

PRC Environme
120 Howard Street
Suite 700
San Francisco, CA 94105
415-543-4880
Fax 415-543-5480

February 21, 1994



Mr. David Song
Department of the Navy
Western Division
Naval Facilities Engineering Command
900 Commodore Way, Building 101
San Bruno, CA 94066-2402

**Re: Contract No. N62474-88-D-5086, Contract Task Order No. 254
Responses to EPA's Draft Screening-Level Ecological Risk
Assessment of Parcel A, Hunters Point Annex**

Dear Mr. Song:

PRC Environmental Management, Inc. and Harding Lawson Associates have prepared our responses to EPA's Draft Screening-Level Ecological Risk Assessment report on Parcel A dated January 11, 1994. At your request we are forwarding a copy of our responses to the U.S. Environmental Protection Agency and other regulatory agencies.

If you need any further information, please contact me at (214) 754-8765.

Sincerely,

A handwritten signature in cursive script that reads "William P. Desmond".

William P. Desmond, Ph.D.
Assistant Project Manager

WD:kk

Enclosure

cc: U.S. Environmental Protection Agency (Attn: Alydda Mangelsdorf) W/Attachment
U.S. Environmental Protection Agency (Attn: Raymond Seid) W/Attachment
California Department of Toxic Substances Control (Attn: Cyrus Shabahari) W/2 cys
Attachments
Regional Water Quality Control Board (Attn: Dr. Barbara Smith) (W/Attachment)
City & County of San Francisco, Department of Public Health (Attn: Amy Brownell)
W/Attachment
City and County of San Francisco, Redevelopment Agency (Attn: Byron Rhett) W/Attachment
California Department of Fish and Game (Attn: Dr. Michael Martin) (W/Attachment)
Harding Lawson Associates (Attn: David Leland) W/Attachment
PRC Environmental Management, Inc. (Attn: James Sickles) W/Attachment
File

**NAVY REVIEW OF DRAFT SCREENING-LEVEL ECOLOGICAL RISK ASSESSMENT OF
HUNTERS POINT ANNEX
PARCEL A**

The following presents the Navy's comments on the Environmental Protection Agency's (EPA's) *Draft Screening Level Ecological Risk Assessment of Hunters Point Annex, Parcel A*. The report was presented in a letter from Alydda Mangelsdorf and Raymond Seid (EPA) to Dave Song (WESTDIV) dated January 11, 1994. The first portions of these comments address the Assessment Assumptions and Uncertainties and Recommendations listed in EPA's cover letter. The second part of these comments addresses the text of the EPA Ecological Risk Assessment.

ASSESSMENT ASSUMPTIONS AND UNCERTAINTIES

- 1. No environmental samples were collected from or around the Parcel A storm drain system despite three detectable OVA readings and a "trace sheen" at one observation station. Without corroborative data, no conclusive statement can be made regarding the nature and extent of contamination in and around the Parcel A storm drain.**

Response: Regarding the detectable low level organic vapor analyzer (OVA) readings, such readings are not uncommon in storm drains containing stagnant water, as methane gas is generated by the decay of organic matter. Regarding the possibility of chemicals in the Parcel A storm drains, the Navy intends to remove observed sediment from the Parcel A storm drains.

Regarding the possibility of migration of chemicals in the storm drain sediments, which have been observed in other parcels but not A, from HPA storm drains to the surrounding environment, there appears to be no correlation between chemicals detected in storm drain sediments and chemicals detected in surrounding soil samples. Specifically, soil samples collected from test pits excavated adjacent to storm drain manholes have not shown the presence of chemicals detected in storm drain sediments. (*Parcels B and D Draft Reports, HLA 1994a, 1994b*).

