

**RESPONSE TO COMMENTS ON
 DRAFT ACTION MEMORANDUM
 FOR CERCLA TIME-CRITICAL REMOVAL ACTION
 IR SITES 5 AND 10 (BUILDINGS 5 AND 400)
 STORM DRAIN AND SEWER LINE REMOVAL
 FORMER NAVAL AIR STATION ALAMEDA
 ALAMEDA POINT, ALAMEDA, CALIFORNIA
 (DATED MAY 29, 2007)
 DCN: ECSD-RACIV-07-1212**

**Reviewed by Environmental Protection Agency, Anna Marie Cook
 Comments Dated: March 22, 2007**

Comment 1. Section 2.0, Site Conditions and Background: The organization of this section varies from the Superfund Removal Procedures, Action Memorandum Guidance (EPA/540/P-90/004). For example, the site description should include "Removal Site Evaluation," "Physical Location," and "Site Characteristics," rather than "Hydrology." Hydrology can be a subsection under "Site Characteristics." Please reorganize this section to follow the format outlined in the guidance document.

In addition, the questions and issues listed in the guidance should be answered. For example, the AM appears to be missing the following:

- Physical location of the site in terms of surrounding land use, population and distances to populations and reference points.
- Vulnerable or sensitive populations, habitats, and natural resources.
- Current uses/tenants of Sites 5 and 10.

Please revise the AM to include this information.

Response 1. Comments noted. The section organization will be revised to follow the promulgated format of the Action Memorandum Guidance. Incorporation of additional reference information to address site characteristics will also be provided.

Comment 2. Section 2.1, Site Background, Page 2-1: The date Alameda Point was placed on the National Priorities List (NPL) is missing from the history in this section. For completeness, please include the date Alameda Point was placed on the NPL.

Response 2. The information was presented in Section 2.1.4. Section 2.1 was realigned and the information is now presented in Section 2.1.5. , National Priorities List Status.

Comment 3. Section 2.1.1, Hydrology, Page 2-4: Since the storm sewer lines from IR Sites 5 and 10 discharge to the Seaplane Lagoon or the Oakland Inner Harbor, it would be more relevant to discuss the

Response 3. Comment noted.
 Additional text incorporating characteristics of the hydrodynamics of

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hydrodynamics of the Seaplane Lagoon and the Oakland Inner Harbor and how they interact with San Francisco Bay rather than the dynamics of San Francisco Bay. Please revise the text to discuss the dynamics of the Seaplane Lagoon and the Oakland Inner Harbor and how water and sediment in these areas interact with San Francisco Bay.

Seaplane Lagoon has been included to expand analysis of tidal influence and historical discharge from the storm drain and sewer line on water quality within Seaplane Lagoon. The Seaplane Lagoon was considered most relevant for this project because of its direct association with the storm sewer lines that are being addressed.

Comment 4. Section 2.1.3, Removal Site Evaluation, Page 2-5: The AM states that a radiological characterization survey of the storm drain lines was conducted in 1997 which included storm drain lines from Buildings 5 and 400, but does not elaborate on the results of that survey. Please discuss the survey of the storm drain lines, including whether any cracks or fissures were found and whether there was evidence that the lines were leaking and contaminating the surrounding soil.

Response 4. The New World Technologies (NWT) 2000 report reference indicates that lines leaked into the soil surrounding the excavated lines.
The second paragraph in Section 2.1.1 will be revised as follows:
“Remedial/removal actions were completed on sections of storm drain and sewer systems associated with IR Sites 5 and 10 in 1997 (NWT, 1998) and 1998 (NWT, 2000). In the Final Report, it was noted that excessive contaminated soil was found below the removed piping and removed (NWT, 2000). This is an indication that cracks and/or fissures were present in the removed storm drain and sewer system piping.”

Comment 5. Section 2.1.3, Removal Site Evaluation, Page 2-5: The AM states that the remediation criteria for radium 226 (Ra226) has increased from 5 pico Curies per gram (pCi/g) (prior to 1997) to a total effective dose equivalent (TEDE) less than 15 millirem per year (mrem/yr). Please provide a citation for this standard. Also, please explain how the pre-1997 concentration standard relates to the current exposure based standard.

Response 5. The text of paragraph three of Section 2.1.1 will be revised as follows:
“Although remedial/removal actions were completed on sections of storm drain and sewer systems associated with IR Sites 5 and 10 in 1997 (NWT, 1998) and 1998 (NWT, 2000), additional investigations and the shift to a more stringent release criteria for ²²⁶Ra have made further removal actions necessary. In 1997, the release criteria for ²²⁶Ra was 5 pCi/g; currently the

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release criteria for ²²⁶Ra is 1 pCi/g based on agreements with EPA Region 9 and the DON as documented in the Action Memorandum for Hunters Point, "Revised Final Basewide Radiological Removal Action, Action Memorandum (DON 2006). Radium is expected to be present in sections of the stormwater and sewer system and associated soils in concentrations greater than the current release criteria of 1 pCi/g. Active storm drain lines that are potentially radiologically-impacted by ²²⁶Ra between the source and Sea Plane Lagoon will be replaced, regardless of whether they were replaced in the previous removal action."

The following reference will be added to Section 9.0, References:

Tetra Tech EC (TtEC). 2006. *Base-wide Storm Drain and Sanitary Sewer Removal Draft Project Work Plan, Hunters Point Shipyard, San Francisco, California*. February 14.

Department of Navy (DON). 2006. *Revised Final Basewide Radiological Removal Action, Action Memorandum*. Hunters Point Shipyard, San Francisco, California. February 14.

Comment 6. Section 2.2.1, Previous Actions, Page 2-6: The AM states that "[b]ased on their history and operations, Buildings 5 and 400 were not subject to former license termination procedures." The basis for this statement is unclear. Please explain the basis for the conclusion that operations at Alameda Point did not trigger license termination

Response 6. Because the subsequent text indicates that surveys were designed to be consistent with guidance described in the NRC and EPA license termination documentation, the sentence referenced in the comment will be deleted. The text will be revised as follows:

"... below levels that satisfy criteria established by RASO, the

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procedures.

Nuclear Regulatory Commission (NRC), and California Department of Public Health (CDPH).. Methods used in the radiological closeout survey were consistent with guidance described in the *Manual for Conducting Radiological Surveys in Support of License Termination* (NRC, 1992) and the *Multi-Agency Radiation Survey and Site Assessment Manual* (EPA, 1997), as modified in the Final Status Radiation Survey and Field Sampling Work Plan (TtEMI, 1998) and Addendum Confirmation Radiation Survey and Field Sampling Work Plan (TtEMI, 2002). The surveys were designed assuming that the radionuclide of interest was ²²⁶Ra, for which the most restriction limits have been established (BEI, 2006).”

