



DEPARTMENT OF THE NAVY
BASE REALIGNMENT AND CLOSURE
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AR_N00236_003022
ALAMEDA POINT
SSIC NO. 5090.3.A

5090
Ser BPMOW.MLH/0149
DEC 13 2007

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Mr. John West
San Francisco Bay Regional Water Quality Control Board
1515 Clay Street, Suite 1400
Oakland, CA 94612

Dear Ms. Cook, Ms. Lofstrom, and Mr. West:

Subj: DRAFT FINAL ROD FOR IR SITE 27, ALAMEDA POINT, ALAMEDA,
CALIFORNIA

Enclosed is the Draft Final Record of Decision (ROD) for Installation Restoration (IR) Site 27, at Alameda Point, in Alameda, California. The Draft Final ROD incorporates regulatory comments on the draft ROD. A summary of responses to comments are provided in a matrix, as enclosure (2).

Per Navy correspondence of November 21, 2007, the due date for the Draft Final ROD was extended to December 21, 2007. In accordance with the timelines in the Federal Facility Agreement, the Draft Final ROD is scheduled to be finalized on January 14, 2008.

Thank you for your assistance with the Navy CERCLA program. If you have questions, please contact the Remedial Project Manager for the project, Ms. Michelle Hurst at (619) 532-0939, or me at (619) 532-0907.

Sincerely,

THOMAS L. MACCHIARELLA
BRAC Environmental Coordinator
By direction of the Director

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Enclosures:

- (1) Draft Final Record of Decision for IR Site 27, Alameda Point, Alameda, California
(Dec 2007)
- (2) Responses to Comments on Draft Record of Decision for IR Site 27, Alameda Point,
Alameda, California, Apr 2007

Copy to:

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ENCLOSURE 1

DRAFT FINAL
RECORD OF DECISION FOR IR SITE 27
DATED 01 DECEMBER 2007 WAS CONVERTED TO:

FINAL
RECORD OF DECISION FOR IR SITE 27

DATED 01 FEBRUARY 2008

IS FILED AS ENVIRONMENTAL RESTORATION
RECORD NO. AR_N00236_003023

**RESPONSE TO COMMENTS ON
DRAFT RECORD OF DECISION, IR SITE 27, DOCK ZONE
ALAMEDA POINT, ALAMEDA, CALIFORNIA
DATED APRIL 2007
CTO-0084/0222**

Comments from A. Cook, U.S. EPA, 7/26/2007

GENERAL COMMENTS	RESPONSE TO GENERAL COMMENTS
<p>General Comment 1.</p> <p>Arsenic does not need to be included as a GW COC because there are very infrequent detections of arsenic above the federal MCL. We recommend that arsenic be removed as a COC and the following changes made in the ROD:</p> <ul style="list-style-type: none"> a. The section on "Identification of Chemicals of Concern," sec. 7.1.4, pages 7-5 and 7-6 should include a statement that very few arsenic samples exceed the MCL of 10 ppb, and most are in the range of 3-5 ppb. There should be a similar edit in Sec. 5.3.2 on page 5-4 and in Table 5-2. b. In Section 8, RAOs, p. 8-1, in the first paragraph following the bullets, the last two sentences should be removed. If a groundwater contaminant is a COC and concentrations exceed MCLs, it cannot automatically be assumed that cleanup levels can exceed MCLs, even if background levels exceed MCLs. The two sentences on page 8-1 are unnecessary if arsenic is not identified as a COC. Also, please remove arsenic from Table 8-1. c. In Section 13, Statutory Determinations, subsection 13.2.1, Chemical-Specific ARARs, the discussion of the arsenic MCL should be deleted if arsenic is not identified as a COC. d. Sec. 12.2.3, page 12-5, ICs, remove arsenic from the RGs in the last bullet. <p>It seems that it would be most logical and informative to discuss the changes in the sections on risk and selection of COCs, and again briefly in the section setting forth the RGs (which is essentially what the Navy chose to do originally when they proposed keeping arsenic as a COC but changing the RG). We would not be adverse to the Navy determining that this is not a significant change, but think the ROD should indicate in an appropriate place what the change is and why it was made.</p>	<p>Response to General Comment 1.</p> <ul style="list-style-type: none"> a. The following sentence has been added to the 1st paragraph on page 7-6 as the last sentence: "Arsenic is not considered a COC in groundwater because there were very few groundwater samples in which arsenic exceeded the MCL of 10 ppb or the background concentration of 20.72 µg/l; most concentrations ranged from 3 to 5 ppb, and these samples were only located in the center of the VOC plume." Please also refer to the Response to Specific Comment 25 below. <p>The following sentence has been added to the third paragraph of Section 5.3.2 on Page 5-4, following the first sentence: "However, there are very few groundwater samples in which arsenic exceeded the MCL of 10 ppb or the background concentration of 20.72 µg/l, and most concentrations ranged from 3 to 5 ppb." The second sentence of this paragraph (now the third sentence) has been revised as follows: "Arsenic concentrations that exceeded background levels <i>or the MCL</i> were limited to..." Since Table 5-2 presents a summary of exceedences, no revisions to the table are proposed.</p> <ul style="list-style-type: none"> b. These modifications have been made as suggested in Section 8 and Table 8-1. c. This modification has been made as suggested. d. This modification has been made as suggested. <p>Revisions to Section 7.1.4 include the addition of the following paragraph following the last paragraph under Identification of Chemicals of Concern: "The majority of the risk in groundwater (greater than 90 percent) is associated with arsenic and vinyl chloride, TCE (U.S. EPA only), PCE, and PAHs. Groundwater samples with arsenic concentrations exceeding the Alameda Point background 95th percentile</p>

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Comments from A. Cook, U.S. EPA, 7/26/2007

GENERAL COMMENTS	RESPONSE TO GENERAL COMMENTS
<p>General Comment 1 (continued).</p>	<p>Response to General Comment 1 (continued).</p> <p>were limited to samples collected from one monitoring well. PAHs are limited in extent and only reported in 1 of 14 groundwater samples. The COCs in groundwater with cancer risks above 10^{-6} are chlorinated VOCs, including vinyl chloride, TCE (U.S. EPA only), and PCE (Cal/EPA only). Arsenic is not considered a COC in groundwater because there were very few groundwater samples in which arsenic concentrations exceed the MCL of 10 ppb or the background concentration of 20.72 $\mu\text{g/l}$; most concentrations ranged from 3 to 5 ppb and these samples were only in the center of the VOC plume. This conclusion regarding arsenic in groundwater differs from that found in the Proposed Plan for IR Site 27 (DON 2006) based on further evaluation.”</p> <p>The last four sentences of the first paragraph on page 7-6 have been deleted.</p>
<p>General Comment 2.</p> <p>In some places, the ROD describes the soil remedy as “no action” (e.g., Table D-1, page D-5, second paragraph under “Description,” second line; Sec. 12.2, p. 12-2). In several other places, however, the soil remedy is described as no “further” action. This should be changed to “no action,” as the ROD does not indicate any prior remediation was undertaken for soil. See, e.g., page D-1 (two places); Table D-1, third paragraph under “Description”; Table D-1, page D-5, end of second paragraph; page 7-1, Sec. 7, third paragraph; Sec. 12.1, page 12-1, first paragraph; Section 14, second line.</p>	<p>Response to General Comment 2.</p> <p>This modification has been made as suggested; all references to “no further action for soil” have been changed to state, “no action for soil.”</p>

