

MOFFETT FEDERAL AIRFIELD

RESPONSE TO COMMENTS ON FINAL OPERABLE UNIT 1 RECORD OF DECISION

AUGUST 1, 1997

This report presents point-by-point responses to regulatory agency comments on the final Operable Unit 1 (OU1) Record of Decision (ROD) submitted June 9, 1997 by PRC Environmental Management, Inc. (PRC) for Moffett Federal Airfield (MFA), California. Mr. Michael Gill of the U.S. Environmental Protection Agency (EPA) submitted comments in a letter dated June 24, 1997. Mr. Joseph Chou of the California Environmental Protection Agency (Cal/EPA), Department of Toxic Substances Control (DTSC) provided comments in a letter dated July 7, 1997. Mr. Chou's letter incorporated comments from Mr. Michael Rochette, Regional Water Quality Control Board, (RWQCB) San Francisco Bay Region and Mr. Glenn Young, California Integrated Waste Management Board (IWMB). The following responses also reflect changes made to address additional verbal comments received from EPA legal staff during the final ROD signing process.

EPA GENERAL COMMENTS

Comment 1. Institutional Controls. EPA believes that the responses to EPA comments 3, 6, 8, 13, 17 and 19 adequately address implementation of institutional controls. Specifically, the ROD does address how the Navy will assure that the National Aeronautics and Space Administration (NASA), as the present property owner and a non-party to the federal facilities agreement (FFA), will implement institutional controls particularly if NASA were to transfer the site to a non-federal party. In our conference call of June 19, 1997, the parties agreed that implementation of institutional controls in the selected remedy would be adequately addressed by adding language to the ROD which indicates that the Navy will enter into an unspecified kind of agreement with NASA to ensure long-term compliance with such institutional controls whether the site remains in NASA's control or is transferred to a non-federal entity. (We believe some assurance regarding transfer to another federal agency should also be included.) The ROD will state that the Navy and NASA will finalize such an agreement within 1 year of the date of the ROD signature. While the Navy and NASA may select the form of such an agreement, we strongly recommend that the agreement address the points discussed in comment 19 of our April 18, 1997 letter. An example of how these matters were addressed may be seen in the Marine Corps Base Barstow ROD. The agreement should also be shared with the Base Closure Team.

Response: The ROD has been expanded to include the following statements: "The Navy will resolve any issues with NASA regarding the process to develop appropriate restrictive provisions to ensure continued operation and maintenance (O&M) of the Building 191 pump station and to maintain the integrity of the Site 1 cap. The Navy will enter into an agreement with NASA or develop another appropriate vehicle to accomplish this task. The Navy will resolve any issues concerning the necessary restrictive provisions within 1 year of the date of this ROD."

Comment 2. Nationwide Permit (NWP) 38. EPA requested that the Navy restore the deleted text on pages 27 and 67 which previously stated that "the substantive requirements of NWP 38 will be met as part of the remedial design." In the conference call of June 19, 1997, the parties agreed that the ROD will state that the substantive requirements of NWP 38 are an applicable or relevant and appropriate requirement (ARAR) and that the remedial project managers (RPMs) will determine whether the selected remedy will meet all substantive requirements, with the exception of mitigation; analysis of compliance with the mitigation requirement will be deferred until the stationwide ROD, which will address all remaining Moffett wetlands matters.

In addition, when complying with the substantive requirements of NWP 38, as a matter of course, the Navy should follow the applicable general conditions as outlined in Nationwide Permit conditions (33 Code of Federal Regulations [CFR] Part 330, dated February 11, 1997). A copy of these conditions is attached to this letter for your reference.

Response: The deleted text was restored and text was added to state that analysis of mitigation requirements will be addressed in the stationwide ROD.

DTSC GENERAL COMMENT

Comment 1. One of the agreements made in the June 19, 1997 meeting as that Title 23, California Code of Regulations (CCR), Chapter 15, Article 5 will be included as an ARAR for groundwater monitoring at Sites 1 and 2. Pursuant to Title 23 CCR, Chapter 15, Article 5, Section 2550.4, the Navy shall derive and propose concentration limits for each constituent of concern. The concentration limit may be lower than but shall not exceed federal ambient water quality criteria (AWQC) or Regional Water Quality Control Board (RWQCB) Basin Plan water quality objectives. This text was developed with the concurrence of RWQCB and EPA.