Comment 7. Section 2.2.1, Previous Actions, Page 2-7: The AM states that one objective of this investigation “was to identify storm sewer sections that were damaged, located below the water table (submerged), and subject to infiltration of contaminated groundwater (TtEMI 2000)” and that. “The data collected would be used to prioritize storm sewer sections for repair to minimize infiltration of contaminated groundwater and its subsequent transport to the Bay.” However, the issues associated with contaminated groundwater and its impact on the TCRA are not discussed. Please discuss the concentrations and chemicals of concern associated with the contaminated groundwater and its impact on the planned TCRA.

Response 7. The primary objectives of the TCRA are to extract piping systems and soil containing radioactive contaminants that may be present in or around the storm and sewer line systems, external to Buildings 5 and 400, dispose of contaminated material, perform a radiological survey to confirm unrestricted release of the excavation area, and replace or remove selected sections of the storm drain and sewer line system. Issues associated with contaminated groundwater, or concentrations and chemicals of concern associated with the contaminated groundwater are not addressed under the scope of this TCRA. No revisions will be made to the text.

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Comment 8. Section 2.2.2, Current Actions, Page 2-7: This section should include a description of all actions/activities currently taking place at Sites 5 and 10 (e.g., six-phase heating to address volatile organic compounds in soil and groundwater). In addition, this section should include a discussion of how the proposed action relates to the current activities described in this section. Please revise the AM to include this information.

Response 8. There are numerous concurrent environmental actions within IR Sites 5 and 10, which are coordinated and administered under the DON. The Point of Contact (POC) for Alameda Point environmental work is the Lead Remedial Project Manager, John Kowalczyk. The DON has informed TtEC that remedial activities associated with CTO 28 will not currently interfere with other ongoing environmental actions. The DON has approved the TCRA project at IR Sites 5 and 10 to proceed in accordance with the contract task order. In the event that an overlap of activities arises, the Lead Remedial Project Manager will evaluate work status and prioritization for each task order and determine the disposition of each activity after review with all appropriate parties. The AM will be revised to list all other actions that are ongoing or planned to be conducted in the vicinity of IR Sites 5 and 10 and indicate how the actions relate to the activities described in this section.

Comment 9. Section 4.1.4, Removal and Off-Site Disposal (Selected Remedy), Page 4-3: The estimated cost of the selected remedy is not provided, although it is provided in a later section. In order to compare the selected remedy with hydroblasting, please provide the estimated cost of removal and off-site disposal or reference Section 4.4.

Response 9. Comment noted. Section 4.1.4, Subsection, Cost, will be revised as follows:

"Unit costs for labor, mobilization, site remediation, and disposal for radiological contamination actions are, on average, greater than the unit cost of chemical contamination removal actions in soils. However, the cost does not become prohibitive unless large volumes of radioactive materials or mixed wastes are removed and disposed of. The estimated cost for the selected remedy is \$11,883,950. Additional details regarding the cost

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	estimate are presented in Section 4.4.”
<p>Comment 10. Section 4.2.1, Proposed Action Description, Page 4-4: The text states that removal actions will be conducted in a manner to minimize impact to sensitive habitat areas, but only prevention of storm water discharges is discussed in the text. In addition, areas with sensitive habitat are not discussed in the text and a figure with these areas has not been provided. Please clarify whether there are measures other than prevention of storm water discharge to protect sensitive habitat. In addition, please revise the AM to discuss the locations of sensitive habitat and provide a figure that shows the relationship of these habitat areas with the proposed actions.</p> <p>In addition, measures to control dust, like sprinkling haul roads and areas to be excavated as well as covering all soil piles should be discussed. Please revise the text to include a discussion of dust control measures.</p>	<p>Response 10. Comment noted. The text of Section 2.1.3. Site Characteristics, Environmentally Sensitive Areas will be revised to include a figure with sensitive habitat areas in the vicinity of IR Site 5 and 10, and include a description of sensitive habitat in and around the site. The revision is as follows:</p> <p style="padding-left: 40px;">“The existing natural resources within the vicinity of IR Sites 5 and 10 consist of marine and biological resources, but because of the developed nature of the sites, the areas contain no sensitive or critical habitat or biota.</p> <p style="padding-left: 40px;">The barren habitat within Sites 5 and 10 exists as bare soil, paved areas, and buildings as described. Barren habitat generally offers little value to wildlife; however, it may serve as a corridor between other habitats or as a resting place, but is not an area of significant occupation or shelter.</p> <p style="padding-left: 40px;">Adjacent to the sites are urban habitat, which is characterized by landscaped areas; non-native grassland; and estuarine habitat. These habitats have the potential to shelter special-status species. Figure 2-3 illustrates the removal action area and the adjacent habitats.”</p> <p>The text of Section 4.2.1 will be revised as follows:</p> <p style="padding-left: 40px;">“No sensitive or critical habitat areas or biota are noted within the area of proposed action because of the disturbed and</p>

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developed nature of the sites. Existing natural resources within the boundaries of Alameda Point and the vicinity of IR Sites 5 and 10 consist of marine and biological resources. The removal action will be conducted to minimize the affect to those areas through the implementation of best management practices (BMPs) that will be developed and implemented to prevent uncontrolled stormwater runoff into the Bay during the removal action and will be included as part of a Stormwater Management Plan (SWMP) that will be provided as an appendix to the TCRA Work Plan (TtEC, 2007)."

Specific dust control measures such as sprinkling haul roads and areas to be excavated as well as other BMPs are presented within the Appendix E, Stormwater Management Plan in the Project Work Plan.

Comment 11. Page 4-6 and ARARs Table p. 1 Clean Water Act Pretreatment Standards, 40 CFR 403. (a) It is unclear why these requirements would be ARARs. Will there be liquids discharged to EBMUD as part of the remedy? Alternatively, does contamination from the storm sewers currently flow into the EBMUD system? (b) It is also unclear what the requirements are. The citation should be more specific than just 40 CFR 403.

Response 11. Comment noted. The text will be revised as follows:

"The National Pretreatment Standards at 40 CFR 403.5 and 403.6 apply to discharges to a publicly owned treatment works (POTW). The Clean Water Act (CWA) requires that owners of sanitary sewer systems feeding into a POTW with a National Pollutant Discharge Elimination System (NPDES) permit enforce those federal standards against the industrial dischargers via a local permit program. During the removal action, wastewater may be generated that requires off-site disposal. Should this occur, DON will comply with the East Bay Municipal Utility District

