
MEMORANDUM

FROM: JOEL I. CEHN

SUBJECT: 2009 WINTER TESTING RESULTS

DATE: JANUARY 8, 2010

CC:

BACKGROUND

The plan for this winter's testing has been pending for some time. As we have discussed, Boeing conducted the removal of clay target pieces in their Northern Drainage that extends onto AJU property. These clay targets washed onto AJU property from the old Rocketdyne employees' shooting range. Lead residue is also a concern, but the heavy metal tends not to migrate very far.

Now that their work is complete, I came and looked at the cleanup areas and collected some confirmation soil samples. This was coordinated with Boeing and was conducted on December 9th.

The area affected is the drainage that goes by Hidden Valley (see map, lower right). The testing was conducted at the New BCI Camp, which is above Hidden Valley, and at locations further down the drainage, towards the north. I tested for lead and chemicals that have been identified in the shooting range cleanup. These chemicals are in a group called polyaromatic hydrocarbons, or PAH for short.

SUMMARY OF TESTING RESULTS

PAH

The four soil samples tested below regulatory limits. They were all positive for PAH, but at very low levels, well below the cleanup standard. The first chart shows the results. The PAH group of chemicals is totaled in three ways (high and low molecular weight, and toxic equivalent—TEQ). The key parameter is TEQ, where the state has set a limit of 0.723 parts per million. The highest TEQ I found was 0.22 ppm.

Lead

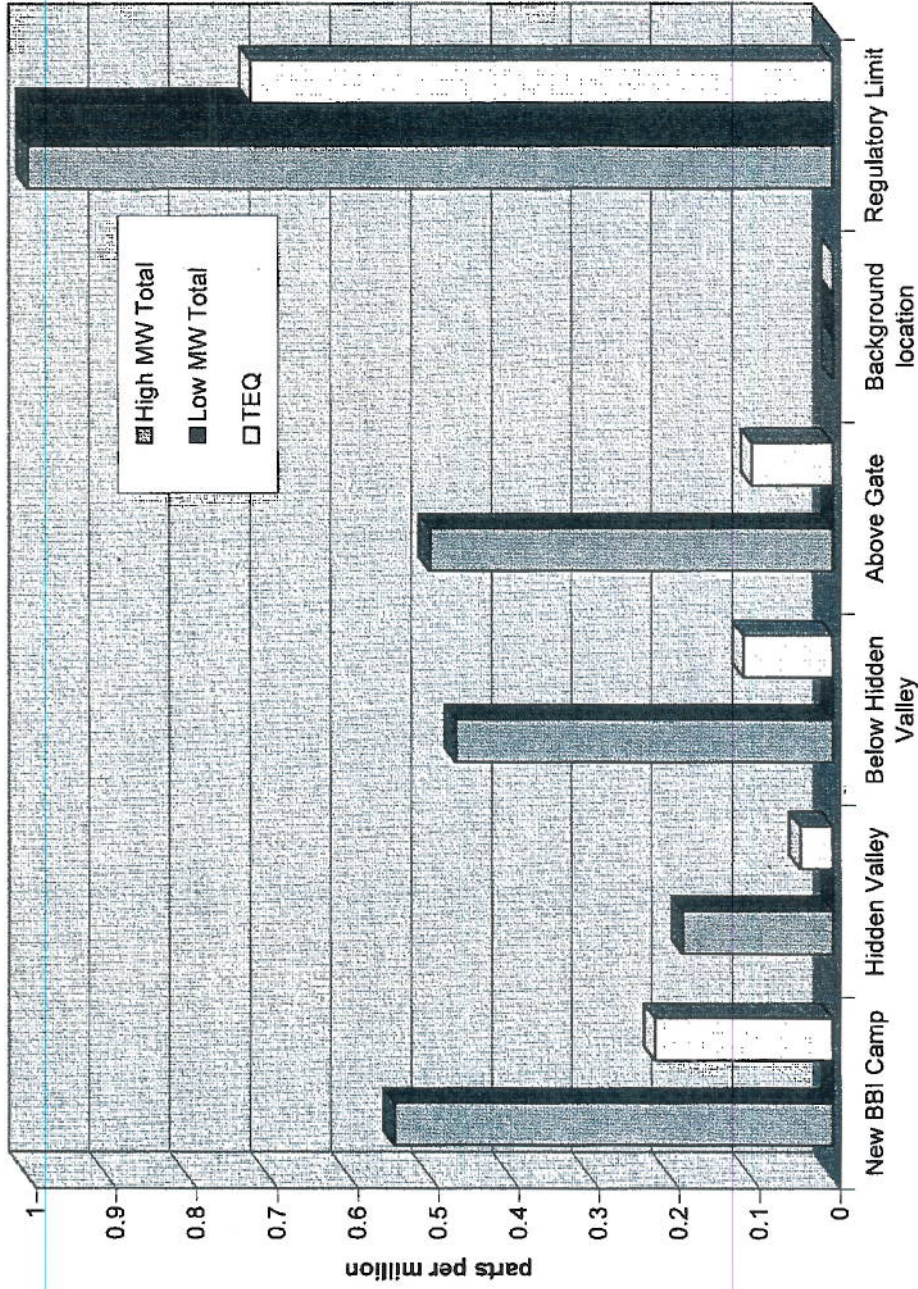
Lead levels in soil were normal, in the parts per million range. The second chart shows the results and the background levels that I've seen over the years. The background sample I took in December was at the low end of that range.

