

MOFFETT FEDERAL AIRFIELD OU1

**RESPONSE TO COMMENTS
DRAFT RECORD OF DECISION**

JUNE 7,1996

This report provides Navy responses to comments on the Operable Unit 1 (OU1) Draft Record of Decision (ROD) dated March 7, 1996. The comments were provided by the U.S. Environmental Protection Agency (EPA), California Regional Water Quality Control Board (RWQCB), California EPA Department of Toxic Substances Control (DTSC), the Technical, Historical, and Educational (THE) Committee of the Restoration Advisory Board (RAB), the National Aeronautics and Space Administration (NASA), and the City of Sunnyvale. The comments have been incorporated into the Draft Final OU1 ROD as appropriate. The ROD presents the selected remedial action - landfill capping, gas and groundwater collection trenches, monitoring - for Operable Unit 1 (OU1) at Moffett Field in Mountain View, California. The selected remedial alternative addresses landfill refuse, leachate, surrounding groundwater, surface water, and landfill gas at the two landfills in OU1.

EPA GENERAL COMMENTS

Comment 1: The continued operation of the Building 191 pump station is necessary for the successful implementation of the capping alternative selected at OU1's Sites 1 and 2. Without its operation, the northern portion of the base, including the landfills, will flood during rainy seasons. Building 191's pumping operation helps to prevent leachate migration into local groundwater from the unlined landfills by controlling the water table.

Response: *The Navy agrees that continued operation and maintenance (O&M) of the Building 191 pump station (or similar lift station operation) is necessary for successful implementation of the remedy selected for OU1. The Moffett Federal Airfield drain system and pump station operation are also essential aspects of current land use by the National Aeronautics and Space Administration (NASA) as well as all other reasonably foreseeable future land uses. Without continued pump station operation, flooding of the northern portion of the base, including the northern end of the runways and landfills, could occur during the rainy season. Therefore, the pump station operation is taken*

285A

into account as an aspect of current land use and a component of the remedy that must remain operational. The operation of the pump station shall be considered in the design and implementation of the remedy, with appropriate institutional controls implemented by the federal government to assure continued O&M of the pump station and drain system.

Comment 2: The Navy needs to provide justification for using municipal solid waste landfill regulations instead of using hazardous waste landfill regulations in this document (i.e., the amount of hazardous waste in the landfills is small). Although no records exist, Navy interviews with former workers suggested that significant amounts of hazardous waste was disposed of in the landfills (polychlorinated byphenyls [PCBs], solvents, jet fuels etc.). We acknowledge that characterization and monitoring studies have shown only minimal amounts of hazardous waste in Sites 1 and 2 and that municipal solid waste requirements apply. However, because this characterization is in disagreement with the interviews, language in the ROD needs to reflect the characterization and investigation results which support that the amount of hazardous substances in the landfill is de minimis in relation to the non-hazardous solid waste in the landfill. This then justifies the use of municipal solid waste landfill regulations.

Response: The justification for selecting solid waste landfill closure regulations over hazardous waste landfill closure regulations has been added to Section 2.11.2.3 of the ROD.

Comment 3: Assuming the amount of hazardous waste in the landfill is small, in order for State municipal solid waste regulations to be applicable or relevant and appropriate requirements (ARARs), the state regulations must be more stringent than the federal regulation (Resource Conservation and Recovery Act [RCRA] Subtitle D). Thus, further analysis is necessary to determine which provisions of 14 CCR are more stringent than Subtitle D.

Response: The Navy has evaluated the respective landfill closure regulations and has determined that state regulations are more stringent. In addition, the Navy and CIWMB have identified 14 CCR as applicable to OUI (CIWMB 1995).

EPA SPECIFIC COMMENTS

Comment 4: Section 1.0, Page 2, Bullet 7. Please briefly specify the institutional controls to be implemented (i.e. Building 191 O&M, fencing, etc.).

Response: The text has been revised to state that the institutional controls will consist of fencing and O&M of Building 191 or similar lift station. While Moffett Federal Airfield remains federally-owned land, the necessity of continued O&M of the pump station shall be noted in the Master Plan for the government's land uses and, in the event of any future conveyance of the property, shall be addressed by appropriate notices and land use covenants binding on subsequent property owners.

Comment 5: Section 1.0, Page 2, Paragraph 1, Sentence 5. Please describe in brief detail the contingency corrective actions.