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	<p style="text-align: center;">(EBMUD) pretreatment requirements.”</p> <p>Appendix B, page 1 of the table will be revised to indicate the new citations.</p>
<p>Comment 12. Page 4-6, NRC effluent limitations.</p> <p>(a) Discussion on page 4-6 is confusing as it includes NRC and UMTRCA requirements in the same paragraph. It would make more sense to move the UMTRCA requirements to the separate paragraph on page 4-7.</p> <p>(b) Are these considered ARARs during the cleanup, or are they final requirements that must be achieved if the site is to be available for unrestricted use?</p> <p>(c) Related discussion in ARARs Table page 4, of 10 CFR part 40, App. A, part I, Criterion 6(6), is confusing. This is part of the NRC regulations, but the ARARs table connects it to UMTRCA instead. Additionally, it would be helpful to state what the requirement is.</p>	<p>Response 12. a) and b) The text will be revised as follows:</p> <p style="padding-left: 40px;">NRC Effluent Limits</p> <p style="padding-left: 40px;">“Annual limits on intake and derived airborne concentrations of radionuclides for occupational exposure, occupational values (10 CFR, Part 20, Appendix B, Tables 1 and 2, respectively), are relevant and appropriate for the potential effluent to unrestricted areas during the removal action because soil and stormwater releases could potentially be impacted by ²²⁶Ra.”</p> <p>c) Section 4.3.1.1, Subsection Nuclear Regulatory Commission Standards for Protection Against Radiation, will be revised as follows:</p> <p style="padding-left: 40px;">“... are relevant and appropriate because unrestricted reuse is proposed following the remedial action and IR Sites 5 and 10 have contamination similar to those regulated at an NRC-licensed sites (i.e., ²²⁶Ra).</p> <p style="padding-left: 40px;">The criteria in 10 CFR Part 40, Appendix A, Part I, Criterion 6(6) provide a benchmark approach for setting radionuclide cleanup levels as a supplement to 40 CFR Part 192 and are considered relevant and appropriate for this removal action. The design requirements in this criteria for</p>

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	<p>longevity and control of radon releases apply to any portion of a licensed and/or disposal site unless such portion contains a concentration of radium in land, averaged over areas of 100 square meters, which, as a result of byproduct material, does not exceed the background level by more than 5 pCi/g of ²²⁶Ra.”</p> <p>The Appendix B table will be revised to place the referenced regulation with the NRC regulations.</p>
<p>Comment 13. Page 4-6, NRC dose limit of 0.1 rem/year. The discussion on page 4-6 is unclear as to why this would be considered an ARAR. The ARARs Table, page 3, indicates that this is an ARAR to protect the public during the removal action. We'd recommend also explaining that on page. 4-6.</p>	<p>Response 13. Comment noted. The subsection NRC Radiation Dose Limits for Individual Members of the Public text will be revised as follows:</p> <p>“Radiation dose limits for the public are required in the substantive provisions of 10 CFR Part 20.1301. This part is considered relevant and appropriate for effluents released while the removal action is being conducted. This criterion requires that the TEDE to individual members of public not exceed 0.1 rem per year (100 mrem/yr) from licensed operations. “</p> <p>The Appendix B table will be revised to clarify how the public could be affected.</p>
<p>Comment 14. Section 4.3.1.1 Federal Chemical-Specific ARARs – Uranium Mill Tailings Radiation Control Act, Page 4-7: This section discusses Ra 228 which is not a contaminant of concern at the Site. Please limit the discussion in this section to Ra 226. Additionally,</p>	<p>Response 14. The text of Section 4.3.1.1, subsection UMTRCA will be revised as follows:</p> <p>“In order for standards in 40 CFR Part 192 to be relevant and appropriate, the contaminants at the site must be the same (i.e.,</p>

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the second to last paragraph (on page 4-8) discusses radon decay product concentration limits, but the issue of radon does not appear anywhere else in the AM. Please explain why radon is relevant. Alternatively, please delete this paragraph.

²²⁶Ra) and the distribution of contamination must be similar to that existing at a Title I site (EPA, 1998). If it is determined either in the course of further study or even during remedial action that subsurface contamination exists at a level between 5 pCi/g to 15 pCi/g averaged over areas of 100 square meters (the averaging areas provided for in Part 192 rules), this indicates that conditions at the site are probably not sufficiently similar to an UMTRCA site to consider the subsurface standard at 40 CFR Part 192 relevant and appropriate. If contamination at the sites is unlike that of uranium mill tailings sites, in that significant subsurface contamination exists at a level between 5 pCi/g and 30 pCi/g, the use of a 15 pCi/g standard is not generally appropriate. Instead, 5 pCi/g is recommended since that was the actual health-based standard expected to be achieved by 40 CFR Part 192.

Requirements for cleanup of radiological contaminants are found in UMTRCA standards for cleanup of land and buildings contaminated . . .

The substantive provisions of 40 CFR Parts 192.12(a) and 192.32(b)(2) have been determined to be relevant and appropriate at IR Sites 5 and 10, since the contaminant (²²⁶Ra) matches and subsurface contamination is expected at levels between 5 to 30 pCi/g in the subsurface. The proposed removal action will meet these standards.

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The Appendix B table will be revised to match the text.

Comment 15. Section 4.3.1.2 State Chemical-Specific ARARs, Page 4-8: The stated purpose of the AM indicates, on page 1-2, that the "removal action objectives (RAOs) for this AM are to protect public health and welfare and the environment by physically removing and disposing of Ra 226 impacted storm water and sewer systems and associated soils ..." The regulations cited in this section deal with identifying non-RCRA hazardous waste. Ra 226 is not a substance regulated, on its own, by these regulations. Please revise the AM to clarify how non-radiological non-RCRA hazardous (or mixed) wastes will be handled during this removal action. Please also discuss whether the excavated sewer lines and associated soils will be analyzed to determine if they qualify as a non-RCRA listed or characteristic hazardous waste. In addition, if other non-radiological non-RCRA hazardous (or mixed) waste is encountered when excavation and analysis of soils is commenced, additional ARARs should be researched and applied to ensure compliance with CERCLA requirements.

Response 15. The text within the ARARs sections will be revised as indicated below to clarify that chemical contamination will be addressed adequately. The Work Plan contains specific instructions regarding how Radioactive, Mixed, Combined, RCRA, and non-RCRA wastes will be identified (through characterization sampling as dictated by the Sampling and Analysis Plan) and how they will be handled (as per the Waste Management Plan).

Section 4.3.1.1 will be revised as follows:

"... The maximum concentrations allowed for the TCLP listed in Section 66261.24(a)(1)(B) are federal ARARs for determining whether the site has hazardous waste. If the site waste has concentrations exceeding these values, it is determined to be a characteristic RCRA-hazardous waste.

This removal action is intended to solely address radioactive contamination; however, chemical contamination may also be present and therefore RCRA requirements could potentially be applicable. Wastes will be characterized for chemical contamination prior to off-site disposal."

Section 4.3.1.2 will be revised as follows:

"... Title 27, CCR, Sections 20210 and 20220 are state definitions for designated waste and non-hazardous waste,

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respectively. These may be ARARs for soils that meet the definitions. These soil classifications determine state classification requirements for discharging waste to land.

This removal action is intended to solely address radioactive contamination; however, chemical contamination may also be present and therefore non-RCRA state requirements could potentially be applicable. Wastes will be characterized for chemical contamination prior to off-site disposal.”

