



National Aeronautics and Space Administration (NASA) Crows Landing Flight Facility [former Naval Auxiliary Landing Field, Crows Landing]

The purpose of this Fact Sheet is to provide the status of a demonstration project to treat contaminated groundwater in the Administration Area Plume near former Underground Storage Tank (UST) Site 117 at the NASA Crows Landing Flight Facility (formerly known as the Naval Auxiliary Landing Field (NALF), Crows Landing) in Stanislaus County, California. The Administration Area Plume, which is managed under Installation Restoration Program (IRP) Site 17, contains both petroleum hydrocarbons and solvents. The demonstration project was implemented in an area of the plume that contains primarily petroleum hydrocarbons, including gasoline, benzene, and 1,2-dichloroethane. Low levels of chloroform have also been detected in this area of the plume.

UST Site 117 was a former gasoline storage tank with a fuel dispenser. UST 117 was installed in the 1940's or 1950's and was removed from the site in 1988. It is suspected that petroleum hydrocarbons leaked from the storage tank into the surrounding soil and groundwater. Previous activities at this site include soil vapor extraction testing and groundwater extraction to address soil and groundwater contamination issues near the source area.

The current demonstration project is evaluating the effectiveness of *in situ* Submerged Oxygen Curtain® technology (iSOC) at enhancing the biodegradation of petroleum hydrocarbons in

groundwater. Dissolved oxygen is injected into the groundwater via the iSOC system.

Biodegradation is anticipated to occur when naturally occurring bacteria in the subsurface utilize the oxygen to breakdown the petroleum hydrocarbons.

Oxygen injection wells and monitoring points were installed in August 2003 and oxygen injection was initiated in September 2003. Groundwater samples are being collected monthly to evaluate any change in concentration of dissolved oxygen and petroleum hydrocarbons. The demonstration project is anticipated to continue until approximately December 2004. At the completion of the demonstration project, an evaluation of the results will be presented in a summary report. The summary report will be placed in the repository at the Patterson Library.

Photograph. UST Site 117 iSOC Demonstration Project Area.
(U.S. Navy Photograph)



Historical Background

The former NALF Crows Landing was commissioned in May 1943 and has served primarily as an auxiliary airfield for operations from Naval Air Station, Moffett Field. The Navy closed the facility in 1994 in accordance with the Base Realignment and Closure (BRAC) Act, and it was transferred to NASA on July 1, 1994. In October 1999, NASA was authorized by legislative act of the 106th Congress of the United States of America to transfer the facility to Stanislaus County.

The Navy is responsible for the restoration of contaminated sites that were the result of historical Navy operations at the facility. The Navy is the lead agency for the implementation of the installation restoration program. The California Department of Toxic Substances Control, the California Regional Water Quality Control Board, Central Valley Region, and the California Integrated Waste Management Board provide regulatory oversight.

Opportunities for Community Involvement

The Navy will provide periodic updates to the community through Fact Sheets. The Fact Sheets are available for viewing on the Navy's Environmental web site at the following address: <http://www.efdsww.navfac.navy.mil/Environmental/CrowsLanding.htm#facts>

Administrative Record Files

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Administrative Record file documents are available at the Information Repository at the Stanislaus County Library, Patterson Branch in Patterson (Telephone Number: (209) 892-6473).

Remedial investigation reports, underground storage tank reports, and other documentation

pertaining to the Navy's environmental restoration program are maintained in the CERCLA Administrative Record files at Naval Facilities Engineering Command, Southwest Division in San Diego. For assistance with the CERCLA Administrative Record files or requests for copies of documents contained within the CERCLA Administrative Record files, please contact the records manager, Ms. Diane Silva, at (619) 532-3676

For More Information

For more information pertaining to the Navy's environmental restoration program projects at the Facility, please contact:

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