Response: The paragraph has been clarified to indicate that, if leachate migrates toward surface water north of Site 1, activation of the groundwater collection trench is the contingency action. If the groundwater monitoring program identifies the need for corrective action along other borders, an Explanation of Significant Differences (ESD), ROD amendment, or other appropriate action will be required under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

Comment 6: Section 1.0, Page 2, Paragraph 2, 4th and 5th Sentences. You indicate that if the groundwater becomes contaminated, there are provisions in the groundwater monitoring program that allow for future corrective actions. This corrective action approach is not consistent with the CERCLA remedy selection process. If the groundwater is or becomes contaminated, a remedy would have to be selected within the framework of CERCLA; in an existing groundwater ROD or a future groundwater ROD. If you intend this ROD to address groundwater contamination, you may consider drafting it as a groundwater contingency ROD, i.e., if contaminant levels exceed a certain level, then the remedy will be to pump and treat. Or you can state that this ROD is a containment ROD and the groundwater will be addressed in a later ROD.

Response: The text has been clarified to state that this ROD includes groundwater monitoring and addresses any groundwater remediation necessary to protect the surface water north of Site 1 (through operation of the groundwater collection trench). If, in the future, the groundwater monitoring program identifies groundwater contamination along other OUI landfill boundaries and requires remediation, an ESD, ROD amendment, or other appropriate action will be taken.

Comment 7: Section 2.4, Page 12. The ROD schedule table needs some update. It should reflect that the OU2-East ROD was signed on December 22, 1994. The Station-Wide ROD is now scheduled to be completed in September, 1997.

Response: The schedule has been updated to reflect July 1997 as the current station-wide ROD due date.

Comment 8: Section 2.4, Page 12, Paragraph 2. The discussion in the second sentence regarding quick identification of parcels for transfer is really not applicable here, since this federal facility has already been transferred to NASA. We suggest that this sentence be edited to delete the last half of the sentence. It should more accurately read: "This strategy, which utilizes the use of no-action RODs, allows resources to be concentrated on the OUs requiring action."

Response: The sentence has been revised as suggested.

Comment 9: Section 2.5, page 12. You state that the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) identifies landfills as areas where treatment may be impracticable. Please provide a citation. You also state that the landfill has not been fully characterized because it is not necessary for containment; however, there are different closure requirements for landfills depending upon whether it is a solid waste landfill or a landfill that has accepted hazardous waste (Subtitle D and Subtitle C, respectively). Please clarify that limited characterization and monitoring have shown only minimal amounts of hazardous waste in Sites 1 and 2 and that is why municipal solid waste requirements apply. Language in the ROD needs to reflect those characterization and investigation results.

Response: *A citation has been added. Sections 2.5.1 and 2.5.2 have been revised to indicate that the limited characterization data indicate that the OUI landfills are not hazardous waste landfills.*

There were other factors in addition to the limited characterization that were considered when ARARs were identified. State and federal hazardous waste landfill closure regulations (Subtitle C and Title 22 CCR) are not applicable since hazardous waste disposal cannot be confirmed at either landfill and the landfills have not attained interim status. Some of the wastes at the OUI landfills may have been hazardous constituents; however, this circumstance is common to all solid waste and CERCLA landfills. Further, low contaminant concentrations in leachate show that a minimal threat from hazardous substances exists at OUI. In addition, documentation received from CIWMB indicates that Site 1 was operated as a solid waste facility. The Navy was issued a Solid Waste Facilities Permit for Site 1 by Santa Clara County Environmental Resources Agency. The permit states that the types of waste received at the site included cardboard, lawn cuttings, prunings, wood waste, and asbestos insulation wrapped in double plastic bags. The permit also states that the disposal of hazardous waste was to be prohibited at the facility. This further supports the assumption that OUI landfills were operated as solid waste landfills and received similar types of wastes (solid waste with small amounts of hazardous waste). Also, visible surface debris includes obvious construction and demolition debris, such as concrete rubble with reinforcing steel, asphalt chunks, wire, wood chips, glass, and mounds of dirt overgrown with weeds (possibly street sweepings), which are similar to solid waste landfill waste. For these reasons, the Navy identified solid waste closure regulations as most appropriate for OUI. CIWMB concurred with these conclusions and the above rationale was added to Section 2.11.2.3.

Comment 10: Section 2.5.1, Page 13, Paragraph 2. You state that the landfill received domestic refuse as well as waste from military operations such as solvents, jet fuels, waste oil, transformer filters, and PCB-contaminated sawdust; yet, you are citing California solid waste landfill regulations which apply to landfills receiving solid waste (Chapter 15, Division 3, Title 23 of the CCR and Chapter 3, Division 7, Title 14 of the CCR). If hazardous wastes are disposed of in landfills, Title 22 would normally be applied rather

than California's solid waste regulations. If you are citing the solid waste landfill regulations because the characterization and monitoring studies show minimal amounts of hazardous waste, then you should say that to support it. Language in the ROD needs to reflect those characterization and investigation results.

Response: The text has been revised as suggested. Please see the response to Comment 9.

Comment 11: Section 2.5.1, Page 13, Paragraph 2. "Information sources" should be clarified (personnel interviews) as it is in the description of Site 2 (page 15, para 4).

