

Edward Dorough
1806 Downing Circle
Tampa, Florida
County: Hillsborough
District: Southwest
Site Lead: Bureau of Waste Cleanup
Approved for Cleanup: May 20, 1999
Delisted: June 30, 2003
ERIC ID # 3888
HWC # 116

Site Description and History

The Edward Dorough site is located on a residential single-family residence in Tampa in Section 01, Township 29S, Range 19E at 27° 59' 06.2633" N, 82° 21' 57.2779" W. Approximately 100 empty retail-sized pesticide, fungicide, and fertilizer containers were buried in the back yard. Mr. & Mrs. Doug and Linda Ashmore purchased the property in 1990 from Mr. Edward Dorough. The Ashmores discovered the buried containers in 1992 while digging in their yard. Labels on some of the containers included Lindane, Sevin, Malathion, Folpet, Kelthane, and Triforine. In June 1992, Enviropact, a subcontractor to Mr. Dorough, removed the containers. After the removal of the containers, pesticide odors were detected from the open excavation which comprised an area of approximately 1.5 ft deep by 10 ft in diameter. The excavation was backfilled with clean fill dirt and peat.

The Florida Department of Environmental Regulation (FDER, now DEP) performed a preliminary groundwater investigation in February 1993 and a Preliminary Assessment in 1995. Three shallow monitoring wells were installed and five soil samples were collected at the site. Soil samples from the former disposal area contained chlordane, DDT, DDE, and Diazinon. Chlordane was also detected at 2.2 µg/L, slightly above the maximum (allowable) contaminant level (MCL) of 2 µg/L, in a groundwater sample collected from a downgradient well.

In 1998 Harding Lawson Associates completed a Site Inspection for the Hazard Ranking System evaluation of the site. Soil and groundwater samples were collected for pesticide and metal analyses. Groundwater analytical data indicated low level pesticide contamination below Federal and State MCLs. Iron and aluminum concentrations in background and site wells exceeded the State secondary MCLs. Soil analytical data indicated that the observed low levels of pesticide contamination were below concentrations that would pose a health risk under residential land use. However, arsenic was detected at concentrations exceeding the State soil cleanup target level (SCTL) for residential use of 0.8 mg/kg. The highest reported arsenic concentration in soil was 22.1 mg/kg.

Threat

Soils containing contaminants with concentrations posing a potential public health risk have been removed from the site as part of site cleanup by DEP. Elevated levels of aluminum and iron observed in the surficial aquifer groundwater in the area are not site related. No one currently utilizes the surficial aquifer for drinking water in the vicinity of the site. The site was delisted on June 30, 2003.

Response Strategy and Status

In May 1999, the Edward Dorough site was approved for state-funded cleanup. In November 1999, a DEP contractor, Foster Wheeler Environmental Corporation, completed a Supplemental Site Assessment to identify the extent of site contamination. Results of the Assessment confirmed arsenic contamination above the 0.8 mg/kg SCTL in onsite soils. Aluminum and iron were determined to exceed secondary drinking water standards in the shallow surficial aquifer.

A Decision Memo documenting the selected site remedy was signed in February 2000. The selected remedy consisted of excavation and offsite disposal of contaminated soils exceeding the State soil guidelines for residential use, and continued monitoring of the groundwater for iron and aluminum. The soil remedy was completed in November 2000 and included removal of approximately 22 cubic yards of soil, backfilling of the excavated area with clean soil and resodding.

Groundwater monitoring subsequent to the soil removal continued to confirm aluminum and iron at concentrations above Florida secondary drinking water standards. Installation and sampling of additional upgradient monitoring wells in November 2002 showed aluminum and iron above secondary standards as well, indicating that these constituents occur naturally at elevated levels in the area and are not site-related.

The site was delisted from the State-funded Hazardous Waste Cleanup sites list on June 30, 2003.