

WARNING

SENSITIVE RECORD

PORTIONS OF THIS RECORD ARE CONSIDERED SENSITIVE AND NOT FOR PUBLIC VIEWING. THIS DOCUMENT CONTAINS THE FOLLOWING TYPE OF SENSITIVE INFORMATION:

- PRIVACY ACT INFORMATION
- ARCHAEOLOGICAL LOCATION COORDINATES OR MAPS
- ATTORNEY / CLIENT DELIBERATIVE PROCESS INFORMATION
- COMMAND INTERNAL RULES AND PRACTICES
- COMMERCIAL TRADE SECRETS OR CONFIDENTIAL COMMERCIAL INFORMATION
- DRAWINGS OF MILITARY STRUCTURES / BUILDINGS OR FEDERAL BUILDINGS
- STREET LEVEL MAP(S) OF MILITARY INSTALLATIONS OR FEDERAL BUILDINGS
- GEOLOGICAL / GEOPHYSICAL INFORMATION / DATA CONCERNING WELLS

RECORDS OFFICE REMINDER: REVIEW AND SAFEGUARD SENSITIVE INFORMATION CONTAINED IN THE DOCUMENT PRIOR TO PUBLIC ACCESS

Transmittal

Date: 4 June 2001

From: Lynn Marie Hornecker *LMH*

To: James Barton
RWQCB Central Valley Region

Subj: Proposed Aquifer Testing Activities
Former Underground Storage Tank (UST) Site 117 Vicinity
NASA Crows Landing Flight Facility

The purpose of this transmittal is to describe proposed aquifer testing activities for the vicinity of Former UST Site 117 at Crows Landing. UST 117 was a 1,200-gallon tank used for storage of gasoline and a fuel dispensing island was located nearby. The tank was removed in 1988. A release of petroleum hydrocarbons including gasoline, benzene, 1,2-dichloroethane (1,2-DCA), and 1,2-dichloropropane (1,2-DCP) has been identified beneath and near the former tank site.

Groundwater monitoring wells for the tank site are less than 300 feet from the eastern property boundary of the facility, and the regional groundwater flow is toward the northeast. Samples from the easternmost shallow monitoring wells for UST Site 117 have concentrations of 1,2-dichloroethane (1,2-DCA) and benzene above laboratory reporting limits.

Due to the proximity of the plume to the property boundary and the limited information pertaining to aquifer characteristics on the eastern side of the Administration Area Plume, the Navy is proposing to conduct aquifer tests in accordance with the procedures identified in previously issued work plans. The aquifer tests will not impede the completion of the other Navy projects at Crows Landing.

Background:

UST Site 117 is located along the eastern edge of the Administration Area Plume. Releases of gasoline, 1,2-dichloroethane (1,2-DCA), and other chemicals have impacted groundwater beneath the site and adjacent to the site.

Proposed Testing Activities:

Aquifer testing is proposed at three or four of the existing wells at UST Site 117. The aquifer tests will provide better information on possible extraction rates and associated zones of influence in the shallow zone at the eastern side of the Administration Area Plume. The testing activities would be conducted in accordance with procedures identified for 48-hour aquifer testing in Attachment 3 of the Rev 1 Work Plans dated November 2000 (included in the Rev 2 Work Plans issued May 2001). The testing activities would result in the extraction of approximately 10,000 gallons of groundwater and all extracted groundwater would be characterized and transported to an appropriate off-site treatment and/or disposal facility.

Testing at each well is anticipated to require approximately 24 to 96 hours of continuous pumping. If extraction rates are low, then the pumping activities will be extended beyond 24 hours. If extraction rates are very high (greater than 10 gallons per minute), then pumping activities will be discontinued after approximately 5,000 gallons have been extracted.

Objectives:

- Improve hydrogeological model by acquiring information on potential extraction rates and responses to pumping in nearby wells.
- Facilitate the evaluation of groundwater extraction as a response action in order to abate the migration of the plume to adjacent properties located east of the facility.
- Remove contaminant mass during aquifer testing activities.

The Navy will publish a technical memorandum or summary report to summarize the results of the testing activities unless the Navy decides to implement a Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) removal action as an interim response action. If a removal action is implemented, then the findings from the aquifer test will be summarized in the Action Memorandum for the removal action.

If the Navy determines that a CERCLA removal action is required due to the proximity of the plume to the eastern property boundary, then the data collected from the aquifer tests may be used to site a larger diameter extraction well and to determine optimum pumping rates to provide limited plume control near UST Site 117.

