

**RESPONSE TO COMMENTS ON THE
 DRAFT RECORD OF DECISION/FINAL REMEDIAL ACTION PLAN INSTALLATION RESTORATION SITE 32,
 FORMER NAVAL STATION TREASURE ISLAND, CALIFORNIA, DATED DECEMBER 2015**

Comments Received from Ms. Remedios Sunga, Department of Toxic Substances Control, in an e-mail dated February 4, 2016		
No.	COMMENTS	RESPONSES
1	Footnote 1, Page 1. Please change “ROD/RAP” and “ROD” to “ROD/Final RAP” in the footnote and in Section 2.5.4, Attachment D, and Attachment E.	Response: The changes have been made as suggested.
2	Section 2.1. –Site Description and History. Please include a figure showing the location of Site 32 within Treasure Island (TI) since most discussion relates to TI.	Response: A new figure (Figure 2) that shows the location of Site 32 within TI has been included as suggested.
3	Section 2.1. Site Description and History. - Please discuss the source of the total petroleum hydrocarbon (TPH) contamination at Site 32.	Response: The following information regarding sources of petroleum was added to Section 2.1, second sentence of the fifth paragraph, as follows: <i>“Open space in Parcel T111₍₅₎ was previously used as (1) a parking area for vehicles and forklifts, (2) an outdoor storage area for miscellaneous materials, and (3) a storage area for hazardous materials and hazardous waste, including more than 100 gallons of waste petroleum products and nonhalogenated organic compounds, and five 55-gallon drums of various waste (including hazardous waste, potassium hydroxide, and oily rags).”</i>
4	Section 2.1. Site Description and History. Please discuss the reasons for the significant delay in issuing the ROD/Final RAP after the Proposed Plan/Draft RAP was finalized.	Response: The Navy received comments on the draft Proposed Plan/Draft RAP that led to additional investigation for radioisotopes. Planning and execution of the investigation delayed the submission of the Record of Decision (ROD)/Final Remedial Action Plan (RAP).

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5	Section 2.2 – Site Characteristics, Page 5. Please discuss other site-specific characteristics such as surface cover, groundwater use, weather conditions, etc.	<p>Response: The following has been added to the last paragraph of Section 2.1: <i>“Except for the unfenced portion of Parcel T115, Site 32 is currently unused. Building 462 is the only remaining structure on Site 32, and it is currently vacant. The surface of the site is covered with asphalt or concrete.”</i></p> <p>The following has been added as the last two paragraphs of Section 2.2: <i>“The groundwater at NAVSTA TI is not considered a potential source of drinking water but is designated for potential agricultural, process, and industrial supply. The temperature at NAVSTA TI is influenced by the Pacific Ocean and the resulting maritime climate. Temperatures range from 64° Fahrenheit in summer to 52° Fahrenheit in winter. Relative humidity ranges from 50 to 90 percent; it is lowest during fall days and highest during winter nights. Fog is frequent, particularly during the night or morning. The average annual precipitation is 23.18 inches and occurs mostly from November to April.”</i></p>
6	Table 1 – Previous Investigations and Cleanup Actions, Page 7. Please change “Proposed Plan” to “Proposed Plan/Draft RAP” in Table 1 and Sections 2.7, 2.8, and 3.0	Response: The title of the Proposed Plan has been revised as suggested.
7	Section 2.4 – Current and Potential Future Land and Resources Uses, Pages 7-9. Please provide more emphasis on the current reuse plan by discussing the features of the Northern Shoreline Park and including a redevelopment land use figure.	Response: A figure showing the Treasure Island Development Authority reuse plan has been included in Section 2.4; however, more details of the Northern Shoreline Park have not been included because the Navy does not have further details on this portion of the redevelopment.
8	Section 2.5.1.5 Results of the HHRA, Page 11, second paragraph. Please delete the last sentence since the Site 32 remediation goals in the TSCA removal action were for unrestricted land use supporting the decision of No Further Action.	Response: The sentence has been deleted as suggested.

