

# Environmental Restoration Project



## ER Site No. 37: PROTO Oil Spill (TA-V)

ADS: 1306

Operable Unit: Tech Area III & V

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### Site History

The PROTO oil spill was initially identified during the 1987 RFA as Area of Concern S. In the CEARP Phase I Installation Assessment, the spill was designated as ER Site 37. Insufficient information was available to calculate an HRS migration mode score. Additional investigation of this site was recommended during the CEARP assessment and is addressed in the RFI.

The PROTO I Facility and its associated transformer oil tanks were constructed in 1978. The facility was shut down in 1989 when the PROTO II Facility in TA-IV became operational. PROTO I was used to test radiation effects on instrument and weapon components. Site 37 is a 0.6-acre site located on the southeast side of TA-V near Building 6597.

Originally there were a series of seven 25,000-gal (95,000-L) underground storage tanks (USTs) east of Building 6597 that were used to store transformer oil for the PROTO I Facility. Each tank was 15 ft (4.6 m) in diameter and was buried approximately 3 to 5 ft (0.9 to 1.5 m) below grade. The transformer oil was transferred in a closed-loop cycle from the USTs into the PROTO I Facility during tests, after which it was returned to the tanks. The purpose of the closed loop was to prevent contamination of the oil from ambient sources. Leaks at the USTs occasionally occurred as a result of tank vent overflow. Although the ground surrounding the tanks is not paved, the area topographically downslope of the tanks was reportedly paved at the time of installation of the tanks. Two dry wells were located between each set of tanks. Each drywell was approximately 30 ft deep, extending into the gravel base below the tanks.

In addition to the undocumented spills that occurred during transfer of oil from the building to the USTs, there were two reported spills of approximately 100 gallons each at a former trailer near the tanks. There are no records describing the cleanup of these oil spills. The spill sites are located adjacent to the east-northeast side of Building 6597. Unpaved areas downgradient from the surface spills are located north of the paved area and around the USTs.

Since the PROTO I Facility was shut down in 1989, and no further surface spills at the USTs were reported, the USTs (designated Site 155, the PROTO UST site) were removed in 1993, in accordance with New Mexico Underground Storage Tank Regulations (NMUSTR). Sampling beneath the tanks indicated that no soil remained in the excavation that contained total petroleum hydrocarbons (TPH) in excess of the NMUSTR standard of 100 mg/kg. Based on this information, Site 155 was subsequently deleted from the ER site list following a Class 1 permit modification with prior EPA approval.

In 1994, soil sampling was conducted without modification from the Resource Conservation and Recovery Acts (RCRA) Facility Investigation (RFI) Work Plan. Eleven auger holes were advanced in the vicinity of the former USTs. Soil samples were collected using a hand auger from depths of 1 and 5 ft bgs, for a total of 22 samples. Field screening of soil samples included immunoassay tests for PCBs and PID screening for VOCs. Based on field screening, seven samples (including a duplicate) were submitted to an offsite analytical laboratory for TPH analysis; three samples were selected for analysis of PCBs and volatile organic compounds (VOCs). No TPH or PCBs were detected above the method detection limit (MDL), and only trace amounts of VOCs were detected.

## **Constituents of Concern**

Mineral-based transformer oil.  
Polychlorinated biphenyls (PCBs).

## **Current Hazards**

There are no current hazards at this site related to contamination of the surface or subsurface soils. There may be structures or stored materials that remain at the site that are a potential hazard.

## **Current Status of Work**

A no further action recommendation for this site was presented in the TA-III&V RFI report that was submitted to the EPA and NMED in June 1996.

Comments on the report were received in a Notice of Deficiency (NOD) from the NMED in July 1997, with a second NOD received in March 1998. SNL responded to these NODs. On May 5, 2000 NMED found Site 37 to be acceptable for No Further Action (NFA) petition. The NFA was approved by NMED on November 19, 2001, after completing the public review and permit modification process.

## **Future Work Planned**

No future work is planned.

## **Waste Volume Estimated/Generated**

No waste was generated at the site.

**Information for ER Site 35 was last updated Jan 21, 2003.**