Environmental Restoration Project



ER Site No. 98: Bldg 863 TCA Photochemical Releases

ADS: 1302

Operable Unit: Technical Area I

Site History	1
Constituents of Concern	
Current Hazards	
Current Status of Work	
Future Work Planned	
Waste Volume Estimated/Generated	

Primary Contact: <u>Dick Fate</u> Office Phone: 284-2568

Site History

ER Site 98 is in the north-central portion of Technical Area (TA)-I on the southwest corner of H and 10th streets. This was the site of former Building 863.

Building 863 was constructed in 1950 as a document vault. In 1951, the building became the site of the motion picture production and film processing division for SNL/NM. An addition was constructed in 1958 to expand film processing operations. A second addition was constructed for chemical storage in 1971.

Building 863 was listed as ER Site 98 because of release of trichloroethane (TCA) from a film cleaning machine installed in the early 1970s near the east side of the building, north of Equipment Room 6. TCA was piped to the machine from a 55-gal drum on the building exterior through holes drilled in the exterior wall. Waste TCA was piped through the wall to a second 55-gal drum adjacent to the TCA supply drum. Holes in the waste drum base allowed the TCA to drain to the underlying soil. The drum was used for waste TCA disposal until a new film cleaning tank was installed in 1986. Estimates of the volume of TCA discharged vary. A long-term film-processing employee estimated that TCA use ranged from 156 to 240 gal/year over the 14-year period from 1970 through 1983 and from 36 to 90 gal/year from 1984 until the practice ceased in 1986. Thus, the total volume of TCA discharged may have ranged from about 2300 to 3600 gal.

In addition to the historic release of TCA, there were several other areas of potential concern in Building 863. These areas had visible chemical residue and evidence of chemical spills within the building. The types of waste generated and the duration of use have caused severe corrosion of the piping and concrete foundation in several areas. The chemicals used in the building and the estimated volumes are listed by processor type in the ER Project files.

Film-processing activities in the building ceased in 1989, after nearly 40 years of activity. All equipment was cleaned. Some equipment was removed and building decontamination activities were completed in FY 1997.

Information obtained through employee interviews and visible deterioration of piping and concrete indicates that chemicals were spilled as a direct or indirect result of facility operations in several portions of the building. Additional building process information is provided in the TA-I Resource Conservation and Recovery Act (RCRA) Facility Investigation (RFI) Work Plan that was submitted to the Environmental Protection Agency (EPA) in February 1995.

The TA-I RFI Work Plan was delivered to the EPA for review in February 1995. Site characterization and field sampling activities were completed as outlined in the work plan. They began in March 1995 and were completed in April 1995. Site characterization included collection of surface (0-2 ft) and near-surface (2-30 ft) soil samples to assess the potential for contaminated soils at the site. Based upon the results collected during the RFI, low levels of VOCs were detected in the soil vapors around the building but were not confirmed in soil samples collected at the site.

Building 863 was demolished and removed in FY 1998.

An additional field investigation was conducted in July/August 1999. The field activities included drilling one borehole to 140 feet below ground surface, collecting and analyzing soil gas and subsurface soil samples, and collecting and analyzing three surface soil samples. The investigation was centered at the TCA release area (east side of former Building 863).

Because there were only low concentrations in the soil gas samples and no detections of VOCs in the soil samples, the site was proposed for a risk-based NFA in September 2000; the risk for the site met standards for an industrial use.

Constituents of Concern

The potential COCs identified for this site during its history include:

TCA,
Trichloroethylene (TCE),
Sodium hydroxide (NaOH),
Acetic acid,
Sulfuric acid, and
Silver.

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

This site was accepted for No Further Action by NMED under an industrial scenario on December 5, 2000.

Future Work Planned

None.

Waste Volume Estimated/Generated

A small amount of waste has been generated at this site during sampling.

Information for ER Site 98 was last updated Jan 21, 2003.