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9	Section 2.5.1.5 – Results of HHRA, Page 11, last paragraph. Please change “His” to HIs”	Response: The sentence has been corrected.
10	Page 13. Please insert a new section after Section 2.5.2 – Screening Level Ecological Risk Assessment to identify the chemical contaminants and the cleanup goals that were established for the TSCA cleanup action. This new section should discuss the chemicals that were addressed during the TSCA cleanup action, in addition to PCBs.	Response: Please refer to Section 2.5.3, which states that polychlorinated biphenyls (PCBs) and collocated total petroleum hydrocarbons (TPH), benzo(a)pyrene (B[a]P), arsenic, lead, and dioxins were addressed in the cleanup action. The Navy has added a new table, Table 3 TSCA Cleanup Action Goals, to Section 2.5.3.
11	Section 2.5.3-TSCA Cleanup Action, Page 13, first paragraph. Lead is included in the list of chemicals that were addressed during the TSCA cleanup action but it was not listed as a COPC in Table 2. Please see Comment #7 [DTSC comments were renumbered and DTSC Comment #7 is current DTSC Comment #10] for a new section identifying all chemical contaminants that were addressed during the cleanup action.	Response: Lead was not included on Table 2 because Table 2 shows the estimated cancer risks and noncancer hazards for Site 32. Please refer to Section 2.5.3, which already states that PCBs and collocated TPH, B(a)P, arsenic, lead, and dioxins were addressed in the cleanup action. The Navy has added a new table, Table 3 TSCA Cleanup Action Goals, to Section 2.5.3.
12	Section 2.5.3 TSCA Cleanup Action, Page 13, second paragraph. This paragraph states “ <i>Cleanup goals were established in the work plan as part of the TSCA cleanup action. However, EPA and DTSC updated risk-based screening levels for some chemicals after the work plan was finalized.</i> ” Please include a table with the chemical contaminants and cleanup goals in the TSCA work plan and the updated screening level to support the statements in this section.	Response: The Navy has included a new table, Table 3 TSCA Cleanup Action Goals, in Section 2.5.3. The Navy did not include the 2010 screening level evaluation in the ROD/Final RAP, as this information was evaluated and presented in the Final Field Activity Report (Shaw 2011). Instead, the Navy will rely on the conclusions of the Final Field Activity Report that confirmation sampling showed cleanup goals were met. The Navy will include information from the Final Field Activity Report identifying which chemicals of concern (COCs) remain above the 2010 screening levels in reference 39.

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13	<p>Section 2.5.4- Historical Radiological Assessment Supplemental Technical Memorandum (HRASTM), Page 14. Please discuss the transfer of the USS Pandemonium training ship from Site 12 to Site 32 that classified Site 32 as radiologically impacted. The relocated ship at Site 32 was named Pandemonium Site II (NE) in the HRASTM.</p>	<p>Response: The paragraph has been revised as follows: <i>“The Navy completed an additional investigation of the use or disposal of radioactive materials associated with the TI portion of former NAVSTA TI after the original historical radiological assessment (HRA) was completed. This additional investigation, also known as the HRA Supplemental Technical Memorandum (HRASTM), included research of historical records and review of reports documenting intrusive investigations conducted at NAVSTA TI after the HRA was published. Prior research had identified the transfer of the training ship mockup, the USS Pandemonium, from a location on the west side of TI to a location on the northeast side of the island in 1969. The location on the northeast side was identified as Building 371 on Site 32. In the HRASTM, this area was referred to as the USS Pandemonium Site II (NE). The Navy identified the USS Pandemonium Site II (NE) as potentially impacted because the USS Pandemonium was used for radiological decontamination training. The HRASTM recommended additional radiological surveys for Site 32.”</i></p>
14	<p>Section 2.6 – Basis of the No Further Action Decision, Page 14. Please clarify that the potential radiological contamination at Site 32 will be addressed in a Final Status Survey Report and that the Navy will seek a no further action or unrestricted release of Site 32 from the California Department of Public Health (CDPH) that provides technical support to DTSC on radiological contamination.</p>	<p>Response: The Navy did not make this change because the ROD/Final RAP addresses chemical contamination, and not radiological contamination. Conclusions regarding radiological investigations of the site will be documented in a separate report.</p>
15	<p>Section 2.8 Community Participation. Please specify that, in addition to fact sheets and newsletters, work notices are also distributed for upcoming field work.</p>	<p>Response: The sentence has been revised as follows: <i>“In addition, the Navy issues fact sheets, newsletters, and work notices to keep the public informed of IR Program activities at NAVSTA TI and follows CERCLA community relations requirements.”</i></p>

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16	<p>Section 2.8 Community Participation. Please include the following DTSC's EnviroStor website address and access instruction for Site32 documents. https://www.envirostor.dtsc.ca.gov/public</p>	<p>Response: The Department of Toxic Substances Control's (DTSC's) website has been added with the Installation Restoration (IR) Program website as suggested; however, access instructions were not included because they are unnecessary for the ROD/Final RAP.</p>
17	<p>Section 2.8 Community Participation. Please discuss the public noticing of ROD/Final RAP in the newspaper after it has been signed and published.</p>	<p>Response: The following sentence has been added: <i>"Once the ROD/Final RAP has been signed, a notice announcing the availability of the ROD/Final RAP will appear in the San Francisco Examiner."</i></p>

