.2E-03 4.9E-03 4.1E-09 4.1E-09 5.4E-09 2.2E-04 2.2E-04 7.4E-05 5.0E-05	5.9E-08 1.3E-09 2.4E-05 3.3E-12 3.1E-13 3.1E-13 3.1E-13 1.2E-06 1.2E-04 1.3E-04 1.3E-04 9.9E-11 1.3E-06 4.9E-06 4.9E-06 1.8E-06 1.8E-06 1.8E-06	PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP EPI PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP	2.8E-03 3.2E-06 2.5E-01 1.4E-17 2.8E-10 4.3E-06 4.0E-04 1.4E-11 1.8E-02 2.9E-02 4.7E-02 8.6E-01 2.7E+00 1.0E-01	PHYSPROP EPI PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP	2.0E+03 1.5E+03 7.9E+02 1.7E+02 7.1E+01 1.5E+02 2.6E+02 2.6E+02 2.4E+02 2.9E+01 1.2E+02 2.8E+01 1.2E+02 3.8E+01 1.6E+03 3.9E+01 6.7E+01	3 CRC89 3 CRC89 2 CRC89 2 CRC89 2 CRC89 2 CRC89 2 EPI 2 PHYSPROP 2 EPI 1 PHYSPROP 1 PHYSPROP 1 PHYSPROP 2 EPI 1 PHYSPROP 2 EPI 2 EPI 2 EPI 3 PHYSPROP 4 EPI 4 EPI 5 EPI 6 EPI 6 EPI 7 EPI 8 EPI 9 EPI 9 EPI 9 EPI 1 EPI 1 EPI 1 EPI 1 EPI 1 EPI 1 PHYSPROP	6.7E+00 8.9E+00 5.9E+00 9.0E-01 1.4E+00 1.2E+00 1.1E+00 9.8E-01 9.8E-01 9.2E-01 9.4E-01 1.0E+00	CRC89	5.8E-02 6.7E-06 EPA WATER9  5.2E-02 7.4E-06 EPA WATER9  6.4E-02 9.8E-06 EPA WATER9  6.8E-02 9.4E-06 EPA WATER9  3.6E-02 4.2E-06 EPA WATER9  4.9E-02 5.8E-06 EPA WATER9  5.6E-02 6.5E-06 EPA WATER9  5.6E-02 6.5E-06 EPA WATER9  1.0E-01 1.4E-05 EPA WATER9  1.0E-02 1.0E-05 EPA WATER9  1.0E-02 1.0E-05 EPA WATER9  5.6E-02 7.8E-06 EPA WATER9  5.6E-02 7.8E-06 EPA WATER9  5.6E-02 7.8E-06 EPA WATER9  9.5E-02 1.2E-05 EPA WATER9	1.1E+02 EPI 1.1E+02 EPI 1.1E+02 EPI 1.1E+02 EPI 1.0E+01 EPI 1.2E+02 EPI 1.2E+02 EPI 1.2E+02 EPI 1.2E+01 EPI 1.0E+01 EPI 1.1E+01 EPI 1.1E+0	1.4E-00 PHYSPROP 1.9E-00 PHYSPROP 4.6E-00 PHYSPROP 4.7E-01 PHYSPROP 1.6E-00 PHYSPROP 3.5E-01 PHYSPROP 3.5E-01 PHYSPROP 3.5E-01 PHYSPROP 3.5E-01 PHYSPROP 3.6E-02 PHYSPROP 1.4E-00 PHYSPROP 1.4E-00 PHYSPROP 1.4E-00 PHYSPROP 1.4E-01 PHYSPROP	1.55-03 PHYSPROP 7.35-02 PHYSPROP 2.15-03 PHYSPROP 2.15-03 PHYSPROP 2.15-02 PHYSPROP 2.15-02 PHYSPROP 1.15-03 PHYSPROP 1.15-04 PHYSPROP 1.35-04 PHYSPROP 1.35-04 PHYSPROP 1.35-04 PHYSPROP 1.15-04 PHYSPROP 1.15-05 PHYSPROP 1.15-0	3.7-03 3.5-01 8.3-01 1.0-03 RAGSE 3.3-03 2.8-01 6.6-01 1.0-03 RAGSE 5.9-04 2.2-01 6.8-01 1.0-03 RAGSE 5.9-04 2.2-01 6.8-01 2.0-04 RAGSE 1.2-00 5.6-04 0.2-04 RAGSE 1.2-00 2.9-04 RAGSE 1.2-0-03 2.9-05 1.0-03 RAGSE 2.6-03 1.9-01 4.6-01 1.0-03 RAGSE 2.6-03 1.9-01 4.6-01 1.0-03 RAGSE 2.0-04 6.2-01 1.5-04 0.2-03 PP 2.3-02 6.2-01 1.5-04 0.2-03 PP 2.3-02 5.1-01 1.2-04 0.3-05 PP 2.3-02 5.1-01 1.2-05 0.3-05 PP 2.3-02 5.1-01 1.2-05 0.3-05 PP 2.3-02 5.1-01 1.2-05 0.3-05 PP 2.3-03 1.3-05 0.3-05 0.3-05 PP 2.3-05 0.3-05 0.3-05 0.3-05 PP 2.3-05 0.3-05 0.3-05 0.3-05 0.3-05 PP 2.3-05 0.3-0
Nickel Refiner Dust Nickel Soluble Salts Nickel Soluble Salts Nickel Souble Salts Nitrate + Nitrite (as N) Nitrite Nitrate + Nitrite (as N) Nitrite Nitrosulline, 2- Nitrosulline, 2- Nitrosulline, 4- Nitrosulline, 8- Nitrosulline, 8- Nitrosulline, N-	12054-48-7 1313-99-1 NA 7440-02-0 12035-72-1 1271-28-9 14797-65-0 88-74-4 100-01-6 98-95-3 9004-70-0 67-20-9 98-87-0 55-63-0 75-20-9 75-73-9 98-95-3 904-70-1 98-95-3 904-70-1 98-95-3 904-70-1 98-95-3 904-70-1 98-95-3 904-70-1 98-95-3 904-70-1 98-95-3 98-	9.38+01 OTHER 7.58+01 PHYSPROP 2.46+02 CRC89 1.98+02 CRC89 1.98+02 PHYSPROP 1.46+02 PHYSPROP 1.26+02 PHYSPROP 1.26+02 PHYSPROP 1.26+02 PHYSPROP 1.26+02 PHYSPROP 1.36+02 PHYSPRO	2.4E-06 5.2E-08 9.8E-04 1.3E-21 5.4E-11 1.3E-14 1.2E-03 5.4E-09 4.1E-09 4.1E-09 5.4E-04 2.0E-10 1.5E-04 7.4E-05 5.0E-05 5.9E-05	5.9E-08 1.3E-09 2.4E-05 3.3E-23 3.1E-13 3.1E-13 3.1E-13 4.5E-16 2.9E-04 1.3E-10 9.9E-11 1.3E-05 4.9E-12 3.6E-06 4.9E-12 4.8E-06 1.2E-06 1.2E-06	PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP EPI PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP	2.8E-03 3.2E-06 2.5E-01 1.4E-17 2.8E-10 4.3E-06 4.0E-04 1.4E-11 3.6E+01 1.7E+01 1.8E-02 2.9E-02 4.7E-02 8.6E-02 5.0E-04 8.6E-02 5.0E-04 1.0E-01 1.1E+00	PHYSPROP	7.1E+01 1.5E+03 7.9E+02 1.7E+01 1.5E+02 5.7E+00 2.6E+02 2.4E+02 2.4E+02 2.4E+02 2.4E+02 2.8E+01 6.8E+00 1.6E+01 3.9E+01 1.6E+01 3.9E+01 1.6E+01 2.7E+0	CRC89	6.7E+00 8.9E+00 5.9E+00 9.0E-01 1.4E+00 1.2E+00 1.1E+00 9.8E-01 9.8E-01 9.2E-01 9.4E-01 1.0E+00	CRC89	5.8E-02 6.7E-06 EPA WATER9 5.2E-02 7.4E-06 EPA WATER9 6.4E-02 9.8E-06 EPA WATER9 6.6E-02 9.4E-06 EPA WATER9 9.6E-02 4.2E-06 EPA WATER9 9.6E-02 6.5E-06 EPA WATER9 9.6E-02 6.5E-06 EPA WATER9 1.0E-01 1.4E-05 EPA WATER9 1.0E-01 1.4E-05 EPA WATER9 1.0E-01 1.4E-05 EPA WATER9 1.0E-01 1.4E-05 EPA WATER9 1.0E-01 0.5E-06 EPA WATER9 1.0E-02 1.0E-06 EPA W	1.1E+02 EPI 1.1E+02 EPI 1.1E+02 EPI 1.1E+02 EPI 2.3E+02 EPI 1.0E+01 EPI 1.2E+02 EPI 1.2E+02 EPI 1.0E+01 EPI 1.0E+01 EPI 1.1E+01 EPI 2.1E+01 EPI 2.1E+	1.4E-00 PHYSPROP 4.6E-00 PHYSPROP 4.6E-00 PHYSPROP 4.7E-01 PHYSPROP 5.3E-01 PHYSPROP 6.3E-01 PHYSPROP 6.3E-0	1.5E-03 PHYSPROP 7.3E-02 PHYSPROP 1.0E-06 PHYSPROP 2.1E-02 PHYSPROP 2.1E-02 PHYSPROP 4.4E-03 PHYSPROP 1.1E-05 PHYSPROP 1.1E-05 PHYSPROP 1.3E-04 PHYSPROP 1.3E-04 PHYSPROP 1.3E-06 PHYSPROP 1.0E-06 PHYSPROP 1.0E-06 PHYSPROP 1.0E-06 PHYSPROP 1.0E-06 PHYSPROP 1.0E-06 PHYSPROP 1.0E-06 PHYSPROP 1.0E-06 PHYSPROP 3.3E-03 PHYSPROP 3.3E-03 PHYSPROP 3.3E-03 PHYSPROP 3.3E-04 PHYSPROP 4.3E-04 PHYSPROP 4.3E-04 PHYSPROP 4.3E-04 PHYSPROP 4.3E-04 PHYSPROP 5.3E-04 PHYSPROP 5.3E-0	3.75-03 3.55-01 8.35-01 1.05-03 RAGSE 3.35-03 2.85-01 6.65-01 1.05-03 RAGSE 5.95-04 2.25-01 5.65-01 1.05-03 RAGSE 5.95-04 2.25-01 5.65-01 2.05-04 RAGSE 1.25-00 5.65-00 2.05-04 RAGSE 1.25-00 5.65-00 2.05-04 RAGSE 1.25-00 2.05-00 3.05-03 2.35-01 5.65-01 1.05-03 RAGSE 2.05-03 1.95-01 1.05-03 RAGSE 2.05-03 1.95-01 1.55-00 4.55-03 EPI 1.05-03 6.25-01 1.55-00 4.55-03 EPI 1.05-03 6.25-03 EP
Nickel Solubie Salts Nickel Solubie Salts Nickel Solubie Salts Nickel Solubie Mickel Solubie Nickelocene Nitrate Nitrate + Nitrite (as N) Nitrite Nitroaniline, 2- Nitroaniline, 2- Nitroaniline, 4- Nitroberizene Nitrofurantoin Nitrofurantoin Nitrofurantoin Nitrofurantoin Nitrofurantoin Nitrofurantoin Nitrofurantoin Nitrofurantoin Nitrofurantoin Nitroguantine Nitromethane Nitropone, 2- Nitrosol-Nerthylurea, N- Nitroso-N-methylurea, N- Nitroso-di-N-propylamine, N- Nitroso-di-N-p	12054-48-7 1313-99-1 NA 744035-72- 1271-28-9 14797-55-8 NA 14797-65-0 88-74-4 100-01-6 98-95-3 9004-70-0 67-20-9 58-87-0 55-68-7 75-52-5 79-46-9 75-73-9 84-93-5 24-16-3 21-64-7 1116-84-7 62-9-9 68-7-9 68-7-9 68	9.38+01 OTHER 7.58+01 EPI 7.58+02 ERS 9.38+01 PHYSPROP 2.48+02 CRC89 1.98+02 ERC89 1.98+02 EPI 1.48+02 EPIYSPROP 1.28+02 EPIYSPROP 1.38+02 EPIYSPROP 1.38+03 EPIYSPROP 1.38+04 EPIYSPROP 1.38+05	2.4E-06 5.2E-08 9.8E-04 1.3E-21 1.3E-11 1.3E-11 1.2E-03 4.9E-03 5.4E-09 4.1E-09 4.1E-09 1.5E-04 7.4E-05 5.9E-05 1.0E-06	5.9E-08 1.3E-09 2.4E-05 3.3E-12 3.1E-13 3.1E-13 3.1E-16 2.9E-05 1.2E-04 1.3E-04 1.3E-05 5.4E-06 4.9E-12 1.2E-06 1.2E-06 1.2E-06 1.2E-06 1.2E-06 1.2E-06 1.2E-06 1.2E-06	PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP EPI PHYSPROP	2.8E-03 3.2E-06 2.5E-01 1.4E-17 2.8E-10 4.3E-06 1.7E+01 1.7E+01 1.8E-02 2.9E-02 4.7E-02 8.6E-01 2.7E+00 1.0E-01 1.1E+00 3.6E+01 1.7E+01 1.8E-01 2.7E+00	PHYSPROP EPI PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP	7.1E+01 1.5E+03 7.9E+02 1.7E+01 1.5E+02 5.7E+00 2.6E+02 2.4E+02 2.4E+02 2.4E+02 2.4E+02 2.8E+01 6.8E+00 1.6E+01 3.9E+01 1.6E+01 3.9E+01 1.6E+01 2.7E+0	3 CRC89 3 CRC89 2 CRC89 2 CRC89 2 CRC89 2 CRC89 2 EPI 2 PHYSPROP 2 EPI 1 PHYSPROP 1 PHYSPROP 1 PHYSPROP 2 EPI 1 PHYSPROP 2 EPI 2 EPI 2 EPI 3 PHYSPROP 4 EPI 4 EPI 5 EPI 6 EPI 6 EPI 7 EPI 8 EPI 9 EPI 9 EPI 9 EPI 1 EPI 1 EPI 1 EPI 1 EPI 1 EPI 1 PHYSPROP	6.7E+00 8.9E+00 5.9E+00 9.0E-01 1.4E+00 1.2E+00 2.0E+00 1.1E+00 9.8E-01 9.2E-01 9.4E-01 1.0E+00	CRC89	5.8E-02 6.7E-06 EPA WATER9  5.2E-02 7.4E-06 EPA WATER9  6.4E-02 9.8E-06 EPA WATER9  6.8E-02 9.4E-06 EPA WATER9  6.8E-02 9.4E-06 EPA WATER9  4.9E-02 5.8E-06 EPA WATER9  5.6E-02 6.5E-06 EPA WATER9  7.6E-02 1.4E-05 EPA WATER9  7.6E-02 1.0E-05 EPA WATER9  9.6E-02 1.0E-05 EPA WATER9  8.6E-02 1.0E-05 EPA WATER9  8.6E-02 6.5E-06 EPA WATER9	1.1E+02 EPI 1.1E+02 EPI 1.1E+02 EPI 1.1E+02 EPI 2.3E+02 EPI 1.0E+01 EPI 1.2E+02 EPI 1.2E+02 EPI 1.0E+01 EPI 1.0E+01 EPI 1.0E+01 EPI 2.1E+01 EPI 2.1E+	1.4E-00 PHYSPROP 1.9E-00 PHYSPROP 4.6E-00 PHYSPROP 4.7E-01 PHYSPROP 1.6E-00 PHYSPROP 3.5E-01 PHYSPROP 3.5E-01 PHYSPROP 3.5E-01 PHYSPROP 3.5E-01 PHYSPROP 3.5E-01 PHYSPROP 3.5E-01 PHYSPROP 3.6E-00 PHYSPROP 1.4E-00 PHYSPROP 1.4E-0	156-03 PHYSPROP 7.36-02 PHYSPROP 2.16-03 PHYSPROP 8.06-01 PHYSPROP 9.16-02 PHYSPROP 1.16-03 PHYSPROP 1.16-03 PHYSPROP 1.16-03 PHYSPROP 1.16-03 PHYSPROP 1.36-04 PHYSPROP 1.36-04 PHYSPROP 1.36-04 PHYSPROP 1.36-04 PHYSPROP 1.16-05 PHYSPROP 1.06-06	3.7-03 3.5-01 8.3-01 1.0-03 RAGSE 3.3-03 2.8-01 6.6-01 1.0-03 RAGSE 5.9-04 2.2-01 5.6-01 2.0-04 RAGSE 5.9-04 2.2-01 5.6-01 2.0-04 RAGSE 1.2-03 5.6-01 2.0-04 RAGSE 1.2-03 5.6-01 2.0-04 RAGSE 1.2-03 5.6-01 1.0-03 RAGSE 2.6-03 1.9-01 4.6-01 1.0-03 RAGSE 2.0-03 6.2-01 1.5-04 0.2-03 FPI 2.3-02 5.1-01 1.2-00 5.4-03 FPI 2.3-02 5.1-01 1.2-00 5.4-03 FPI 2.3-02 5.1-01 1.2-00 5.4-03 FPI 2.3-02 5.1-01 1.2-00 3.2-03 FPI 2.3-03 5.0-01 1.2-00 9.9-04 FPI 2.3-03 5.0-01 1.2-00 9.9-04 FPI 2.3-03 5.0-01 1.2-03 5.9-03
Nickel Refiner Dust Nickel Soluble Salts Nickel Soluble Salts Nickel Souble Salts Nitrate + Nitrite (as N) Nitrite Nitrate + Nitrite (as N) Nitrite Nitrosulline, 2- Nitrosulline, 2- Nitrosulline, 4- Nitrosulline, 8- Nitrosulline, 8- Nitrosulline, N-	12054-48-7 1313-99-1 NA 7440-02-0 12035-72-1 1271-28-9 14797-65-0 88-74-4 100-01-6 98-95-3 9004-70-0 67-20-9 98-87-0 55-63-0 75-20-9 75-73-9 98-95-3 904-70-1 98-95-3 904-70-1 98-95-3 904-70-1 98-95-3 904-70-1 98-95-3 904-70-1 98-95-3 904-70-1 98-95-3 98-	9.38+01 OTHER 7.58+01 PHYSPROP 2.46+02 CRC89 1.98+02 CRC89 1.98+02 PHYSPROP 1.46+02 PHYSPROP 1.26+02 PHYSPROP 1.26+02 PHYSPROP 1.26+02 PHYSPROP 1.26+02 PHYSPROP 1.36+02 PHYSPRO	2.4E-06 5.2E-08 9.8E-04 1.3E-21 5.4E-11 1.3E-14 1.2E-03 5.4E-09 4.1E-09 4.1E-09 5.4E-04 2.0E-10 1.5E-04 7.4E-05 5.0E-05 5.9E-05	5.9E-08 1.3E-09 2.4E-05 3.3E-23 3.1E-13 3.1E-13 3.1E-13 4.5E-16 2.9E-04 1.3E-10 9.9E-11 1.3E-05 4.9E-12 3.6E-06 4.9E-12 4.8E-06 1.2E-06 1.2E-06	PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP EPI PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP	2.8E-03 3.2E-06 2.5E-01 1.4E-17 2.8E-10 4.0E-04 1.4E-11 3.6E+01 1.7E+01 1.8E-02 2.9E-02 4.7E-02 5.0E-04 8.6E-01 2.7E+00 1.0E-01 1.1E+00 3.6E-02 9.2E-02	PHYSPROP	7.1E+01 1.5E+03 7.9E+02 1.7E+01 1.5E+02 5.7E+00 2.6E+02 2.4E+02 2.4E+02 2.4E+02 2.4E+02 2.8E+01 6.8E+00 1.6E+01 3.9E+01 1.6E+01 3.9E+01 1.6E+01 2.7E+0	3 CRC89 2 CRC89 2 CRC89 2 CRC89 2 CRC89 2 CRC89 2 PHYSPROP 3 PHYSPROP 4 EPI 4 PHYSPROP 5 PHYSPROP 6 EPI 6 PHYSPROP 6 EPI 7 PHYSPROP 6 EPI 8 EPI 9 EPI 1 EPI	6.7E+00 8.9E+00 9.0E-01 1.4E+00 1.2E+00 1.6E+00 9.0E-01 1.1E+00 9.0E-01 1.0E+00 9.4E-01 1.0E+00	CRC89	5.8E-02 6.7E-06 EPA WATER9 5.2E-02 7.4E-06 EPA WATER9 6.4E-02 9.8E-06 EPA WATER9 6.6E-02 9.4E-06 EPA WATER9 9.6E-02 4.2E-06 EPA WATER9 9.6E-02 6.5E-06 EPA WATER9 9.6E-02 6.5E-06 EPA WATER9 1.0E-01 1.4E-05 EPA WATER9 1.0E-01 1.4E-05 EPA WATER9 1.0E-01 1.4E-05 EPA WATER9 1.0E-01 1.4E-05 EPA WATER9 1.0E-01 0.5E-06 EPA WATER9 1.0E-02 1.0E-06 EPA W	1.1E+02 EPI 1.1E+02 EPI 1.1E+02 EPI 1.1E+02 EPI 2.3E+02 EPI 1.0E+01 EPI 1.2E+02 EPI 1.2E+02 EPI 1.0E+01 EPI 1.0E+01 EPI 1.1E+01 EPI 2.1E+01 EPI 2.1E+	1.4E-00 PHYSPROP 4.6E-00 PHYSPROP 4.6E-00 PHYSPROP 4.7E-01 PHYSPROP 5.3E-01 PHYSPROP 6.3E-01 PHYSPROP 6.3E-0	1.5E-03 PHYSPROP 7.3E-02 PHYSPROP 1.0E-06 PHYSPROP 2.1E-02 PHYSPROP 2.1E-02 PHYSPROP 4.4E-03 PHYSPROP 1.3E-04 PHYSPROP 1.3E-04 PHYSPROP 1.3E-04 PHYSPROP 1.3E-05 PHYSPROP 1.0E-06 PHYSPROP	3.75-03 3.55-01 8.35-01 1.05-03 RAGSE 3.35-03 2.85-01 6.65-01 1.05-03 RAGSE 5.95-04 2.25-01 5.65-01 1.05-03 RAGSE 5.95-04 2.25-01 5.65-01 2.05-04 RAGSE 1.25-00 5.65-00 2.05-04 RAGSE 1.25-00 5.65-00 2.05-04 RAGSE 1.25-00 2.05-00 3.05-03 2.35-01 5.65-01 1.05-03 RAGSE 2.05-03 1.95-01 1.05-03 RAGSE 2.05-03 1.95-01 1.55-00 4.55-03 EPI 1.05-03 6.25-01 1.55-00 4.55-03 EPI 1.05-03 6.25-03 EP
Nickel Refiner Dust Nickel Soluble Salts Nitrate + Nitrite (as N) Nitrite Nitrote Salts Nitro	12054-48.7 1313-99-1 MA 7440-02-70-1 2035-72-1 1271-28-9 14797-65-0 88.74-4 100-01-6 98-95-3 9904-70-0 67-20-9 58-87-0 55-63-0 56-88-7 75-52-5 79-46-9 759-73-9 921-16-3 221-64-7 151-68-7 55-88-7 151-68-7 55-88-7 151-68-7 59-88-9 904-9 151-68-7 904-9 908-1 905-95-95-6 98-95-9 921-64-7 905-95-95-6 98-95-95-6 98-95-95-6 98-95-95-6 98-95-95-6 98-95-95-6 98-95-95-6 98-95-95-6 99-95-95-6	9.38+01 OTHER 7.58+01 PHYSPROP 2.48+02 CRC89 1.98+02 CRC89 1.98+02 PHYSPROP 1.48+02 PHYSPROP 1.48+02 PHYSPROP 1.28+02 PHYSPROP 1.38+02 PHYSPRO	2.4E-06 5.2E-08 9.8E-04 1.3E-21 5.4E-11 1.3E-11 1.3E-14 1.2E-03 4.9E-03 4.9E-03 4.9E-03 4.9E-04 2.0E-10 1.5E-04 7.4E-05 5.0E-05 5.0E-05 5.9E-05 1.0E-06 3.5E-06	5.9E-08 1.3E-09 2.4E-05 3.3E-23 3.3E-23 3.1E-13 3.1E-13 3.1E-13 1.2E-04 1.3E-16 2.9E-05 1.2E-04 1.3E-06 1.3E-06 1.4E-06 1.4E-06 1.4E-06 1.4E-06 2.5E-07 4.9E-08 9.3E-06	PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP EPI PHYSPROP EPI PHYSPROP	2.8E-03 3.2E-06 3.2E-06 1.4E-17 2.8E-10 1.4E-11 3.6E+01 1.7E-01 1.8E-02 2.9E-02 2.9E-02 2.7E-00 1.1E-02 3.6E-01 1.1E-02 3.7E-06 6.0E-02 9.2E-02 6.0E-02 9.2E-02	PHYSPROP EPI PHYSPROP	2.0E+03 1.5E+03 7.9E+02 1.7E+01 1.5E+02 7.1E+01 1.5E+02 2.6E+02 2.6E+02 2.4E+02 1.4E+03 2.4E+02 2.4E+02 2.4E+02 2.4E+02 2.4E+02 2.4E+01 2.4E+02 2.8E+01 2.4E+02 2.8E+01 2.6E+02 2.8E+01 2.6E+02 2.8E+01 2.6E+02 2.8E+01 2.6E+03 2.6E+0	3 CRC89 3 CRC89 2 CRC89 2 CRC89 2 PHYSPROP 2 PHYSPROP 2 PHYSPROP 2 PHYSPROP 3 PHYSPROP 4 PHYSPROP 5 PH 6 PHYSPROP 6 PH 7 PHYSPROP 6 PH 7 PHYSPROP 7 PHYSPROP 8 PH 8 PH 9 PH 9 PH 1 PHYSPROP	9.0E-01   9.0E-0	CRC89	5.8E-02 6.7E-06 EPA WATER9  5.2E-02 7.4E-06 EPA WATER9 6.4E-02 9.8E-06 EPA WATER9 6.8E-02 9.4E-06 EPA WATER9 3.6E-02 4.2E-06 EPA WATER9 9.6E-02 6.5E-06 EPA WATER9 9.6E-02 6.5E-06 EPA WATER9 9.6E-02 6.5E-06 EPA WATER9 1.0E-01 1.4E-05 EPA WATER9 1.0E-01 1.4E-05 EPA WATER9 1.0E-01 1.4E-05 EPA WATER9 1.0E-01 9.4E-05 EPA WATER9 1.0E-02 9.3E-06 EPA WATER9 1.0E-02 9.3E-06 EPA WATER9 1.7SE-02 7.8E-06 EPA WATER9 1.7SE-02 7.8E-06 EPA WATER9 1.7SE-02 6.7SE-06 EPA WATER9 1.7SE-02 6.7SE-0	1.1E+02 EPI 1.1E+02 EPI 1.1E+02 EPI 2.3E+02 EPI 1.0E+01 EPI 1.2E+02 EPI 1.2E+02 EPI 1.2E+02 EPI 1.2E+02 EPI 1.0E+01 EPI 1.0E+01 EPI 2.1E+01 EPI 2.1E+	1.4E-00 PHYSPROP 4.6E-00 PHYSPROP 4.6E-00 PHYSPROP 4.7E-01 PHYSPROP 4.7E-01 PHYSPROP 5.8E-01 PHYSPROP 5.8E-01 PHYSPROP 5.8E-01 PHYSPROP 5.8E-01 PHYSPROP 5.8E-01 PHYSPROP 5.8E-01 PHYSPROP 5.7E-01 PHYSPROP 5.7E-01 PHYSPROP 5.7E-01 PHYSPROP 5.7E-01 PHYSPROP 5.7E-01 PHYSPROP 4.4E-01 PHYSPROP 4.8E-01 PHYSPROP 5.7E-01 PHYSPROP 5.7E-0	1.58-0.3 PHYSPROP 7.38-0.2 PHYSPROP 2.18-0.3 PHYSPROP 8.06-0.1 PHYSPROP 8.06-0.1 PHYSPROP 9.18-0.2 PHYSPROP 1.18-0.3 PHYSPROP 1.18-0.4 PHYSPROP 1.38-0.4 PHYSPROP 1.38-0.4 PHYSPROP 1.38-0.4 PHYSPROP 1.38-0.4 PHYSPROP 1.38-0.5 PHY	3.75-03 3.55-01 8.35-01 1.05-03 RAGSE 3.35-03 2.85-01 666-01 1.05-03 RAGSE 5.95-04 2.25-01 6.85-01 1.05-03 RAGSE 5.95-04 2.25-01 5.85-01 2.05-04 RAGSE 1.25-00 2.35-00 2.05-04 RAGSE 1.25-00 2.95-00 3.05-03 2.35-01 5.65-01 1.05-03 RAGSE 2.65-03 1.95-01 1.05-03 RAGSE 2.65-03 1.95-01 1.05-03 RAGSE 2.65-03 1.95-01 1.05-03 RAGSE 2.65-03 1.95-01 1.55-00 2.25-03 EPI 1.05-02 6.25-01 1.55-00 2.25-03 EPI 1.05-02 6.25-01 1.25-00 5.45-03 EPI 1.05-03 RAGSE 2.05-03 1.05-01 1.25-00 2.25-03 EPI 1.05-03 RAGSE 2.05-03 1.05-01 1.25-00 2.25-03 EPI 1.05-03 RAGSE 2.05-03 1.05-01 1.25-00 3.25-03 EPI 1.05-03 RAGSE 2.05-03 1.05-03 PI 1.05-03 RAGSE 2.05-03 RAGSE
Nickel Soluble Salts Nitrate + Nitrite (as N) Nitrite Nitrate + Nitrite (as N) Nitrite Nitroanline, 2- Nitroanline, 2- Nitroanline, 4- Nitroanline, 4- Nitroanline, 4- Nitrosolubse Nitrofurantoin Nitrofurantoin Nitrofurantoin Nitrogyerin Nitrogyerin Nitrogyerin Nitrogyerin Nitrogone-Nethylurea, N- Nitroso-di-N-butylamine, N- Nitroso-di-N-butylamine, N- Nitroso-di-N-butylamine, N- Nitrosodietylamine, N- Nitrosodietylamine, N- Nitrosodietylamine, N- Nitrosodietylamine, N- Nitrosodietylamine, N- Nitrosodietylamine, N- Nitrosondietylamine, N- Nitrosondie	12054-48-7 1313-99-1 MA 744005-72-2 1271-28-9 14797-55-8 NA 14797-65-0 88-74-4 100-01-6 99-95-3 9904-70-6 55-63-0 55-68-7 75-52-5 79-46-9 75-52-5 79-46-9 75-75-7 84-93-5 24-16-3 62-75-9 68-93-6 105-95-9-9-9-8-1	9.38+01 OTHER 7.58+01 EPI 7.58+01 EPI 9.47+02 CRC89 1.98+02 CRC89 1.98+02 CRC89 1.98+02 EPI 1.48+02 EP	2.4E-06 5.2E-08 9.8E-04 1.3E-21 5.4E-11 1.3E-11 3.5E-06 1.8E-14 1.2E-03 4.9E-03 5.4E-09 4.1E-09 1.5E-04 7.4E-05 5.0E-05 5.0E-05 5.9E-05 1.0E-06 3.5E-06 3.5E-06 3.5E-06 3.5E-06 3.5E-06 3.5E-06 3.5E-06 3.5E-06 3.5E-06 3.5E-06	5.9E-08 1.3E-09 2.4E-05 3.3E-13 3.1E-13 3.1E-13 3.1E-13 3.1E-13 1.3E-10 9.9E-11 1.3E-05 5.4E-06 1.2E-06 1.2E-06 1.4E-06 1.4E-06 1.4E-08 8.4E-07 8.4E-07 8.4E-07 8.4E-07	PHYSPROP	2.8E-03 3.2E-06 3.2E-06 1.4E-17 4.3E-06 1.4E-11 3.6E-01 1.8E-02 5.0E-04 8.6E-01 5.0E-04 1.0E-01 1.0E-01 1.0E-01 1.0E-01 3.6E-02 5.0E-04 8.6E-01 9.0E-04 9.0E-0	PHYSPROP EPI PHYSPROP HYSPROP	2.0E+03 1.5E+02 7.1E+01 1.7E+02 7.1E+01 1.5E+02 5.7E+00 1.5E+02 2.6E+02 2.4E+02 1.4E+02 1.2E+02 2.9E+03 1.1E+03 1.2E+02 2.8E+01 1.6E+03 3.1E+04 1.6E+03 3.1E+04 1.6E+03 1.6E+01 1.6E+03	3 CRC89 3 CRC89 2 CRC89 2 CRC89 2 CRC89 4 PHYSPROP 2 PHYSPROP 2 PHYSPROP 2 EPI 4 PHYSPROP 5 EPI 5 EPI 6 EPI 6 EPI 7 EPI 7 EPI 8 EPI 8 EPI 9 EPI 9 EPI 1 EPI	9.0E-01 1.6E+00 2.0E+00 9.8E-01 1.6E+00 9.8E-01 9.8E-01 9.4E-01 1.1E+00 9.4E-01 1.1E+00 1.1E+00 1.1E+00	CRC89	5.8E-02 6.7E-06 EPA WATER9  5.2E-02 7.4E-06 EPA WATER9  6.4E-02 9.8E-06 EPA WATER9  6.8E-02 9.4E-06 EPA WATER9  6.8E-02 9.4E-06 EPA WATER9  6.8E-02 9.4E-06 EPA WATER9  6.8E-02 5.7E-06 EPA WATER9  1.0E-01 1.4E-05 EPA WATER9  1.0E-01 1.4E-05 EPA WATER9  1.0E-01 1.4E-05 EPA WATER9  7.8E-02 9.7E-06 EPA WATER9  7.8E-02 1.0E-05 EPA WATER9  7.8E-02 9.1E-06 EPA WATER9  5.6E-02 6.5E-06 EPA WATER9  5.	1.1E+02 EPI 1.1E+02 EPI 1.1E+02 EPI 2.3E+02 EPI 1.0E+01 EPI 1.2E+02 EPI 1.2E+02 EPI 1.2E+02 EPI 1.2E+02 EPI 1.2E+01 EPI 1.1E+01 EPI 2.1E+01 EPI 2.1E+	1.4E-00 PHYSPROP 1.9E-00 PHYSPROP 4.6E-00 PHYSPROP 4.7E-01 PHYSPROP 4.7E-01 PHYSPROP 3.5E-01 PHYSPROP 3.6E-01 PHYSPROP 4.8E-01 PHYSPROP 3.1E-00 PHYSPROP 4.8E-01 PHYSPROP 4.8E-0	1.55-03 PHYSPROP 7.33-02 PHYSPROP 7.33-02 PHYSPROP 2.15-03 PHYSPROP 8.05-01 PHYSPROP 8.05-01 PHYSPROP 1.45-03 PHYSPROP 1.45-03 PHYSPROP 1.45-04 PHYSPROP 1.35-04 PHYSPROP 1.35-04 PHYSPROP 1.35-05 PHYSPROP 1.35-05 PHYSPROP 1.35-06 PHYSPROP 1.35-0	3.76-03 3.56-01 8.36-01 1.06-03 RAGSE 3.36-03 2.86-01 6.66-01 1.06-03 RAGSE 5.96-04 2.26-01 5.66-01 2.06-04 RAGSE 1.26-03 2.36-03 2.36-03 2.36-03 2.36-03 2.96-03 2.36-04 2.36-04 2.36-03 2.36-03 2.36-03 2.36-03 2.36-04 2.36-04 2.36-03 2.36-03 2.36-03 2.36-04 2.36-04 2.36-03 2.36-03 2.36-04 2.36-04 2.36-03 2.36-03 2.36-04 2.36-04 2.36-03 2.36-03 2.36-04 2.36-04 2.36-03 2.36-03 2.36-04 2.36-04 2.36-03 2.36-04 2.36
