



# Fact Sheet

## February 2012



### Cleanup and Restoration of the 2009 Jet Fuel Pipeline Leak

#### BACKGROUND

This fact sheet updates the status of the environmental investigation into and cleanup of the February 2009 petroleum pipeline leak near the intersection of State Route 12 and Lawler Ranch Parkway in the City of Suisun. The leak was discovered along a portion of the pipeline that transfers jet fuel from a Martinez petroleum facility to Travis Air Force Base (AFB). The type of jet fuel Travis AFB uses is Jet Propellant 8 (JP-8), which is kerosene-based and less flammable and less hazardous than earlier jet fuel formulas.

In October 2009 and June 2010, Travis AFB published fact sheets that described the leak, the initial response, and the environmental investigation to identify how far the fuel spread from the leak's point of origin. Electronic copies of these fact sheets are available on the Travis AFB public environmental website at <http://www.travis.af.mil/enviro>.

#### THE SITE INVESTIGATION

As described in the second fact sheet, Travis AFB collected soil and groundwater samples along the fuel pipeline, nearby utility lines and in the median of Lawler Ranch Parkway. Because the investigation area included portions of several Lawler Ranch residential properties, the base obtained landowners' permission to collect samples on their properties. Travis coordinated all field activities with the Solano County Department of Resource Management (SCDRM).

The soil and groundwater samples were sent to a laboratory for analysis, and the results showed that the fuel had migrated beneath the back yards of three homes in Lawler Ranch.

Before a long-term fuel cleanup strategy could be chosen, it had to be determined if vapors from the fuel were entering the three homes and posing a potential risk to the inhabitants. To complete the

site investigation, the field team collected soil vapor samples from several vapor monitoring points in the backyards. They also used Summa canisters to collect air samples from the crawl spaces beneath the three homes. The analyses of these samples confirmed that fuel vapors are not entering the homes. The field team will continue to collect and analyze crawl space air samples for another nine months to ensure that the residents remain safe from fuel vapors.

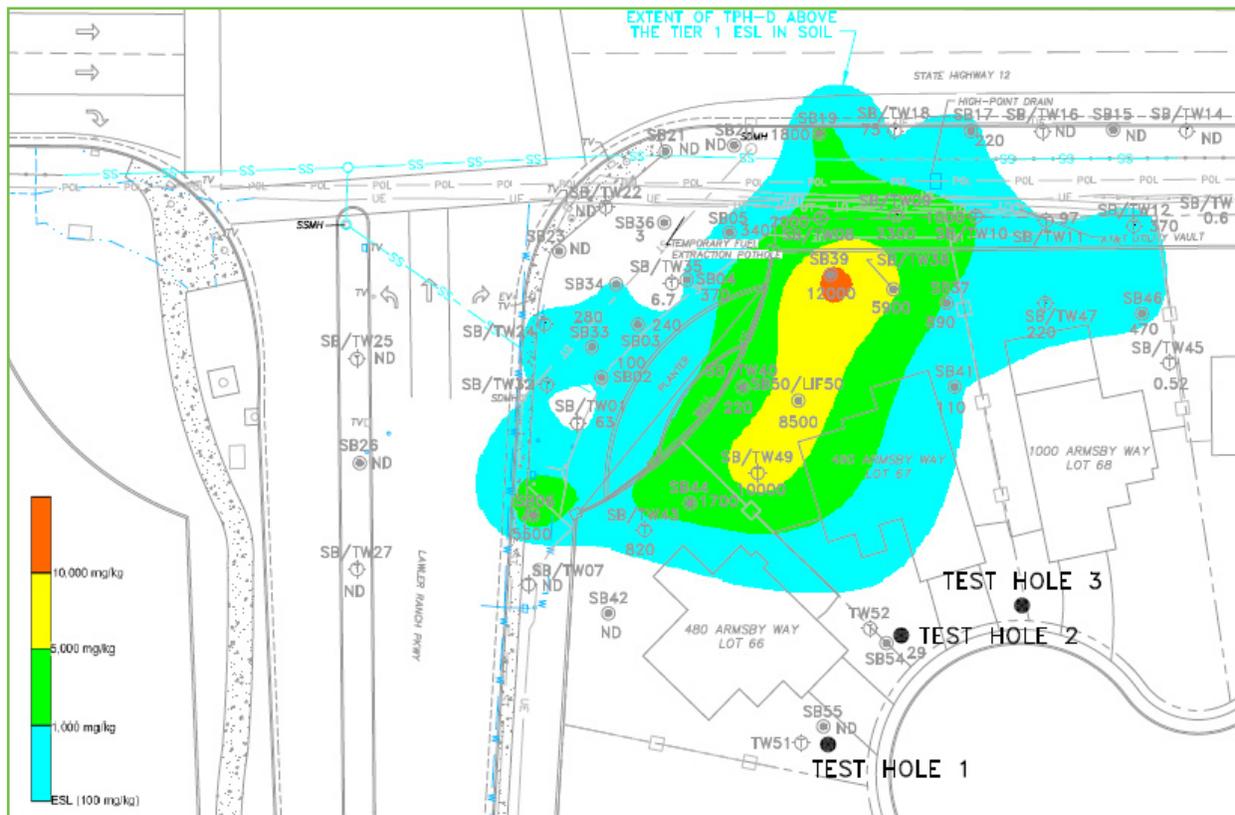


A field technician prepares to place a Summa cannister into the crawl space of a Lawler Ranch home. When the cannister is full, it is sent to a laboratory where the collected gas is analyzed for fuel constituents.

#### THE NEXT STEP

Now that the site investigation is complete, Travis AFB and the SCDRM are focusing on the selection of an appropriate remedy to clean up the fuel. They have looked at every potential cleanup technology and compared them to the nature and extent of the contamination, the challenges of working in a residential area and near a major highway, the desired level of cleanup to be achieved, and the desired cleanup time. This results of this evaluation are currently under SCDRM review.

The list of cleanup strategies ranged from "no action" to aggressively digging up and hauling away the fuel contaminated soil. One technology that seems to fit well with the site conditions is In-



Extent of fuel contamination in the soil from the jet fuel leak at the intersection of Lawler Ranch Parkway and Highway 12 in the City of Suisun. Units are in parts per million (mg/kg).

situ Chemical Oxidation (ISCO). ISCO involves the injection of a chemical oxidant into the contaminated soil and groundwater. This chemical releases oxygen which promotes the growth of microscopic organisms that break down fuel into harmless compounds. ISCO may be able to clean up the fuel relatively quickly with little interruption to the neighborhood. If chemical injection proves to be difficult, and no other less intrusive remedy is available, then soil excavation may be required. Since digging up the contaminated soil would be more disruptive to the neighborhood, this is not a preferred remedy. Every effort will be made to minimize the impact of the fuel cleanup on local residents. The goal is to complete cleanup activities within the next two years.

To help with the remedy selection process, the field team will conduct an initial test to see if the

oxidant can be injected into the tight clay soil at three test locations, shown in the above figure. If the test is successful, then an estimated two rounds of oxidant injection should substantially degrade the fuel contamination.

### HOW CAN I LEARN MORE ABOUT THIS FUEL LEAK CLEANUP ACTION?

There are several ways to obtain updates on the status of this cleanup project. Both Ms. Merrie Schilter-Lowe (Travis AFB Public Affairs Office) and Mr. Josuwa Bernardo (SCDRM) can answer your questions or provide the latest information available.

1. Write to them at the addresses below.
2. Talk to them by calling their phone numbers that are provided below.
3. Send them email at the addresses below.

### For additional information, please contact:

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