

Response to Comments
Revised Draft Soil Feasibility Study Report for Operable Unit 5, Alameda Point, Alameda, California
Report Dated 13 August 2004
Comments Dated 16 November 2004

N00236.001957
ALAMEDA POINT
SSIC NO. 5090.3

Following are responses to comments provided by Ms. Lea Loizos ,for the OU-5 Focus Group dated 16 November, 2004:

#	REFERENCE	COMMENT	RESPONSE
General Comments			
1	Page 1-5	<p>As stated in the site description on page 1-5, approximately 40 percent of OU-5 is covered with structures and concrete or asphalt paving. The proposed remedies only address the remaining 60 percent - the "unimproved" or uncovered areas. Therefore, no matter what remedy is chosen, a significant amount of potentially contaminated soil will remain on the property. We have learned from the Coast Guard that redevelopment of their housing area is likely to occur in the next few years. There has been little public discussion about who will pay for the removal or treatment of the remaining soils when they are uncovered during redevelopment. To assume that the Coast Guard or the City of Alameda will absorb these costs is unacceptable. A remedy for OU-5 soil cannot be chosen until an agreement is reached about how these soils will be handled in the future.</p>	<p>The alternatives do address all areas of the site. The general approach is a soil remedy in undeveloped areas and institutional controls (IC) in the developed areas. Current as well as future use of the property is residential, therefore, there will be significant portions of the site covered by developed areas. It is not necessary to remove all soil. ICs are evaluated as protective for the developed areas, and are not a prohibition of intrusion, rather a notification process to facilitate soil access with proper safety and protective measures.</p> <p>As stated in the NCP, the FS does not select a remedy. A preferred remedy is identified in the Proposed Plan, commented on, adjusted as needed, and a final remedy is agreed to in the ROD. Future handling of soil and the nature of the IC will be specified in the remedial design phase.</p>

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2.	Page 1-11	<p>In the discussion of pre-Remedial Investigation (RI) site investigations, the report mentions detection of MTBE in soil in the eastern portion of Estuary Park. These detections are not mentioned in the Draft Final Groundwater Feasibility Study for IR-25 and Alameda Annex Site 2. What is the suspected source of the MTBE? What is the spatial relationship of these soil detections to the detections of the MTBE in groundwater and soil gas?</p>	<p>Operable Unit 5 has been divided into two distinct matrices: soil and groundwater. This feasibility study is germane to soil. The groundwater has been dealt with separately in the Final Groundwater RI/FS (ERRG 2004)</p> <p>This comment relates more to the groundwater FS, not this soil FS. Thus, we suggest that this comment be made a part of the process to comment on the remedy selection for the groundwater remedy.</p> <p>Also, please note the statement on page 1-14, 2nd paragraph, of the FS, which states:</p> <p>"The RI concluded that results for the soil gas samples suggest that there is little volatilization of VOCs from groundwater into soil."</p> <p>Refer to the RI (conclusions and site conceptual models) for additional detail on evaluation of off-site migration.</p>

