NPL Site Narrative for Longhorn Army Ammunition Plant

LONGHORN ARMY AMMUNITION PLANT
Karnack, Texas

Conditions at proposal (July 14, 1989): Longhorn Army Ammunition Plant (LAAP) covers 8,490 acres between State Highway 43 and Caddo Lake in Karnack, Harrison County, Texas. The area is primarily rural. Established in 1941, LAAP has been operated since 1956 by Thiokol Corp. Its primary mission is to load, assemble, and pack solid propellant rocket motors and pyrotechnic and illuminating ammunition. Until about 1984, production wastes were washed into ponds or burned in landfills. At present, explosive residues, waste water treatment sludge from explosives, and brine sludge are burned in an incineration area. Liquid and solid wastes are now placed in drums and stored in separate areas until disposal is arranged.

LAAP is participating in the Installation Restoration Program (IRP), established in 1978. Under this program, the Department of Defense seeks to identify, investigate, and clean up contamination from hazardous materials. Under IRP, the Army has identified 11 contaminated or potentially contaminated areas. Among them are the Active Burning Grounds, where flammable wastes have been burned since the early 1950s; the Unlined Evaporation Pond (in the Active Burning Grounds), into which an estimated 16,000 gallons per day of waste containing arsenic, barium, chromium, lead, zinc, and organic nitrogen compounds were discharged during 1972-84; the Old Landfill, where trinitrotoluene (TNT) wastes were disposed of during 1942-44; the Former TNT Production Area; and the Ground Signal Test Area and South Test Area, where various rocket motors and ammunition are tested.

A 1984 IRP study reports barium, chromium, and lead in sediments from the Unlined Evaporation Pond, and barium in soil from the Old Landfill. The study also found that arsenic, barium, chromium, lead, zinc, 1,3-dinitrobenzene, and 1,3,5-trinitrobenzene are present in on-site monitoring wells near the Active Burning Grounds. An estimated 1,900 people obtain drinking water from wells within 3 miles of hazardous substances on LAAP. The nearest well is 500 feet from LAAP's northern boundary.

Dinitrobenzene, 2,4,6-trinitrotoluene, nitrobenzene, 2,4-dinitrobenzene, and 2,6-dinitrotoluene are present in surface waters, according to the 1984 IRP study. The contaminants originate from at least two areas in LAAP: the Old Landfill and the Former TNT Production Area. Harrison Bayou flows east of the Old Landfill; the Production Area is drained by Goose Prairie Creek and Central Creek. Goose Prairie Creek, Central Creek, and Harrison Bayou drain into Caddo Lake. Caddo Lake, a part of the Big Cypress Bayou, which flows into the Red River, is used for recreational activities.

Status (August 30, 1990): IRP activities continue.

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) or by telephone at 1-888-42-ATSDR or 1-888-422-8737.