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Comments from A. Cook, U.S. EPA, 7/26/2007

SPECIFIC COMMENTS	RESPONSE TO SPECIFIC COMMENTS
<p>Specific Comment 1. Page D-1, second paragraph, second sentence: Recommend deleting the word "immediate" before the word "threat". Saying no immediate threat implies that there is a longer term threat, when in fact there is no threat.</p>	<p>Response to Specific Comment 1. This modification has been made as suggested.</p>
<p>Specific Comment 2. Page D-1, first sentence under "Assessment of the Site" header: Please delete the word "further" from this sentence since there has been no action taken for the soil in the past at this site.</p>	<p>Response to Specific Comment 2. This modification has been made as suggested.</p>
<p>Specific Comment 3. Page D-2, first full paragraph, the ROD states that the site poses no unacceptable risk from soil "based on current and reasonably anticipated future land uses." We recommend either including a parenthetical "(including residential use)" following "future land uses," or, as an alternative, removing the language "based on current and reasonably anticipated future land uses." Same recommendation for the first paragraph under the heading "Description of the Selected Remedy" and on page 7-1, Sec. 7, second paragraph.</p>	<p>Response to Specific Comment 3. The phrase "including residential uses" has been added.</p>
<p>Specific Comment 4. Page D-2, second paragraph, third sentence: Please note that while the sampling of the OWS and the wash down areas may also satisfy the RCRA SWMU requirements, these actions are being done under CERCLA and if there are contaminants in the soil above residential PRGs, a CERCLA soil clean up action may be necessary.</p>	<p>Response to Specific Comment 4. Comment noted. The words "under the CERLCA program" have been added to the third sentence following the words "Further action".</p>
<p>Specific Comment 5. Page D-2, third bullet: Recommend deleting the word "confirmation" before sampling as it is redundant with the later phrase "to confirm treatment has reduced...", and "proposed" should be changed to "selected."</p>	<p>Response to Specific Comment 5. This modification has been made as suggested.</p>

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Comments from A. Cook, U.S. EPA, 7/26/2007

SPECIFIC COMMENTS	RESPONSE TO SPECIFIC COMMENTS
<p>Specific Comment 6. Page D-3, end of first full paragraph on this page: Add in a sentence stating "Institutional Controls will be maintained until the concentration of hazardous substances in the groundwater reach remediation goals and are at such levels to allow for unrestricted use and exposure."</p>	<p>Response to Specific Comment 6. The following sentence has been added after the last sentence under "Statutory Determinations": "ICs will be maintained until COCs reach remediation goals."</p>
<p>Specific Comment 7. Page D-4, third checklist item, description, second sentence: Delete the word "further" from "no action" because there has not been any past action taken on soil at this site.</p>	<p>Response to Specific Comment 7. This modification has been made as suggested.</p>
<p>Specific Comment 8. Page D-4, last checklist item, description: Suggest adding to last sentence the phrase "including unrestricted use."</p>	<p>Response to Specific Comment 8. This modification has been made as suggested.</p>
<p>Specific Comment 9. Page D-5, last checklist item: Recommend an additional spacing between the two items in the checklist on this page for easier reading. Also the description of the last item should delete the word "further" from the third to last sentence since no past soil action has been taken at this site.</p>	<p>Response to Specific Comment 9. These modifications have been made as suggested.</p>
<p>Specific Comment 10. Page D-6, first sentence: Please delete the word "further" from this sentence.</p>	<p>Response to Specific Comment 10. This modification has been made as suggested.</p>
<p>Specific Comment 11. Table 1-1, page 1, second paragraph, second to last sentence: Please verify location of fuel farm. It seems that stating that it is located in the "northern" or "northwestern" portion of IR 27 would be more accurate.</p>	<p>Response to Specific Comment 11. The location has been revised to "northwestern".</p>

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Comments from A. Cook, U.S. EPA, 7/26/2007

SPECIFIC COMMENTS	RESPONSE TO SPECIFIC COMMENTS
<p>Specific Comment 12. Page 2-4, second to last paragraph, last sentence: Please delete the word "further".</p>	<p>Response to Specific Comment 12. This modification has been made as suggested.</p>
<p>Specific Comment 13. Page 2-5, Section 2.2.2, second paragraph, fourth sentence: Please clarify this sentence. As written it sounds as if the tanks have contributed to groundwater contamination. Is this correct?</p>	<p>Response to Specific Comment 13. The specific source(s) of groundwater contamination at IR Site 27 has not been determined. Potential historical sources of groundwater contamination are described in Table 1-1. The sentence "Closure of these tanks will be completed after the remediation of the impacted groundwater at IR Site 27 has been completed" has been revised as follows: "Closure of these tanks will be completed as part of the remediation of impacted groundwater at IR Site 27".</p>
<p>Specific Comment 14. Page 2-5, Section 2.2.2, second paragraph, seventh sentence: Please rephrase this sentence. Data gap sampling is not an action, as it relates to actions explained in a ROD. Additionally, the ROD has stated in many places that it is selecting "no action" for soil, so it is confusing to suddenly see "further action" taken for soil in this paragraph. Recommend simply deleting the words "further action" here and removing brackets from "data gap sampling".</p>	<p>Response to Specific Comment 14. This modification has been made as suggested.</p>
<p>Specific Comment 15. Table 2-1, under date 2002-2004: Both Objective and Summary of Findings descriptions should remove the word "further" from the text. The word "immediate" should also be deleted from the Summary of Findings.</p>	<p>Response to Specific Comment 15. These modifications have been made as suggested.</p>
<p>Specific Comment 16. Table 2-3, SWMUs OWS-166A and B, WD 166: Please note that if soil contamination is found at levels above residential PRGs, it may be necessary to perform a CERCLA clean up action for soil.</p>	<p>Response to Specific Comment 16. The Navy agrees that if hazardous substances are on site above levels that allow unrestricted use, that a CERCLA response action may be necessary.</p>

