

K and K Grocery
Intersection of State Road 2 and County Road 179A
New Hope, Florida
County: Holmes
District: Northwest
Site Lead: Bureau of Waste Cleanup
Approved for Cleanup: October 13, 1986
Delisted: April 1, 1997
HWC # 046

Site Description and History

The K&K Site occupies approximately $\frac{2}{3}$ of an acre at the intersection of Highway 2 and 179A in Section 06, Township 06N, Range 16W at 30° 57' 09.0165" N 85° 52' 40.2387" W. The Site is a gasoline service station (FAC ID # 308840737) and small grocery store located in the community of New Hope in northwestern Holmes County. Evans Grocery is located east of the site and was a small grocery store and gasoline service station (FAC ID # 308509103). The Choctawhatchee River is approximately two miles west of the site. The surrounding area is primarily listed as agricultural with sporadic residences. There are four private water supply wells located within $\frac{1}{4}$ mile of this site.

Attention was brought to the site when an on-site private supply well that taps into the deeper Floridan aquifer showed contamination. The site was investigated by the Florida Department of Environmental Regulation (FDER, now DEP) in 1984, and samples from the surficial aquifer and the surrounding area indicated hydrocarbon contamination. Results of the geophysical logging of the private water supply well indicated that the well was contaminated through leakage of contaminated water from the surficial aquifer into the well through a casing joint or improper grouting around the casing.

Threat

One drinking water well was contaminated with petroleum hydrocarbons and other wells were threatened. The Floridan aquifer and the underlying Claiborne Aquifer are the principal sources of potable water in the area. No public water supply exists within five miles of the site. Soils in the area of the leaking underground storage tank were contaminated with petroleum hydrocarbons. The site was delisted and **transferred** to the Petroleum Cleanup Pre-Approval Program in June 1997.

Response Strategy and Status

In March 1984, the FDER Northwest District Office collected soil samples near the station's underground storage tanks. The analytical results indicated the presence of petroleum hydrocarbons. A warning notice was issued to D & H Oil Company on March 26, 1984. Tank pressure checks were generally inconclusive, but did reveal a small leak in the gasoline pipeline. From June to November 1984, an FDER Groundwater Operation Response Team (ORT)

conducted a groundwater investigation. Samples collected from both the shallow monitor wells and the deeper supply well revealed high concentrations of petroleum-related hydrocarbons. A new private well was installed at the K&K site in late 1984 and remains uncontaminated at this time.

In October 1986, the FDER tasked a state contractor, Ecology & Environment (E&E), to delineate the horizontal and vertical extent of the contamination. The field investigation was conducted during February 1987 and the preliminary Contamination Assessment Report (CAR) was received in July 1987. Further determination of the extent of contamination and confirmatory sampling were completed in April 1988. The final CAR was completed in November 1988. Further investigation in support of remedial design was completed by E&E in November 1989. A preliminary remedial action plan (RAP) was approved by the FDER in December 1989. A RAP work plan was approved in February 1990. The work plan included an initial field effort to collect additional data for design and installation of groundwater recovery wells. A Final RAP was submitted in November 1990 and approved by the FDER Engineering Support section in January 1991.

In February 1991, E&E entered the construction phase of the project and was tasked to develop contract documents, procure a subcontractor, and develop a construction management work plan. Once this was complete, E&E was tasked in June 1991 to initiate construction of the groundwater remediation system and excavation of excessively contaminated soils. In July 1991, Hulcher Resources and E&E's subcontractors began the soil excavation process. Field analysis indicated soil contamination was more extensive than the original delineation. Hulcher completed soil excavation and construction of the groundwater treatment system in August 1991. Substantial completion was delayed due to problems with the capacity of the injection well. In October 1991, the injection well was rehabilitated successfully.

The Operation & Maintenance (O&M) phase was initiated in November 1991. In October 1992; the monitoring data indicated that the level of remediation that was predicted in the RAP was not apparent during remedial action. In addition, questions were raised as to whether the existing wells accurately delineated the entire plume. In January 1993, E&E was tasked to conduct a supplemental Contamination Assessment to decide how the treatment system should be augmented to provide a more effective remedial system.

Additional wells were installed in February 1993, and a report of the sample results was submitted in March 1993. The results indicated that additional wells were necessary to delineate the plume. In June 1994, additional wells were installed in the appropriate areas. The Supplemental Contamination Assessment was approved by FDEP in December 1994.

The Additional Assessment indicated that the existing remedial system was having little effect on remediating groundwater contamination, probably due to widespread soil contamination. The underground storage tanks and surrounding contaminated soil located at Evans grocery were removed in June 1995.

The existing O & M task phase was completed in April 1995 and the remedial system was turned off at this time. Review of remedial system status and specific site conditions indicate that active remedial efforts over the past four years have been ineffective in reducing petroleum contamination. Remedial action for the site was revised to consist of semi-annual monitoring of private wells and selected monitoring wells. The objective of this remedial action modification is to provide ongoing site status review while collecting data for development of a natural attenuation model. If sampling results indicate that site contaminants will pose a threat to human health or the environment, or if new technology becomes available to address site-specific problems, action would be initiated to address site contamination. Groundwater sampling of specific monitoring wells was conducted in March, and October 1996 and April 1997. Analytical results indicate that natural attenuation of contaminants is evident throughout the majority of the site and there has been no plume expansion.

The site was delisted from the State Hazardous Waste list in June 1997 and transferred to the Petroleum Cleanup Pre-Approval Program.