

**RESPONSE TO COMMENTS ON THE
 DRAFT PROPOSED PLAN/DRAFT REMEDIAL ACTION PLAN INSTALLATION RESTORATION SITE 12,
 FORMER NAVAL STATION TREASURE ISLAND, CALIFORNIA, DATED DECEMBER 2015**

Comments Received from Ms. Remedios Sunga, Department of Toxic Substances Control, dated January 25, 2016. The comments were received in a pdf file of the Proposed Plan/Draft Remedial Action Plan (RAP) attached to an e-mail from Ms. Sunga.		
No.	COMMENTS	RESPONSES
1	Heading: Remove Draft and change date to March 2016	Response: The heading has been updated to remove “Draft” and the date changed to March 2016.
2	Page 1, second sentence, Introduction: Replace ‘hazardous chemicals’ with ‘chemical contaminants’	Response: The sentence has been revised as suggested.
3	Page 1 third sentence, Introduction: change ‘...excluding the solid waste disposal areas and the radiological program,...’ to excluding the four solid waste disposal areas (SWDAs) located within Site 12 and the radiological program,	Response: The sentence has been revised as suggested.
4	Global change: replace ‘Solid Waste Disposal Areas’ to ‘SWDAs.’	Response: The change has been made as suggested.
5	Page 1, seventh sentence, Introduction: Change ‘radioisotopes of concern’ with ‘radiological contaminants.’	Response: The change has been made as suggested.
6	Page 1, first paragraph, last sentence, Introduction: change ‘remaining chemicals’ with ‘the chemical contamination.’	Response: The sentence has been revised as suggested.
7	Page 1, last bullet of Groundwater Alternative GW-5: replace ‘monitored natural attenuation of arsenic’ with ‘groundwater monitoring after excavation and in situ treatment to verify the reduction of TPH and arsenic concentrations.’	Response: The sentence has been revised as follows: <i>“Implement groundwater monitoring to verify the reduction of arsenic concentrations.”</i>

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No.	COMMENTS	RESPONSES
8	Page 2, third paragraph, CERCLA Process section: Please revise this statement since the RAOs and RGs are also identified in the PP/Draft RAP.	Response: The sentence was revised as follows: <i>“After the public comment period, the ROD/Final RAP will document the selected cleanup remedy and will identify the final remedial action objectives (RAO) and final remediation goals.”</i>
9	Page 2, first paragraph, second sentence, Site Background section: Add ‘areas outside the SWDAs.’	Response: The sentence has been revised as suggested.
10	Page 2, first paragraph, Site Background section: Change sentence: ‘The site is designated for residential, open space...’ to ‘The planned redevelopment of the site includes residential, open space...’	Response: The sentence has been revised as suggested.
11	Page 2, Nature and Extent of Contamination: Please make "TPH" in bold font and include in Glossary.	Response: The text has been bolded and defined as suggested.
12	Page 3, first paragraph, last sentence, Nature and Extent of Contamination section: Change sentence to: ‘These radiological objects and the chemical contamination in the SWDAs will be addressed in a separate Proposed Plan/Draft RAP...’	Response: The sentence has been revised as follows: <i>“Removal of these radiological objects and the chemical contamination in the SWDAs will be addressed in a separate Proposed Plan/Draft RAP, which will be available for public comment in the near future.”</i>

