

Responses to Regulatory Agency Comments
to the *Draft Non-Time-Critical Removal Action Work Plan*
Installation Restoration Site 17 and Building 503 Area
Former Mare Island Naval Shipyard, Vallejo, California
dated August 2009

Comment No.	Comment Location	Comment	Response
	Reference		
<i>Comments from Paisha Jorgensen, P.G., California Regional Water Quality Control Board, San Francisco Bay Region - received September 16, 2009</i>			
1	General	The Final Engineering Evaluation/Cost Analysis/Interim Remedial Action Plan (EE/CA/IRAP), finalized in June 2009, identified Alternative 5 (soil excavation, off-site disposal, and backfilling) as the recommended alternative, which could serve as the final site action. The Navy does not propose to collect confirmation samples from the excavations (except for Excavation C, where free product has not been identified). Without quantifiable data to show that free product has been removed, it will be difficult to evaluate this remedial action as the final site action. The Water Board requests confirmation samples be collected from the sidewalls and bottoms of the excavations (as proposed for Excavation C). Other data collection options include; expanding the excavations to areas defined by previously collected acceptable soil samples, or collecting soil samples along the perimeter of the excavations after backfilling.	The human-health risk from soil and groundwater is at the low end of the risk management range for the commercial/industrial use scenario and the Navy plans to implement institutional controls (ICs) to restrict residential site reuse of the property. The human-health risk posed at the site is primarily due to vapor intrusion (VI), therefore the performance of the non-time-critical removal action (NTCRA) will be based on soil gas samples (see Department of Toxic Substances Control Response to Comment Number 2 below) and groundwater monitoring. Since soil concentration is not a significant contributor to risk and risk reduction from this media is not a goal of the NTCRA, soil samples will not be collected in Excavations A and B. Also please note that the determination of the extent of these two excavations based on visual observations and field indicators was previously agreed upon and is documented in the Final Engineering Evaluation/Cost Analysis, Final Action Memorandum, emails, and meeting minutes.

Comment No.	Comment Location	Comment	Response
	Reference		
2	Section 5.8.1	Section 5.8.1 indicates “before backfilling activities, accumulated groundwater (if 6 inches deep or greater) will be managed as described in Section 5.4”. There is no discussion of how the groundwater will be managed if less than six inches deep, and/or free product is present. If any free product, including sheen, is present on groundwater (no matter the depth of groundwater) all attempts shall be made to remove the free product and groundwater prior to backfilling the excavation.	The first sentence of the final paragraph in Section 5.8.1 has been revised as follows: “Before backfilling activities are initiated, any pumpable groundwater and any free product or sheen will be removed to the extent practical, and managed as described in Section 5.4 and Appendix E.”
<i>Comments from Janet Naito, Department of Toxic Substances Control - received October 1, 2009</i>			
1	General	The extent of free-phase floating product was deduced from a number of lines of evidence, including concentrations in soil and groundwater. In order to ensure that the removal of soil containing free-phase floating product has been adequate, DTSC concurs with the Water Board’s suggestion to collect confirmation samples in Areas A and B.	Please see response to Water Board comment number 1 above.
2	General	For areas where soil is being removed to address elevated soil gas concentrations that could pose a potential indoor air risk under a commercial/industrial setting, DTSC recommends collection of soil gas samples once the excavation is backfilled and the subsurface conditions have an opportunity to equilibrate. Confirmation samples should be analyzed for VOC and for chemicals that exceed the site screening levels in that area.	The Navy plans to implement ICs to restrict residential site use. VI cancer risk based on the commercial/industrial use scenario does not exceed the risk management range. However, the Navy agrees to collect one-round of soil gas samples a minimum of three months after completion of the NTCRA from five locations.

