

RESPONSE TO COMMENTS ON THE DRAFT ACTION MEMORANDUM: REMOVAL ACTIONS FOR INSTALLATION RESTORATION SITE 12, NAVAL STATION TREASURE ISLAND, SAN FRANCISCO, CALIFORNIA

This document presents the response to regulatory agency comments on the “Draft Action Memorandum: Removal Actions for Installation Restoration Site 12, Former Naval Station Treasure Island, San Francisco, California,” dated June 2015. The comments addressed below were received from Remedios (Medi) Sunga of the California Department of Toxic Substances Control (DTSC) on July 7, 2015; and Myriam Zech of the San Francisco Bay Regional Water Quality Control Board (Water Board) on July 13, 2015.

RESPONSES TO DTSC COMMENTS (MEDI SUNGA)		
NO.	COMMENT	RESPONSE
1.	Document Title. Please change the document title to specify that this is a work plan for a time-critical removal action (TCRA). The title should be “Action Memorandum: Time-Critical Removal Action Work Plan for Installation Restoration Site 12.”	Document title has been changed to “ <i>Action Memorandum: Time-Critical Removal Actions for Installation Restoration Site 12.</i> ” This document is not the removal action work plan, which is planned for draft distribution in November 2015.
2.	Concurrence Process. The 2007 Site 12 Action Memorandum (AM) for Non-Time Critical Removal Action (NTCRA) included a DTSC approval page. This draft Action Memorandum does not include DTSC as signatory. Please clarify DTSC's role and concurrence process on this AM/TCRA.	The Navy, as the lead agency, will sign the action memorandum to document its selection of a removal action for Site 12. The role of the state is described in Section 2.3 of the action memorandum. The Navy will add language to this section to indicate that the state will provide technical review and comment on the Navy’s development, selection, and implementation of the removal action.
3.	Section 1.0-Purpose, Page 1. This section states that the purpose of the TCRA is to remove contaminated soil from three areas at the southern half of Site 12. Please explain why removal of contaminated soil at the northern half was not included in this AM/TCRA. Please explain why a TCRA is needed at the southern portion of Site 12 and not at the northern portion where additional COCs exist, i.e., chromium and pesticides.	The focus of this TCRA was initially the Gateway Arsenic/TPH Area. With the completion of the feasibility study (FS) addendum, it became apparent that it was cost-effective to include Halyburton Court and the discrete locations within the southern portion of the site. However, the upcoming non-solid waste disposal area Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) record of decision/remedial action plan (ROD/RAP) for Site 12 will address all areas (southern and northern portions of the site).

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4.	Section 2.1.2-Physical Location, Page 5. Please specify the current land use of Site 12 which is residential, and clarify that there are no other sensitive land uses such as wetlands.	<p>Please refer to Section 2.1.3, which describes site characteristics including land uses. The following sentences have been added to the end of Section 2.1.3:</p> <p><i><u>“Presently, the habitat on TI is poor (TriEco-Tt 2012). No other sensitive land uses (wetlands or other) occur within the areas of IR Site 12 subject to this TCRA.”</u></i></p>
5.	Section 3.2-Threats to the Environment, Page 10. The last paragraph states "The presence of TPH, while not a COC, can cause conditions that will further contribute to dissolved arsenic. It is not clear why TPH is not a COC in this area since concentrations were above the TI remedial goals.	<p>As described previously in the document (Sections 1.0 and 2.1.4), response actions under CERCLA do not generally address petroleum because petroleum is excluded from the definition of a CERCLA hazardous substance. However, CERCLA response actions may address petroleum contamination if the petroleum contamination is collocated with a release of CERCLA hazardous substances. The TPH in soil and groundwater at the Gateview Arsenic/TPH Area (while not a CERCLA COC) is believed to contribute to the elevated concentrations of dissolved arsenic in groundwater. The planned soil removal action at the Gateview Arsenic/TPH Area will improve the subsurface conditions by removing saturated and unsaturated soil impacted by TPH, thus reducing concentrations of dissolved arsenic in groundwater.</p> <p>No change has been made to the document as a result of this comment.</p>

