NPL Site Narrative for Stauffer Chemical Co. (Tarpon Springs Plant)

STAUFFER CHEMICAL CO. (TARPON SPRINGS PLANT)
Tarpon Springs, Florida

Stauffer Chemical Co. is located in an industrialized area between Anclote Boulevard and the Anclote River in Tarpon Springs, Pinellas County, Florida, about 1.6 miles east of the Gulf of Mexico. Stauffer purchased the 160-acre facility from Victor Chemical Works in 1960. The facility's ownership has changed several times; it is currently owned by Stauffer Management Co.

From 1950 to 1981, the facility manufactured elemental phosphorus from phosphate ore. The processed ore was shipped off-site to be used primarily for production of agricultural pesticides, food-grade phosphates, and flame retardants.

During the years of operation, a number of processing wastes were disposed of on the site. A system of seven unlined lagoons, about 600 feet from the Anclote River, received discharges of waste scrubber liquid and phosphorus water, as well as overflow from a calcium silicate slag pit. At some time, two of the lagoons were dredged, and the dredged material, composed of calcium sulfate/sulfite, calcium silicate, calcium fluoride, phosphate sand, and calcined phosphate dust, was placed in two piles approximately 40 feet from the Anclote River.

Other on-site disposal activities included the dumping of furnace dust in an isolated pond and the burial of 900 drums of calcined phosphate sand consisting of 20% elemental phosphorus. Over 500,000 tons of chemical process wastes were disposed of on the site between 1950 and 1979.

The site is underlain by a surficial aquifer composed primarily of sand and the Floridan Aquifer composed of limestone. Water is reached at an average depth of 8 feet below land surface. The Floridan Aquifer is encountered at 17 to 37 feet and is approximately 100 feet thick in the area of the site.

On-site monitoring wells into both aquifers are contaminated with barium, chromium, lead, vanadium, zinc, copper, and arsenic, according to EPA tests conducted in 1988 and 1989. The 1989 tests found these metals in the on-site waste piles. An estimated 8,500 people in the Tarpon Springs area receive drinking water from 23 public wells and 3 private wells located within 4 miles of the site. Because of the depths of the aquifers, all drinking water wells within 4 miles of the site are potential targets.

EPA's 1988 and 1989 tests also detected most of the same heavy metals in the Anclote River. Surface water runoff from the facility could flow south/southwest and enter the Anclote River, which is used for fishing. From there, the Anclote River flows 1.6 miles and empties into the Gulf of Mexico. Although no surface water intakes are located along the drainage pathways of the site, numerous county parks, State parks, and beaches are present and are extensively used. In addition, several wetlands that support a number of endangered and protected species are located along the surface water pathway.

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.