Response: The text has been revised as suggested.

Comment 12: Section 2.5.1, Page 14, Paragraph 3. Sentence 2 states "Some chemicals have been detected infrequently...". Please clarify which chemicals were detected infrequently in the monitoring wells.

Response: The text will reference the OUI feasibility study (FS) report (PRC 1995) for this information.

Comment 13: Section 2.5.2, page 15, Paragraph 4. Same as Comment 10. If you are citing the solid waste landfill regulations because the characterization and monitoring studies show minimal amounts of hazardous waste, then you should say that to support it. Language in the ROD needs to reflect those characterization and investigation results.

Response: The text was revised as suggested. Please see the response to Comment 9.

Comment 14: Section 2.5.2, Page 16, Paragraph 13. Again, please clarify which chemicals were infrequently detected in the monitoring wells.

Response: This information is explained in detail in the FS report and the text has been revised to reference the FS report for this information.

Comment 15: Section 2.6.1, Page 16, Paragraph 1. Although the decision to cap a landfill is typically not dependent on risk assessment results, a human health risk assessment was performed at this site, based on its limited characterization. These results should be presented in this ROD.

Response: The risk assessment results were not used in the remedial alternative selection process since a large amount of uncertainty was associated with the results. The uncertainty is due to the high degree of heterogeneity associated with landfill content. It is likely the risk assessment results do not accurately quantify risks associated with OUI. In the past, discussing risk assessment results associated with OUI resulted in confusion regarding the basis for remediation. Therefore, risk assessment results were not discussed in the ROD.

Comment 16: Section 2.7.2.3, Page 23, Paragraph 2. Sentence 2 states "...if a concentration level exceeded its background concentration, evaluation monitoring and possibly corrective action would be implemented." Where are these background concentrations defined? Please provide references.

Response: The text will reference the OUI FS report for background concentrations.

Comment 17: Section 2.7.2.3, Page 25, Paragraph 1. The fact that Building 191 provides hydraulic control in the OU1 areas is a clear indication that the pump station needs to be considered part of the remedy.

Response: Comment acknowledged. Navy concurs. The pumping at the Building 191 lift station is both an essential aspect of current land use and an engineering control considered in the design and implantation of the remedy. A review of the remedy and lift station operation will be conducted periodically to ensure that the remedy continues to provide adequate protection of human health and the environment.

Comment 18: Section 2.7.2.4, Page 25. The text refers to the FS for a list of ARARs. The ROD is a stand-alone document and must include all the necessary information and rationale to support the selected remedy. In this instance, referring back to the RI/FS for identification of ARARs is unacceptable and it is also not wise, since some of the ARARs identified in the FS are no longer considered ARARs in the ROD.

Response: The reference to the FS for ARARs has been deleted. Table 3 of the ROD lists ARARs for this remedy.

Comment 19: Section 2.8, Page 26, Bullet 1. Redraft this section to read: "A comparative analysis of the alternatives against the nine evaluation criteria set fourth in the NCP at Title 40 Code of Federal Regulations (40 CFR) part 300.430(e)(9)(iii) is presented in this section."

Response: The text has been revised as suggested.

Comment 20: Section 2.10, Page 36, Bullet 1. Please indicate the range of permeabilities in the low-permeability layer.

Response: The text has been revised as suggested.

Comment 21: Section 2.10, Page 36, Bullet 5. Please clarify what institutional controls are being incorporated.

Response: The text will be clarified to state that the institutional controls will consist of fencing and O&M of Building 191 or a similar lift station operation. While Moffett Federal Airfield remains federally-owned land, the necessity of continued O&M of the pump station shall be noted in the Master Plan for the government's land uses and, in the event of any future conveyance of the property, shall be addressed by appropriate notices and land use covenants binding on subsequent property owners.

Comment 22: Section 2.10, Page 36, paragraph after the bullets. You indicate that the "selected remedy does not include leachate extraction or active groundwater remediation at this time...". From a ROD standpoint, this is unclear. Is this ROD merely a containment ROD implying that the leachate and groundwater will be addressed in a different ROD? Or is this ROD a contingency ROD that will trigger action if certain levels are exceeded? If this is a contingency ROD, be specific as to what levels will trigger the contingency action (e.g. ambient water quality criteria [AWQC] levels) and what ARARs will be triggered if the corrective action pumping is necessary. You also state that if the groundwater becomes contaminated, there are provisions in the groundwater monitoring program that allow for future corrective actions. This approach, although appropriate in RCRA actions, is not consistent with the remedy selection process under Superfund.

Response: Please see the response to EPA Comment 6.

