



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
215 Fremont Street
San Francisco, CA 94105

N00217.001214
HUNTERS POINT
SSIC NO. 5090.3

March 26, 1990

Commanding Officer
Naval Station Treasure Island
ATTN: Kam Tung, Hunters Point Annex
Building I (Code 70)
San Francisco, CA 94130-5000

Dear Mr. Tung:

Enclosed are EPA's comments on Draft Volume 1, Workplan, for the Removal Action at the Pickling and Plate Yard, and the Draft Air Modeling and Risk Assessment of Airborne Contaminants ... Report for Removal Actions at Hunters Point Annex.

We have a general concern with the lack of detailed consideration of alternatives to land disposal. Given the potential impacts of the impending land disposal restrictions on characteristic wastes, as well as the Congressional "preference for treatment" clearly expressed in SARA, we feel the Navy must give additional consideration to treatment alternatives for the hazardous wastes generated in the course of this removal action. The Navy should identify potential treatment technologies, off-site treatment facilities or vendors capable of providing on-site treatment, actual estimated costs associated with the treatment alternatives, and additional data (if any) which may need to be obtained in order to carry out one or more of the treatment alternatives.

We also believe it would be helpful to include a summary of the air modeling and risk assessment document in the Workplan.

If you have any questions or wish to discuss these comments further, please call me at 865-7630.

Sincerely,

A handwritten signature in cursive script, appearing to read "Chuck Flippo".

Chuck Flippo
Federal Enforcement Section

Enclosures

cc: Louise Lew, WESDIY
Mark Malinowski, DHS
Charlie Noyes, RWQCB

EPA COMMENTS ON WORKPLAN FOR REMOVAL ACTION
AT PICKLING AND PLATE YARD, HUNTERS POINT ANNEX

1. Page 1, second ¶. The last sentence of this paragraph states that "No soil removal is anticipated for this removal action." On Page 4, in the last paragraph, the third sentence starts "Although significant quantities of soil will not be removed, ..." Please clarify whether or not soil will be removed. The waste characterization applied to the disposal facility should include soil analytical data if soil is included in the waste stream. The presence of soil in the waste stream could also affect treatment, if required.

2. Page 10, last ¶. According to Table 3, the zinc chromate residue contains cadmium in addition to chromium, lead, and zinc. The total cadmium levels presented in Table 3 are more than 16 times the EP Tox level, indicating the possibility that leachate could exceed EP Tox levels for cadmium. In order to determine the applicability of land disposal requirements, as well as to ensure proper notification of any off-site storage, treatment or disposal facility which may handle this waste, the residue should be subjected to the EP Tox test for cadmium, chromium, and lead.

[Please note that EPA is about to publish a final rule replacing the EP Tox test with the TCLP, which is currently required only to determine compliance with Land Disposal Restriction standards. The TCLP will replace EP Tox for large quantity generators (> 1000 kg per month) at the end of August, 1990, and for small quantity generators (between 100 and 1000 kg per month) at the end of March, 1991. Depending on the timing of the removal activities, this regulatory change could affect the PPY action. Consequently, references in our comments to EP Tox should be understood to apply as well to the new TCLP regulation once that takes affect for any activities at HPA. Please also note that the new regulation adds several new organic constituents to the list that are included in the TCLP analysis.]

3. Page 12, § 3.0, second ¶. It would be helpful to summarize the ARARs considered and the determination as to their applicability to this situation. It would also be helpful to identify the agencies contacted concerning potential ARARs. This information could be presented in table or chart form.

4. Page 14, § 3.1.2.1, last ¶. EPA expects land disposal restrictions on characteristic wastes (part of the so-called "third third" rules) to take effect for most EP Tox wastes by early May. The treatment standard for D007 wastewater (EP Tox for chromium) presented in the proposed regulations is 0.32 µg/kg (total chromium). (See 54 FR 48372, November 22, 1989.) The effects of these regulations on disposal of the pickling tank contents need to be considered in the final workplan. Although the treatment standard cited here is subject to change in the final regulations

(due out by May 8, 1990), it is useful to treat the proposed regulations as "to be considered" requirements at this time and address this in the final workplan. In addition, the cost of complying with the land ban treatment requirements should be assessed, as this could significantly affect implementation of the removal action.

5. Page 15, § 3.2. The last half of this paragraph is confusing and needs to be rewritten. We assume the phrase "If found to be *nonhazardous* ..." was meant to read "If found to be *hazardous*" The next sentence is also confusing. Finally, the workplan needs to address collection, sampling, analysis, and disposal of wastewater from the steamcleaning operation, if used.

6. Page 16, § 3.3. In the second paragraph, the second sentence needs to be rewritten ("disposal ... may need to be disposed ..."). Also, the vault should be inspected, after removal of the contents, for any visible cracks, holes, etc.

7. Page 20, § 3.4.2, first ¶. The statement in the fourth sentence, that "although this testing [EP Tox] is not required at this time because the waste is classified as hazardous by state regulations," is incorrect and should be deleted. Since California is not authorized under RCRA Section 3006, the fact that a material is hazardous under State regulation has no bearing on its status as a RCRA-regulated waste. It could be argued that the tests undertaken pursuant to the Title 22 requirements provide the generator with sufficient data to make a determination under 40 CFR 262.11(c)(2) that the material is a RCRA-regulated characteristic waste, thus precluding the need for EP Tox testing. If this is what is meant, it should be so stated. (However, as noted in comment #2, there may be other reasons, such as the Land Ban, to perform confirmatory EP Tox (or TCLP) analysis.

Also, as noted in comment #2, cadmium levels are high enough EP Tox testing is needed to see if this is also a D006 waste.

