



## Navy Environmental Restoration Program Update 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 an update on the activities that were conducted by the Navy during calendar year 2002 at the NASA Crows Landing Flight Facility (the Facility), formerly known as the Naval Auxiliary Landing Field (NALF), Crows Landing in Stanislaus County, California. The fact sheet includes a map showing the locations of various projects.

### ***Installation Restoration Program (IRP)***

Field work was conducted at IRP Site 11, IRP Site 11A, and IRP Site 17 during 2002. 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 for the IRP.

**IRP Site 11 (Disposal Pits):** IRP Site 11 was used for disposal of facility refuse and ordnance material from the off-site practice bombing ranges from the 1960's until approximately 1982. A revised feasibility study report was issued for Site 11 in November 2001. The Navy received regulatory review comments on the feasibility study report in mid-2002. The Navy began preparing responses to the comments during 2002.

The concrete foundations of several former ammunition magazines and one magazine structure in the vicinity of IRP Site 11 were demolished and removed in October 2002 as shown in the following photograph.

Photograph 1. Demolition of Former Ammunition Magazine Foundations near IRP Site 11 in October 2002.



**IRP Site 11A (Sewer Systems):** IRP Site 11A includes the original sewage treatment plant, constructed in approximately 1943, and the most recently used sewage treatment plant, constructed in the early 1950's. The sites are located in the eastern section of the Facility adjacent to Bell Road. Exploratory trenching activities were conducted in August 2002, an Action Memorandum for removal of buried waste and debris at the oxidation pond area at the original sewer system was issued in October 2002, and detailed plans for the removal of waste and debris were issued in November 2002. Field activities at the oxidation ponds at the original sewer system began in December 2002.

**IRP Site 17 (Demolished Hangar Area and Administration Area Plume (the Plume)):** IRP Site 17 encompasses the demolished hangar area near the east central section of the Facility. Regulatory review comments on the revised feasibility study were evaluated, another remedial technology was evaluated, and additional field data was collected. Thirteen (13) new groundwater monitoring wells were constructed during 2002.

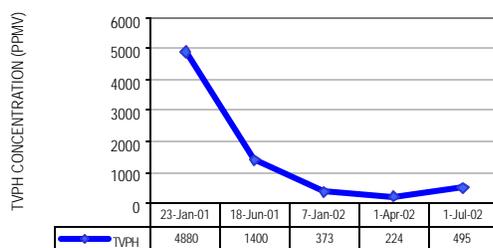
The extraction of contaminated groundwater in the vicinity of a former dry well in the southern section of the Plume and in the vicinity of former underground storage tank (UST) 117 in the eastern section of the Plume continued during 2002. As of late November 2002, approximately 208,000 gallons of contaminated groundwater have been extracted and more than 230 pounds of contaminants have been removed with the extracted groundwater. Primary contaminants in the extracted groundwater include gasoline, acetone, benzene, 1,2-dichloroethane (1,2-DCA), ethylene dibromide (EDB), methyl ethyl ketone (MEK), and chloroform. The highest concentrations of contaminants were detected in the vicinity of the former dry well. Extracted groundwater is transported to an off-site treatment facility.

### **Underground Storage Tank (UST) Program**

Field work was conducted at UST Cluster 1, UST Cluster 2, UST Site 117, and UST Site 109 during 2002. The California Regional Water Quality Control Board, Central Valley Region, provides regulatory oversight for the UST Program.

**UST Cluster 1 (former location of aviation fuel tanks CL-1, CL-2, and CL-3):** Soil vapor extraction (SVE) treatment operations continued until mid-2002, and more than 24,000 pounds of contaminants have been removed from the soil as of November 2002. Confirmation soil gas samples were collected in August 2002. Selected petroleum hydrocarbon vapor concentrations are shown on the following chart.

Chart 1. Selected Total Volatile Petroleum Hydrocarbon (TVPH) Vapor Concentrations at UST Cluster 1



The groundwater underlying UST Cluster 1 is managed as the Administration Area Plume (IRP Site 17).

**UST Cluster 2 (former location of aviation fuel tanks CL-7, CL-8, and CL-9):** The treatment system was constructed in 1999. Initial operations were conducted from January through June 2000, and additional testing and optimization activities were conducted from June through December 2001. More than 5,000 pounds of petroleum hydrocarbons have been removed from the soil. Confirmation soil samples were collected in October 2002 as shown in the following photograph.

Photograph 2. Collection of Soil Samples at UST Cluster 2 during October 2002.



**UST Site 109 (former heating oil tank site) and UST Site 117 (former motor vehicle fuel tank site):** Groundwater conditions were monitored and information was evaluated for closure documentation.