Section 4.3.3.1, Federal RCRA Hazardous Waste Storage ARARs will be revised as follows:

“This removal action is intended to solely address radioactive contamination; however, chemical contamination may also be present and therefore RCRA requirements could potentially be applicable. Wastes will be characterized for chemical contamination and managed in accordance with the requirements below.

Storage of hazardous waste in stockpiles or containers during a response action and transport and disposal may be subject to stringent RCRA and/or state requirements, as follows: . . .”

ARARs for non-RCRA and RCRA-hazardous wastes are currently presented in both the Chemical-specific and Action-specific ARARs sections of the table (pages 4, 6, and 7). Included are characterization, sampling, storage, container, and closure requirements. No additional

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	ARARs were identified as being necessary to comply with CERCLA requirements.
<p>Comment 16. ARARs Table p. 5, Basin Plan. The table indicates that substantive requirements pertaining to beneficial uses and WQOs are ARARs for the surface water and groundwater components of this response action. It is not clear from the discussion on pages 4-10 and 4-11 which WQOs and beneficial uses are ARARs, or why. (a) What uses and/or WQO for surface water are included, and why. Does the storm sewer system drain to the Bay? (b) Page 4-11 says that agricultural and industrial beneficial uses “would be prevented using institutional controls that are proposed for each GW remedial action alternative.” What does this refer to? Where in the document are ICs discussed? (c) What GW uses and WQOs are considered to be ARARs? The discussion on pages 4-10 and 4-11 suggests that no GW uses are considered ARARs.</p>	<p>Response 16. (a) The text will be revised to include surface water beneficial uses and WQOs. The storm drain system currently drains to the Bay.</p> <p>(b) The reference to institutional controls will be removed. Institutional controls may be developed in future CERCLA decision documents for this site; however, they are not a part of this remedy.</p> <p>(c) Only MUN is negated as an ARAR. Both agricultural and industrial usage will remain ARARs.</p> <p>The text of Section 4.3.1.2, Subsection Comprehensive Water Quality Control Plan for the San Francisco Bay Basin (Basin Plan), will be revised as follows:</p> <p style="padding-left: 40px;">“Comprehensive Water Quality Control Plan for the San Francisco Bay Basin (Basin Plan)</p> <p style="padding-left: 40px;">The DON accepts the substantive provisions in the Basin Plan, Chapters 2 and 3 (Water Board, 2006), including beneficial use, excepting municipal groundwater use as described below, WQOs, and waste discharge requirements, as ARARs. The WQOs and uses designated for the groundwater underlying IR Sites 5 and 10 are ARARs.</p> <p style="padding-left: 40px;">The Basin Plan was prepared and implemented by the Water</p>

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Board to protect and enhance the quality of the waters in the San Francisco Bay Basin. The Basin Plan establishes location-specific beneficial uses and WQOs for the surface water and groundwater of the region and is the basis of the Water Board's San Francisco Bay Basin regulatory programs.

The Basin Plan includes both numeric and/or narrative WQOs for specific groundwater sub-basins and surface water. The WQOs are intended to protect the beneficial uses of the waters of the region and to prevent nuisance.

Numeric WQOs have not been established in the Basin Plan for the San Francisco Bay Region for radioactive compounds in groundwater (excluding MUN). The narrative objective for groundwater used as an agricultural supply states, "Groundwater with a beneficial use of agricultural supply shall not contain concentrations of chemical constituents in amounts that adversely affect such beneficial use." The narrative objective for groundwater used as an industrial supply states, "Groundwater with a beneficial use of industrial service supply or industrial process supply shall not contain pollutant levels that impair current or potential industrial uses."

The following objective applies to all surface waters within the region: "Radionuclides shall not be present in concentrations that result in the accumulation of radionuclides in the food web to an extent that presents a hazard to human, plant, animal, or

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IR SITES 5 AND 10 (BUILDINGS 5 AND 400)
STORM DRAIN AND SEWER LINE REMOVAL
FORMER NAVAL AIR STATION ALAMEDA
ALAMEDA POINT, ALAMEDA, CALIFORNIA
(DATED MAY 29, 2007)
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Comments Dated: March 22, 2007

aquatic life. Waters designated for use as domestic or municipal supply shall not contain concentrations of radionuclides in excess of the limits specified in Table 4 of Section 64443 (Radioactivity) of Title 22 of the California Code of Regulations (CCR).” The surface water WQOs that apply to this removal action include:

- Combined Radium-226 and Radium-228 = 5 pCi/L
- Gross Alpha Particle Activity = 15 pCi/L
- Beta Particle and Photon Radioactivity = 4 mrem/yr

Remediation of naturally occurring concentrations of inorganic constituents that may exceed WQOs established by the Water Board for the regional aquifer to below background water-quality conditions is not required by SWRCB under the Porter-Cologne Act, SWRCB Res. 68-16 of the State Water Board, and the basin plans of the state and regional Water Boards.

Beneficial use and reuse of water are key aspects of the Basin Plan for the San Francisco Bay Basin. IR Sites 5 and 10 are located in the East Bay Plain groundwater sub-basin. This sub-basin has the following beneficial use designations (Water Board, 2006):

- municipal and domestic water supply (MUN)

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- agricultural supply
- industrial service supply
- industrial process supply

The Basin Plan allows for exceptions from MUN designation (see Chapter 2 of the *Basin Plan: Beneficial Uses and Present and Potential Beneficial Uses, Groundwater*). The DON considers the substantive provisions of this chapter to be an ARAR, and therefore the criterion for excepting a MUN designation is either of the following, which are the same criteria of State Water Resources Control Board (SWRCB) Res. No. 88-63 discussed below:

- The total dissolved solid (TDS) exceed 3,000 milligrams per liter (mg/L) (electrical conductivity 5,000 microhms per centimeter), and the Water Board does not reasonably expect the groundwater to supply a public water system.

Or

- The groundwater does not provide sufficient water to supply a single well capable of producing an average, sustained yield of 200 gallons per day.

Shallow groundwater beneath IR Sites 5 and 10 has little

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potential as sources of drinking water for the following reasons:

- Existing saltwater intrusion into the shoreline groundwater.
- Likelihood of saltwater intrusion into the inland groundwater shortly after beginning groundwater pumping, causing elevated TDS levels in a short period of time.
- No supply wells currently existing within or downgradient of the contaminated groundwater at IR Sites 5 and 10.
- State and county limitations on well construction due to the thin, vulnerable first water-bearing zone (FWBZ) aquifer.

In a letter to the DON dated July 21, 2003 (RWQCB, 2003), the Water Board concurred that groundwater west of Saratoga Street (which would include IR Sites 5 and 10) meets the exemption criteria in the SWRCB Source of Drinking Water Policy Res. 88-63. Therefore, in light of this determination and the site-specific conditions, the MUN beneficial use is not considered an ARAR.