Nickel Refiner Dust Nickel Soluble Salts Nickel Soluble Salts Nickel Soluble Salts Nickel Soluble Salts Nickel Subsuffide Nickelocene Nitrate + Nitrite (as N) Nitrite Nitroteleccene Nitrocellusia Nitroduratine, 4 Nitroduration Nitrofurzation Nitrofurzation Nitrofurzation Nitrofurzation Nitrofurzation Nitroguanidine Nitr	12054-87 7 1313-99-1 MA 7440-02-72- 1271-28-9 14797-65-0 88-74-4 100-01-6 98-95-3 9004-70-0 67-20-9 59-87-0 55-68-0 55-68-0 75-52-5 79-46-9 75-52-5 79-46-9 75-73-9 88-95-3 24-16-3 621-64-7 1116-54-7 55-18-5 62-75-9 88-30-6 1099-95-95-95-95-95-95-95-95-95-95-95-95-9	9.38+01 OTHER 7.58+01 PHYSPROP 2.48+02 CRC99 1.98+02 CRC99 1.98+02 CRC99 1.98+02 PHYSPROP 1.48+02 PHYSPROP 1.28+02 PHYSPROP 1.38+02 PHYSPROP 1	2.4E-06 9.8E-04 1.3E-21 5.4E-11 1.3E-11 1.3E-11 1.3E-14 1.2E-03 4.1E-09 4.1E-09 4.1E-09 5.4E-04 2.0E-10 1.5E-04 7.4E-05 5.0E-05 1.0E-05 3.5E-05 2.0E-05 1.0E-06 3.5E-05 2.0E-06 3.5E-05 2.0E-06 3.5E-05	5.9E-08 1.3E-09 2.4E-05 3.3E-12 3.1E-13 3.1E-13 3.1E-13 3.1E-13 1.3E-10 9.9E-11 1.3E-05 1.2E-06 1.8E-06 1.4E-0	PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP EPI PHYSPROP	2.28-03 3.22-06 2.5E-01 1.4E-17 4.3E-06 4.4E-11 1.7E-01 1.7E-01 1.7E-01 2.7E-00 2.7E-00 2.7E-00 2.7E-00 2.7E-00 2.7E-00 2.7E-00 2.7E-00 2.7E-00 2.7E-00 2.7E-00 2.7E-00 2.7E-00 2.7E-01 2.7E-01 2.7E-01 3.6E-0	PHYSPROP EPI PHYSPROP EPI EPI EPI	2.0E+03 1.5E+03 7.9E+02 1.7E+02 7.1E+01 1.5E+02 5.7E+00 5.7E+00 2.6E+02 2.4E+02 2.4E+02 2.4E+02 2.4E+01 1.2E+02 1.2E+02 1.2E+02 1.3E+01 1.3E+02 1.3E+01 1.3E+0	3 CRC89 3 CRC89 2 CRC89 2 CRC89 2 CRC89 2 PHYSPROP 3 PHYSPROP 5 PHYSPROP 5 PHYSPROP 6 EPI 6 EPI 6 EPI 7 EPI 7 EPI 8 EPI 1 PHYSPROP	9.0E-01 1.1E+00 1.1E+0	CRC89	5.8E-02 6.7E-06 EPA WATER9  5.2E-02 7.4E-06 EPA WATER9  6.4E-02 9.8E-06 EPA WATER9  6.4E-02 9.4E-06 EPA WATER9  6.4E-02 9.4E-06 EPA WATER9  5.6E-02 6.5E-06 EPA WATER9  5.6E-02 6.5E-06 EPA WATER9  5.6E-02 6.5E-06 EPA WATER9  1.0E-01 1.4E-05 EPA WATER9  1.0E-02 1.0E-05 EPA WATER9  1.0E-02 EPA WA	1.1E+02 EPI 1.1E+02 EPI 1.1E+02 EPI 2.3E+02 EPI 1.0E+01 EPI 1.2E+02 EPI 3.5E+02 EPI 1.2E+01 EPI 1.1E+01 EPI 2.3E+01 EPI 2.3E+01 EPI 2.3E+01 EPI 2.3E+01 EPI 3.6E+02 EPI	1.4E-00 PHYSPROP 19E-00 PHYSPROP 4.6E-00 PHYSPROP 4.7E-01 PHYSPROP 1.6E-00 PHYSPROP 3.5E-01 PHYSPROP 3.5E-01 PHYSPROP 3.3E-01 PHYSPROP 2.3E-01 PHYSPROP 2.3E-01 PHYSPROP 3.3E-01 PHYSPROP 3.3E-01 PHYSPROP 3.3E-00 PHYSPROP 1.3E-00 PHYSPROP 4.0E-01	1.55-03 PHYSPROP 7.38-02 PHYSPROP 2.18-03 PHYSPROP 2.18-03 PHYSPROP 2.18-02 PHYSPROP 2.18-02 PHYSPROP 2.18-02 PHYSPROP 1.18-03 PHYSPROP 1.38-03 PHYSPROP 1.38-04 PHYSPROP 1.38-04 PHYSPROP 1.18-05 PHYSPROP 1.18-05 PHYSPROP 1.18-05 PHYSPROP 1.18-05 PHYSPROP 1.18-05 PHYSPROP 1.18-05 PHYSPROP 1.18-06 PHYSPROP 1.18-0	3.7-03 3.5-01 8.3-01 1.0-0.3 RAGSE 3.3-03 2.8-01 6.6-01 1.0-0.3 RAGSE 5.9-0.4 2.2-01 6.6-01 1.0-0.3 RAGSE 5.9-0.4 2.2-01 5.6-01 2.0-04 RAGSE 1.2-00 5.6-00 2.0-04 RAGSE 1.2-00 2.9-0.0 2.0-0.0 4.0-0.0 2.0-0.0 4.0-0.0 2.0-0.0 4.0-0.0 2.0-0.0 4.0-0.0 2.0-0.0 4.0-0.0 2.0-0.0 4.0-0.0 2.0-0.0 4.0-0.0 2.0-0.0 4.0-0.0 2.0-0.0 4.0-0.0 2.0-0.0 2.0-0.0 4.0-0.0 2.0-0.0-0.0 2.0-0.0 2.0-0.0 2.0-0.0 2.0-0.0 2.0-0.0 2.0-0.0 2.0-0.0 2.0
Nickel Soluble Salts Nitrate + Nitrite (as N) Nitrite Nitrate + Nitrite (as N) Nitrite Nitroanline, 2- Nitroanline, 2- Nitroanline, 4- Nitroanline, 4- Nitroanline, 4- Nitrosolubse Nitrofurantoin Nitrofurantoin Nitrofurantoin Nitrofurantoin Nitrogualdine Nitromethane Nitromethane Nitromethane Nitroso-di-N-brutylamine, N- Nitroso-di-N-brutylamine, N- Nitroso-di-N-brutylamine, N- Nitroso-di-N-brutylamine, N- Nitrosodietylamine, N- Nitrosodietylamine, N- Nitrosodietylamine, N- Nitrosodietylamine, N- Nitrosodietylamine, N- Nitrosondiphenylamine, N- Nitrosomethyletylamine, N-	12054-48-7 1313-99-1 MA 744005-72-2 1271-28-9 14797-55-8 NA 14797-65-0 88-74-4 100-01-6 99-95-3 9904-70-6 55-63-0 55-68-7 75-52-5 79-46-9 75-52-5 79-46-9 75-75-7 84-93-5 24-16-3 62-75-9 68-93-6 105-95-9-9-9-8-1	9.38+01 OTHER 7.58+01 EPI 7.58+01 EPI 2.48+02 CRC89 1.98+02 CRC89 1.98+02 EPI 4.78+01 EPI 1.48+02 EPI 4.78+01 EPI 1.48+02 EPI 4.78+01 EPI 1.48+02 EPI 4.78+02 EPI	2.4E-06 9.8E-04 1.3E-21 5.4E-11 1.3E-11 1.3E-11 1.3E-14 1.2E-03 4.1E-09 4.1E-09 4.1E-09 5.4E-04 2.0E-10 1.5E-04 7.4E-05 5.0E-05 1.0E-05 3.5E-05 2.0E-05 1.0E-06 3.5E-05 2.0E-06 3.5E-05 2.0E-06 3.5E-05	5.9E-08 1.3E-09 2.4E-05 3.3E-13 3.1E-13 3.1E-13 3.1E-13 3.1E-13 1.3E-10 9.9E-11 1.3E-05 5.4E-06 1.2E-06 1.2E-06 1.4E-06 1.4E-06 1.4E-08 8.4E-07 8.4E-07 8.4E-07 8.4E-07	PHYSPROP	2.88-03 3.22-06 2.55-01 2.88-10 4.60-04 1.46-11 1.78-0	PHYSPROP EPI PHYSPROP HYSPROP	2.0E+03 1.5E+02 7.1E+01 1.7E+02 7.1E+01 1.5E+02 5.7E+00 2.6E+02 2.4E+02 2.4E+02 2.4E+02 2.4E+02 2.4E+02 2.4E+02 2.4E+03 2.4E+0	3 CRC89 3 CRC89 2 CRC89 2 CRC89 2 CRC89 4 PHYSPROP 2 PHYSPROP 2 PHYSPROP 2 EPI 4 PHYSPROP 5 EPI 5 EPI 6 EPI 6 EPI 7 EPI 7 EPI 8 EPI 8 EPI 9 EPI 9 EPI 1 EPI	9.0E-01 1.1E+00 1.1E+0	CRC89	5.8E-02 6.7E-06 EPA WATER9  5.2E-02 7.4E-06 EPA WATER9  6.4E-02 9.8E-06 EPA WATER9  6.4E-02 9.8E-06 EPA WATER9  6.8E-02 9.4E-06 EPA WATER9  4.9E-02 9.4E-06 EPA WATER9  4.9E-02 5.8E-06 EPA WATER9  4.9E-02 7.7E-06 EPA WATER9  5.6E-02 5.8E-06 EPA WATER9  5.6E-02 5.7E-06 EPA WATER9  5.8E-02 1.0E-05 EPA WATER9  5.8E-02 1.0E-05 EPA WATER9  5.6E-02 7.8E-06 EPA WATER9  5.6E-02 7.8E-06 EPA WATER9  5.6E-02 7.8E-06 EPA WATER9  5.6E-02 5.9E-06 EPA WATER9  5.6E-02 6.9E-06 EPA WATER9  5.9E-02 8.7E-06 EPA WATER9  5.7E-02 8.4E-06 EPA WATER9  5.7E-02 8.4E-06 EPA WATER9  5.7E-02 8.4E-06 EPA WATER9	1.1E+02 EPI 1.1E+02 EPI 1.1E+02 EPI 2.3E+02 EPI 1.0E+01 EPI 1.2E+02 EPI 1.2E+02 EPI 1.2E+02 EPI 1.2E+02 EPI 1.2E+01 EPI 1.1E+01 EPI 2.1E+01 EPI 2.1E+	1.4E-00 PHYSPROP 1.9E-00 PHYSPROP 4.6E-00 PHYSPROP 4.7E-01 PHYSPROP 4.7E-01 PHYSPROP 3.5E-01 PHYSPROP 3.6E-01 PHYSPROP 4.8E-01 PHYSPROP 3.1E-00 PHYSPROP 4.8E-01 PHYSPROP 4.8E-0	1.55-03 PHYSPROP 7.38-02 PHYSPROP 2.18-03 PHYSPROP 2.18-03 PHYSPROP 2.18-02 PHYSPROP 2.18-02 PHYSPROP 2.18-02 PHYSPROP 1.18-03 PHYSPROP 1.38-03 PHYSPROP 1.38-04 PHYSPROP 1.38-04 PHYSPROP 1.18-05 PHYSPROP 1.18-05 PHYSPROP 1.18-05 PHYSPROP 1.18-05 PHYSPROP 1.18-05 PHYSPROP 1.18-05 PHYSPROP 1.18-06 PHYSPROP 1.18-0	3.7-03 3.5-01 8.3-01 1.0-03 RAGSE 3.3-03 2.8-01 6.6-01 1.0-03 RAGSE 5.9-04 2.2-01 5.6-01 2.0-04 RAGSE 1.2-03 5.6-01 2.0-04 RAGSE 1.2-03 5.6-01 2.0-04 RAGSE 1.2-03 2.3-01 5.6-01 2.0-04 RAGSE 1.2-03 2.3-01 5.6-01 1.0-03 RAGSE 2.6-03 1.9-01 4.6-01 1.0-03 RAGSE 2.6-03 1.9-01 4.5-00 5.4-03 EPI 2.3-02 5.1-01 1.2-04 5.4-03 EPI 2.3-02 5.1-01 1.2-04 0.5-03 EPI 2.3-02 5.1-01 1.2-04 0.3-03 EPI 2.3-02 5.1-01 1.2-04 0.3-03 EPI 2.1-04 2.3-00 5.4-03 5.5-05 EPI 2.1-04 2.3-00 5.4-03 5.5-05 EPI 2.1-04 2.3-00 5.4-03 5.5-05 EPI 2.1-04 2.3-00 5.7-01 1.1-04 EPI 2.1-04 4.0-01 9.7-01 1.1-04 EPI 2.1-04 5.6-01 1.1-04 0.9-04 EPI 1.5-03 4.0-01 9.5-01 4.0-04 EPI 1.5-03 4.0-01 9.5-01 4.0-04 EPI 1.5-03 4.0-01 9.5-01 4.0-04 EPI 1.0-02 5.6-01 1.4-04 0.3-03 EPI 1.0-04 5.9-01 1.4-04 0.3-03 EPI 1.0-04 5.9-04 EPI 1.0-04 5.0-04 1.1-04 EPI 1.0-04 5.0-04 1.1-04 EPI 1.0-04 5.0-04 EPI 1.0-04 5.0-0
Nickel Refiner Dust Nickel Soluble Salts Nitrate + Nitrite (as N) Nitrite Nitrate + Nitrite (as N) Nitrite Nitroselline, 2- Nitrosalline, 2- Nitrosalline, 4- Nitrosalline, 8- Nitrosallin	12054-87 T 1313-99-1 MA 7440-97-1 7400-97-1 74	9.38+01 OTHER 7.58+01 EPI 7.58+01 EPI 9.47+02 CRC89 1.98+02 CRC89 1.98+02 EPI 1.48+02 EPI	2.4E-06 5.2E-08 9.8E-04 1.3E-21 5.4E-11 1.3E-11 3.5E-06 1.8E-14 1.2E-03 4.9E-03 5.4E-09 4.1E-09 1.5E-04 7.4E-05 5.0E-05 5.0E-05 3.5E-06 3.5E-0	5.9E-08 1.3E-09 2.4E-05 3.3E-13 3.1E-13 3.1E-13 3.1E-13 3.1E-13 1.3E-15 1.2E-04 1.3E-05 5.4E-06 1.2E-06 1.2E-06 1.4E-06 1.4E-06 1.4E-06 4.9E-07 4.9E-0	PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP EPI PHYSPROP	2.88-03 3.22-06 2.55-01 2.88-10 4.60-04 1.46-11 1.78-0	PHYSPROP EPI PHYSPROP EPI PHYSPROP EPI EPI EPI EPI	7.1E+01 1.5E+02 7.1E+02 7.1E+02 7.1E+02 7.1E+02 7.1E+01 1.5E+02 2.6E+02 2.4E+02 1.4E+01 1.2E+02 2.8E+01 0.3E+02 0.7E+01 1.2E+02 2.8E+01 0.7E+0	3 CRC89 3 CRC89 2 CRC89 2 CRC89 2 CRC89 2 PHYSPROP 2 PHYSPROP 2 PHYSPROP 2 PHYSPROP 2 EPI 1 PHYSPROP 2 EPI 2 PHYSPROP 1 EPI 4 EPI 5 EPI 6 EPI 6 EPI 7 EPI 7 EPI 8 EPI 9 EPI 9 EPI 9 EPI 9 EPI 9 EPI 9 EPI 1 PHYSPROP	9.0E-01 1.1E+00 1.1E+0	CRC89	5.8E-02 6.7E-06 EPA WATER9  5.2E-02 7.4E-06 EPA WATER9  6.4E-02 9.8E-06 EPA WATER9  6.8E-02 9.4E-06 EPA WATER9  3.6E-02 4.2E-06 EPA WATER9  5.6E-02 6.5E-06 EPA WATER9  5.6E-02 6.5E-06 EPA WATER9  1.0E-01 1.4E-05 EPA WATER9  1.0E-02 EPA WA	1.1E+02 EPI 1.1E+02 EPI 1.1E+02 EPI 2.3E+02 EPI 1.0E+01 EPI 1.2E+02 EPI 1.2E+02 EPI 1.2E+02 EPI 1.2E+02 EPI 1.1E+01 EPI 1.1E+01 EPI 2.1E+01 EPI 3.1E+02 EPI 3.1E+	1.4E-00 PHYSPROP 1.9E-00 PHYSPROP 4.6E-00 PHYSPROP 4.7E-01 PHYSPROP 4.7E-01 PHYSPROP 1.6E-00 PHYSPROP 3.5E-01 PHYSPROP 3.5E-01 PHYSPROP 3.5E-01 PHYSPROP 3.5E-01 PHYSPROP 3.5E-01 PHYSPROP 3.5E-01 PHYSPROP 3.6E-01 PHYSPROP 3.6E-01 PHYSPROP 4.8E-01 PHYSPROP 3.1E-00 PHYSPROP 4.8E-01 PHYSPROP 4.8E-0	1.55-03 PHYSPROP 7.33-02 PHYSPROP 7.33-02 PHYSPROP 2.13-03 PHYSPROP 8.05-01 PHYSPROP 8.05-01 PHYSPROP 1.45-03 PHYSPROP 1.45-03 PHYSPROP 1.45-04 PHYSPROP 1.35-04 PHYSPROP 1.35-04 PHYSPROP 1.35-05 PHYSPROP 1.35-05 PHYSPROP 1.35-06 PHYSPROP 1.35-0	3.76-03 3.56-01 8.36-01 1.06-03 RAGSE 3.36-03 2.86-01 6.66-01 1.06-03 RAGSE 5.96-04 2.26-01 5.66-01 2.06-04 RAGSE 1.26-03 2.36
Nickel Refiner Dust Nickel Soluble Salts Nickel Soluble Salts Nickel Soluble Salts Nickel Soluble Salts Nickel Subsulfide Nickel Concere Nitrate + Nitrite (as N) Nitrate Nitroselline, 2 Nitroaniline, 2 Nitroaniline, 2 Nitroaniline, 4 Nitrobenene Nitrocellulose Nitrofuration Nitrofurazone Nitroptyperin Nitroguandine Nitroptyperin Nitroguandine Nitropropane, 2 Nitroso-N-ethylurea, N- Nitroso-di-N-butylurea, N- Nitroso-di-N-butylurea, N- Nitroso-di-N-butylamine, N- Nitroso-di-	12054-48-7 1313-99-1 NA 744035-72- 1271-28-9 14797-55-8 NA 14797-65-0 88-74-4 100-01-6 98-95-3 9004-70-0 67-20-9 58-70 55-68-7 55-68-7 75-52-5 79-46-9 755-73-9 684-93-5 224-16-3 224-16-3 224-16-3 225-56-9 9-88-7 224-16-3 225-56-9 9-88-7 224-16-3 225-56-52-9 9-88-7 224-16-3 225-56-52-9 224-16-3 225-56-52-9 23-116-54-7 23-25-56-7 23-25-9 24-116-54-7 24-116-54-7 25-9 25-9 25-9 25-9 25-9 25-9 25-9 25-9	9.38+01 OTHER 7.58+01 PHYSPROP 2.48+02 CRC89 1.98+02 CRC89 1.98+02 CRC89 1.98+02 PHYSPROP 1.48+02 PHYSPROP 1.28+02 PHYSPROP 1.28+02 PHYSPROP 1.28+02 PHYSPROP 1.28+02 PHYSPROP 1.28+02 PHYSPROP 1.28+02 PHYSPROP 1.08+02 PHYSPROP 1.38+02 PHYSPROP 1	2.4E-06 5.2E-08 9.8E-04 1.3E-21 1.3E-11 1.3E-11 1.3E-11 1.2E-03 4.9E-03 5.4E-09 4.1E-09 4.1E-09 5.4E-04 7.4E-05 5.0E-05 5.0E-05 3.9E-04 1.5E-04 7.4E-05 3.9E-04 1.4E-03 3.1E-04 1.4E-02 1.4E-03 3.1E-04 1.4E-03 3.1E-04 1.4E-03 3.1E-04	5.9E-08 1.3E-09 2.4E-05 3.3E-12 3.1E-13 3.1E-13 3.1E-13 3.1E-13 1.2E-04 1.2E-04 1.2E-04 1.3E-05 1.2E-06 1.4E-0	PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP EPI PHYSPROP	2.88-03 3.22-06 2.58-01 1.48-17 4.38-06 1.48-11 1.78-01 1.78-01 1.78-01 1.78-01 1.78-02 2.98-0	PHYSPROP EPI PHYSPROP EPI EPI PHYSPROP EPI EPI PHYSPROP EPI EPI PHYSPROP EPI EPI PHYSPROP	7.1E+01 1.5E+02 7.1E+02 7.1E+02 7.1E+02 7.1E+02 7.1E+01 1.5E+02 2.6E+02 2.4E+02 1.4E+01 1.2E+02 2.8E+01 1.2E+02 2.8E+01 1.2E+02 2.8E+01 1.2E+02 2.8E+01 3.1E+02 3.1E+0	CRC89  CRC89  CRC89  CRC89  CRC89  PHYSPROP	9.0E-01 1.4E+00 1.2E+00 1.6E+00 1.2E+00 1.6E+00 1.1E+00 9.8E-01 9.4E-01 1.0E+00 9.4E-01 1.1E+00 1.1E+00 1.2E+00 1.2E+00 1.2E+00 1.2E+00	CRC89	5.8E-02 6.7E-06 EPA WATER9  5.2E-02 7.4E-06 EPA WATER9  6.4E-02 9.8E-06 EPA WATER9  6.4E-02 9.4E-06 EPA WATER9  6.4E-02 9.4E-06 EPA WATER9  4.9E-02 5.8E-06 EPA WATER9  5.6E-02 6.5E-06 EPA WATER9  5.6E-02 6.5E-06 EPA WATER9  1.0E-01 1.4E-05 EPA WATER9  1.0E-02 1.0E-05 EPA WATER9  1.0E-02 9.3E-06 EPA WATER9  1.0E-02 8.7E-06 EPA WATER9  1.	1.1E+02 EPI 1.1E+02 EPI 1.1E+02 EPI 1.1E+02 EPI 1.2E+02 EPI 1.2E+02 EPI 1.2E+02 EPI 1.2E+01 EPI 1.2E+02 EPI 1.2E+03 EPI 1.2E+0	1.4E-00 PHYSPROP 1.9E-00 PHYSPROP 4.7E-01 PHYSPROP 4.7E-01 PHYSPROP 4.7E-01 PHYSPROP 1.6E-00 PHYSPROP 3.5E-01 PHYSPROP 3.5E-01 PHYSPROP 3.5E-01 PHYSPROP 3.5E-01 PHYSPROP 3.5E-01 PHYSPROP 3.6E-01 PHYSPROP 3.6E-01 PHYSPROP 1.4E-00 PHYSPROP 1.4E-00 PHYSPROP 3.6E-01 PHYSPROP	1.55-03 PHYSPROP 7.35-02 PHYSPROP 2.15-03 PHYSPROP 2.15-03 PHYSPROP 2.15-03 PHYSPROP 2.15-03 PHYSPROP 2.15-03 PHYSPROP 1.15-04 PHYSPROP 1.35-04 PHYSPROP 1.35-04 PHYSPROP 1.35-04 PHYSPROP 1.05-06 PHYSPROP 1.05-0	3.8-01   3.8-01   1.06-03   3.65E   3.8-01   2.0E-04   3.65E   3.8-01   2.0E-05   3.0E-05
Nickel Refiner Dust Nickel Soluble Salts Nickel Soluble Salts Nickel Soluble Salts Nickel Soluble Salts Nickel Soluble Nickel Soluble Nickel Soluble Nickel Soluble Nickel Soluble Nickel Soluble Nitrote Nitr	12054-48-7 1313-99-1 NA 744035-72-1 1312-99-1 14797-55-8 NA 14797-65-0 88-74-4 100-01-6 98-95-3 9904-70-6 99-97-3 904-70-7 55-63-0 59-72-1 59-93-1 50-75-6 59-89-2 100-75-4 90-55-2 99-99-1 91-91-81-81-81-81-81-81-81-81-81-81-81-81-81	9.38+01 OTHER 7.58+01 EPI 7.58+01 EPI 9.47-61 EPI 1.48+02 CKC89 1.98+02 CKC89 1.98+02 EPI 1.48+02 EPI	2.4E-06 5.2E-08 9.8E-04 1.3E-21 5.4E-11 1.3E-11 1.3E-11 1.3E-11 1.3E-14 1.2E-03 4.9E-03 4.9E-03 4.9E-03 5.4E-09 4.1E-09 2.0E-10 1.5E-04 7.4E-05 5.0E-05 5.9E-05 1.0E-06 3.5E-06 5.1E-04 2.3E-04 1.4E-02 1.4E-03 5.4E-0	5.9E-08 1.3E-09 2.4E-05 3.1E-13 3.1E-13 3.1E-13 8.7E-08 4.5E-16 1.2E-04 1.3E-05 5.4E-04 1.3E-06 1.2E-06 1.2E-06 1.2E-06 1.2E-06 1.2E-06 1.2E-06 1.2E-06 1.2E-06 1.3E-05 3.6E-06 3.6E-0	PHYSPROP	2.88-03 3.22-06 2.58-01 1.46-17 2.88-10 4.06-04 1.78-01 1.78-0	PHYSPROP EPI PHYSPROP EPI PHYSPROP	2.0E+03 1.5E+03 1.7E+01 1.7E+02 1.7E+02 1.7E+02 1.7E+02 2.6E+02 2.6E+02 2.6E+02 2.6E+02 2.9E+01 1.2E+03 2.2E+02 2.9E+01 1.2E+03 2.3E+00 3.9E+001 1.6E+01 3.9E+001 3.1E+00 6.8E+000 3.1E+00 6.8E+00 5.2E+01 5.4E+01 5.4E+01 5.4E+01 5.4E+02 2.0E+02 2.9E+02 2.9E+02 2.0E+02 2.9E+02 2.0E+02 2.9E+02 2.0E+02 2.9E+02 2.0E+02 2.9E+02 2.0E+02 2.9E+02 2.0E+02 2.9E+02 2.9	3 CRC89 3 CRC89 2 CRC89 2 CRC89 2 CRC89 2 CRC89 2 PHYSPROP 2 PHYSPROP 2 PHYSPROP 1 PHYSPROP 2 PHYSPROP 3 PHYSPROP 4 EPI 4 EPI 5 EPI 6 EPI 6 EPI 7 EPI 7 EPI 8 EPI 8 EPI 9 EPI 9 EPI 9 EPI 9 EPI 9 EPI 9 EPI 1 PHYSPROP 1 PHYSPROP 2 PHYSPROP 3 CRC89	9.0E-01 1.4E+00 1.2E+00 1.6E+00 1.2E+00 1.6E+00 1.1E+00 9.8E-01 9.4E-01 1.0E+00 9.4E-01 1.1E+00 1.1E+00 1.2E+00 1.2E+00 1.2E+00 1.2E+00	CRC89	5.8E-02 6.7E-06 EPA WATER9  5.2E-02 7.4E-06 EPA WATER9  6.4E-02 9.8E-06 EPA WATER9  6.8E-02 9.4E-06 EPA WATER9  6.8E-02 10E-05 EPA WATER9  6.8E-02 10E-05 EPA WATER9  6.8E-02 10E-05 EPA WATER9  7.8E-02 9.3E-06 EPA WATER9  7.8E-	1.1E+02 EPI 1.1E+02 EPI 1.1E+02 EPI 2.3E+02 EPI 1.0E+01 EPI 1.2E+02 EPI 3.5E+02 EPI 1.0E+01 EPI 1.0E+01 EPI 1.0E+01 EPI 2.1E+01 EPI 3.1E+02 EPI 3.1E+02 EPI 3.1E+02 EPI 3.1E+02 EPI 3.1E+02 EPI 3.1E+03 EPI 3.1E+	1.4E-00 PHYSPROP 1-9E-00 PHYSPROP 4.6E-00 PHYSPROP 4.7E-01 PHYSPROP 4.7E-01 PHYSPROP 5.7E-01 PHYSPROP 5.7E-01 PHYSPROP 5.7E-01 PHYSPROP 5.7E-01 PHYSPROP 5.7E-01 PHYSPROP 5.7E-01 PHYSPROP 6.7E-01 PHYSPROP 6.7E-0	1.5E-03 PHYSROP 7.3E-02 PHYSROP 1.0E-06 PHYSROP 2.1E-02 PHYSROP 2.1E-02 PHYSROP 1.1E-04 PHYSROP 1.1E-04 PHYSROP 1.3E-04 PHYSROP 1.3E-04 PHYSROP 1.3E-04 PHYSROP 1.3E-05 PHYSROP 1.3E-06 PHYSROP 1.0E-06 PHYSROP	3.8-01   3.8-01   1.06-03   8.655
Nickel Refiner Dust Nickel Soluble Salts Nickel Soluble Salts Nickel Soluble Salts Nickel Soluble Salts Nickel Subsulfide Nickel Concere Nitrate + Nitrite (as N) Nitrate Nitroselline, 2 Nitroaniline, 2 Nitroaniline, 2 Nitroaniline, 4 Nitrobenene Nitrocellulose Nitrofuration Nitrofurazone Nitroptyperin Nitroguandine Nitroptyperin Nitroguandine Nitropropane, 2 Nitroso-N-ethylurea, N- Nitroso-di-N-butylurea, N- Nitroso-di-N-butylurea, N- Nitroso-di-N-butylamine, N- Nitroso-di-	12054-48-7 1313-99-1 NA 744035-72- 1271-28-9 14797-55-8 NA 14797-65-0 88-74-4 100-01-6 98-95-3 9004-70-0 67-20-9 58-70 55-68-7 55-68-7 75-52-5 79-46-9 755-73-9 684-93-5 224-16-3 224-16-3 224-16-3 225-56-9 9-88-7 224-16-3 225-56-9 9-88-7 224-16-3 225-56-52-9 9-88-7 224-16-3 225-56-52-9 224-16-3 225-56-52-9 23-116-54-7 23-25-56-7 23-25-9 24-116-54-7 24-116-54-7 25-9 25-9 25-9 25-9 25-9 25-9 25-9 25-9	9.38+01 OTHER 7.58+01 PHYSPROP 2.48+02 CRC89 1.98+02 CRC89 1.98+02 CRC89 1.98+02 PHYSPROP 1.48+02 PHYSPROP 1.28+02 PHYSPROP 1.28+02 PHYSPROP 1.28+02 PHYSPROP 1.28+02 PHYSPROP 1.28+02 PHYSPROP 1.28+02 PHYSPROP 1.08+02 PHYSPROP 1.38+02 PHYSPROP 1	2.4E-06 5.2E-08 9.8E-04 1.3E-21 1.3E-21 1.3E-11 3.5E-06 1.8E-14 1.2E-03 4.9E-03 5.4E-09 4.1E-09 4.1E-09 5.4E-09 1.5E-04 7.4E-05 5.9E-05 1.0E-06 3.5E-06 3.5E-06 3.5E-05 2.2E-02 1.0E-06 3.5E-05 3.5E-05 1.0E-06 3.5E-05 1.0E-06 3.5E-06 1.3E-04 1.4E-02 1.4E-03 3.5E-06 1.5E-08 1.5E-08	5.9E-08 1.3E-09 2.4E-05 3.3E-12 3.1E-13 3.1E-13 3.1E-13 3.1E-13 1.2E-04 1.2E-04 1.2E-04 1.3E-05 1.2E-06 1.4E-0	PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP EPI PHYSPROP	2.8E-03 3.2E-06 2.5E-01 4.8E-06 4.4E-01 1.7E-01 1.7E-01 1.7E-01 2.9E-02 2.9E-02 2.9E-02 2.7E-00 2.7E-0	PHYSPROP EPI PHYSPROP EPI EPI PHYSPROP EPI EPI PHYSPROP EPI EPI PHYSPROP EPI EPI PHYSPROP	2.0E+03 1.5E+03 1.7E+01 1.7E+02 1.7E+02 1.7E+02 1.7E+02 1.7E+02 1.5E+02 1.6E+02 1.4E+02 1.4E+03 1.4E+0	CRC89  CRC89  CRC89  CRC89  CRC89  PHYSPROP	9.0E-01 1.4E+00 1.2E+00 1.6E+00 1.2E+00 1.6E+00 1.1E+00 9.8E-01 9.4E-01 1.0E+00 9.4E-01 1.1E+00 1.1E+00 1.2E+00 1.2E+00 1.2E+00 1.2E+00	CRC89	5.8E-02 6.7E-06 EPA WATER9  5.2E-02 7.4E-06 EPA WATER9  6.4E-02 9.8E-06 EPA WATER9  6.4E-02 9.4E-06 EPA WATER9  6.4E-02 9.4E-06 EPA WATER9  4.9E-02 5.8E-06 EPA WATER9  5.6E-02 6.5E-06 EPA WATER9  5.6E-02 6.5E-06 EPA WATER9  1.0E-01 1.4E-05 EPA WATER9  1.0E-02 1.0E-05 EPA WATER9  1.0E-02 9.3E-06 EPA WATER9  1.0E-02 8.7E-06 EPA WATER9  1.	1.1E+02 EPI 1.1E+02 EPI 1.1E+02 EPI 1.1E+02 EPI 1.2E+02 EPI 1.2E+02 EPI 1.2E+02 EPI 1.2E+01 EPI 1.2E+02 EPI 1.2E+03 EPI 1.2E+0	1.4E-00 PHYSPROP 1.9E-00 PHYSPROP 4.7E-01 PHYSPROP 4.7E-01 PHYSPROP 4.7E-01 PHYSPROP 1.6E-00 PHYSPROP 3.5E-01 PHYSPROP 3.5E-01 PHYSPROP 3.5E-01 PHYSPROP 3.5E-01 PHYSPROP 3.5E-01 PHYSPROP 3.6E-01 PHYSPROP 3.6E-01 PHYSPROP 1.4E-00 PHYSPROP 1.4E-00 PHYSPROP 3.6E-01 PHYSPROP	1.55-0.3 PHYSPROP 7.35-0.2 PHYSPROP 7.35-0.2 PHYSPROP 8.05-0.1 PHYSPROP 8.05-0.1 PHYSPROP 9.115-0.3 PHYSPROP 1.15-0.4 PHYSPROP 1.15-0.4 PHYSPROP 1.35-0.4 PHYSPROP 1.35-0.4 PHYSPROP 1.35-0.4 PHYSPROP 1.35-0.4 PHYSPROP 1.35-0.5 PHYSPROP 1.35-0.5 PHYSPROP 1.35-0.6 PHYSPROP 1.35-0.6 PHYSPROP 1.05-0.6 PH	3.8-01   3.8-01   1.06-03   3.65E   3.8-01   2.0E-04   3.65E   3.8-01   2.0E-05   3.0E-05
Nickel Refinery Dust Nickel Soluble Salts Nickel Soluble Salts Nickel Subsulfide Nickel Conce Nitrate Nitrate Nitrite (as N) Nitrote Nitrote Nitrote (as N) Nitr	12054-48-7 1313-99-1 MA 744035-72- 1271-28-9 1479-75-8 NA 14797-65-0 88-74-4 100-01-6 98-95-3 9004-70-0 67-20-9 58-87 75-58-7 9-46-9 75-88-7 75-58-7 75-65-0 88-7 75-73-9 88-93-3 821-16-47 111-64-7 115-18-5 627-5-9 88-30-6 198-89-2 199-98-1 88-72-2 99-98-1 88-72-2 99-98-1 88-72-2 99-98-1 12734-13-2 12734-13-2 12734-13-2 12734-13-2 12734-13-2	9.35+01 OTHER 7.55+01 EPI 7.55+01 EPI 2.45+02 CRC89 1.95+02 CRC89 1.95+02 CRC89 1.95+02 EPI 1.45+02 EP	2.4E-06 5.2E-08 9.8E-04 1.3E-21 1.3E-21 1.3E-11 3.5E-06 1.8E-14 1.2E-03 4.9E-03 5.4E-09 4.1E-09 4.1E-09 5.4E-09 1.5E-04 7.4E-05 5.9E-05 1.0E-06 3.5E-06 3.5E-06 3.5E-05 2.2E-02 1.0E-06 3.5E-05 3.5E-05 1.0E-06 3.5E-05 1.0E-06 3.5E-06 1.3E-04 1.4E-02 1.4E-03 3.5E-06 1.5E-08 1.5E-08	5.9E-08 1.3E-09 2.4E-03 3.3E-12 3.1E-13 3.1E-13 3.1E-13 3.1E-10 9.9E-11 1.3E-05 4.9E-06 1.8E-06 1.8E-06 1.4E-06 1.4E-06 4.9E-06 1.4E-0	PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP EPI PHYSPROP	2.8E-03 3.8E-04 2.5E-01 1.4E-17 2.8E-07 1.4E-17 1.8E-02 2.9E-02 1.7E-01 1.1E-02 2.7E-00 3.6E-02 2.7E-00 3.6E-02 2.7E-00 3.6E-02 2.7E-00 3.6E-02 2.7E-00 3.6E-02 2.7E-00 3.6E-02 3.6E-0	PHYSPROP EPI PHYSPROP	2.0E+03 1.5E+03 1.7E+01 1.7E+02 1.7E+02 1.7E+02 1.7E+02 1.7E+02 1.7E+02 1.5E+03 1.5E+03 1.5E+03 1.5E+03 1.5E+03 1.6E+03 1.6E+0	CRC89	9.0E-01 1.4E+00 1.2E+00 1.2E+00 1.1E+00	CRC89	5.8E-02 6.7E-06 EPA WATER9  5.2E-02 7.4E-06 EPA WATER9  6.4E-02 9.8E-06 EPA WATER9  6.4E-02 9.8E-06 EPA WATER9  6.8E-02 9.4E-06 EPA WATER9  5.6E-02 6.5E-06 EPA WATER9  5.6E-02 5.8E-06 EPA WATER9  5.6E-02 6.5E-06 EPA WATER9  5.6E-02 1.4E-05 EPA WATER9  1.0E-01 1.4E-05 EPA WATER9  7.8E-02 1.0E-05 EPA WATER9  7.8E-02 8.7E-06 EPA WATER9  7.	1.1E+02 EPI 1.1E+02 EPI 1.1E+02 EPI 1.1E+02 EPI 1.1E+02 EPI 1.2E+02 EPI 1.2E+02 EPI 1.2E+02 EPI 1.2E+02 EPI 1.2E+01 EPI 1.2E+02 EPI 1.2E+01 EPI 1.2E+02 EPI 1.2E+03 EPI 1.2E+0	1.4E-00 PHYSPROP 1.9E-00 PHYSPROP 4.6E-00 PHYSPROP 4.7E-01 PHYSPROP 4.7E-01 PHYSPROP 1.6E-00 PHYSPROP 3.5E-01 PHYSPROP 3.5E-01 PHYSPROP 3.5E-01 PHYSPROP 3.5E-01 PHYSPROP 3.6E-01 PHYSPROP 3.6E-01 PHYSPROP 3.6E-01 PHYSPROP 3.6E-01 PHYSPROP 4.8E-01 PHYSPROP 5.7E-01 PHYSPROP 5.7E-01 PHYSPROP 5.7E-00 PHYSPROP 6.7E-00 PHYSPROP 6.7E-0	1.55-03 PHYSPROP 7.35-02 PHYSPROP 1.05-06 PHYSPROP 2.15-02 PHYSPROP 2.15-02 PHYSPROP 1.15-04 PHYSPROP 1.75-04 PHYSPROP 1.75-05 PHYSPROP 1.75-0	3.8-01   3.8-01   1.06-03   3.655   3.8-03   2.8-01   6.6-01   1.06-03   3.655   5.9-04   2.2-01   5.6-01   2.06-04   7.6-55   7.6-01   2.06-04   7.6-55   7.6-01   2.06-04   7.6-55   7.6-01   2.06-04   7.6-55   7.6-01   2.06-04   7.6-55   7.6-01   7.6-03   7.6-0