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3.		As noted in our comments on the Draft Final Groundwater RI/FS for IR Site 25 and Alameda Annex Site 2, we remain concerned about a risk from volatilization of volatile organic compounds (VOCs) into indoor air. Despite the conclusions of the <i>Residential Risk Evaluation for U.S. Coast Guard Housing (August 2002 Report)</i> , we would like to echo the request of the Coast Guard that quarterly monitoring of indoor air conducted, as the analysis to date is sufficient.	This comment relates more to the groundwater FS, not this soil FS. Thus, we suggest that this comment be made a part of the process to comment on the remedy selection for groundwater. Also refer to the additional response to comment #2, just above.
4.	Figures 1-18	It is unclear whether the B(a)P equivalent concentrations presented in figures 1-15 through 1-18 depict pre-or post-TCRA conditions. They appear to be showing pre-TCRA soil concentrations. If so, please provide maps that show post-TCRA soil concentrations.	Figures 1-15 through 1-18 depict pre-TCRA conditions. Figure 1-20 presents the areas of the TCRA. The post-TCRA B(a)P equivalent concentration in the upper 2 feet of soil in these areas is 12 ug/kg. This concentration is based upon the analyses of 50 samples of the fill soil used, prior to placement of the soil. Refer to Section 1.8.5 of the FS for a more detailed discussion of the imported clean fill used to fill the site, and the risk associated with this soil, i.e., the post-TCRA risks.
Institutional/Land Use Controls			
5.	Section 4.3.3.1, page 4-6	"Proven LUCs [land use controls] for local environmental problem in the Alameda Point area are environmental restrictions (or deed restrictions) and covenants to restrict the land use of property, similar to those selected in the March Crust Remedial Action Plan. Record of Decision". Please provide greater detail on these proven LUCs. If LUCs of the type being suggested for OU-5 were in fact proven to work, we would not be as concerned with this proposed "remedy". To the contrary, we are aware of many failed LUCs on hazardous sites in the Bay Area and specifically in the Alameda Point area, such as the	Greater detail on LUCs will be provided in the record of decision document. In October 2003 the USEPA and DoN entered into the "Principles and Procedures for Specifying, Monitoring and Enforcement of Land use Controls and Other Post-ROD Actions (herein referred to as the "LUC Principles)". In a similar manner, LUC agreements have been consummated with DTSC pursuant to the "Memorandum of Agreement Between The United States Department of the Navy and the California Department of Toxic Substances Control" dated 10 March 2000. This EPA endorsed approach will be incorporated into future LUC agreements for the remedy at OU 5 (Site25). To date no government property of NAS Alameda (Alameda Point) has been transferred. As such no deeds, nor associated LUCs, have been

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		restriction against digging wells on residential property and the requirements for the proper storage and transport of marsh crust soils during major construction jobs.	established. Any incidental violation of an IC and consequential exposure to soil, is not associated with the long term exposure scenario.
6.	Section 4.3.3.2	The evaluation of LUCs in Section 4.3.3.2 estimates that there will be little cost associated with the implementations of LUCs for OU-5 soil. However, several items have not been included in the evaluation. The estimate should include costs to the City, the State, and the Navy for monitoring and management of the controls. The estimate should also consider the costs associated with redevelopment of the area if PAHs are left in place, including the costs for disposal, special equipment, etc.	Refer to response to Comment #13. All reasonable costs for monitoring and management of the LUCs have been included in the FS, to the extent needed to compare alternatives. The same level of monitoring costs are included in each alternative thus the cost comparison analysis would not be affected by slight changes in costs. Land redevelopment costs are not directly related to the CERCLA remedial action, and thus are not included in the CERCLA cost analysis.
7.	Section 4.3.3.2, page 4-8	<p>We disagree with the conclusion that "By preventing exposure to the OU-5 contaminants, the protection of human health is achieved at a nominal cost." For the following reasons:</p> <ul style="list-style-type: none"> a. As noted in Comment #6, the costs of the ICs are substantially underestimated. b. The feasibility of implementing the types of LUCs proposed in alternative 2 has not been adequately addressed. c. There is no discussion of how the LUCs will be monitored to ensure compliance by future property users. It is if, and only if, the ICs are upheld that human health is protected. <p>We remain concerned that the proposed ICs are neither implementable nor enforceable and are therefore not confident that human health will be protected under</p>	Refer to the response to Comment #5 above. LUCs and ICs will be discussed in much greater detail in the remedial design documents, and in LUC agreements, that will effectively meet the protection standards of the ROD. EPA endorsed LUCs and ICs as effective and implemental.