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13	<p>Page 3, second paragraph first sentence, Nature and Extent of Contamination section: Please verify 2003 date (2014 or 2015?) This date should be the FS Addendum sampling. And add 'soil gas, and groundwater at Site 12' to the end of the sentence.</p>	<p>Response:</p> <p>The data gap sampling information has been included as a separate sentence to portray these investigations in chronological order. The text has been revised as follows:</p> <p><i>“Between 2000 and 2003, the Navy performed trenching and sampling investigations to evaluate and further refine the extent of contamination in soil. The Navy fenced off known areas of debris contamination and installed covers in the back yards of several occupied residences. From 2013 to 2014, the Navy completed an additional data gap investigation by collecting soil and soil gas samples in specific areas across the site.”</i></p>
14	<p>Page 3, second paragraph, Nature and Extent of Contamination section: delete the sentence “The Navy fenced off known areas of debris contamination and installed covers in the back yards of several occupied residences.”</p>	<p>Response: The sentence has been deleted as suggested.</p>
15	<p>Page 3, second paragraph, Nature and Extent of Contamination section: Change sentence: ‘Navy also completed one removal action for the SWDAs in 2007, and another removal action in the SWDA Bigelow Court is currently ongoing.’ To ‘The Navy also completed one removal actions in for the SWDAs in 2007 and 2015, additional removal action in the SWDAs are and another removal action in the SWDA Bigelow Court is currently ongoing.’</p>	<p>Response: There are removal actions currently ongoing in the SWDAs. The sentence was revised as follows:</p> <p><i>“The Navy also completed removal actions in the SWDAs in 2007 and 2015 and additional removal actions in the SWDAs are currently ongoing.”</i></p>

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No.	COMMENTS	RESPONSES
16	Page 3, second paragraph, Nature and Extent of Contamination section: update sentence: Another removal action to excavate contaminated soil is planned for 2016 in discrete locations at the southern portion of Site 12.	Response: The sentence has been revised as follows: <i>“Another removal action to excavate contaminated soil in discrete locations at the southern portion of Site 12 is planned for 2016.”</i>
17	Page 3, second paragraph, Nature and Extent of Contamination section: update sentence: ‘These removal actions will not address all identified discrete locations of with contaminated soil outside the solid waste disposal areas contaminated with PAHs, PCBs, lead, and dioxins throughout Site 12 outside the SWDAs, so concentrations of the chemicals so chemical contaminates at other discrete locations will remain on Site 12 after the removal actions.’	Response: The sentence has been revised as suggested.
18	Page 3, second paragraph, Nature and Extent of Contamination section: Update sentence: ‘Groundwater investigations identified elevated concentrations of arsenic and TPH just west of Gateview Avenue (called the Gateview Avenue Arsenic/TPH Area), likely related to a leaking former waste oil tank.’	Response: The sentence has been revised as suggested.
19	Page 3, second paragraph, Nature and Extent of Contamination section: Update sentence: ‘The investigation concluded that the background concentrations of arsenic had naturally dissolved from the soil into the groundwater as a result of the chemical conditions created by the breakdown of the TPH over time.’	Response: The sentence has been revised as suggested.

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20	Page 3, second paragraph, Nature and Extent of Contamination section: Add sentence at the end of the paragraph: ‘The dissolved arsenic in groundwater could migrate into the Bay at concentrations that would be harmful to marine ecology.’	Response: The sentence has been revised as follows: <i>“The dissolved arsenic in groundwater could migrate into San Francisco Bay at concentrations that would potentially be harmful to marine ecology.”</i>
21	Page 3 Summary of Site Risks section: Please add a separate paragraph after the "Summary of Site Risks" discussing the chemicals that were not identified as COCs but will be excavated and/or monitored per the RTCs for the RI and FS reports. These chemicals include chromium, pesticides, copper, and TPH as discussed in the comments below.	Response: The following paragraph has been added on page 4 after the bulleted chemical of concern (COC) list in the Human Health Risk Assessment section: <i>“In addition to addressing the COCs identified above, the Navy will also address total chromium, pesticides, and TPH, although none of these chemicals were identified as COCs in the HHRA.”</i> The Navy will not address copper in groundwater in this Proposed Plan/Draft RAP and ROD/RAP because elevated concentrations of copper were identified within the SWDAs and will be addressed by future SWDA documentation and/or the groundwater monitoring program.
22	Page 4, fourth paragraph, first sentence, Human Health Risk Assessment section: change ‘subareas’ to ‘exposure areas.’	Response: The sentence has been revised as suggested.