Contaminant		Molecular Weight		Vola	tility Parameter	'S		Melti	ng Point	De	nsity	Diffusivity in Air and Water	Soil Partition Coefficients	Water Partition	Water Solubility	Tapwater Dermal Parameters
Analyte	CAS No.	MW MW Ref	H` (unitless) (a	HLC atm-m³/mole)	H` and HI C Ref	VP	VP Ref	MP	MP Ref	Density (g/cm <sup>3</sup> )	Density Ref	Dia Diw (cm <sup>2</sup> /s) (cm <sup>2</sup> /s) D <sub>ia</sub> and D <sub>iw</sub> Ref	K <sub>d</sub>	log K <sub>ow</sub> (unitless) log K <sub>ow</sub> Ref	S (mg/L) S Ref	B T <sub>event</sub> t* K <sub>p</sub> (unitless) (hr/event) (hr) (cm/hr) KPRFF
Oxyfluorfen	42874-03-3	3.6E+02 PHYSPROP	(dinicicas) (c	8.2E-07	EPI EPI		PHYSPROP	1011	PHYSPROP	1.4E+00	CRC89	2.1E-02 5.3E-06 EPA WATER9	4.0E+04 EPI	4.7E+00 PHYSPROP	1.2E-01 PHYSPROP	1.5E-01 1.1E+01 2.7E+01 2.0E-02 EPI
Paclobutrazol	76738-62-0	2.9E+02 PHYSPROP		8.3E-11	EPI		PHYSPROP		PHYSPROP	1.2E+00	CRC89	2.2E-02 5.7E-06 EPA WATER9	9.2E+02 EPI	3.2E+00 PHYSPROP	2.6E+01 PHYSPROP	3.1E-02 4.6E+00 1.1E+01 4.7E-03 EPI
Paraquat Dichloride Parathion	1910-42-5 56-38-2	2.6E+02 PHYSPROP 2.9E+02 PHYSPROP	1.3E-11 1.2E-05	3.2E-13 3.0E-07	PHYSPROP	7.5E-08 6.7E-06	PHYSPROP	3.0E+02	EPI PHYSPROP	1.3E+00	CRC89	4.7E-02 5.5E-06 EPA WATER9 2.3E-02 5.8E-06 EPA WATER9	6.8E+03 EPI 2.4E+03 EPI	-4.5E+00 PHYSPROP 3.8E+00 PHYSPROP	6.2E+05 PHYSPROP 1.1E+01 PHYSPROP	3.6E-07 2.9E+00 7.0E+00 5.8E-08 EPI 8.4E-02 4.5E+00 1.1E+01 1.3E-02 EPI
Pebulate	1114-71-2	2.0E+02 PHYSPROP	9.7E-03	2.4E-04	EPI	8.9E-02	PHYSPROP	7.1E+01	EPI	9.5E-01	CRC89	2.4E-02 6.1E-06 EPA WATER9	3.0E+02 EPI	3.8E+00 PHYSPROP	1.0E+02 PHYSPROP	2.2E-01 1.4E+00 3.5E+00 4.0E-02 EPI
Pendimethalin	40487-42-1	2.8E+02 PHYSPROP	3.5E-05	8.6E-07	EPI		PHYSPROP	5.6E+01	PHYSPROP	1.2E+00	CRC89	2.3E-02 5.7E-06 EPA WATER9	5.6E+03 EPI	5.2E+00 PHYSPROP		7.4E-01 4.0E+00 1.5E+01 1.2E-01 EPI
Pentabromodiphenyl Ether Pentabromodiphenyl ether, 2,2',4,4',5- (BDE-99)	32534-81-9 60348-60-9	5.6E+02 PHYSPROP 5.6E+02 PHYSPROP	4.4E-03 4.8E-05	1.1E-04 1.2E-06	PHYSPROP PHYSPROP	3.1E-08 3.1E-08	EPI EPI	-5.0E+00 -5.0E+00	PHYSPROP EPI	2.3E+00	IRIS	2.8E-02 3.2E-06 EPA WATER9 2.2E-02 5.6E-06 EPA WATER9	2.2E+04 EPI 2.2E+04 EPI	6.8E+00 PHYSPROP 7.7E+00 PHYSPROP	2.4E-03 PHYSPROP 7.9E-05 PHYSPROP	3.4E-01 1.5E+02 3.7E+02 3.7E-02 EPI 3.4E-01 1.5E+02 3.7E+02 3.7E-02 EPI
Pentachlorobenzene	608-93-5	2.5E+02 PHYSPROP	2.9E-02	7.0E-04	PHYSPROP	1.0E-03	EPI		PHYSPROP	1.8E+00	CRC89	2.9E-02 7.9E-06 EPA WATER9	3.7E+03 EPI	5.2E+00 PHYSPROP		1.0E+00 2.7E+00 1.0E+01 1.7E-01 EPI
Pentachloroethane	76-01-7	2.0E+02 PHYSPROP	7.9E-02	1.9E-03	EPI		PHYSPROP		PHYSPROP	1.7E+00	CRC89	3.2E-02 8.6E-06 EPA WATER9	1.4E+02 EPI	3.2E+00 PHYSPROP		8.6E-02 1.4E+00 3.4E+00 1.6E-02 EPI
Pentachloronitrobenzene Pentachlorophenol	82-68-8 87-86-5	3.0E+02 PHYSPROP 2.7E+02 PHYSPROP	1.8E-03 1.0E-06	4.4E-05 2.5E-08	EPI PHYSPROP	5.0E-05 1.1E-04	PHYSPROP PHYSPROP		PHYSPROP	1.7E+00 2.0E+00	CRC89 CRC89	2.6E-02 6.9E-06 EPA WATER9 3.0E-02 8.0E-06 EPA WATER9	6.0E+03 EPI 5.0E+03 EPI	4.6E+00 PHYSPROP 5.1E+00 PHYSPROP	4.4E-01 PHYSPROP	2.8E-01 4.7E+00 1.1E+01 4.2E-02 EPI 8.0E-01 3.3E+00 1.3E+01 1.3E-01 EPI
Pentaerythritol tetranitrate (PETN)	78-11-5	3.2E+02 PHYSPROP	5.4E-08	1.3E-09	PHYSPROP	5.5E-09	EPI		PHYSPROP	1.8E+00	CRC89	2.6E-02 6.8E-06 EPA WATER9	6.5E+02 EPI	2.4E+00 PHYSPROP	4.3E+01 PHYSPROP	6.9E-03 6.2E+00 1.5E+01 1.0E-03 EPI
Pentane, n-	109-66-0	7.2E+01 PHYSPROP	5.1E+01	1.3E+00	PHYSPROP	5.1E+02	PHYSPROP	-1.3E+02	PHYSPROP	6.3E-01	CRC89	8.2E-02 8.8E-06 EPA WATER9	7.2E+01 EPI	3.4E+00 PHYSPROP	3.8E+01 PHYSPROP	3.6E-01 2.7E-01 6.4E-01 1.1E-01 EPI
Perchlorates ~Ammonium Perchlorate	7790-98-9	1.2E+02 PHYSPROP								2.0F+00	CRC89				2.5E+05 PHYSPROP	4.2F-03 4.8F-01 1.1F+00 1.0F-03 RAGSE
~Lithium Perchlorate	7791-03-9	1.1E+02 CRC89						2.4E+02	CRC89	2.4E+00	CRC89				5.9E+05 CRC89	4.0E-03 4.1E-01 1.0E+00 1.0E-03 RAGSE
~Perchlorate and Perchlorate Salts	14797-73-0	1.2E+02 CRC89													2.5E+05 CRC89	4.2E-03 4.8E-01 1.1E+00 1.0E-03 RAGSE
~Potassium Perchlorate ~Sodium Perchlorate	7778-74-7 7601-89-0	1.4E+02 PHYSPROP 1.2F+02 PHYSPROP						5.3E+02 4.8F+02		2.5E+00 2.5E+00	CRC89				1.5E+04 PHYSPROP 2.1E+06 PHYSPROP	9.1E-03 6.3E-01 1.5E+00 2.0E-03 RAGSE 4.3E-03 5.1E-01 1.2E+00 1.0E-03 RAGSE
Perfluorobutane Sulfonate	375-73-5	3.0E+02 PHYSPROP	5.9E-04	1.4E-05	PHYSPROP	5.2E-02	PHYSPROP	3.7E+01			LookChem	2.7E-02 7.2E-06 EPA WATER9	1.8E+02 EPI	2.4E+00 PHYSPROP		8.7E-03 5.0E+00 1.2E+01 1.3E-03 EPI
Permethrin	52645-53-1	3.9E+02 PHYSPROP	7.7E-05	1.9E-06	EPI	2.2E-08	PHYSPROP		PHYSPROP	1.2E+00	CRC89	1.9E-02 4.8E-06 EPA WATER9	1.2E+05 EPI	6.5E+00 PHYSPROP	6.0E-03 PHYSPROP	1.6E+00 1.6E+01 6.5E+01 2.1E-01 EPI
Phenacetin Phenmedioham	62-44-2 13684-63-4	1.8E+02 PHYSPROP 3.0E+02 PHYSPROP	8.7E-09 3.4F-11	2.1E-10 8.4F-13	EPI FPI		PHYSPROP		PHYSPROP			6.0E-02 7.0E-06 EPA WATER9 4.2E-02 5.0E-06 EPA WATER9	4.1E+01 EPI 2.6E+03 EPI	1.6E+00 PHYSPROP 3.6E+00 PHYSPROP		8.9E-03 1.1E+00 2.5E+00 1.7E-03 EPI 5.2E-02 5.1E+00 1.2E+01 7.9E-03 EPI
Phenol	13684-63-4	9.4E+01 PHYSPROP	3.4E-11 1.4E-05	8.4E-13 3.3E-07	PHYSPROP	3.5E-01	PHYSPROP	4.1F+01	PHYSPROP	1.1E+00	CRC89	8.3E-02 1.0E-05 EPA WATER9	2.6E+03 EPI 1.9E+02 EPI	1.5E+00 PHYSPROP	8.3E+04 PHYSPROP	1.6E-02 3.5E-01 8.5E-01 4.3E-03 EPI
Phenothiazine	92-84-2	2.0E+02 PHYSPROP	1.1E-06	2.8E-08	PHYSPROP		PHYSPROP		PHYSPROP		PubChem	2.9E-02 7.5E-06 EPA WATER9	1.5E+03 EPI	4.2E+00 PHYSPROP		3.7E-01 1.4E+00 3.3E+00 6.8E-02 EPI
Phenylenediamine, m-	108-45-2	1.1E+02 PHYSPROP	5.1E-08	1.3E-09	EPI	2.1E-03	EPI		PHYSPROP	1.0E+00	CRC89	7.2E-02 9.2E-06 EPA WATER9	3.4E+01 EPI	-3.3E-01 PHYSPROP		9.4E-04 4.2E-01 1.0E+00 2.3E-04 EPI
Phenylenediamine, o- Phenylenediamine, p-	95-54-5 106-50-3	1.1E+02 PHYSPROP 1.1E+02 PHYSPROP	2.9E-07 2.8E-08	7.2E-09 6.7E-10	EPI PHYSPROP	2.1E-03 5.0E-03	EPI PHYSPROP		PHYSPROP			8.4E-02 9.8E-06 EPA WATER9 8.4E-02 9.8E-06 EPA WATER9	3.5E+01 EPI 3.4E+01 EPI	1.5E-01 PHYSPROP -3.0E-01 PHYSPROP		1.9E-03 4.2E-01 1.0E+00 4.9E-04 EPI 9.8E-04 4.2E-01 1.0E+00 2.5E-04 EPI
Phenylphenol, 2-	90-43-7	1.7E+02 PHYSPROP	4.3E-05	1.1E-06	EPI	2.0E-03	EPI		PHYSPROP	1.2E+00	CRC89	4.2E-02 7.8E-06 EPA WATER9	6.7E+03 EPI	3.1E+00 PHYSPROP		9.8E-02 9.4E-01 2.3E+00 2.0E-02 EPI
Phorate	298-02-2	2.6E+02 PHYSPROP	1.8E-04	4.4E-06	EPI		PHYSPROP	-1.5E+01		1.2E+00	CRC89	2.3E-02 5.9E-06 EPA WATER9	4.6E+02 EPI	3.6E+00 PHYSPROP	5.0E+01 PHYSPROP	7.8E-02 3.0E+00 7.2E+00 1.3E-02 EPI
Phosgene Phosmet	75-44-5	9.9E+01 PHYSPROP	6.8E-01 3.4E-07	1.7E-02 8.4E-09	PHYSPROP EPI		PHYSPROP PHYSPROP		PHYSPROP	1.4E+00	CRC89	8.9E-02 1.2E-05 EPA WATER9	1.0E+00 EPI 1.0E+01 EPI	-7.1E-01 PHYSPROP 2.8E+00 PHYSPROP		5.6E-04 3.8E-01 9.0E-01 1.5E-04 EPI 1.3E-02 6.3E+00 1.5E+01 1.8E-03 EPI
Phosphates, Inorganic	732-11-6	3.2E+02 PHYSPROP	3.4E-07	8.4E-09	EPI	4.9E-07	PHYSPRUP	7.2E+U1	PHYSPRUP			4.1E-02 4.8E-06 EPA WATER9	1.0E+01 EPI	2.8E+00 PHYSPROP	2.4E+01 PHYSPROP	1.3E-02 6.3E+00 1.5E+01 1.8E-03 EPI
~Aluminum metaphosphate	13776-88-0	2.6E+02 CRC89								2.8E+00	CRC89					6.2E-03 3.2E+00 7.6E+00 1.0E-03 RAGSE
~Ammonium polyphosphate	68333-79-9															1.0E-03 RAGSE
~Calcium pyrophosphate ~Diammonium phosphate	7790-76-3 7783-28-0	2.5E+02 CRC89 1.3E+02 EPI						1.2E+03	CRC89	3.1E+00	CRC89					6.1E-03 2.8E+00 6.7E+00 1.0E-03 RAGSE 4.4E-03 5.8E-01 1.4E+00 1.0E-03 RAGSE
~Dicalcium phosphate	7757-93-9	1.4E+02 EPI														4.5E-03 6.1E-01 1.5E+00 1.0E-03 RAGSE
~Dimagnesium phosphate	7782-75-4	1.7E+02 CRC89								2.1E+00	CRC89					5.1E-03 1.0E+00 2.4E+00 1.0E-03 RAGSE
~Dipotassium phosphate ~Disodium phosphate	7758-11-4 7558-79-4	1.7E+02 EPI 1.4E+02 EPI														5.1E-03 9.9E-01 2.4E+00 1.0E-03 RAGSE 4.6E-03 6.6E-01 1.6E+00 1.0E-03 RAGSE
~Monoaluminum phosphate	13530-50-2	3.2E+02 CRC89														6.9E-03 6.3E+00 1.5E+01 1.0E-03 RAGSE
~Monoammonium phosphate	7722-76-1	1.2E+02 EPI														4.1E-03 4.6E-01 1.1E+00 1.0E-03 RAGSE
~Monocalcium phosphate	7758-23-8	2.3E+02 EPI														5.9E-03 2.2E+00 5.2E+00 1.0E-03 RAGSE
~Monomagnesium phosphate ~Monopotassium phosphate	7757-86-0 7778-77-0	1.2E+02 CRC89 1.4E+02 EPI														4.2E-03 5.0E-01 1.2E+00 1.0E-03 RAGSE 4.5E-03 6.1E-01 1.5E+00 1.0E-03 RAGSE
~Monosodium phosphate	7558-80-7	1.2E+02 PHYSPROP						6.0E+01	PHYSPROP	•					4.9E+05 PHYSPROP	4.2E-03 4.9E-01 1.2E+00 1.0E-03 RAGSE
~Polyphosphoric acid	8017-16-1	2.6E+02 EPI														6.2E-03 2.9E+00 7.0E+00 1.0E-03 RAGSE
~Potassium tripolyphosphate ~Sodium acid pyrophosphate	13845-36-8 7758-16-9	4.5E+02 OTHER 2.2E+02 EPI														8.1E-03 3.4E+01 8.2E+01 1.0E-03 RAGSE 5.7E-03 1.8E+00 4.4E+00 1.0E-03 RAGSE
~Sodium aluminum phosphate (acidic)	7785-88-8	1.4E+02 OTHER														4.6E-03 6.8E-01 1.6E+00 1.0E-03 RAGSE
~Sodium aluminum phosphate (anhydrous)	10279-59-1															1.0E-03 RAGSE
~Sodium aluminum phosphate (tetrahydrate	10305-76-7	9.5E+02 OTHER 6.1E+02 CRC89														1.2E-02 2.2E+04 5.3E+04 1.0E-03 RAGSE 9.5E-03 2.8E+02 6.7E+02 1.0E-03 RAGSE
~Sodium polyphosphate	68915-31-1	3.6E+02 EPI														7.3E-03 1.1E+01 2.6E+01 1.0E-03 RAGSE
~Sodium trimetaphosphate	7785-84-4	3.1E+02 EPI														6.7E-03 5.4E+00 1.3E+01 1.0E-03 RAGSE
~Sodium tripolyphosphate	7758-29-4	3.7E+02 EPI														7.4E-03 1.2E+01 2.9E+01 1.0E-03 RAGSE
~Tetrapotassium phosphate ~Tetrasodium pyrophosphate	7320-34-5 7722-88-5	3.3E+02 PHYSPROP 2.7E+02 PHYSPROP						8.0E+0.1	PHYSPROP						8.1E+04 PHYSPROP	7.0E-03 7.4E+00 1.8E+01 1.0E-03 RAGSE 6.3E-03 3.2E+00 7.8E+00 1.0E-03 RAGSE
~Trialuminum sodium tetra decahydrogenoctaorthophosphate (dihydrate)	15136-87-5	8.9E+02 OTHER														1.1E-02 9.9E+03 2.4E+04 1.0E-03 RAGSE
~Tricalcium phosphate	7758-87-4 7757-87-1	3.1E+02 CRC89							CRC89 CRC89	3.1E+00	CRC89					6.8E-03 5.7E+00 1.4E+01 1.0E-03 RAGSE 6.2E-03 3.1E+00 7.5E+00 1.0E-03 RAGSE
~Trimagnesium phosphate ~Tripotassium phosphate	7757-87-1 7778-53-2	2.6E+02 CRC89 2.1E+02 EPI						1.2E+03	CKC89							5.6E-03
~Trisodium phosphate	7601-54-9	1.6E+02 PHYSPROP							PHYSPROP							4.9E-03 8.7E-01 2.1E+00 1.0E-03 RAGSE
Phosphine Phosphine	7803-51-2	3.4E+01 PHYSPROP	1.0E+00	2.4E-02	PHYSPROP		PHYSPROP	-1.3E+02	PHYSPROP	1.4E+00	CRC89	1.9E-01 2.2E-05 EPA WATER9		-2.7E-01 OTHER		2.2E-03 1.6E-01 3.9E-01 1.0E-03 RAGSE
Phosphoric Acid Phosphorus, White	7664-38-2 7723-14-0	9.8E+01 PHYSPROP 3.4E+01 PHYSPROP	8.6E-02	2.1E-03	ATSDR Profile	3.0E-02 2.5E-02	NIOSH ATSDR Profile	4.2E+01 4.4E+01	PHYSPROP	1.8E+00 1.8E+00	PERRY CRC89	2.2E-01 2.8E-05 EPA WATER9	3.5E+00 BAES	3.1E+00 OTHER	5.5E+06 CRC89 3.3E+00 PHYSPROP	3.8E-03 3.7E-01 8.9E-01 1.0E-03 RAGSE 2.2E-03 1.6E-01 3.9E-01 1.0E-03 RAGSE
Phthalates	7723-14-0	T. C. OZ VIII SPROP	5.02.02	2.12.03	Jon Frome	2.32-02	Jon Frome		Jr KOP	1.02700	C.1.003	LILL OF EIGH WATERS		J.L. O OHIEK	THISTROP	1.00 01 3.50-01 1.00-03 RAGSE
~Bis(2-ethylhexyl)phthalate	117-81-7	3.9E+02 PHYSPROP	1.1E-05	2.7E-07	EPI		PHYSPROP		PHYSPROP	9.8E-01	CRC89	1.7E-02 4.2E-06 EPA WATER9	1.2E+05 EPI	7.6E+00 PHYSPROP		8.6E+00 1.6E+01 7.3E+01 1.1E+00 EPI
~Butylphthalyl Butylglycolate ~Dibutyl Phthalate	85-70-1 84-74-2	3.4E+02 PHYSPROP 2.8E+02 PHYSPROP	8.4E-07 7.4E-05	2.1E-08 1.8E-06	PHYSPROP PHYSPROP	7.1E-06 2.0E-05	PHYSPROP PHYSPROP	-3.5E+01	PHYSPROP	1.1E+00 1.0E+00	LANGE CRC89	2.0E-02 4.9E-06 EPA WATER9 2.1E-02 5.3E-06 EPA WATER9	1.1E+04 EPI 1.2E+03 EPI	4.2E+00 PHYSPROP 4.5E+00 PHYSPROP		8.2E-02 8.0E+00 1.9E+01 1.2E-02 EPI 2.7E-01 3.8E+00 9.1E+00 4.2E-02 EPI
~Diethyl Phthalate	84-66-2	2.2E+02 PHYSPROP		6.1E-07	EPI		PHYSPROP	-4.1E+01	PHYSPROP	1.2E+00	CRC89	2.6E-02 6.7E-06 EPA WATER9	1.0E+02 EPI	2.4E+00 PHYSPROP		2.1E-02 1.8E+00 4.4E+00 3.6E-03 EPI
~Dimethylterephthalate	120-61-6	1.9E+02 PHYSPROP		1.3E-04	EPI		PHYSPROP		PHYSPROP	1.1E+00	CRC89	2.9E-02 6.7E-06 EPA WATER9	3.1E+01 EPI	2.3E+00 PHYSPROP		2.1E-02 1.3E+00 3.1E+00 4.0E-03 EPI
~Octyl Phthalate, di-N- ~Phthalic Acid. P-	117-84-0 100-21-0	3.9E+02 PHYSPROP 1.7E+02 PHYSPROP	1.1E-04 1.6E-11	2.6E-06 3.9E-13	EPI PHYSPROP	1.0E-07 9.2E-06	PHYSPROP	2.5E+01	PHYSPROP	1.5E+00	PERRY	3.6E-02 4.2E-06 EPA WATER9 4.9E-02 9.0E-06 EPA WATER9	1.4E+05 EPI 7.9E+01 EPI	8.1E+00 PHYSPROP 2.0E+00 PHYSPROP		1.8E+01 1.6E+01 7.5E+01 2.4E+00 EPI 1.9E-02 9.0E-01 2.1E+00 3.9E-03 EPI
~Phthalic Acid, P- ~Phthalic Anhydride	100-21-0 85-44-9	1.7E+02 PHYSPROP 1.5E+02 PHYSPROP		3.9E-13 1.6E-08	EPI	9.2E-06 5.2E-04	EPI		PHYSPROP	1.5E+00 1.5E+00	CRC89	5.9E-02 9.8E-06 EPA WATER9	7.9E+01 EPI 1.0E+01 EPI	1.6E+00 PHYSPROP		1.9E-02 9.0E-01 2.1E+00 3.9E-03 EPI 1.2E-02 7.1E-01 1.7E+00 2.7E-03 EPI
Picloram	1918-02-1	2.4E+02 PHYSPROP	2.2E-12	5.3E-14	EPI		PHYSPROP	2.2E+02	PHYSPROP			4.9E-02 5.7E-06 EPA WATER9	3.9E+01 EPI	1.9E+00 PHYSPROP		7.6E-03 2.4E+00 5.7E+00 1.3E-03 EPI
Picramic Acid (2-Amino-4,6-dinitrophenol) Picric Acid (2.4.6-Trinitrophenol)	96-91-3 88-89-1	2.0E+02 PHYSPROP 2.3E+02 PHYSPROP	4.0E-10 7.0E-10	9.8E-12 1.7E-11	PHYSPROP EPI	4.2E-07	PHYSPROP	1.7E+02	PHYSPROP	1.8E+00	PERRY	5.6E-02 6.5E-06 EPA WATER9 3.0E-02 8.2E-06 EPA WATER9	2.3E+02 EPI 2.3E+03 EPI	9.3E-01 PHYSPROP 1.4E+00 PHYSPROP	1.4E+03 PHYSPROP 1.3E+04 PHYSPROP	2.7E-03 1.4E+00 3.3E+00 5.0E-04 EPI 3.6E-03 2.0E+00 4.8E+00 6.2E-04 EPI
Picric Acid (2,4,6-Trinitrophenol) Pirimiphos, Methy	88-89-1 29232-93-7	3.1E+02 PHYSPROP		1.7E-11 7.0E-07	EPI		PHYSPROP		PHYSPROP	1.8E+00 1.2E+00	CRC89	2.2E-02 5.4E-06 EPA WATER9	2.3E+03 EPI 3.7E+02 EPI	4.2E+00 PHYSPROP		1.3E-01 5.4E+00 1.3E+01 1.9E-02 EPI
Polybrominated Biphenyls	59536-65-1															
Polychlorinated Biphenyls (PCBs)	42674.44.5	F. F.F. O.D. DUDGETTO	0.25.02	2.05.04	ED!	4.05.05	DINCODOS	1.0F+02	EPI	4.45.00	TCDD D C'	4.75.02.4.25.06. 504.111	4.8F+04 FPI	5 75.00 DUNGSSSS	4.35.04 DUNCESCO	275.00 4.25.02 5.25.02 2.45.25
~Aroclor 1016 ~Aroclor 1221	12674-11-2	5.5E+02 PHYSPROP 1.9E+02 PHYSPROP		2.0E-04 2.3E-04	EPI PHYSPROP		PHYSPROP PHYSPROP	1.0E+02 3.4E+01	EPI EPI			1.7E-02 4.2E-06 EPA WATER9 3.2E-02 7.2E-06 EPA WATER9	4.8E+04 EPI 8.4E+03 EPI	5.7E+00 PHYSPROP	4.2E-01 PHYSPROP 1.5E+01 PHYSPROP	2.7E+00 1.3E+02 5.3E+02 3.1E-01 EPI 8.9E-01 1.2E+00 4.6E+00 1.7E-01 EPI
~Aroclor 1221 ~Aroclor 1232		1.9E+02 PHYSPROP		7.4E-04			PHYSPROP					3.3E-02 7.5E-06 EPA WATER9		4.4E+00 PHYSPROP	1.5E+00 PHYSPROP	8.9E-01 1.2E+00 4.6E+00 1.7E-01 EPI