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SPECIFIC COMMENTS	RESPONSE TO SPECIFIC COMMENTS
<p>Specific Comment 17.</p> <p>Page 4-1: Please add the phrase "AND RESPONSE ACTION" to the title on this page. In addition, please include a paragraph describing the response action similar to that found in the RODs for IR 26 and IR 28.</p>	<p>Response to Specific Comment 17.</p> <p>The first modification has been made as suggested.</p> <p>The following paragraph is added as the first paragraph of Section 4 on Page 4-1:</p> <p>"Responses associated with this ROD include no action for soil under CERCLA; remedial action and institutional controls (ICs) to address VOCs in groundwater under CERCLA; and addressing AOC 015 (USTs 15-1 through 15-3), OWS-166A, OWS-166B, and WD-166 as part of the remediation of impacted groundwater at IR Site 27. These responses should provide for unrestricted site use."</p>
<p>Specific Comment 18.</p> <p>Page 5-4, last sentence of second paragraph: Since the detection limits were set above PRGs, the samples cannot be considered confirmation samples. Is there any other information available that would yield better support for not considering tetraethyl lead to be a problem?</p>	<p>Response to Specific Comment 18.</p> <p>To clarify that the samples may not be considered confirmation samples, the last sentence of the 1st paragraph on page 5-4 has been revised as follows: "Results of subsequent sampling at adjacent locations reported this compound at lower concentrations."</p> <p>More information to support the conclusion that tetraethyl lead is not a problem at the site is provided below in Response to Specific Comment 22.</p>
<p>Specific Comment 19.</p> <p>Page 5-4, third paragraph, third sentence: There appear to be only three samples where iron exceeds the residential PRG and one where thallium exceeds the residential PRG. It would support the decision to not consider these metals releases to state this information. Suggest removing the third sentence and replacing with "Three soil samples had concentrations of iron, which is an essential nutrient, above the residential PRG and one soil sample had a concentration of thallium slightly above the residential PRG. All other samples yielded iron and thallium concentrations below PRGs, leading to the conclusion that neither iron nor thallium are a concern in soil."</p>	<p>Response to Specific Comment 19.</p> <p>This modification has been made as suggested.</p>

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Comments from A. Cook, U.S. EPA, 7/26/2007

SPECIFIC COMMENTS	RESPONSE TO SPECIFIC COMMENTS
<p>Specific Comment 20.</p> <p>Page 5-4, Section 5.3.2, last paragraph, second sentence: Please elaborate on the mechanism that could have locally mobilized arsenic in soil. Also, it should be mentioned here that arsenic exceeded the MCL only infrequently. The majority of the samples yielded arsenic concentrations below the level of the MCL.</p>	<p>Response to Specific Comment 20.</p> <p>The following text has been inserted after the second sentence (now third sentence) 2in the third paragraph of Section 5.3.2: “The microbial activity associated with biodegradation of chlorinated VOCs creates reducing conditions that can mobilize arsenic (U.S. EPA 1999). This may explain why detections of arsenic in groundwater at IR Site 27 infrequently exceeded the MCL, and only in the center of the VOC plume. The majority of the samples yielded arsenic concentrations below the level of the MCL.” Please also refer to the response to DTSC Specific Comment 8.</p> <p>New reference to be added:</p> <p>U.S. EPA, 1999. Monitored Natural Attenuation of Chlorinated Solvents. U.S. EPA Remedial Technology Fact Sheet. Office of Research and Development, EPA/600/F-98/022. May.</p>
<p>Specific Comment 21.</p> <p>Page 5-5, Section 5.3.3: Both chlorinated VOCs and fuel-related VOCs are stated as being located in the western portion of IR Site 27. Are they co-located? Please explain.</p>	<p>Response to Specific Comment 21.</p> <p>A depiction of the chlorinated VOCs and fuel-related VOCs in soil gas is provided on Figures 4-14 and 4-15 of the RI Report (Bechtel 2005). As shown in the figures, the higher detections of the chlorinated VOCs and fuel-related VOCs in soil gas are not coincident. A detailed discussion of the nature and extent of VOCs in soil gas can be found in the RI Report.</p>
<p>Specific Comment 22.</p> <p>Table 5-1: The concentration listed in the table for tetraethyl lead is over a 100 times greater than the residential PRG. Please provide more information on this very high hit. What was the detection limit? It is stated in the text on Page 5-4 that confirmation samples had detection limits set above the PRGs so the percent reported above the detection limit is not very useful for this contaminant. Also, please explain the relation to dioxin/furan results and the tetraethyl lead stated in footnote “g”.</p>	<p>Response to Specific Comment 22.</p> <p>As presented in the RI on Page 4-10 (Bechtel 2005), this soil sample was taken at the storm drain corridor east of Building 168 in EBS Parcel 140 (location 140-SS-001, as shown in Figure 1-9 of the RI Report). The detection limit was not reported in the EBS. Four additional borings were subsequently sampled in the vicinity of this location, and tetraethyl lead was not reported above detection limits in the soil samples from these additional</p>

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Comments from A. Cook, U.S. EPA, 7/26/2007

SPECIFIC COMMENTS	RESPONSE TO SPECIFIC COMMENTS
<p>Specific Comment 22 (continued).</p>	<p>Response to Specific Comment 22 (continued).</p> <p>borings. The detection limits for the additional samples ranged from 520 to 540 µg/kg. The term “confirmation sample” has been deleted.</p> <p>The remarks related to the dioxin/furan results have been deleted from Note g.</p>
<p>Specific Comment 23.</p> <p>Page 7-1, third paragraph, last sentence: Please delete the word “further”.</p>	<p>Response to Specific Comment 23.</p> <p>This modification has been made as suggested.</p>
<p>Specific Comment 24.</p> <p>Page 7-5, Residential Scenario Cancer Risks: Consider including a brief description of the major risk drivers, i.e. VOCs for this scenario in this paragraph. Otherwise the reader has to keep reading until the following page to find out that information.</p>	<p>Response to Specific Comment 24.</p> <p>This modification has been made as suggested. Please refer to Response to General Comment 1 for text revisions to Section 7.1.4.</p>
<p>Specific Comment 25.</p> <p>Page 7-6, first paragraph: Suggest not including arsenic as a risk driver and COC here. There are very few hits of arsenic above the federal MCL and all of the concentrations are below the state MCL. The majority of the risk in groundwater is due to the VOCs (as stated in the last paragraph). It seems that giving an explanation in this section, as well as in the section discussing remediation goals, as to why arsenic is not a COC would be useful and would support the selected remedy which does not address arsenic. The argument for not considering arsenic in groundwater should also be presented with an additional sentence at the end of the section discussing incremental risk on this page.</p>	<p>Response to Specific Comment 25.</p> <p>This modification has been made as suggested. Please refer to Response to General Comment 1 for text revisions to Section 7.1.4. The word “primarily” has been deleted from the last sentence of the 1st paragraph on page 7-6.</p> <p>The following three sentences have replaced the first sentence of the last paragraph of Residential Scenario Cancer Risks as follows: “The RME risk for direct contact with soil (ingestion, inhalation, and dermal contact) is 10⁻⁵, and is considered protective of a resident in the future. The majority of the risk is associated with background concentrations of arsenic. Without arsenic, the incremental risk is 10⁻⁶.”</p>

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Comments from A. Cook, U.S. EPA, 7/26/2007

