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HUNTERS POINT
SSIC NO. 5090.3

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, Ca. 94105-3901

June 14, 1993

Henry C. Gee *Handwritten initials and date: HCG 6/23/93*
Building 103, Code 182
Western Division
Naval Facilities Engineering Command
900 Commodore Drive
San Bruno, CA 94066-2402

Dear Mr. Gee:

The U.S. Environmental Protection Agency has reviewed the Draft Final Interim-Action Operable Unit II Summary Alternative Selection Report (ASR), for the Hunters Point Annex site. We also reviewed the Navy's responses to supplemental regulatory agency comments on the Draft Operable Unit II Public Health and Environmental Evaluation Report. Our comments on these two reports are enclosed. Comments on the ASR are from our Office of Regional Counsel, Regional Toxicologist, Remedial Project Manager and our representative Bechtel Environmental Inc. Comments on the PHEE are from Bechtel. Please call me at (415) 744-2385 if you have any questions regarding these comments.

Sincerely,

A handwritten signature in cursive script that reads "Roberta Blank".

Roberta Blank
Remedial Project Manager

cc: Cyrus Shabahari, DTSC
Barbara Smith, RWQCB
David Wells, San Francisco Public Health Department
Ray Ramos, Western Division
Jim Sullivan, NSTI

EPA Office of Regional Counsel's ARARS Comments
Draft Final Interim-Action Operable Unit II ASR

Section 4.0 claims to present the various potential ARARs for the three interim action alternatives considered for Site IR-6. We have the following comments regarding the analysis of these ARARs:

1. Primary MCLs:

It appears that MCLs are a potential ARAR for this OU.

2. Secondary MCLs:

Secondary MCLs (SMCLs) (40 CFR Part 143) are non-enforceable limits designed to establish minimum aesthetic qualities in drinking water. SMCLs and proposed SMCLs may be TBCs for the OU if the selected remedy includes supplying water to a public water supply system.

3. MCLGs:

Use of MCLGs as ARARs is usually reserved to instances where application of MCLs will not provide sufficient protection.

4. Proposition 65:

To be an ARAR, the requirements of the state law must be more stringent than federal requirements. However, the regulations implementing Proposition 65 state that "[n]othing in this article shall preclude a person from using evidence, standards, risk assessment methodologies, principles, assumptions or levels not described in this article to establish that level of exposure to a listed chemical poses no significant risk." CCR Title 22, Section 12701(a). If the Navy has performed, or will perform, a risk assessment meeting the requirements of CCR Title 22, Section 12721, and has determined that the standards that will be met in the cleanup pose "no significant risk," as intended by this regulation. The Proposition 65 Title 22 regulations, at Section 12703(b) state:

For chemicals assessed in accordance with this section, the risk level which represents no significant risk shall be one which is calculated to result in one excess case of cancer in an exposed population of 100,000 assuming lifetime exposure at the level in question, except where sound consideration of public health support an alternative level, as for example, where a clean-up and resulting discharge is ordered and supervised by an appropriate governmental agency or court of competent jurisdiction. (emphasis added).

Thus, the statute and implementing regulations recognize that the alternative cleanup levels set by U.S.EPA for a Superfund cleanup are adequate to satisfy the requirements of the Act. Therefore, this law does not impose any more stringent requirement for the remedial action at the OU and is not an ARAR.

5. Antidegradation policy (Resolution No. 68-16):

This is a potential ARAR.

6. Sources of Drinking Water Policy (Resolution No. 88-63):

This law is not enforceable and is thus not an ARAR.

In addition to the above ARARS cited for all three alternatives, the following are provided as ARARS for at least one of the alternatives:

1. 40 CFR Section 264.14 (Security at a TSD):

In discussion of this ARAR as well as all additional potential RCRA requirements, the Navy states "[b]ecause chemicals at concentrations considered hazardous have been identified at Site IR-6 ...[the following RCRA requirement is an ARAR]." The Navy appears to be assuming that all chemicals at concentrations considered hazardous are RCRA hazardous waste. This assumption, while perhaps correct, does not appear to be substantiated within the documents provided. However, for this review, I will assume that the substances in question are RCRA hazardous wastes.

This is a potential ARAR.

2. 40 CFR Part 264 Subpart F (release from a SWMU):

It is unclear what substantive portions of Subpart F will be more stringent than the groundwater monitoring requirements necessary under CERCLA. To the extent such portions of Subpart F are determined, these specific provisions may be an ARAR.