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Comments Received from the Treasure Island Development Authority (TIDA) dated January 19, 2016		
No.	COMMENTS	RESPONSES
1	Section 2.5.2 Screening Level Ecological Risk Assessment, page 13. This section addresses terrestrial receptors. Please consider including the reason why potential marine receptors were not considered in the SLERA.	Response: The following paragraph has been added as the last paragraph of Section 2.5.2, which has been retitled to Screening Level Ecological Risk Assessment and Aquatic Habitat Assessment: <i>“The Navy also evaluated potential risk to aquatic receptors located adjacent to the shoreline at Site 32 in an Aquatic Habitat Assessment. Data collected during the 2003 EBS were used to assess risk to aquatic receptors. Chemicals detected at concentrations above toxicity screening criteria and ambient concentrations were modeled using the BIOSCREEN model to estimate chemical concentrations that may discharge to San Francisco Bay. Based on the BIOSCREEN modeling, chemicals in groundwater at Site 32 do not pose unacceptable risks to aquatic organisms because (1) conservative groundwater modeling analysis indicates that concentrations will be less than screening criteria for all chemicals except silver when chemical concentrations reach the bay, and (2) elevated concentrations of metals are likely the result of suspended particles in grab groundwater samples.”</i>
2	Section 2.5.2 Screening Level Ecological Risk Assessment, page 13. Please consider add the statement that based on current redevelopment plans, future exposure (like current exposure) will be limited to species adapted to landscaped open space habitat in the vicinity of urban development.	Response: The following sentence was added to the second to last paragraph of Section 2.5.2, which has been retitled to Screening Level Ecological Risk Assessment and Aquatic Habitat Assessment: <i>“Future exposure to ecological receptors will be limited to species adapted to landscaped open space habitat in the vicinity of urban development.”</i>
3	Section 2.5.3 TSCA Cleanup Action, page 13, first paragraph. If correct, please clearly state that the excavation removed all soil posing a cancer risk of greater than 10 ⁻⁶ and a noncancer risk of greater than an HQ of 1 for all potential future receptors considered in the HHRA.	Response: The Navy cannot make this statement because a post TSCA-cleanup action human health risk assessment was not completed. The Navy has added the following statement to the second paragraph of Section 2.5.3: <i>“The Navy compared residual concentrations in soil with the Site 32 cleanup goals to document that cleanup goals were met and to document that there were no detections above the cleanup goals for PCBs, B(a)P, arsenic, lead, dioxins, and TPH remaining in soil from 0 to 2 feet bgs or in soil from 0 to 10 feet bgs.”</i>
4	Section 2.5.3 TSCA Cleanup Action, page 13. It is stated	Response: The Navy has revised the last sentence of the second paragraph as

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	that "...nearly all concentrations were below the updated health-based screening concentrations." Please consider including a brief explanation why despite some concentrations being above the updated health based screening concentrations, there is no unacceptable risk.	follows: <i>"There is no unacceptable risk to human health and the environment at Site 32 because confirmation sampling confirmed that concentrations do not exceed the agreed upon unrestricted use goals identified in the TSCA cleanup action."</i>