SPECIFIC COMMENTS	RESPONSE TO SPECIFIC COMMENTS
<p>Specific Comment 26.</p> <p>Page 8-1, third paragraph: Recommend removing the RG for arsenic (see general comment), and the last two sentences of this paragraph.</p>	<p>Response to Specific Comment 26.</p> <p>These modifications have been made as suggested.</p>
<p>Specific Comment 27.</p> <p>Page 8-1, last paragraph: Delete the word “further” from the first sentence. Also, please remove the word “immediate” as it implies that there remains a long-term threat.</p>	<p>Response to Specific Comment 27.</p> <p>These modifications have been made as suggested.</p>
<p>Specific Comment 28.</p> <p>Sec. 9.2, p. 9-2, fourth line from the top, we recommend adding “current and” before “future landowner(s)”, consistent with the language on page 12-3, Sec. 12.2.3.</p>	<p>Response to Specific Comment 28.</p> <p>This modification has been made as suggested.</p>
<p>Specific Comment 29.</p> <p>Page 10-3, Section 10.6, last paragraph: Is the implementability actually “low” for this technology? It appears to have successfully been implemented at Site 9 and the two plumes at Site 16 with little difficulty. Having low implementability for the selected remedy is unusual.</p>	<p>Response to Specific Comment 29.</p> <p>As summarized in the first row of Table 10-1, implementability considers the following factors: technical feasibility, operational reliability, future alternative remedial options, ability to monitor effectiveness, ability to obtain governmental approvals, and availability of services and materials. Alternative 6B was rated low in implementability because of low technical feasibility based on the high number of injection points (570). In the other elements of implementability listed above, the selected alternative would rank favorably. No change to the ranking of this alternative is proposed.</p> <p>The following sentence has replaced the last sentence of Section 10.6: “This alternative assumes full-scale ISCO injections in approximately 570 locations throughout the IR Site 27 plume. This high number of injection locations reduces the technical feasibility of the alternative.”</p>

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SPECIFIC COMMENTS	RESPONSE TO SPECIFIC COMMENTS
<p>Specific Comment 30.</p> <p>Sec. 10.7, p. 10-3, Cost. We recommend adding a statement that although Alternative 6B rates low in cost due to higher net present value, it also has the lowest total cost.</p>	<p>Response to Specific Comment 30.</p> <p>Total cost does not consider the present value of future cash flows. Cost analyses in the FS were calculated consistent with the guidelines and procedures set forth in the RI/FS guidance (EPA 1988), which dictates the use of present value costs in comparing alternatives. No change in text is proposed in response to this comment.</p>
<p>Specific Comment 31.</p> <p>The ROD is ambiguous about whether MNA is considered part of the remedy. Figure 12-2 includes a box "implement MNA," suggesting that MNA could be part of the remedy, although the text never clearly explains this. The remedy bullets in the Declaration do not mention MNA, while the bullets on page 12-1 include "groundwater confirmation sampling, including the measurement of MNA parameters" in the remedy. We recommend that this be clarified</p>	<p>Response to Specific Comment 31.</p> <p>MNA is considered to be part of the remedy as described in Section 12. For clarification, the following change has been made to the Declaration. The third bullet under Description of the Selected Remedy on page D-2 has been revised as follows: "Groundwater sampling and sampling and analysis for MNA parameters will be performed to confirm that treatment has reduced VOC concentrations and that the RGs selected in this ROD have been met. MNA parameters would be measured across the plume, including the shoreline portion, and may be employed where the groundwater concentrations approach the RGs."</p>
<p>Specific Comment 32.</p> <p>Page 12-1, Section 12.1, first paragraph: Delete the word "further" from the second sentence.</p>	<p>Response to Specific Comment 32.</p> <p>This modification has been made as suggested.</p>
<p>Specific Comment 33.</p> <p>Sec. 12.2.3, page 12-3, second paragraph. At the beginning of the second sentence, we recommend adding "If the property is transferred," (unless the Navy intends on entering into covenants with DTSC while the property still is held by the Navy).</p>	<p>Response to Specific Comment 33.</p> <p>At the beginning of the second sentence the wording "If the property is transferred to a non-federal entity", has been added.</p>

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Comments from A. Cook, U.S. EPA, 7/26/2007

SPECIFIC COMMENTS	RESPONSE TO SPECIFIC COMMENTS
<p>Specific Comment 34.</p> <p>Section 12.2.3, page 12-4 and 5, IC objectives.</p> <p>a. The bullet prohibiting the installation of new groundwater wells suggests that there may be existing groundwater wells. We recommend an additional bullet clearly prohibiting the consumption of groundwater until the remedial goals have been achieved.</p> <p>b. It would be preferable to say “until remedial goals have been achieved” rather than “until cleanup objectives are achieved” to avoid any lack of clarity as to whether the cleanup objectives are something different from the RGs.</p> <p>c. The first bullet preventing residential use appears to be a permanent prohibition. Our understanding is that this prohibition is only needed until RGs are met. We recommend this be added so that it will not be necessary to obtain approval by the Navy and FFA signatories for residential use once RGs are met. The statement on page 12-5 that ICs will remain in place until the RGs have been achieved does indicate that residential use will be permissible once the RGs have been achieved.</p> <p>d. It would be clearer to just say the ICs will remain in place until the following RGs have been achieved, rather than saying “until RAOs and the following RGs are achieved.”</p>	<p>Response to Specific Comment 34.</p> <p>a. The sentence preceding the bullets in Section 12.2.2 has been revised to clarify that existing wells are monitoring wells as follows: “It was assumed that groundwater from existing monitoring wells would be sampled...”</p> <p>The following bullet has been added to page 12-5 following the bullet regarding the installation of new groundwater wells: “Prohibit the domestic use of groundwater until RGs have been achieved.”</p> <p>b. This modification has been made as suggested</p> <p>c. As the reviewer noted, the statement on page 12-5 is already included and applies to all the ICs listed above. For clarification, the following is added to the first bullet on page 12-4 after the word “signatories”: “or until RGs have been achieved.”</p> <p>d. This modification has been made as suggested.</p>
<p>Specific Comment 35.</p> <p>Figure 12-1: The recently submitted figure showing the IC boundaries superimposed on the site boundaries should be included in the draft final ROD with a figure title stating that the figure shows site and IC boundaries</p>	<p>Response to Specific Comment 35.</p> <p>This modification has been made as suggested.</p>
<p>Specific Comment 36.</p> <p>Page 12-5: Recommend deleting the arsenic RG from the bulleted list.</p>	<p>Response to Specific Comment 36.</p> <p>This modification has been made as suggested.</p>

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Comments from A. Cook, U.S. EPA, 7/26/2007