Comment 23: Section 2.11.2, Page 39. Attachment 1 is copy of sections of a signed ROD that illustrate the necessary level of detail for an ARAR discussion. Although it is a groundwater ROD, it will give you an idea of how to draft this section. As our Regional Counsel has stated in previous comments, you should describe what ARARs are, explain what applicable requirements are and how they differ from relevant and appropriate requirements. In addition, provide a definition for chemical-specific, location-specific, and action-specific ARARs and then provide a breakdown of the laws/regulations that fall into these categories and apply to the remedy.

Response: Information from Attachment 1 will be incorporated into Section 2.11.2 as appropriate.

Comment 24: Table 3, Page 40, 40 CFR part 131. Please include the list of Federal AWQC somewhere in the ROD, possibly as an appendix.

Response: A list has been included as suggested in Appendix A.

Comment 25: Table 3, Page 40, 23 CCR §2500. Please briefly specify the corrective action activities.

Response: The reference to 23 CCR has been deleted as a chemical-specific ARAR for clarity. The chemical-specific ARARs associated with the collection trench at Site 1 are AWQC and basin plan objectives. The chemical-specific ARARs for releases along other borders will be specified when necessary, through a ROD amendment or other appropriate mechanism in accordance with CERCLA. Please see the response to Comment 5.

Comment 26: Table 3, Page 41, Basin Plan. Please identify the beneficial uses of the groundwater. What are the beneficial uses the RWQCB is trying to protect?

Response: The beneficial uses are discussed in the first paragraph.

Comment 27: Table 3, Page 41, Basin Plan. In paragraph 2, it is stated: "There is no evidence that a release has occurred from OU1 landfills." This disagrees with statements on Page 14, Paragraph 3 and Page 16, Paragraph 3. However small, some release has occurred. Please be consistent.

Response: The text has been revised for consistency.

Comment 28: Table 3, Page 42, 40 CFR 264.18(b), 40 CFR 761.75. These two ARARs suggest that the Building 191 pump station is a necessary part of the remedy.

Response: Comment acknowledged. The Navy agrees that continued O&M of the Building 191 pump station (or similar lift station operation) is necessary for successful implementation of the remedy selected for OUI. The Moffett Federal Airfield drain system and pump station operation are also essential for continued airfield operations and other reasonably foreseeable future land uses.

Comment 29: Table 3, Page 42, Executive Order 11990. you state: "Discharge of dredge or fill material into a wetland without a permit is prohibited...". The administrative requirements of the permit may not have to be complied with since the cap (fill) is on site. The NCP states that "requirements that do not in and of themselves define a level or standard of control are considered administrative." Please see 55 Fed. Reg. 8756;53 Fed. Reg. 51433.

Response: The sentence has been deleted to clarify that administrative requirements do not need to be met.

Comment 30: Table 3, Pages 43, 44, Citing 14 CCR and 23 CCR. See comment #3. Although the hazardous waste in the landfills may be minimal enough to be closed in accordance with solid waste landfill regulations, unless there are sections of 14 CCR which have additional requirements or are more stringent, RCRA Subtitle D is the ARAR. Attachment 2 (Mather Air Force Base landfills ROD) was recently signed and shows how this same issue was handled. It states that if specific provisions of the federal and state regulations are the same, then the federal regulation is the ARAR. Please identify if any provisions of RCRA Subtitle D are equally as stringent as 14 CCR.

Response: Title 14 CCR has been identified as more stringent. Please see the response to EPA Comment 3.

Comment 31: Table 3, Page 44, 14 CCR 17787-17796. Please repeat "the reasons discussed above" in this block to avoid any misinterpretation.

Response: The table has been revised to avoid misinterpretation.

Comment 32: Table 3, Page 44, 14 CCR 17782, 23 CCR 2550. Please repeat "the reasons discussed above" in this block to avoid any misinterpretation

Response: The table has been revised to avoid misinterpretation.

Comment 33: Section 2.11.2.2, Page 45. Endangered Species Act. Please provide the citation

Response: The citation has been added as suggested.

Comment 34: Section 2.11.2.2, Page 46, Paragraph 1. Please provide a schedule for the mitigation plan.

Response: A restoration plan has been added to the schedule contained in the remedial design and remedial action (RD/RA) workplan.

Comment 35: Section 2.11.2.2, Page 47, Paragraph 1. Because this is a Superfund site, we do not believe that you have to go through the administrative process of getting the permit; however, the substantive requirements of the permit will still have to be met.

Response: The text has been revised to indicate that administrative requirements do not need to be met.

EPA COMMENTS ON THE RESPONSIVENESS SUMMARY

Comment 36: Comment 7, Page 84. Because Building 191 is necessary as part of the complete remedy for the landfills, its O&M needs should be included in this ROD as well as the station-wide ROD.

Response: The Navy acknowledges that the O&M of Building 191 must be taken into account in the design and implementation of the remedy. Detailed provisions for system O&M are not included in the OUI FS or the ROD because the pump station must be operated and maintained by NASA as part of their current land use. A review of the remedy and lift station operation will be conducted periodically to ensure that the remedy continues to provide adequate protection of human health and the environment.