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		this remedy.	
Cleanup Level			
8.		<p>The RAB recently requested a meeting with the BCT and agency toxicologists to discuss the "human health based preliminary remediation goal" developed and agreed to by the BCT in May 2001. We would like to reiterate this request in writing since a meeting has not yet been organized. Before the RAB can agree to the BCT-accepted screening level of 0.62 mg/kg, the following questions need to be answered:</p> <ol style="list-style-type: none"> a. What are the assumptions that went into the EPA Region 9 PRG of .062 mg/kg for residential soil? Are these assumptions similar to the site conditions at OU-5 and Alameda Point, in general? How do they differ? b. How did the BCT decide upon the proposed screening criteria? What site data were used to make this determination? c. What is the dissolvability of the PAHs at these concentrations? d. What is the impact on the Bay of the runoff from PAH contaminated soil? 	<p>The schedule for future meetings between the RAB, BCT, and agencies will be decided by the BCT.</p> <p>The EPA's PRG is based on conservative assumptions for risk; however, EPA notes that the PRG is only to be used in the absence of a site-specific risk analysis. Also, please note the following Navy response to the EPA comment #6 (comment made 15 November 2004):</p> <p>"The chemical-specific cleanup criteria are proposed in the Proposed Plan and agreed to as final in the ROD. In the FS a preliminary remedial goal (PRG) is used to evaluate alternatives.</p> <p>The Navy acknowledges the EPA Region 9 tabulated values commonly referred to as PRG values. The "PRGs" contained in the EPA Region 9 PRG Table are generic; they are calculated without site specific information, and they may be re-calculated using site specific data. This FS adopts the site-specific preliminary remedial goal (PRG) based upon the May 2001 meeting that are summarized in Section 3.3.1 and included in Appendix H. The FS consistently presents the PRG as a range (0.62 mg/kg to 1.0 mg/kg) for evaluating remedial alternatives."</p> <p>Also, refer to Appendix H of the FS, which presents minutes of the May 2001 meeting. Screening criteria will continue to be discussed at future BCT meetings.</p> <p>Comment 8(c) refers to the groundwater medium which is not an element of this soil FS. In response to comment 8(d), refer to the RI (conclusions and conceptual site model), which concluded that runoff from PAH contaminated soil to the Bay is not a pathway of concern.</p>

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9.		Both the Coast Guard and the RAB requested a cost analysis for achieving the 1×10^{-6} clean up level, or a .062 mg/kg level. This was not included in the revised draft.	This FS details risk values associated with depth, and remedial alternatives that are depth dependant, indicative of any pre and post removal action risk calculations. Cleanup criteria will be determined in the ROD. The Remedial Design documents will further refine the cleanup levels and actions to achieve these levels. A change in the preliminary remedial goal for all alternatives would have the same effect for each alternative and no overall effect on the comparison amongst alternatives. For clarity to this comment, as shown in Table 5-2, the post TCRA area risk in the 0 - 2 foot depth is a soil risk of 10^{-7} . The risk at each depth following each alternative is shown on Tables 5-2 and 5-3. Changing the risk based value or the numerical criteria does not change the alternative because the criteria is not being used to delimit removal areas or hotspots. As detailed in Section 5 of the FS, alternatives 3, 4, and 5 remove soil across the full extent of the undeveloped area of the site.
Identification and Screening of Remedial Alternatives			
10.	Section 4.3.4	The negative impact of long-term monitoring should be included in the evaluation of the land use control alternative. In the evaluation of the monitoring alternative, the report stated that long-term monitoring would place a long-term commitment on future property owners and could reduce the value of the property. The same is true for the land use control alternative however this is never mentioned.	Long-term monitoring costs are estimated in the FS to the level of accuracy required by the CERCLA Guidance (Refer to response to Comment #13). The future value of land under a variety of CERCLA remedial alternatives is not included in the cost analysis, as land costs are not directly related to the CERCLA remedial actions.
11.	Section 5.2, page 5-9	In the discussion of the implementability of alternative 4 (excavation from 0-4 foot depth in Parcels 181, 182, and 183), the report states, " This alternative is logistically complex because it involves removing the 2 feet of clean fill placed during the TCRA, stockpiling this soil, and excavating to a depth of 4 feet in areas addressed by the	The analysis of alternatives in the FS must consider existing conditions, irrespective of the past decisions and actions that created the existing conditions.

