

**RESPONSES TO COMMENTS ON THE DRAFT FINAL RECORD OF DECISION FOR PARCEL G,  
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA**

The table below contains the responses to comments received from regulatory agencies on the “Draft Final Record of Decision for Parcel G, Hunters Point Shipyard, San Francisco, California,” dated November 26, 2008. The comments addressed below were received from the California Department of Toxic Substances Control (DTSC), California Department of Public Health (CDPH), U.S. Environmental Protection Agency (EPA), California Regional Water Quality Control Board (Water Board), and San Francisco City and County Department of Public Health during the period from November 26, 2008, through December 26, 2008. Throughout this table, *italicized* text represents additions to the document and ~~strikeout~~ text indicates locations of deletions. Also throughout this table, references to page, section, table, and figure numbers pertain to the new document unless indicated otherwise.

No.	Page	Comment	Response
<b>Responses to Comments from Department of Toxic Substances Control (Thomas Lanphar)</b>			
<b>SPECIFIC COMMENTS</b>			
1.	43	<b>Fourth full paragraph:</b> In the first sentence, please change “implemented through” to “addressed in”.	The text was revised as suggested in this comment.
2.	46	<b>Additional Land Use Restrictions Related to Radionuclides:</b> According to the selected remedial action for radionuclides, Parcel G will be cleaned to unrestricted release levels. Therefore, the additional restrictions related to radionuclides are not necessary for Parcel G. Please delete this section.	This section was deleted as suggested in this comment.
<b>Responses to Comments from California Department of Public Health (Vandana Kohli)</b>			
<b>SPECIFIC COMMENTS</b>			
1.	15	<b>Section 2.3, last paragraph:</b> Please delete “fill areas” from the sentence, “The Navy decided to conduct a time critical removal action to address potential radioactive contamination in buildings, fill areas, former building sites, storm drains, and sanitary sewers at Parcel G”.	The reference to “fill areas” was deleted from the following sentence: <i>“The Navy decided to conduct a time critical removal action to address potential radioactive contamination in buildings, <del>fill areas</del>, former building sites, storm drains, and sanitary sewers at Parcel G.”</i>
<b>Responses to Comments from the U.S. Environmental Protection Agency (Mark Ripperda)</b>			
<b>SPECIFIC COMMENTS</b>			
1.	32	We had suggested that detailed monitoring frequency and duration language be removed from Table 6. The Navy responded that the language will remain because it is the basis for the cost estimates. While we agree that costs must be based on assumptions, Table 6 is a description of the remedy and the assumptions thus appear to be a requirement. Please remove the frequency and duration description	Detailed monitoring frequency and duration language was removed from Table 6 as suggested in the comment.

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		from Table 6.	
<b>Additional Responses to Comments from the U.S. Environmental Protection Agency (Mark Ripperda and EPA Headquarters)</b>			
1.	41	<b>The fourth paragraph of Section 2.9.2:</b> This paragraph needs clarification. What is the “removal action phase” and what characterization is planned for that period?	This paragraph was revised so that more detail is provided to the reader. See specific comment #1 provided by the City.
2.	43	The last paragraph should be eliminated because it tracks language from page 44 (last paragraph above Activity Restrictions). The language on page 44 needs to stay because it is the required LUC Checklist Language.	The paragraph was removed from the Final ROD as suggested.
3.	45	Please remove the reference to CDPH in the discussion on the Proposed Activity Restrictions Relating to VOC Vapors. CDPH should not be involved in VOC decisions. Also, the presence of rad does not affect Vapor ARICs. Page 46 adequately addresses the rad issues.	The reference to CDPH was deleted from the text in the Final ROD as suggested.
4.	46	The Additional Land Use Restrictions Related to Radionuclides needs clarification. The first sentence states that “the following activity restriction requirements shall apply in the ARIC...”, but there is no following set of restrictions. Also, while it is OK to leave the surveying of the exact area until the RD, this section should at least generally describe the location of the potential ARIC, and why this area might require ICs.	The section “ <i>Additional Land Use Restrictions Related to Radionuclides</i> ” was deleted in the Final ROD. Therefore, the specific concerns provided in this comment are no longer relevant in the Final ROD.
5.	48	Please revise the Five-Year Review bullet to stat that the reviews will be coordinated with the on-going site-wide five year review schedule.	The text was revised so that it is clear that the statutory review follows the schedule of the on-going site-wide five year review.
<b>Responses to Comments from the California Regional Water Quality Control Board (Erich Simon)</b>			
<b>GENERAL COMMENTS</b>			
1.		The Navy’s response to our comment states that areas where fuel constituents and CERCLA contaminants are commingled are addressed in the Record of Decision because individual fuel constituents are evaluated in the human health risk assessment. We disagree with this statement. This is because we are concerned about the total petroleum hydrocarbon (TPH) mixtures (i.e., TPH-gasoline, diesel, motor oil, etc.) in addition to the individual fuel constituents. Therefore, we request that the Hunters Point TPH program specifically evaluate all areas where fuel contaminants may be commingled with	As recommended in this comment, the Hunters Point TPH program will specifically evaluate all areas where fuel contaminants may be commingled with CERCLA contaminants to determine if further action is warranted.