Finally, the last paragraph mentions that only recycling of the zinc chromate residue will be further evaluated. Additional treatment alternatives, such as on- or off-site chemical fixation, also need to be considered and evaluated.

8. Page 21, top ¶. See comment #4 above. Our concern with the potential impacts of the "third third" land disposal regulations, and the need to consider the proposed regulations now, apply to the zinc chromate residue as well as the pickling tank contents.

9. Page 24, second and third ¶s. Plate 2 appears to contradict the second paragraph, in that the "transition zone" and the support zone appear to be *within* the exclusion zone. It also appears from Plate 3 that the decon area is well within the boundaries of the area of unacceptable health risks described in bullet #4. Please clarify this.

10. Page 25, second ¶. Again, this description of the CRZ is contradicted by the drawing on Plate 2. Although the drawings are subject to change, it is confusing to have this apparent contradiction. Plate 2 should be redrawn to show the CRZ and support zone outside the exclusion zone.

11. Page 26, §4.2.2, first ¶. At a minimum, the pickling tank contents will need to be neutralized and solidified, as noted earlier in the Workplan. Where will this treatment take place? Regarding the last sentence in this paragraph, we would expect additional sampling to be needed following treatment and prior to disposal. (If this is done at an off-site TSD, sampling and analysis would be done in accordance with the facility's waste analysis plan.) Also, as noted in comment #4 above, analysis may be required pursuant to the expected land disposal regulations.

12. Page 28, last ¶. While it may be acceptable to assume the material is a RCRA-regulated hazardous waste if the total concentration of any metal exceeds the TTLC (see comment #7), the reverse is not necessarily true. That is, if the total level of any metal is below the TTLC, but above the EP Tox level (or, for a solid, above the EP Tox level by a factor of 16 or more, the EP Tox test must be conducted to determine whether or not it is a hazardous waste. The California WET should be run *in addition to* EP Tox. (Please see comment #2 concerning the TCLP test.)

13. Page 29, § 4.4.1, first ¶. The Workplan calls for the decontamination of the concrete drying racks by sandblasting a minimum of 1/8-inch of clean concrete material from the racks. The Workplan must identify how the concrete will be sampled and analyzed to determine when it is "clean". How is "clean" to be defined (i.e., in terms of contaminant levels)?

14. Table 1, Analytical Data Summary - Pickling Tanks and Containment Vaults. The units for TPH should be µg/l.

15. Table 3, Analytical Data Summary - Zinc Chromate Residue. The units for the wipe sample are given in µg/l. The units for a wipe sample are typically presented as a concentration per unit area (example: mg/cm²). Comparison to a TTLC may not be appropriate for this type of sample.

16. Appendix A, Overall. Several important analytical parameters appear to be missing from the Workplan. Although the report from the laboratory indicates that sample blanks, surrogates and matrix spikes were run for volatiles, only the data on the surrogates were included. No QC data was included for the Total Petroleum Hydrocarbons analysis, and only the spike analyses were included for the metals analyses. We recommend that a complete data validation to assess the adequacy of the data be performed. Analytical data for the blank, surrogates, and spikes should be included with all data packages.

17. Appendix A, page 3, § 2.1, first ¶. In the last sentence, the Plate should be labeled "B-2" rather than "2", to avoid confusion with Plate 2 in the main text.

18. Appendix A, Table 6. In note 2, we presume the two EPA methods cited, 60 and 7106, should be 6010 and 7196, respectively.



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DRAFT MEMORANDUM

22 March 1990

To: Chuck Flippo (H-6-3)
Environmental Protection Specialist

From: David C. Lewis, Ph.D. (H-8-4)
Regional Toxicologist

Re: Hunters Point Removal Health Risk Assessment

At your request, I have reviewed the document titled "Draft Air Modeling and Risk Assessment of Airborne Contaminants during Proposed Removal Actions at the Tank Farm and Pickling and Plate Yard, Naval Station, Treasure Island, Hunters Point Annex, San Francisco, California" (February 1990).

Risk Assessment Results

The assessment estimated that the individual excess cancer risk for a maximally exposed individual on-site at the Tank Farm would be 3×10^{-6} via inhalation and 7×10^{-7} via dermal exposure. Similarly, individual excess cancer risk for a maximally exposed individual on-site at the Pickling and Plate Yard was estimated as 4×10^{-5} . Lower risks were projected at locations further from the remediation site.

Contaminant exposures at the Pickling and Plate Yard were found to present potentially significant non-cancer health risks based on determination of a hazard index exceeding one.

Major Comments on the Risk Assessment

Health impacts could be greater than estimated in the present document if: (1) significant exposure via ingestion of soil contaminants were to occur and/or if (2) significant exposure to other site contaminants were to occur. EPA guidance suggests that where significant dermal soil exposure occurs, significant soil ingestion may also be anticipated.

Soil Ingestion Pathway:

The exclusion of soil ingestion as a pathway of concern does not appear to be adequately justified. Given EPA recommended exposure guidance, soil ingestion frequently represents a greater health concern than dermal exposure to soil.

22 March 1990

Exclusion of Site Contaminants

It is unclear why certain site contaminants were eliminated from the assessment. Aldrin scored relatively highly in the indicator chemical selection process, but was eliminated from consideration (Appendix, Table Bla).

Acceptability of Estimated Risks:

The risk assessment (see p. 1-2, p. 11-1, third paragraph, and other locations in the document) should avoid definitive statements regarding the acceptability of estimated human health or environmental risks. Background information on risk levels that have been considered acceptable in other circumstances may be provided. Final determination of acceptability of risks, however, will be made by appropriate regulatory agencies on a site-specific basis after consideration of all relevant site-specific factors.

Please do not hesitate to contact me to discuss any of these issues.

cc: Don White (H-8)