SPECIFIC COMMENTS	RESPONSE TO SPECIFIC COMMENTS
<p>Specific Comment 37.</p> <p>Section 12.2.3, page 12-6, last paragraph. Line two should read “enforcing the ICs” and lines 5-6 should read “Should any of the ICs fail” (rather than “IC objectives). As an alternative “IC objectives” could be changed to “IC controls.” It is difficult to measure whether an objective is being met for purposes of enforcement. See, e.g., DF ROD for OU5.</p>	<p>Response to Specific Comment 37.</p> <p>These modifications have been made as suggested. The word “objectives” has been deleted.</p>
<p>Specific Comment 38.</p> <p>Page 14-1, first sentence: Please delete the words “further” and “immediate” from this sentence.</p>	<p>Response to Specific Comment 38.</p> <p>This modification has been made as suggested.</p>

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Comments from D. Lofstrom, DTSC, 7/27/07

SPECIFIC COMMENTS	RESPONSE TO SPECIFIC COMMENTS
<p>Specific Comment 1. <u>Declaration, Page D-2, first true paragraph.</u> This paragraph concludes with the statement, "The Navy recommends that aboveground storage tank (AST) 15 be deferred to the Alameda Point Total Petroleum Hydrocarbons (TPH) program. Later, on page 2-5, second paragraph, the Site 27 Draft ROD states, "The aboveground storage tank included in AST015 was removed prior to 1994; this unit is deferred to the Alameda Point TPH Program." It's not clear from these two sentences if the Navy is requesting concurrence from the regulatory agencies to defer the AST to the TPH program or if that has already occurred. Please reconcile the contradiction between the two statements, and notify DTSC if concurrence is sought.</p>	<p>Response to Specific Comment 1. DTSC concurrence with the recommendation to defer this AST to the Petroleum Program is requested. As stated in Note b on Table 2-3, the DTSC determination is "pending" and concurrence was requested. Upon receipt of DTSC concurrence, the Declaration and the statement in Table 2-3 will be updated with the final determination. The Declaration will be revised to state that the "AST has been deferred to the Petroleum Program" and Table 2-3 will be revised to state that DTSC concurrence for the deferral was received. The statement on Page 2-5 will not have to be revised since it was written assuming that concurrence would be given.</p>
<p>Specific Comment 2. <u>Declaration, page D-2, first true paragraph.</u> The paragraph describing the solid waste management Units (SWMU) at Site 27 states that further action is recommended for Area of Concern (AOC) 15, oil water separator (OWS)-166A and 166-B, and washdown area (WD-166). OWS-166A, OWS-166B and WD-166 are referred to several more times throughout the Site 27 Draft ROD, and, with the exception of some confusion related to the TPH program (described in our comment below), it is apparent that additional sampling will be completed during the remedial design. However, the description of AOC-15 is less clear in the text. AOC-15 consists of three underground storage tanks (USTs) that were removed in 1994, but that is evident only from Table 2-3, not from the text. Until the reader arrives at Table 2-3 it is not understood that AOC-15 is comprised of the three removed USTs. Moreover, low concentrations of total petroleum hydrocarbons have been detected in groundwater associated with the three USTs, but that is not clearly presented in the text either, as reflected in U.S. Environmental Protection Agency (USEPA) Comment 13 on the Site 27</p>	<p>Response to Specific Comment 2. A description of AOC 15 has been added to Table 1-1, Site Description. The following sentences have been added to Paragraph 2: "Historically, three USTs were used to store diesel and fuel in the western portion of the site (UST 15-1, 15-2 and 15-3, collectively known as AOC 15). These tanks were removed in December 1994. During removal of the USTs in 1994, samples were collected and total petroleum hydrocarbons (TPH) were reported in soil and groundwater. During the post-UST removal follow-on activities in 1995, additional soil and groundwater samples were collected, and chlorinated VOCs were reported in groundwater samples." This information is presented on Page 2-2 and 2-5 but by adding it to Table 1-1, a more accurate description of the site is provided earlier in the document. In addition, the following has been added to the Declaration Page D-2, second paragraph, third sentence, following "(AOC) 15": "which consists of former USTs 15-1, 15 -2 and 15-3." Also, on Page 2-2, the words "collectively known as AOC-15" have been</p>

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Comments from D. Lofstrom, DTSC, 7/27/07

SPECIFIC COMMENTS	RESPONSE TO SPECIFIC COMMENTS
Draft ROD. Thus,	added to the parenthetical statement "(USTs 15-1 through 15-3)".
<p>Specific Comment 2 (continued).</p> <p>AOC-15 should be discussed separately from OWS-166A, OWS-166B, and WD-166, and a more complete initial description provided in both the declaration and on page 2-5. Additionally, groundwater contamination associated with the three USTs should be clearly stated.</p>	<p>Response to Specific Comment 2 (continued).</p>
<p>Specific Comment 3.</p> <p><u>Table 1-1, Site Description, third paragraph.</u> This paragraph concludes with a description of three SWMUs, specifically, WD-166, OWS 166A and OWS-166B. On page 2-7 the Site 27 Draft ROD states that these SWMUs were recommended for no further action under the Total Petroleum Hydrocarbon (TPH) program. On page 2-5, the Site 27 Draft ROD states that these SWMUs are recommended for further action (data gap sampling). DTSC is interpreting these two statements to mean that although the SWMUs were recommended for no further action under the TPH program, additional data gap sampling under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) will be conducted during remedial design. Is this interpretation correct? If so, this explanation should also be provided on pages 2-5 and 2-7.</p>	<p>Response to Specific Comment 3.</p> <p>DTSC's interpretation is correct. The following changes have been made: Page 2-5, Section 2.2.2, second paragraph, 7th sentence, "under the CERCLA program" now follows the words "data gap sampling." Page 2-7, Washdown Areas, following the 2nd sentence, the following new sentence has been added "Further action will be performed under the CERCLA program."</p>
<p>Specific Comment 4.</p> <p><u>Table 1-1, Site Description, fourth paragraph.</u> The Site 27 ROD uses language in this paragraph that both USEPA and DTSC objected to during the Proposed Plan. Previous comments from USEPA are as follows:</p> <p style="padding-left: 40px;">Is the Navy stating here that current operations at Site 27 are continuing to provide a source of contamination to groundwater? In addition to this concern, EPA continues to find the statement that there are potential upgradient sources of contamination at IR 27 problematic. Making this statement brings up the concern that groundwater sources have not been adequately characterized and that the treatment of</p>	<p>Response to Specific Comment 4.</p> <p>There is no evidence of a continuing source of groundwater contamination at IR Site 27. The 4th paragraph on Table 1-1 has been revised as follows: "Potential sources of contaminants in soil gas, soil, and groundwater at IR Site 27 include dredged fill material used to create the site, historical activities conducted within the boundaries of the site and VOCs which may have been released historically to groundwater upgradient of the site".</p>