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6.1	<p>Section 5.1.1-Selected Action Description, Page 11.</p> <p>Second, Third and Fourth Bullets: Please relate the COCs with the chemicals cited in these bullets. The second bullet should state "Reduce risk to current and future residents by minimizing the dermal contact, incidental ingestion, and inhalation with soil containing known concentrations of PAHs based on BAP EQ that exceed the removal action goal."</p>	<p>The referenced bullets, which are the remedial action objectives defined in the final FS, were revised to read as follows (new text shown in underlined italics):</p> <ul style="list-style-type: none"> • “Reduce risk to current and future residents by minimizing the dermal contact, incidental ingestion, and inhalation with soil containing known concentrations of <u>PAHs based on benzo(a)pyrene equivalent (BAP EQ)</u> that exceed the removal action goal • Reduce risk to current and future residents by minimizing the dermal contact, incidental ingestion, and inhalation with soil containing known concentrations of <u>PCBs (as total Aroclors)</u> that exceed the removal action goal • Reduce risk to current and future residents by minimizing the dermal contact, incidental ingestion, and inhalation with soil containing known concentrations of <u>dioxins and furans (as 2,3,7,8-tetrachloro-p-dibenzo-dioxin [TCDD] toxicity equivalent [TEQ])</u> above the removal action goal”
6.2	<p>Section 5.1.1-Selected Action Description, Page 11.</p> <p>Please discuss the volume of soil that will be removed from each area which is also the basis for the cost estimates.</p>	<p>The approximate volume of soil will be determined in the upcoming TCRA Work Plan that will be reviewed by stakeholders. Costs included in this AM are generally based on Appendix D of the FS addendum but have been revised, as appropriate, to meet the variances in the TCRA.</p>
7.	<p>Section 5.1.4-ARARs, Page 13. GW-4 and S-3 were mentioned in this section for the first time in the document. Please discuss the details of these</p>	<p>Please refer to Section 5.0 and its subsections for a description of the selected removal action. To clarify the role of Alternatives GW-4 and S-3 that were defined in the FS, the second paragraph of Section 5.1.4 was</p>

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	alternatives and the areas they address within Site 12.	revised to read as follows (new text shown in underlined italics): “An ARAR analysis was conducted and included as Appendix C of the FS (KCH 2014). Potential chemical-, location-, and action-specific requirements identified in the FS for IR Site 12 and Alternatives GW-4 and S-3 are identified as the ARARs for this removal action, <u>as these alternatives analyzed the breadth of activities and locations that are included in this removal action.</u> The ARARs <u>are</u> included as Appendix A in this action memorandum.”
8.1	Section 5.1.5-Project Schedule, Page 14. This section states that a public notice will be published announcing the availability of the administrative record for a 30-day public comment period. Please include the administrative record in the AM/TCRA that will be subjected to the 30-day public comment period. Will the entire administrative record be subjected to the public comment period or just the AM/TCRA?	Section 5.1.5 has been revised as follows (new text shown in underlined italics, deleted text shown in strikeout): “The selected removal action is anticipated to take approximately 1 year, which will include adequate time to publish a public notice announcing the availability of the administrative record for the site and project, fulfill a 30-day public comment period, prepare a responsiveness summary of significant comments received during the comment period, prepare a RAWP and SAP, distribute a 60 day notice before the TCRA is implemented, <u>issue a work notice to local residents,</u> mobilize necessary equipment, prepare the site for excavation, excavate contaminated soil, backfill (including biostimulation for the Gateview Arsenic/TPH Area, if necessary), transport and dispose of excavated soil off site, restore the site, and demobilize equipment from the site. <u>A public notice announcing a 30-day public comment period on site actions and investigations will be published after the administrative record file is made available for the final action memorandum. A responsiveness</u>

