

Arc Ecology

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Mr. Richard Mach
Department of the Navy
Southwest Division
Naval Facilities Engineering Command
1220 Pacific Highway
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RE: Draft Final Petroleum Hydrocarbon Corrective Action Plan, Parcel B, dated August 11, 2000

Arc Ecology has a few questions on the above referenced report. Would it be possible for the Navy to address these questions at the next RAB meeting?

1. The Navy plans to manage each CAP site so that each one meets six criteria used by the RWQCB to identify a low-risk soil site. If a site qualifies as low-risk, soil will be left to intrinsic biodegradation. With respect to the six criteria, we have the following questions:

- a. How will the Navy determine when a site is adequately characterized (criteria 2)?
- b. How will the Navy decide if a current groundwater impact exists (criteria 3)?
- c. How will it be determined what are "applicable" water quality objectives (criteria 3)? Will MCL's apply if the groundwater has not been dedesignated by the RWQCB? Or will applicable water quality objectives be based upon language in a deed restriction?
- d. How will it be determined whether surface water is likely to be contaminated (criteria 4)? How will the Navy decide whether or not TPH constituents are impacting the Bay? Navy claims that all areas within Parcel B, except IR-46, are too distant from the shoreline for significant contamination to occur. How was this determined? What level of impact would be considered significant and therefore will trigger action?
- e. What is considered a sensitive receptor? How will it be determined if sensitive receptors are likely to be contaminated (criteria 4)?
- f. How will risk to human health be determined (criteria 5)? How will the Navy show that there exists no risk to human health? Navy makes reference to ASTM RBCA, but provides insufficient detail.

- g. How will significant risk to the environment be determined (criteria 6)? What risk is considered significant?
 - h. How will the Navy determine whether a dissolved groundwater plume is migrating (groundwater criteria)?
2. A Total TPH screening level (soil source material level) of 3500 ppm was set forth with no explanation about how the Navy derived this level. The Navy needs to explain in detail how the 3500 ppm level was selected, including what data were considered or relied upon. References need to be provided.
 3. A groundwater screening value of 1.4 mg/l is proposed for use. Navy says this value is based on Ecological Reference Value (ERV) designed to be protective of aquatic receptors in San Francisco Bay. What agency develops ERVs? Is a guidance document available?
 4. The Navy plans to rely on natural attenuation to complete the remediation of Total TPH residues. This method assumes (a) aerobic conditions and (b) undisturbed soils. How will the Navy assure that favorable conditions will be maintained during redevelopment? How will the Navy verify continued aerobic conditions even as the petroleum breaks down (depleting dissolved oxygen)? What contingency plans will be made if conditions turn unfavorable to bioremediation?
 5. Why has the Navy decided to limit TPH cleanup to 10 feet? What site conceptual was used to select this depth of cleanup? Page 5-1 states, "Since it is impractical to excavate or adequately treat soil source areas beneath the water table, which is located at approximately 10 feet bgs, only source soil areas in the 2-10 foot bgs will be considered for remedial actions." How is it impractical? Is it impossible? Will soil source areas be excavated to 10 feet in shallow groundwater areas? How will soils under buildings be handled? Will residual contamination be recorded electronically? Who will be responsible for monitoring residual contamination?
 6. What does the term "groundwater reclassification" on page 3-3 mean? Has groundwater at Parcel B been dedesignated as a potential source of drinking water by the Regional Water Quality Control Board?
 7. Page 4-8: What is meant by the sentence, "Eight of the locations will not be addressed by this CAP because they are located below the water table or located next to a permanent barrier."?
 8. Appendix B: Parameter H^0 (Amplitude of Tidal Change) was taken from a measurement in late April 1999. How representative is this number of change in tidal amplitude at Hunters Point throughout the year? How sensitive is the model to changes of value in H^0 ?

Please feel free to call me if my questions are unclear. Please note that I plan to comment on this document, hopefully after my questions have been answered.

Yours sincerely,



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