

NPL Site Narrative for Frontier Fertilizer

FRONTIER FERTILIZER Davis, California

Frontier Fertilizer is a 13-acre site located near the eastern boundary of the City of Davis in Yolo County, California. The site is north of Interstate 80, on the corner of Road 32A and Mace Boulevard. Since World War II, the facility has been used for various agricultural activities. The Barber and Rowland Co. operated a pesticide and fertilizer distribution facility on the site from 1972 to 1982. The Frontier Fertilizer Co. used the site from 1982 to 1987. Operations consisted of delivering pesticides, herbicides, and non-bulk chemicals in cans, drums, and other containers. Currently, the site is used as a maintenance yard for agricultural equipment.

Both the Barber and Rowland and Frontier Fertilizer companies used a former disposal basin, approximately 4,000 cubic feet in volume, to dispose of unused pesticides and fertilizers. Returned tanks and containers were washed and the rinsate was dumped into the disposal basin or onto the ground. In 1985, approximately 1,100 cubic yards of contaminated soil were excavated by Frontier Fertilizer from the former disposal basin and land farmed on a field east of the site.

Surface and subsurface soils in the area of the former disposal basin are contaminated with 1,2-dibromoethane (EDB), 1,2-dichloropropane (1,2-DCP), 1,2-dibromo-3-chloropropane (DBCP), Disyston (disulfoton), ethyl parathion, Treflan, and Eptam. EDB, 1,2-DCP, and DBCP were also found in ground water samples collected from onsite and offsite monitoring wells.

Other contaminants that were detected in ground water samples but have not been attributed to the former disposal basin include benzene, carbon tetrachloride, chlorobenzene, chloroform, 1,2-dichlorobenzene, 1,2-dichloroethane, 1,3-dichloropropene, p-isopropyltoluene, methylene chloride, naphthalene, toluene, 1,1,1-trichloroethane, trichloroethylene, 1,2,3-trichloropropane, and xylenes. These contaminants may be from other potential sources at the site such as underground storage tanks, waste oil storage tanks, northern fuel area, railroad hopper cars, washracks, grain storage building, east and west pole barns, central machine shop, eastern farm shop, western and central concrete slabs, and tomato grading station.

The Frontier Fertilizer site was never issued a Resource Conservation and Recovery Act permit to treat, store, or dispose of hazardous wastes. The California Department of Toxic Substances Control (DTSC) issued a remedial action order to Frontier Fertilizer in August 1987, and has regulated all site investigations since that time.

Site investigations have characterized the underlying interconnected aquifer as consisting of four water-bearing zones. Sampling of onsite monitoring wells has shown a release of contaminants from the site to the upper three water-bearing zones. The lower two water-bearing zones supply water to the City of Davis (population 43,168), the Barthel Mobile Home Park (population 540), and private wells within 4 miles of the site. Although actual contamination has not been documented in any of the drinking water wells, the potential for ground water contamination at the Frontier Fertilizer site remains.

In March and April 1993, EPA's Emergency Response Team collected and analyzed soil samples in areas of known or suspected contamination. The levels of contamination found did not trigger the need to

perform a time-critical removal action. EPA will begin a remedial investigation/feasibility study for soil and ground water in the fall of 1993. In the winter of 1993, the DTSC will install and operate an interim ground water extraction and treatment system in the most highly contaminated area of the ground water plume.

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.