

**RESPONSE TO AGENCY COMMENTS ON
DRAFT OPERABLE UNIT 2 - WEST (BUILDING 88)
PROJECT SUMMARY REPORT**

OCTOBER 9, 1995

This report presents point-by-point responses to comments from the U.S. Environmental Protection Agency (EPA) and the California Environmental Protection Agency Department of Toxic Substances Control (DTSC) on the May 16, 1995 Draft Operable Unit 2 - West (Building 88) Project Summary Report prepared by PRC Environmental Management, Inc. (PRC) for Moffett Federal Airfield (MFA), California. Mr. Michael Gill (EPA) submitted comments in a letter dated July 19, 1995, and Mr. Joseph Chou (DTSC) submitted comments in a letter dated June 17, 1995.

EPA COMMENTS

Comment 1: Section 1.0, Page 1, Paragraph 2, Sentence 5. This sentence should be rewritten to read: "The U.S. Environmental Protection Agency (EPA) determined that the Navy is responsible for remediating the western portion of MFA utilizing requirements in the Middlefield-Ellis-Whisman (MEW) Record of Decision (ROD) since this ROD covers all aquifer zones affected by the MEW regional volatile organic compound (VOC) groundwater plume."

Response: The referenced sentence will be rewritten as suggested.

Comment 2: Section 2.4, Page 11, Paragraph 2, Last Sentence. The sentence states "...additional samples were collected from the excavations.." Where were the additional samples collected (the bottom of the excavation, the sidewalls, etc.)?

Response: The additional samples were collected from the excavation sidewalls; the referenced sentence will be revised for clarification. Additionally, three excavation bottom samples were collected (discussed in Section 3.3) to provide additional characterization information for the saturated zone soils. The bottom samples were not considered confirmation samples since the saturated zone was not included in the scope of this action.

Comment 3: Section 2.5, Page 11, Paragraph 1, Last Sentence. "At the end of the aeration period, samples were collected to verify contaminant reduction". It is believed that these analysis results are the ones presented in Chapter 3. If this is the case, please indicate this in the text.

Response: The referenced sentence refers to samples collected from the treated soils. A reference to Section 3.3 will be included for clarification.

Comment 4: Section 2.5, Page 11, Paragraph 2, Last Sentence. "With City of Sunnyvale approval...". Please provide a reference of this approval.

Response: The National Aeronautics and Space Administration coordinated discharge of the water from the treatment pad. The text will be revised for clarification.

Comment 5: Section 3.1.2, Page 15, Paragraph 1, Last Sentence. "Only one detection, 34 milligrams per kilogram (mg/kg), of oil and grease was observed (sample EX68-1)". These units disagree with those in Table 3.

Response: Units for total petroleum hydrocarbons (TPH) and oil and grease were mislabeled in Table 3. The table will be revised.

Comment 6: Section 3.1.2, Page 15, Paragraph 5. The results from the samples collected at Tank 68 are not always below VOC and petroleum cleanup levels. The groundwater samples presented in Table 3 indicate VOC groundwater samples greater than maximum contaminant levels (MCLs), which are the MEW ROD cleanup levels. For example, trichloroethene (TCE) and tetrachloroethene (PCE) from well GW68-1 are listed at 170 parts per billion (ppb) and 200 ppb, respectively, and the cleanup levels for both constituents are 5 ppb (MCLs). Please clarify that the "no further action required" statement applies to soil and not groundwater. The levels indicated in Table 3 show that future action is required for remediating groundwater.

Response: For clarification, sample GW68-1 was a groundwater sample collected from water in the bottom of the Tank 68 excavation. It is agreed that concentrations for TCE and PCE exceed MCLs for this sample. However, the source of the contamination does not appear to be Tank 68. Concentrations of these chemicals measured in sidewall soil samples from the Tank 68 excavation were considerably lower than the soil

cleanup level (500 micrograms per kilogram [$\mu\text{g}/\text{kg}$]), a level based on preventing effects to water quality. Additionally, soil samples collected during the remedial action indicated that PCE contamination at Building 88 most likely originated from spills and leaks around floor drains, which may have migrated to the underlying groundwater. TCE concentrations in sample GW68-1 are similar to upgradient concentrations from the MEW VOC groundwater plume. The text in Section 3.3 and Section 4.0 states that recommendations for no action are specifically for the unsaturated soils around Building 88.

Comment 7: Section 3.3, Page 17, Paragraph 1. In the second sentence, it is stated that the source control measure is "a separate action implemented to address PCE groundwater contamination from Building 88." Because other constituents besides PCE have been detected in soil samples and the possibility that this soil contamination may have contributed to groundwater contamination, it would be more accurate to strike the reference to "PCE" and replace this statement with the following: "a separate action implemented to address groundwater contamination from Building 88."