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23	<p>Page 4, second paragraph, Human Health Risk Assessment section: The RTC for the FS Report states that the Navy does plan to excavate isolated areas where chromium was detected above the risk-based criteria or screening levels that will also remove high levels of hexavalent chromium (DTSC Comment #2). Table 1 with RGs also includes chromium as a COC. Since chromium was not identified as a COC in the HHRA, a separate paragraph should be added to discuss other chemicals that will be remediated based and on its risk-based concentration (RBC).</p> <p>The RTC for the FS Report also states that two locations with pesticides above the RBC will also be excavated (Langan Comment #7).</p>	<p>Response: Please see response to Comment 21 for text added to the Summary of Site Risks, Human Health Risk Assessment discussion.</p> <p>In addition, the following text has been added to the second sentence of the first paragraph of the Summary of the Preferred Alternative section:</p> <p><i>“The Navy will excavate discrete locations of soil contaminated with COCs, total chromium, and pesticides within Site 12 and dispose of the soil off site.”</i></p>
24	<p>Page 4, fourth paragraph Human Health Risk Assessment section: The RTC for the FS Report states sampling of wells at GW-S2 and GW-S3 for copper will be included in the sitewide groundwater monitoring program. This is conducted by either SWDA actions, or the Site 12 monitoring program (Response to DTSC Comment #5). Please discuss this action here or in a new separate paragraph for chemicals that were not identified as COCs in the RI.</p>	<p>Response: The Navy has not added information about elevated concentrations of copper in groundwater because the elevated concentrations are within the SWDAs and will be addressed by future SWDA documentation or the groundwater monitoring program.</p>

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25	Page 5, Remedial Action Objectives and Cleanup Goals section: Please insert a new paragraph before the RAOs and RGs paragraphs for chemicals that will be remediated although not identified as COCs.	<p>Response: Please see response to Comments 21 and 23.</p> <p>In addition, the Navy has made the following changes:</p> <p>The Navy has revised the paragraph after the bulleted list of remedial action objectives (RAO) as follows:</p> <p><i>“Table 1 presents a complete list of contaminants addressed by the CERCLA actions, the remediation goals, and the basis for the remediation goals developed for Site 12.”</i></p> <p>The Navy has revised Table 1 to include pesticides.</p>
26	Page 5, Remedial Action Objectives and Cleanup Goals section: Replace Cleanup with Remediation	Response: The heading has been revised as suggested.
27	Page 5, Remedial Action Objectives and Cleanup Goals section: Please add a paragraph for objectives for the other chemicals that will be remediated but were not identified as COCs.	Response: Please see response to Comment 25. Please note that the section has been retitled to: Remedial Action Objective and Remediation Goals.
28	Page 5, Summary of Remedial Alternatives section: ‘Land use controls (LUC): Includes land use, groundwater use, and temporary access restrictions to prevent human contact with contaminated media.’ Delete temporary.	Response: The sentence has been revised as suggested.
29	Page 6, Summary of Remedial Alternative section: Update sentence: ‘Removal: Includes excavation and off-site disposal of COC and petroleum hydrocarbon contaminated soil.’	Response: The sentence has been revised as suggested.
30	Page 6, Remedial Alternatives for COCs section: Delete ‘for COCs.’	Response: The heading has been revised as suggested.

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31	Page 6, first paragraph, last sentence Remedial Alternatives section: ‘...were developed to address potentially unacceptable risk to human receptors the contaminants in soil and groundwater.’	Response: The sentence has been revised as suggested.
32	Page 6, third bullet, Remedial Alternatives section: Update selected alternate S-3 to ‘Alternative S-3: Excavation and Off-Site Disposal.’	Response: The sentence has been revised as suggested.
33	Page 6: Change header from ‘EVALUATION OF CLEANUP ALTERNATIVES’ to ‘Evaluation of Remedial Alternatives’	Response: The Navy and DTSC discussed the use of “cleanup” versus “remediation.” It was agreed that “remediation” will be used for official terms like “remediation goal” or “remedial action objectives;” however, “cleanup” will be used in all other instances. No change was made to this section header as a result of this comment.
34	Page 6, first sentence, Evaluation of Cleanup Alternatives section: Change from ‘The cleanup alternatives represent a range of remediation strategies that fulfill the RAOs.’ To ‘The remedial alternatives represent a range of cleanup strategies that fulfill the RAOs.’	Response: The sentence has been revised as follows: <i>“The cleanup alternatives represent a range of strategies that fulfill the RAOs.”</i> See also response to Comment 33.
35	Page 6, Item 2, Evaluation of Remedial Alternatives section: add s to ARAR	Response: An “s” has been added to all appropriate acronyms.
36	Page 7, Item 3 Long-Term Effectiveness and Permanence section: Please change "COCs" to "contaminants" throughout the document if other chemicals that will be removed will not be identified as COCs.	Response: The term “COCs” has been changed to contaminants throughout the Proposed Plan/Draft RAP, except in the Summary of Site Risks, Human Health Risk Assessment section and the Summary of the Preferred Alternative section.
37	Page 8, last sentence of Item 5 Short-Term Effectiveness section: Delete ‘related to’	Response: The sentence has been revised as suggested.