- 2. Sediment samples collected in the Parcel B storm drain system downgradient of PA-43 in Parcel A were analyzed for organochlorine pesticides only. Herbicides, Semivolatile Organic Compounds (SVOC), fuels and metals which were detected in the soils of PA-43 were not analyzed in the downgradient Parcel B storm drain sediments to confirm that storm-related contaminant movement had not occurred.**

RESPONSE: All storm drain sediment samples in Parcel B were analyzed for volatile organic compounds (VOCs), SVOCs, organochlorine pesticides, PCBs, total petroleum hydrocarbons as diesel (TPH-d), and gasoline (TPH-g), total oil and grease (TOG), and metals (*HLA, 1994 Draft Parcel B SI Report*). The summary tables of chemical results presented in the Parcel A SI report are "hits-only" tables, i.e., organic and

inorganic chemicals detected in at least one sample are reported. Organics and inorganics not detected in any samples are not reported.

Although samples were not analyzed for chlorinated herbicides, given the ubiquitous list of recalcitrant SVOCs, PCBs, and metals in the storm drain sediment samples of Parcel B (unrelated to Parcel A drainage), it is unlikely that the presence of chlorinated herbicides in Parcel B storm drains could conclusively be tied to potential releases from Parcel A.

3. **No environmental samples were collected from Reach 10 of the sanitary sewer, despite sags in the line which were discovered during the sewer inspection. The nature and extent of contaminant contribution from PA-41 (Buildings 816 and 818) to the environment through the sewer system is currently unknown.**

RESPONSE: According to the YEI report (1988), sags in the sanitary sewer in Reach 1 were noted at several areas but no serious integrity loss was observed. Also, the sanitary sewer in this area is below the water table and acts as a sink rather than a source. Buildings 816 and 818 are currently unoccupied; no contribution to the sanitary sewer is expected from these buildings.

4. **Soil samples taken near the Parcel A sanitary sewer system downgradient of PA-43 were analyzed for chlorinated herbicides and organochlorine pesticides only. Fuels, SVOCs, and metals which were detected in the soils of PA-43 were not analyzed in the soil around the downgradient Parcel A storm drains to confirm that contaminant movement had not occurred.**

RESPONSE: Comment acknowledged. It is unclear if the "soil around the downgradient Parcel A storm drains" refers to soils in Parcel B or to the soil samples collected adjacent to sanitary sewers near PA-43. While it is true that SVOCs, metals, and fuels were not analyzed in the soil samples adjacent to the sanitary sewer near PA-43, these constituents were tested in the soil adjacent to storm drains in Parcel B. The extent of contamination detected in the soils at PA-43 appeared to be localized and not transported any significant distance.

5. **The locations of 48 transformers which may have been in Parcel A, but were previously removed, were not confirmed through the SI. Their previous locations remain unknown.**

RESPONSE: The 48 transformers listed in Appendix E of the PA Other Areas/Utilities Report (HLA, 1990) were facility-wide, and not specific to Parcel A. None of the transformers listed in Appendix E (that had buildings associated with them) were in Parcel A, and other historical information reviewed during the SI did not indicate transformers in this parcel.

During an SI visit to Parcel A, one former and nine current transformers which had not been previously identified in any reports were observed on either concrete pads or mounted on power poles; inspections of these transformers and soil in their vicinity did not indicate that a release of PCB oils to the environment had occurred and no further investigation was recommended. Please also refer to the Navy's responses to EPA's Comment No. 28 on the draft Parcel A SI Report, as presented in Appendix I of the Draft Final Report (PRC, 1993) which documents rationale and regulatory issues for using visual inspections as a basis for assuring the potential for release of PCB oils to the environment.

6. **The detection limits for several samples were higher than the contaminant levels measured in other samples, calling into question some of the nondetections recorded.**

RESPONSE: In general, high detection limits in samples are due to interferences found during the analysis of the environmental samples. In the case of sediment samples, seemingly high detection limits could also be reported because the concentration reported is on a dry-weight basis. In general, sediment samples could have a percent moisture of over 50%, which affects the reported detection limit. However, these matrix constraints do not call into question the nondetections reported.

