



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105

October 15, 1993

Mr. Stephen Chao
Naval Facilities Engineering Command
Western Division
900 Commodore Way, Bldg. 101
San Bruno, CA. 94066

Re: Response To Proposal For No-Action On Operable Unit 2 - East

Dear Mr. Chao,

The U.S. Environmental Protection Agency (EPA) has received and reviewed two documents regarding the potential risk from beryllium (Be) in soils at various Operable Unit 2 - East sites. The reports ("Draft Statistical Analysis of the Occurrence of Beryllium in Soils Technical Report", dated September 1993 and "Evaluation of Potential Risks Associated with Dermal Exposure to Beryllium from Soils at NAS Moffett Field OU2", dated August 30, 1993) sufficiently conclude that this compound does not pose a threat to human health. Therefore, as requested in a letter to EPA (May 12, 1993), the Navy can proceed directly to a Proposed Plan and a no-action ROD for OU2-East. In the interim, in order for the public to remain aware of the status of OU2-East, a fact sheet should be released.

Although not required to be resubmitted, comments on how to improve the documents are included for the record.

Statistical Analysis Report

This document presents discussions of the statistical analysis of the Be soil results. It is confusing. The statistical treatments are not well explained nor are the rationale for the procedures. The introduction is good and suggests that elevated Be would not be expected in the area. Since this is an area-wide determination, the artificial division of east and west sites should be removed. All the soil data should be evaluated for Be together. The criteria for using nonparametric analysis is good but several plots to illustrate the point would better support the argument, i.e., show the distributions both normally and log-normally.

The classification of the data into soil type, depth and site location is appropriate. Soil maps for the area should be provided to illustrate the distributions of the different soil types. This is a critical concept. The rationale for the cut points of the soil data in these figures should be presented. EPA would prefer that the plots be presented using the residential PRG value as the first demarcation since this is one of the evaluation criteria and that the detection limits be included for the nondetects. Additionally, plots of

concentration with depth for each site would better illustrate the argument for homogeneity than the statistical discussion alone.

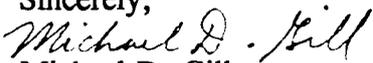
Finally, the conclusion of no sources is contradicted by the introduction. The use of Be in the aircraft industry is well established. Discussion should be included on the types of operations at each site with high Be concentrations to support the argument of no release mechanisms. Inclusion of these discussions will give the document a more logical flow and readily convey the conclusions to the public.

Evaluation of Potential Risk Issue Paper

This document is concise and well presented. The risk assessment for OU2 indicated that Be presented an ILCR of 5×10^{-3} risk for the RME residential exposure. This risk was due to direct contact pathways, primarily the dermal pathway. Due to the conservative exposure assumptions used in the original risk assessment, changes in the default parameters for the dermal exposure route were prepared. Additional discussion on the other areas of exposure and the impact this would have on risk assessment should be included. The possible sources of Be, i.e., aircraft parts and their machining and repair, should also be presented.

According to the OU6 RI Workplan, dated October 1, 1993, the Navy is going to be conducting a field investigation of background soil metal contents at Moffett Field. This data may provide information for future cumulative risk assessment information to be calculated during the station-wide RI and may show that remediation of these areas under CERCLA is necessary.

It should also be understood that benzene at sites within this operable unit still presents risk problems. Because of Petroleum Exclusion, these particular sites do not require remediation under CERCLA. But when cumulative risk assessment is performed during the station-wide RI, interactions with other OUs may yield different results and call for remediation. It should be understood that when cumulative risk is calculated for the station-wide RI, this risk "should include all media that the reasonable maximum exposure scenario indicates are appropriate to combine and should not assume that institutional controls or fences will account for risk reduction".¹ In other words, if the risk assessment for a particular OU shows no risk, this does not forever exclude the OU from possible remediation. Please call me at 415-744-2383 if you have any questions.

Sincerely,

Michael D. Gill
Remedial Project Manager
Federal and Technical Programs Branch

cc: Elizabeth Adams (RWQCB), Ken Eichstaedt (URS),
Chip Gribble (DTSC), Jeff Pile (IT)

¹ OSWER Directive 9355.0-30, dated April 22, 1991.