

LCP BRIDGE ST.

Contacts For More Information And Comments

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Documents for this Site are Available for Public Inspection at:

Atlantic States Legal Foundation Depository Library
658 West Onondaga Street, Syracuse NY 13204-3711
Phone: 315-475-1170 Fax: 315-475-6719
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New York State Department of Environmental Conservation
625 Broadway, Albany, NY 12233-7016
Phone: (518) 402-9676
Hours: M - Fri, 8:30 am - 4:45 pm
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New York State Department of Environmental Conservation, Region 7
615 Erie Blvd. West, Syracuse, NY 13204-2400
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Figure 1: An aerial photo of the LCP site when surface soils were being processed to remove mercury. The Grandstand at the NYS Fairgrounds can be seen in the background. The turquoise line shows the approximate placement of the slurry wall which is designed to prevent contaminants from leaking off-site. The wall consists of a trench dug 30-70 ft into the earth, filled with bentonite clay.

Description

The LCP Bridge Street plant is located in the Town of Geddes, immediately south of the New York State Fairgrounds. Land uses to the east and west are industrial. The Village of Solvay lies to the south.

Allied Chemical (now a part of Honeywell, Inc.) began operating a "chlor-alkali" chemical plant at this location in 1953. Caustic soda (NaOH) and liquid chlorine (Cl_2) were manufactured here using the "diaphragm cell" and "mercury cell" electrolytic processes. Bleach, and hydrochloric acid were also produced here. Allied sold the plant to Linden Chemicals and Plastics (LCP) in 1979. LCP continued to operate this plant until 1988, when it was shut down after a series of accidental chlorine releases to the air. The plant owner (Hanlin Group) was also fined by OSHA for numerous safety violations, and filed for bankruptcy in 1992.

A small portion of the site was used by Allied Chemical from 1956 to 1969 for manufacturing hydrogen peroxide. These operations contaminated local groundwater with xylene.

Environmental Issues

The primary contaminant of concern at the site is mercury. Prior to remediation of the site (see below), this site was identified as the single largest source of mercury to Onondaga Lake, via a drainage ditch (the West Flume). Prior to remediation, groundwater and surface water were contaminated with mercury and other chemicals. Site soils had extremely high levels of mercury (up to 19,000 ppm). Elemental (i.e. liquid) mercury was found in the central area of the site at depths of up to 55 ft. below ground. The mercury contamination presented a significant threat to the environment. PCBs and xylene were also found in portions of the site.

What's been done to address the problem?

Preliminary cleanup efforts—mainly involving the removal of PCB-contaminated soils and equipment—took place in 1990 and 1995. Most structures at the site were demolished in 2000-2001. Honeywell began an accelerated cleanup of the site in October 2003, by:

- excavating the Brine Mud Disposal Area
- excavating and disposing of PCB-contaminated soils, and
- removing abandoned drums

In October 2004, a \$14 million cleanup effort of the main plant site (Operable Unit-1) began, including these major components:

- removal of contaminated sediments from the West Flume (these were moved to the LCP site)
- treatment of mercury-contamination in the top six feet of soils excavated from certain areas of the LCP site. Over seven tons of elemental mercury was recovered using a soil-washing process. All contamination in deeper soils, including many tons of elemental mercury, was left in place.
- installation of a slurry wall around the perimeter of the site (see Fig. 1)
- installation of a temporary cap and a groundwater collection system.

These activities were completed in 2008. A final cap has yet to be installed. The site is fenced and security is maintained to minimize public exposure to on-site contamination.

Future actions

A final cap over the 20-acre site has yet to be installed. Current plans call for the addition of >100,000 cu. yards of contaminated sediments from Geddes Brook and Ninemile Creek at the site. Groundwater from the site is being pumped and treated continuously. This will need to be continued into the future indefinitely.

The former hydrogen peroxide plant is being treated as a separate cleanup operation (Operable Unit 2, or OU-2). The remedial investigation (RI) for OU-2 has been completed and approved. A Feasibility Study (FS) which examines different cleanup options is currently under review.