Candidate Test Locations at or near UST Site 117:

Well Identification	Screened Interval (feet below ground surface (bgs))	Contaminants previously reported	Rationale for Testing
MW117-4 (2-inch diameter well)	36-56	1,2-DCA 7 ug/L (March 1998) 1,2-DCA 4.5 ug/L (January 2001) Gasoline 720 "Y" ug/L (December 1994) Gasoline 20 "J" ug/L (January 2001)	Downgradient well for UST Site 117. 1,2- DCA has been reported above drinking water standards. Pumping rates in this vicinity will be helpful in siting future 6-inch diameter extraction wells if such wells become necessary.
117-MW-02 (2-inch diameter well)	49-74	1,2-DCA 80 ug/L (2/8/1999) 1,2-DCA 640 ug/L (November 1996) Gasoline 130 ug/L (2/5/1999)	Well is near former UST 117 excavation. 1,2- DCA has been reported above drinking water standards. Pumping rates in this vicinity will be helpful in siting future 6-inch diameter extraction wells if such wells become necessary.
117-MW-03 (2-inch diameter well)	98-108	1,2-DCA 2 "J" ug/L (2/8/1999) 1,2-DCA 7 ug/L (May 1997) Benzene 190 "D" ug/L (December 1995) Gasoline 80 ug/L (2/5/1999)	Well is near former UST 117 excavation. 1,2- DCA has been reported above drinking water standards. Pumping rates in this vicinity will be helpful in siting future 6-inch diameter extraction wells if such wells become necessary.
117-MW-10(S) (2-inch diameter well)	45-70	Benzene 3.7 ug/L (2/14/1999) 1,2-DCA 27 ug/L (2/15/1999) 1,2-DCA 204 ug/L (January 2001)	Well is east of former UST 117 excavation. 1,2- DCA has been reported above drinking water standards. Pumping rates in this vicinity will be helpful in siting future 6-inch diameter extraction wells if such wells become necessary.

Proposed Schedule:

June 2001: Regulatory review of Navy proposal.
July 2001: Begin preparation for aquifer tests if regulatory concurrence is obtained.
July - September 2001: Conduct aquifer tests and present preliminary findings.
October 2001: Submit technical memorandum summarizing results of testing activities unless CERCLA removal action is implemented for groundwater extraction at this area of the Administration Area Plume. If a removal action is implemented, then the results of the aquifer tests will be summarized in an Action Memorandum.

References and/or Sources of Information:

IT Corporation. 2000. NASA Crows Landing Flight Facility, Soil Vapor Extraction Optimization for the Remediation of UST Cluster 1 and Site Verification Activities at Various Sites, Work Plans, Revision 1. November.

IT Corporation. 2001a. NASA Crows Landing Flight Facility, Soil Vapor Extraction Optimization for the Remediation of UST Cluster 1 and Site Verification Activities at Various Sites, Work Plans, Revision 2. May.

IT Corporation. 2001b. Quarterly Basewide Groundwater Report, Verification Sampling and Analysis, First Quarter – Fall 2000, NASA Crows Landing Flight Facility, Crows Landing, California. March 29, 2001.

IT Corporation. 2001c. Quarterly Basewide Groundwater Report, Verification Sampling and Analysis, Second Quarter – Winter 2001, NASA Crows Landing Flight Facility, Crows Landing, California. May 2001.

Southwest Division, Naval Facilities Engineering Command. 2000. Final Action Memorandum, Time-Critical Removal Actions at the National Aeronautics and Space Administration (NASA), Crows Landings Flight Facility, California, Administration Area Plume at Installation Restoration Program (IRP) Site 17. November 29, 2000.

Southwest Division, Naval Facilities Engineering Command. 2001a. Status report for Various Environmental Restoration Program Projects, National Aeronautics and Space Administration, Crows Landings Flight Facility. April 2001.

Southwest Division, Naval Facilities Engineering Command. 2001b. Status report for Various Environmental Restoration Program Projects, National Aeronautics and Space Administration, Crows Landings Flight Facility. May 4, 2001.

Tetra Tech EM Inc. 1998. Naval Auxiliary Landing Field Crows Landing. Draft Annual Groundwater Monitoring Report. June 17.

TtEMI 1999a. Draft Predesign Investigation Summary Report for IRP Site 17, UST Cluster 1 and UST 117. June 24.

TtEMI 1999b. Draft Phase 1 and 2 Pilot Testing Technical Memorandum. September 24.

TtEMI 1999c. Draft Groundwater Modeling to Support Alternative Remediation Options at Site 17, NASA Crows Landing Flight Facility, Crows Landing, California.

Thank you for considering our proposed testing activities. Please do not hesitate to call me at (619) 532-0783 if you have questions pertaining to this proposed project.

Attachment

Sketch of Possible Testing Locations near UST Site 117

CF:

Marianna Potacka (SWDIV, BRAC Environmental Coordinator)

Francesca D'Onofrio (DTSC)

Brad Hicks (Stanislaus County)

Don Chuck (NASA)

Project File

TRANSMITTAL

Date: 6 June 2001

From: Lynn Marie Hornecker *LMH*

To: Diane Silva
Code 01LS.DS

Subj: CERCLA Administrative Record Materials
NALF Crows Landing

Installation: Naval Auxiliary Landing Field, Crows Landing

UIC Number: N60211

Document Title (or subject): Proposed Aquifer Testing Activities

Author: Lynn Marie Hornecker

Recipient: James Barton

Record Date: 4 June 2001

Approximate Number of Pages: 7

EPA Category: 01.1

Sites: Site 17, UST 117

Key Words: groundwater extraction tests

Contract: N/A

CTO Number:

N/A

Note Groundwaters beneath UST 117
is part of IRP Site 17.

N60211_000294
CROWS LANDING
SSIC NO. 5090.3

SUPPLEMENT TO THE PROPOSED AQUIFER TESTING ACTIVITIES

DATED 18 JULY 2001

THIS RECORD IS ENTERED IN THE DATABASE AND FILED AS

RECORD NO. N60211_000308