Response: The Navy has agreed to follow Title 23, Chapter 15, Article 5 regulations for groundwater monitoring at Sites 1 and 2. The Navy and the regulatory agencies discussed the language to be included in the ROD during the July 9, 1997 RPM meeting. The Navy and the agencies agreed to the following statement: "If chemical concentrations exceeding concentration limits set pursuant to 23 CCR, Chapter 15, Article 5 are observed, the Navy will immediately notify the regulatory agencies and will evaluate the groundwater contamination in accordance with CERCLA, and will obtain concurrence from EPA and the State on remediation decisions."

DTSC SPECIFIC COMMENTS

Comment 1. Page 2, Paragraph 1, Section 1.0. As it was mentioned in our previous comment, the designating of the Site 1 landfill as a corrective action management unit (CAMU) should be in accordance with Section 66264.552, not only Section 66264.552(c).

Response: The complete state regulation citation has been added to the text.

Comment 2. Page 5; Signatory Block. Please correct the DTSC signatory block to read:

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Chief
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California Department of Toxic Substances Control

Response: The text has been changed as requested.

Comment 3. Page 70, Paragraph 2; Section 2.11.2.3. The groundwater monitoring requirements in Title 23 CCR, Chapter 15, Article 5 should be included as ARARs for both Sites 1 and 2. After closure of a waste management unit, a minimum of 3 consecutive years of groundwater monitoring is required by Title 23 CCR Section 2550.0(d).

Response: The text has been modified to state that groundwater monitoring requirements in 23 CCR, Chapter 15, Article 5 are applicable to Sites 1 and 2.

Response to Comments

Comment 4. Page 15, Comment 5. The 22 CCR, Chapter 11, Articles 4 and 5 regulations are applicable to the containerized mobile or liquid hazardous wastes that may be encountered during the OU1 excavation and consolidation activities. Those hazardous wastes should be shipped to an offsite permitted facility for proper treatment and/or disposal and are subject to the land disposal restrictions (LDRs), 22 CCR, Chapter 18, Sections 66268.1 to 66268.9, 66268.30, 66268.32, and 66268.40 to 66268.50.

Response: Title 22 CCR Sections 66261.30, 66261.100, and 66261.101 have been added to the ARARs listed in Table 1 of the ROD to address 22 CCR Chapter 11, Articles 4 and 5. The sections of 22 CCR Chapter 18 listed in the comment have also been added to Table 1.

RWQCB GENERAL COMMENTS

Comment 1. Revise Section 1, Description of the Selected Remedy components 1, 2, 3, 4, and 5 to state "in accordance with pertinent provisions of 23 CCR, Chapter 15." It is acceptable if the Navy revises the text without specifying each applicable section.

Response: The text has been modified as requested.

Comment 2. The Navy's response to RWQCB's general comment 8 is unclear. RWQCB proposes that the Navy delete the sentence "Post-excavation ... been removed." and revise the paragraph with "The Navy plans to remove all waste materials to the fullest extent technically and economically feasible. Prior to backfilling the excavation, the Navy will collect and analyze confirmatory horizontal and vertical soil samples after all waste identified by visual screening has been removed. The Navy will consult with the regulatory agencies to select the number and locations of these confirmatory samples. The Navy will consult with the agencies to determine the final limits of the excavation based on these sample results."

If the Navy elects not to confirm the complete removal of waste materials prior to backfilling, additional post-excavation samples will be required. This may delay closure because long-term groundwater monitoring, significantly greater than 3 years, may be required.

Response: The text has been modified as requested. The Navy acknowledges that less than complete removal of waste materials may result in additional postclosure groundwater monitoring.