Comment No.	Comment Location	Comment	Response
	Reference		
3	General	The Navy has clarified that Potrero Hill import source previously approved by DTSC for use in backfilling the DRMO area will be used to backfill the excavation. The work plan should be revised to reflect this.	<p>The first two sentences of step 11 in Section 3.1 have been revised to read as follows:</p> <p>“The excavations will be backfilled using clean overburden from the Potrero Hill borrow source previously approved by DTSC.”</p> <p>The second bullet in Section 5.8.1 has been removed and the first line of the second bullet (previously the third bullet) has been revised to read as follows:</p> <p><i>“Import soil originating from Potrero Hill—“</i></p>
4	Section 5.8.2	Please clarify whether it would make sense to run some compaction tests to determine whether an appropriate compaction rate is achieved by the methodology used.	The specified method compaction specification (three two-way passes with a 20-ton minimum sheepsfoot compactor) will be adequate up to 30 inches below final subgrade. Thereafter a 95% compaction requirement will be confirmed by testing.
5	Appendix A, Worksheet #15	Please verify that the project action limits are correct. The Water Board’s Screening Criteria for Shallow Soil at Commercial/Industrial Land Use sites have carcinogenic risk-based direct contact numbers that are lower than the values provided.	Worksheet #15 of Appendix A has been revised to reflect the Water Board’s Screening Criteria for Shallow Soil at Commercial/Industrial Land Use sites where groundwater is not a current or potential drinking water resource.

Comment No.	Comment Location	Comment	Response
	Reference		
<i>Specific Comments from Tami Nakahara, California Department of Fish and Game, Office of Spill Prevention and Response (DFG-OSPR) - received October 1, 2009</i>			
1	Section 1.1.1	<p><i>Onshore Ecological Risk Assessment (ERA) (2002)</i>. Please note in the text that that the United States Environmental Protection Agency, United States Fish and Wildlife Service, California Department of Toxic Substances Control, and California Department of Fish and Game have not accepted the conclusions of the “final” onshore ecological risk assessment report. Those agencies agreed that the underlying data could be brought forward into the subsequent site-specific assessments, but not the conclusions from the ecological risk assessment (ERA). DFG-OSPR does not support conclusions from the onshore ERA such as those provided in this document or in other documents (e.g., remedial investigation report for IR 17/B503).</p> <p>DFG-OSPR disagrees with the Navy’s statement that “The onshore ERA identified the seasonal wetland as the only viable habitat; therefore, no complete exposure pathways for ecological receptors exist in the upland portion of the IR17 and Building 503 Area.” The upland portion contains salt marsh vegetation (e.g., pickleweed), non-native annual grasses, ruderal vegetation, and trees, which provide habitat for various wildlife such as amphibians, reptiles, birds, rodents, and other mammals. Please revise the document to include an accurate description of the natural resources and habitats present on site.</p>	<p>This section is a historical summary of previous reports and as such it would be inaccurate to revise this section. However, because the Navy is committed to remediating this site for the benefit of all receptors and to avoid delays, the bullet describing the Onshore ERA will be removed from the Work Plan. In addition, a biological monitor will be onsite to perform training prior to beginning work and will document his/her observations.</p>

Comment No.	Comment Location	Comment	Response
	Reference		
2	Section 1.1.4	<p>The Navy states, “the adjacent wetland areas are potential habitat for the endangered Salt Marsh Harvest Mouse (SMHM).” Please note, the excavation area in the southwest corner of the project site where the Southern Tank Farm was previously located, contains salt marsh vegetation (e.g., pickleweed), grasses, and ruderal vegetation which provide cover and potential habitat for the salt marsh harvest mouse (SMHM). This area is contiguous with the adjacent non-tidal salt marsh therefore, there is potential for SMHM to also be present in the excavation area. Thus the excavation area should be treated the same as the non-tidal salt marsh. Appropriate avoidance and minimization measures should be implemented to prevent impacts to the SMHM such as hand removing vegetation within 50 feet of the edge of pickleweed, the use of a biological monitor during all work within habitat and potential habitat, and the biological monitor checking the silt fence periodically throughout each work day as discussed in the conference call between the Navy, DFG-OSPR, and the U.S. Fish and Wildlife Service (USFWS) on July 31, 2009.</p>	<p>The last sentence of Section 1.1.4 will be replaced with the following:</p> <p>“Since the adjacent wetland areas are potential habitat for the Salt Marsh Harvest Mouse (SMHM), and some excavation could occur within a 25 to 50 ft buffer zone surrounding dense pickleweed, the avoidance measures described in Section 4.5 will be implemented.”</p> <p>As an additional measure above what was previously agreed upon for this site, and because some excavation could occur within the 25 to 50 foot buffer zone (from dense pickleweed) discussed by USFWS, the pickleweed that has grown around the monitoring well will be removed by hand. Other vegetation in this area will be removed with hand-held mechanized equipment. Also, a biological monitor will be present during the vegetation removal and will inspect the silt fence periodically during the work day. Section 4.5 will be revised to reflect these additional measures.</p> <p>As noted above, the Navy concurs that hand removal of pickleweed in the buffer zone was discussed in the referenced call. However, the Navy does not agree that hand removal of <u>all</u> vegetation within 50 feet of dense pickleweed was agreed upon during the referenced call.</p>