3. 40 CFR 264.119 (Post-Closure Notices):

While there is a substantial portion of the RCRA closure requirements which are potential ARARS for this OU, 40 CFR 264.119 does not appear to be included within this category. Specifically, the Navy sites the requirement to place a deed restriction as relevant and appropriate; this statement neglects the fact that there is no deed for the property at Hunters Point.

4. EPA Guidelines for Groundwater Classification:

This is a potential TBC.

5. 40 CFR 264.601 (Env. Perf. Stds.):

This is a potential ARAR.

6. 40 CFR 268 (LDR):

This is a potential ARAR.

7. Section 402(p) Clean Water Act:

This is a potential ARAR.

8. 23 CCR, Division 3, Chapter 15:

A copy of this state requirement was not provided by the Navy. Review of its potential as an ARAR was not undertaken.

9. BAAQMD Rules & Regulations:

A copy of the BAAQMD Rules and Regulations was not provided by the Navy for review as potential ARARs.

Finally, the ASR apparently fails to discuss to what extent any of the alternatives will comply with the Navy's list of ARARs.

EPA Regional Toxicologist's Comments
Draft Final Interim-Action Operable Unit II ASR

1. As stated in previous comments by EPA on the ASR's, EPA does not support the use of 10^{-4} excess lifetime cancer risk as a cut-off; rather we use 10^{-6} as a point of departure and look at risks within a range of 10^{-6} to 10^{-4} based on site specific factors.

2. As stated previously, EPA does not support the use of PRGs to screen out class A carcinogens. Class A carcinogens should be carried through the risk assessment.

3. EPA has requested that risk levels be calculated for interim ambient levels. This was done for the Draft Final OU III and IV ASRs but not for the OU II ASR.

4. Also as commented upon previously, EPA does not support the determination of health based clean up levels for TPH.

EPA RPM Comments
Draft Final Interim-Action Operable Unit II ASR

1. On page 19, the ASR states that "observations made during the removal action and conditions at the site at completion of the removal will be addressed in an addendum to this ASR." When will such an addendum be prepared and what ramifications are there for the action proposed in the ASR? This addendum should precede or be included in the decision document for this ASR.

2. On page 21, the ASR states "...the final determination of ARARS will be made by EPA as part of the selection of the remedy, and will take into account public comment." The final determination of ARARS and selection of the remedy is the responsibility of the Navy as lead agency, not EPA. EPA would either concur with or dispute the Navy's final determination.

3. The following comments pertain to the rationale used to consider interim-action on pages 41-43:

a. For Site IR-8, the ASR states that "Potential exposures to future users of the site, assuming continued commercial uses...could be mitigated; therefore direct contact exposures to soil through the exposure pathways described in the OU II PHEE Report are not expected."

First, a decision regarding future uses of the site has not been made; second mitigation implies some form of remediation; third, cleanup decisions should be based on the results of the quantitative risk assessment, not some other set of assumptions which discount the risk assessment.

A more appropriate rationale for not taking interim action would be criteria such as that there are no current exposures, or access to the site is restricted to prevent exposure, and that cleanup to protect future uses will be assessed in the Parcel RI/FS when additional data are available.

b. The rationale used to weed out interim-action at other IR sites was not applied to IR-6. Diesel fuel appears to drive the IR-6 cleanup. The rationale for this is not stated, nor is the extent of floating product described.

4. On page 43, commercial use TRGs are the basis for determining the size of the interim action soil remedial unit. This could result in additional action needed if residential use TRGs are selected for parcel cleanup.

5. In Section 6.2, the ASR states that Remedial Action Objectives (RAOs) are to reduce risk within a range of 10^{-4} to 10^{-6} , yet Appendix A states that "setting the target risk equal to 1×10^{-4} yields the initial estimates of TRG." These

statements are not consistent.

6. On page 48, treatment of ground water is discounted due to TDS levels. For the Parcel RI/FS's and site wide cleanup, the Navy should still retain treatment as an option for the groundwater.

7. The detailed analysis of alternatives is written as if the Navy were looking at final as opposed to interim actions. For example: For Alternative 1 - No Action/Institutional Action, the ASR states on page 53, Section 6.5.1, that "The implementation of this alternative would presumably discontinue any further remedial measures at the site after implementation of the Tank Farm Removal Action." This alternative only applies to the need for interim action; if it were selected now, future action would still be considered as part of the Parcel RI/FS.