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SPECIFIC COMMENTS	RESPONSE TO SPECIFIC COMMENTS
groundwater at Site 27	
<p>Specific Comment 4 (continued).</p> <p>will not be successful due to recontamination from the upgradient sources. Which sources upgradient does the Navy believe may be responsible for the contamination at Site 27 and what steps have been taken to characterize this source and control its future impact on groundwater at Site 27?</p> <p>Please revise the fourth paragraph of the Site Description in Table 1-1 to reflect this comment.</p>	<p>Response to Specific Comment 4 (continued).</p>
<p>Specific Comment 5.</p> <p><u>Section 2.2.3, entire section.</u> This section states that several areas in the vicinity of Site 27 are being addressed by the Alameda TPH program, and that a portion of Corrective Action Area (CAA) 11-B is located within the IR Site 27 boundaries. Please add a paragraph that briefly explains the status of the CAA-11B remediation.</p>	<p>Response to Specific Comment 5.</p> <p>It is assumed that the DTSC is referring to Section 2.2.4 rather than 2.2.3. The following sentence has been added under Section 2.2.4 before the Fuel Line Investigations heading: "A field activity report documenting completed field activities and post-shut down sampling results, and a Site Management Plan proposing one year of post-remediation sampling is under development."</p>
<p>Specific Comment 6.</p> <p><u>Section 2.2.4, page 2-7.</u> The Site 27 Draft ROD states that underground storage tanks in CAA-11B were used as "storage for lubricating oil; diesel, gasoline or jet fuel; or other miscellaneous liquids." Please define "other miscellaneous liquids." This could be included as a footnote, or could be provided in Table 2-4.</p>	<p>Response to Specific Comment 6.</p> <p>The description of the liquids stored in the USTs in CAA-11B is quoted from the document entitled "Data Gap Investigation at Correction Action Areas and Other Locations at Alameda Point Summary Report (TtEMI 2001b). The description of the liquids in the USTs contained in this report on Page 3-19 includes "miscellaneous liquids". No further description is available. The reference "TtEMI 2001b" has been added to the end of this sentence to clarify that this information is from that particular source.</p>

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SPECIFIC COMMENTS	RESPONSE TO SPECIFIC COMMENTS
<p>Specific Comment 7. <u>Section 5.3, page 5-4, second paragraph.</u> This paragraph states that arsenic concentrations in soil at the site were above the preliminary remediation goal (PRG) but were comparable to the Alameda Point background concentrations. Please state the Alameda Point background concentration in this paragraph.</p>	<p>Response to Specific Comment 7. The following has been added to the 1st sentence of the 2nd paragraph on Page 5-4: “of 9.14 mg/kg for the pink area 95th percentile and 16.55 mg/kg for the blue area 95th percentile (TtEMI 2003).” The reference to the Final IR Sites 14 and 15 RI report which presents the background statistics for Alameda Point has also been added to the reference list in Section 15.</p>
<p>Specific Comment 8. <u>Section 5.3.2, page 5-4, third paragraph.</u></p> <ul style="list-style-type: none"> • Arsenic has been reported in groundwater at concentrations exceeding the Alameda Point background value, and a remediation goal of 20.4 micrograms per liter (µg/L) is proposed in the Site 27 Draft ROD. Section 5.3.2 states that localized mobilization of arsenic has likely occurred as a result of geochemical conditions in the VOC plume area, and that arsenic concentrations will be reduced following completion of VOC remediation. Please explain this hypothesis in greater detail. Is the Navy suggesting that the presence of chlorinated solvents in groundwater is mobilizing the arsenic? Is this due to a change in soil pH? A similar hypothesis is presented in the Operable Unit 1 Draft Final ROD on page 3-16, where the Navy postulates that the release of TPH at Site 7 may have changed the geochemical conditions (reducing conditions) of the shallow groundwater aquifer, resulting in increased arsenic solubility. Is there a correlation throughout Alameda Point with increased arsenic and groundwater contaminant plumes? • The post-treatment monitoring program described in Section 12.2.2 does not include metals analyses. Metals analyses should be performed to monitor post-treatment arsenic concentrations as well as concentrations of other metals that may be mobilized under oxidizing 	<p>Response to Specific Comment 8.</p> <ul style="list-style-type: none"> • Natural anaerobic biodegradation processes (reductive dechlorination) have been occurring at IR Site 27. The microbial activity involved in degrading the contaminants appears to have caused a temporary mobilization of naturally occurring arsenic into groundwater in the core of the plume. The following text has been inserted after the second sentence in the third paragraph of Section 5.3.2: “The microbial activity associated with biodegradation of chlorinated VOCs creates reducing conditions that can mobilize arsenic (U.S. EPA 1999). This may explain why detections of arsenic in groundwater at IR Site 27 infrequently exceeded the MCL, and only in the center of the VOC plume. The majority of these samples yielded arsenic concentrations below the level of the MCL.” A correlation analysis as described has not been performed for Alameda Point. Please also refer to the response to EPA Specific Comment 20. • Dissolved metals have been added to the list of analyses in the first two bullets in Section 12.2.2. The exact details of the groundwater sampling program will be developed in the remedial design stage.

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Comments from D. Lofstrom, DTSC, 7/27/07

SPECIFIC COMMENTS	RESPONSE TO SPECIFIC COMMENTS
concentrations.	
<p>Specific Comment 9.</p> <p><u>Table 5-1.</u> Please add a footnote with the Alameda Point background concentration for all chemicals with a "Yes" in the Background column. In the case of Site 27, that is arsenic only.</p>	<p>Response to Specific Comment 9.</p> <p>Note "h" has been added after the word "Yes" under arsenic which states: "95th percentile for pink area is 9.14 mg/kg and 95th percentile for blue area is 16.55 mg/kg."</p>
<p>Specific Comment 10.</p> <p><u>Table 5-2.</u> Please add a footnote stating that the Alameda Point background concentration for arsenic in groundwater is 20.4 ug/l.</p>	<p>Response to Specific Comment 10.</p> <p>A footnote stating that the 95th percentile for arsenic in Alameda Point background groundwater is 20.72 µg/l has been added.</p>
<p>Specific Comment 11.</p> <p><u>Section 9.5, page 9-3, second paragraph.</u> The paragraph describes institutional controls that would be put in place that would prohibit groundwater extraction at the site and prohibit actions that would interfere with the remediation and confirmation sampling activities. Please include the IC that will prohibit residential and other sensitive land uses until RGs have been met in this paragraph.</p>	<p>Response to Specific Comment 11.</p> <p>The following statement has been added to the 2nd sentence of the 2nd paragraph after the word "activities": "and would also prohibit residential and other sensitive land uses." ICs are described in more detail in Section 12.2.3.</p>
<p>Specific Comment 12.</p> <p><u>Section 12, page 12-1, first paragraph.</u> The selected remedy includes groundwater confirmation sampling. Confirmation soil gas sampling should also be conducted upon remedy completion to ensure unrestricted use is appropriate at that time.</p>	<p>Response to Specific Comment 12.</p> <p>The risk to a potential resident due to inhalation of indoor air is 3 X 10⁻⁵. Land use is therefore not restricted on the basis of this risk, thus soil gas sampling would not be needed.</p>