Comment No.	Comment Location	Comment	Response
	Reference		
3	Section 3.1	The Navy states, "vegetation in the excavation footprint will be cut." Per the conference call with USFWS on July 31, 2009, vegetation within 50 feet of the edge of pickleweed shall be removed by hand using non-mechanized cutting tools. Please revise the text accordingly.	Section 3.1, item 1, will be revised to refer to the measures listed in Section 4.5. Also see response to DFG-OSPR specific Comment 2.
4	Section 4.5	<p>a. The Navy states the SMHM is "a Federal- and State-Listed Endangered Species." Please also note that the SMHM is a State Fully Protected Species.</p> <p>b. The Navy states, "To avoid and minimize potential effects to the SMHM or any federally-listed species the following measures will be implemented during the NTCRA." Please note the California Clapper Rail is also a State-listed endangered species, the California Black Rail is not Federally-listed but is a State-listed threatened species, and both are State Fully Protected Species. Therefore, please revise the text to state "To avoid and minimize potential effects to the SMHM or any federally- or state-listed species, the following measures will be implemented during the NTCRA."</p> <p>c. In addition to those avoidance and minimization measures listed in the Work Plan, other appropriate measures should be implemented for the protection of the SMHM, California Clapper Rail, and California Black Rail. Please refer to the Biological Opinion for Installation Restoration Site 05 and the Paint Waste Area (Proposed Conservation Measures 3, 6, 8, and 12, and Terms and Conditions 3 and 4) (USFWS, 2009). Also, please refer to the DFG-OSPR email dated February 11, 2009 (Tsao and Nakahara, 2009a), and Specific Comment # 2 above, for additional appropriate avoidance and minimization measures that should be implemented.</p>	<p>a. The first sentence of the third paragraph in Section 4.5 has been revised to read as follows: "The planned excavation area west of Azuar Drive is located near a non-tidal wetland populated with pickleweed, the preferred habitat for the SMHM, a Federal- and State-Listed Endangered Species and State Fully Protected Species.</p> <p>b. The last sentence of the third paragraph in Section 4.5 has been replaced with the following: "To avoid and minimize potential effects to the SMHM the measures provided in the following list will be implemented during the NTCRA. Although the Navy does not believe the California Clapper Rail (a Federal and State-Listed Species), or the black rail (a State-Listed Species) are impacted by this NTCRA, the same measures will also be afforded to the rails as indicated below."</p> <p>c. Please see the response to DFG-OSPR specific comment 2.</p>

