

# Chemical Leaman Tank Lines, Inc

## New Jersey

EPA ID#: NJD047321443

### EPA REGION 2

#### Congressional District(s): 01

Gloucester  
Logan Township

#### NPL LISTING HISTORY

Proposed Date: 9/1/1983

Final Date: 9/1/1984

## Site Description

Chemical Leaman Tank Lines, Inc. (CLTL) has operated a tank-washing facility since 1961 on a 34-acre site zoned for light industry in Logan Township, New Jersey. Logan Township has a population of approximately 3,000 residents and approximately 50 homes are within a 1/2-mile radius of the site. Prior to 1975, the wastewater generated from the tank-washing was placed in a series of seven unlined lagoons and ultimately was discharged to Cedar Swamp and Moss Branch Creek which border the site. Following the closure of these lagoons in 1975, sludge in the settling lagoons was excavated and disposed of off-site. These lagoons were then backfilled with clean sand. The aeration lagoons were backfilled with sand and construction debris, but no sludge was removed. In 1980 and 1981, the New Jersey Department of Environmental Protection found carbon tetrachloride and other organic compounds in the groundwater on the site as well as in neighboring private wells. In 1987, residences north of the site along Route 44 were connected to the Bridgeport Municipal Water System. In 1993 and 1995, residences south and west of the site were connected to the municipal water supply.

Site Responsibility: This site is being addressed through Federal and Potentially Responsible Party (PRP) actions.

## Threat and Contaminants

The groundwater on site is contaminated with volatile organic compounds (VOCs) including trichloroethene, benzene, and vinyl chloride, and heavy metals including arsenic, chromium, and zinc. Many of the same contaminants have been found in private wells in the vicinity of the CLTL facility. Contaminants found in subsurface soils include heavy metals, VOCs, and phthalates (semi-volatile organic compounds). Residents who use water from VOC-contaminated wells for drinking, bathing, or clothes washing may ingest, inhale, or dermally absorb contaminants. Area homes have been connected to the municipal water supplies. Workers could be exposed to VOCs by direct contact with or by inhaling contaminants. Cedar Swamp, located adjacent to the facility, has been impacted by the direct discharge of contaminants, contaminant laden surface water runoff, and migrating contaminants in the groundwater. These contaminants pose an ecological risk to the Cedar Swamp ecosystem.

## Cleanup Approach

The site is being addressed in four stages: immediate action, and three long-term remedial phases focusing on cleanup of the groundwater (Operable Unit One), soil (Operable Unit Two), and wetlands (Operable Unit Three) contamination.

#### Response Action Status

Immediate Actions: Activated carbon treatment units were placed in four homes with contaminated drinking water. The four homes were later connected to a permanent water line from a nearby town in 1987. Three more homes with threatened water supplies south and west of the site were connected to the municipal water line in March 1993 and August 1995.

Groundwater Contamination: In 1990 EPA completed a Remedial Investigation (RI) of the groundwater. The remedy selected in the 1990 Record of Decision (ROD) included groundwater extraction, treatment through chemical precipitation, air stripping and granulated activated carbon, and discharge of the treated groundwater into the Delaware River. The Remedial Design (RD) of the selected remedy began in 1991 and was completed in September of 1997. In 1998, CLTL, the Responsible Party (PRP), approached the EPA with a request to develop an alternate remedial design comprised of both conventional pump-and-treat and innovative in-situ technologies. The PRP provided documented evidence at other sites with similar hydrogeology and contaminant characteristics that the combined use of conventional

pump-and-treat and in-situ technologies were potentially suited to achieve the ultimate goal of restoring the aquifer to drinking water quality. The PRP's proposal to modify the design and revise the groundwater extraction scheme was approved by the EPA and an addendum to the design was subsequently developed and approved by EPA in January 2004. The construction of the groundwater extraction and treatment system began in May 2005 and was completed in January 2007. Startup/shakedown of the treatment system was initiated in February 2007. Numerous difficulties were experienced with the equipment installed which required re-fabrication and replacement. The treatment system was started again in 2010 and operated for five weeks. However, the plant had to be shut down due to exceedances in air emissions in excess of the state permit. Exceedances were due to changes in the influent contaminant concentrations, therefore, the treatment system had to be modified to accommodate the new contaminant levels. Laboratory scale experiments were conducted to introduce chemical oxidation to the treatment system and later tested at the pilot scale. Pilot results indicate that the new treatment system is capable of treating the contaminant groundwater plume and full scale operation is scheduled to resume in the summer of 2011.

**Soil/Source Contamination:** EPA performed an investigation of the soil contamination in the late 1990's. Additional studies were performed by the PRP to fully delineate the contaminated saturated soils in the area from 2000 through 2005. Results of all soil/source sampling were summarized and presented in a remedial investigation report (RI) dated June 2009. A feasibility study (FS) report, which presents and evaluates alternative remedial technologies for addressing the contaminated source areas was issued in June of 2009. A ROD for this Operable Unit was signed in September 2009. The PRP is currently working on their Remedial Design Workplan.

**Wetlands:** An investigation into the nature and extent of contamination in the wetlands was completed in July 1993. The remedy selected in the October 1993 ROD included excavation of approximately 7,500 cubic yards of contaminated sediments and soils in the wetlands. This excavated material was disposed of at an appropriate off-site facility. The excavation was completed in early 2006 and the wetlands were restored to their original functional value in the spring of 2006. The remedy also included the construction of a berm around the active CLTL facility to protect the remediated wetlands. Construction of the berm was completed in July 2006. Additional erosion and storm water runoff control measures were implemented in July 2007 with the construction of a low gradient, aggregate-lined swale. The effectiveness of the remedy is regularly monitored in accordance with the schedule established in the wetlands mitigation and monitoring plan for the site.

**Site Facts:** CLTL, the PRP, entered into an Administrative Consent Order (ACO) with EPA in July 1985 to perform the site investigation and the alternative cleanup activities. In June 1989, EPA took over the performance of the investigation and completed the groundwater RI in 1990. CLTL entered into an ACO to construct a waterline extension to the homes in the vicinity of the site not receiving municipal water. CLTL entered into a Consent Decree (CD) in September 1991 to perform the Remedial Design/Remedial Action of the groundwater remediation system. In September 1998, EPA issued an Administrative Order to CLTL for the performance of the remedial design and implementation of the wetlands remediation. CLTL entered into a Consent Decree with EPA in October 2010. The CD was entered with the court in February 2011.

## Cleanup Progress

In 1987, the affected homes to the north of the CLTL site were connected to an alternate water supply. Homes located to the south and west of the site were connected to an alternate water supply in March 1993 and August 1995. Remedial construction activities for the construction of the groundwater pump and treat system were completed in January 2007. Additional delineation to fully define the extent of contamination in the unsaturated and saturated soils throughout the site was completed in July 2008. Sampling results were summarized and analyzed in a remedial investigation report which was completed in June 2009. The feasibility study report evaluated alternative technologies and was also issued in June 2009. CLTL is currently working on the remedial design workplan for the soil contamination. The remedial design to restore the functional value of the wetlands was completed in May 2003 and remedial construction was initiated in May 2004. Remedial construction activities for the wetlands were completed in June 2006.

## Site Repositories

Township Clerk's Office, Logan Township Municipal Building, 3 Main Street, Bridgeport, NJ 08014 and US EPA, Records Center, 290 Broadway, 18th Floor, New York, NY 10007, (212) 637-4308, Building Hours: Mon.-Fri. 9 a.m. - 5 p.m.