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Comments received from Ms. Myriam Zech, San Francisco Bay Regional Water Quality Control Board, dated March 2, 2016		
No.	COMMENTS	RESPONSES
1	<p>Table 1 Previous Investigations and Cleanup Actions, Row 2, page 6. Following the “Environmental Baseline Survey” box, create a separate box entry for “Data Gap Investigation, 2003.” A data gaps investigation was conducted in 2003, etc.</p>	<p>Response: The 2003 Data Gap Investigation was added to Table 1 as suggested.</p>
2	<p>Table 1 Previous Investigations and Cleanup Actions, Row 4, page 6. The Navy mentions that “The SLERA did not identify any ecological resources at TI that need to be protected.” The SLERA (Final Screening-Level Ecological Risk Assessment for Sites 6 12, 21, 24, 30, 31, 32, and 33, dated March 2007) indicates that the maximum concentrations of several Chemicals of Potential Ecological Concern at Site 32 pose “potentially unacceptable risks to plant, invertebrate, and vertebrate receptors based on the conservative assumptions of the SLERA,” but that, as stated in the Remedial Investigation Report, Site 32 “does not support a natural ecosystem or provide habitat for ecologically relevant receptors.” While this finding may apply to current site use/conditions, what if site use/conditions were to change due to redevelopment or other unforeseen environmental changes such as sea level rise? Will controls be in place to prevent ecological receptor exposures should site conditions change, or require the re-evaluation of exposure pathways? We note that the ROD for Site 6 requires, if wetland habitat is created or natural habitat otherwise changes, that specific development plans account for protection of ecological receptors. The Navy or developer should consider appropriate controls or future re-evaluation of the exposure pathways if natural habitat evolves at Site 32.</p>	<p>Response: The future reuse of Site 32 and the surrounding area is open space and the wastewater treatment plant. The freshwater wetland that is being considered for redevelopment does not extend onto Site 32. Based on this reuse, the SLERA conclusions are still appropriate for Site 32.</p> <p>The Treasure Island Development Authority evaluated potential risk posed by sea level rise and developed an adaptation strategy that included identifying areas that could be adapted into tidal marshland should sea levels rise more than planned. Site 32 is not identified as one of the areas that could be adapted into tidal marshland.</p> <p>The ROD/Final RAP was not revised in response to these comments.</p>

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Comments received from Ms. Myriam Zech, San Francisco Bay Regional Water Quality Control Board, dated March 2, 2016		
No.	COMMENTS	RESPONSES
3	Table 1 Previous Investigations and Cleanup Actions, Toxic Substances Control Act Cleanup Action (Field Activity Report) Row 1, page 7. Consider adding the word “soil:” “None of the remaining <i>soil</i> chemical concentrations exceeded the Site 32 cleanup goals...”	Response: The sentence has been revised as follows: <i>“None of the remaining chemical concentrations in soil exceeded the Site 32 cleanup goals, and nearly all remaining concentrations were below the 2010 updated risk based screening concentrations.”</i>
4	Table 1 Previous Investigations and Cleanup Actions, Row 1, page 7. Can you provide the 2010 updated risk based screening concentrations?	Response: The Navy did not include the 2010 screening levels in Table 1. Tables from the Final Field Activity Report comparing confirmation sample results with the 2010 screening levels, the TSCA cleanup action goals, and background concentrations will be included in reference 39 (Shaw 2011). The Navy did include a new table, Table 3 TSCA Cleanup Action Goals, to Section 2.5.3.
5	Table 1 Previous Investigations and Cleanup Actions, Row 1, page 7 and Section 2.5.3 TSCA Cleanup Action, paragraph 2, page 13. Please specify which COC remained above the 2010 updated risk based screening concentrations, and at which levels.	Response: The Navy did not include this information in the ROD/Final RAP, as this information was evaluated and presented in the Final Field Activity Report (Shaw 2011). Instead, the Navy included a new table, Table 3 TSCA Cleanup Action Goals. The Navy will rely on the conclusions of the Final Field Activity Report that confirmation sampling showed cleanup goals were met. The Navy will include information from the Final Field Activity Report identifying which COCs remain above the 2010 updated risk based screening concentrations in reference 39.
6	Section 2.4 Current and Potential Future Land and Resources Uses, after the last paragraph, page 9. Add the following: “The Navy will include a restriction in appropriate real property transfer documents that will prohibit the installation of groundwater supply wells for any purpose.”	Response: The Navy has added the following sentence at the end of the last paragraph of Section 2.4: <i>“While not addressing a remedial action objective, the Navy will include a restriction in appropriate real property transfer documents that will prohibit the installation of groundwater production wells for any purpose.”</i>

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No.	COMMENTS	RESPONSES
Miscellaneous comments		
1	Section 2.1 Site Description and History, third paragraph, page 3. Please rewrite the description to make it obvious that building 462 is the only building which remain on site to date.	Response: The third paragraph of Section 2.1 was revised to clearly state that the USS <i>Pandemonium</i> (also known as Building 371) was demolished in 1996. In addition, the following was added as to the last paragraph of Section 2.1: <i>“Except for the unfenced portion of Parcel T115, Site 32 is currently unused. Building 462 is the only remaining structure on Site 32, and it is currently vacant. The surface of the site is covered with asphalt or concrete.”</i>
2	Please consider printing the document double sided	Response: Comment noted.

REFERENCES:

Shaw 2011. Final Field Activity Report, *Soil Excavation, Parcel T111/Installation Restoration Site 32 and TX-152(1) PCB Remediation Treasure Island San Francisco, California*. Revision 1. July 13.