Comment 3. Revise discussions on groundwater monitoring at Sites 1 and 2 to state that "Pursuant to Title 23 CCR, Chapter 15, Article 5, Section 2550.1, the Navy shall prepare and institute a detection monitoring program to determine if statistically significant evidence of a release from the waste management unit exists. The Navy shall also prepare an evaluation monitoring program to assess the nature and extent of a release and to design a corrective action program. If corrective action is required, the Navy shall amend the ROD or prepare an explanation of significant differences (ESD), as appropriate, for the collection, treatment, and discharge of leachate. As part of the detection monitoring program, the Navy will derive and propose concentration limits for each constituent of concern pursuant to Title 23 CCR, Chapter 15, Article 5, Section 2550.4. Verified detections above these concentration limits trigger the evaluation monitoring program which, in turn, could trigger a corrective action program to remediate releases and achieve compliance. (This could be a lengthy process.)

Response: The text has been modified to include the following statement: "Pursuant to 23 CCR, Chapter 15, Article 5, Section 2550.4, the Navy will derive and propose concentration limits for each constituent of concern. Federal AWQC and RWQCB Basin Plan water quality objectives will be considered in deriving the concentration limits."

Comment 4. Since the leachate collection trench is designed to quickly intercept potential leachate migration before it reaches surface water, the Navy will activate the trench during the detection monitoring program upon any verified detection above:

- RWQCB Basin Plan Water Quality Objectives
- Federal Ambient Water Quality Criteria

Response: The Navy has agreed to follow Title 23, Chapter 15, Article 5 regulations for groundwater monitoring at Sites 1 and 2. The Navy and the regulatory agencies discussed the language to be included in the ROD during the July 9, 1997 RPM meeting. The Navy and the agencies agreed to the following statement: "If chemical concentrations exceeding concentration limits set pursuant to 23 CCR, Chapter 15, Article 5 are observed, the Navy will immediately notify the regulatory agencies and will evaluate the groundwater contamination in accordance with CERCLA, and will obtain concurrence from EPA and the State on remediation decisions."

Comment 5. If the Navy is considering proposing concentration limits greater than background concentrations pursuant to Title 23 CCR, Chapter 15, Article 5, Section 2550.4(a)(3), the San Francisco Bay Basin Water Quality Control Plan (Basin Plan), June 1995 water

quality objectives and beneficial use designations shall be included as ARARs. The Basin Plan's beneficial use designations are necessary for determining the current and potential future uses of groundwater and surface water pursuant to Chapter 15, Article 5. Sections 2550.4(d)(1)(E) and 2550.4(d)(2)(F) and water quality objectives are necessary for determination of the existing quality of groundwater and surface water pursuant to Sections 2550.4(d)(1)(F) and 2550.4(d)(2)(G).

Response: The ARARs listed in Table 1 of the ROD have been expanded to include Sections 2 (beneficial uses) and 3 (water quality objectives) of the San Francisco Bay Basin Plan.

Comment 6. Include the following additions to the ARAR table:

- RWQCB San Francisco Bay Basin Plan, Water Quality Objectives and Beneficial Use Designations for setting water quality protection standards, and implementation plan for wetlands
- Water Code Section 13142.5 and the Governor's Executive Order W-59-93 as to be considered (TBC) criteria
- 23 CCR, Chapter 15, Article 5, Section 2550.9
- 23 CCR, Chapter 15, Article 5, Section 2550.7(c)(2) for general monitoring requirements
- 23 CCR 2580(b) and 2581(c)(3) for postclosure requirements
- 23 CCR, Section 2547(a) for seismic design

Response: The ARARs listed in Table 1 of the ROD have been expanded to include Sections 2 (beneficial uses), 3 (water quality objectives), and 4 (implementation plan) of the San Francisco Bay Basin Plan. Water Code Section 13142.5 and the Governor's Executive Order W-59-93 have been added as TBC criteria. Table 1 also has been expanded to include 23 CCR 2547(a) and 2550.9. However, 23 CCR 2550.7(c)(2), 2580(b), and 2581(c)(3) were not added because these sections require a California registered geologist or professional engineer to approve the preparation of various closure and postclosure documents. The Navy does not consider regulations requiring registered professionals to be ARARs. A statement has been added to the ROD stating that qualified professionals will be used to conduct the work required by the ROD (see Section 1.0).

RWQCB SPECIFIC COMMENTS

Comment 1. Page 2, Section 1, Items 1, 2, and 7. See general comment 1.

Response: The text has been modified as requested.

Comment 2. Page 2, Section 1, Item 3. See general comment 3.

Response: Please see the response to RWQCB general comment 3.

