

# NPL Site Narrative for Landia Chemical Company

## LANDIA CHEMICAL COMPANY Lakeland, Florida

**Conditions at Proposal (February 4, 2000):** The Landia Chemical Company site encompasses a former pesticide manufacturing, blending, and storage facility located at 1405 West Olive Street in Lakeland, Polk County, Florida. The facility operated from 1940 to 1988 and, over that period, operations included formulating and storing a variety of pesticides including organophosphates, organochlorines, and metal-based pesticides such as zinc, copper, and lead oxides. The site is being proposed to the NPL because arsenic, copper, mercury, lead, zinc, and organic pesticides attributable to facility operations were detected in elevated concentrations in soil and ground water at the site. Thirteen municipal wells supplying potable water to two public water systems are located within 4 miles of the Landia facility.

The Landia facility covers approximately 19.6 acres, comprising 4.6 acres on the 1405 West Olive Street lot and a 15-acre vacant lot across West Olive Street. The 4.6-acre Landia property includes an office building, break room building and two metal warehouses. An unrelated company is currently leasing the office and warehouse buildings. The property formerly housed an oil and chemical drum washdown building, mill buildings, and shop buildings. The former manufacturing buildings were removed in 1991. The northern portion of the 4.6-acre property was used as a materials handling, loading, and transfer area. At one time, the facility maintained a retention pond along the western boundary of the 4.6-acre property, and leased a large portion of the adjacent property as a sulfur pile. Contaminated surface water from the oil and chemical drum washdown building, wastewater from cleanup procedures throughout the facility, and surface water runoff was directed to the former retention pond. The retention pond was backfilled prior to 1977; however, this area has remained active as a temporary impoundment for storm water runoff since that time.

The 15-acre lot across West Olive Street was used as a parking lot. Calcium sulfate residues from facility operations were reportedly used to backfill low-lying areas in the southern part of this parcel. A drainage ditch runs across West Olive Street along the eastern boundary of both the 4.6-acre and 15-acre parcels and receives storm water runoff from the eastern portion of the facility. A chain-link fence surrounds most of the 4.6-acre part of the facility, with the exception of the office building.

In 1983, reports of pesticides in a drainage ditch receiving runoff from the facility's eastern drainage ditch prompted an investigation by the Florida Department of Environmental Regulation (FDER). FDER discovered high levels of organic pesticides in the ditch water and sediments. Since that time, FDER (now Florida Department of Environmental Protection) and EPA Region 4 have completed a number of investigations to evaluate the potential threat posed by ground water and soil contamination. Process-related contaminants, including the metal-based and organic pesticides, pesticide components, and breakdown products, have been detected at elevated levels in ground water and soil samples. Metals detected at elevated concentrations include arsenic, copper, mercury, lead, and zinc. Organic pesticides include DDD, DDT, DDE, aldrin, BHC, chlordane, dieldrin, endosulfan, endrin, heptachlor, heptachlor epoxide, and toxaphene.

These hazardous substances have been detected in both the surficial and intermediate aquifers overlying the deep Floridan aquifer that is used by the Lakeland Electric and Water and Polk County public water utilities to supply drinking water for residents of the City of Lakeland and surrounding communities. The Lakeland Electric and Water and Polk County utilities serve approximately 158,724 people. These utilities operate thirteen municipal wells that draw water from the Floridan aquifer within 4 miles of the Landia facility.

**Status (May 2000):** EPA is considering various alternatives for this site.

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.