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38	Page 9, Summary of Preferred Alternative section, Figure 5: Please verify that the excavation locations include chromium and pesticide locations. The groundwater exposure areas should also be shown in this figure or in new figure.	Response: The Navy has verified that Figure 5 includes the four locations that will be excavated for total chromium (three separate locations and one location collocated with benzo(a)pyrene) and the two separate locations that will be excavated for pesticides. In addition, the Navy has revised Figure 5 to show the groundwater exposure areas.
39	Page 9, first sentence, Summary of Preferred Alternative section: Add and Off-Site Disposal to ‘Alternative S-3: Soil Excavation.’	Response: The sentence has been revised as suggested.
40	Page 9, second sentence, Summary of Preferred Alternative section: Change sentence: ‘The Navy will excavate discrete locations of soil contaminated with COCs contaminated soil throughout Site 12.’	Response: The sentence has been revised as follows: <i>“The Navy will excavate discrete locations of soil contaminated with COCs, total chromium, and pesticides throughout Site 12 and dispose of the soil off site.”</i>
41	Page 9, second paragraph, Summary of Preferred Alternative section: Please discuss groundwater monitoring at GW-S2 and GW-23 for copper that will be included in the SWDA or basewide monitoring per the above comment. The groundwater exposures areas should be shown in a figure.	Response: Elevated concentrations of copper were detected in groundwater exposure areas GW-S2 and GW-S3. These groundwater exposure areas are within the SWDAs. This Proposed Plan/Draft RAP addresses the area outside the SWDAs and so will not address elevated concentrations of copper in the groundwater. Instead, the Navy will address the elevated concentrations of copper in groundwater as part of future SWDA documentation or the groundwater monitoring program.
42	Page 11 Opportunities for Community Participation: Delete items listed as 1 and 2.	Response: The items have been deleted as suggested.
43	Page 11 Glossary ARARs: Add ‘s’ to ARAR.	Response: An “s” has been added to all appropriate acronyms.
44	Page 11 Glossary Biostimulation: Change ‘contamination’ at the end of the definition to ‘chemical contaminants’	Response: The definition has been revised as suggested.

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45	Page 11 Glossary Chemicals of Concern: Delete ‘baseline’ from definition.	Response: The definition has been revised as suggested.
46	Page 11 Glossary CERCLA: Change definition: ‘A federal law that set up created a program to identify hazardous waste sites and to established procedures for cleaning up sites to protect human health and the environment.’	Response: The definition has been revised as suggested.
47	Page 11 Glossary Dioxin: Change to ‘A class of chemical contaminants that are formed during combustion processes such waste incineration, forest fires, and backyard trash burning, and during some industrial processes such as pesticide manufacturing.’	Response: The definition has been revised as suggested.
48	Page 12 Glossary In-Situ Soil Mixing with Chemical Oxidants: Delete ‘otherwise.’	Response: The definition has been revised as suggested.
49	Page 12 Glossary Installation Restoration Program: add ‘at military facilities’ to the end of definition.	Response: The definition has been revised as suggested.
50	Page 13 Glossary: Add TPH to glossary.	Response: The following definition was added to the Glossary: <i>“Total Petroleum Hydrocarbons (TPH): A large family of several hundred chemical compounds that originally come from crude oil. Crude oil is used to make petroleum products, which can contaminate the environment.”</i>
51	Page 14, second to last sentence, Information Repositories section: update to ‘Enter “San Francisco” as the City and check “State Response Sites” box.	Response: The Navy has not deleted this portion of the sentence because it is an easier way to navigate to the Site 12 documents.