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SPECIFIC COMMENTS	RESPONSE TO SPECIFIC COMMENTS
<p>Specific Comment 13. <u>Section 12.2.1, page 12-2, second paragraph.</u> The Site 27 Draft ROD states that injections of Fenton-like reagent will focus on a 10-foot thick treatment zone for in situ chemical oxidation. The Site 27 Draft ROD further states in Section 12.4, page 12-8 that information collected during the remedial design phase may include defining the vertical extent of the chemicals of concern. As stated in comments from DTSC previously submitted for the Site 27 Draft Remedial Investigation report and Draft Feasibility Study, the vertical extent of chlorinated solvents has not been defined at Site 27 and is a data gap that needs to be completed during the remedial design phase.</p>	<p>Response to Specific Comment 13. Overall, the vertical extent of the chlorinated solvent plume at IR Site 27 is adequately characterized for RI/FS purposes. Discrete groundwater samples were collected at two depths (10' and 20' bgs) in at least four borings during the RI, each showing VOC concentrations in deeper samples several orders of magnitude lower (or non-detect) compared with shallower groundwater samples. During the RD stage, the treatment interval for successful remediation using ISCO typically needs to be known to a higher degree of accuracy than the RI/FS stage. A 10-foot thick treatment zone was assumed for cost estimating purposes during the FS based on a review of the groundwater investigation data presented in the RI. During the RD, the installation of additional monitoring wells or collection of groundwater "grab" samples will be conducted if necessary. No changes to the text are proposed.</p>
<p>Specific Comment 14. <u>Section 12.2.2, page 12-3.</u> The groundwater sampling schedule is included for during and post-treatment. Please add a provision to include at least one round of post-treatment soil gas sampling as well.</p>	<p>Response to Specific Comment 14. Please refer to the response to Specific Comment 12 above.</p>

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Comments from E. Simon, RWQCB, 7/31/2007

GENERAL COMMENTS	RESPONSE TO GENERAL COMMENTS
<p>General Comment 1. Please include a figure that explicitly shows concentrations and extent of COC plume boundaries, based on all available data.</p>	<p>Response to General Comment 1. A new figure, Figure 1-4 has been added. The following sentence has been added on page 1-1, Section 1.3 following the last sentence of the last paragraph: "Figure 1-4 depicts the chlorinated VOC plume at the site."</p>

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SPECIFIC COMMENTS	RESPONSE TO SPECIFIC COMMENTS
<p>Specific Comment 1. Figure 1-3 – Please include the boundaries of CAA-11B in this figure titled Site Features.</p>	<p>Response to Specific Comment 1. Figure 1-3 has been revised to include the boundaries of CAA-11B.</p>
<p>Specific Comment 2. Section 2.2.1 - Page 2-4 – fourth paragraph down – This paragraph describes the site investigation for Transfer Parcel EDC-12 that sampled for polycyclic aromatic hydrocarbons (PAHs) in a grid pattern over the entire area but does not summarize the results of this investigation. Please include a brief summary of these results here instead of just referencing the Remedial Investigation data set.</p>	<p>Response to Specific Comment 2. The conclusions of this investigation and the extent of PAHs in soil at the site are summarized in Section 5.3.1 of the draft ROD, page 5-4, Section 5.3.1. Section 2 summarizes the prior investigations, whereas results are included in Section 5 of the ROD.</p>
<p>Specific Comment 3. Section 2.2.4 – Page 2-7 – Last paragraph – This paragraph indicates that washdown area WD-166 and oil water separators OWS-166A and OWS-166B were recommended for no further action under the Total Petroleum Hydrocarbon (TPH) program. As these areas still require further action under the CERCLA program, please clearly indicate in this paragraph that while the TPH program recommended no further action, more investigation under the CERCLA program is planned.</p>	<p>Response to Specific Comment 3. Further investigation under the CERCLA program is planned. On Page 2-7, Washdown Areas, following the 2nd sentence, the following new sentence has been added “ Further action will be performed under the CERCLA program.” Please also refer to Response to DTSC Specific Comment 3.</p>
<p>Specific Comment 4. Table 2-1 – Page 1 of 3 – 3rd item down – The summary of findings for the 2000 and 2001 Storm Drain Investigations indicates that ‘a TPH plume in shallow groundwater was identified at Outfall I’. Please be more specific as to where the TPH plume extends and indicate if this TPH plume is being addressed as a part of Corrective Action Area (CAA)-11B.</p>	<p>Response to Specific Comment 4. The statements made in Table 2-1 present a summary of the conclusions from the Storm Drain investigations which occurred at the site between 2000 and 2001. Additional sampling was performed as part of the Data Gap Investigation (DGI), and is summarized in the first entry on Table 2-1, page 2 of 3, which indicates that no TPH was detected in sample I-5. For clarification, the following sentence was added to the “Summary of Findings” column: “TPH was not reported in groundwater samples.”</p>

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SPECIFIC COMMENTS	RESPONSE TO SPECIFIC COMMENTS
<p>Specific Comment 5. Section 5.3 – Nature and Extent of Contamination in Soil, Groundwater, and Soil Gas - Please include a discussion in this section on any known releases that have occurred at this site, when those releases occurred, and the estimated volume of the release. This information, if available, may help in estimating the age of the plume and associated contaminants.</p>	<p>Response to Specific Comment 5. There are no documented releases of the constituents found in soil or groundwater at the site. Table 1-1, last paragraph, provides a description of potential sources.</p>
<p>Specific Comment 6. Section 5.3.2 – Page 5-4 – second paragraph from bottom – This paragraph describes how elevated arsenic levels are a result of modified geochemical conditions within the central portion of the volatile organic carbon (VOC) plume. Please provide a technical explanation for why arsenic levels are elevated and why it is believed that the localized mobilization of arsenic in soil is expected to return to background levels once remediation is complete.</p>	<p>Response to Specific Comment 6. As described in Response to U.S. EPA Specific Comment 20, the following text has been inserted after the second sentence in the third paragraph of Section 5.3.2 to explain why the arsenic levels are elevated: “The microbial activity associated with biodegradation of chlorinated VOCs creates reducing conditions that can mobilize arsenic (U.S. EPA 1999). Detections of arsenic in groundwater at IR Site 27 infrequently exceeded the MCL, and only in the center of the VOC plume.” The last two sentences of this same paragraph explain that once geochemical conditions return to normal following remediation, arsenic in soil will be less likely to mobilize in groundwater. No revision has been made to this part of the text.</p> <p>Arsenic also has been removed from the list of COCs, as described in Response to EPA General Comment 1, because there are very few groundwater samples in which arsenic exceeds the federal MCL of 10 ppb (and no groundwater samples with arsenic concentrations exceeding the state MCL). Most samples contain arsenic in the range of 3-5 ppb, and the highest arsenic concentrations are only in the center of the VOC plume.</p>