Contaminant		Molecular Weight	Vo	latility Paramete	rs	Meltir	ng Point	Der	nsity	Diffusivity in Air and Water	Soil Partition Coefficients	Water Partition	Water Solubility	Tanwater Dermal Parameters
contaminant		Workedian Weight	H, HTC	denicy ruramete		Wicien	8	Density	isicy	Dia Diw	K <sub>d</sub> K <sub>oc</sub>	log K <sub>ow</sub>	S	B T <sub>event</sub> t* K <sub>p</sub>
Analyte	CAS No.	MW Ref	(unitless) (atm-m³/mole	H' and HLC Ref	VP VP Ref	MP	MP Ref	107 - 7	Density Ref	(cm <sup>2</sup> /s) (cm <sup>2</sup> /s) D <sub>ia</sub> and D <sub>iw</sub> Ref	(L/kg) K <sub>d</sub> Ref (L/kg) K <sub>oc</sub> Ref	(unitless) log K <sub>ow</sub> Ref	(mg/L) S Ref	(unitless) (hr/event) (hr) (cm/hr) KPREF
~Aroclor 1242	53469-21-9	2.9E+02 PHYSPROP	1.4E-02 3.4E-04	PHYSPROP	8.6E-05 EPI	1.2E+02	EPI		TSDR Profile	2.4E-02 6.1E-06 EPA WATER9	7.8E+04 EPI	6.3E+00 PHYSPROP	2.8E-01 PHYSPROP	3.6E+00 4.5E+00 1.9E+01 5.5E-01 EPI
~Aroclor 1248 ~Aroclor 1254	12672-29-6 11097-69-1	6.2E+02 PHYSPROP 3.3E+02 PHYSPROP	1.8E-02 4.4E-04 1.2E-02 2.8E-04	PHYSPROP PHYSPROP	4.9E-04 PHYSPROP 7.7E-05 PHYSPROP	1.2E+02 1.3F+02	EPI EPI	1.4E+00	HSDB TSDR Profile	1.6E-02 3.9E-06 EPA WATER9 2.4E-02 6.1E-06 EPA WATER9	7.7E+04 EPI 1.3E+05 EPI	6.2E+00 PHYSPROP 6.5E+00 PHYSPROP	1.0E-01 PHYSPROP 4.3E-02 PHYSPROP	4.5E+00 3.1E+02 1.3E+03 4.8E-01 EPI 5.2E+00 7.1E+00 3.1E+01 7.5E-01 EPI
~Aroclor 1260	11096-82-5	4.0E+02 PHYSPROP	1.4E-02 3.4E-04	PHYSPROP	4.1E-05 PHYSPROP	1.6E+02	EPI		TSDR Profile	2.2E-02 5.6E-06 EPA WATER9	3.5E+05 EPI	7.6E+00 PHYSPROP	1.4E-02 PHYSPROP	7.5E+00 1.7E+01 7.7E+01 9.9E-01 EPI
~Aroclor 5460	11126-42-4	2.9E+02 PHYSPROP	5.1E-03 1.3E-04	PHYSPROP	8.5E-06 PHYSPROP	1.2E+02	EPI	1.6E+00		2.6E-02 6.8E-06 EPA WATER9	8.1E+04 EPI	6.3E+00 PHYSPROP	5.3E-02 PHYSPROP	3.8E+00 4.5E+00 2.0E+01 5.8E-01 EPI
~Heptachlorobiphenyl, 2,3,3',4,4',5,5'- (PCB 189) ~Hexachlorobiphenyl, 2,3',4,4',5,5'- (PCB 167	39635-31-9 52663-72-6	4.0E+02 PHYSPROP 3.6E+02 PHYSPROP	2.1E-03 5.1E-05 2.8E-03 6.9E-05	PHYSPROP	1.3E-07 PHYSPROP	1.6E+02 1.5F+02	EPI EPI		LookChem	2.2E-02 5.7E-06 EPA WATER9 2.3E-02 5.9E-06 EPA WATER9	3.5E+05 EPI 2.1E+05 EPI	8.3E+00 PHYSPROP 7.5E+00 PHYSPROP	7.5E-04 PHYSPROP 2.2F-03 PHYSPROP	2.3E+01 1.7E+01 8.0E+01 3.0E+00 EPI 1.0E+01 1.1E+01 5.0E+01 1.4E+00 EPI
~Hexachlorobiphenyl, 2,3,4,4,5,5 - (PCB 167 ~Hexachlorobiphenyl, 2,3,3',4,4',5'- (PCB 157)	69782-90-7	3.6E+02 PHYSPROP	6.6E-03 1.6E-04	EPI	5.8E-07 PHYSPROP	1.5E+02	EPI	1.6E+00	LookCnem	2.3E-02 5.9E-06 EPA WATER9	2.1E+05 EPI 2.1E+05 EPI	7.6E+00 PHYSPROP	1.6E-03 EPI	1.2E+01 1.1E+01 5.0E+01 1.4E+00 EPI
~Hexachlorobiphenyl, 2,3,3',4,4',5-(PCB 157)	38380-08-4	3.6E+02 PHYSPROP	5.8E-03 1.4E-04	EPI	1.6E-06 PHYSPROP	1.5E+02	EPI		LookChem	2.3E-02 5.9E-06 EPA WATER9	2.1E+05 EPI	7.6E+00 PHYSPROP	5.3E-03 PHYSPROP	1.2E+01 1.1E+01 5.0E+01 1.7E+00 EPI
~Hexachlorobiphenyl, 3,3',4,4',5,5'- (PCB 169	32774-16-6	3.6E+02 PHYSPROP	2.8E-03 6.9E-05	PHYSPROP	5.8E-07 PHYSPROP	1.5E+02	EPI	1.6E+00	LookChem	2.3E-02 5.9E-06 EPA WATER9	2.1E+05 EPI	7.4E+00 PHYSPROP	5.1E-04 PHYSPROP	9.1E+00 1.1E+01 5.0E+01 1.2E+00 EPI
~Pentachlorobiphenyl, 2',3,4,4',5- (PCB 123)	65510-44-3	3.3E+02 EPI	7.8E-03 1.9E-04	EPI	5.5E-06 EPI	9.8E+01	EPI	1.5E+00		2.4E-02 6.1E-06 EPA WATER9	1.3E+05 EPI	7.0E+00 EPI	1.6E-02 EPI	6.9E+00 7.1E+00 3.2E+01 1.0E+00 EPI
~Pentachlorobiphenyl, 2,3',4,4',5- (PCB 118) ~Pentachlorobiphenyl, 2,3,3',4,4'- (PCB 105	31508-00-6 32598-14-4	3.3E+02 PHYSPROP 3.3E+02 PHYSPROP	1.2E-02 2.9E-04 1.2E-02 2.8E-04	EPI EPI	9.0E-06 PHYSPROP 6.5E-06 PHYSPROP	1.3E+02 1.3E+02	EPI EPI	1.5E+00   1.5E+00	LookChem	2.4E-02 6.1E-06 EPA WATER9 2.4E-02 6.1E-06 EPA WATER9	1.3E+05 EPI 1.3E+05 EPI	7.1E+00 PHYSPROP 6.8E+00 PHYSPROP	1.3E-02 PHYSPROP	8.6E+00 7.1E+00 3.2E+01 1.2E+00 EPI 5.2E+00 7.1E+00 3.1E+01 7.5E-01 EPI
~Pentachlorobiphenyl, 2,3,4,4'-(PCB 103 ~Pentachlorobiphenyl, 2,3,4,4',5- (PCB 114)	74472-37-0	3.3E+02 PHYSPROP	3.8E-03 9.2E-05	PHYSPROP	5.5E-06 PHYSPROP	9.8E+01	PHYSPROP	1.5E+00		2.4E-02 6.1E-06 EPA WATER9	1.3E+05 EPI	7.0E+00 PHYSPROP	1.6E-02 PHYSPROP	6.9E+00 7.1E+00 3.2E+01 1.0E+00 EPI
~Pentachlorobiphenyl, 3,3',4,4',5- (PCB 126)	57465-28-8	3.3E+02 EPI	7.8E-03 1.9E-04	EPI	2.2E-06 EPI	1.3E+02	EPI	1.5E+00		2.4E-02 6.1E-06 EPA WATER9	1.3E+05 EPI	7.0E+00 EPI	7.3E-03 EPI	6.9E+00 7.1E+00 3.2E+01 1.0E+00 EPI
~Polychlorinated Biphenyls (high risk	1336-36-3	2.9E+02 PHYSPROP	1.7E-02 4.2E-04	PHYSPROP	4.9E-04 PHYSPROP	1.2E+02	EPI	1.4E+00	HSDB	2.4E-02 6.3E-06 EPA WATER9	7.8E+04 EPI	7.1E+00 PHYSPROP	7.0E-01 PHYSPROP	3.6E+00 4.5E+00 1.9E+01 5.5E-01 EPI
~Polychlorinated Biphenyls (low risk)	1336-36-3	2.9E+02 PHYSPROP	1.7E-02 4.2E-04	PHYSPROP	4.9E-04 PHYSPROP	1.2E+02	EPI	1.4E+00	HSDB	2.4E-02 6.3E-06 EPA WATER9	7.8E+04 EPI	7.1E+00 PHYSPROP	7.0E-01 PHYSPROP	3.6E+00 4.5E+00 1.9E+01 5.5E-01 EPI
~Polychlorinated Biphenyls (lowest risk) ~Tetrachlorobiphenyl, 3,3',4,4'- (PCB 77]	1336-36-3 32598-13-3	2.9E+02 PHYSPROP 2.9E+02 PHYSPROP	1.7E-02 4.2E-04 3.8E-04 9.4E-06	PHYSPROP	4.9E-04 PHYSPROP 1.6E-05 PHYSPROP	1.2E+02 1.8E+02	EPI CRC89	1.4E+00	HSDB	2.4E-02 6.3E-06 EPA WATER9 4.3E-02 5.0E-06 EPA WATER9	7.8E+04 EPI 7.8E+04 EPI	7.1E+00 PHYSPROP 6.6E+00 PHYSPROP	7.0E-01 PHYSPROP 5.7E-04 PHYSPROP	3.6E+00 4.5E+00 1.9E+01 5.5E-01 EPI 6.0E+00 4.5E+00 2.0E+01 9.2E-01 EPI
~Tetrachlorobiphenyl, 3,4,4',5- (PCB 81)	70362-50-4	2.9E+02 PHT3PROP	9.1E-03 2.2E-04	FPI	8.5E-06 EPI	1.0E+02	EPI	1.4F+00	LookChem	2.4F-02 6.3F-06 EPA WATER9	7.8E+04 EPI	6.3F+00 FPI	3.2E-02 EPI	3.8F+00 4.5F+00 2.0F+01 5.8F-01 FPI
Polymeric Methylene Diphenyl Diisocyanate (PMDI)	9016-87-9	5.1E+02 EPI	5.4E-10 1.3E-11	EPI	5.4E-13 EPI	2.5E+02	EPI	1.42.00	LOOKCHCIII	3.0E-02 3.5E-06 EPA WATER9	1.0E+10 EPI	1.0E+01 EPI	1.8E-06 EPI	1.6E+02 7.8E+01 3.7E+02 1.9E+01 EPI
Polynuclear Aromatic Hydrocarbons (PAHs)														
~Acenaphthene	83-32-9 120-12-7	1.5E+02 PHYSPROP	7.5E-03 1.8E-04	PHYSPROP	2.2E-03 PHYSPROP		PHYSPROP	1.2E+00	CRC89	5.1E-02 8.3E-06 EPA WATER9	5.0E+03 EPI	3.9E+00 PHYSPROP	3.9E+00 PHYSPROP	4.1E-01 7.7E-01 1.8E+00 8.6E-02 EPI
~Anthracene ~Benz[a]anthracene	120-12-7 56-55-3	1.8E+02 PHYSPROP 2.3E+02 PHYSPROP	2.3E-03 5.6E-05 4.9E-04 1.2E-05	PHYSPROP	6.5E-06 EPI 2.1E-07 PHYSPROP	2.2E+02 8.4E+01	PHYSPROP	1.3E+00 1.3E+00	CRC89 PubChem	3.9E-02 7.9E-06 EPA WATER9 2.6E-02 6.7E-06 EPA WATER9	1.6E+04 EPI 1.8E+05 EPI	4.5E+00 PHYSPROP 5.8E+00 PHYSPROP	4.3E-02 PHYSPROP	7.3E-01 1.0E+00 4.1E+00 1.4E-01 EPI 3.2E+00 2.0E+00 8.5E+00 5.5E-01 EPI
~Benzo(i)fluoranthene	205-82-3	2.5E+02 PHYSPROP	8.3E-06 2.0E-07	PHYSPROP	2.6E-08 PHYSPROP	1.7E+02	PHYSPROP	2.32.700	. doctient	4.8E-02 5.6E-06 EPA WATER9	6.0E+05 EPI	6.1E+00 PHYSPROP	2.5E-03 PHYSPROP	4.2E+00 2.7E+00 1.2E+01 6.9E-01 EPI
~Benzo[a]pyrene	50-32-8	2.5E+02 PHYSPROP	1.9E-05 4.6E-07	PHYSPROP	5.5E-09 EPI		PHYSPROP			4.8E-02 5.6E-06 EPA WATER9	5.9E+05 EPI	6.1E+00 PHYSPROP	1.6E-03 PHYSPROP	4.4E+00 2.7E+00 1.2E+01 7.1E-01 EPI
~Benzo[b]fluoranthene	205-99-2	2.5E+02 PHYSPROP	2.7E-05 6.6E-07	PHYSPROP	5.0E-07 PHYSPROP	1.7E+02	PHYSPROP			4.8E-02 5.6E-06 EPA WATER9	6.0E+05 EPI	5.8E+00 PHYSPROP	1.5E-03 PHYSPROP	2.5E+00 2.7E+00 1.1E+01 4.2E-01 EPI
~Benzo[k]fluoranthene	207-08-9	2.5E+02 PHYSPROP	2.4E-05 5.8E-07	PHYSPROP	9.7E-10 EPI	2.2E+02	PHYSPROP			4.8E-02 5.6E-06 EPA WATER9	5.9E+05 EPI	6.1E+00 PHYSPROP	8.0E-04 PHYSPROP	4.2E+00 2.7E+00 1.2E+01 6.9E-01 EPI
~Chloronaphthalene, Beta- ~Chrysene	91-58-7 218-01-9	1.6E+02 PHYSPROP 2.3E+02 PHYSPROP	1.3E-02 3.2E-04 2.1E-04 5.2E-06	PHYSPROP PHYSPROP	1.2E-02 EPI 6.2E-09 PHYSPROP		PHYSPROP PHYSPROP		CRC89	4.5E-02 7.7E-06 EPA WATER9 2.6E-02 6.7E-06 EPA WATER9	2.5E+03 EPI 1.8E+05 EPI	3.9E+00 PHYSPROP 5.8E+00 PHYSPROP	1.2E+01 PHYSPROP 2.0E-03 PHYSPROP	3.7E-01 8.6E-01 2.1E+00 7.5E-02 EPI 3.5E+00 2.0E+00 8.5E+00 6.0E-01 EPI
~Dibenz[a,h]anthracene	53-70-3	2.8E+02 PHYSPROP	5.8E-06 1.4E-07	EPI	9.6E-10 EPI	2.7F+02	PHYSPROP	1.31.700	CINCOS	4.5E-02 5.2E-06 EPA WATER9	1.9E+06 EPI	6.8E+00 PHYSPROP	2.5E-03 PHYSPROP	6.1E+00 3.8E+00 1.7E+01 9.5E-01 EPI
~Dibenzo(a,e)pyrene	192-65-4	3.0E+02 PHYSPROP	5.8E-07 1.4E-08	PHYSPROP	7.0E-11 PHYSPROP	2.3E+02	PHYSPROP			4.2E-02 4.9E-06 EPA WATER9	6.5E+06 EPI	7.7E+00 EPI	8.0E-05 PHYSPROP	2.8E+01 5.2E+00 2.4E+01 4.2E+00 EPI
~Dimethylbenz(a)anthracene, 7,12	57-97-6	2.6E+02 PHYSPROP	1.5E-04 3.8E-06	EPI	6.8E-07 PHYSPROP	1.2E+02	PHYSPROP			4.7E-02 5.5E-06 EPA WATER9	4.9E+05 EPI	5.8E+00 PHYSPROP	6.1E-02 PHYSPROP	2.5E+00 2.9E+00 1.2E+01 4.1E-01 EPI
~Fluoranthene	206-44-0	2.0E+02 PHYSPROP	3.6E-04 8.9E-06	PHYSPROP	9.2E-06 PHYSPROP			1.3E+00	CRC89	2.8E-02 7.2E-06 EPA WATER9	5.5E+04 EPI	5.2E+00 PHYSPROP	2.6E-01 PHYSPROP	1.7E+00 1.4E+00 5.7E+00 3.1E-01 EPI
~Fluorene ~Indeno[1,2,3-cd]pyrene	86-73-7 193-39-5	1.7E+02 PHYSPROP 2.8E+02 PHYSPROP	3.9E-03 9.6E-05 1.4E-05 3.5E-07	PHYSPROP PHYSPROP	6.0E-04 PHYSPROP 1.3E-10 PHYSPROP	1.1E+02 1.6E+02	PHYSPROP	1.2E+00	CRC89	4.4E-02 7.9E-06 EPA WATER9 4.5E-02 5.2E-06 EPA WATER9	9.2E+03 EPI 2.0E+06 EPI	4.2E+00 PHYSPROP 6.7E+00 PHYSPROP	1.7E+00 PHYSPROP	5.5E-01 9.0E-01 2.2E+00 1.1E-01 EPI 7.9E+00 3.7E+00 1.7E+01 1.2E+00 EPI
~Methylnaphthalene. 1-	90-12-0	1.4E+02 PHYSPROP	2.1E-02 5.1E-04	PHYSPROP	6.7E-02 PHYSPROP	-3.0E+01	THISTRO	1.0E+00	CRC89	5.3E-02 7.8E-06 EPA WATER9	2.5E+03 EPI	3.9E+00 PHYSPROP	2.6E+01 PHYSPROP	4.3E-01 6.6E-01 1.6E+00 9.3E-02 EPI
~Methylnaphthalene, 2-	91-57-6	1.4E+02 PHYSPROP	2.1E-02 5.2E-04	PHYSPROP	5.5E-02 PHYSPROP	3.4E+01	PHYSPROP	1.0E+00	CRC89	5.2E-02 7.8E-06 EPA WATER9	2.5E+03 EPI	3.9E+00 PHYSPROP	2.5E+01 PHYSPROP	4.2E-01 6.6E-01 1.6E+00 9.2E-02 EPI
~Naphthalene	91-20-3	1.3E+02 PHYSPROP	1.8E-02 4.4E-04	PHYSPROP	8.5E-02 PHYSPROP	8.0E+01	PHYSPROP	1.0E+00	CRC89	6.0E-02 8.4E-06 EPA WATER9	1.5E+03 EPI	3.3E+00 PHYSPROP	3.1E+01 PHYSPROP	2.0E-01 5.5E-01 1.3E+00 4.7E-02 EPI
~Nitropyrene, 4-	57835-92-4	2.5E+02 PHYSPROP	1.0E-06 2.5E-08	PHYSPROP	5.5E-08 PHYSPROP	1.9E+02				4.8E-02 5.6E-06 EPA WATER9	8.6E+04 EPI	4.8E+00 PHYSPROP	6.8E-02 PHYSPROP	5.6E-01 2.6E+00 6.3E+00 9.2E-02 EPI
~Pyrene Potassium Perfluorobutane Sulfonate	129-00-0 29420-49-3	2.0E+02 PHYSPROP 3.4E+02 EPI	4.9E-04 1.2E-05	PHYSPROP	4.5E-06 PHYSPROP 1.1E-08 FPI	1.5E+02 1.9F+02	PHYSPROP	1.3E+00	CRC89	2.8E-02 7.2E-06 EPA WATER9 3.9E-02 4.6E-06 EPA WATER9	5.4E+04 EPI 1.8F+02 EPI	4.9E+00 PHYSPROP -3.3E-01 EPI	1.4E-01 PHYSPROP	1.1E+00 1.4E+00 5.5E+00 2.0E-01 EPI 2.1E-04 8.2E+00 2.0E+01 3.0E-05 EPI
Prochloraz	67747-09-5	3.8E+02 PHYSPROP	6.7E-07 1.6E-08	EPI	1.1E-06 PHYSPROP	1.52.02	PHYSPROP			3.6E-02 4.3E-06 EPA WATER9	2.4E+03 EPI	4.1E+00 PHYSPROP	3.4E+01 PHYSPROP	4.8E-02 1.4E+01 3.2E+01 6.4E-03 EPI
Profluralin	26399-36-0	3.5E+02 PHYSPROP	1.2E-02 2.9E-04	EPI	6.3E-05 PHYSPROP		PHYSPROP	1.4E+00	HSDB	2.2E-02 5.5E-06 EPA WATER9	3.1E+04 EPI	5.6E+00 PHYSPROP	1.0E-01 PHYSPROP	6.5E-01 9.3E+00 3.7E+01 9.0E-02 EPI
Prometon	1610-18-0	2.3E+02 PHYSPROP	3.7E-08 9.1E-10	EPI	2.3E-06 PHYSPROP	9.1E+01				5.1E-02 6.0E-06 EPA WATER9	1.4E+02 EPI	3.0E+00 PHYSPROP	7.5E+02 PHYSPROP	4.8E-02 1.9E+00 4.6E+00 8.3E-03 EPI
Prometryn	7287-19-6	2.4E+02 PHYSPROP	4.9E-07 1.2E-08	EPI	1.2E-06 PHYSPROP	1.2E+02		1.2E+00	CRC89	2.4E-02 6.2E-06 EPA WATER9	6.6E+02 EPI	3.5E+00 PHYSPROP	3.3E+01 PHYSPROP	8.9E-02 2.4E+00 5.7E+00 1.5E-02 EPI
Propanedial, 1.2-	1918-16-7 114-26-1	2.1E+02 PHYSPROP 2.1E+02 PHYSPROP	1.5E-05 3.6E-07 5.8E-08 1.4E-09	EPI	2.3E-04 PHYSPROP 2.1E-05 PHYSPROP	7.7E+01 9.0E+01	PHYSPROP	1.2E+00 1.1E+00	CRC89	2.7E-02 7.0E-06 EPA WATER9	2.0E+02 EPI 6.0F+01 EPI	2.2E+00 PHYSPROP 1.5E+00 PHYSPROP	5.8E+02 PHYSPROP	1.6E-02 1.6E+00 3.9E+00 2.9E-03 EPI 6.0E-03 1.6E+00 3.7E+00 1.1E-03 EPI
Propanil	709-98-8	2.2E+02 PHYSPROP	7.0E-08 1.7E-09	EPI	9.1E-07 PHYSPROP	9.2E+01	PHYSPROP	1.3E+00	CRC89	2.7E-02 6.9E-06 EPA WATER9	1.8E+02 EPI	3.1E+00 PHYSPROP	1.5E+02 PHYSPROP	5.9E-02 1.8E+00 4.2E+00 1.0E-02 EPI
Propargite	2312-35-8	3.5E+02 PHYSPROP	2.6E-05 6.4E-07	EPI	3.0E-07 PHYSPROP	1.7E+02	EPI	1.1E+00	CRC89	1.9E-02 4.8E-06 EPA WATER9	3.7E+04 EPI	5.0E+00 PHYSPROP	2.2E-01 PHYSPROP	2.6E-01 9.7E+00 2.3E+01 3.6E-02 EPI
Propargyl Alcohol	107-19-7	5.6E+01 PHYSPROP	4.7E-05 1.2E-06	EPI	1.6E+01 PHYSPROP		PHYSPROP	9.5E-01	CRC89	1.2E-01 1.3E-05 EPA WATER9	1.9E+00 EPI	-3.8E-01 PHYSPROP	1.0E+06 PHYSPROP	1.2E-03 2.2E-01 5.2E-01 4.2E-04 EPI
Propazine Propham	139-40-2 122-42-9	2.3E+02 PHYSPROP 1.8E+02 PHYSPROP	1.9E-07 4.6E-09 7.5E-06 1.8E-07	EPI EPI	1.3E-07 PHYSPROP 1.4E-04 PHYSPROP	2.1E+02	PHYSPROP	1.2E+00 1.1E+00	CRC89 CRC89	2.5E-02 6.4E-06 EPA WATER9 3.6E-02 7.1E-06 EPA WATER9	3.4E+02 EPI 2.2E+02 EPI	2.9E+00 PHYSPROP 2.6E+00 PHYSPROP	8.6E+00 PHYSPROP 1.8E+02 PHYSPROP	4.2E-02 2.0E+00 4.9E+00 7.1E-03 EPI 4.3E-02 1.1E+00 2.5E+00 8.3E-03 EPI
Propiconazole Propiconazole	60207-90-1	3.4E+02 PHYSPROP	7.0E-08 1.7E-09	EPI	4.2E-07 PHYSPROP	1.7E+01	EPI	1.1E+00 1.3E+00	CRC89	2.1E-02 5.3E-06 EPA WATER9	2.2E+02 EPI 1.6E+03 EPI	3.7E+00 PHYSPROP	1.1E+02 PHYSPROP	4.0E-02 8.7E+00 2.5E+00 8.3E-03 EPI
Propionaldehyde	123-38-6	5.8E+01 PHYSPROP	3.0E-03 7.3E-05	PHYSPROP	3.2E+02 PHYSPROP	-8.0E+01	PHYSPROP	8.7E-01	CRC89	1.1E-01 1.2E-05 EPA WATER9	1.0E+00 EPI	5.9E-01 PHYSPROP	3.1E+05 PHYSPROP	5.3E-03 2.2E-01 5.3E-01 1.8E-03 EPI
Propyl benzene	103-65-1	1.2E+02 PHYSPROP	4.3E-01 1.1E-02	PHYSPROP	3.4E+00 PHYSPROP		PHYSPROP	8.6E-01	CRC89	6.0E-02 7.8E-06 EPA WATER9	8.1E+02 EPI	3.7E+00 PHYSPROP	5.2E+01 PHYSPROP	4.0E-01 5.0E-01 1.2E+00 9.4E-02 EPI
Propylene	115-07-1	4.2E+01 PHYSPROP		PHYSPROP	8.7E+03 PHYSPROP	_	PHYSPROP	5.1E-01	CRC89	1.1E-01 1.1E-05 EPA WATER9	2.2E+01 EPI	1.8E+00 PHYSPROP	2.0E+02 PHYSPROP	3.4E-02 1.8E-01 4.3E-01 1.4E-02 EPI
Propylene Glycol Propylene Glycol Dinitrate	57-55-6 6423-43-4	7.6E+01 PHYSPROP 1.7E+02 PHYSPROP	5.3E-07 1.3E-08 3.9E-05 9.4E-07	EPI PHYSPROP	1.3E-01 PHYSPROP 3.8E-01 PHYSPROP	-6.0E+01 -9.6E+00		1.0E+00	CRC89	9.8E-02 1.2E-05 EPA WATER9 6.3E-02 7.3E-06 EPA WATER9	1.0E+00 EPI 6.1E+01 EPI	-9.2E-01 PHYSPROP 1.8F+00 PHYSPROP	1.0E+06 PHYSPROP 3.3E+03 EPI	4.8E-04 2.8E-01 6.7E-01 1.4E-04 EPI 1.0E-02 9.0E-01 2.1E+00 2.1E-03 EPI
Propylene Glycol Monomethyl Ether	107-98-2	9.0E+01 PHYSPROP	3.8E-05 9.2E-07	PHYSPROP	1.3E+01 PHYSPROP		PHYSPROP	9.6E-01	CRC89	8.3E-02 1.0E-05 EPA WATER9	1.0E+00 EPI	-4.9E-01 PHYSPROP	1.0E+06 PHYSPROP	1.4E-03 3.4E-01 8.1E-01 3.7E-04 RAGSE
Propylene Oxide	75-56-9	5.8E+01 PHYSPROP	2.8E-03 7.0E-05	EPI	5.4E+02 PHYSPROP		PHYSPROP	8.3E-01	PERRY	1.1E-01 1.2E-05 EPA WATER9	5.2E+00 EPI	3.0E-02 PHYSPROP	5.9E+05 PHYSPROP	2.3E-03 2.2E-01 5.3E-01 7.7E-04 EPI
Propyzamide	23950-58-5	2.6E+02 PHYSPROP	4.0E-07 9.8E-09	EPI	4.4E-07 PHYSPROP		PHYSPROP			4.7E-02 5.5E-06 EPA WATER9	4.0E+02 EPI	3.4E+00 PHYSPROP	1.5E+01 PHYSPROP	6.7E-02 2.9E+00 6.9E+00 1.1E-02 EPI
Pyridine	110-86-1 13593-03-8	7.9E+01 PHYSPROP	4.5E-04 1.1E-05 1.9E-06 4.6E-08	PHYSPROP	2.1E+01 PHYSPROP 2.6E-06 PHYSPROP		PHYSPROP	9.8E-01	CRC89	9.3E-02 1.1E-05 EPA WATER9 4.3E-02 5.0E-06 EPA WATER9	7.2E+01 EPI 4.2E+03 EPI	6.5E-01 PHYSPROP 4.4E+00 PHYSPROP	1.0E+06 PHYSPROP	5.2E-03 2.9E-01 7.0E-01 1.5E-03 EPI 2.0E-01 4.9E+00 1.2E+01 3.0E-02 EPI
Quinalphos Quinoline	13593-03-8 91-22-5	3.0E+02 PHYSPROP 1.3E+02 PHYSPROP	1.9E-06 4.6E-08 6.8E-05 1.7E-06	EPI EPI	2.6E-06 PHYSPROP 6.0E-02 PHYSPROP	3.2E+01 -1.5E+01	PHYSPROP	1.1E+00	CRC89	4.3E-02 5.0E-06 EPA WATER9 6.2E-02 8.7E-06 EPA WATER9	4.2E+03 EPI 1.5E+03 EPI	4.4E+00 PHYSPROP 2.0E+00 PHYSPROP	2.2E+01 PHYSPROP 6.1E+03 PHYSPROP	2.0E-01 4.9E+00 1.2E+01 3.0E-02 EPI 2.9E-02 5.6E-01 1.3E+00 6.6E-03 EPI
Quizalofop-ethyl	76578-14-8	3.7E+02 PHYSPROP	4.3E-07 1.1E-08	EPI	6.5E-09 PHYSPROP		PHYSPROP			3.7E-02 4.3E-06 EPA WATER9	7.7E+03 EPI	4.3E+00 PHYSPROP	3.0E-01 PHYSPROP	6.6E-02 1.3E+01 3.1E+01 8.9E-03 EPI
Refractory Ceramic Fibers	NA													1.0E-03 RAGSE
Resmethrin	10453-86-8	3.4E+02 PHYSPROP	5.4E-06 1.3E-07 1.3E-03 3.2E-05	EPI	1.1E-08 PHYSPROP		PHYSPROP	1.4E+00	CRC89	3.9E-02 4.6E-06 EPA WATER9	3.1E+05 EPI 4.5E+03 EPI	6.1E+00 PHYSPROP	3.8E-02 PHYSPROP	1.7E+00 8.3E+00 3.3E+01 2.4E-01 EPI
Ronnel Rotenone	299-84-3 83-79-4	3.2E+02 PHYSPROP 3.9E+02 PHYSPROP	1.3E-03 3.2E-05 4.6E-12 1.1E-13	PHYSPROP	7.5E-05 PHYSPROP 6.9E-10 PHYSPROP	4.1E+01 1.8F+02	PHYSPROP	1.4E+00	CKC89	2.3E-02 5.9E-06 EPA WATER9 3.5E-02 4.1E-06 EPA WATER9	4.5E+03 EPI 2.6E+05 EPI	4.9E+00 PHYSPROP 4.1E+00 PHYSPROP	1.0E+00 PHYSPROP	3.0E-01 6.6E+00 1.6E+01 4.3E-02 EPI 3.9E-02 1.7E+01 4.1E+01 5.1E-03 EPI
Safrole	94-59-7	1.6E+02 PHYSPROP	3.7E-04 9.1E-06	PHYSPROP	6.2E-02 PHYSPROP		PHYSPROP	1.1E+00	CRC89	4.4E-02 7.6E-06 EPA WATER9	2.1E+02 EPI	3.5E+00 PHYSPROP	1.2E+02 PHYSPROP	5.5E-02 8.5E-01 2.0E+00 1.1E-02 RAGSE
Selenious Acid	7783-00-8	1.3E+02 PHYSPROP				7.0E+01	EPI	3.0E+00	CRC89				9.0E+05 PERRY	4.4E-03 5.5E-01 1.3E+00 1.0E-03 RAGSE
Selenium	7782-49-2	7.9E+01 PHYSPROP			1.4E-10 EPI	2.2E+02	PHYSPROP	4.8E+00	CRC89		5.0E+00 SSL			3.4E-03 2.9E-01 7.0E-01 1.0E-03 RAGSE
Selenium Sulfide	7446-34-6 74051-80-2	1.1E+02 EPI	8.8E-10 2.2E-11	PHYSPROP	1.6E-07 PHYSPROP	1.65.03	EDI	1.0E+00	CRC89	2.0E.02 4.9E.06 EDA WATERO	4.4E+03 EPI	4.4E+00 PHYSPROP	2.5E+01 PHYSPROP	4.1E-03 4.4E-01 1.1E+00 1.0E-03 RAGSE 1.3E-01 7.2E+00 1.7E+01 1.9E-02 EPI
Sethoxydim Silica (crystalline, respirable)	74051-80-2 7631-86-9	3.3E+02 PHYSPROP 6.0F+01 FPI	o.ot-10 2.2t-11	PHISPROP	1.0E-U/ PHYSPROP	1.6E+02	PFRRY	1.0E+00 2.3E+00	PERRY	2.0E-02 4.8E-06 EPA WATER9	4.4E+U3 EPI	4.4E+UU PHYSPROP	Z.SE+U1 PHYSPKOP	1.3E-01 7.2E+00 1.7E+01 1.9E-02 EPI 3.0E-03 2.3E-01 5.5E-01 1.0E-03 RAGSE
Silver	7440-22-4	1.1E+02 PHYSPROP			0.0E+00 NIOSH		PHYSPROP	1.1E+01	CRC89		8.3E+00 SSL			2.4E-03 4.2E-01 1.0E+00 6.0E-04 RAGSE
Simazine	122-34-9	2.0E+02 PHYSPROP	3.9E-08 9.4E-10	EPI	2.2E-08 PHYSPROP	2.3E+02	PHYSPROP	1.3E+00	CRC89	2.8E-02 7.4E-06 EPA WATER9	1.5E+02 EPI	2.2E+00 PHYSPROP	6.2E+00 PHYSPROP	1.8E-02 1.4E+00 3.4E+00 3.3E-03 EPI
Sodium Acifluorfen	62476-59-9	3.8E+02 PHYSPROP	2.5E-09 6.1E-11	PHYSPROP	9.8E-09 EPI	2.8E+02	EPI			3.6E-02 4.2E-06 EPA WATER9	3.9E+03 EPI	3.7E-01 PHYSPROP	2.5E+05 PHYSPROP	1.5E-04 1.5E+01 3.6E+01 2.0E-05 EPI
Sodium Azide Sodium Dichromate	26628-22-8 10588-01-9	6.5E+01 EPI 2.6E+02 CRC89				3.0E+02 3.6F+02	CRC89 CRC89	1.8E+00	CRC89				4.1E+05 CRC89	3.1E-03 2.4E-01 5.8E-01 1.0E-03 RAGSE 6.2E-03 3.1E+00 7.4E+00 1.0E-03 RAGSE
Sodium Dichromate Sodium Diethyldithiocarbamate	10588-01-9	1.7E+02 CRC89  1.7E+02 PHYSPROP			8.2E-10 PHYSPROP	9.4E+01	PHYSPROP			6.1E-02 7.2E-06 EPA WATER9	2.0E+02 EPI	-1.4E+00 PHYSPROP	3.6E+05 PHYSPROP	9.7E-05 9.7E-01 2.3E+00 1.9E-05 EPI
Sodium Fluoride	7681-49-4	4.2E+01 PHYSPROP			0.0E+00 NIOSH		PHYSPROP	2.8E+00	CRC89	DE TIEL OF ETA WATERS	Z.OCTOZ EPI	L.4E.GO FITTSFROP	4.2E+04 PHYSPROP	2.5E-03 1.8E-01 4.3E-01 1.0E-03 RAGSE
Sodium Fluoroacetate	62-74-8	1.0E+02 PHYSPROP	4.5E-05 1.1E-06	PHYSPROP	6.5E-07 PHYSPROP	2.0E+02				8.8E-02 1.0E-05 EPA WATER9	1.4E+00 EPI	-3.8E+00 PHYSPROP	1.1E+06 PHYSPROP	5.1E-06 3.8E-01 9.2E-01 1.3E-06 EPI
Sodium Metavanadate	13718-26-8	1.2E+02 CRC89				6.3E+02	CRC89						2.1E+05 CRC89	4.2E-03 5.1E-01 1.2E+00 1.0E-03 RAGSE