Response: The paragraph will be revised as suggested.

Comment 8: Section 3.4, Page 18, Paragraph 1. The last two sentences of this paragraph describe how samples were collected. Please reference the methods used for this collection.

Response: Standard operating procedure (SOP) 005 in the OU2-West Remedial Action Field Work Plan (PRC 1994) contains the soil sample collection methods. This reference will be added to the text for clarification.

Comment 9: Section 4.0, Page 19. Please include a schedule for the upcoming closure report.

Response: Currently, the schedule for submittal of the closure report has not been established. The referenced report will contain closure information for numerous other tanks and sumps as well, and the Navy is still deciding on the scope of the report. A schedule will be provided at the earliest opportunity.

DTSC COMMENTS

Comment 1: In the OU2-West 100-percent Design Report, the Navy has assured that "only one of these OU2 sites (Site 18, near Building 88) requires remediation based on elevated concentrations of TCE and PCE. Therefore, the remedial action will be implemented at OU2-West for Building 88 and surrounding unsaturated soils." However, according to National Aeronautics and Space Administration's (NASA's) recent field work, more TCE contaminated soils were found and excavated at the north of Site 8 (Navy storage yard) which is also part of OU2-West investigation area. Therefore, the subject report can be only considered as the project summary report for Building 88, not for the entire OU2-West. The Navy should reevaluate any other potential soil contamination sources in OU2-West, which should include the areas that petroleum products commingled with other Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) substances.

Response: The Navy agrees that the subject report covers only Site 18 (Building 88) and not Site 8. The first paragraph in Section 1.0 will be modified for clarification. Additional actions in the OU2-West area are being conducted independently of this summary report and are subject to the appropriate regulations.

Comment 2: Please note that the petroleum cleanup levels at MFA were negotiated between DTSC, Regional Water Quality Control Board (RWQCB), and the Navy. In DTSC's letter dated July 6, 1994, it was clearly stated that the soil cleanup level must be based upon the fuel constituents of concern and are intended to be protective to water quality. Cleanup levels based on total petroleum hydrocarbons (TPH) are not acceptable to DTSC. In the same letter, DTSC also addressed "Since benzo(a)pyrene has not been detected in other petroleum sites, the DTSC agreed with the Navy not to include polynuclear aromatic hydrocarbons (PAHs) in the current MFA petroleum sites soil cleanup goals. The decision is based on the site specific information provided by the Navy, and is not contradictory with DTSC's policy of setting risk-based individual constituent cleanup goals. This management decision shall not be applied to other federal facilities. In addition, should PAHs be found through future confirmation analysis, the Navy will cleanup the contaminated soils at the petroleum sites of MFA to EPA PRGs accordingly."

Response: Comment noted.

Comment 3: It is addressed that the cleanup levels for PAHs in soils coincide with EPA Region 9 preliminary remediation goals (PRGs). However, the detection limits in this report are much higher than the PRGs (EPA 1995) and it will prohibit the positive identification of PAHs.

Response: The Building 88 remedial action was undertaken to remediate soils contaminated with VOCs from former operations at the building, and therefore, VOCs were the focus of the action. TPH and semivolatile organic compound (SVOC) analyses (and thereby PAH analysis) were included for closure information for the removal of Tank 68 and Sump 91 at Building 88. The highest detection of TPH (from which PAHs primarily originate) was 18 mg/kg TPH extractable. It is unlikely that significant PAH detections could result from such a low TPH concentration at this site. As an example, the concentration of benzo(a)pyrene in a sample containing 18 mg/kg TPH diesel would be 0.0013 µg/kg based on a benzo(a)pyrene weight percent of 0.07 µg/kg (LUFT 1989).

Comment 4: The Navy needs to explain how the total organic carbon (TOC) are sampled and analyzed in this report.

Response: The report inaccurately used the term TOC to describe the analysis required by the Bay Area Air Quality Management District (BAAQMD) for evaluating uncontrolled aeration. The term should be organic content as measured by EPA method 8010 or equivalent. For this evaluation, the detections of organic compounds are summed and compared to the BAAQMD standards; results less than 50 mg/kg are exempt from BAAQMD regulation. The proper analytical methods were used and results were below the BAAQMD level. This explanation will be added to the report for clarification.

REFERENCES

State of California Leaking Underground Fuel Tank Task Force (LUFT). 1989. LUFT Field Manual: Guidelines for Site Assessment, Cleanup, and Underground Storage Tank Closure. California. October.

PRC Environmental Management, Inc. (PRC). 1994. Operable Unit 2-West Remedial Action Field Work Plan. Naval Air Station Moffett Field, California. May.