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52	Page 18, update Figure 2 Title to: ‘Current Phase in CERCLA Process of Site 12 excluding SWDAs and radiological program.’	Response: The Navy has not made this change because adding this phrase would make the heading too long. The Proposed Plan/Draft RAP will be converted into a publishing format and the figure will likely be fairly small. Therefore, the figure needs to be simple and easily read.
53	Figure 5: Please verify that the chromium and pesticides excavation locations are included in this figure.	Response: The Navy has verified that Figure 5 includes the chromium and pesticides excavation locations.
54	Figure 5: Green Dot: Figure 5 shows only one location as previously excavated. This location can be deleted since there are more areas that were previously excavated outside the SWDAs.	Response: This location has been changed to purple because it will be addressed by Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) response actions and this Proposed Plan/Draft RAP is a comprehensive list of all areas (non-SWDA) that need to be addressed (whether accomplished by recent or ongoing removal actions or this future remedial action).
55	Figure 5: Please define TCRA. TCRA was not discussed earlier.	Response: Figure 5 has been revised to remove the TCRA acronym and just refer to the removal action planned for 2016.
56	Table 1 Delete ‘and Furans’ from ‘Dioxins and Furans’	Response: The title has been revised as suggested.
57	Table 2: Add ‘and Off-Site Disposal’ to S-3 title	Response: The title has been revised as suggested.
58	Table 2: Please explain why GW-5 cost less than GW-4. These alternatives are similar but GW-5 has an additional component of soil mixing which should make it cost more than GW-4	Response: The assumptions used in calculating costs associated with each alternative are described in FS addendum, Appendix D (KCH 2015). Cost differences can be attributed to a larger excavation area evaluated in Alternative GW-4. No changes to Table 2 were made in response to this comment.
59	Table 2 S-3 Component: Add sentence ‘The excavated contaminated soil will be transported to permitted landfills.’ To the end of component.	Response: The sentence has been added as suggested.

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60	Table 3: Add 'and Off-Site Disposal' to S-3 title	Response: The title has been revised as suggested.
61	Table 3: The evaluation discussion states that none of the soil alternatives reduces toxicity, mobility, or volume through treatment so the circles for S-2 and S-3 should be the same as No Action.	Response: The table has been revised as suggested.

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Comments Received from Langan Treadwell Rollo on behalf of Treasure Island Development Authority (TIDA), dated January 19, 2016		
No.	COMMENTS	RESPONSES
1	Page 1 first paragraph, Introduction: Please define SWDA as the acronym for Solid Waste Disposal Area in this paragraph, as the acronym is used in later sections.	Response: The acronym has been defined as suggested.
2	Page 1 Soil alternative S-3, Introduction: Please consider revising the statement as indicated: “Excavate discrete locations of soil with chemicals of concern (COC) above their remediation goals (listed on Table 1) and dispose of the soil off site.”	Response: The sentence has been revised as suggested.
3	Page 3, second paragraph, Nature and Extent of Contamination section: Following the statement “...concentrations of the chemicals will remain in Site 12 after the removal actions,” please consider stating that the actions proposed in the Proposed Plan intend to address these remaining chemical concentrations.	Response: The following sentence has been added as suggested: <i>“This Proposed Plan addresses these remaining chemical concentrations.”</i>
4	Page 4, Human Health Risk Assessment, Ecological Risk Assessment: In one of these sections, please state that while TPH is not a COC for human health or ecological risk, addressing TPH is part of the remedial alternatives because the presence petroleum has the effect of increasing arsenic concentrations in groundwater.	Response: The conclusion that the release of TPH caused naturally occurring concentrations of arsenic in soil to dissolve was already stated in the last sentence of the Nature and Extent of Contamination section. This sentence has been revised as follows in response to DTSC Comment 19: <i>“The investigation concluded that the background concentrations of arsenic had naturally dissolved from the soil into the groundwater as a result of the chemical conditions created by the breakdown of the TPH over time.”</i>