CONCLUSIONS AND RECOMMENDATIONS

It appears that Boeing has met the cleanup requirements for the shooting range, at least on AJU property. Although chemicals were detected in soils, none of these findings pose a health risk. The levels are simply too low, and exposures are rare, if they occur at all. The tested locations are safe.

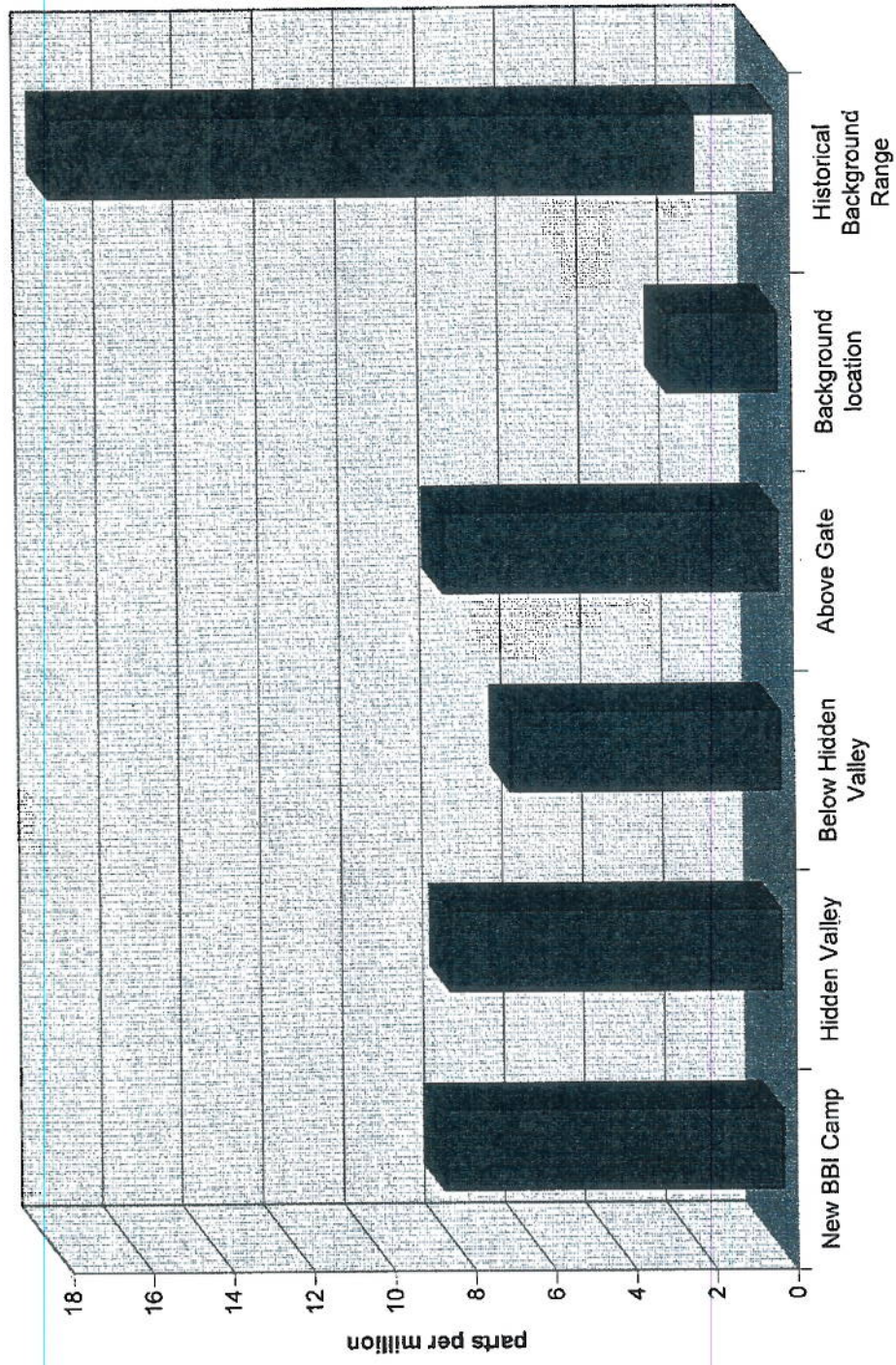
I am enclosing copies of the lab reports. Contact me if you have any questions.

PAH in Soils



Moving further away from property line with Boeing →

Lead in Soils



Moving further away from property line with Boeing →