Contaminant		Molecular Weight	1		olatility Paramete	rc		Mol	ting Point	De	nsity	Diffusivity in Air and Water	Soil Partition Coefficients	Water Partition	Water Solubility	Tapwater Dermal Parameters
Contaminant			H,	HLC						Density		Dia Diw	K <sub>d</sub> K <sub>oc</sub>	log K <sub>ow</sub>	S	B T <sub>event</sub> t* K <sub>p</sub>
Analyte	CAS No.	MW Ref	(unitless)	(atm-m³/mole	e) H` and HLC Ref	VP	VP Ref	MP	MP Ref		Density Ref	(cm <sup>2</sup> /s) (cm <sup>2</sup> /s) D <sub>ia</sub> and D <sub>iw</sub> Ref	(L/kg) K <sub>d</sub> Ref (L/kg) K <sub>oc</sub> Ref	(unitless) log K <sub>ow</sub> Ref	(mg/L) S Ref	(unitless) (hr/event) (hr) (cm/hr) KPREF
Sodium Tungstate Sodium Tungstate Dihydrate	13472-45-2 10213-10-2	2.9E+02 CRC89 3.3E+02 CRC89						7.0E+0:		4.2E+00 3.3E+00	CRC89 CRC89				7.4E+05 CRC89	6.6E-03 4.6E+00 1.1E+01 1.0E-03 RAGSE 7.0E-03 7.4E+00 1.8E+01 1.0E-03 RAGSE
Stirofos (Tetrachlorovinphos)	961-11-5	3.7E+02 PHYSPROP	7.5E-08	1.8E-09	EPI	4.2E-08	PHYSPROP	9.8E+0:	citcos	3.32+00	CICOS	3.7E-02 4.3E-06 EPA WATER9	1.4E+03 EPI	3.5E+00 PHYSPROP	1.1E+01 PHYSPROP	2.3E-02 1.2E+01 2.8E+01 3.1E-03 EPI
Strontium Chromate	7789-06-2	2.0E+02 CRC89								3.9E+00	CRC89				1.1E+03 CRC89	5.5E-03 1.5E+00 3.5E+00 1.0E-03 RAGSE
Strontium, Stable	7440-24-6 57-24-9	8.8E+01 PHYSPROP 3.3E+02 PHYSPROP		7.6E-14	PHYSPROP	2.9E-09	PHYSPROP	7.8E+0	2 PHYSPROP	2.6E+00 1.4E+00	CRC89	2.2E-02 5.6E-06 EPA WATER9	3.5E+01 BAES 5.4E+03 EPI	1.9E+00 PHYSPROP		3.6E-03 3.3E-01 7.8E-01 1.0E-03 RAGSE 2.8E-03 7.8E+00 1.9E+01 4.0E-04 EPI
Strychnine Styrene	100-42-5	1.0E+02 PHYSPROP	3.1E-12 1.1E-01	7.6E-14 2.8E-03	PHYSPROP		PHYSPROP		2 PHYSPROP 1 PHYSPROP	1.4E+00 9.0E-01	CRC89	7.1E-02 S.8E-06 EPA WATER9	5.4E+03 EPI 4.5E+02 EPI	3.0E+00 PHYSPROP	1.6E+02 PHYSPROP 3.1E+02 PHYSPROP	2.8E-03 7.8E+00 1.9E+01 4.0E-04 EPI 1.5E-01 4.0E-01 9.7E-01 3.7E-02 EPI
Styrene-Acrylonitrile (SAN) Trimei	NA NA	2.1E+02 OTHER	1.12 01	2.02.03	1111511101	0.42100	1111311101	5.12.0	1 1111511101	1.1E+00	PPRTV	2.6E-02 6.5E-06 EPA WATER9	435,02	3.1E+00 OTHER	8.5E+01 PPRTV	6.6E-02 1.6E+00 3.8E+00 1.2E-02 RAGSE
Sulfolane	126-33-0	1.2E+02 PHYSPROP	2.0E-04	4.9E-06	PHYSPROP	4.1E-03	EPI		1 PHYSPROP	1.3E+00	CRC89	7.2E-02 9.9E-06 EPA WATER9	9.1E+00 EPI	-7.7E-01 PHYSPROP	1.0E+06 PHYSPROP	4.3E-04 5.0E-01 1.2E+00 1.0E-04 EPI
Sulfonylbis(4-chlorobenzene), 1,1'- Sulfur Trioxide	80-07-9 7446-11-9	2.9E+02 PHYSPROP 8.0E+01 PHYSPROP	5.6E-06	1.4E-07	PHYSPROP	8.1E-07 2.6E+02	PHYSPROP PHYSPROP		2 PHYSPROP 1 PHYSPROP	1.9E+00	CRC89	4.4E-02 5.1E-06 EPA WATER9	2.9E+03 EPI	3.9E+00 PHYSPROP	2.4E+00 PHYSPROP	9.7E-02 4.3E+00 1.0E+01 1.5E-02 EPI 3.4E-03 3.0E-01 7.1E-01 1.0E-03 RAGSE
Sulfuric Acid	7664-93-9	9.8E+01 PHYSPROP				5.9E-05	PHYSPROP		1 PHYSPROP	1.8E+00	CRC89	THE OF THE OF THE WATERS			1.0E+06 PHYSPROP	3.8E-03 3.7E-01 8.9E-01 1.0E-03 RAGSE
Sulfurous acid, 2-chloroethyl 2-[4-(1,1-dimethylethyl)phenoxy]-1-methylethyl ester	140-57-8	3.3E+02 PHYSPROP	7.8E-06	1.9E-07	PHYSPROP	2.2E-07	PHYSPROP	-3.2E+0	1 PHYSPROP	1.1E+00	CRC89	2.0E-02 5.0E-06 EPA WATER9	5.6E+03 EPI	4.8E+00 PHYSPROP	5.9E-01 PHYSPROP	2.3E-01 7.9E+00 1.9E+01 3.3E-02 EPI
TCMTB Tebuthiuron	21564-17-0	2.4E+02 PHYSPROP	2.7E-10	6.5E-12	PHYSPROP	3.1E-07	PHYSPROP	1.5E+0	2 EPI			4.9E-02 5.8E-06 EPA WATER9	3.4E+03 EPI 4.2E+01 EPI	3.3E+00 PHYSPROP	1.3E+02 PHYSPROP	6.7E-02 2.3E+00 5.5E+00 1.1E-02 EPI 7.4E-03 2.0E+00 4.8E+00 1.3E-03 EPI
Temephos	34014-18-1 3383-96-8	2.3E+02 PHYSPROP 4.7E+02 PHYSPROP	4.9E-09 8.0E-08	1.2E-10 2.0E-09	PHYSPROP	7.9E-08	PHYSPROP		2 PHYSPROP 1 PHYSPROP	1.3E+00	CRC89	5.1E-02 5.9E-06 EPA WATER9 1.8E-02 4.5E-06 EPA WATER9	4.2E+01 EPI 9.5E+04 EPI	1.8E+00 PHYSPROP 6.0E+00 PHYSPROP	2.5E+03 PHYSPROP 2.7E-01 PHYSPROP	2.9E-01 4.3E+01 1.0E+02 3.5E-02 EPI
Terbacil	5902-51-2	2.2E+02 PHYSPROP	4.9E-09	1.2E-10	EPI	4.7E-07	PHYSPROP		2 PHYSPROP	1.3E+00	CRC89	2.7E-02 7.2E-06 EPA WATER9	5.0E+01 EPI	1.9E+00 PHYSPROP	7.1E+02 PHYSPROP	9.7E-03 1.7E+00 4.1E+00 1.7E-03 EPI
Terbufos	13071-79-9 886-50-0	2.9E+02 PHYSPROP		2.4E-05	EPI		PHYSPROP		1 PHYSPROP	1.1E+00	CRC89	2.2E-02 5.4E-06 EPA WATER9	1.0E+03 EPI	4.5E+00 PHYSPROP	5.1E+00 PHYSPROP	2.3E-01 4.3E+00 1.0E+01 3.6E-02 EPI
Terbutryn Tetrabromodiphenyl ether, 2,2',4,4'- (BDE-47	5436-43-1	2.4E+02 PHYSPROP 4.9E+02 PHYSPROP	8.8E-07 1.2F-04	2.2E-08 3.0F-06	EPI PHYSPROP	1.7E-06 7.0E-08	PHYSPROP	1.0E+0.	2 PHYSPROP 2 EPI	1.1E+00	CRC89	2.4E-02 6.0E-06 EPA WATER9 3.1E-02 3.6E-06 EPA WATER9	6.1E+02 EPI 1.3E+04 EPI	3.7E+00 PHYSPROP 6.8E+00 PHYSPROP	2.5E+01 PHYSPROP	1.3E-01 2.4E+00 5.7E+00 2.1E-02 EPI 7.9E-01 5.5E+01 2.1E+02 9.3E-02 EPI
Tetrachlorobenzene, 1,2,4,5-	95-94-3	2.2E+02 PHYSPROP	4.1E-02	1.0E-03	PHYSPROP	5.4E-03	EPI		2 PHYSPROP	1.9E+00	CRC89	3.2E-02 8.8E-06 EPA WATER9	2.2E+03 EPI	4.6E+00 PHYSPROP	6.0E-01 PHYSPROP	6.6E-01 1.7E+00 6.7E+00 1.2E-01 EPI
Tetrachloroethane, 1,1,1,2-	630-20-6	1.7E+02 PHYSPROP	1.0E-01	2.5E-03	PHYSPROP	1.2E+01			1 PHYSPROP	1.5E+00	CRC89	4.8E-02 9.1E-06 EPA WATER9	8.6E+01 EPI	2.9E+00 PHYSPROP	1.1E+03 PHYSPROP	7.9E-02 9.2E-01 2.2E+00 1.6E-02 EPI
Tetrachloroethane, 1,1,2,2-	79-34-5	1.7E+02 PHYSPROP	1.5E-02	3.7E-04	PHYSPROP	4.6E+00			1 PHYSPROP	1.6E+00 1.6E+00	CRC89	4.9E-02 9.3E-06 EPA WATER9	9.5E+01 EPI 9.5E+01 EPI	2.4E+00 PHYSPROP 3.4E+00 PHYSPROP	2.8E+03 PHYSPROP	3.5E-02 9.2E-01 2.2E+00 6.9E-03 EPI 1.7E-01 8.9E-01 2.1E+00 3.3E-02 EPI
Tetrachloroethylene Tetrachlorophenol, 2,3,4,6-	127-18-4 58-90-2	1.7E+02 PHYSPROP 2.3E+02 PHYSPROP	7.2E-01 3.6E-04	1.8E-02 8.8E-06	PHYSPROP EPI	1.9E+01 6.7E-04	PHYSPROP EPI		1 PHYSPROP 1 PHYSPROP	1.02+00	CNC89	5.0E-02 9.5E-06 EPA WATER9 5.0E-02 5.9E-06 EPA WATER9	9.5E+01 EPI 3.0E+03 EPI	4.5E+00 PHYSPROP	2.1E+02 PHYSPROP 2.3E+01 PHYSPROP	1.7E-01 8.9E-01 2.1E+00 3.3E-02 EPI 4.2E-01 2.1E+00 5.0E+00 7.1E-02 EPI
Tetrachlorotoluene, p- alpha, alpha, alpha-	5216-25-1	2.3E+02 PHYSPROP	7.9E-03	1.9E-04	PHYSPROP	3.8E-02	PHYSPROP	4.0E+0	1 EPI	1.4E+00	CRC89	2.8E-02 7.3E-06 EPA WATER9	1.6E+03 EPI	4.5E+00 PHYSPROP		4.9E-01 2.0E+00 4.9E+00 8.4E-02 EPI
Tetraethyl Dithiopyrophosphate	3689-24-5	3.2E+02 PHYSPROP	1.8E-04	4.5E-06	EPI	1.1E-04	PHYSPROP	-3.2E+0		1.2E+00	CRC89	2.1E-02 5.3E-06 EPA WATER9	2.7E+02 EPI	4.0E+00 PHYSPROP	3.0E+01 PHYSPROP	7.5E-02 6.7E+00 1.6E+01 1.1E-02 EPI
Tetrafluoroethane, 1,1,1,2- Tetryl (Trinitrophenylmethylnitramine	811-97-2 479-45-8	1.0E+02 PHYSPROP 2.9E+02 PHYSPROP	2.0E+00 1.1E-07	5.0E-02 2.7E-09	PHYSPROP		PHYSPROP		2 PHYSPROP 2 PHYSPROP	1.2E+00 1.6E+00	CRC89 CRC89	8.2E-02 1.1E-05 EPA WATER9 2.6E-02 6.7E-06 EPA WATER9	8.6E+01 EPI 4.6E+03 EPI	1.7E+00 PHYSPROP 1.6E+00 PHYSPROP	2.0E+03 PHYSPROP 7.4E+01 PHYSPROP	2.1E-02 3.9E-01 9.4E-01 5.5E-03 EPI 3.1E-03 4.3E+00 1.0E+01 4.7E-04 EPI
Thallium (I) Nitrate	10102-45-1	2.7E+02 PHYSPROP	1.12-07	2.76-03	JFROP	3.72-00	, marnor	2.1E+0	2 PHYSPROP	5.6E+00	CRC89	THE OF THE OWN IN THE	4.0E103 EPI		9.6E+04 PHYSPROP	6.3E-03 3.3E+00 7.9E+00 1.0E-03 RAGSE
Thallium (Soluble Salts)	7440-28-0	2.1E+02 PHYSPROP							2 PHYSPROP	1.2E+01	CRC89		7.1E+01 SSL			5.5E-03 1.5E+00 3.6E+00 1.0E-03 RAGSE
Thallium Acetate	563-68-8	2.6E+02 PHYSPROP					PHYSPROP	1.3E+0		3.7E+00	CRC89	3.9E-02 1.2E-05 EPA WATER9 3.9E-02 1.2E-05 EPA WATER9		-1.7E-01 PHYSPROP		2.5E-04 3.1E+00 7.5E+00 4.0E-05 EPI 8.2E-06 4.4E+01 1.1E+02 9.8E-07 EPI
Thallium Carbonate Thallium Chloride	6533-73-9 7791-12-0	4.7E+02 PHYSPROP 2.4E+02 PHYSPROP				5.8E+00	PHYSPROP		2 PHYSPROP 2 PHYSPROP	7.1E+00 7.0E+00	CRC89 CRC89	5.2E-02 1.8E-05 EPA WATER9		-8.6E-01 PHYSPROP	5.2E+04 PHYSPROP 2.9E+03 PHYSPROP	8.2E-06 4.4E+01 1.1E+02 9.8E-07 EPI 6.0E-03 2.3E+00 5.6E+00 1.0E-03 RAGSE
Thallium Sulfate	7446-18-6	5.0E+02 PHYSPROP						6.3E+0	2 PHYSPROP	6.8E+00	CRC89				5.5E+04 CRC89	8.6E-03 7.1E+01 1.7E+02 1.0E-03 RAGSE
Thifensulfuron-methyl	79277-27-3	3.9E+02 PHYSPROP	1.7E-12	4.1E-14	PHYSPROP		PHYSPROP		2 PHYSPROP			3.6E-02 4.2E-06 EPA WATER9		1.6E+00 PHYSPROP	2.2E+03 PHYSPROP	8.6E-04 1.6E+01 3.7E+01 1.1E-04 EPI
Thiobencarb Thiodiglycol	28249-77-6 111-48-8	2.6E+02 PHYSPROP 1.2E+02 PHYSPROP	1.1E-05 7.6E-08	2.7E-07 1.9E-09	EPI PHYSPROP	2.2E-05 3.2E-03	PHYSPROP PHYSPROP	3.3E+0	PHYSPROP  PHYSPROP	1.2E+00 1.2E+00	CRC89 CRC89	2.3E-02 5.9E-06 EPA WATER9 6.8E-02 9.4E-06 EPA WATER9	1.6E+03 EPI 1.0E+00 EPI	3.4E+00 PHYSPROP -6.3E-01 PHYSPROP	2.8E+01 PHYSPROP	6.3E-02 2.9E+00 7.0E+00 1.0E-02 EPI 5.2E-04 5.1E-01 1.2E+00 1.2E-04 EPI
Thiofanox	39196-18-4	2.2E+02 PHYSPROP	3.8E-07	9.4E-09	EPI	1.7E-04	PHYSPROP	5.7E+0	1 PHYSPROP			5.2E-02 6.1E-06 EPA WATER9	7.2E+01 EPI	2.2E+00 PHYSPROP	5.2E+03 PHYSPROP	3.6E-02 1.8E+00 4.2E+00 6.3E-03 EPI
Thiophanate, Methyl	23564-05-8	3.4E+02 PHYSPROP		1.2E-09	EPI		PHYSPROP	1.7E+0	2 EPI			3.9E-02 4.5E-06 EPA WATER9	3.3E+02 EPI	1.4E+00 PHYSPROP		1.1E-03 8.7E+00 2.1E+01 1.6E-04 EPI
Thiram	137-26-8 7440-31-5	2.4E+02 PHYSPROP 1.2E+02 CRC89	7.4E-06	1.8E-07	EPI	1.7E-05 0.0E+00	PHYSPROP	1.6E+0	2 PHYSPROP 1 CRC89	1.3E+00 7.3E+00	PERRY CRC89	2.6E-02 6.6E-06 EPA WATER9	6.1E+02 EPI 2.5E+02 BAES	1.7E+00 PHYSPROP	3.0E+01 PHYSPROP	5.9E-03 2.3E+00 5.6E+00 9.9E-04 EPI 4.2E-03 4.9E-01 1.2E+00 1.0E-03 RAGSE
Titanium Tetrachloride	7550-45-0	1.9E+02 CRC89					ATSDR Profile	-2.4E+0		1.7E+00	CRC89	3.8E-02 9.1E-06 EPA WATER9	2.3ETUZ BAE3			5.3E-03 1.2E+00 2.9E+00 1.0E-03 RAGSE
Toluene	108-88-3	9.2E+01 PHYSPROP	2.7E-01	6.6E-03	PHYSPROP	2.8E+01	PHYSPROP	-9.5E+0		8.6E-01	CRC89	7.8E-02 9.2E-06 EPA WATER9	2.3E+02 EPI	2.7E+00 PHYSPROP	5.3E+02 PHYSPROP	1.1E-01 3.5E-01 8.3E-01 3.1E-02 EPI
Toluene-2,5-diamine	95-70-5 106-49-0	1.2E+02 PHYSPROP	3.0E-07 8.3E-05	7.4E-09 2.0F-06	PHYSPROP	3.4E-03 2.9F-01	PHYSPROP	6.4E+0	1 PHYSPROP	9.6F-01	CRC89	7.7E-02 9.0E-06 EPA WATER9	5.5E+01 EPI 1.1E+02 EPI	1.6E-01 PHYSPROP	7.7E+04 PHYSPROP	1.7E-03 5.1E-01 1.2E+00 4.1E-04 EPI 1.3E-02 4.2E-01 1.0E+00 3.3E-03 EPI
Toluidine, p- Total Petroleum Hydrocarbons (Aliphatic High)	106-49-0 NA	1.1E+02 PHYSPROP 1.7E+02 EPI	8.3E-05 3.3E+02	8.2E+00	EPI	1.4E-01	EPI	4.4E+0		9.6E-01	CRC89	6.2E-02 7.2E-06 EPA WATER9	1.1E+02 EPI 4.8E+03 EPI	6.1E+00 PHYSPROP	3.7E-03 PHYSPROP	9.8E+00 9.5E-01 1.0E+00 3.3E-03 EPI 9.8E+00 9.5E-01 4.3E+00 2.0E+00 EPI
Total Petroleum Hydrocarbons (Aliphatic Low)	NA	8.6E+01 EPI	7.4E+01	1.8E+00	EPI	1.5E+02	EPI	-9.5E+0	1 EPI	6.6E-01	CRC89	7.3E-02 8.2E-06 EPA WATER9	1.3E+02 EPI	3.9E+00 EPI	9.5E+00 EPI	7.2E-01 3.2E-01 1.2E+00 2.0E-01 EPI
Total Petroleum Hydrocarbons (Aliphatic Medium) Total Petroleum Hydrocarbons (Aromatic High)	NA NA	1.3E+02 EPI 2.0E+02 EPI	1.4E+02 3.6F-04	3.4E+00 8.9E-06	EPI EPI	4.5E+00 9.2F-06	EPI EPI	-5.4E+0		7.2E-01 1.3E+00	CRC89	5.1E-02 6.8E-06 EPA WATER9	8.0E+02 EPI 5.5E+04 EPI	5.7E+00 EPI 5.2E+00 EPI	2.2E-01 EPI	7.4E+00 5.5E-01 2.5E+00 1.7E+00 EPI 1.7E+00 1.4E+00 5.7E+00 3.1E-01 EPI
Total Petroleum Hydrocarbons (Aromatic High)  Total Petroleum Hydrocarbons (Aromatic Low)	NA NA	7.8E+01 EPI	2.3E-01	5.6E-03	EPI	9.2E-06 9.5E+01	EPI	5.5E+0		8.8E-01	CRC89	9.0E-02 1.0E-05 EPA WATER9	5.5E+04 EPI 1.5E+02 EPI	2.1F+00 EPI	1.8E+03 EPI	5.1F-02 2.9F-01 6.9F-01 1.5F-02 FPI
Total Petroleum Hydrocarbons (Aromatic Medium)	NA	1.4E+02 EPI	2.0E-02	4.8E-04	EPI	7.0E-02	EPI	5.7E+0		1.0E+00	CRC89	5.6E-02 8.1E-06 EPA WATER9	2.0E+03 EPI	3.6E+00 EPI	2.8E+01 EPI	3.1E-01 6.0E-01 1.4E+00 6.9E-02 EPI
Toxaphene	8001-35-2	4.5E+02 PHYSPROP	2.5E-04	6.0E-06	PHYSPROP	6.7E-06		7.7E+0				3.2E-02 3.8E-06 EPA WATER9	7.7E+04 EPI	5.9E+00 PHYSPROP	5.5E-01 PHYSPROP	4.2E-01 3.4E+01 8.2E+01 5.2E-02 EPI
Tralomethrin Tri-n-butyltin	66841-25-6 688-73-3	6.7E+02 PHYSPROP 2.9E+02 PHYSPROP	1.6E-08 6.2E+01	3.9E-10 1.5E+00	EPI PHYSPROP	3.6E-11 4.0E-02	PHYSPROP PHYSPROP	1.4E+0: 2.9E+0:	2 PHYSPROP 1 EPI	1.1E+00	CRC89	2.5E-02 2.9E-06 EPA WATER9 2.1E-02 5.4E-06 EPA WATER9	1.9E+05 EPI 8.1E+03 EPI	7.6E+00 PHYSPROP 4.1E+00 PHYSPROP	8.0E-02 PHYSPROP 7.3E-03 PHYSPROP	3.0E-01 5.6E+02 1.3E+03 3.1E-02 EPI 1.3E-01 4.5E+00 1.1E+01 1.9E-02 EPI
Triacetin	102-76-1	2.2E+02 PHYSPROP	5.0E-07	1.2E-08	EPI	2.5E-03			1 PHYSPROP	1.2E+00	CRC89	2.6E-02 6.6E-06 EPA WATER9	4.1E+01 EPI	2.5E-01 PHYSPROP	5.8E+04 PHYSPROP	7.8E-04 1.8E+00 4.2E+00 1.4E-04 EPI
Triadimefon	43121-43-3	2.9E+02 PHYSPROP	0.02 00	8.1E-11	EPI		PHYSPROP		1 PHYSPROP	1.2E+00	CRC89	2.2E-02 5.7E-06 EPA WATER9	3.0E+02 EPI	2.8E+00 PHYSPROP		1.6E-02 4.6E+00 1.1E+01 2.4E-03 EPI
Triallate Triasulfuron	2303-17-5 82097-50-5	3.0E+02 PHYSPROP 4.0E+02 PHYSPROP	4.9E-04 1.3E-11	1.2E-05 3.2E-13	EPI PHYSPROP	1.2E-04	PHYSPROP PHYSPROP		1 PHYSPROP 2 PHYSPROP	1.3E+00	CRC89	2.2E-02 5.7E-06 EPA WATER9 3.5E-02 4.1E-06 EPA WATER9	1.0E+03 EPI 4.3E+02 EPI	4.6E+00 PHYSPROP 1.1E+00 PHYSPROP	4.0E+00 PHYSPROP 3.2E+01 PHYSPROP	2.3E-01 5.3E+00 1.3E+01 3.5E-02 EPI 3.6E-04 1.9E+01 4.5E+01 4.7E-05 EPI
Tribenuron-methyl	101200-48-0	4.0E+02 PHYSPROP	4.2E-12	1.0E-13	PHYSPROP	3.9E-10	PHYSPROP		2 PHYSPROP			3.5E-02 4.1E-06 EPA WATER9	9.5E+01 EPI	7.8E-01 PHYSPROP	5.0E+01 PHYSPROP	3.6E-03 1.7E+01 4.1E+01 4.7E-04 EPI
Tribromobenzene, 1,2,4-	615-54-3	3.1E+02 PHYSPROP	1.4E-02	3.4E-04	PHYSPROP	5.5E-03	PHYSPROP	4.5E+0	1 PHYSPROP		ChemNet	2.9E-02 7.9E-06 EPA WATER9	6.1E+02 EPI	4.7E+00 PHYSPROP	4.9E+00 PHYSPROP	2.3E-01 6.1E+00 1.5E+01 3.4E-02 EPI
Tributyl Phosphate	126-73-8	2.7E+02 PHYSPROP	5.8E-05	1.4E-06	EPI	1.1E-03	PHYSPROP	-7.9E+0	1 PHYSPROP	9.7E-01	CRC89	2.1E-02 5.2E-06 EPA WATER9	2.4E+03 EPI	4.0E+00 PHYSPROP	2.8E+02 PHYSPROP	1.4E-01 3.3E+00 7.8E+00 2.3E-02 EPI
Tributyltin Compounds Tributyltin Oxide	NA 56-35-9	6.0E+02 PHYSPROP	1.2E-05	3.0E-07	EPI	7 SE-06	PHYSPROP	-4 SE+0	1 PHYSPROP	1 2F+00	CRC89	1.5E-02 3.6E-06 EPA WATER9	2.6E+07 EPI	4.1E+00 PHYSPROP	2.0E+01 PHYSPROP	2.4E-03 2.3E+02 5.5E+02 2.5E-04 EPI
Trichloro-1,2,2-trifluoroethane, 1,1,2-	76-13-1	1.9E+02 PHYSPROP		5.3E-01	EPI		PHYSPROP		1 PHYSPROP		CRC89	3.8E-02 8.6E-06 EPA WATER9	2.0E+02 EPI	3.2E+00 PHYSPROP		9.2E-02 1.2E+00 2.8E+00 1.8E-02 EPI
memoro 1,2,2-umuoroemane, 1,1,2-			5.5E-07	1.4E-08	PHYSPROP	6.0E-02	EPI	5.8E+0	1 PHYSPROP	1.6E+00	CRC89	5.2E-02 9.5E-06 EPA WATER9	3.2E+00 EPI	1.3E+00 PHYSPROP	5.5E+04 PHYSPROP	7.1E-03 8.6E-01 2.1E+00 1.5E-03 EPI
Trichloroacetic Acid	76-03-9	1.6E+02 PHYSPROP							2 EPI							
Trichloroacetic Acid Trichloroaniline HCI, 2,4,6-	33663-50-2	2.3E+02 EPI	2.9E-12	7.2E-14	EPI	6.1E-08	EPI DHVSDDOD					5.0E-02 5.9E-06 EPA WATER9	1.3E+03 EPI	-6.7E-01 EPI	2.1E+01 EPI	1.6E-04 2.1E+00 5.1E+00 2.8E-05 EPI
Trichloroacetic Acid	33663-50-2 634-93-5			7.2E-14 1.3E-06 1.3E-03	PHYSPROP PHYSPROP	6.1E-08 4.4E-03 2.1E-01	PHYSPROP PHYSPROP		1 PHYSPROP	1.5E+00	CRC89	5.0E-02 5.9E-06 EPA WATER9 5.6E-02 6.6E-06 EPA WATER9 4.0E-02 8.4E-06 EPA WATER9	1.3E+03 EPI 4.4E+03 EPI 1.4E+03 EPI	-6.7E-01 EPI 3.5E+00 PHYSPROP 4.1E+00 PHYSPROP	2.1E+01 EPI 4.0E+01 PHYSPROP 1.8E+01 PHYSPROP	1.6E-04 2.1E+00 5.1E+00 2.8E-05 EPI 1.5E-01 1.3E+00 3.2E+00 2.7E-02 EPI 3.8E-01 1.1E+00 2.6E+00 7.4E-02 EPI
Trichioroacetic Acid Trichioroaniline HCI, 2.4,6- Trichioroaniline, 2.4,6- Trichiorobenzene, 1,2,3- Trichiorobenzene, 1,2,4-	33663-50-2 634-93-5 87-61-6 120-82-1	2.3E+02 EPI 2.0E+02 PHYSPROF	2.9E-12 5.5E-05 5.1E-02 5.8E-02	1.3E-06 1.3E-03 1.4E-03	PHYSPROP PHYSPROP PHYSPROP	4.4E-03 2.1E-01 4.6E-01	PHYSPROP PHYSPROP PHYSPROP	7.9E+0: 5.4E+0: 1.7E+0:	PHYSPROP PHYSPROP PHYSPROP	1.5E+00	CRC89	5.6E-02 6.6E-06 EPA WATER9	4.4E+03 EPI 1.4E+03 EPI 1.4E+03 EPI	3.5E+00 PHYSPROP 4.1E+00 PHYSPROP 4.0E+00 PHYSPROP		1.5E-01 1.3E+00 3.2E+00 2.7E-02 EPI 3.8E-01 1.1E+00 2.6E+00 7.4E-02 EPI 3.7E-01 1.1E+00 2.6E+00 7.1E-02 EPI
Trichloroacetic Acid Trichloroaniline HCI, 2,4,6- Trichloroaniline, 2,4,6- Trichlorobenzene, 1,2,3- Trichlorobenzene, 1,2,4- Trichlorobenzene, 1,1,1-	33663-50-2 634-93-5 87-61-6 120-82-1 71-55-6	2.3E+02 EPI 2.0E+02 PHYSPROF 1.8E+02 PHYSPROF 1.8E+02 PHYSPROF 1.3E+02 PHYSPROF	2.9E-12 5.5E-05 5.1E-02 5.8E-02 7.0E-01	1.3E-06 1.3E-03 1.4E-03 1.7E-02	PHYSPROP PHYSPROP PHYSPROP PHYSPROP	4.4E-03 2.1E-01 4.6E-01 1.2E+02	PHYSPROP PHYSPROP PHYSPROP PHYSPROP	7.9E+0: 5.4E+0: 1.7E+0:	1 PHYSPROP 1 PHYSPROP	1.5E+00 1.3E+00	CRC89 CRC89	5.6E-02 6.6E-06 EPA WATER9 4.0E-02 8.4E-06 EPA WATER9 4.0E-02 8.4E-06 EPA WATER9 6.5E-02 9.6E-06 EPA WATER9	4.4E+03 EPI 1.4E+03 EPI 1.4E+03 EPI 4.4E+01 EPI	3.5E+00 PHYSPROP 4.1E+00 PHYSPROP 4.0E+00 PHYSPROP 2.5E+00 PHYSPROP	4.0E+01 PHYSPROP 1.8E+01 PHYSPROP 4.9E+01 PHYSPROP 1.3E+03 PHYSPROP	1.5E-01     1.3E+00     3.2E+00     2.7E-02     EPI       3.8E-01     1.1E+00     2.6E+00     7.4E-02     EPI       3.7E-01     1.1E+00     2.6E+00     7.1E-02     EPI       5.6E-02     5.9E-01     1.4E+00     1.3E-02     EPI
Trichioroacetic Acid Trichioroaniline HCI, 2.4,6- Trichioroaniline, 2.4,6- Trichiorobenzene, 1,2,3- Trichiorobenzene, 1,2,4-	33663-50-2 634-93-5 87-61-6 120-82-1	2.3E+02 EPI 2.0E+02 PHYSPROP 1.8E+02 PHYSPROP 1.8E+02 PHYSPROP	2.9E-12 5.5E-05 5.1E-02 5.8E-02	1.3E-06 1.3E-03 1.4E-03	PHYSPROP PHYSPROP PHYSPROP	4.4E-03 2.1E-01 4.6E-01	PHYSPROP PHYSPROP PHYSPROP PHYSPROP	7.9E+0: 5.4E+0: 1.7E+0: -3.0E+0 -3.7E+0	PHYSPROP PHYSPROP PHYSPROP	1.5E+00	CRC89	5.6E-02 6.6E-06 EPA WATER9 4.0E-02 8.4E-06 EPA WATER9 4.0E-02 8.4E-06 EPA WATER9	4.4E+03 EPI 1.4E+03 EPI 1.4E+03 EPI	3.5E+00 PHYSPROP 4.1E+00 PHYSPROP 4.0E+00 PHYSPROP	4.0E+01 PHYSPROP 1.8E+01 PHYSPROP	1.5E-01 1.3E+00 3.2E+00 2.7E-02 EPI 3.8E-01 1.1E+00 2.6E+00 7.4E-02 EPI 3.7E-01 1.1E+00 2.6E+00 7.1E-02 EPI
Trichioracetic Add Trichioracetin HD, 24,6- Trichioraniline, 24,6- Trichiorobenzene, 1,2,3- Trichiorobenzene, 1,2,4- Trichiorobenzene, 1,2,4- Trichioroethane, 1,1,1- Trichioroethane, 1,1,2- Trichioroethylene Trichioroethylene	33663-50-2 634-93-5 87-61-6 120-82-1 71-55-6 79-00-5 79-01-6 75-69-4	2.3E+02 EPI 2.0E+02 PHYSPROP 1.8E+02 PHYSPROP 1.8E+02 PHYSPROP 1.3E+02 PHYSPROP 1.3E+02 PHYSPROP 1.3E+02 PHYSPROP 1.4E+02 PHYSPROP	2.9E-12 5.5E-05 5.1E-02 5.8E-02 7.0E-01 3.4E-02 4.0E-01 4.0E+00	1.3E-06 1.3E-03 1.4E-03 1.7E-02 8.2E-04 9.9E-03 9.7E-02	PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP	4.4E-03 2.1E-01 4.6E-01 1.2E+02 2.3E+01 6.9E+01 8.0E+02	PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP	7.9E+0: 5.4E+0: 1.7E+0: -3.0E+0 -3.7E+0	1 PHYSPROP 1 PHYSPROP 1 PHYSPROP 1 PHYSPROP 1 PHYSPROP	1.5E+00 1.3E+00 1.4E+00 1.5E+00 1.5E+00	CRC89 CRC89 CRC89 CRC89 CRC89	5.6E-02 6.6E-06 PA WATER9 4.0E-02 8.4E-06 EPA WATER9 4.0E-02 8.4E-06 EPA WATER9 6.5E-02 1.0E-05 EPA WATER9 6.5E-02 1.0E-05 EPA WATER9 6.5E-02 1.0E-05 EPA WATER9 6.5E-02 1.0E-05 EPA WATER9	4.4E+03 EPI 1.4E+03 EPI 1.4E+03 EPI 4.4E+01 EPI 6.1E+01 EPI 6.1E+01 EPI 4.4E+01 EPI	3.5E+00 PHYSPROP 4.1E+00 PHYSPROP 4.0E+00 PHYSPROP 2.5E+00 PHYSPROP 1.9E+00 PHYSPROP 2.4E+00 PHYSPROP 2.5E+00 PHYSPROP	4.0E+01 PHYSPROP 1.8E+01 PHYSPROP 4.9E+01 PHYSPROP 1.3E+03 PHYSPROP 4.6E+03 PHYSPROP	1.5E-01         1.3E+00         3.2E+00         2.7E-02         EPI           3.8E-01         1.1E+00         2.6E+00         7.4E-02         EPI           3.7E-01         1.1E+00         2.6E+00         7.1E-02         EPI           5.6E-02         5.9E-01         1.4E+00         1.3E-02         EPI           2.2E-02         5.7E-01         1.4E+00         5.0E-03         EPI           5.1E-02         5.7E-01         1.4E+00         1.2E-02         EPI           5.7E-02         6.2E-01         1.5E+00         1.3E-02         EPI
Trichioroacetic Acid Trichioroaniline HCI, 2.4,6- Trichioroaniline, 2.4,6- Trichioroaniline, 2.4,6- Trichiorobenzene, 1,2,3- Trichiorobenzene, 1,2,4- Trichioroethane, 1,1,1- Trichioroethane, 1,1,2- Trichioroethane Trichiorofluoromethane Trichiorofluoromethane Trichiorofluoromethane	33663-50-2 634-93-5 87-61-6 120-82-1 71-55-6 79-00-5 79-01-6 75-69-4 95-95-4	2.3E+02 PHYSPROF 1.8E+02 PHYSPROF 1.8E+02 PHYSPROF 1.3E+02 PHYSPROF 1.3E+02 PHYSPROF 1.3E+02 PHYSPROF 1.4E+02 PHYSPROF 1.4E+02 PHYSPROF 2.0E+02 PHYSPROF 2.0E+02 PHYSPROF	2.9E-12 5.5E-05 5.1E-02 5.8E-02 7.0E-01 3.4E-02 4.0E-01 4.0E+00 6.6E-05	1.3E-06 1.3E-03 1.4E-03 1.7E-02 8.2E-04 9.9E-03 9.7E-02 1.6E-06	PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP EPI	4.4E-03 2.1E-01 4.6E-01 1.2E+02 2.3E+01 6.9E+01 8.0E+02 7.5E-03	PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP EPI	7.9E+0: 5.4E+0: 1.7E+0: -3.0E+0 -3.7E+0 -8.5E+0 -1.1E+0 6.9E+0:	1 PHYSPROP 1 PHYSPROP 1 PHYSPROP 1 PHYSPROP 1 PHYSPROP 1 PHYSPROP 2 PHYSPROP 1 PHYSPROP	1.5E+00 1.3E+00 1.4E+00 1.5E+00 1.5E+00 1.5E+00	CRC89 CRC89 CRC89 CRC89 CRC89	5.6E-02 6.6E-06 EPA WATER9 4.0E-02 8.4E-06 EPA WATER9 4.0E-02 8.4E-06 EPA WATER9 6.5E-02 9.6E-06 EPA WATER9 6.7E-02 1.0E-05 EPA WATER9 6.9E-02 1.0E-05 EPA WATER9 6.5E-02 1.0E-05 EPA WATER9 3.1E-02 8.1E-06 EPA WATER9	4.4E+03 EPI 1.4E+03 EPI 1.4E+03 EPI 1.4E+03 EPI 4.4E+01 EPI 6.1E+01 EPI 6.1E+01 EPI 4.4E+01 EPI 1.8E+03 EPI	3.5E+00 PHYSPROP 4.1E+00 PHYSPROP 4.0E+00 PHYSPROP 2.5E+00 PHYSPROP 2.4E+00 PHYSPROP 2.5E+00 PHYSPROP 3.7E+00 PHYSPROP	4.0E+01 PHYSPROP 1.8E+01 PHYSPROP 4.9E+01 PHYSPROP 1.3E+03 PHYSPROP 4.6E+03 PHYSPROP 1.1E+03 PHYSPROP 1.1E+04 PHYSPROP 1.2E+04 PHYSPROP	1.5E-01 1.3E+00 3.2E+00 2.7E-02 EPI 3.8E-01 1.1E+00 2.6E+00 7.4E-02 EPI 3.7E-01 1.1E+00 2.6E+00 7.1E-02 EPI 5.6E-02 5.9E-01 1.4E+00 1.3E-02 EPI 5.2E-02 5.7E-01 1.4E+00 5.0E-03 EPI 5.7E-02 6.2E-01 1.5E+00 1.3E-02 EPI 5.7E-02 6.2E-01 1.5E+00 1.3E-02 EPI 2.0E-01 1.5E+00 3.2E+00 3.6E-02 EPI
Trichloroacetic Acid Trichloroaniline HD, 2,4,6- Trichloroaniline, 2,4,6- Trichlorobenzene, 1,2,3- Trichlorobenzene, 1,2,4- Trichloroethane, 1,1,1- Trichloroethane, 1,1,2- Trichloroethane, 1,1,2- Trichloroethane, 1,1- Trichloroethane, 1,1- Trichlorofluoromethane Trichlorophenol, 2,4,5- Trichlorophenol, 2,4,5- Trichlorophenol, 2,4,6-	33663-50-2 634-93-5 87-61-6 120-82-1 71-55-6 79-00-5 79-01-6 75-69-4 95-95-4 88-06-2	2.3E+02 EPI 2.0E+02 PHYSPROF 1.8E+02 PHYSPROF 1.3E+02 PHYSPROF 1.3E+02 PHYSPROF 1.3E+02 PHYSPROF 1.4E+02 PHYSPROF 2.0E+02 PHYSPROF 2.0E+02 PHYSPROF 2.0E+02 PHYSPROF	2.9E-12 5.5E-05 5.1E-02 5.8E-02 7.0E-01 3.4E-02 4.0E-01 4.0E+00 6.6E-05 1.1E-04	1.3E-06 1.3E-03 1.4E-03 1.7E-02 8.2E-04 9.9E-03 9.7E-02 1.6E-06 2.6E-06	PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP EPI EPI	4.4E-03 2.1E-01 4.6E-01 1.2E+02 2.3E+01 6.9E+01 8.0E+02 7.5E-03 8.0E-03	PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP EPI EPI	7.9E+0: 5.4E+0: 1.7E+0: -3.0E+0 -3.7E+0 -8.5E+0 -1.1E+0 6.9E+0:	1 PHYSPROP 1 PHYSPROP 1 PHYSPROP 1 PHYSPROP 1 PHYSPROP 1 PHYSPROP 2 PHYSPROP	1.5E+00 1.3E+00 1.4E+00 1.5E+00 1.5E+00 1.5E+00 1.5E+00	CRC89 CRC89 CRC89 CRC89 CRC89 PERRY CRC89	5.6E-02 6.6E-06 EPA WATER9 4.0E-02 8.4E-06 EPA WATER9 6.5E-02 9.6E-06 EPA WATER9 6.7E-02 1.0E-05 EPA WATER9 6.9E-02 1.0E-05 EPA WATER9 6.9E-02 1.0E-05 EPA WATER9 6.5E-02 1.0E-05 EPA WATER9 3.1E-02 8.1E-06 EPA WATER9 3.1E-02 8.1E-06 EPA WATER9	4.4E+03 EPI 1.4E+03 EPI 1.4E+03 EPI 4.4E+01 EPI 6.1E+01 EPI 4.4E+01 EPI 4.4E+01 EPI 1.8E+03 EPI 1.8E+03 EPI	3.5E+00 PHYSPROP 4.1E+00 PHYSPROP 4.0E+00 PHYSPROP 2.5E+00 PHYSPROP 2.4E+00 PHYSPROP 2.5E+00 PHYSPROP 3.7E+00 PHYSPROP 3.7E+00 PHYSPROP 3.7E+00 PHYSPROP	4.0E+01 PHYSPROP 1.8E+01 PHYSPROP 4.9E+01 PHYSPROP 1.3E+03 PHYSPROP 4.6E+03 PHYSPROP 1.3E+03 PHYSPROP 1.1E+03 PHYSPROP	1.5E-01 1.3E+00 2.6E+00 2.7E-02 EPI 3.RE-01 1.1E+00 2.6E+00 7.4E-02 EPI 3.7E-01 1.1E+00 2.6E+00 7.1E-02 EPI 5.6E-02 5.9E-01 1.4E+00 1.3E-02 EPI 5.1E-02 5.7E-01 1.4E+00 1.2E-02 EPI 5.1E-02 5.7E-01 1.5E+00 1.3E-02 EPI 5.7E-02 6.7E-01 1.5E+00 1.3E-02 EPI 2.0E-01 1.3E+00 3.2E+00 3.6E-02 EPI 1.9E-01 1.3E+00 3.2E+00 3.5E-02 EPI