### **Miscellaneous Activities**

Quarterly groundwater monitoring activities were conducted at IRP Site 11, IRP Site 17, UST Cluster 1, UST Cluster 2, UST Site 117, and UST Site 109 during 2002. Four quarterly monitoring reports and one annual groundwater monitoring report were issued during 2002.

Continuous automated water level measurements were collected at the Administration Area Plume vicinity, UST Site 109, UST Cluster 2, and IRP Site 11 vicinity during 2002.

Deep soil borings were advanced at three locations in order to collect information pertaining to subsurface conditions. The information was used to refine a hydrogeological model of the Plume.

The pump house for an abandoned water supply well, 6S-8E/9M1, located in the northeastern section of the Facility was demolished and a videographic survey of the well was conducted. An abandoned water supply well located within Building 151 was closed in November 2002 with oversight by Stanislaus County.

A visual inspection of former ordnance storage areas (former ammunition magazines) near IRP Site 11 and target areas (IRP Site 18) was conducted in August 2002.

### **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. The Facility was transferred to NASA on July 1, 1994. In October 1999, NASA was authorized by legislative act of the 106<sup>th</sup> Congress of the United States of America to transfer the facility to Stanislaus County. On April 10, 2001, the Stanislaus County Board of Supervisors adopted the Crows Landing Flight Facility Reuse Plan. Phase 1 of the Reuse Plan maintains the status quo, with ongoing environmental remediation, agricultural production, and planning. Phase 2 of the Reuse Plan adds general aviation uses to those listed as Phase 1. The Reuse Plan was approved following adoption of a Mitigated Negative Declaration and is in full compliance with the California Environmental Quality Act.

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 Regional Water Quality Control Board, Central Valley Region, the California Department of Toxic Substances Control, and the California Integrated Waste Management Board provide regulatory oversight.

**OPPORTUNITIES FOR COMMUNITY INVOLVEMENT**

The Navy will provide periodic updates to the community through these Fact Sheets. The Fact Sheets are available for viewing on the Navy's Community Relations Program web site at the following address:

<http://www.efdswnavfac.navy.mil/Environmental/CrowsLanding.htm#facts>.

The most current project correspondence, plans, reports, and other documents are available for inspection by the public at the local information repository at the Patterson Branch Library. If you have comments or questions pertaining to the Navy's projects, please send them to Ms. Marianna Potacka, Southwest Division, Naval Facilities Engineering Command, 1220 Pacific Highway, San Diego, CA 92132-5190.

**Environmental Restoration Program  
Mailing List Update Form**

To better serve the community regarding the Navy's Environmental Restoration Program projects at the NASA Crows Landing Flight Facility, we are continuing to update our mailing list. If you would like to receive copies of fact sheets and proposed plans, please complete the form and return to the following address:

Southwest Division, Naval Facilities Engineering Command  
BRAC Programs  
Code 06CC.LMH (Lynn Marie Hornecker)  
1220 Pacific Highway  
San Diego, California 92132-5190

Or Fax the form to Southwest Division, Naval Facilities Engineering Command at (619) 532-0780.

**FOR MORE INFORMATION**

For more information pertaining to specific projects, please contact:

