

Sparr Gasoline Contamination
County Road 200A
Sparr, Florida
County: Marion
District: Central
Site Lead: Bureau of Waste Cleanup
Approved for Cleanup: May 30, 1987
Delisted: April 1, 1997
HWC # 054

Site Description and History

The Sparr site is located in a mixed residential-commercial area in the town of Sparr on CR 200A north of Ocala in Section 28, Township 13S, Range 22E at 29° 20' 16.6148" N, 82° 06' 44.2630" W. In October 1983, the Marion County Health Department (MCHD) reported to the Florida Department of Environmental Regulation (FDER, now DEP) several areas of potable water contaminated with gasoline in Sparr, Florida. During February – July 1984, the FDER and MCHD conducted a well inventory and sampling program to characterize the contaminated sites. Sampling by MCHD and FDER in 1983 and 1984 indicated high levels of gasoline contamination in the Universal Garage well and lesser amounts in the nearby Clay Jungle and Volunteer Fire Department wells, all of which are included as part of the Sparr site.

Threat

The primary threat was to private wells in the area which use the Floridan Aquifer as the source of drinking water. The unconfined Floridan Aquifer in Marion County is extremely susceptible to infiltration of contaminants from the surface. The Universal Garage well was reportedly contaminated for at least 20 years. Contaminants include benzene, toluene, ethylbenzene and xylenes (BTEX). A pump and treat groundwater remedial system was installed and the site was delisted from the State-funded Hazardous Waste Cleanup sites list in April 1997 and transferred to the Petroleum Cleanup Pre-Approval Program.

Response Strategy and Status

During October 1985, an FDER state contractor conducted a geophysical survey to locate abandoned tanks in the vicinity of confirmed ground water contamination. A soil gas survey was conducted in December 1985 to determine the extent of contamination around the tanks. Tanks at the Universal Garage, Petsky and Family Grocery were removed in February 1986. Tanks at the Clay Jungle and Sparr Hardware were pumped dry and filled with cement. Monitoring wells were installed in April 1986. Several wells were geophysically logged and sampled to further define the zone of contamination.

A draft Contamination Assessment report was submitted by the State contractor, Ecology & Environment (E&E), to FDER in February 1987, followed by a Remedial Action Plan in March. In July 1988, FDER tasked E&E to obtain additional soil samples in order to determine the

necessity of soil remediation, and to resample on-site wells. The results were submitted in September 1988, indicating that only groundwater required remediation. The highest levels of contamination were observed beneath the Universal Garage property.

Remedial Design was initiated under FDER's Petroleum Cleanup program in March 1989. Field work, including recovery well installation and pump tests, was conducted in July 1989. Remedial Design was completed in January 1990. Construction of the groundwater treatment and disposal system began in May 1990. System startup and operation were implemented in August 1990. Routine bi-weekly inspections and effluent monitoring were conducted from September 1990 to July 1991 to ensure that the system was operating as designed.

The system became inoperable in July 1991 when the control board was struck by lightning. Groundwater monitoring at that time showed that contamination had been significantly reduced except in the area of the Universal Garage well. Two additional recovery wells, one shallow and one deep, were installed in that area and pump tests were performed. The pump tests indicated that only the deep well in the Floridan aquifer could effectively recover contaminated groundwater on a continual basis. This well was connected to the existing groundwater recovery and treatment system in December 1992. The control board was also replaced with additional telemetry components to allow remote adjustments to the system. The groundwater recovery and treatment system resumed operations in December 1992. As of December 1996, over 11.7 million gallons of contaminated groundwater had been captured and treated by the system.

The site was delisted from the State-funded Hazardous Waste Cleanup sites list in April 1997 and transferred to the Petroleum Cleanup Pre-Approval Program. Additional site information is available by contacting the Petroleum Cleanup Pre-Approval Program.