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		<p><i>summary of significant comments received during the comment period will be prepared. An index of the administrative record is included as Appendix B. The Navy maintains the administrative record at two local information repositories: Building 1 on TI and at the San Francisco Main Public Library. For access to the Navy’s administrative record, please contact:</i></p> <p style="text-align: center;"><i><u>Ms. Diane Silva, Command Records Manager</u></i> <i><u>Naval Facilities Engineering Command Southwest DIV Code EV33</u></i> <i><u>NBSD Building 3519</u></i> <i><u>1220 Pacific Highway</u></i> <i><u>San Diego, California 92132</u></i> <i><u>Phone: (619) 556-1280</u></i> <i><u>diane.silva@navy.mil</u></i></p> <p>The NAVSTA TI restoration advisory board meets regularly, and the Navy may provide updates on the TCRA during the meetings and solicit any community feedback throughout the duration of the TCRA.”</p>
8.2	<p>Section 5.1.5-Project Schedule, Page 14.</p> <p>The public involvement process discussed in this section is inconsistent with EPA's 2000 Action Memoranda guidance document that states “The administrative record file for time-critical removal actions, and emergency responses, should be made available for public inspection no later than 60 days after the initiation of on-site activity. Public comment periods should be held in appropriate situations at the</p>	<p>The subject section has been revised based on this comment and comment 8.1, as described in the response above.</p>

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	time the record file is made available and should be no less than 30 days.” The process discussed appears to be for NTCRA without an Engineering Evaluation/Cost Analysis (EE/CA). Please explain the variation from the EPA guidance.	
9.1	<p>Section 5.2-Estimated Costs, Pages 14 and 15. Please revise the cost estimates in the summary table on page 15 based on the following comments.</p> <p>It is not clear how the costs in the summary table were estimated since the net present value estimates in the Final Feasibility Study (FFS) Addendum for S-3 soil removal throughout Site 12 is \$4,936,000 and the GW-4 groundwater remediation is \$6,789,527 for Year 1. The estimate in the summary table indicates that soil removal at the remaining northern portion of Site 12 would only cost about half million.</p>	<p>The TCRA cost estimates were developed by calculating unit rates using the cost totals from the FS addendum and then revising, as appropriate, to meet the variances in the TCRA.</p> <p>After further review of the cost summary table, the costs have been revised for each area and more detail has been added to the table notes. The Gateview Arsenic/TPH excavation area roughly corresponds to the approximate smear zone shown in Figure 3 and to a depth of up to 10.5 feet below ground surface (bgs). The discrete locations and Halyburton Court roughly correspond to the estimated aerial extent and a general depth of 4 feet bgs. Actual quantities, aerial extent and excavation depths will be refined in the upcoming TCRA Work Plan that will be reviewed by stakeholders. Revisions to the summary table are as follows (new text shown in underlined italics; the table columns have been compressed to fit below):</p> <p>Cost Summary for Selected <u>Action</u> Former Naval Station Treasure Island, San Francisco, California</p>