Comment 3. Page 2, Section 1, Item 4. See general comment 4.

Response: Please see the response to RWQCB general comment 4.

Comment 4. Page 3, Section 1.0, Paragraph 2. See general comment 4.

Response: Please refer to the response to RWQCB general comment 4.

Comment 5. Page 3, Section 1.0, Paragraph 3. Leave in original form. See general comment 4.

Response: Please refer to the response to RWQCB general comment 4.

Comment 6. Page 26, Section 2.6.2, Paragraph 5. Leave in original form and include text detailing the agreement between the Navy and agencies that wetland mitigation of Site 1 will be determined as part of the stationwide ROD.

Response: The deleted text was restored and text was added to state that analysis of mitigation requirements will be addressed in the stationwide ROD.

Comment 7. Page 29, Section 2.7.1.2.3. Revise section to state “ ... as applicable for Sites 1 and 2” to be consistent with comment 3.

Response: The text has been modified as requested.

Comment 8. Page 31, Section 2.7.1.2.3, Paragraph. Revise section to be consistent with comment 3.

Response: Please see the response to RWQCB general comment 3.

Comment 9. Page 36, Figure 6. Revise the figure to reflect the final cap design.

Response: Figure 6 presents the conceptual model for alternative 3 of the OUI feasibility study. The analysis of alternatives in the feasibility study is based on this conceptual cap configuration and changing the figure would create inconsistencies with the text in Section 2.7.1.3 of the ROD as well as with the OUI feasibility study. Consequently, Figure 6 was not revised. However, Figure 7, which presents the revised cap configuration, was revised.

Comment 10. Page 36, Section 2.7.2, Paragraph 2. See general comment 2.

Response: The text has been modified as requested.

Comment 11. Page 37, Section 2.7.2, Paragraph 1. Revise text to reflect agreement on Chapter 15, Article 2 as an ARAR for Site 2.

Response: The text has been modified as requested.

Comment 12. Page 37, Section 2.7.2, Paragraph 2. Revise text to state that groundwater must not contain substances exceeding federal AWQC for freshwater aquatic life or RWQCB water quality objectives for surface waters with salinities less than 5 parts per thousand

(ppt). Also water generated during dewatering activities at Site 2 will be used for dust control only at Site 1 within a bermed area 10 feet interior of the foot print of the landfill cap and that occupational health and safety requirements must also be met.

Response: The text has been modified as requested.

Comment 13. Page 52, Figure 7. Revise text to reflect final cap design.

Response: Figure 7 has been revised to reflect the final cap design.

Comment 14. Page 54, Section 2.10, Paragraph 3. Revise text to reflect general comment 3.

Response: Please see the response to RWQCB general comment 3.

Comment 15. Page 58, Section 2.11.2.1, Paragraph 3. Revise section to reflect general comment 3.

Response: Please see the response to RWQCB general comment 3.

Comment 16. Page 58, Section 2.11.2.1, Paragraph 3. Revise section to reflect general comments 3 and 4.

Response: Please see the responses to RWQCB general comments 3 and 4.

Comment 17. Page 67, Section 2.11.2.2, Paragraph 5. Revise to reflect agreement between the Navy and agencies that wetland mitigation of Site 1 will be determined as part of the stationwide ROD.

Response The text has been modified as requested.

Comment 18. Page 68, Section 2.11.2.3. Revise section to reflect the applicability of Chapter 15, Article 2.

Response: The text has been modified as requested.

Comment 19. Page 69, Section 2.11.2, Paragraph 1. Provide information detailing the statement that soils currently stockpiled at the bioremediation pad will be used as fill. (Additionally, if material is to be used from the light rail project, it should be identified.)

Response: The text has been modified as requested.

Comment 20. Page 70, Section 2.11.2.3, Paragraph 4. See comment 3.

Response: Please see the response to RWQCB general comment 3.

Comment 21. Page 72, Section. 2.11.2.4, Paragraph 1. Provide information detailing the statement that soils currently stockpiled at the bioremediation pad will be used as fill. (Additionally, if material is to be used from the light rail project, it should be identified.)

Response: The text has been modified as requested.

Comment 22. Page 76, Figure 8. Identify delineated wetlands.