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SPECIFIC COMMENTS	RESPONSE TO SPECIFIC COMMENTS
<p>Specific Comment 7.</p> <p>Section 5.3.3 – Page 5-5 – Last Paragraph – This paragraph indicates that 2,2,4-Trimethylpentane was reported in all soil gas samples distributed across the site but does not indicate the levels that were detected or if these levels are above any risk-based or toxicity-based levels. Please briefly summarize these results and provide applicable references.</p>	<p>Response to Specific Comment 7.</p> <p>Section 4.4.2 of the RI Report (Bechtel 2005), states that the presence of 2,2,4-trimethylpentane (a gasoline additive) could have been introduced into the soil gas samples from ambient air since the soil gas samples were collected at shallow depths due to the shallow depth to groundwater. Thus the draft ROD does not place an emphasis on these results. For a summary of the levels detected, please refer to Figure 4-14 of the RI Report.</p> <p>The screening levels used in Sections 4 and 5 of the RI to describe the nature and extent of contaminants (PRGs and MCLs) do not include risk-based levels in soil gas. However, all chemicals reported in any sample are fully evaluated in the risk assessment (Section 6 and Appendix K). As stated in the RI Report, 2,2-4 Trimethylpentane is assigned a reference dose for noncancer health effects and the associated hazard quotient is 0.07 which is well below the risk management hazard quotient of 1.</p> <p>Additionally, there is no published risk-based level for 2,2-4 Trimethylpentane in soil gas in either the San Francisco Regional Water Quality Control Environmental Screening Levels or the Cal/EPA Human California Human Health Screening Levels. No text changes were made in response to this comment.</p>
<p>Specific Comment 8.</p> <p>Section 7.1.4 – Page 7-5 – Noncancer Hazards and Lead subsection – This section identifies that while the majority of the risk in the residential scenario for soil is associated with arsenic, concentrations are within the Alameda Point background levels. Considering that the recommendation of no further action for soil is based on the incremental risk for metals above background levels, please discuss in detail on how arsenic background levels were calculated and reference regulator concurrence with these metals background calculations. Furthermore, please clarify how future residential users across this site will be protected from elevated background levels of arsenic.</p>	<p>Response to Specific Comment 8.</p> <p>The majority of the risk for direct contact with soil is associated with background concentrations of arsenic. Without arsenic, the incremental risk is 10^{-6}. Including arsenic, the risk is 10^{-5}. No further action is warranted for soil at IR Site 27 because the human health risk assessment meets the criteria established in the NCP for allowing risks within the risk management range. The calculation of background levels of arsenic are presented in the Final IR Sites 14 and 15 RI report (TtEMI, 2003). As noted in Response to DTSC Specific Comment 7, this reference was added to the</p>

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Comments from E. Simon, RWQCB, 7/31/2007

SPECIFIC COMMENTS	RESPONSE TO SPECIFIC COMMENTS
	references in Section 15.
<p>Specific Comment 9. Section 8 – Page 8-1 – Third Paragraph – Please include a reference to the Alameda Point background determination.</p>	<p>Response to Specific Comment 9. As noted above, the reference to the Final IR Sites 14 and 15 RI report which presents the background statistics for Alameda Point has also been added to the reference list in Section 15.</p>
<p>Specific Comment 10. Section 9.4 – Page 9-2 – Alternative 6A includes using in-situ chemical oxidation (ISCO) to oxidize VOCs in groundwater in the two areas of higher VOC concentrations. As noted in General Comment #1, please include more detail on where these two areas would have been by referring to a figure showing extent of contaminant plumes.</p>	<p>Response to Specific Comment 10. As noted in Response to General Comment 1, a new figure, Figure 1-4 has been added to show the extent of the contaminant plume and in particular, the two areas of higher VOCs.</p>
<p>Specific Comment 11. Section 9.5 – Page 9-2 – Alternative 6B includes confirmation sampling for VOCs as well as monitored natural attenuation (MNA) parameters, but does not include MNA as a component of the alternative. Because the intent of collecting the MNA parameter data is to determine if MNA is feasible if ISCO treatment does not reduce concentrations down to remedial goals, why is MNA not specifically called out in Alternative 6B? MNA is also included in the Remedy Implementation decision matrix in Figure 12-2. Please revise or include further justification for not specifically identifying MNA as a preferred alternative after ISCO treatment.</p>	<p>Response to Specific Comment 11. MNA is considered to be part of the remedy as described in Section 12. For clarification, the following change has been made to the Declaration. The third bullet under Description of the Selected Remedy on page D-2 has been revised as follows: “Groundwater sampling and sampling and analysis for MNA parameters will be performed to confirm that treatment has reduced VOC concentrations and that the RGs selected in this ROD have been met. MNA parameters would be measured across the plume, including the shoreline portion, and may be employed where the groundwater concentrations approach the RGs.” Also, please refer to Response to EPA Specific Comment 31.</p>
<p>Specific Comment 12. Section 12 – Page 12-1 – Please include more information on nature and extent of contamination at Area of Concern (AOC) 15 and discuss why this AOC, which is located adjacent to the shore at Seaplane Lagoon, is not specifically addressed in the selected remedy.</p>	<p>Response to Specific Comment 12. AOC 15 was the original area identified by the Navy for further investigation, and this area was later renamed IR Site 27. As described in Table 2-3, first entry, this AOC will be addressed by the ROD.</p>

**RESPONSE TO COMMENTS ON
DRAFT RECORD OF DECISION IR SITE 27, DOCK ZONE
ALAMEDA POINT, ALAMEDA, CALIFORNIA
DATED APRIL 2007
CTO-0084/0222**

Comments from U.S. EPA-HQ, 8/1/2007

GENERAL COMMENTS	RESPONSE TO GENERAL COMMENTS
<p>General Comment 1.</p> <p>Regarding the timeframe between leasing and transfer, on page 12-4, 1st full paragraph, please change the 2nd full sentence, top of the page as follows:</p> <p style="padding-left: 40px;">Through the LIFOC, the Navy will maintain conditions at IR Site 27 that are eonsistent with no less restrictive than the IC Objectives and associated land-use restriction for the remedial alternative chosen.</p>	<p>Response to General Comment 1.</p> <p>This modification has been made as suggested.</p>
<p>General Comment 2.</p> <p>Regarding Checklist Item 7, the responsibility language should reference the land use controls, not just the land use objectives (see language in the Draft Final OU 5 ROD). Please modify the language on page 12-6, paragraph 3 to reflect this as follows, choosing one of the proposed options:</p> <p style="padding-left: 40px;">Option 1) The Navy will be responsible for implementing, maintaining, inspecting, reporting, and enforcing the ICs objectives described in the ROD in accordance with the approved remedial design reports.</p> <p style="padding-left: 40px;">Option 2) The Navy will be responsible for implementing, maintaining, inspecting, reporting, and enforcing the ICs and IC objectives described in the ROD in accordance with the approved remedial design reports.</p>	<p>Response to General Comment 2.</p> <p>This modification has been made as suggested in Option 1.</p>