



California Regional Water Quality Control Board

San Francisco Bay Region



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Arnold Schwarzenegger
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Department of the Navy
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ALAMEDA POINT
SSIC NO. 5090.3

Subject: Comments on the Draft Record of Decision for Installation Restoration Site 1, 1943-1956 Disposal Area, Alameda Point, Alameda, California

Dear Mr. Macchiarella:

Upon review of the above referenced document, we have the following comments:

General Comments

- 1) **Application of the CERCLA Municipal Landfill Presumptive Remedy** – Throughout this document it is assumed that the EPA's presumptive remedy guidance, Application of the CERCLA Municipal Landfill Presumptive Remedy to Military Landfills (1996), is appropriately applied to this site. We questioned¹ the applicability of the presumptive remedy back in the Draft Feasibility Study. In response, the Navy removed all mention of it in the Final Feasibility Study (February 2006). Furthermore, our understanding is that neither the EPA nor DTSC have determined that the presumptive remedy is applicable at this site. We still question its applicability, especially because of the proximity of the disposal area to the San Francisco Bay and the high water table. Please revise the document to remove all mention of the presumptive remedy so that it is consistent with agreements reached in the Final Feasibility Study.
- 2) **Institutional Controls (ICs)** - ICs should include restrictions that prohibit construction of buildings and golf course water hazards directly above historic disposal area to reduce potential infiltration and reduce leachate formation. The ICs should also specifically limit activities such as pile driving that have the potential to create preferential pathways for contaminant migration to the deeper aquifer system.
- 3) **Containment** – With containment identified as the preferred remedial approach in Area 1a, all substantive requirements within State Board Resolution 92-49 need to be met. There also needs to be ample documentation that source materials left in place are not mobile or migrating. Furthermore, a comprehensive monitoring network needs to be established to ensure contaminants do not migrate to the San Francisco Bay in

¹ Water Board. 2003. Letter to Navy commenting on "Revised Draft Feasibility Study Report Operable Unit 3, site 1 1943-1956 Disposal Area Alameda Point, Alameda, California", February 24.

the future. Please expand discussion to include all historic data that may indicate contaminant mobility, discuss how future monitoring efforts will ensure adjacent surface water is protected, and clearly describe any features that may serve as hydraulic barriers or conduits to contaminant migration.

- 4) **Selected Remedial Alternative for Soil in Area 1a** – Because disposal areas are adjacent to the San Francisco Bay, remaining source materials and groundwater contamination needs to be effectively contained to protect neighboring surface water and aquatic receptors. As such, all applicable requirements of Title 27 need to be properly addressed in the selection of the final remedy at this landfill area. Please revise this document to clearly indicate that the selected remedy will effectively contain contamination, that CTR criteria will be met for all constituents of concern where groundwater discharges to surface water, and that it satisfies all applicable requirements of Title 27.

Specific Comments

- 1) **Page D-3 – Description of the Selected Remedy for Groundwater** – Alternative GW-3 relies of In-Situ Chemical Oxidation (ISCO) to reduced high concentrations of chemicals of concern (COCs), followed by monitored natural attenuation (MNA). While this approach may adequately reduce volatile organic compounds (VOCs) and semi-volatile organic compounds (SVOCs) to remediation goals, it may not adequately address other constituents not amenable to MNA such as metals. Some discussion is needed regarding how those constituents not amenable to MNA will be addressed if ISCO does not reduce concentration to below remediation goals.
- 2) **Page D-5 – Data Certification Checklist – 3th checklist item down** – The description of the selected remedy in the Data Certification Checklist indicates that excavation and off-site disposal of contaminated soil is the selected remedy, whereas the remedies currently described throughout this document indicate that only contaminated soil in Area 1b will be disposed of offsite and source materials will remain in place in Area 1a. Please resolve this discrepancy.
- 3) **Page D-5 – Data Certification Checklist – 4th checklist item down** – The description of how source materials constituting principal threats are addressed is conspicuously missing a discussion of source materials in the disposal area. Please revise this description to include discussion of source materials constituting principal threats in the disposal area.
- 4) **Section 2.1 - Page 2-2 – Second Paragraph, Last Sentence** – This sentence indicates that the 3 storm sewers located within Site 1 were evaluated and determined to be in good condition and recommends no further action. Please include more justification as to why no further action was recommended. Include discussion of any