Response: Figure 8 has been modified accordingly.

IWMB COMMENTS

Comment 1. In order to ensure that standard design and construction practices are adhered to for implementation of environmental containment and control systems (final cover, drainage, erosion, slope protection, landfill gas, groundwater, etc.), specific qualifications for individuals responsible for design and construction aspects of closure are required by state regulations (both Title 14 and Title 23). These are statutory requirements under state law and therefore are ARARs per IWMB regulations regarding landfill closure. IWMB therefore advises that Sections 17773(a), 17774(b), 17777(c), 17778(b), and 17779(b) remain as ARARs in the final record of decision. The design of the final cover system (17773(a)) and preparation of the construction quality assurance plan for the final cover (17774(b)) are to be performed by a registered civil engineer or certified engineering geologist. Any supporting analysis for the final cover design or drainage control systems, i.e. slope and foundation stability analysis (17777(c)), or drainage design analysis (17778(b)), are to be prepared by a registered civil engineer. Any slope protection or erosion control procedures to be implemented for final closure are to be prepared by a registered civil engineer or certified engineering geologist. All operating and closing landfills in California are subject to the same closure standards.

Response: These regulations were not added as ARARs because these sections require a California registered geologist or professional engineer to approve the preparation of various closure and postclosure documents. The Navy does not consider regulations requiring registered professionals to be ARARs. A statement has been added to the ROD stating that qualified professionals will be used to conduct the work required by the ROD (see Section 1.0 of the ROD).

Comment 2. IWMB advises that Section 17783(a)(1) (control trigger of 1.25 percent methane gas structures) and 17783.7 (structure monitoring) be included in the final ROD as ARARs, even though they are not applicable to current site conditions. If structures are constructed within 1,000 feet of Site 1 during the postclosure period, Section 17783(a)(1) is the applicable state regulation for establishing the requirement for landfill gas control at Site 1 during the postclosure period. The gas control requirement (Section 17783.15) is applicable should gas monitoring at the property boundary or perimeter wells show levels of methane in excess of 5 percent. The Navy will implement any controls, i.e. active or passive gas control, necessary to prevent gas from migrating away from the landfill. The gas control requirement (Section 17783.15) addresses public health and safety issues associated with subsurface migration of landfill gas and is independent of clean air rules or NSPS requirements for solid waste landfills.

Response: The Navy disagrees that the gas monitoring requirements in 14 CCR 17783 should be listed as ARARs. There are no structures on site and no reason to expect that structures will ever be constructed given the prohibition against cap disturbances and runway airlight restrictions. If future land uses at Site 1 change, a re-evaluation of the remedy and the ARARs may be necessary and gas monitoring requirements may be applicable or relevant and appropriate at that time. As stated in the response to IWMB comment 3, the Navy will coordinate with NASA to notify IWMB and the local enforcement agency in the event of property transfer or land use change at Site 1.

Comment 3. IWMB staff advise that Section 17796(b), postclosure land use, remain as an ARAR in addition to federal ARARs regarding land-use restrictions, i.e. Section 120(h)(3) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) (EPA comment 19). IWMB staff have experience with postclosure land-use applications throughout California and can provide regulatory direction for engineering and environmental issues associated with landfill land uses. Several residential and commercial developments of landfills have had significant negative impacts on public health and safety and property, e.g. South Hampton Development in Benecia, 14th Avenue Landfill in Sacramento, Duck Pond Landfill in San Diego, etc. Other commercial developments such as Modesto Airport, Shoreline Amphitheater in Mountain View, and the Sheraton Hotel in the City of Industry have had problems with gas migration and differential settlement. This issue may be resolved by including IWMB and the local enforcement agency (LEA) as agencies to be notified in any land use transfer actions or land-use change actions for Site 1.

Response: Section 17796(b) requires only notification and consultation. This section does not provide a standard of control or cleanup and, therefore, does not meet the criteria specified for an ARAR. However, the Navy has modified Section 2.7.1.2.1 of the ROD (Institutional Controls) to include the following: "The Navy will coordinate with NASA, as the federal property holding agency, to notify IWMB and the local enforcement agency in the event of property transfer or land use change at Site 1 so that issues related to postclosure land use at Site 1 are managed appropriately."