The agricultural and industrial beneficial uses are considered ARARs but are not expected uses of the groundwater.

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	<p>Although there are no surface waters located within the boundaries of the site, stormwater from the site drains to Seaplane Lagoon, and ultimately to San Francisco Bay. The San Francisco Bay Estuary supports estuarine habitat (EST), industrial service supply (IND), and navigation (NAV) in addition to all of the uses listed within the Basin Plan for streams. The specific beneficial uses for inland streams include municipal and domestic supply (MUN), agricultural supply (AGR), industrial process supply (PRO), groundwater recharge (GWR), water contact recreation (REC1), noncontact water recreation (REC2), wildlife habitat (WILD), cold freshwater habitat (COLD), warm freshwater habitat (WARM), fish migration (MIGR), and fish spawning (SPWN)."</p>
<p>Comment 17. Page 4-12, ESA. The document states that consultation requirements aren't ARARs but they are TBCs. EPA considers portions of the ESA, such as the prohibition on take, to be substantive, and thus ARARs. Are there any threatened or endangered species in the area that should be considered?</p>	<p>Response 17. One endangered species, the California Least Tern, nests in another part of Alameda Point. The nesting area is approximately a half mile from the site (Figure 2-3), and no least terns have been reported or observed in the area of the removal action. No other endangered or threatened species have been observed in the response area. Accordingly, the ESA is not considered an ARAR. The Appendix B table will be revised to reflect this change (see attached).</p>
<p>Comment 18. Section 4.3.1.2 State Chemical-Specific ARARs, Comprehensive Water Quality Control Plan for the San Francisco</p>	<p>Response 18. Appendix B will be revised to exclude the MUN beneficial use as an ARAR (see AM Appendix B).</p>

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Bay Basin (Basin Plan), Page 4-10: This section concludes that because the shallow groundwater beneath IR Sites 5 and 10 has little potential as a source of drinking water, "the MUN beneficial use is not considered a [sic]ARAR." However, the corresponding Appendix B entry, on page 5 of the appendix, indicates that these regulations are applicable ARARs. Please revise these sections to be consistent.

Comment 19. Section 4.3.1.2 State Chemical-Specific ARARs, Comprehensive Water Quality Control Plan for the San Francisco Bay Basin (Basin Plan), Pages 4-9 through 4-11: This section also fails to cite California Water Code regulations consistent with the regulations cited in Appendix B on page 5. Please cite the regulations listed in Appendix B on pages 4-9 to 4-11 of the AM.

Comment 20. Section 4.3.2.1 Federal Location-Specific ARARs, Endangered Species Act of 1973, Page 4-12: This section states that "[u]nder Section 7(a) of the ESA (16 USC § 1536[a][2]), Federal Agencies must carry out conservation programs for listed species," but the correct citation for this requirement appears at 16 USC § 1536(a)(1) rather than (a)(2). Please correct this citation.

In addition, this section does not state whether these regulations are applicable or relevant and appropriate. Please specify whether these requirements are applicable or relevant and appropriate.

Response 19. All of the regulations cited on page 5 of Appendix B were found to be presented in the third and fifth paragraphs on page 4-9. No revisions will be made to the text.

Response 20. The citation is correct but the text will be revised after the citation as follows:

"Under Section 7(a) of the ESA (16 USC § 1536[a][2]), federal agencies must ensure that their actions are not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of habitat of such species."

No revisions were required to the table in Appendix B.

Section 4.3.2.1, Endangered Species Act of 1973 will be revised as follows.

"... regulations at 50 CFR Part 402 are administrative in nature

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	<p>and are therefore not ARARs. However, they may be to be considered (TBC) to comply with the substantive provisions of the ESA.</p> <p>One endangered species, the California Least Tern, nests in another part of Alameda Point. The nesting area is more than a mile from the site and no least terns have been reported or observed in the area of the response. Also, no other endangered or threatened species have been observed in the response areas. Accordingly, the ESA is not considered an ARAR.”</p>
<p>Comment 21. Section 4.3.2.2 State Location-Specific ARARs, California Coast Act of 1976, Page 4-14: This section cites multiple sections of the California Coast Act of 1976 including sections not relevant to the AM (e.g. provisions related to protection of productive agricultural lands and archaeological resources). Please edit this section to discuss only sections of the Act relevant to the Removal Action.</p>	<p>Response 21. The text will be revised as follows: “because federal lands are specifically excluded from the definition of coastal zone, the California Coastal Act is not applicable to IR Sites 5 and 10 but the following substantive requirements of protection and expansion of public access to the shoreline and recreation opportunities (Cal. Pub. Res. Code Sections 30210–30224) are evaluated further as a relevant and appropriate requirement.”</p> <p>The ARARs table will be modified to correlate with text.</p>
<p>Comment 22. Section 4.3.3.1 Federal Action-Specific ARARs, Radioactive Waste Storage and Control, Page 4-15: The last two sentences of this section provide definitions for a “controlled area” and an “unrestricted area” but do not provide citations for these definitions. Please edit this section to provide citations for these definitions.</p>	<p>Response 22. The text of Section 4.3.3.1, Subsection Radioactive Waste Storage and Control, will be revised as follows:</p> <p>“These requirements are ARARs if storage of materials or waste similar to NRC-regulated materials or waste is in a controlled or unrestricted area. A “controlled area” is an area outside a restricted area, but inside the site boundary, to which access can</p>

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	<p>be limited by the licensee for any reason. An "unrestricted area" is an area to which access is neither limited nor controlled by the licensee. Controlled and unrestricted areas are defined in 10 CFR Part 1003."</p>
<p>Comment 23. Section 4.3.3.1 Federal Action-Specific ARARs, Clean Water Act and State NPDES General Permit for Discharges of Stormwater Runoff Associated with Construction Activity, Page 4-16: The citation provided for this section (40 CFR 122.44(k)(2) and (4)) related to NPDES stormwater discharge requirements for construction sites over one acre in size does not appear to be correct. Please correct this citation.</p>	<p>Response 23. The text of Section 4.3.3.1, Subsection Clean Water Act and State NPDES General Permit for Discharges of Stormwater Runoff Associated with Construction Activity, will be revised as follows:</p> <p style="padding-left: 40px;">"NPDES stormwater discharge requirements, 40 CFR Part 122.26 (b)(15)(i) and Exhibit 1 thereto, establish stormwater requirements for construction sites over 1 acre in size. This is relevant and appropriate for this TCRA; and a . . ."</p> <p>The Appendix B table will be revised.</p>
<p>Comment 24. Section 4.3.3.2 State Action-Specific ARARs, Bay Area Air Quality Management District Regulation 6-301, Page 4-17: Please add a subheading to this section on page 4-17, indicating that this regulation is part of the California Health & Safety Code.</p>	<p>Response 24. The text of Section 4.3.3.2 State Action-specific ARARs, will be revised as follows:</p> <p style="padding-left: 40px;">"California Health and Safety Code, Division 26, Air Resources</p> <p style="padding-left: 40px;">Fugitive dust may be generated during the excavation and handling of the contaminated soil. The pertinent substantive provisions of the Bay Area Air Quality Management District Regulation 6-301 are considered an ARAR for these activities."</p>
<p>Comment 25. Appendix B, Federal and State Chemical-, Action-, and Location Specific ARARs for Buildings 5 and 400 Storm Drain</p>	<p>Response 25. The "Comments" field will be revised to indicate how the DON is meeting the requirements stated in the regulation and will</p>