Comment 37: Comment 9, Page 92. Same as last comment. Because Building 191 is necessary as part of the complete remedy for the landfills, its O&M needs should be included in this ROD, as well as the station-wide ROD.

Response: Pumping at Building 191 will be continued as necessary to provide for long-term effectiveness of the remedy. A review of the remedy and lift station operation will be conducted periodically to ensure that the remedy continues to provide adequate protection of human health and the environment.

Comment 38: Comment 4, Page 96. Same as last comment. Because Building 191 is necessary as part of the complete remedy for the landfills, its O&M needs should be included in this ROD, as well as the station-wide ROD.

Response: The ROD adequately states the necessary performance standards of the remedy. The operation of the pump station (as a man-made hydraulic control) will be accounted for in the closure design. Because the pump station is operated and maintained by NASA as an essential aspect of their current land use, the O&M cost need not be reflected in the cost allocations for the Navy's remedy selection.

Comment 39: Comment 8, Page 98. Same as last comment. Because Building 191 is necessary as part of the complete remedy for the landfills, its O&M needs should be included in this ROD, as well as the station-wide ROD.

Response: Please see the response to Comment 38.

Comment 40: Comment 2, Page 114. Same as last comment. Because Building 191 is necessary as part of the complete remedy for the landfills, its O&M needs should be included in this ROD, as well as the station-wide ROD.

Response: While Moffett Federal Airfield remains federally-owned land, the necessity of continued O&M of the pump station shall be noted in the Master Plan for the government's land uses and, in the event of any future conveyance of the property, shall be addressed by appropriate notices and land use covenants binding on subsequent property owners. While the CERCLA deed covenant and notice requirements would be applicable to any property transfer, any change in land use (either before or in connection with a transfer) would also be subject to an evaluation pursuant to the National Environmental Policy

Act (NEPA), which would require the Government to solicit public comment and evaluate the environmental impacts, including any possible effect on the remedial activities at OUI.

Comment 41: Comment 9, Page 126. The response states: "The collection trench will be activated when AWQC for the protection of aquatic life are exceeded in groundwater in the trench." Will activation of the pump and treat system happen the first occurrence of exceeding AWQC? After two consecutive months or quarters? Please specify the protocol in the ROD text and this response of the Responsiveness Summary.

Response: The monitoring program will be conducted in accordance with 23 CCR, which contains the protocol for evaluating monitoring data and entering the corrective action phase. The ROD references these procedures as applicable.

Comment 42: Comment 4, Page 129. We believe the authors intended this response to state that 14 CCR 17796 be specified for compliance in the OU1 ROD.

Response: The text has been revised as suggested.

Comment 43: Comment 4, Page 143. Because Building 191 is necessary as part of the complete remedy for the landfills, its O&M needs should be included in this ROD, as well as the station-wide ROD.

Response: Flooding of the northern portion of the base, which includes the northern end of the airfield runways and landfills, could occur during the rainy season without continued pump station operation. Therefore, appropriate institutional controls will be implemented by the federal government to assure continued O&M of the pump station and drain system. While Moffett Federal Airfield remains federally-owned land, the necessity of continued O&M of the pump station shall be noted in the Master Plan for the government's land uses and, if still necessary in the event of any conveyance of the property, the required pump station O&M will be addressed by appropriate notices and land use covenants binding on subsequent property owners.

EPA EDITORIAL COMMENTS

Comment 44: Section 1.0, Page 3. The correct spelling of the Executive Officer of the RWQCB is Loretta Barsamian.

Response: The text has been revised.

Comment 45: Page 57. Please correct the tense used in the last two sentences, as the public comment period has passed.

Response: The text has been revised as suggested.

RWQCB GENERAL COMMENTS

Comment 1: Without the completion of the Site-Wide Ecological Assessment (SWEA), what is the basis for the determination that the selected remedy is protective of the environment?

Response: Completion of the SWEA is not necessary. The determination that the remedy is protective of the environment is found in the OUI FS (PRC 1995) and OUI ecological assessment technical memorandum (EATM) (PRC 1994). Section 2.6.2 of the ROD discusses how the remedy protects the environment.

Comment 2: Because of the effect of the pumping operations at Building 191 with respect to future land use and site-wide groundwater flow, how does the Navy propose to address the public and agency concerns regarding the continued operations at Building 191?

Response: The Navy has agreed that the effect of the pumping operations at Building 191 must be taken into account in the design and implementation of the remedy, with appropriate institutional controls implemented by the federal government and regulatory agencies to assure continued O&M of the pump station and drain system as necessary to provide adequate protection of human health and the environment.

Comment 3: Please include a schedule that will address anticipated funding limitations.

