

GCL Tie & Treating

New York

EPA ID#: NYD981566417

EPA REGION 2 Congressional District(s): 23

Delaware
Sidney

NPL LISTING HISTORY
Proposed Date: 1/18/1994

Site Description

The GCL Tie and Treating site occupies approximately 30 acres in an industrial area in southwestern Delaware County, New York. The property consisted of a sawmill and wood treating facility known as GCL Tie and Treating, and a former light manufacturing company. According to an analysis of historical photographs conducted by the Environmental Protection Agency (EPA) and accounts by local residents, wood-preserving activities at the site date as far back as the 1940's when the Delaware and Hudson Railway Company owned the property. The site first came to the attention of the New York State Department of Environmental Conservation (NYSDEC) in 1986, after one of the pressure tanks used at the GCL facility malfunctioned, causing an estimated 30,000-gallon release of creosote. GCL representatives excavated contaminated surface soil and placed it in a mound; no further action was undertaken at that time. Approximately 1,100 people are employed in the nearby industrial area. About 5,000 people live within 2 miles of the site and depend on groundwater as their potable water supply. The nearest residential well is within 0.5 mile of the site. A shopping plaza consisting of three fast food restaurants and several stores is located approximately 300 feet from the site. Other facilities (i.e., a hospital, public schools, senior citizen housing, and child care centers) are located within 2 miles of the site.

Site Responsibility: This site is being addressed through federal actions

Threat and Contaminants

The only remaining threat at the site is the potential exposure to groundwater contaminated with creosote constituents, such as anthracene, chrysene, benzo(a)anthracene, and benzo (a)pyrene. Area residents receive drinking water from public supply wells, which are routinely tested to ensure compliance with Federal and state standards. Access to the site is restricted by fencing. Threats posed by contaminated soil, aboveground tanks and drums containing creosote wastes/sludges, have been addressed.

Cleanup Approach

The site is being addressed in two stages: immediate actions and two long-term remedial phases focusing on cleanup of site soils/sediments and site groundwater.

Response Action Status

Immediate Actions: At the request of NYSDEC, EPA initiated a removal action at the site in March 1991. Activities conducted as part of the removal action included: delineation of surface contamination, installation of a chain link fence, site stabilization, identification and disposal of containerized (e.g., tanks, drums) and noncontainerized hazardous wastes (e.g., liquids in sumps), staging of contaminated soil and wood debris for disposal, and a pilot study to determine the effectiveness of composting to bioremediate creosote-containing soils.

Entire Site: The long-term response work being conducted at this site is divided into two operable units. Operable unit 1 (OU1) deals with the contaminated soils on the portion of the site where GCL operated its facility (referred to as the GCL property); this area was also the focus of the removal activities. A remedy for this portion of the site was selected in a September 1994 Record of Decision (ROD), which called for the excavation and on-site treatment of contaminated soil via low temperature thermal desorption. The remedial design (RD) for OU1 was completed in September 1997. The contract for remedial action was awarded on March 31, 1998. On-site construction activities for OU1 began in August 1998 and were completed in June 2000.

Operable unit 2 (OU2) deals with the soils/sediments on the remainder of the site (referred to as the non-GCL property), and also includes surface water, groundwater, and other components not covered under OU1. In March 1995, EPA

selected a remedy in the OU2 ROD, calling for the extraction and on-site treatment of groundwater contaminated with organic compounds; discharge of treated groundwater to surface water, and the excavation and treatment of contaminated sediments via the thermal desorption system to be used for the GCL-property soils. Pools of dense non-aqueous phase liquid contaminated groundwater, encountered during the OU1 soil excavation, were pumped and treated as part of the OU1 remedial action. Pre-design groundwater sampling conducted in November 1997 indicated that contamination had migrated off-site. Further sampling conducted in March 2000 defined the extent of the downgradient plume of contamination. The remedial design for OU2, based on the hydrologic and geochemical data collected during the pre-design investigation, was completed in the fall of 2001. Onsite construction activities for OU2 remedy began in October 2002 and were completed in July 2004. The groundwater treatment system began operation on August 30, 2004 and was determined construction complete in September 22, 2004.

The site is currently in the long term remedial action (LTRA) phase which began September 30, 2005. A Remediation System Evaluation (RSE) was conducted by EPA to optimize the management and operation of the treatment system. An RSE report was finalized by the end of December 2006. The recommendations of the RSE report are currently being implemented.

Site Facts: The GCL site was selected as a pilot project for the Superfund Accelerated Cleanup Model (SACM). Under this pilot, work which had typically been performed sequentially (e.g., site assessment, National Priorities List (NPL) placement, removal action assessment) was performed in parallel. While determining if the site was eligible for the NPL, EPA performed investigations to further delineate the nature and extent of contamination at the site.

Cleanup Progress

(Removal Completed)

EPA's removal activities eliminated any potential imminent threat posed by the site. Approximately 20,000 gallons of creosote wastes/sludges were removed from the site and 4,800 cubic yards of contaminated soil and 3,000 cubic yards of wood debris were staged for on-site treatment.

OU1 (Construction Complete)

On-site mobilization of the low temperature thermal desorption system, used to remediate contaminated soils and sediments, began in September 1998. Excavation and soil treatment activities were completed in May 2000. Site restoration activities (e.g., grading, seeding) were completed in June 2000. During the excavation and treatment phase of the remedial action, additional structures and sources of contamination were discovered. Average and maximum contaminant concentrations were also detected at much higher levels than those predicted in the ROD. As a result, the actual volume of contaminated soil requiring remediation was 80,000 cubic yards, twice the estimated volume predicted in the ROD. These increases resulted in a much longer schedule for remediation.

OU2 (Construction Complete)

The OU2 remedial design to address groundwater contamination was completed in the fall of 2001. Construction of the OU2 remedy was separated in two phases. Phase I was the installation of six extraction wells which began in October 2002 and was completed in March 2003. The aquifer and pump tests of the installed wells were used to size the plant equipment. Phase II began in October 2003 and included the construction of the plant and two additional extraction wells. The work entailed construction of a 60 by 80 foot metal building on a concrete slab with the associated water treatment equipment, piping, process instrumentations and controls. Construction activities were completed in July 2004. The groundwater treatment system began operation on August 30, 2004 and is ongoing..

LTRA (on going)

LTRA began September 30, 2005. A Remediation System Evaluation(RSE) was conducted by EPA to optimize the management and operation of the treatment system. An RSE report was finalized by the end of December 2006. The recommendations of the RSE report are currently being implemented. As a results of these implementations, three new monitoring wells were installed at the site; two of these wells were installed to help delineate the plume. Another recommendation of the RSE report is to turn off the intermediate zone wells which will be implemented/ scheduled to start at the beginning of 2009 on a trial basis. A soil vapor intrusion evaluation was also recommended and will be be conducted at the Meadwestvavo property building in the near future.

Site Repositories

Sidney Memorial Library, Main Street (corner of Main & River Streets), Sidney, NY 13838