

NPL Site Narrative for LCP Chemicals Georgia

LCP CHEMICALS GEORGIA Brunswick, Georgia

Conditions at Proposal (October 1995): LCP Chemicals is located on Ross Road in Brunswick, Glynn County, Georgia. The site is bordered by the Turtle River marshes to the west and south and the urban populations of Brunswick to the north and east. The site is comprised of approximately 500 to 600 acres, the majority of which are not used due to the predominance of tidal marshlands. The remaining portion of the property is occupied with process buildings, administration offices, railroad spurs, treatment, storage and disposal units, and tank storage facilities. The State of Georgia has designated LCP Chemicals as its highest priority site.

The site was originally owned and operated by the Atlantic Refining Company (ARCO) who operated a petroleum refinery from 1919 until 1930. Portions of the site were also owned by Georgia Power Company and the Dixie O'Brien Paint Company. In 1955, the entire property was purchased by Allied Chemical, Inc., who manufactured caustic soda, chlorine, and hydrochloric acid by the electrolysis of sodium chloride using mercury cells. In 1979, LCP Chemicals purchased the property and continued the process practiced by Allied Chemical. From 1955 until 1968, waste sludges containing mercury produced by Allied Chemical were sold to an off-site reclaimer. From 1968 until the facility was sold to LCP Chemicals, several hundred to several thousand tons of contaminated sludge were disposed in surface impoundments that were constructed on site along the tidal marsh.

In 1989, EPA Region 4 performed a field investigation consisting of 86 samples. Mercury was detected in all seven on-site sources, lead was detected in six sources, and PCBs were found in the majority of sources. Mercury and lead were also detected in ground water in temporary wells near the site and in a surface water body in the vicinity of the site. In 1991 a Georgia Environmental Protection Division/ Department of Natural Resources investigation revealed elevated levels of mercury and lead in sediment and surface water samples near the site. Mercury was also found at elevated levels in crab tissue and oyster samples in the surrounding waters. The same study revealed extremely high levels of PCBs in sediment and crab tissue. Portions of Purvis Creek have been closed to commercial fishing.

The drinking water supply for the area is composed of private wells and the Brunswick municipal wells. The municipal wells draw water from the Upper Floridan Aquifer while the private wells are drilled at a wide range of depths. Within a 4-mile radius of the site, the municipal system serves 28,844 residents and private wells serve approximately 5,000 residents. The nearest drinking water well is located slightly beyond 0.25 mile from the site. Runoff from the site flows off the western edge of the facility into a canal that flows 0.35 mile through an area of wetlands and enters Purvis Creek. Purvis Creek merges with the Turtle River 0.9 mile downstream and then the Brunswick River an additional 7.5 miles downstream. The river flows approximately 5 miles before emptying into the Atlantic Ocean. Wetlands bound the majority of the surface water pathway, which is inhabited by numerous endangered species.

Status (June 1996): LCP Chemicals is heavily contaminated with a co-mingled combination of mercury, PCBs, dioxin, lead, and numerous organic compounds. When EPA arrived at the site, oil refinery wastes

laced with PCBs seeped into the marsh at several locations. PCB-contaminated anodes had been used to fill areas of erosion at the marsh's edge. Pools of mercury were commonplace in the cell buildings. By mid-1995, 150 tons of mercury had been recovered. To date, 25,000 tons of contaminated soil have been excavated and shipped off-site. Removal activities may cost \$25-40 million and take several years. EPA issued a removal order to AlliedSignal, Georgia Power, and ARCO. These parties are now working with EPA to control surface water run-off, dismantle the mercury cell buildings, and ship large volumes of contaminated soil by rail off site. In addition, these parties are conducting a remedial investigation/feasibility study (RI/FS) to determine what long-term threats to the ground water and marshland may exist at this site. An RI/FS work plan is currently under review by EPA.

For more information about the hazardous substances identified in this narrative summary, including general information regarding the effects of exposure to these substances on human health, please see the Agency for Toxic Substances and Disease Registry (ATSDR) ToxFAQs. ATSDR ToxFAQs can be found on the Internet at [ATSDR - ToxFAQs](http://www.atsdr.cdc.gov/toxfaqs/index.asp) (<http://www.atsdr.cdc.gov/toxfaqs/index.asp>) or by telephone at 1-888-42-ATSDR or 1-888-422-8737.