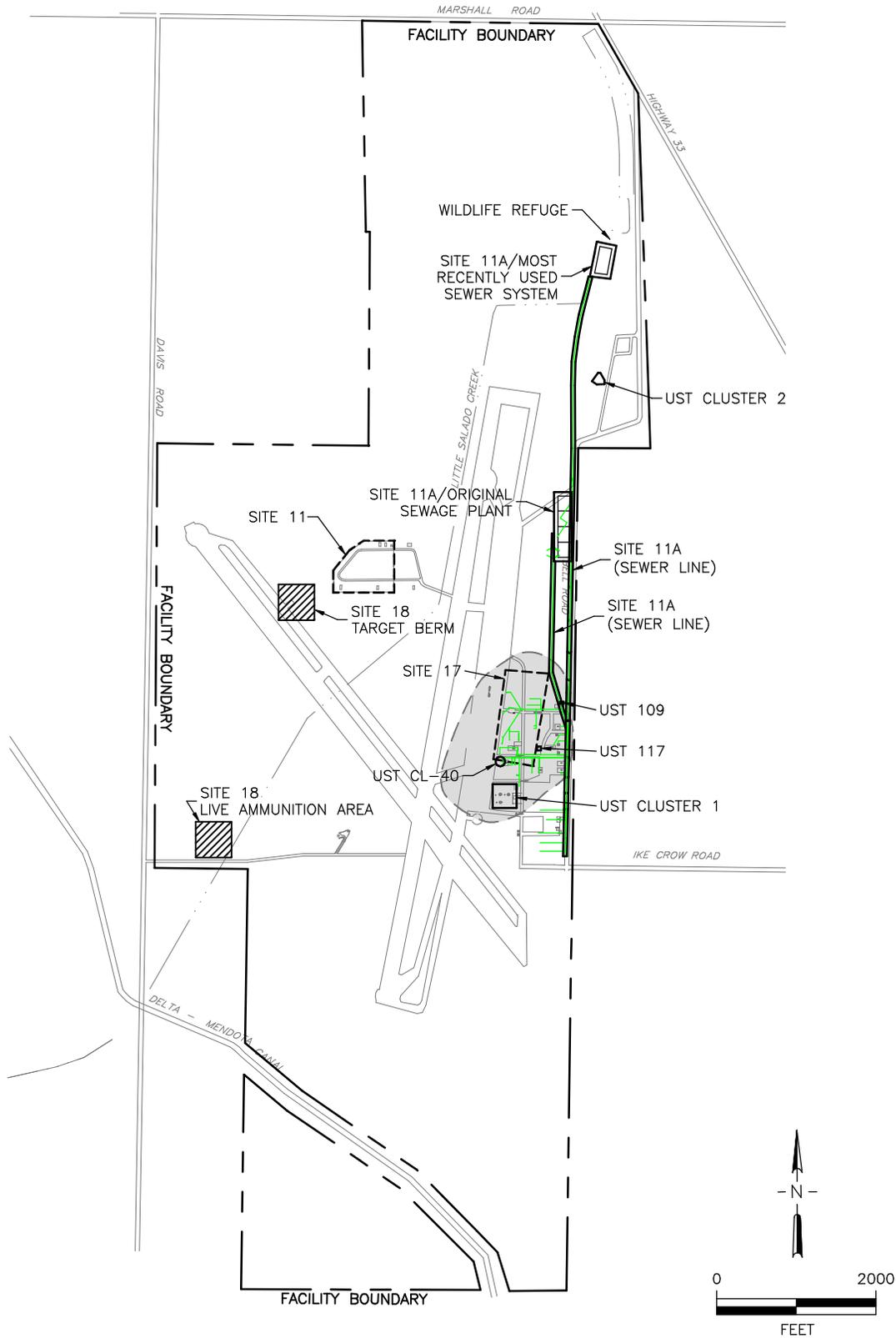
Ms. Marianna Potacka  
BRAC Environmental Coordinator  
Southwest Division, Naval Facilities Engineering Command  
1220 Pacific Highway  
San Diego, California 92132-5190  
Telephone: (619) 532-0941; Fax: (619) 532-0940  
E-mail: [Potackamk@efdswnavfac.navy.mil](mailto:Potackamk@efdswnavfac.navy.mil)

Or  
Ms. Lynn Marie Hornecker  
Project Manager  
Southwest Division, Naval Facilities Engineering Command  
1220 Pacific Highway  
San Diego, California 92132-5190  
Telephone: (619) 532-0783; Fax: (619) 532-0780  
E-mail: [Horneckerlm@efdswnavfac.navy.mil](mailto:Horneckerlm@efdswnavfac.navy.mil)

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Administrative Record documents are available at the Information Repository at the Stanislaus County Library, Patterson Branch in Patterson. The Information Repository also includes an index of all documents contained within the CERCLA Administrative Record. The Navy's CERCLA Administrative Record is maintained at Southwest Division, Naval Facilities Engineering Command in San Diego. For assistance with the CERCLA Administrative Record or requests for copies of documents contained within the CERCLA Administrative Record, please contact the records manager, Ms. Diane Silva, at (619) 532-3676.

<p>Mailing List Update Form – Please provide all information:</p> <p>Name: _____</p> <p>Organization: _____</p> <p>Address: _____</p> <p>City: _____</p> <p>State &amp; Zip Code: _____</p>
---

c:\0035.dwg  
12/6/2002 2:37 PM



**LEGEND**

- SEWER LINE
- UST PROGRAM CORRECTIVE ACTION SITE
- SITE UNDER INVESTIGATION (IRP SITES 11, 11A, & 17)

**NOTES**

1. SITE 17 GROUNDWATER PLUME IS SHOWN IN GRAY.
2. SITE BOUNDARIES ARE APPROXIMATE.

**SOUTHWEST DIVISION  
NAVAL FACILITIES ENGINEERING COMMAND**

**NASA CROWS LANDING FLIGHT FACILITY, CA**

**PROJECT LOCATIONS**

FILE NO.	<b>YEAR 2002</b>	DATE
CL0035.DWG		12/6/02