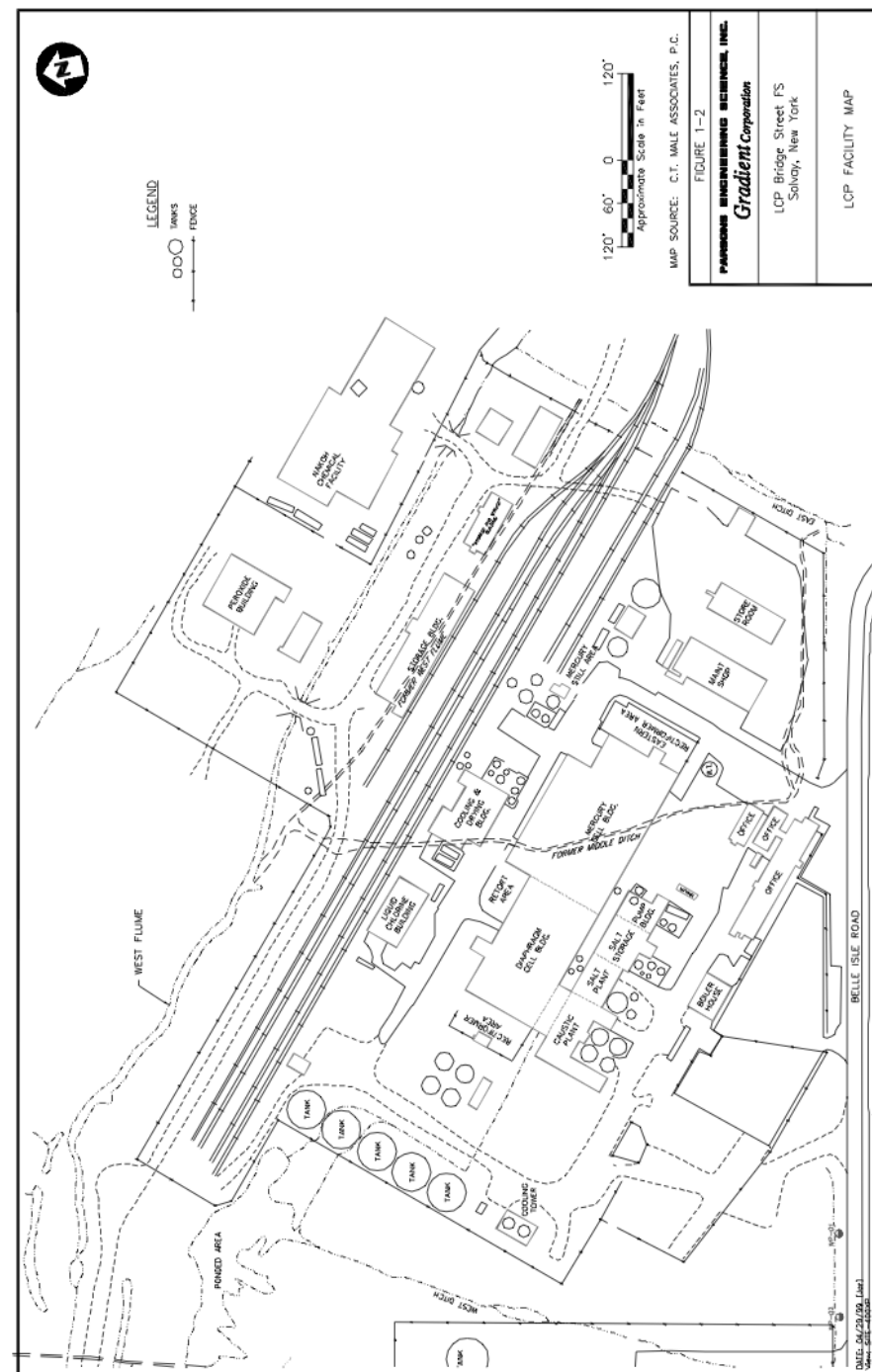


Figure 2: The former Allied/LCP facility prior to its demolition. The chlor-alkali facility is south of the RR tracks; the hydrogen peroxide plant lies to the north.