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		CERCLA contaminants to determine if further action is warranted. This approach was agreed to by the Navy in the Draft Final Amended Record of Decision for Parcel B.	
<b>Responses to Comments from the San Francisco City and County Department of Public Health (Amy Brownell)</b>			
<b>GENERAL COMMENTS</b>			
1.		We remain of the belief that the chemical specific remedial goals for soil gas should be established, presented in the Parcel G ROD and approved by the regulatory agencies instead of being delayed until after the ROD. However, we accept the fact that we are all under time pressure to finish the ROD and that any delays would negatively impact future work that will ultimately result in the desired cleanup. If the establishment of the chemical specific soil gas remediation goals is delayed until after the ROD is finalized then the associated cost for this evaluation should be added to the ROD. At a minimum, the methodology for calculating soil gas remedial goals needs to be determined and approved by the regulatory agencies in the very near future.	<p>The Navy has established remediation goals for indoor inhalation of vapors from groundwater. Numeric action levels for VOCs in soil gas will not be established in the ROD, but rather may be set using COC identification information from soil gas surveys that may be conducted in the future. Soil gas COCs are expected to change significantly as a result of the remedial actions; therefore, collection of soil gas data (and the subsequent establishment of action levels for soil gas) is not proposed until after the remedial actions.</p> <p>The Navy is preparing a draft approach for developing soil gas action levels for vapor intrusion exposure for review by the BCT.</p> <p>The ROD statement concerning remediation goals (see Table 4) was revised as follows. “Remediation goals for volatile organic compounds to address exposure via indoor air inhalation of vapors may be superseded based on chemical of concern identification information from <del>future</del> soil gas surveys that may be conducted <i>in the future following the remedial actions.</i>”</p>
2.		Please make a statement in the ROD that future documents, beginning with the Remedial Design (RD), will determine remedy implementation areas based on the nature and extent of contamination rather than the presence or location of redevelopment blocks. Additionally, please add the following note to the appropriate figures and tables as was done in the Parcel B ROD, “Reuse areas based on “Hunters Point Shipyard Redevelopment Plan” (SFRA, 1997). Reuse areas and development blocks may change in the future.”	<p>The ROD was prepared with the intent to reduce the use and emphasis on redevelopment blocks to the extent possible. However, a means to clearly and unambiguously identify areas within Parcel G is still needed to explain the proposed remedial actions, and redevelopment blocks still serve that purpose. The Navy would appreciate communications from the city when changes to redevelopment blocks, and especially those changes that affect the reuse exposure, are identified. The Navy will work closely with the city to use the most current plans for land reuses at Parcel G, but the Navy does not propose to abandon the concept of redevelopment blocks.</p> <p>In addition, the following has been added to Table 3: “<i>Reuse areas are based on the “Hunters Point Shipyard Redevelopment Plan.”. Reuse areas and development blocks may change in the future.</i>”</p>

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3.		The City still maintains that the costs presented in the ROD underestimate the true cost of remediation and exclude key components including the establishment of soil gas remediation goals and the regulatory oversight for that process.	Comment noted. The ROD was not changed as a result of this comment.
4.		Thank you for your response to our General Comment 1 on the draft ROD. As stated, please include an update on the status of the current Treatability Study and status of the removal of the pickling and plating sump, if available, in the Final Parcel G ROD.	An update on the status of the current Treatability Study and the removal of the pickling and plating sump was provided in the Final Parcel G ROD.
5.		We would like to point out for the record, that once the engineering controls and institutional controls are properly installed and maintained the current design of the proposed remedies will cut off pathways for: a) contact with soil contaminants and b) inhalation of indoor VOC vapors and this means that the entire property will be health protective for all types of uses.	Comment noted. The ROD was not changed as a result of this comment.