Response: The Navy has requested adequate funding in accordance with the requirements set forth in Section 32.1 of the Federal Facilities Agreement (FFA). The Navy does not know the exact amount of funding that will be allocated in the future. The Navy will continue to prioritize work in conjunction with the Base Closure Team (BCT) and RAB.

RWQCB SPECIFIC COMMENTS

Comment 4: Page 3, Statutory Determinations. Please provide supporting text for the evaluation that the selected remedy is protective of the environment.

Response: In accordance with EPA guidance (EPA 1989) on preparing RODs, the "Statutory Determinations" section should only contain confirmatory statements that the selected remedy is protective of human health and the environment. EPA guidance (EPA 1989) states that the "Description of Selected Remedy" section should describe how the remedy is protective of the environment. The OUI ROD contains this description in accordance with guidance.

Comment 5: Page 3, Statutory Determinations. Please correct the spelling of the RWQCB Executive Officer to Loretta K. Barsamian.

Response: The text has been revised as suggested.

Comment 6: Page 20, Section 2.6.2, 2nd Paragraph. Please state how the Navy is planning to respond to the recommendation by the U.S. Fish and Wildlife Service to prepare a wetland mitigation plan. Please incorporate the plan into the ROD and the RD/RA.

Response: The text was revised to state that the Navy will design a restoration plan in which the present wetland acreage as defined by state and federal resource trustees is maintained.

Comment 7: Page 21, Section 2.6.2, 3rd Paragraph. Has a contingency plan been evaluated if the Nationwide Permit is denied?

Response: A mutually acceptable restoration plan is an integral part of this remedy. Therefore, no contingency plan is necessary.

DTSC GENERAL COMMENTS

Comment 1: Please include a statement in the main body of the ROD regarding the need to continue to operate the Building 191 pumping station. Without continuing operation of the pumping station, flooding of Sites 1 and 2 is likely which would cause the need for more extensive remedial work.

Response: The ROD has been revised to include a statement regarding the need to continue to operate the Building 191 pumping station.

Comment 2: In the main body of the document, it should be clearly stated that further groundwater investigation and radiological survey will be conducted and the results be considered in the remedial design documents.

Response: The text has been revised to indicate that further groundwater investigation and radiological surveys will be conducted during the RD phase.

Comment 3: Pursuant to Section 32.1 of the Federal Facility Agreement (FFA), Navy shall seek sufficient funding through the Department of Defense (DoD) budgetary process to fulfill its environmental cleanup obligations at Moffett Field. If appropriated funds are not available to fulfill the Navy's obligation under the FFA, the State reserves the right to initiate an action against the Navy, or to take any action, which would be appropriate absent the agreement.

Response: Comment noted.

DTSC SPECIFIC COMMENTS

Comment 1: Page 2, Description of the Selected Remedy. The closure and postclosure requirements of Title 23 of the California Code of Regulations (CCR), which were listed in the Final OU1 Feasibility Study Report, should be included in the "Description of the Selected Remedy" section.

Response: Title 14 CCR closure and postclosure requirements contain the necessary references to 23 CCR.

Comment 2: Page 2, Description of the Selected Remedy. Please specify the "institution controls" mentioned in this paragraph.

Response: The text has been revised to specify the institutional controls.

Comment 3: Page 11, 5th Paragraph, Section 2.4. Please explain how the response action will seal off Sites 1 and 2 as sources to groundwater contamination. To our understanding, containment actions may only isolate the landfill refuse, minimize disturbances to the landfill surface, and reduce off-site surface contaminant migration into the nearby wetlands.

Response: The text was revised to indicate that low-permeability cap layers will protect groundwater.

Comment 4: Page 12, 1st Paragraph, Section 2.4. Only 19 sites, not 24 sites, were mentioned in Section 2.2. All the Station-wide sites were not discussed in Section 2.2.

Response: Section 2.2 was revised to discuss all 24 sites.

Comment 5: Page 12, 2nd Paragraph, Section 2.4. Please clarify what is the current installation management strategy, since Moffett Federal Airfield (Formerly Naval Air Station Moffett Field) has been transferred to NASA in July 1994. Therefore, the statement of identifying parcels and the no-action ROD does not apply to Moffett Field.

Response: The text was revised as appropriate.

Comment 6: Page 12, 3rd Paragraph, Section 2.5. Please provide a citation of the statement "The NCP contains the expectation that engineering controls...where treatment is impracticable."

Response: A citation was provided as suggested.

Comment 7: Page 15, 2nd Paragraph, Section 2.5.2. Please clarify if a security fence will be built (or has been built) to prevent any illegal dumping as Site 2.

Response: The text was clarified to indicate that a fence exists.

Comment 8: Page 19, 2nd and 3rd Paragraphs, Section 2.6.2. The Department disagrees with the statement that the groundwater off-site migration exposure pathway is incomplete. Additionally, the third paragraph is confusing, please explain why the ecological assessment was streamlined because of the incomplete exposure pathways.