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		<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%;">Removal Action Area</th> <th style="width: 15%;">Capital Cost</th> <th style="width: 15%;">Post-Construction Reporting Cost</th> <th style="width: 20%;">Total Cost, <u>Net Present Value</u>^{a,b,c}</th> </tr> </thead> <tbody> <tr> <td>Gateview TPH/Arsenic Area Excavation^d</td> <td style="text-align: right;"><u>\$4,500,000</u></td> <td style="text-align: right;">\$80,000</td> <td style="text-align: right;"><u>\$5,500,000</u></td> </tr> <tr> <td>Discrete Locations in IR Site 12 Excavation^e</td> <td style="text-align: right;"><u>\$430,000</u></td> <td style="text-align: right;">\$80,000</td> <td style="text-align: right;"><u>\$610,000</u></td> </tr> <tr> <td>Halyburton Court Area Excavation^f</td> <td style="text-align: right;"><u>\$2,800,000</u></td> <td style="text-align: right;">\$80,000</td> <td style="text-align: right;"><u>\$3,400,000</u></td> </tr> </tbody> </table>		Removal Action Area	Capital Cost	Post-Construction Reporting Cost	Total Cost, <u>Net Present Value</u> ^{a,b,c}	Gateview TPH/Arsenic Area Excavation ^d	<u>\$4,500,000</u>	\$80,000	<u>\$5,500,000</u>	Discrete Locations in IR Site 12 Excavation ^e	<u>\$430,000</u>	\$80,000	<u>\$610,000</u>	Halyburton Court Area Excavation ^f	<u>\$2,800,000</u>	\$80,000	<u>\$3,400,000</u>
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		<p>Notes: Costs derived from KCH (2015).</p> <p>^a Includes contingency (20 percent) and markups.</p> <p>^b The present value is calculated by adding the capital costs to the post-construction reporting costs priced as of December 2012 (including contingency allowances); because the alternatives may be completed at different times, the present value was calculated on the basis of real discount rate, which essentially considers the effect of inflation on future cash flows.</p> <p>^c Totals may not sum because of rounding and contingencies.</p> <p>^d <u>Costs based on an approximate aerial extent of the smear zone as shown on Figure 3 and to an approximate depth of 10.5 feet.</u></p> <p>^e <u>Costs based on an approximate aerial extent as shown Figure 4 and to an approximate depth of 4 feet.</u></p> <p>^f <u>Costs based on an approximate aerial extent of the four building footprints (1100,1102, 1104 and 1106) and the aerial extent of other locations shown on Figure 5 outside of the building footprints and to an approximate depth of 4 feet.</u></p>																	
9.2	<p>Section 5.2-Estimated Costs, Pages 14 and 15. Please revise the cost estimates in the summary table on page 15 based on the following comments.</p> <p>The operation and maintenance (O&M) cost of soil</p>	<p>The FS addendum included reporting as part of O&M costs; however, to avoid confusion the table has been updated to revise the column title to Post-Construction Reporting Cost.</p>																	

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	removal would be less than the groundwater cleanup since soil removal O&M only includes removal completion report and close-out documentation, per the FFS Addendum, that are not actual O&M activities. While the groundwater cleanup cost estimates in the FFS Addendum include 10 years of monitoring and reporting.	
9.3	Section 5.2-Estimated Costs: O&M costs for removal actions at Discrete Locations and Halyburton Court should not be included in the estimate since removal goals will achieve the unrestricted use of these areas.	See revisions per response to comment number 9.2.

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RESPONSE TO WATER BOARD COMMENT (MYRIAM ZECH)		
NO.	COMMENT	RESPONSE
1.	I have but one comment regarding the subject document, regarding sea level rise (SLR). Treasure Island redevelopment plans do not appear to include specific features to protect Site 12 (and the TCRA areas) from potential inundation due to sea level rise (SLR). Without such features, potential mobilization of residual soil contaminants at Site 12 becomes a valid concern that will need to be addressed either by the Navy, City, TIDA, or developer. In either case, we will look to the Site 12 Record of Decision to demonstrate remedy protectiveness under current and reasonably foreseeable future site conditions.	Removal and reduction of contaminants would reduce potential mobilization should inundation occur. Furthermore, sea level rise is addressed in the Hydrology and Water Quality Section of the 2011 Environmental Impact Report (EIR) for Treasure Island/Yerba Buena Island Redevelopment Project (City and County of San Francisco [CCSF] 2011). Among other measures identified in the EIR, “the perimeter berm would be raised where necessary to prevent significant wave overtopping onto the perimeter open space during storm events, for up to 16 inches of sea level rise from present-day sea levels.” No change has been made to the action memorandum as a result of this comment.

REFERENCE

City and County of San Francisco (CCSF). 2011. “Final Environmental Impact Report, Treasure Island/Yerba Buena Island Redevelopment Project.” CCSF Planning Department. Vol. 1-6. April 21, 2011. Section IV-O, pages IV.O.1 through IV.O.51. Available online at: <http://sftreasureisland.org/FinalEIR>