8. On page 53, Section 6.5.1.1, the ASR states "It is expected that continued monitoring of the groundwater would be necessary, and deed restrictions would need to be imposed if this land is transferred before completion of the final ROD." First, the Parcel RI/FS/ROD will precede the final site-wide ROD. Second, transfer of this parcel would be unlikely without a Parcel ROD in place, since it is not a clean site. Under CERCLA, it must be demonstrated that all remedial action has been taken prior to a transfer (except in the case of a lease).

9. Again, in Section 6.5.1.2, Cost, the No Action Alternative is analyzed as if being proposed as a final action versus an interim action.

10. On page 56, the ASR describes treatment and placement of contaminated soil within an excavated area. If the waste being excavated and treated is a RCRA hazardous waste, this activity could trigger Land Disposal Restrictions (LDR) ARARs.

11. On page 57, LDR for offsite disposal of hot spots is discussed. Has possible cost of stabilization been included in the cost analysis for this action?

12. On page 58, the ASR states that long-term effectiveness for Alternative 2 would result in an immediate reduction of long-term risks to current and future users of HPA. This statement only applies to the commercial use scenario. The statement cannot be made at this time that this alternative is expected to meet the final action objectives at the site since those have not yet been agreed upon.

13. Page 62 of the ASR states that implementing Alternative 3 would "eliminate the potential for human exposure and...is expected to meet final action objectives..." This alternative would reduce the exposure to a certain risk level for a certain use, not eliminate exposure, and again, the final action objectives are not currently known.

Also, how could residual risks be within or below the target risk range of 10^{-4} to 10^{-6} if TRGs are based on 10^{-4} , as is stated on page A-1?

14. Page 63 of the ASR states that "State, federal and community acceptance of the Interim Action remedial alternatives cannot be determined at this time and will be addressed in the ROD." It is EPA's position that there should not be a ROD for this interim action, but that a removal action should be done, supported by an Action Memorandum.

**Bechtel Comments on the Navy's Responses to EPA Comments on the
Draft Summary Alternative Selection Report
Operable Unit II for the Hunter Point Annex**

1. Response to General Comment 1:

The discussion in Sections 2.0 of conditions that must be met before an interim action is recommended should be further clarified. Quantitative (or semi-quantitative) criteria should be provided for the following:

- assessment of chemicals most frequently detected in soil samples, e.g., 10% of surface (0- to 2-foot depth) samples;
- assessment of chemical most consistently detected in groundwater samples from the same wells in different sampling rounds, e.g., 2 samples with detectable concentrations above background out of 3 samples;
- comparison of soil and groundwater metal concentrations to disputed background levels and health based levels, e.g., if the 95% upper confidence limit Cd concentration in a quaternary bay mud sample was less than or equal to the site wide bay mud background concentration, then the bay mud was not considered contaminated;
- assessment of spatial trends in the chemical concentrations in soil and groundwater, e.g., decreasing concentration with increasing distance from a location where a spill may have occurred;
- comparison of soil and groundwater chemical distributions, e.g., areas of high soil concentration are associated with areas of high groundwater concentrations and the relationship between the distributions is consistent with probable soil to groundwater transport mechanisms;
- comparison of groundwater concentrations to MCLs, e.g., concentrations determined in three sampling rounds were averaged and the upper 95% confidence limit concentration was compared to the corresponding MCL;
- identification of remedial units using risk assessment results, e.g., if surface (0 to 2-foot depth) soil concentrations were less than or equal to health based levels, then the soil represented by that sample was excluded from the remedial unit.

A flow chart should be developed that includes the decision criteria requested above and incorporated into Section 2.0 of the report.

2. Response to General Comment 2:

Sufficient data from the OU II remedial investigation report, public health and environmental evaluation report, and feasibility study report have not been presented to support the selection of the interim remedial action alternative proposed in this ASR. For example, plates illustrating soil and groundwater contaminant distributions and remedial units would be more illustrative of the horizontal extent of contamination if they were annotated to include the results of sampling and analysis. The rationale for the vertical extent of a remedial unit should be illustrated with a cross section.

The conceptual model presented as Plate J1 of Appendix J of the OU II RI Report is not acceptable. The model should be specific to OU-II (or specific to IR-6, IR-8, IR-9, and IR-10) and include a three dimensional pictorial representation of all potentially complete exposure pathways, OU II contaminant sources, potential contaminant sources under investigation in adjacent areas (e.g., PA-24, PA-25, PA-33, and PA-37), OU-II exposure points, release mechanisms, transport media, and receptors. The limited nature of the proposed interim remedial action should be contrasted with the conceptual model.