Response: The preceding three paragraphs explain that, based on the remedy chosen and groundwater data, exposure pathways are incomplete.

Comment 9: Page 20, 2nd Paragraph, Section 2.6.2. Please refer to the letter from DTSC dated June 22, 1995. In the attachment, the California Department of Fish and Game (DFG) recommended that a redelineation of wetland resources using Cowardin recognition criteria should be conducted. In addition, the removal of wetlands at the landfill be offset such that no net loss of either wetland acreage or wetland habitat value would result from proposed remedial action.

Response: The text was revised to state that the Navy will design a restoration plan in which the present wetland acreage as defined by state and federal resource trustees is maintained.

DTSC COMMENTS ON RESPONSIVENESS SUMMARY

Comment 1: Page 53, Comment 8. At the end of 30 years of postclosure maintenance, the Navy should demonstrate to the satisfaction of the State of California which includes DTSC and RWQCB.

Response: Comment noted.

Comment 2: Page 56, Comment 22. Please clarify if dioxins will be analyzed in future sampling activities.

Response: The text has been clarified.

TECHNICAL, HISTORICAL, AND EDUCATIONAL COMMITTEE GENERAL COMMENTS

Comment 1: First and foremost, members of the Technical, Historical, and Educational (THE) Committee were very concerned to learn at the April 11, 1996, Restoration Advisory Board (RAB) meeting that funding to permit the required capping of the OU1 landfills

will not be available in the Fiscal Year 1997 (FY 97) budget. It appears from your presentation to the RAB that Moffett Field has received only approximately one-sixth of the Installation Restoration Program (IRP) funding needed for FY 97 to maintain progress toward the Navy's planned resolution of its environmental liabilities at Moffett Field. In light of current congressional funding priorities, members of the THE Committee believe that it may be unrealistic to expect that such a shortfall will be made up. In any event, it appears from your presentation that the Navy will unilaterally postpone capping of the OU1 landfills for purely budgetary reasons, and for an indefinite period.

Response: The Navy has requested sufficient funding to complete Moffett Field restoration activities. The amount of funding will not be determined until Congress passes the FY 97 budget. At the April 11, 1996 RAB meeting, the Navy presented "control numbers" which can be used to prioritize activities at each facility.

Comment 2: The issue of the reliability of the Navy's commitment to clean up Moffett Field has been raised numerous times by the RAB. RAB members understand that funding of the Navy environmental restoration work is different from funding of environmental work by private parties and subject to some constraints not entirely within the Navy's control. Nevertheless, at this early stage of the process, the denial of funding for so basic and uncontroversial a cleanup as landfill capping calls into question not only the Navy's ability and commitment to fulfil the terms of the OU1 ROD, but its commitment to fulfill all of its other obligations at Moffett Field as well. This serious problem must be addressed and the solution described in the ROD, or the credibility and community acceptance of the ROD may be compromised.

Response: The Navy is fully committed to satisfying all of its environmental response obligations at Moffett Field. Funds available in the "Department of Defense Base Closure Account 1990" established by Section 2906 of the Defense Base Closure and Realignment Act of 1990, Public Law 101-510, Section 2901 (November 5, 1990) (1990 Base Closure Act) and allocated by the DoD to the Navy will be the source of funds for the Navy's cleanup of Moffett Field. In the event that those funds should be inadequate in any year to meet the total Navy CERCLA implementation requirements at bases that are closed under the 1990 Base Closure Act, DoD employs and the Navy is required to follow a standardized prioritization process that allocates the available funds in a manner that maximizes the protection of human health or the environment.

Comment 3: A related comment concerns provision for the long-term O&M of the Moffett Field storm drain and subdrain system and the associated pump station at Building 191. The RAB has heard the Navy state on numerous occasions that the Navy's ability to provide for the long-term O&M of this system was problematical, although all parties agree that system operation is key to the success of Moffett Field remedial actions for OU1 and for other OUs. Members of the Committee believe that this issue is so important that it should be specifically addressed in the main body of the ROD and in the ROD executive summary, not just the responsiveness summary. The news that funding for the landfill caps is not available reinforces this opinion. If current funding for the caps is unavailable, how can the community have confidence that the necessary long-term funding for the storm drain and subdrain system will be available?

Response: The Navy regrets the lack of clarity or consistency in previous statements regarding the long-term O&M of the Moffett Field storm drain and subdrain system and associated pump station at Building 191. It is not necessary for the Navy to separately provide for the long-term O&M of the drain system and pump station on the federally-owned land because NASA, another agency of the United States, must operate and maintain the storm drain system for its use of Moffett Field. In the future, if title to the property is transferred by the United States and O&M of the drain system is still necessary for the OUI remedy to be protective of human health and the environment, the required pump station O&M will be addressed by appropriate notices and land use covenants binding on the subsequent property owners.