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and Sewer Line Removal, Page 2: The last entry on page 2 cites the 10 CFR section 20.1404(a)(1)-(a)(3) requirement that the maximum exposure limit will be less than 100 mrem/yr. The "Comments" field on the table indicates that this ARAR is relevant and appropriate because radiological material less than 1 pCi/g will remain on site. Please clarify how the expected concentration level of Ra 226 relates to the exposure limit listed in the regulation. Also, please edit the "Requirement" field to more closely summarize the quoted regulation.

remove any reference to 1 pCi/g of ²²⁶Ra. The "Requirement" column will not be revised (see Appendix B of AM).

The new "Comments" section will read as follows:

"Not applicable because the site is not an NRC-regulated site. However, it is relevant and appropriate because radiological material will be left on site.

Alternate criteria are allowed for license termination since the DON has determined that public health and safety would continue to be protected."

Comment 26. Appendix B, Federal and State Chemical-, Action-, and Location Specific ARARs for Buildings 5 and 400 Storm Drain and Sewer Line Removal, Page 3: The first entry on page 3 indicates that licensed operations include: "construction, operation, and decommissioning of commercial reactors and fuel cycle facilities; possession, use, processing, exporting, and certain aspects of transporting nuclear materials and waste; and siting, design, construction, operations, and closure of waste disposal sites," but licensed operations are not enumerated in the cited regulation. Please expand the citation for this regulation to reference the above listed operations.

Response 26. It is not necessary to expand the regulatory citation because the definition is not considered a substantive requirement and is therefore not an ARAR. No revisions will be made to the text or table.

Comment 27. Appendix B, Federal and State Chemical-, Action-, and Location Specific ARARs for Buildings 5 and 400 Storm Drain and Sewer Line Removal, Page 3: The second entry on page 3

Response 27. The ARAR evaluation for radioactive material discharges is included in Appendix B.

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establishes limits for effluent releases to an unrestricted area and cites to 10 CFR pt. 20, app. B, Table 2; however, this reference, in Table 3, establishes the "Monthly Average Concentration limitation. Please include a discussion of this limitation as an ARAR.

Comment 28. Appendix B, Federal and State Chemical-, Action-, and Location Specific ARARs for Buildings 5 and 400 Storm Drain and Sewer Line Removal, Page 3: The last entry on page 3 identifies the standards for cleanup of land and buildings contaminated with Ra 226, Ra 228 and Thorium. Please limit the discussion to Ra 226 if it is the only relevant contaminant of concern.

In addition, the reference citation provided lists 40 CFR 192.41 as one of the regulations which defines the level of cleanup which is relevant and appropriate, but it appears that this citation is not relevant to this discussion. Please revise this section of the table to indicate the relevance of 40 CFR 192.41 or, alternatively, please delete this section.

Response 28. The Appendix B table will be revised to remove references to ²²⁸Ra, Thorium, and 40 CFR Part 192.41 in the citation and comments columns.

Section 4.3.1.1, Subsection UMTRCA, will be revised as follows:

"... standards in 40 CFR Part 192 to be relevant and appropriate, the contaminants at the site must be the same (i.e., ²²⁶Ra) and the distribution of contamination . . . Instead, 5 pCi/g is recommended since that was the actual health-based standard expected to be achieved by 40 CFR Part 192.

Requirements for cleanup of radiological contaminants are found in UMTRCA standards . . .

The substantive provisions of 40 CFR Parts 192.12(a) and 192.32(b)(2) have been determined to be relevant and appropriate at IR Sites 5 and 10, because the contaminant (²²⁶Ra) matches and subsurface contamination is expected at levels between 5 to 30 pCi/g in the subsurface. The proposed removal action will meet these standards.

The requirements in 40 CFR Part 192.12(b)(1) states that in any occupied or habitable building . . . the objective of

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	<p>remedial action shall be, and reasonable effort shall be made to achieve, an annual average (or equivalent) radon decay product concentration (including background) not to exceed 0.02 Working Level (WL). In any case, the radon decay product concentration (including background) shall not exceed 0.03 WL. Provisions applicable to radon-222 shall also apply to radon-220. The provisions of 40 CFR Part 192.12(b)(1) are relevant and appropriate if habitable buildings are constructed at IR Sites 5 and 10 as a part of site reuse.”</p>
<p>Comment 29. Appendix B, Federal and State Chemical-, Action-, and Location Specific ARARs for Buildings 5 and 400 Storm Drain and Sewer Line Removal, Page 5: As mentioned above, the determination regarding the ARARs listed on page 5, appear to be inconsistent with the AM discussion on page 4-10 to 4-11 in that Appendix B indicates that these ARARs are “Applicable”; whereas the discussion on page 4-10 to 4-11 indicates that these regulations are not considered ARARs. Please resolve these inconsistencies.</p>	<p>Response 29. The text regarding the Basin Plan will be amended as described in Response 16. The text on page 4-10 indicates that “The DON accepts the substantive provisions in the Basin Plan, Chapters 2 and 3 (Water Board, 2006), including beneficial use, excepting municipal groundwater use.” The determination of ARARs and comments on page 5 of the Appendix B ARARs table reflect this same determination and information.</p>
<p>Comment 30. Appendix B, Federal and State Chemical-, Action-, and Location Specific ARARs for Buildings 5 and 400 Storm Drain and Sewer Line Removal, Page 6: The section related to Hazardous Waste Accumulation mistakenly cites regulations related to containers in the “Requirement” field. The correction citation should be 22 CCR 66264.171 – 178. Please revise this section to reflect this correction.</p>	<p>Response 30. The table will be revised to reflect the corrected citation. No revisions are required for the text.</p>
<p>Comment 31. ARARs Table page 8 and page 10. Discussion of</p>	<p>Response 31. Groundwater or decontamination wastewater may be</p>

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requirements related to discharge of groundwater to sanitary sewer system (p. 8) and surface water (p. 10) is confusing. Is there a plan to discharge groundwater to the sanitary sewer system, or to surface water?

discharged to the sanitary sewer or disposed of at another off-site location as described in the Work Plan. Surface water discharges regulated under the NPDES program would occur as a result of stormwater discharges during construction. No revisions will be made to the text.