**SPECIFIC COMMENTS**

1.	41	<p><b>Section 2.9.2:</b> The ROD states that “Soil gas surveys may be conducted at focused source area characterizations during the removal action phase and across the parcel after completion of the radiological removal actions and groundwater remediation to evaluate the potential for vapor intrusion, and if needed, set action levels for soil gas, and assess the need for remediation or ICs (or a combination).”</p> <p>There are areas where no remedial actions are currently planned. If there are VOCs in soil in these areas, a soil gas survey should be conducted to determine if there are any residual chemicals in the soil that may require remedial actions. We suggest writing the paragraph as follows:</p> <p>“In consultation with regulatory agencies conduct the following steps:</p> <ul style="list-style-type: none"> <li>• Review existing soil data and site histories to determine areas where the ARIC for VOCs can be released from the parcel (without the need for soil gas surveys)</li> <li>• Conduct a soil gas survey in focused areas where there are still concerns about residual VOCs in soil or where there are VOCs in</li> </ul>	<p>The Navy agrees that remediation for VOCs will not likely be needed over widespread areas of Parcel G. However, existing data for soil gas are insufficient to further reduce the size of the ARIC for VOC vapors. Additional soil gas data will need to be collected and analyzed to reduce the ARIC.</p> <p>The paragraph in question was replaced as follows.</p> <p>A soil gas survey may be conducted in the future for the following purposes:</p> <ul style="list-style-type: none"> <li>• to evaluate potential vapor intrusion risks,</li> <li>• to identify COCs for which risk-based numeric action levels for VOCs in soil gas would be established (based on a cumulative risk of 10<sup>-6</sup>),</li> <li>• to identify where the initial areas requiring institutional controls (ARIC) for VOCs would be retained and where they would be released, and</li> <li>• to evaluate the need for additional remedial action in order to remove</li> </ul>
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		<p>groundwater</p> <ul style="list-style-type: none"> <li>• Use results of the soil gas survey to identify COCs for which risk-based numeric action levels for VOCs in soil gas would be established (based on a cumulative risk of <math>10^{-6}</math>)</li> <li>• Once risk-based numeric action levels are established, compare the results of the soil gas survey to the action levels to evaluate the need for remedial action or the release or retention of the ARIC for VOCs</li> </ul> <p>For the groundwater remediation areas: conduct a soil gas survey following completion of the remedial action for groundwater (after the areas have re-equilibrated). The results of the survey would be used to evaluate potential vapor intrusion risks, identify if the ARIC for VOCs can be released and evaluate the need for additional remedial action.”</p>	ARICs
2.	15 and 41	<p><b>Figures 7 and 11 and associated text:</b> We understand that the Navy does not wish to update the Parcel G ROD to reflect the results of current groundwater sample data; However, please add the following, or similar statements, to the following sections:</p> <p><b>Section 2.3, page 15, end of second paragraph,</b> “The current groundwater sample data will be reviewed during the RD to focus the groundwater remediation activities.”</p> <p><b>Section 2.9.2, page 41, third paragraph, after the second to the last sentence,</b> “The RD will use current information on the plume extent and concentration to select the actual injection parameters.”</p>	<p>The following text was added to Section 2.3 as suggested: “<i>The current groundwater sample data will be reviewed during the RD to focus the groundwater remediation activities.</i>”</p> <p>The following text was added to Section 2.9.2 as suggested in the comment: “<i>The RD will use current information on the plume extent and concentration to select the actual injection parameters.</i>”</p>
3.	15	<p><b>Section 2.3, Page 15, 2<sup>nd</sup> Paragraph</b> states that “Although recent finding from a treatability study and ongoing groundwater monitoring may potentially result in a slight reconfiguration of the plumes presented on Figure 7, changes are expected to be minimal”. In our opinion, monitoring results and treatability study results to date have shown substantial contaminant and plume reduction. Please revise this statement to reflect this decrease.</p>	<p>The text was revised so that it is clear that there has been contaminant and plume reduction since 2004.</p>
4.	29	<p><b>Table 4.</b> Please edit the footnote about remediation goals as follows</p>	<p>The text in the footnote in Table 4 was revised as follows: “Remediation goals for</p>

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		“Remediation Goals for volatile organic compounds to address exposure via indoor inhalation of vapors may be superseded based on chemicals of concern identification in future soil gas surveys that may be conducted <del>following the remedial actions.</del>	volatile organic compounds to address exposure via indoor air inhalation of vapors may be superseded based on chemical of concern identification information from <del>future</del> soil gas surveys that may be conducted <i>in the future</i> <del>following the remedial actions.”</del>
5.	46	<b>Page 46, Additional Land Use Restrictions Related to Radionuclides.</b> We understand that this text was erroneously added to the Draft Final ROD. We understand that you will remove it.	The section “Additional Land Use Restrictions Related to Radionuclides” was deleted in the Final ROD.