Comment 4: The main body and Executive Summary of the OU1 ROD should explicitly state that radiological and groundwater characterization at Site 1, the Runway Landfill, is incomplete and that further field studies are planned to remedy this deficiency. The main body of the ROD should also clearly describe the process by which the data from these studies will be published and the steps available to the public to comment on the new data, the interpretation of the new data, and the implications of the new data for the planned remedy at Site 1. This is necessary to properly memorialize the promises made to the public by the Navy and by state and federal regulators concerning the resolution of deficiencies in the Site 1 characterization.

Response: The text has been revised to indicate that further characterization will be conducted during the RD phase.

Comment 5: Members of the THE Committee are very concerned that the draft OU1 ROD conveys the incorrect impression that all material issues concerning OU1 remedy selection have been resolved. This is definitely not the case. For example, one of the most important assumptions underlying the selection and design of the Site 1 remedy, the assumption that the Site 1 landfill has not seriously affected underlying groundwater, remains to be proven. The community was promised that this deficiency would be addressed, and the Navy has produced a work plan to deal with the deficiency. This work plan and provisions to address other deficiencies in OU1 characterization should be explicitly memorialized in the main body of the OU1 ROD so that the ROD properly conveys the fact that the Navy has not completed an adequate characterization of OU1 and has obligations in addition to those now described in the main body of the ROD.

Response: The ROD has been clarified regarding this issue. OU1 has been adequately characterized to support the selected remedy. Additional data will be evaluated to further support the remedial design and to determine whether there are any impacts to groundwater outside the landfill boundaries.

CITY OF SUNNYVALE GENERAL COMMENTS

Comment 1: The subdrain system that is presently being handled by Building 191 shall be continued because it appears to be critical to the cleanup process of the landfills.

Response: Comment acknowledged. The Navy agrees that the effect of the pumping operations at Building 191 must be taken into account in the design and implementation of the remedy, with appropriate institutional controls implemented by the federal government and regulatory agencies to assure continued O&M of the pump station and drain system as necessary to provide adequate protection of human health and the environment.

Comment 2: There remain some gaps in the present data and many unanswered questions, therefore if modifications to existing proposed "treatment/cleanup" methods are required, the Navy must be open. New field work and data may bring about these modifications.

Response: Comment noted.

Comment 3: The budget continues to be an issue in that the level of uncertainty has raised many questions about the Navy's long-term and short-term remediation projects.

Response: Comment noted.

NASA GENERAL COMMENTS

Comment 1: Page 14, Section 2.5.1, Site 1 Characteristics, Sixth Paragraph, First Sentence. Labeling Figure 2 with the locations of the stormwater retention pond and Jagel Slough would be helpful.

Response: The figure has been revised as suggested.

Comment 2: Page 15, Section 2.5.2, Site 2 Characteristics, Fifth Paragraph, First Sentence. Grammatical correction...the history of the landfill was researched...

Response: The text has been revised as suggested.

Comment 3: Page 16, Section 2.5.2, Site 2 Characteristics, Seventh Paragraph. Please include a statement regarding the continued operation of Building 191 pump station, located at the corner of North Perimeter Road and North Patrol Road. Building 191 affects the wetlands and the groundwater in the northern portion of MFA. These areas would flood and groundwater flow direction would be affected if Building 191 were to shut down.

Response: A statement regarding the continued operation of the Building 191 pump station has been included in Section 2.7.2.1.

Comment 4: Page 21, Section 2.7.2.1, Institutional Controls, Third Sentence. Site 2 currently does have a fence surrounding the entire perimeter.

Response: The text has been clarified.

Comment 5: Page 47, Section 2.11.2.2, Executive Order 11990, Protection of Wetlands, 40 CFR 6.302, Third Paragraph. A figure would be helpful in visualizing the location and relationship of the two potential wetlands in the vicinity of Site 1.

Response: The exact location of the wetlands will be identified in RD documents following delineation. Please see the response to DTSC Comment 9.

REFERENCES

- California Integrated Waste Management Board (CIWMB). 1995. Letter from Diane Nordstrom to Joseph Chou (DTSC) regarding applicable or relevant and appropriate requirements (ARARs) for OU1. February 18.
- PRC Environmental Management, Inc. (PRC) 1994. OU1 Ecological Assessment Technical Memorandum (EATM). Naval Air Station, Moffett Field, California. June 1994.
- PRC 1995. OU1 Final Feasibility Study. Moffett Federal Airfield, California. May 1995.
- U.S. Environmental Protection Agency (EPA) 1989. Guidance on Preparing Superfund Decision Documents, EPA/540/G-89/007, OSWER Directive 9355.3-02. July 1989.