Comment 32. Appendix B, Federal and State Chemical-, Action-, and Location Specific ARARs for Buildings 5 and 400 Storm Drain and Sewer Line Removal, Page 11: The comments related to the Migratory Bird Treaty Act of 1972 are inconsistent with the requirement field. The requirement field indicates that an unregulated taking may include "poisoning at hazardous waste sites"; however, the ARAR determination relates that this legislation is relevant and appropriate (but not applicable) based on the finding that the paved spaces at Sites 5 and 10 do not support special-status species and therefore migratory birds are not likely to be exposed to radiologically contaminated materials or affected by remedial activities. However, according to the AM, radiologically contaminated waste is known to have been discharged to the San Francisco Bay; therefore, it would appear that migratory birds feeding in the San Francisco Bay Area may be exposed to radiologically contamination. Please revise this section to address this concern.

Response 32. Seaplane Lagoon may have been the recipient of radiologically contaminated waste; however, it is not part of IR Sites 5 and 10, and is not addressed as part of this removal action. The MBTA is considered relevant and appropriate due to the unlikely possibility that a migrating bird could land at the site, attempt to feed, and thereby possibly ingest contamination. Because the ARAR is considered relevant and appropriate, it is not applied to off-site actions. No revisions will be made to the text or table.

Comment 33. Appendix B, Federal and State Chemical-, Action-, and Location Specific ARARs for Buildings 5 and 400 Storm Drain and Sewer Line Removal, Page 11: The section related to the Endangered Species Act (ESA) combines multiple sections of the ESA so it is not clear which provisions are applicable and which are relevant

Response 33. Comment noted. Since the entire ESA has been determined not to be an ARAR but only a TBC (See discussion in Response 20), there is no additional need to analyze sub-sections of the statute.

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and appropriate (it appears consultation with the USFS would be classified as relevant and appropriate whereas the requirement that the DON not jeopardize the existence of any listed species (or its critical habitat) would be classified as applicable). Please edit this section to separate the separate sections of the ESA and indicate which sections are applicable, or relevant and appropriate.

Comment 34. Appendix B, Federal and State Chemical-, Action-, and Location Specific ARARs for Buildings 5 and 400 Storm Drain and Sewer Line Removal, Page 13: This section relates that “[a]ction must be taken to conserve endangered species; there can be no releases and/or actions that would have a deleterious effect on species or habitat,” but the regulation cited (CFGC 2080) does not state the above quoted language. Instead, the regulation is designed to protect endangered and threatened species from being imported or exported out of the state, taken, possessed, purchased or sold. Please revise this sentence to reflect the stated purpose of the regulation.

Response 34. The Appendix B table will be revised to amend the language. The ARAR determination will be revised as well to indicate that the section is not an ARAR.

Section 4.3.2.2., Subsection California Department of Fish and Game ARARs will be revised as follows:

“CFGC Section 2080 (added by Statute 1984, ch. 1240, Section 2) prohibits the take, possession, purchase or sell within the state, any species (including rare native plant species), or any product thereof, that the commission determines to be an endangered or threatened species, or the attempt of any of these acts. This section is not an ARAR. The DON has conducted several studies for special-status species at Alameda Point. Based on those studies and surveys, the DON prepared a biological assessment that was used to support a consultation with the USFWS in accordance with the ESA. No special-status species . . .”

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Comment 1. Section 1.0 – Purpose – Please include a brief discussion of previous storm drain removal efforts in this area.

Response 1. The text of Section 1.0 will be revised as follows.

“ . . . Radiologically impacted storm and sewer line debris and soils will be removed and disposed of off site.

Previous efforts to eliminate and clean storm drain and sanitary sewer lines have been conducted. In February 2000, NewWorld Technologies (NWT) issued the *Final Report, Alameda Naval Air Station Storm Drain Removal Project* (NWT, 2000) that described the removal and replacement of radioactively contaminated storm drain piping and manholes. The following activities occurred:

- Approximately 660 linear feet of storm drain piping outside of Building 5/5A were removed.
- Three designated manholes (6F, 6F-1, 6F-2), were removed and replaced outside of Building 5/5A.
- Approximately 60 linear feet of “abandoned line” was removed and not replaced outside of Building 5/5A.
- Approximately 270 linear feet of storm drain piping between manholes 5F-4 and 5F-3 were hydroblast cleaned and resurveyed.

Approximately 430 linear feet of storm drain piping between manholes 6F-5 and 6F were hydroblast cleaned and resurveyed.

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	<p>The action level and release levels for removed material and trench bottoms were reported to be 1.5 times background and 5 picocuries per gram (pCi/g).</p> <p>The removal action objectives (RAOs) for this AM are to protect public health and welfare and the environment by physically removing . . .”</p>
<p>Comment 2. Section 1.0 – Purpose – Page 1-2 – Last paragraph – This paragraph indicates that the removal action objective (RAO) for ²²⁶Ra is the total effective dose equivalent (TEDE) of <15 mrem/yr. Please reference the source(s) used for establishing this RAO.</p>	<p>Response 2. Comment noted. Reference will be added to Section 9.0: <i>Bechtel Environmental, Inc. (BEI). 2006a. Draft Final Feasibility Study, Report IR Site 1, 1943-1956 Disposal Area, Alameda Point Alameda, California, Volume I, Part A, CTO-0068/009. January.</i></p> <p>Section 1.0 will be revised as follows.</p> <p>“Removal action objectives (RAOs) for this AM are to protect public health and welfare and the environment by physically removing and disposing of ²²⁶Ra impacted stormwater and sewer systems and associated soils such that a total effective dose equivalent (TEDE) of < 15 mrem/yr is achieved. The RAO was developed for this removal action using the Feasibility Study for IR Sites 1 and 2. It was maintained for this removal action for protectiveness and consistency (Bechtel Environmental Inc. [BEI], 2006a).”</p>
<p>Comment 3. Section 2.1 – Site Background - Page 2-2 – fourth</p>	<p>Response 3. The text will be revised as follows.</p>

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paragraph – The reference for “PRC Environmental Management, Inc, 1996” is included in the references section, but dated 1997. Please correct this discrepancy.

“... detected radioactive contamination in drain piping at Building 5 that discharged to the storm sewer (PRC Environmental Management, Inc, 1997; Tetra Tech EM, Inc. [TtEMI], 2002) . . .”

Comment 4. Section 2.1 – Site Background - Page 2-2 – fourth paragraph – This paragraph mentions the previous storm drain and sewer line removal effort within Site 5. Please include more detail regarding the previous removal action, including what was removed, what contamination was left in place, and what issues or challenges were encountered during the previous removal action that will need to be considered during the proposed removal action. Please also indicate whether this previous effort was performed as a CERCLA action, and reference any applicable reports or documentation.

Response 4. Comment noted. The text of Section 2.1, Subsection IR Site 5, will be revised as follows.

“... drain and sewer line removal was performed within IR Site 5. However, the work was halted in the spring of 1999 due to budgetary constraints.