Trichioroacetic Acid Trichioroacetic Acid Trichioroacetic Acid Trichioroacetic Acid Trichioroacetic Acid Trichiorobenzene, 1,2,3- Trichiorobenzene, 1,2,4- Trichioroethane, 1,1,1- Trichioroethane, 1,1,1- Trichioroethane, 1,1,2- Trichioroethoene Trichiorofluoromethane Trichiorophenol, 2,4,5- Trichiorophenol, 2,4,5- Trichiorophenol, 2,4,6- Trichiorophenol, 2,4,6- Trichiorophenoly, 2,4,5- Trichiorophenoly, 2,4,5-	33663-50-2 634-93-5 87-61-6 120-82-1 71-55-6 79-00-5 79-01-6 75-69-4 95-95-4	2.3E+02 PHYSPROF 1.8E+02 PHYSPROF 1.8E+02 PHYSPROF 1.3E+02 PHYSPROF 1.3E+02 PHYSPROF 1.3E+02 PHYSPROF 1.4E+02 PHYSPROF 1.4E+02 PHYSPROF 2.0E+02 PHYSPROF 2.0E+02 PHYSPROF	2.9E-12 5.5E-05 5.1E-02 5.8E-02 7.0E-01 3.4E-02 4.0E-01 4.0E+00 6.6E-05 1.1E-04 3.5E-07	1.3E-06 1.3E-03 1.4E-03 1.7E-02 8.2E-04 9.9E-03 9.7E-02 1.6E-06	PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP EPI	4.4E-03 2.1E-01 4.6E-01 1.2E+02 2.3E+01 6.9E+01 8.0E+02 7.5E-03 8.0E-03 3.8E-05	PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP EPI	7.9E+0: 5.4E+0: 1.7E+0: -3.0E+0 -3.7E+0 -8.5E+0 -1.1E+0 6.9E+0: 1.5E+0:	1 PHYSPROP 1 PHYSPROP 1 PHYSPROP 1 PHYSPROP 1 PHYSPROP 1 PHYSPROP 2 PHYSPROP 1 PHYSPROP	1.5E+00 1.3E+00 1.4E+00 1.5E+00 1.5E+00 1.5E+00	CRC89 CRC89 CRC89 CRC89 CRC89	5.6E-02 6.6E-06 EPA WATER9 4.0E-02 8.4E-06 EPA WATER9 4.0E-02 8.4E-06 EPA WATER9 6.5E-02 9.6E-06 EPA WATER9 6.7E-02 1.0E-05 EPA WATER9 6.9E-02 1.0E-05 EPA WATER9 6.5E-02 1.0E-05 EPA WATER9 3.1E-02 8.1E-06 EPA WATER9	4.4E+03 EPI 1.4E+03 EPI 1.4E+03 EPI 1.4E+03 EPI 4.4E+01 EPI 6.1E+01 EPI 6.1E+01 EPI 4.4E+01 EPI 1.8E+03 EPI	3.5E+00 PHYSPROP 4.1E+00 PHYSPROP 4.0E+00 PHYSPROP 2.5E+00 PHYSPROP 2.4E+00 PHYSPROP 2.5E+00 PHYSPROP 3.7E+00 PHYSPROP	4.0E+01 PHYSPROP 1.8E+01 PHYSPROP 4.9E+01 PHYSPROP 1.3E+03 PHYSPROP 4.6E+03 PHYSPROP 1.1E+03 PHYSPROP 1.1E+04 PHYSPROP 1.2E+04 PHYSPROP	1.5E-01 1.3E+00 3.2E+00 2.7E-0.2 EPI 3.8E-01 1.1E+00 2.6E+00 7.4E-0.2 EPI 3.7E-01 1.1E+00 2.6E+00 7.1E-0.2 EPI 5.6E-02 5.9E-01 1.4E+00 1.3E-0.2 EPI 5.2E-02 5.7E-01 1.4E+00 5.0E-0.3 EPI 5.7E-02 5.7E-01 1.4E+00 1.2E-0.2 EPI 5.7E-02 6.2E-01 1.5E+00 1.3E-0.2 EPI 5.7E-02 6.2E-01 1.5E+00 3.6E-0.2 EPI 5.7E-02 6.2E-01 3.EE+00 3.6E-0.2 EPI
Trichioracetic Acid Trichioracetic Acid Trichioracetiline, 2.4,6- Trichioracetiline, 2.4,6- Trichioracetiline, 2.4,6- Trichioracetiline, 2.4,6- Trichiorobenzene, 1,2,3- Trichiorocethane, 1,1,1- Trichiorocethane, 1,1,1- Trichiorocethylene Trichiorocethylene Trichiorophenol, 2.4,5- Trichiorophenol, 2.4,5- Trichiorophenoxyacetic Acid, 2,4,5- Trichiorophen	33663-50-2 634-93-5 87-61-6 120-82-1 71-55-6 79-00-5 79-01-6 75-69-4 95-95-4 88-06-2 93-76-5 93-77-6	2.3E+02 EPI 2.0E+02 PHYSPROF 1.8E+02 PHYSPROF 1.3E+02 PHYSPROF 1.3E+02 PHYSPROF 1.3E+02 PHYSPROF 1.3E+02 PHYSPROP 2.0E+02 PHYSPROP 2.0E+02 PHYSPROP 2.6E+02 PHYSPROP 2.7E+02 PHYSPROP 2.7E+02 PHYSPROP 2.7E+02 PHYSPROP 2.7E+02 PHYSPROP 2.7E+02 PHYSPROP 2.7E+02 PHYSPROP 3.7E+02 PHY	2.9E-12 5.5E-05 5.1E-02 5.8E-02 7.0E-01 3.4E-02 4.0E-01 4.0E+00 6.6E-05 1.1E-04 3.5E-07 1.3E-07	1.3E-06 1.3E-03 1.4E-03 1.7E-02 8.2E-04 9.9E-03 9.7E-02 1.6E-06 2.6E-06 8.7E-09 9.1E-09 3.2E-04	PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP EPI EPI PHYSPROP PHYSPROP EPI EPI PHYSPROP	4.4E-03 2.1E-01 4.6E-01 1.2E+02 2.3E+01 6.9E+01 8.0E+02 7.5E-03 8.0E-03 3.8E-05 1.0E-05 3.1E+00	PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP EPI EPI EPI PHYSPROP PHYSPROP	7.9E+0: 5.4E+0: 1.7E+0: -3.0E+0 -3.7E+0 -8.5E+0 -1.1E+0 6.9E+0: 1.5E+0: 1.8E+0: -6.5E+0	PHYSPROP	1.5E+00 1.3E+00 1.4E+00 1.5E+00 1.5E+00 1.5E+00 1.5E+00 1.5E+00 1.8E+00 1.2E+00 1.4E+00	CRC89 CRC89 CRC89 CRC89 CRC89 PERRY CRC89 PubChem PubChem CRC89	\$66.02 6.66.06 PA WATEN 4.06.02 8.46.06 PA WATEN 4.06.02 8.46.06 PA WATEN 6.56.02 9.66.06 PA WATEN 6.56.02 10.60.5 PA WATEN 6.57.02 9.26.06 PA WATEN 6.57.02 9.26.06 PA WATEN 6.57.02 9.26.06 PA WATEN 6.57.02 9.26.06 PA WATEN	4.4E+03 EPI 1.4E+03 EPI 1.4E+03 EPI 4.4E+01 EPI 6.1E+01 EPI 6.1E+01 EPI 1.8E+03 EPI 1.8E+03 EPI 1.1E+02 EPI 1.1E+02 EPI 9.5E+01 EPI 9.5E+01 EPI	3.5E+00   PHYSPROP   4.1E+00   PHYSPROP   4.0E+00   PHYSPROP   5.5E+00   PHYSPROP   5.5E+00   PHYSPROP   3.7E+00   PHYSPROP   3.7E+00   PHYSPROP   3.3E+00   PHYSPROP   2.4E+00   PHYSPROP   3.3E+00   PHYSPROP   4.4E+00   PHYSPROP   4.4E+00	4.0E+01 PHYSPROP 1.8E+01 PHYSPROP 1.3E+03 PHYSPROP 4.6E+03 PHYSPROP 1.1E+03 PHYSPROP 1.1E+03 PHYSPROP 1.2E+03 PHYSPROP 2.8E+02 PHYSPROP 7.1E+01 PHYSPROP 1.9E+03 PHYSPROP 1.9E+03 PHYSPROP 1.9E+03 PHYSPROP 1.9E+03 PHYSPROP	1.5E-01 1.3E+00 3.2E+00 2.7E-02 EPI 3.8E-01 1.1E+00 2.6E+00 7.4E-02 EPI 3.7E-01 1.1E+00 2.6E+00 7.1E-02 EPI 5.6E-02 5.9E-01 1.4E+00 1.3E-02 EPI 5.1E-02 5.7E-01 1.4E+00 1.3E-02 EPI 5.1E-02 5.7E-01 1.4E+00 1.2E-02 EPI 5.7E-02 6.2E-01 1.5E+00 1.3E-02 EPI 5.7E-02 6.2E-01 1.5E+00 1.3E-02 EPI 1.9E-01 1.3E+00 3.2E+00 3.6E-02 EPI 1.9E-01 1.3E+00 6.3E-00 9.1E-03 EPI 1.0E-01 3.4E+00 6.3E+00 9.1E-03 EPI 1.0E-01 3.4E+00 8.2E+00 1.6E-02 EPI 4.5E-02 7.0E-01 1.7E-00 9.6E-03 EPI 4.5E-02 7.0E-01 1.7E-00 9.6E-03
Trichioroacetic Acid Trichioroaniline HCI, 2.4,6- Trichioroaniline, 2.4,6- Trichioroaniline, 2.4,6- Trichioroaniline, 2.4,6- Trichiorobenzene, 1,2,3- Trichioroethane, 1,1,1- Trichioroethane, 1,1,1- Trichioroethane, 1,1,2- Trichioroethane, 2.4,5- Trichiorofluoromethane Trichiorofluoromethane Trichiorophenol, 2,4,5- Trichiorophenol, 2,4,5- Trichiorophenoxypropionic acid, -2,4,5- Trichiorophenoxypropionic acid, -2,4,5- Trichioropopane, 1,2,2- Trichioropopane, 1,2,2- Trichioropopane, 1,2,3-	33663-50-2 634-93-5 87-61-6 120-82-1 71-55-6 79-00-5 79-01-6 75-69-4 95-95-4 88-06-2 93-76-5 93-72-1 598-77-6 96-18-4	2.3E+02 PHYSPROF 2.0E+02 PHYSPROF 1.8E+02 PHYSPROF 1.3E+02 PHYSPROF 1.3E+02 PHYSPROF 1.3E+02 PHYSPROF 2.0E+02 PHYSPROF 2.0E+02 PHYSPROF 2.0E+02 PHYSPROF 2.7E+02 PHYSPROF 1.5E+02 PHYSPROF 1.5E+02 PHYSPROF 1.5E+02 PHYSPROF	2.9E-12 5.5E-05 5.1E-02 5.8E-02 7.0E-01 3.4E-02 4.0E-01 4.0E+00 6.6E-05 1.1E-04 3.5E-07 1.3E-02 1.4E-02	1.3E-06 1.3E-03 1.4E-03 1.7E-02 8.2E-04 9.9E-03 9.7E-02 1.6E-06 2.6E-06 8.7E-09 9.1E-09 3.2E-04 3.4E-04	PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP EPI PHYSPROP PHYSPROP PHYSPROP PHYSPROP	4.4E-03 2.1E-01 4.6E-01 1.2E+02 2.3E+01 6.9E+01 8.0E+02 7.5E-03 8.0E-03 3.8E-05 1.0E-05 3.1E+00 3.7E+00	PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP EPI EPI EPI PHYSPROP PHYSPROP PHYSPROP	7.9E+0: 5.4E+0: 1.7E+0: -3.0E+0 -3.7E+0 -8.5E+0 -1.1E+0 6.9E+0: 1.5E+0: 1.8E+0: -6.5E+0 -1.5E+0	1 PHYSPROP 1 PHYSPROP 1 PHYSPROP 1 PHYSPROP 2 PHYSPROP 1 PHYSPROP 1 PHYSPROP 1 PHYSPROP 2 PHYSPROP 2 PHYSPROP 2 PHYSPROP 1 EPI 1 PHYSPROP	1.5E+00 1.3E+00 1.4E+00 1.5E+00 1.5E+00 1.5E+00 1.5E+00 1.2E+00 1.4E+00 1.4E+00	CRC89 CRC89 CRC89 CRC89 CRC89 PERRY CRC89 PubChem PubChem CRC89 CRC89	\$66.02 6.6E-06 PA WATER9 4.0E-02 8.4E-06 PA WATER9 6.5E-02 9.6E-06 PA WATER9 6.5E-02 9.6E-06 PA WATER9 6.5E-02 10.E-05 PA WATER9 6.9E-02 1.0E-05 PA WATER9 6.3E-02 1.0E-05 PA WATER9 3.1E-02 8.1E-06 PA WATER9 3.1E-02 8.1E-06 PA WATER9 2.3E-02 5.9E-06 PA WATER9 2.3E-02 5.9E-06 PA WATER9 5.7E-02 9.2E-06 PA WATER9 5.7E-02 9.7E-06 PA WATER9 5.7E-02 9.7E-02 9	4.4E+03 EPI 1.4E+03 EPI 1.4E+03 EPI 1.4E+03 EPI 4.4E+01 EPI 6.1E+01 EPI 6.1E+01 EPI 4.4E+01 EPI 1.8E+03 EPI 1.1E+02 EPI 1.8E+02 EPI 1.8E+02 EPI 1.2E+02 EPI 1.2E+02 EPI 1.2E+02 EPI	3.5E+00 PHYSPROP 4.1E+00 PHYSPROP 4.1E+00 PHYSPROP 2.5E+00 PHYSPROP 1.9E+00 PHYSPROP 2.5E+00 PHYSPROP 3.7E+00 PHYSPROP 3.3E+00 PHYSPROP 3.8E+00 PHYSPROP 3.8E+00 PHYSPROP 2.4E+00 PHYSPROP 2.4E+00 PHYSPROP 2.4E+00 PHYSPROP	4.0E+01   PHYSPROP   1.8E+01   PHYSPROP   1.8E+03   PHYSPROP   1.8E+03	1.5E-01 1.3E+00 3.2E+00 2.7E-02 EPI 3.8E-01 1.1E+00 2.6E+00 7.4E-02 EPI 3.7E-01 1.1E+00 2.6E+00 7.1E-02 EPI 5.6E-02 5.9E-01 1.4E+00 1.3E-02 EPI 5.1E-02 5.7E-01 1.4E+00 5.0E-03 EPI 5.7E-02 6.2E-01 1.4E+00 1.3E-02 EPI 5.7E-02 6.2E-01 1.5E+00 1.3E-02 EPI 1.9E-01 1.3E+00 3.2E+00 3.6E-02 EPI 1.9E-01 1.3E+00 3.2E+00 3.5E-02 EPI 5.6E-02 2.8E+00 6.8E+00 9.1E-03 EPI 1.9E-01 3.4E+00 8.2E+00 9.1E-03 EPI 1.9E-01 3.4E+00 8.2E+00 1.6E-02 EPI 4.5E-02 7.0E-01 1.7E+00 9.6E-03 EPI 3.5E-02 7.0E-01 1.7E+00 9.6E-03 EPI 3.5E-02 7.0E-01 1.7E+00 9.6E-03 EPI
Trichioracetic Acid Trichioracetic Acid Trichioracetiline, 2.4,6- Trichioracetiline, 2.4,6- Trichioracetiline, 2.4,6- Trichioracetiline, 2.4,6- Trichiorobenzene, 1,2,3- Trichiorocethane, 1,1,1- Trichiorocethane, 1,1,1- Trichiorocethylene Trichiorocethylene Trichiorophenol, 2.4,5- Trichiorophenol, 2.4,5- Trichiorophenoxyacetic Acid, 2,4,5- Trichiorophen	33663-50-2 634-93-5 87-61-6 120-82-1 71-55-6 79-00-5 79-01-6 75-69-4 95-95-4 88-06-2 93-76-5 93-77-6	2.3E+02 EPI 2.0E+02 PHYSPROF 1.8E+02 PHYSPROF 1.3E+02 PHYSPROF 1.3E+02 PHYSPROF 1.3E+02 PHYSPROF 1.3E+02 PHYSPROP 2.0E+02 PHYSPROP 2.0E+02 PHYSPROP 2.6E+02 PHYSPROP 2.7E+02 PHYSPROP 2.7E+02 PHYSPROP 2.7E+02 PHYSPROP 2.7E+02 PHYSPROP 2.7E+02 PHYSPROP 2.7E+02 PHYSPROP 3.7E+02 PHY	2.9E-12 5.5E-05 5.1E-02 5.8E-02 7.0E-01 3.4E-02 4.0E-01 4.0E+00 6.6E-05 1.1E-04 3.5E-07 3.7E-07 1.3E-02 1.4E-02 7.2E-01	1.3E-06 1.3E-03 1.4E-03 1.7E-02 8.2E-04 9.9E-03 9.7E-02 1.6E-06 2.6E-06 8.7E-09 9.1E-09 3.2E-04	PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP EPI EPI PHYSPROP PHYSPROP EPI EPI PHYSPROP	4.4E-03 2.1E-01 4.6E-01 1.2E+02 2.3E+01 6.9E+01 8.0E+02 7.5E-03 8.0E-03 3.8E-05 1.0E-05 3.1E+00	PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP EPI EPI EPI PHYSPROP PHYSPROP	7.9E+0: 5.4E+0: 1.7E+0: -3.0E+0 -3.7E+0 -8.5E+0 -1.1E+0 6.9E+0: 1.5E+0: 1.8E+0: -6.5E+0 -1.5E+0 -1.5E+0	1 PHYSPROP 1 PHYSPROP 1 PHYSPROP 1 PHYSPROP 2 PHYSPROP 1 PHYSPROP 1 PHYSPROP 1 PHYSPROP 2 PHYSPROP 2 PHYSPROP 2 PHYSPROP 1 EPI 1 PHYSPROP	1.5E+00 1.3E+00 1.4E+00 1.5E+00 1.5E+00 1.5E+00 1.5E+00 1.5E+00 1.8E+00 1.2E+00 1.4E+00	CRC89 CRC89 CRC89 CRC89 CRC89 PERRY CRC89 PubChem PubChem CRC89	\$66.02 6.66.06 PA WATEN 4.06.02 8.46.06 PA WATEN 4.06.02 8.46.06 PA WATEN 6.56.02 9.66.06 PA WATEN 6.56.02 10.60.5 PA WATEN 6.57.02 9.26.06 PA WATEN 6.57.02 9.26.06 PA WATEN 6.57.02 9.26.06 PA WATEN 6.57.02 9.26.06 PA WATEN	4.4E+03 EPI 1.4E+03 EPI 1.4E+03 EPI 4.4E+01 EPI 6.1E+01 EPI 6.1E+01 EPI 1.8E+03 EPI 1.8E+03 EPI 1.1E+02 EPI 1.1E+02 EPI 9.5E+01 EPI 9.5E+01 EPI	3.5E+00   PHYSPROP   4.1E+00   PHYSPROP   4.0E+00   PHYSPROP   5.5E+00   PHYSPROP   5.5E+00   PHYSPROP   3.7E+00   PHYSPROP   3.7E+00   PHYSPROP   3.3E+00   PHYSPROP   2.4E+00   PHYSPROP   3.3E+00   PHYSPROP   4.4E+00   PHYSPROP   4.4E+00	4.0E+01 PHYSPROP 1.8E+01 PHYSPROP 1.3E+03 PHYSPROP 4.6E+03 PHYSPROP 1.1E+03 PHYSPROP 1.1E+03 PHYSPROP 1.2E+03 PHYSPROP 2.8E+02 PHYSPROP 7.1E+01 PHYSPROP 1.9E+03 PHYSPROP 1.9E+03 PHYSPROP 1.9E+03 PHYSPROP 1.9E+03 PHYSPROP	1.5E-01 1.3E+00 3.2E+00 2.7E-02 EPI 3.8E-01 1.1E+00 2.6E+00 7.1E-02 EPI 3.7E-01 1.1E+00 2.6E+00 7.1E-02 EPI 5.6E-02 5.9E-01 1.4E+00 1.3E-02 EPI 5.1E-02 5.7E-01 1.4E+00 5.0E-03 EPI 5.1E-02 5.7E-01 1.4E+00 1.2E-02 EPI 5.7E-02 6.2E-01 1.5E+00 1.3E-02 EPI 2.0E-01 1.3E+00 3.2E+00 3.5E-02 EPI 1.9E-01 1.3E+00 3.2E+00 3.5E-02 EPI 1.9E-01 3.4E+00 6.8E+00 9.1E-03 EPI 1.0E-01 3.4E+00 8.2E+00 1.6E-02 EPI 1.0E-01 3.4E+00 8.2E+00 1.6E-02 EPI 4.5E-02 7.0E-01 1.7E-00 9.6E-03 EPI
Trichloroacetic Add Trichloroacetic Add Trichloroacetiline, 2.4,6- Trichloroacetiline, 2.4,6- Trichloroberzene, 1.2,3- Trichloroberzene, 1.2,3- Trichloroberzene, 1.2,4- Trichlorocethane, 1.1.1- Trichlorocethane, 1.1.2- Trichlorocethylene Trichlorocethylene Trichloropethologouther Trichlorophenol, 2.4,5- Trichlorophenoxypoethic Add, 2.4,5- Trichlorophenoxypoethic Add, 2.4,5- Trichlorophenoxypoethic Add, 2.4,5- Trichlorophenoxypoethic Add, 2.4,5- Trichlorophenoxypoethic Trichlorophenoxypoethic Add, 2.4,5- Trichlorophenoxypoethic Trichlorophenoxypoethic Add, 2.4,5- Trichlorophenoxypoethic Trichlorophenoxypoethic Add, 2.4,5- Trichlorophen	33663-50-2 634-93-5 87-61-6 120-82-1 71-55-6 79-00-5 79-01-6 75-69-4 95-95-4 88-06-2 93-76-5 93-72-1 598-77-6 96-18-4 96-19-5 1330-78-5 58138-08-2	2.35+02 EPI 2.06+02 PHYSPROF 1.85+02 PHYSPROF 1.85+02 PHYSPROF 1.85+02 PHYSPROF 1.35+02 PHYSPROF 1.35+02 PHYSPROF 1.35+02 PHYSPROF 2.05+02 PHYSPROF 2.05+02 PHYSPROF 2.05+02 PHYSPROF 2.05+02 PHYSPROF 2.05+02 PHYSPROF 1.55+02 PHY	2.9E-12 5.5E-05 5.1E-02 5.8E-02 7.0E-01 3.4E-02 4.0E+00 6.6E-05 1.1E-04 3.5E-07 1.3E-02 1.4E-02 7.2E-01 3.3E-05 1.7E-07	1.3E-06 1.3E-03 1.4E-03 1.7E-02 8.2E-04 9.9E-03 9.7E-02 1.6E-06 8.7E-09 9.1E-09 9.2E-04 3.4E-04 1.8E-02 4.1E-07	PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP EPI EPI PHYSPROP	4.4E-03 2.1E-01 4.6E-01 1.2E+02 2.3E+01 6.9E+01 8.0E+02 7.5E-03 8.0E-03 3.8E-05 1.0E-05 3.1E+00 3.7E+00 4.4E+00 6.0E-07 3.9E-04	PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP EPI EPI PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP	7.9E+0: 5.4E+0: 1.7E+0: -3.0E+0 -3.7E+0 -8.5E+0 -1.1E+0 6.9E+0: 1.5E+0: 1.5E+0: -1.5E+0 -5.6E+0 -3.3E+0 4.3E+0:	1 PHYSPROP 1 PHYSPROP 1 PHYSPROP 1 PHYSPROP 1 PHYSPROP 2 PHYSPROP 1 PHYSPROP 2 PHYSPROP 2 PHYSPROP 2 PHYSPROP 1 PHYSPROP 1 EPI 1 PHYSPROP 1 PHYSPROP 1 EPI 1 PHYSPROP	1.5E+00 1.3E+00 1.4E+00 1.5E+00 1.5E+00 1.5E+00 1.5E+00 1.2E+00 1.4E+00 1.4E+00 1.4E+00	CRC89 CRC89 CRC89 CRC89 CRC89 PERRY CRC89 PubChem PubChem CRC89 CRC89 CRC89	\$66-0.2 6.66-0.6 PA WATER9 4.06-0.2 8.46-0.6 PA WATER9 4.06-0.2 8.46-0.6 PA WATER9 6.56-0.2 10-0.5 PA WATER9 6.56-0.2 10-0.5 PA WATER9 6.56-0.2 10-0.5 PA WATER9 6.56-0.2 10-0.5 PA WATER9 8.16-0.8 PA WATER9 8.16-0.6 PA WATER9 8.16-0.6 PA WATER9 8.16-0.6 PA WATER9 8.16-0.6 PA WATER9 8.76-0.2 9.26-0.6 PA WATER9 8.76-0.2 9.26-0.6 PA WATER9 8.76-0.2 9.26-0.6 PA WATER9 1.96-0.2 4.86-0.6 PA WATER9	4.4E+03 EPI 1.4E+03 EPI 1.4E+03 EPI 4.4E+01 EPI 4.4E+01 EPI 6.1E+01 EPI 6.1E+01 EPI 1.8E+03 EPI 1.8E+03 EPI 1.1E+02 EPI 1.8E+02 EPI 1.2E+02 EPI 1.2E+02 EPI 1.2E+04 EPI 1.2E+04 EPI 4.7E+04 EPI 4.7E+04 EPI 3.4E+03 EPI	3.5540 PHYSPROP 4.1E400 PHYSPROP 2.55400 PHYSPROP 2.55400 PHYSPROP 2.45400 PHYSPROP 3.75400 PHYSPROP	40-6-01 PHYSPROP 1.38-03 PHYSPROP 1.38-04 PHYSPROP	1.5E-01 1.3E+00 3.2E+00 2.7E-02 EPI 3.8E-01 1.1E+00 2.6E+00 7.4E-02 EPI 3.7E-01 1.1E+00 2.6E+00 7.4E-02 EPI 3.7E-01 1.1E+00 2.6E+00 7.1E-02 EPI 5.6E-02 5.9E-01 1.4E+00 1.3E-02 EPI 5.1E-02 5.7E-01 1.6E+00 1.3E-02 EPI 5.7E-02 6.2E-01 1.5E+00 1.3E-02 EPI 5.7E-02 6.2E-01 1.5E+00 1.3E-02 EPI 5.7E-02 6.2E-01 1.5E+00 1.3E-02 EPI 5.6E-02 2.8E+00 3.2E+00 3.5E-02 EPI 5.6E-02 2.8E+00 6.8E+00 9.1E-03 EPI 4.5E-02 7.0E-01 1.7E+00 7.5E-03 EPI 4.5E-02 7.0E-01 1.7E+00 7.5E-03 EPI 5.5E-02 FPI 5.6E-02 1.5E-02 EPI 5.5E-02 7.0E-01 1.7E+00 7.5E-03 EPI 5.5E-02 7.0E-01 1.7E+00 7.5E-03 EPI 5.5E-01 1.5E-01 1.5E-02 EPI 5.5E-01 1.5E-01 1.5E-02 EPI 5.5E-01 1.5E-01 1.5E-01 5.9E-02 EPI 5.5E-01 1.5E-01 1.5E-01 5.9E-02 EPI 5.5E-01 1.5E-01 1.5E-01 5.9E-02 EPI 5.9E-01 5.9E-01 5.9E-01 5.9E-02 EPI 5.9E-01 5.
Trichioroacetic Acid Trichioroacetic Acid Trichioroacetic Acid Trichioroacetic Acid Trichioroacetic Acid Trichiorobenzene, 1,2,3- Trichiorobenzene, 1,2,4- Trichiorobenzene, 1,2,4- Trichiorocethane, 1,1,1- Trichiorocethane, 1,1,1- Trichiorocethane Trichiorophenol, 2,4,5- Trichiorophenol, 2,3- Trichiorophenol, 1,2,3- T	33663-50-2 634-93-5 87-61-6 120-82-1 71-55-6 79-00-5 79-01-6 75-69-4 95-95-4 88-06-2 93-76-5 93-77-5 98-77-6 96-18-4 96-19-5 1330-78-5 58138-08-2 121-44-8	2.35+02 EPI 2.06+02 PHYSPROF 1.88+02 PHYSPROF 1.88+02 PHYSPROF 1.88+02 PHYSPROF 1.38+02 PHYSPROF 1.36+02 PHYSPROF 1.36+02 PHYSPROF 1.46+02 PHY	2.9E-12 5.5E-05 5.1E-02 7.0E-01 3.4E-02 4.0E-01 4.0E+00 6.6E-05 1.1E-04 3.5E-07 1.3E-02 1.4E-02 7.2E-01 3.3E-05 5.17E-05 6.1E-03	1.3E-06 1.3E-03 1.4E-03 1.7E-02 8.2E-04 9.9E-03 9.7E-02 1.6E-06 8.7E-09 9.1E-09 3.2E-04 3.4E-04 1.8E-02 8.1E-07 1.5E-04	PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP EPI PHYSPROP	4.4E-03 2.1E-01 4.6E-01 1.2E+02 2.3E+01 6.9E+01 8.0E+02 7.5E-03 8.0E-03 3.8E-05 1.0E-05 3.1E+00 3.7E+00 4.4E+00 6.0E-07 3.9E-04	PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP EPI EPI EPI PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP	7.9E+0: 5.4E+0: 1.7E+0: -3.0E+0 -3.7E+0 -8.5E+0 -1.1E+0 6.9E+0: 1.5E+0: 1.5E+0: -1.5E+0: -5.6E+0 -3.3E+0 4.3E+0: -1.1E+0	1 PHYSPROP 1 PHYSPROP 1 PHYSPROP 1 PHYSPROP 1 PHYSPROP 2 PHYSPROP 2 PHYSPROP 1 PHYSPROP 2 PHYSPROP 2 PHYSPROP 2 PHYSPROP 1 EPI 1 PHYSPROP 1 EPI 1 PHYSPROP 1 PHYSPROP 1 PHYSPROP 2 PHYSPROP 2 PHYSPROP 3 PHYSPROP 4 PHYSPROP 5 PHYSPROP 6 PHYSPROP 7 PHYSPROP 6 PHYSPROP 7 PHYSPROP	1.5E+00 1.3E+00 1.4E+00 1.5E+00 1.5E+00 1.5E+00 1.5E+00 1.2E+00 1.4E+00 1.4E+00 1.2E+00	CRC89 CRC89 CRC89 CRC89 CRC89 PERRY CRC89 PubChem CRC89 CRC89 CRC89 CRC89	\$66.00 6.66-06 PA WATEN9 4.06-02 8.46-06 PA WATEN9 6.56-02 9.66-06 PA WATEN9 6.56-02 9.66-06 PA WATEN9 6.56-02 9.66-06 PA WATEN9 6.56-02 1.06-05 PA WATEN9 5.56-02 1.06-05 PA WATEN9 3.16-02 8.16-06 PA WATEN9 3.16-02 8.16-06 PA WATEN9 2.36-02 5.96-06 PA WATEN9 2.36-02 5.96-06 PA WATEN9 5.76-02 9.26-06 PA WATEN9 5.76-02 9.26-06 PA WATEN9 1.96-02 4.86-06 PA WATEN9 6.66-02 7.96-06 PA WATEN9 6.66-06 PA WATE	4.4E+03 EPI 1.4E+03 EPI 1.4E+03 EPI 1.4E+03 EPI 4.4E+01 EPI 6.1E+01 EPI 6.1E+01 EPI 1.8E+03 EPI 1.8E+03 EPI 1.8E+03 EPI 1.8E+02 EPI 1.2E+02 EPI 1.2E+02 EPI 1.2E+02 EPI 1.2E+02 EPI 1.2E+04 EPI 3.4E+04 EPI 3.4E+04 EPI 3.4E+04 EPI 5.1E+01 EPI	3.55+00 PHYSPROP 4.16+00 PHYSPROP 2.55+00 PHYSPROP 2.55+00 PHYSPROP 2.45+00 PHYSPROP 2.45+00 PHYSPROP 3.75+00 PHYSPROP 3.75+00 PHYSPROP 3.75+00 PHYSPROP 3.75+00 PHYSPROP 3.75+00 PHYSPROP 2.35+00 PHYSPROP 2.35+00 PHYSPROP 2.35+00 PHYSPROP 2.35+00 PHYSPROP 2.35+00 PHYSPROP 5.15+00 PHYSPROP 5.15+00 PHYSPROP 5.15+00 PHYSPROP 5.15+00 PHYSPROP 5.15+00 PHYSPROP 5.15+00 PHYSPROP	406-01 PHYSPROP 1.81-03 PHYSPROP	1.5E-01 1.3E+00 3.2E+00 2.7E-02 EPI 3.8E-01 1.1E+00 2.6E+00 7.4E-02 EPI 3.8E-01 1.1E+00 2.6E+00 7.4E-02 EPI 5.6E-02 5.9E-01 1.4E+00 1.3E-02 EPI 5.6E-02 5.9E-01 1.4E+00 1.3E-02 EPI 5.1E-02 5.7E-01 1.4E+00 1.2E-02 EPI 5.7E-02 6.2E-01 1.5E+00 1.3E-02 EPI 2.0E-01 1.3E+00 3.2E+00 3.6E-02 EPI 1.9E-01 1.3E+00 3.2E+00 3.5E-02 EPI 1.9E-01 1.3E+00 6.8E+00 9.1E-03 EPI 1.0E-01 3.4E+00 6.8E+00 9.1E-03 EPI 1.0E-01 3.4E+00 8.2E+00 1.6E-02 EPI 1.5E-02 2.6E-01 1.7E+00 9.6E-03 EPI 3.5E-02 6.9E-01 1.7E+00 7.5E-03 EPI 3.5E-02 6.9E-01 1.6E-02 EPI 4.7E-01 6.9E-01 1.6E+01 6.9E-02 EPI 4.7E-01 6.6E+01 6.9E-02 EPI 4.7E-01 6.6E+01 6.9E-02 EPI 4.7E-01 6.6E+01 6.9E-02 EPI 4.7E-01 5.9E-01 9.3E-01 3.9E-03 EPI
Trichloroacetic Acid Trichloroacetic Acid Trichloroacetine, 2,4,6- Trichloroacetine, 2,2,6- Trichloroacetine, 2,2,3- Trichloroacetine, 1,2,3- Trichlorocetine, 1,2,1- Trichlorocetine, 1,1,1- Trichlorocetine, 1,1,1- Trichlorocetine, 1,1,2- Trichlorocetine, 1,2,5- Trichloropheno, 2,4,5- Trichlorophenovyacetic Acid, 2,4,	33663-50-2 634-93-5 87-61-6 120-82-1 71-55-6 79-00-5 79-01-6 75-69-4 95-95-4 88-06-2 93-76-5 93-72-1 598-77-6 96-18-4 96-19-5 1330-78-5 58138-08-2	2.35+02 EPI 2.06+02 PHYSPROF 1.85+02 PHYSPROF 1.85+02 PHYSPROF 1.85+02 PHYSPROF 1.35+02 PHYSPROF 1.35+02 PHYSPROF 1.35+02 PHYSPROF 2.05+02 PHYSPROF 2.05+02 PHYSPROF 2.05+02 PHYSPROF 2.05+02 PHYSPROF 2.05+02 PHYSPROF 1.55+02 PHY	2.9E-12 5.5E-05 5.1E-02 5.8E-02 7.0E-01 3.4E-02 4.0E-01 4.0E+00 6.6E-05 1.1E-04 3.5E-07 3.7E-07 1.3E-02 1.4E-02 7.7E-01 3.3E-03 1.7E-05 6.1E-03 3.3E-03	1.3E-06 1.3E-03 1.4E-03 1.7E-02 8.2E-04 9.9E-03 9.7E-02 1.6E-06 8.7E-09 9.1E-09 9.2E-04 3.4E-04 1.8E-02 4.1E-07	PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP EPI EPI PHYSPROP	4.4E-03 2.1E-01 4.6E-01 1.2E+02 2.3E+01 6.9E+01 8.0E+02 7.5E-03 8.0E-03 3.8E-05 1.0E-05 3.1E+00 3.7E+00 4.4E+00 6.0E-07 3.9E-04	PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP EPI EPI EPI PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP PHYSPROP	7.9E+0: 5.4E+0: 1.7E+0: -3.0E+0 -3.7E+0 -8.5E+0 -1.1E+0: 6.9E+0: 1.5E+0: 1.8E+0: -6.5E+0 -1.5E+0 -3.3E+0 -3.3E+0 -4.1E+0: -7.0E+0	1 PHYSPROP 1 PHYSPROP 1 PHYSPROP 1 PHYSPROP 1 PHYSPROP 2 PHYSPROP 1 PHYSPROP 2 PHYSPROP 2 PHYSPROP 2 PHYSPROP 1 PHYSPROP 1 EPI 1 PHYSPROP 1 PHYSPROP 1 EPI 1 PHYSPROP	1.5E+00 1.3E+00 1.4E+00 1.5E+00 1.5E+00 1.5E+00 1.5E+00 1.2E+00 1.4E+00 1.4E+00 1.4E+00	CRC89 CRC89 CRC89 CRC89 CRC89 PERRY CRC89 PubChem PubChem CRC89 CRC89 CRC89	\$66-0.2 6.66-0.6 PA WATER9 4.06-0.2 8.46-0.6 PA WATER9 4.06-0.2 8.46-0.6 PA WATER9 6.56-0.2 10-0.5 PA WATER9 6.56-0.2 10-0.5 PA WATER9 6.56-0.2 10-0.5 PA WATER9 6.56-0.2 10-0.5 PA WATER9 8.16-0.8 PA WATER9 8.16-0.6 PA WATER9 8.16-0.6 PA WATER9 8.16-0.6 PA WATER9 8.16-0.6 PA WATER9 8.76-0.2 9.26-0.6 PA WATER9 8.76-0.2 9.26-0.6 PA WATER9 8.76-0.2 9.26-0.6 PA WATER9 1.96-0.2 4.86-0.6 PA WATER9	4.4E+03 EPI 1.4E+03 EPI 1.4E+03 EPI 4.4E+01 EPI 4.4E+01 EPI 6.1E+01 EPI 6.1E+01 EPI 1.8E+03 EPI 1.8E+03 EPI 1.1E+02 EPI 1.8E+02 EPI 1.2E+02 EPI 1.2E+02 EPI 1.2E+04 EPI 1.2E+04 EPI 4.7E+04 EPI 4.7E+04 EPI 3.4E+03 EPI	3.5540 PHYSPROP 4.1E400 PHYSPROP 2.55400 PHYSPROP 2.55400 PHYSPROP 2.45400 PHYSPROP 3.75400 PHYSPROP	40-6-01 PHYSPROP 1.38-03 PHYSPROP 1.38-04 PHYSPROP	1.5E-01 1.3E+00 3.2E+00 2.7E-02 EPI 3.8E-01 1.1E+00 2.6E+00 7.4E-02 EPI 3.7E-01 1.1E+00 2.6E+00 7.4E-02 EPI 3.7E-01 1.1E+00 2.6E+00 7.4E-02 EPI 5.6E-02 5.9E-01 1.4E+00 1.3E-02 EPI 5.1E-02 5.7E-01 1.4E+00 1.3E-02 EPI 5.1E-02 5.7E-01 1.5E+00 1.3E-02 EPI 5.7E-02 6.2E-01 1.5E+00 1.3E-02 EPI 1.9E-01 1.3E-00 3.2E+00 3.6E-02 EPI 1.9E-01 1.3E+00 3.2E+00 3.5E-02 EPI 1.0E-01 3.4E+00 3.2E+00 9.1E-03 EPI 1.0E-01 3.4E+00 8.2E-00 9.1E-03 EPI 3.5E-02 7.0E-01 1.7E+00 9.6E-03 EPI 3.5E-02 7.0E-01 1.7E+00 9.6E-03 EPI 7.7E-02 6.7E-01 1.7E-00 9.7E-03 EPI 7.7E-02 6.7E-01 1.7E-00 9.7E-03 EPI 7.7E-02 6.7E-01 1.7E-01 9.7E-01 9.7E-02 EPI 7.7E-01 9.7E-01 9.7E-01 9.7E-02 EPI 7.7E-01 9.7E-01 9.7E-0