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Bechtel

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May 28, 1993

Ms. Roberta Blank H-7-5
U.S. EPA Region IX
75 Hawthorne Street
San Francisco, CA 94105

Subject: ARCSWEST Program Contract No. 68-W9-0060
Hunters Point Annex Work Assignment No. 60-05-9PP3
Review of the Navy's responses to supplemental regulatory agency comments on the
Draft Operable Unit II Public Health and Environmental Evaluation Report for the
Hunters Point Annex

Dear Roberta,

As you requested, the Bechtel Project Team has reviewed the Navy's responses to supplemental regulatory agency comments on the *Draft Operable Unit II Public Health and Environmental Evaluation Report* for the Hunters Point Annex. The attached comments have been discussed with Dan Stralka as documented by a telephone conversation record (also attached).

Please contact me if you have comments or questions.

Sincerely,



Richard Draper, Ph.D.
Project Manager
(415) 768-3282

cc: M. Mitguard, EPA
D. Morrison, EPA
Dan Stralka, EPA



Bechtel Environmental, Inc.

Evaluation on Navy's Response to EPA Comments Hunter's Point Annex, OU II

This document contains EPA's evaluation of the Navy's 23 April 1993 response to comments made by the EPA on the Public Health and Environmental Evaluation Report. The Navy's response addresses two unresolved issues: 1. use of total health-based levels (tHBL) in the selection of chemicals of potential concern (COPC) and 2. exclusion of hexavalent chromium as a soil contaminant.

EPA Region IX does not approve of the use of risk-based concentrations to select COPCs and requires Group A carcinogens to be carried through the risk assessment even though initial screening indicates that the concentrations of those carcinogens are too low to present a significant risk.

Use of Risk-Based Concentrations to Screen COPCs

Region IX requires risk assessments to be performed in accordance with guidelines developed by EPA for Superfund sites. Current guidelines specify conducting risk assessments on all chemical analytes found in concentrations significantly above background and known or suspected of having been released at the site under investigation. If the number of COPCs is very large, the guidelines allow the list of COPCs to be reduced to a reasonable number. Chemicals may be culled from the initial list on the basis of a toxicity-concentration screen, frequency of detection, and other factors. The guidelines clearly state that the number of COPCs should not be reduced without approval from the EPA remedial program manager (RPM).

With the development of computerized spreadsheets for computations, EPA has found that the cost of eliminating chemicals from the COPC list using risk-based concentrations and other means is approximately the same as the cost of conducting the risk assessment on all of the chemicals. The list of chemicals of concern and additional chemicals (revised Table 7-18) contains 66 chemical substances, including those that were initially eliminated from further consideration because their concentrations were below their respective tHBLs. EPA does not consider 66 to be an unreasonable number of chemicals to include in a risk assessment.

Inclusion in a risk assessment of all known and potential site related chemicals detected at levels significantly above background increases the credibility of any risk assessment. Those that do not contribute significantly to overall risk would be identified in the process. Eliminating such chemicals before the risk assessment is performed does not foster as much confidence in the outcome of the assessment as leaving them in would.

Although the Navy's procedure for reducing the COPC list may be scientifically sound, the act of excluding chemicals, no matter how sound the basis for exclusion is, will most likely reduce significantly the public's confidence in the outcome and the decisions based on the outcome. Therefore, the Navy's response is unacceptable. The risk assessment should be performed on all of the chemicals on the original list of COPCs.

Elimination of Hexavalent Chromium as A COPC in Soil

According to the Navy, hexavalent chromium was eliminated as a soil COPC because its measured concentration in soil was less than its tHBL; hence, the evaluation presented above applies

TELEPHONE CONVERSATION RECORD

Date: 26 May 1993
Person Contacted: Dan Stralka
Affiliation: U.S. EPA, Region IX
Telephone No. 415/744-2310
Project: ARCS, Hunters Pt, OU II
Recorder: David Liu *DL*
cc: B. Draper

I contacted Dan to discuss the two issues that remain open regarding the risk assessment of OU II. One is EPA's objection to the use of risk-based concentrations in selecting chemicals of potential concern (COPC) and the other is the omission of hexavalent chromium from the list of COPCs. I informed Dan that these appear to be policy issues and asked him if I should evaluate the Navy's responses on the basis of policy, guidelines, or science. He said that I should evaluate the responses on the basis of guideline adherence and science.

We agreed that EPA risk assessment guidelines were not followed on both issues and that the Navy probably spent more money defending its stance than it would spent following the guidelines.