

Vroom
Pete's Lane, west of State Road 547
Loughman, Florida
County: Polk
District: Southwest
Site Lead: Bureau of Waste Cleanup
Approved for Cleanup: May 11, 1987
Delisted: July 29, 1998
ERIC ID # 3829
HWC # 056

Site Description and History

The Vroom site is located near Loughman, Florida in a 5-acre tract residential area in Section 11, Township 26S, Range 27E at 28° 13' 52.7396" N, 81° 35' 15.7688" W. From 1973 to 1979, seventy to one hundred 55-gallon drums were stored adjacent to property owned by Mr. Howard Vroom. The drums contained waste solvents and plasticizers from the Crown, Cork and Seal Company. The drum contents leaked into the ground and contaminated the surficial aquifer and shallow soils.

Threat

In 1979, the drinking water well of Mr. Vroom located in the surficial aquifer was found to be contaminated by solvents (toluene, xylenes, and methylene chloride). More recent sampling of other area wells indicates the presence of low levels of solvents. The soils where drums were stored also were contaminated with solvents and plasticizers. Contaminants have not yet migrated to the Floridan Aquifer, and the Southwest Florida Water Management District is enforcing well construction restrictions in the area. The shallow, surficial aquifer has been abandoned by nearby residents in favor of the deeper Floridan Aquifer. The site was delisted in July 29, 1998, and no longer is an environmental concern.

Response Strategy and Status

The Florida Department of Environmental Regulation (FDER, now DEP) Groundwater Section completed a site investigation in June 1984. Their report estimated the extent of groundwater contamination and identified the need for a soil investigation in the storage area. The soil and expanded groundwater investigations were completed in May 1985 by Environmental Science and Engineering (ESE), Inc., under contract to the FDER. Additional soil assessment was completed in May 1989. Results of these investigations indicated the presence of an estimated 3,000 yd³ of soil with concentrations above cleanup goals for contaminants of concern, and a groundwater plume that encompasses three acres and vertically extends to a depth of approximately 60 feet.

ESE completed and submitted a final Feasibility Study (FS), establishing cleanup criteria for the contaminated soil and groundwater, to the FDER in April 1987. The cleanup criterion for methylene chloride concentrations in soils was re-evaluated due to errors in the original calculations. The original FS recommendation for soil remediation was considered technically unsound for the contaminants of concern. Further soil assessment was conducted by the new

FDER contractor Camp, Dresser & McKee (CDM), and upon thorough review of the project recommended land disposal in a permitted hazardous waste disposal facility.

In August 1989, O.H. Materials, Corp., under contract with the FDER conducted a soil removal operation. 5,200 tons of contaminated soils were excavated and transported for disposal at the Chem-Waste Emelle, Alabama hazardous waste disposal facility. During this removal, Pete's Lane, the earthen roadway leading to the site, was resurfaced with limestone to facilitate the heavily loaded trucks. The selected remedial alternative for groundwater contamination was treatment by using air stripping and carbon adsorption, and disposal of treated water by injection. The groundwater remedial design was completed in December 1989. Contract documents for competitive, sealed bidding were completed in March 1990.

O.H. Materials was selected for the contract award, and the ground water treatment system construction process began in July 1990. Construction began in September 1990, and substantial completion was awarded in October 1990. The groundwater treatment system began operation at the time of substantial completion. Since the cleanup criteria for the project were modified to the stricter organoleptic levels, the projected time frame for groundwater treatment required extension. Due to site access problems, FDER filed a complaint against property owners Vroom and Roberts. A hearing on January 29, 1991 authorized site access for continuing remedial activities.

In September 1991, monitoring well SW-2 was converted to an extraction well to remediate a contaminated area on the periphery of the plume. In February 1992, a Contamination Assessment (CA) was performed to define the plume in the vicinity of SW-4. An additional extraction well was installed to address this contamination. By April 1992, contamination levels had decreased across the site, and the cleanup verification phase was initiated. The results indicated elevated levels of contamination in SW-1, and a CA was conducted in August 1992 to verify the extent of contamination in the vicinity of SW-1 and across the site.

In March 1993, approximately 7,941,082 gallons of contaminated groundwater had been recovered and treated, and cleanup criteria were met in all site monitoring and recovery wells. The treatment system was removed in May 1993. Continued monitoring of the site has indicated that the site remains virtually remediated. In May 1995, analysis results indicated elevated levels of contaminants were detected in monitoring well SW-1. Since SW-1 is in the surficial aquifer there is no threat to local residents.

In April 1996, the Polk County Board of County Commissioners voted to pave Pete's Lane. Construction planning commenced in July 1996. A contract agreement between DEP and Polk County to provide partial funding for the rehabilitation of Pete's Lane was entered into in September 1996. The completion of the Pete's Lane rehabilitation occurred in March 1998.

The latest round of groundwater sampling and analysis in May 1998 indicates that toluene, ethylbenzene, naphthalene, total xylenes and all polyaromatic hydrocarbon constituents are below detection limits in all samples. There are no longer any surficial aquifer groundwater receptors

within a 1-mile radius of the site, and restrictions are in place for wells cased in the Floridan. Thus, no public health threat exists. As a result of the recent analytical data indicating all contaminants are at non-detect, the DEP moved forward to delete this site from the State Action Sites List. The Vroom site was delisted on July 29, 1998.