Contaminant		Molecular Weight		Vola	tility Paramete	rs		Melt	ting Point	D	ensity	Diffusivity in Air and Water	Soil Partition Coefficients	Water Partition	Water Solubility	Tanwater Dermal Parameters
			H,	HLC						Density	,	Dia Diw	K <sub>d</sub> K <sub>or</sub>	log K <sub>ow</sub>	S	B Tourset t* Ks
Analyte	CAS No.	MW MW Ref	(unitless) (atr	m-m³/mole)	H` and HLC Ref	VP	VP Ref	MP	MP Ref	(g/cm <sup>3</sup> )	Density Ref	(cm <sup>2</sup> /s) (cm <sup>2</sup> /s) D <sub>ia</sub> and D <sub>iw</sub> Re		(unitless) log K <sub>rw</sub> Ref	(mg/L) S Ref	(unitless) (hr/event) (hr) (cm/hr) KPREF
Trifluralin 1!	582-09-8	3.4E+02 PHYSPROP	4.2E-03	1.0E-04	PHYSPROP	4.6E-05	PHYSPROP	4.9E+01	PHYSPROP	1.4E+00	PubChem	2.2E-02 5.6E-06 EPA WATER9	1.6E+04 EPI	5.3E+00 PHYSPROP	1.8E-01 PHYSPROP	5.1E-01 7.9E+00 1.9E+01 7.3E-02 EPI
Trimethyl Phosphate 5:	12-56-1	1.4E+02 PHYSPROP	2.9E-07	7.2E-09	PHYSPROP	8.5E-01	EPI	-4.6E+0:	1 PHYSPROP	1.2E+00	CRC89	5.8E-02 8.8E-06 EPA WATERS	1.1E+01 EPI	-6.5E-01 PHYSPROP	5.0E+05 PHYSPROP	4.3E-04 6.4E-01 1.5E+00 9.5E-05 EPI
Trimethylbenzene, 1,2,3	26-73-8	1.2E+02 PHYSPROP	1.8E-01	4.4E-03	PHYSPROP	1.7E+00	PHYSPROP	-2.5E+0	1 PHYSPROP	8.9E-01	CRC89	6.1E-02 8.0E-06 EPA WATERS	6.3E+02 EPI	3.7E+00 PHYSPROP	7.5E+01 PHYSPROP	3.8E-01 5.0E-01 1.2E+00 9.0E-02 EPI
Trimethylbenzene, 1,2,4- 99	5-63-6	1.2E+02 PHYSPROP	2.5E-01	6.2E-03	PHYSPROP	2.1E+00	PHYSPROP	-4.4E+0:	1 PHYSPROP	8.8E-01	CRC89	6.1E-02 7.9E-06 EPA WATER9	6.1E+02 EPI	3.6E+00 PHYSPROP	5.7E+01 PHYSPROP	3.6E-01 5.0E-01 1.2E+00 8.6E-02 EPI
Trimethylbenzene, 1,3,5-	08-67-8	1.2E+02 PHYSPROP	3.6E-01	8.8E-03	PHYSPROP	2.5E+00	PHYSPROP	-4.5E+0:	1 PHYSPROP	8.6E-01	CRC89	6.0E-02 7.8E-06 EPA WATERS	6.0E+02 EPI	3.4E+00 PHYSPROP	4.8E+01 PHYSPROP	2.6E-01 5.0E-01 1.2E+00 6.2E-02 EPI
Trimethylpentene, 2,4,4 25	5167-70-8	1.1E+02 PHYSPROP	3.0E+01	7.5E-01	PHYSPROP	7.1E+01	PHYSPROP	-8.4E+0	1 EPI	7.2E-01	PubChem	6.0E-02 7.3E-06 EPA WATER9	2.4E+02 EPI	4.1E+00 PHYSPROP	4.0E+00 PHYSPROP	7.7E-01 4.5E-01 1.7E+00 1.9E-01 RAGSE
Trinitrobenzene, 1,3,5- 99	9-35-4	2.1E+02 PHYSPROP	2.7E-07	6.5E-09	EPI	6.4E-06	EPI	1.2E+02	2 PHYSPROP	1.5E+00	CRC89	2.9E-02 7.7E-06 EPA WATER9	1.7E+03 EPI	1.2E+00 PHYSPROP	2.8E+02 PHYSPROP	3.4E-03 1.6E+00 3.9E+00 6.1E-04 EPI
Trinitrotoluene, 2,4,6-	18-96-7	2.3E+02 PHYSPROP	8.5E-07	2.1E-08	EPI	8.0E-06	PHYSPROP	8.0E+01	L PHYSPROP	1.7E+00	CRC89	3.0E-02 7.9E-06 EPA WATERS	2.8E+03 EPI	1.6E+00 PHYSPROP	1.2E+02 PHYSPROP	5.6E-03 2.0E+00 4.7E+00 9.6E-04 EPI
Triphenylphosphine Oxide 75	91-28-6	2.8E+02 PHYSPROP	2.2E-08	5.3E-10	PHYSPROP	2.6E-09	EPI		2 PHYSPROP	1.2E+00	CRC89	2.3E-02 5.8E-06 EPA WATERS	2.0E+03 EPI	2.8E+00 PHYSPROP	6.3E+01 PHYSPROP	2.1E-02 3.8E+00 9.1E+00 3.3E-03 EPI
Tris(1,3-Dichloro-2-propyl) Phosphate 1:	3674-87-8	4.3E+02 PHYSPROP	1.1E-07	2.6E-09	PHYSPROP	7.4E-08	PHYSPROP		L PHYSPROP			3.3E-02 3.9E-06 EPA WATER9	1.1E+04 EPI	3.7E+00 PHYSPROP	7.0E+00 PHYSPROP	1.3E-02 2.7E+01 6.5E+01 1.6E-03 EPI
Tris(1-chloro-2-propyl)phosphate 1:	3674-84-5	3.3E+02 PHYSPROP	2.4E-06	6.0E-08	PHYSPROP	2.0E-05	PHYSPROP	-4.0E+0:	1 PHYSPROP			4.0E-02 4.7E-06 EPA WATERS	1.6E+03 EPI	2.6E+00 PHYSPROP	1.2E+03 PHYSPROP	8.4E-03 7.2E+00 1.7E+01 1.2E-03 EPI
Tris(2,3-dibromopropyl)phosphate 1:	26-72-7	7.0E+02 PHYSPROP	8.9E-04	2.2E-05	EPI	1.9E-04	PHYSPROP	5.5E+00	PHYSPROP	2.3E+00	PubChem	1.9E-02 4.9E-06 EPA WATERS	9.7E+03 EPI	4.3E+00 PHYSPROP	8.0E+00 PHYSPROP	1.4E-03 8.5E+02 2.0E+03 1.4E-04 EPI
Tris(2-chloroethyl)phosphate 1:	15-96-8	2.9E+02 PHYSPROP	1.3E-04	3.3E-06	EPI	6.1E-02	PHYSPROP		1 PHYSPROP		CRC89	2.4E-02 6.2E-06 EPA WATER9	3.9E+02 EPI	1.4E+00 PHYSPROP	7.0E+03 PHYSPROP	2.3E-03 4.2E+00 1.0E+01 3.6E-04 EPI
Tris(2-ethylhexyl)phosphate 78	8-42-2	4.3E+02 PHYSPROP	3.2E-06	7.9E-08	EPI	8.3E-08	PHYSPROP	-7.4E+0	1 PHYSPROP			1.6E-02 3.9E-06 EPA WATERS	2.5E+06 EPI	9.5E+00 PHYSPROP	6.0E-01 PHYSPROP	9.3E+01 2.9E+01 1.3E+02 1.2E+01 EPI
Tungsten 74	440-33-7	1.8E+02 PHYSPROP				0.0E+00	NIOSH	3.4E+03	PHYSPROP	1.9E+01	CRC89		1.5E+02 BAES			5.2E-03 1.1E+00 2.7E+00 1.0E-03 RAGSE
Uranium (Soluble Salts) N	A	2.4E+02 CRC89				0.0E+00	NIOSH	1.1E+03		1.9E+01	CRC89		4.5E+02 BAES			5.9E-03 2.3E+00 5.4E+00 1.0E-03 RAGSE
	1-79-6	8.9E+01 PHYSPROP	2.6E-06	6.4E-08	EPI	2.6E-01	EPI			9.9E-01		8.5E-02 1.0E-05 EPA WATERS	1.2E+01 EPI	-1.5E-01 PHYSPROP		1.4E-03 3.3E-01 8.0E-01 3.9E-04 EPI
Vanadium Pentoxide 1:	314-62-1	1.8E+02 EPI				0.0E+00	NIOSH	6.8E+02	2 CRC89	3.4E+00	CRC89				7.0E+02 CRC89	5.2E-03 1.1E+00 2.6E+00 1.0E-03 RAGSE
	440-62-2	5.1E+01 EPI						1.9E+03		6.0E+00	CRC89		1.0E+03 SSL			2.7E-03 2.0E-01 4.9E-01 1.0E-03 RAGSE
		2.0E+02 PHYSPROP		3.1E-05	EPI	1.0E-02	PHYSPROP	7.1E+01		9.5E-01		2.4E-02 6.1E-06 EPA WATERS		3.8E+00 PHYSPROP	9.0E+01 PHYSPROP	2.2E-01 1.4E+00 3.5E+00 4.0E-02 EPI
Vinclozolin 50	0471-44-8	2.9E+02 PHYSPROP	7.1E-07	1.7E-08	EPI	1.2E-07	PHYSPROP			1.5E+00		2.5E-02 6.5E-06 EPA WATERS	2.8E+02 EPI	3.1E+00 PHYSPROP	2.6E+00 PHYSPROP	2.9E-02 4.2E+00 1.0E+01 4.5E-03 EPI
Vinyl Acetate 10	08-05-4	8.6E+01 PHYSPROP	2.1E-02	5.1E-04	EPI	9.0E+01	PHYSPROP	-9.3E+0	1 PHYSPROP	9.3E-01		8.5E-02 1.0E-05 EPA WATERS	5.6E+00 EPI	7.3E-01 PHYSPROP	2.0E+04 PHYSPROP	5.6E-03 3.2E-01 7.7E-01 1.6E-03 EPI
		1.1E+02 PHYSPROP		1.2E-02	PHYSPROP	1.0E+03	PHYSPROP		2 PHYSPROP			8.6E-02 1.2E-05 EPA WATERS	2.2E+01 EPI	1.6E+00 PHYSPROP	7.6E+03 PHYSPROP	1.7E-02 4.2E-01 1.0E+00 4.4E-03 EPI
	5-01-4	6.2E+01 PHYSPROP	1.1E+00	2.8E-02	PHYSPROP	3.0E+03	EPI			9.1E-01		1.1E-01 1.2E-05 EPA WATERS	2.2E+01 EPI	1.6E+00 PHYSPROP	8.8E+03 PHYSPROP	2.5E-02 2.4E-01 5.7E-01 8.4E-03 EPI
Warfarin 8:	1-81-2	3.1E+02 PHYSPROP	1.1E-07	2.8E-09	EPI	1.2E-07	PHYSPROP	1.6E+02	2 PHYSPROP			4.2E-02 4.9E-06 EPA WATERS	4.3E+02 EPI	2.7E+00 PHYSPROP	1.7E+01 PHYSPROP	1.2E-02 5.6E+00 1.3E+01 1.8E-03 EPI
	06-42-3	1.1E+02 PHYSPROP		6.9E-03	PHYSPROP	8.8E+00	PHYSPROP		L PHYSPROP			6.8E-02 8.4E-06 EPA WATERS	3.8E+02 EPI	3.2E+00 PHYSPROP		2.0E-01 4.1E-01 9.9E-01 4.9E-02 EPI
Xylene, m- 10	08-38-3	1.1E+02 PHYSPROP	2.9E-01	7.2E-03	PHYSPROP	8.3E+00	PHYSPROP	-4.8E+0	1 PHYSPROP	8.6E-01	CRC89	6.8E-02 8.4E-06 EPA WATERS	3.8E+02 EPI	3.2E+00 PHYSPROP	1.6E+02 PHYSPROP	2.1E-01 4.1E-01 9.9E-01 5.3E-02 EPI
		1.1E+02 PHYSPROP		5.2E-03	PHYSPROP		PHYSPROP			8.8E-01		6.9E-02 8.5E-06 EPA WATER9	3.8E+02 EPI	3.1E+00 PHYSPROP		1.9E-01 4.1E-01 9.9E-01 4.7E-02 EPI
		1.1E+02 PHYSPROP	2.7E-01	6.6E-03	PHYSPROP	8.0E+00	PHYSPROP	-2.5E+0				6.9E-02 8.5E-06 EPA WATERS	3.8E+02 EPI	3.2E+00 PHYSPROP	1.1E+02 PHYSPROP	2.0E-01 4.1E-01 9.9E-01 5.0E-02 EPI
Zinc Phosphide 1:	314-84-7	2.6E+02 CRC89						1.2E+03	CRC89	4.6E+00	CRC89					3.7E-03 2.9E+00 7.0E+00 6.0E-04 RAGSE
		6.5E+01 PHYSPROP					<u></u>			7.1E+00	CRC89		6.2E+01 SSL			1.9E-03 2.4E-01 5.9E-01 6.0E-04 RAGSE
		2.8E+02 PHYSPROP	1.1E-07	2.7E-09	PHYSPROP	7.5E-08	PHYSPROP	1.6E+02				4.5E-02 5.2E-06 EPA WATERS		1.3E+00 PHYSPROP	1.0E+01 PHYSPROP	2.1E-03 3.7E+00 8.8E+00 3.3E-04 EPI
Zirconium 74	440-67-7	9.1E+01 EPI				0.0E+00	NIOSH	1.9E+03	CRC89	6.5E+00	CRC89		3.0E+03 BAES			3.7E-03 3.4E-01 8.2E-01 1.0E-03 RAGSE