- sediment sampling, discharge point sampling, or non-stormwater discharge sampling results for these storm sewer lines.
- 5) **Section 2-5 – Page 2-5 – First complete paragraph, first sentence** – This sentence lists the chemicals of concern identified in previous investigations at Site 1, but leaves out VOCs and SVOCs. Please include VOCs and SVOCs in the list of soil contaminants identified in previous investigations at Site 1.
 - 6) **Section 2-5 – Page 2-5 – First complete paragraph** – This paragraph indicates the Navy has recommended no further action for the aboveground storage tanks (ASTs) located within Site 1. Please clearly indicate that while no further action was recommended by the Navy, we have not yet approved these recommendations or sent case closure letters for these tanks.
 - 7) **Table 2-1 – Page 1 of 9 – Second row from bottom** - The 3 ASTs identified in Site 1 are referred to here as 266A, 266B, and 267A, whereas elsewhere in this document they are referred to as 466A, 466B, and 467A. Please correct this discrepancy and ensure these ASTs are referred to correctly throughout the document.
 - 8) **Table 2-1 – Page 2 of 9 – Last row** – The pilot scale demonstration identified at the bottom of this page is incorrectly placed under the Radiological Surveys section of the table. Please move this item to a more appropriate location in this table.
 - 9) **Table 2-1 – Page 9 of 9** – the TtECI 2007 reference for the 2007 time critical removal action (TCRA) is not included in the list of sources. Please include this reference in the list of sources.
 - 10) **Section 6.2 – Page 6-1 – Groundwater Uses** – This paragraph discusses the current uses of groundwater but does not discuss that it also has the beneficial use of providing freshwater replenishment to neighboring surface water, as specified in the Basin Plan. Please include freshwater replenishment as a beneficial use of the groundwater at Site 1. Please also include discussion of how cleanup levels at Site 1 shall be protective of this beneficial use as well as be protective of aquatic organisms where groundwater discharges to surface water.
 - 11) **Section 7.1.2 – Page 7-4 – Exposure Assessment - Bottom Paragraph** – This paragraph indicates that occupational and recreational exposure scenarios were evaluated, but construction worker exposures were not evaluated. With the likely potential for construction of golf course facilities, clubhouses, and perhaps a hotel at Site 1, it seems shortsighted to not consider construction worker exposure at Site 1. Because of the likelihood of future construction worker exposure at this site, we request that this evaluation be conducted to ensure that the risk assessment adequately characterized potential risks associated with this site.
 - 12) **Section 7.1.4 – Page 7-6 – Risk characterization – Third Paragraph** – This paragraph has 2 nearly identical sentences with one stating that the total cancer risk

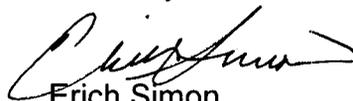
for recreational users is 4.4×10^{-5} and the other stating it is 1×10^{-4} . Please resolve this discrepancy.

- 13) **Section 7.2.1 – Page 7-8 – 1999 Ecological Risk Assessment** – This paragraph suggests that “barges present between the VOC plume and San Francisco Bay were acting as a semiconfining barrier to groundwater flow, thereby causing COECs [chemicals of ecological concern] to accumulate at the VOC plume.” Please clarify what is meant by this statement and clearly indicate whether or not groundwater discharge from Area B to surface water poses ecological risks. This paragraph also indicates that attenuation of COECs before discharge may be occurring in groundwater. While this may be occurring for some constituents as they migrate from the source area towards the shoreline, our position remains that further attenuation between shoreline wells and the groundwater-surface water interface cannot be modeled with any level of confidence. This position has been recently been detailed in comments from us regarding Site 28.²
- 14) **Section 7.2.2 – Page 7-9 – 2006 SLERA – Second Paragraph down** – This paragraph indicates that direct contact and inhalation were not evaluated in the Screening Level Ecological Risk Assessment (SLERA), “because exposure by ingestion was considered to be more likely”. Please include clearer justification for why the SLERA did not evaluate direct contact and inhalation exposure for terrestrial receptors that may be living in the soil and potentially breathing vapors.
- 15) **Table 7-4 – Summary of Site 1 Risks** – This table includes a column for “chemicals used in HHRA Analysis” for each exposure pathway. Some of the boxes in this column for select exposure pathways are empty, while risk values for these exposure pathways are shown. As the information is presented, it seems to indicate that no chemicals were used in the Human Health Risk Assessment (HHRA) analysis for those exposure pathways. Please clarify.
- 16) **Table 8-1 – Remedial Goals for Human Receptors** – The remedial goals for VOCs and SVOCs presented in this Table are based solely on California Toxics Rule (CTR) criteria, according to footnote b. Please also ensure that remedial goals incorporate risk-based levels associated with the vapor intrusion exposure pathway.
- 17) **Section 12.1 – Page 12-3 – Site Wide Radiological Impacted Study – Second paragraph down** – Please clarify that radiologically impacted soil excavated during the TCRA will be disposed of ‘offsite’.
- 18) **Section 12.2.1.1 – Page 12-6 – Institutional Controls** – With source materials remaining in place, the institutional controls should include restriction of any construction or other land disturbing activities over historic disposal areas.

² Water Board. 2007. Comments on the “Draft Record of Decision for Installation Restoration Site 28, Todd Shipyards, Alameda Point, Alameda, California”, June 1.

Please contact me at (510) 622-2355 or email ersimon@waterboards.ca.gov if you have any questions.

Sincerely,



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