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Comments Received from Myriam Zech, San Francisco Regional Water Quality Control Board, dated February 2, 2016. The comments were received in a Word file of the Proposed Plan/Draft RAP attached to an e-mail from Ms. Zech and in the body of the e-mail.		
No.	COMMENTS	RESPONSES
1	Page 1, first paragraph, Introduction: Please update sentence: ‘ Hazardous chemicals Contaminants were released to the environment during former operations on the former naval installation station. ’	Response: The sentence has been revised as suggested.
2	Page 1, second paragraph, Introduction: Please update sentence: ‘This Proposed Plan/Draft RAP presents and summarizes remedial (cleanup) alternatives which the Navy developed in the 2014 Feasibility Study (FS) and 2015 Feasibility Study-S Addendum (FSA) for Site 12. This plan also and identifies the Navy’s preferred alternatives to address soil and groundwater contamination.’	Response: The sentences have been revised as follows: <i>“This Proposed Plan/Draft RAP presents and summarizes remedial (cleanup) alternatives that the Navy developed in the 2014 Feasibility Study (FS) and 2015 FS Addendum for Site 12. This plan also identifies the Navy’s preferred alternatives to address soil and groundwater contamination.”</i>
3	Page 1, second paragraph, Introduction: Please update sentence: ‘ The Navy will select a remedial alternative for Site 12 after reviewing and considering After all information submitted during the public comment period on the Proposed Plan/Draft RAP. has been reviewed and considered, the Navy will select a remedial alternative for Site 12. ’	Response: The sentence has been revised as follows: <i>“The Navy will select a cleanup alternative for Site 12 after all information submitted during the public comment period on the Proposed Plan/Draft RAP has been reviewed and considered.”</i>
4	Page 1, second paragraph, Introduction: Please add parenthesis: ‘...remedial alternative (presented in this Proposed Plan/Draft RAP) based...’	Response: The Navy did not make the suggested revision to maintain the flow of the sentence after discussing it with a technical editor. .

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5	Page 1, second paragraph, Introduction: Please update sentences: ‘The public is therefore encouraged to review and comment on all of the alternatives presented in this Proposed Plan/Draft RAP. A because the final decision will not be made until after all comments submitted during the review period are considered. See i Instructions on how to provide submit comments are found in the text box on page 11.’	Response: The sentences have been revised as suggested.
6	Page 1, third paragraph, Introduction: Please delete sentences ‘This Proposed Plan/Draft RAP summarizes the remedial alternatives the Navy evaluated. It also explains the basis for selecting the preferred alternatives.’	Response: The sentences have been deleted as suggested.
7	Page 1, Bullet, Introduction: Please update sentence: ‘Excavate discrete locations of soil with chemicals of concern (COCs) above their remediation goals as listed in Table 1 and dispose of the soil off site.’	Response: The sentence has been revised as follows: <i>“Excavate discrete locations of soil with chemicals of concern (COCs) and chemical contaminants above their remediation goals (listed in Table 1) and dispose of the soil off site.”</i>
8	Page 3, below the bullets, page 3: Move sentence: ‘Oral and written comments can be provided any time during the comment period but written comments must be emailed or postmarked no later than Monday May 9, 2016.’ to second sentence of paragraph.	Response: The sentence has been moved as suggested.
9	Below the bullets, page 3: delete sentence: ‘Members of the public may submit written and oral comments on this Proposed Plan/Draft RAP at the public meeting.’	Response: The sentence has been deleted as suggested.