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		TCRA in 2001, the RAB opposed the 2 foot depth cleanup level and expressed concern that it would become the final remedy. We were assured that the remedy was only temporary. The logistical complexities created by the Navy's decision to only remove the top 2 feet of soil during the TCRA should not be used as an argument against cleanup to greater depths. Please remove this sentence from analysis.	
12.		We would like to see an analysis of the feasibility of building a facility on Alameda Point that could be used to treat PAH-contaminated soil ex-situ. Due to the ubiquitous nature for PAHs at Alameda Point, the question of how to remediate these soils will continue to rise. The commonly used method of dig and haul at Alameda Point is costly, thereby creating an argument against cleanup to greater depths. The creation of a semi-permanent facility on site would potentially allow for more extensive cleanups at a fraction of the cost. While we do not want to delay the cleanup of the site any further, we feel this type of evaluation should be added to the draft final FS.	Ex-situ treatment was evaluated in the FS and eliminated from further consideration. This option was eliminated from further consideration based on implementability concerns, including significant impact on current residential activity, creation of spoils requiring disposal, and negative impacts on site use. Refer to Section 4.3.8 for a more detailed discussion of why this option was eliminated.
Cost Estimates (Appendix E)			
13.		A detailed explanation of how the costs are derived is not given. We cannot evaluate the accuracy of the estimates without knowing the parameters that went into the equations. Please provide this information on the draft final document. Also as a comparison, please provide information on the accuracy of RACER in estimating cost for the other projects where used.	A detailed explanation of how the costs are derived is provided in Appendix E. Appendix E presents an extensive discussion of the accuracy of the estimates, and RACER, the most common costing tool used to estimate costs in an FS. The cost estimates have a -30 to +50 percent accuracy consistent with U.S. EPA remedial investigation/FS technical guidance (U.S. EPA 1988). Note that the purpose of estimating costs in an FS is to compare alternatives, not provide precise costing of alternatives. The accuracy of costs in the FS, as stands, it adequate for this comparison.

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			Costs will be refined and accuracy added, as the remediation moves into the remedial action design phases.
14.	Page 15 of 53, #6	<p>The cost estimate for institutional controls (ICs) is grossly underestimated.</p> <ul style="list-style-type: none"> a. The estimate only takes into account the Navy's 5 -year review costs while the annual costs to the City or other entities responsible for the maintenance and monitoring of the ICs are not included. Annual reporting on institutional controls is required of the transferee, however the costs associated with this reporting are not included. (Please note that in the response to comments, the Navy stated that these costs would be included in the estimate) b. The estimate assumes only ten years of operation and maintenance costs. Operation and maintenance should continue as long as the institutional controls are in place. Please revise the estimate to cover a more realistic timeframe. c. Costs associated with soil disposal during future construction and development have not been considered. Please revise the estimate to include all cost that the City and future property owners can be expected to incur under this remedy. 	The cost estimates for all alternatives consider a 30-year period for future costs, bringing back all costs to present worth values using CERCLA guidance and procedures for an FS. Also refer to the response to Comment #13. The accuracy of the costs are adequate to compare alternative for the FS analysis. Future costs that are indirectly related to the action, such as costs associated with soil disposal during future construction and development, are not directly part of the remedy, and thus are not included in a CERCLA FS analysis.



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DOC No. 7013

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Subject: Navy Delivery Order No. N68711-00-D-0004, Delivery Order 0038
Multi-Media Environmental Compliance
Operable Unit 5, Alameda Point, Alameda, CA
Response to RAB Comments, Revised Draft Soil Feasibility Study Report

Dear Ms. Cook:

Enclosed are insertion pages to Appendix G of the Revised Draft Final Soil Feasibility Study Report, Operable Unit-5 Alameda Point, Alameda, California that were not included as part of the 18 January 2005 document submittal. If you have any questions please call Mr. Darren Newton, Navy Remedial Project Manager at (619) 532-0963.

Sincerely,

for

Larry Davidson, P.E.
Program Manager
CDM Federal Programs Corporation

Encl: (1) Response to RAB Comments, Revised Draft Soil Feasibility Study Report

c:	J. Howell-Payne, SWDIV (w/o)	G. Foulk, TTEMI (w/1)
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