Previous efforts to eliminate and clean storm drain and sanitary sewer lines have been conducted. In February 2000, NewWorld Technologies (NWT) issued the *Final Report, Alameda Naval Air Station Storm Drain Removal Project* (NWT, 2000) that described the removal and replacement of radioactively contaminated storm drain piping and manholes. The following describes changes made to infrastructure:

- Approximately 660 linear feet of storm drain piping outside of Building 5/5A were removed.
- Three designated manholes (6F, 6F-1, 6F-2) were removed and replaced outside of Building 5/5A.
- Approximately 60 linear feet of “abandoned line” was removed and not replaced outside of Building 5/5A.

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FORMER NAVAL AIR STATION ALAMEDA
ALAMEDA POINT, ALAMEDA, CALIFORNIA
(DATED MAY 29, 2007)
DCN: ECSD-RACIV-07-1212**

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- Approximately 270 linear feet of storm drain piping between manholes 5F-4 and 5F-3 were hydroblast cleaned and resurveyed.
- Approximately 430 linear feet of storm drain piping between manholes 6F-5 and 6F were hydroblast cleaned and resurveyed.

The action level and release levels for removed material and trench bottoms were reported to be 1.5 times background and 5 picocuries per gram (pCi/g).

Several issues and challenges occurred during the CERCLA removal action. The Final Report detailed the following problems:

- The original shoring installed (trench plate and whaler system) was found to be ineffective at shoring due to the soil conditions; however, an interlocking sheet pile system was effective
- Excessive contamination was encountered at several locations outside Building 5/5A resulting in a large increase in the amount of soil requiring off-site disposal.
- Reinforced piping was discovered due to repairs that occurred during the mid-1970s and a hydraulic breaker was required.
- Excessively wet soil was encountered requiring the

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	<p>implementation of soil staging and drying prior to shipment off site.</p> <p>Storm drains and sewer lines are currently located along all sides of Building 5, vary in diameter from 18 to 24 inches adjacent to the northern side of Building 5, and . . .”</p>
<p>Comment 5. Section 2.1 – Site Background - Page 2-3 – top paragraph – This paragraph describes IR Site 10 as being approximately 3.9 acres in size, whereas previous documents¹ have indicated it is 4.3 acres. Please correct this discrepancy.</p>	<p>Response 5. Current IR surveyed acreage for Alameda Point provided by the Geographic Information System administered by the DON lists IR Site 10 as 3.892477 acres.</p>
<p>Comment 6. Section 2.1.1 – Hydrology – Page 2-4 – Last sentence – This sentence indicates previous investigations suggest there is minimal vertical gradient between the first and second water-bearing units. Please include any applicable references and indicate if any historic groundwater wells may be present that could serve as a vertical conduit between the water bearing units.</p>	<p>Response 6. The purpose of this removal action is to excavate along the storm drain route for removal of potentially radiologically impacted particulate material that may have been transported through the storm drain and sewer system network and deposited in the surrounding soil units through open cracks or separated pipes. Existing groundwater monitoring wells will be protected, or if required, properly abandoned when they can not be protected during excavation activities. These will be evaluated on an individual basis as water wells are encountered.</p> <p>The Navy will evaluate the necessity for possible replacement of abandoned wells after review with appropriate parties.</p> <p>Information on the current status of existing wells including well construction details have not been made available to TtEC by the Navy and TtEC has not been tasked to evaluate the effectiveness of the current seals of the wells separating the water-bearing units. The</p>

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	<p>contaminant of concern for this task order is ²²⁶Ra that would be associated with soil-sized particulates and is not suspected to be present in a dissolved state. Therefore, the Navy has determined that the potential for migration of the contaminant further than a 1-foot radius from the drainage pipe is unlikely. TtEC understands that other chemical contaminants may be present at the site; however, other contractors working on specific task orders are evaluating those contaminants. During excavation activities, TtEC will control all waters within the excavation and if required, direct those waters to the appropriate holding and treatment facilities.</p>
<p>Comment 7. Section 2.2.2 – Current Actions – Page 2-7 – Please include the reference for the final draft of the Historical Radiological Assessment (HRA) in this section. Currently the reference cited for the HRA is the Draft Work Plan for Supplemental RI Sampling at OU-2C.</p>	<p>Response 7. Comment noted. Section 2.2.2 will be revised as follows:</p> <p style="padding-left: 40px;">“The DON conducted a historical radiological assessment of Alameda Point (Weston Solutions Inc., 2007). This document evaluated past uses and storage of radioactive materials at Alameda Point and previous radiological surveys and removal actions to ensure that the DON is complying with current state and federal radiological standards. “</p> <p>The following reference will be inserted into Section 9.0:</p> <p style="padding-left: 40px;"><i>Weston Solutions, Inc. 2007. Final Historical Radiological Assessment. Alameda Naval Air Station Use of General Radioactive Materials, 1941–2005.</i></p>
<p>Comment 8. Section 4.3.1.2 – State Chemical-specific ARARs – Second paragraph from bottom – Ensure that the reference to the</p>	<p>Response 8. Comment noted. All references to RWQCB, 1995, will be revised to indicate (Water Board, 2006). Navy does not accept</p>

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<p>RWQCB Basin Plan (1995) is the most up-to-date version. The most current version is dated December 22, 2006. Please also mention in this section that State Board Resolutions 68-16 and 92-49 are specified by reference in the Basin Plan.</p>	<p>resolution 92-49 as an ARAR for the purposes of this removal action.</p>
<p>Comment 9. Figures 2-1 and 2-2 – These figures are essentially identical. Delete one and use the other as needed.</p>	<p>Response 9. Figures were revised to provide clarification.</p>
<p>Comment 10. Appendix B – Please ensure that the ARARs table includes reference to state Board Resolutions 68-16 and 92-49. Please also ensure that the ARARs table includes reference to the General Permit for Storm Water Discharges Associated with Construction Activity (Water Quality Order 99-08-DWQ).</p>	<p>Response 10. Navy does not accept resolution 92-49 as an ARAR for the purposes of this removal action. Resolution 68-16 is not considered an ARAR for this response action, which involves radiological contamination in soil media only. Order 99-08 was nominated by the State as a TBC. Enabling federal legislation for controlling stormwater runoff associated with construction activity is detailed in the ARAR table and text.</p>



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Naval Facilities Engineering Command SW
Ms. Beatrice Appling, AQE.BA
Building 127, Room 108
1220 Pacific Highway
San Diego, CA 92132-5190

DATE: 06/16/08
CTO: 0028
LOCATION: Alameda, CA

FROM: A. N. Bolt, Program Manager

DESCRIPTION: Response to Comments on Draft Action Memorandum
Cercla Time-Critical Removal Action Installation Restoration Sites 5 and 10 Buildings 5 and 400
Storm Drain and Sewer Line Removal (Dated May 29, 2007) DCN: ECSD-RACIV-07-1212

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