Comment No.	Comment Location	Comment	Response
	Reference		
5	Appendix C, Section 1.6.2	In this section, the Navy describes the types of training that will be provided to WESTON employees and all subcontractors working at the site. Please include a statement that training will include a Biological Resource Education Program provided by a qualified biologist.	The first sentence in Section 1.6.2 has been revised to read as follows: “Along with the Biological Resource Education Program briefing indicated in Section 2.3, WESTON employees and all subcontractors working at the site will be instructed on the contents of this EPP.”
6	Appendix C, Section 2	The Navy states WESTON will conduct a pre-construction survey to document the condition of existing vegetation and land resources to be preserved within the authorized work and staging areas. The pre-construction surveys should also document wildlife species and habitats of concern observed within these areas, that may be impacted by project activities and will need implementation of appropriate avoidance and minimization measures.	Wildlife species and habitats of concern within the work area, and appropriate avoidance and minimization measures, have been addressed in the Work Plan, Section 4.5 and Appendix C, Section 2.3. A biological monitor will be onsite to perform training prior to beginning work and will document his/her observations.
7	Appendix C, Section 2.1	The Navy states that no historical, archaeological, or cultural resources have been identified within the work area. However, if such resources are identified, the Navy states, “WESTON and all contractors working under WESTON will record, report, and preserve the finds.” A qualified archaeologist should be used to properly record, report, and preserve the finds.	As noted in Section 2.1 in Appendix C, any historical, archaeological, or cultural resource findings will be documented in accordance with federal regulations covering the Protection of Archeological Resources. The text has not been revised.
8	Appendix C, Section 2.2	Please describe how disturbed areas will be backfilled and restored after excavation activities are completed. The site should be graded to match existing elevations so as not to alter the existing hydrology.	Section 2.2 of Appendix C has been revised to read as follows: “Once the excavation activities are completed, disturbed areas will be backfilled to the surrounding grade with approved import backfill. Restoration efforts will address erosion and sedimentation controls; however, removed vegetation will not be replanted.”

Comment No.	Comment Location	Comment	Response
	Reference		
9	Appendix C, Section 2.3	<p>a. The Navy states, “The SMHM is fully protected and listed as endangered under the federal Endangered Species Act.” Please revise this statement to clarify that the SMHM is fully protected by the State and is also listed as endangered under the State Endangered Species Act.</p> <p>b. The scientific name for pickleweed has been recently changed from <i>Salicornia virginica</i> to <i>Sarcocornia pacifica</i>. Please correct this in the text.</p> <p>c. The Navy states, “The SMHM is known to be highly cover dependent, i.e., it will not frequent areas devoid of cover from raptors and other predators.” Therefore, areas adjacent to salt marsh that provide cover for the SMHM, such as vegetation (ruderal, grasslands, shrubs, etc.), stockpiled materials (excavated debris, cut vegetation, supplies, etc.), and parked vehicles and equipment, can potentially contain SMHM. As a result, these areas need to be treated the same as pickleweed-dominated areas and appropriate avoidance and minimization measures need to be implemented for the protection of the SMHM.</p> <p>d. In addition to those avoidance and minimization measures listed in the Work Plan, other appropriate measures need to be implemented for the protection of the SMHM and other sensitive species. Please see Specific Comment # 4.</p>	<p>a. The second sentence in the first paragraph of Appendix C, Section 2.3, has been revised to read as follows: “The SMHM is a Federal- and State-Listed Endangered Species and State Fully Protected Species.”</p> <p>b. The scientific name for pickleweed has been revised in the text as requested.</p> <p>c. Please see response to DFG-OSPR Specific Comment 4.</p> <p>d. Please see response to DFG-OSPR Specific Comment 4.</p>

Comment No.	Comment Location	Comment	Response
	Reference		
10	Appendix C, Section 2.6	The Navy states, "As part of mobilization, existing vegetation within the work area will be mowed." Per the conference call with USFWS on July 31, 2009, vegetation within 50 feet of the edge of pickleweed shall be removed by hand using non-mechanized cutting tools. Please revise the text and include this avoidance measure.	The first paragraph of Appendix C, Section 2.6 has been revised to read as follows: "As part of mobilization, existing vegetation within the work area will be removed and the boundaries of the wetlands adjacent to the work areas will be delineated using silt fencing. Mobilization activities will be performed in accordance with the avoidance measures detailed in Section 2.3." Please also see response to DFG-OSPR specific Comment 2.