# Strontium-90 Risk Based Concentration as Calculated by the U.S. EPA Radionuclide Calculator

**MARCH 2016** 

## Site-Specific Resident Equation Inputs for Soil

Variable	Value
TR (target cancer risk) unitless	1.0E-6
t <sub>rec</sub> (time - resident) yr	26
ED <sub>res</sub> (exposure duration - resident) yr	26
ET <sub>me</sub> (exposure time - resident) hr/day	24
ET_mesc (exposure time - resident child) hr/day	24
ET <sub>me</sub> (exposure time - resident adult) hr/day	24
ET <sub>mes.i</sub> (exposure time - indoor resident) hr/day	16.416
ET_ms_n (exposure time - outdoor resident) hr/day	1.752
ED <sub>rec.</sub> (exposure duration - resident child) yr	6
ED <sub>rec.a</sub> (exposure duration - resident adult) yr	20
EF <sub>res</sub> (exposure frequency - resident) day/yr	350
EF (exposure frequency - resident child) day/yr	350
EF <sub>ree.a</sub> (exposure frequency - resident adult) day/yr	350
IRS <sub>rec.a</sub> (soil intake rate - resident adult) mg/day	100
IRS <sub>ree_</sub> (soil intake rate - resident child) mg/day	200
IRA <sub>res-a</sub> (inhalation rate - resident adult) m <sup>3</sup> /day	20
IRA <sub>res-c</sub> (inhalation rate - resident child) m ³/day	10
IFS <sub>rec.arti</sub> (age-adjusted soil ingestion factor - resident) mg	1120000
IFA <sub>res-adj</sub> (age-adjusted soil inhalation factor - resident) m <sup>3</sup>	161000
GSF, (gamma shielding factor - indoor) unitless	0.4
MLF (produce plant mass loading factor) unitless	0.26
Slab size for ACF (area correction factor) m <sup>2</sup>	10000
Cover thickness for GSF (gamma shielding factor) cm	0
IRV <sub>res.a</sub> (vegetable consumption rate - resident adult) g/day	0
IRV recent (vegetable consumption rate - resident child) g/day	0
IFV <sub>recadi</sub> (age-adjusted vegetable ingestion factor - resident) g	0
IFF recard: (age-adjusted fruit ingestion factor - resident) g	0
IRF <sub>rec.a</sub> (fruit consumption rate - resident adult) g/day	0
IRF (fruit consumption rate - resident child) g/day	0
CF <sub>res.produce</sub> (contaminated plant fraction) unitless	0.25
TR (target cancer risk) unitless	1.0E-6
ED <sub>rec.</sub> (exposure duration - resident child) yr	6
ED <sub>rec.a</sub> (exposure duration - resident adult) yr	20
EF <sub>res-c</sub> (exposure frequency - resident child) day/yr	350

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## Site-Specific Resident Equation Inputs for Soil

Variable	Value
EF <sub>res.a</sub> (exposure frequency - resident adult) day/yr	350
City (Climate Zone)	Default
A (acres)	.5
$Q/C_{wp}$ (g/m <sup>2</sup> -s per kg/m <sup>3</sup> )	93.77
PEF (particulate emission factor) m ³/kg	1359344438
A (PEF Dispersion Constant)	16.2302
B (PEF Dispersion Constant)	18.7762
C (PEF Dispersion Constant)	216.108
V (fraction of vegetative cover) unitless	0.5
U <sub>m</sub> (mean annual wind speed) m/s	4.69
U, (equivalent threshold value)	11.32
$F(x)$ (function dependant on $U_m/U_t$ ) unitless	0.194

#### Site-Specific Resident PRGs for Soil

Isotope	ICRP Lung Absorption Type	Inhalation Slope Factor (risk/pCi)	External Exposure Slope Factor (risk/yr per pCi/g)	Slope Factor	Soil Ingestion Slope Factor (risk/pCi)	Particulate Emission Factor (m³/kg)	Lambda (1/yr)	Halflife (yr)	10000 m <sup>2</sup> Soil Volume Area Correction Factor	0 cm Soil Volume Gamma Shielding Factor	Wet Soil-to-plant transfer factor (pCi/g-fresh plant per pCi/g-wet soil)
Sr-90+D	S	4.33E-10	1.95E-08	9.51E-11	1.35E-10	1.36E+09	2.41E-02	2.88E+01	1.00E+00	1.00E+00	9.57E-02

			External	Produce		
	Ingestion	Inhalation	Exposure	Consumption	Total	Total
	PRG	PRG	PRG	PRG	PRG	PRG
Isotope	(pCi/g)	(pCi/g)	(pCi/g)	(pCi/g)	(pCi/g)	(mg/kg)
Sr-90+D	8.87E+00	2.62E+04	7.98E+00	-	4.20E+00	3.05E-08

#### Final

### Radiological and Soil Investigation Report for the American Jewish University Brandeis-Bardin Campus at Simi Valley, California

#### Prepared for:

#### AMERICAN JEWISH UNIVERSITY 1101 Peppertree Lane Brandeis, CA 93064

REVIEW AND APPROVAL							
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