7. **Soil samples collected from the former drum storage area at PA-41 (Building 816) were analyzed for SVOCs, fuels, and a few Volatile Organic Contaminants (VOC) only. Pesticides/PCBs and metals were not analyzed, leaving unknown the extent of these compounds at the former drum storage area.**

RESPONSE: The tables in the report present only those analytes that were detected in the laboratory analyses and qualified using the QA/QC procedures outlined in the HPA QAPP (HLA, 1988). As such, analytes that were not detected in a set of data for a given matrix (e.g., soil samples) at a specific PA-site, would not appear on the data tables. See also comment on Assumption No. 2.

8. **The Navy used its Interim Ambient Levels (IAL) to screen out contaminant levels it did not consider to be of concern. EPA previously questioned the method by which the IALs were developed and as such, has not used them in this assessment.**

RESPONSE: Comment acknowledged. The Navy and the agencies are continuing discussions on this unresolved issue.

9. **Elevated levels of magnesium are found in PA-43. However, the toxicity of magnesium is not well documented. As such, the true risks associated with magnesium residuals is unclear and represents a site uncertainty.**

RESPONSE: Comment acknowledged. Note: high levels of naturally occurring magnesium are common in the serpentinite fill and bedrock at HPA.

10. **Elevated levels of 4,4'-DDD are found in PA-43. The maximum residual level found approaches the toxicity threshold for the American Kestrel, in which egg shell thinning has been shown to occur. The ERA concludes that the limited foraging habitat for the Kestrel and other raptors in the vicinity of the identified DDD levels reduces the potential risk associated with this elevated residual finding. However, the basewide ecological assessment should consider the risk to raptors which might rest on Parcel A, but forage over the wider area of Hunters Point.**

RESPONSE: The Phase 1A ecological risk assessment will include a qualitative analysis of whether a significant pathway links site contaminants with raptors that inhabit Parcel A and forage throughout the site.

11. **This assessment is based on the assumption that reuse of Parcel A will not include the removal of asphalt which is currently covering site residuals or the additional excavation of the Parcel for construction or other purposes. The Risk Manager should consider the potential for increased risks due to future soil disturbance, if any is expected.**

RESPONSE: Comment acknowledged. The only areas in Parcel A where data indicate residuals may be present beneath asphalt are at PA-41 (Building 816) and the former location of underground storage tank S-812 (near Building 813).

We will await the Navy's comments on the Draft ERA before finalizing the report. In the interim, the following are our recommendations for your consideration.

RECOMMENDATIONS

1. **The Navy's forthcoming basewide ERA should include the assessment of ecological risk associated with the discharge of stormwater from Parcel A and all other parcels to San Francisco Bay. Further it should include an assessment of the ecological risk posed by raptors which rest near PA-43 in Parcel A and forage throughout the Hunters Point Annex.**

RESPONSE: The Phase 1A ecological risk assessment will include a qualitative determination of whether stormwater from Hunters Point Annex is a significant vector for potential contaminants entering San Francisco Bay. The Phase 1A ecological risk assessment will also include a qualitative determination of whether a significant pathway links site contaminants with raptors that inhabit Parcel A and forage throughout the site.

2. Should future investigations of Reach 10 of the sanitary sewer system indicate that release of hazardous substances to or from the sewer line has occurred, an assessment of the ecological risk associated with such release should be conducted.

RESPONSE: Comment acknowledged.

3. The degree to which sewer contaminants may be migrating to the hillside springs and seeps is not well understood at this juncture. Although we have agreed that the recent sampling and analysis of the groundwater near Boring PA50B011 will suffice for determining whether Parcel A groundwater is contaminated or not, the seeps observed behind Buildings 816 and 818 supporting emergent vegetation, should nevertheless be evaluated, including the collection of water and sediment samples.

RESPONSE: Comment acknowledged. The Navy is continuing discussions with the agencies on this issue.

4. The Risk Manager should carefully assess the assumptions and uncertainties associated with the ERA before making a final decision regarding the Parcel A property.

RESPONSE: Comment acknowledged.

GENERAL COMMENT TO EPA'S SCREENING-LEVEL METHOD:

EPA screened out the metals, chromium and nickel, because they are naturally-occurring constituents of serpentinite soils. This particular approach has an impact on current discussions concerning background levels. This point could be re-visited at the forthcoming progress meeting.