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Ser 1831.3DW/L6029  
10 NOV 1995

From: Commanding Officer, Engineering Field Activity, West, Naval Facilities  
Engineering Command  
To: Distribution

Subj: FINAL REMOVAL ACTION IMPLEMENTATION REPORT  
INTERMEDIATE MAINTENANCE FACILITY (IMF) SITE  
(INSTALLATION RESTORATION SITE 13) NAVAL AIR STATION (NAS),  
ALAMEDA, CALIFORNIA

Encl: (1) Amendment to the Draft Removal Action Report for the IMF Site

1. Enclosure (1) is the amendment to the Draft Removal Action Implementation Report for the IMF Site at NAS Alameda. The draft report was dated 10 August 1995 and was previously sent to you. Because the corrections to the draft report are minor, a complete final report is not to be issued. This amendment makes the draft report final.

The amendment includes the following modifications:

- Cover page: corrections to the contract number and the addition of the word "FINAL" to the report title.
- Page ii: removed reference to Figure 7.
- Page iv: corrected the number of acres encompassed by the IMF site from approximately 8.5 acres to about 5 acres (see paragraph 3).
- Page 23- References: corrected typographic error in the second citation.
- Figure 7: removed figure because the content was redundant of other figures.

3. If you have any questions regarding this matter, I can be reached at (415) 244-2526, Code 1831.3, FAX (415) 244-2654.

Original signed by:

DENNIS WONG  
By direction of  
the Commanding Officer

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**INTERMEDIATE MAINTENANCE FACILITY SITE  
NON-TIME-CRITICAL REMOVAL ACTION  
REMOVAL ACTION IMPLEMENTATION REPORT  
AMENDMENT**

**COMPREHENSIVE LONG-TERM ENVIRONMENTAL ACTION NAVY (CLEAN)  
Northern and Central California, Nevada, and Utah  
Contract Number N62474-88-D-5086  
Contract Task Order 0137**

**Prepared For**

**DEPARTMENT OF THE NAVY  
Dennis Wong, Remedial Project Manager  
Engineering Field Activity West  
Naval Facilities Engineering Command  
San Bruno, California**

**INTERMEDIATE MAINTENANCE FACILITY SITE  
NON-TIME-CRITICAL REMOVAL ACTION  
REMOVAL ACTION IMPLEMENTATION REPORT  
FINAL**

**November 10, 1995**

**Prepared By**

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## EXECUTIVE SUMMARY OF REMOVAL ACTION

### NAVAL AIR STATION ALAMEDA Alameda, Alameda County, California 94501

Response Authority: None (following CERCLA guidance)  
Site Status: Non-National Priorities List (NPL)  
Category of Removal: Non-Time-Critical Removal Action  
CERCLIS ID: CA2170023236  
Site ID: Intermediate Maintenance Facility (IMF) site  
Project Period: July 1991 to December 1994

As part of a removal action for lead and acid soils at the Intermediate Maintenance Facility (IMF) site at Naval Air Station (NAS) Alameda, PRC Environmental Management, Inc. (PRC) and its Comprehensive Long-term Environmental Action Navy (CLEAN) team subcontractor, Montgomery Watson (hereafter referred together as the PRC team), performed site investigation activities; prepared an engineering evaluation/cost analysis (EE/CA) report, implementation work plan, and action memorandum; conducted oversight and verification sampling of the removal action implementation; prepared this implementation report; and provided project management. The Navy's Public Works Center San Francisco Bay Region (PWC) provided removal action services.

This removal action was conducted to address elevated levels of lead in vadose zone soils with low (acidic) pH. A preliminary endangerment assessment was conducted and showed that there was a potential risk to human health or the environment.

NAS Alameda is located on the western end of Alameda Island, in Alameda and San Francisco counties, California. The IMF site is located within Installation Restoration (IR) Site No. 13, an area formerly occupied by the Pacific Coast Oil Refinery. The Pacific Coast Oil Refinery operated from 1879 to 1903. The IMF site encompasses approximately 5 acres. At present, the IMF site is an undeveloped vacant lot, and no industrial or other activity is conducted at this site.

In 1989, petroleum odors and stained soil were encountered during construction activities by the Navy for the IMF. Harding Lawson Associates (HLA) was contracted to investigate the extent of contamination present at the site. In HLA's boring B-7, a soil sample collected from a depth of 4.5 feet below ground surface (bgs) had a pH of 1.6 and contained lead at a concentration of 13,000

## 6.0 REFERENCES

- Canonie Environmental Services Corporation (Canonie). 1990. "Phase 2A Analytical Results for Site 13, Oil Refinery Site. Remedial Investigation/Feasibility Study, Naval Air Station, Alameda, California." December 4.
- Department of Toxic Substances Control (DTSC) 1992. "Supplemental Guidance for Human Health Multimedia Risk Assessments of Hazardous Waste Sites and Permitted Facilities." State of California Environmental Protection Agency. July.
- DTSC 1994. "Preliminary Endangerment Assessment Guidance Manual (Final)." State of California Environmental Protection Agency. January.
- EFA West. 1994. "Removal Action, Lead and Acid Soils Removal, Intermediate Maintenance Facility Site, Implementation Work Plan (Final). Naval Air Station Alameda, Alameda, California." October 12.
- Harding Lawson Associates (HLA). 1989. "Soil and Groundwater Investigation, Intermediate Facility, Project P-207, Alameda Naval Air Station, Alameda, California." December 6.
- PRC Environmental Management, Inc. (PRC). 1994. "Action Memorandum (Final). Naval Air Station Alameda, Alameda, California." October 13.
- PRC and Montgomery Watson. 1993. "IMF Site Interim Removal Action, Engineering Evaluation/Cost Analysis Report (Final). Naval Air Station Alameda, Alameda, California." September 29.
- U.S. Environmental Protection Agency (EPA). 1993. "Guidance on Conducting Non-Time-Critical Removal Action under CERCLA." Office of Emergency and Remedial Response, EPA 540-R-93-057, Washington, D.C. August.
- EPA 1994. "Integrated Risk Information System (IRIS), On-line Database."
- U.S. Public Health Service, Agency for Toxic Substances and Disease Registry (ATSDR) 1990. "Toxicity Profile for Lead."