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10	Below the bullets, page 3, Introduction: Update sentence: ‘Public comments can be submitted via email , mail, or fax, or e-mail throughout the comment period or in person at the public meeting. A The public meeting will be held from 6:00 p.m. to 7:30 p.m. on Thursday, April 21, 2016, at the Casa de la Vista, 191 Avenue of the Palms, Building 271 on Treasure Island.’	Response: The sentences have been revised as suggested.
11	Page 2, second paragraph, CERCLA Process and globally: Change FS addendum to FSA	Response: The Navy has not changed FS Addendum to FSA because the Proposed Plan/Draft RAP already contains numerous acronyms.
12	Page 2, third paragraph, CERCLA Process section: Update sentence: ‘The 2012 RI, 2014 FS, and 2015 FSA Addendum , along with other documents for Site 12, are available for public review on line at the physical locations listed on page 14.’	Response: The sentence has been revised as follows: <i>“The 2012 RI, 2014 FS, and 2015 FS Addendum, along with other documents for Site 12, are available for public review on line and at the physical locations listed on page 14.”</i>
13	Page 3, second paragraph, Site Background section: Update sentences: ‘The Navy constructed built residential housing for military personnel from 1967 to 1989 in four construction phases . The site remains residential to this day .’	Response: The sentences have been updated as suggested.
14	Page 3, Nature and Extent of Contamination section: Please state which metals on lines 4 and 5.	Response: The Navy did not make these revisions because the objective of this section is to present general information on the classes of chemical detected above screening criteria at Site 12. The Summary of Site Risks section identifies the specific chemicals that present risk and need to be addressed.
15	Page 3, first paragraph, Nature and Extent of Contamination: Can you be more precise than ‘in the near future?’	Response: The Navy does not want to include any specific dates in this Proposed Plan/Draft RAP to keep the focus on the activities covered by this Proposed Plan.

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16	Page 3, second paragraph, Nature and Extent of Contamination section: List actions in chronological order.	Response: This paragraph is organized by topic (investigation activities and removal activities), then chronologically within the topic. No changes were made in response to this comment.
17	Page 3, second paragraph, Nature and Extent of Contamination section: Please update sentence: ‘...and TPH west of Gateview Avenue (called the Gateview Avenue Arsenic/TPH Area, formerly the “Building 1311/1313 Area”)...’	Response: The sentence has been revised as suggested.
18	Page 3, first paragraph, Summary of Site Risks section: Update sentence: ‘The most common ways that people may be exposed to contamination such as ingesting soil that contains contaminants , are referred to as called exposure pathways.’ Add sentence: ‘An example of an exposure pathway would be ingestion of contaminated soil.’	Response: . The Navy has revised the sentence as follows: <i>“The most common ways that people may be exposed to contamination, such as ingesting soil that contains contaminants, are called exposure pathways.”</i>
19	Page 4, fourth paragraph, last sentence, Human Health Risk Assessment section: Add area/subarea.	Response: The sentence was not revised as suggested because the Navy changed references from “groundwater subarea” to “groundwater exposure area” throughout the Proposed Plan/Draft RAP.
20	Page 5, first paragraph, Ecological Risk Assessment section: last word of paragraph and globally, capitalize Bay.	Response: The word “bay” has been replaced with “San Francisco Bay.”
21	Page 6, second bullet, Summary of Remedial Alternatives section: Add ‘s’ to Land use controls (LUCs):	Response: An “s” has been added to all appropriate acronyms.

**RESPONSE TO COMMENTS ON THE
DRAFT PROPOSED PLAN/DRAFT REMEDIAL ACTION PLAN INSTALLATION RESTORATION SITE 12,
FORMER NAVAL STATION TREASURE ISLAND, CALIFORNIA, DATED DECEMBER 2015**

No.	COMMENTS	RESPONSES
22	Page 7, first paragraph, last sentence, Long-Term Effectiveness and Permanence: update sentence: ‘...need to be maintained to be remain effective.’	Response: The sentence has been updated as suggested.
23	Page 8, first paragraph, Short-Term Effectiveness: update sentence: ‘Alternative S-3 could occur with during the excavation; however, implementation of conventional waste handling and fugitive dust emission...’	Response: The sentence has been updated as suggested.
24	Page 8, third paragraph, Short-Term Effectiveness: Update sentences: ‘Alternative S-3 ranked lower was ranked less sustainable than Alternative S-2 in sustainability evaluation due to because residual waste handling and manufacturing of the consumables greenhouse has emission and required more energy use related to and produced more greenhouse gas emissions residual waste handling and fracturing of the consumables needed. Alternative GW-3 ranked least favorably was the least sustainable of the groundwater alternatives in the sustainability evaluation, primarily due because manufacturing the consumables needed produced more greenhouse gas emissions related to manufacturing the consumables needed. ’	Response: The sentences have been updated as suggested.
25	Page 8, third paragraph, Short-Term Effectiveness: update sentence: ‘... were greenhouse gas emissions related to generated by the manufacturing...’	Response: The sentence has been updated as suggested.

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No.	COMMENTS	RESPONSES
26	<p>Page 9, first paragraph, Implementability: update sentence: ‘Alternative S-2 may be more easily implemented in that easier to implement because it provides the option for placing an engineered cover in that area, or relying relies on the footprint of an existing building to serve as a cover. Alternative S-3 would require requires building demolition, which would presents additional...’</p>	<p>Response: The sentences have been revised as suggested.</p>
27	<p>Page 9, second paragraph, Implementability: update sentences: ‘Alternatives GW-2, GW-3, and GW-5 require the use of readily available chemicals and materials that should be readily available. From the standpoint of administrative feasibility, Alternatives GW-3, GW-4, and GW-5 would require demolition of buildings to gain access to petroleum hydrocarbons in the source area. As the buildings may be currently leased, demolition will present require additional administrative actions to terminate needed to end the lease of the buildings leases. Alternative GW-2 would have less impact on the community in that because the probable location of the permeable reactive barrier (along the western perimeter of GW-S4)...’</p>	<p>Response: The sentences have been revised as suggested.</p>
28	<p>Page 10, second paragraph, Summary of the Preferred Alternative section: updated sentence: ‘Groundwater monitoring would needs to be performed as part of the remedial action to provide the information to demonstrate that the concentrations of arsenic in the groundwater are decreasing and meet the remediation goal.’</p>	<p>Response: The sentence has been updated as suggested.</p>

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No.	COMMENTS	RESPONSES
29	Page 11, text box: Add address to item 2.	Response: Please see response to DTSC comment 42. Items 1 and 2 in the text box have been deleted.
30	Page 24, Table 2 S-1: Update sentence: ‘ This The NCP requires this is-alternative is required by the NCP as a baseline for comparison with other alternatives. Under this alternative, no further remediation would be performed.’	Response: The sentence has been updated as suggested.
31	Page 24, Table 2 GW-1: ‘ The NCP requires this This alternative is required by the NCP as a baseline for comparison with other alternatives.’	Response: The sentence has been updated as suggested.
32	Comment in body of email: I suggest the following additions/changes to the glossary: <ul style="list-style-type: none"> • Under the entry for PCBs, add a note to explain why PCBs are given as total Aroclors • Under the entry for dioxins (and furans), explain why concentrations of dioxins are calculated as 2, 3, 7, 7-tetrachloro-p-dibenzo-dioxin (TCDD) toxicity equivalent (TEQ) • Consider adding entries for “discrete,” “monitored natural attenuation,” “medium/media,” “dissolved TPH,” “exposure scenario,” and “aquatic receptors.” 	Response: The Navy added a definition for TPH to the glossary. The Navy did not make any other additions to the glossary because the glossary already spans 2 pages and the Navy does not want to further increase its size.
33	Comment in body of email: On Figure 2, consider adding the dates each step was completed.	Response: The Navy did not add the completion dates to Figure 2 because the boxes are small and adding more information would clutter the figure.

REFERENCES

KCH. 2015. “Final Feasibility Study Addendum for Installation Restoration Site 12 Old Bunker Area, Non-Solid Waste Disposal Areas, Former Naval Station Treasure Island, San Francisco, California.” June.