

Jimmy's Discount Cleaners
601 North 25th Street
Ft. Pierce, Florida
County: St. Lucie
District: Southeast
Site Lead: Waste Cleanup Program
Approved for Cleanup: October 3, 2005
ERIC ID # 3915

Site Description and History

This site is located on the northwest corner of the intersection of North 25th Street and Avenue E in Township 35S, Range 40E, Section 05 at 27° 27' 18.2300" N, 80° 21' 00.1571" W. Drycleaning operations were conducted at this site from 1973 to sometime in the early 1990's. Jimmy's Discount Cleaners operated at this site from 1973 to 1990 when it became First Class Cleaners. The building, which was constructed in 1956, is currently operating as a convenience store. A "Dry-to-Dry" machine, reportedly utilizing tetrachloroethene (PCE) as the drycleaning solvent, was utilized for drycleaning purposes. No secondary containment structures were installed around or beneath the machine. The facility also had a Pilgrim muck cooker, spotting board and five presses.

In January 1992, the Fort Pierce Utilities Authority filed a complaint with the Florida Department of Environmental Regulation (FDER, now DEP) regarding possible dry-cleaning solvent contamination of one of the City's production wells (Well Number N11). This well was located within 100 feet of the First Class Cleaners (FCC) facility. On March 11, 1992, FDER conducted an inspection of the FCC facility. Nine containers of potentially hazardous substances were detected. Five 20 – 30-gallon containers, between 1/3 full and full, were found. The labels indicated that the contents were PCE. Two rusted, full, 55-gallon drums were also found. These drums were reportedly on the verge of rupturing. Two other open-topped 55-gallon drums were observed. The liquid in these drums exhibited a sheen suggesting the presence of solvent or petroleum contamination. FDER subsequently notified the owner of FCC to remove the containers and to implement a contamination assessment of the site.

On March 26, 1992, the Fort Pierce Utilities Authority collected a groundwater sample from production well N11. 0.56 micrograms per liter (µg/L) PCE and 2.4 µg/L trichloroethylene (TCE) were detected in the well sample. This well is part of the 25th Street wellfield and is located approximately 75 feet north of the site. Raw water from the 25th Street wellfield is currently treated using an air stripping remediation system. These results were forwarded to FDER in June 1992. On June 1, 1992 FDER contacted a site representative regarding the status of the containers. The site representative indicated that the containers had been removed. However, on June 6, 1992, FDER conducted a site visit and found that the containers had not been removed. A Warning Letter was forwarded to the site owner on July 23, 1992. In August 1992, the FDER Southeast District requested assistance from the FDER Site Investigation Section (SIS) regarding assessment of the site. Between March 1992 and February 1993, FDER identified a number of potential site, property and mortgage owners. However, each party claimed that they did not own the property. As a result, permission for site access was denied. In May 1993, FDER filed suit against First Class Cleaners, Inc. and three potential responsible parties (PRPs). The containers and abandoned material, including dry cleaning filters and sludge, were removed by the DEP in March 1994. On

February 10, 1994, as part of the removal process, a water sample was collected by Laidlaw Environmental Services from one of the containers at the site. 21,800 µg/L PCE was detected.

On July 26, 1994, DEP SIS performed three soil borings and installed one temporary monitor well at the site. Sampling was conducted on the west side of the facility at the rear of the building. Soil samples were collected between 3 and 16 feet below land surface (bls). 230 µg/kg PCE was detected in one of the soil samples collected from boring #3. Leachability tests of the soil samples using the Toxicity Characteristic Leaching Procedure (TCLP) were also conducted. 47 – 470 µg/L of PCE was detected in the leachate.

On August 13, 1996, a groundwater sample was collected from a temporary well (TMW-1) located in the northwest corner of the site. The well was installed to a depth of four feet. A strong odor was detected during the installation of the well. This sample was subsequently analyzed for purgeable halocarbons and found to contain 129 µg/L PCE, which exceeded the State maximum contaminant level (MCL) of 3 µg/L for PCE. On August 26, 1996, the owner of the former dry cleaner submitted an application for entry into the State's Drycleaning Solvent Cleanup Program (DSCP). A Site Screening Report was also included. The application and report noted some overflows, spills and leaks but indicated that the incidents would not exclude the site from the State program. Based on a review of the application, FCC was subsequently accepted into the program by DEP.

In June 2000, a DEP contractor, Foster Wheeler Environmental Corp. (now Tetra Tech EC, Inc. [TTEC]), submitted a Site Assessment Workplan for the FCC site to the Department. The workplan scope of work included provisions for direct push borings, piezometer installation, monitor well installation and soil and groundwater collection and analysis. Sample analyses included volatile organic compounds (VOCs) including PCE and its breakdown or degradation products (TCE, cis-/trans-1,2-dichloroethene and vinyl chloride). However, due to site access issues, the workplan could not be implemented. On November 14, 2000, DEP notified the owner that the site was no longer eligible to participate in the DSCP. The reasons cited for cancellation were nonpayment of the deductible payment and denial of site access. On August 29, 2001, this site was forwarded to the DEP Superfund Site Screening section for CERCLA consideration.

Threat

The surficial aquifer system is the aquifer of concern. The majority of the site area is served potable water by the Fort Pierce Utilities Authority (FPUA) water well system. FPUA maintains four well fields. These consist of:

- 25th Street (17 wells),
- Lawnwood (15 wells),
- West (8 wells) and,
- Belcher Canal (7 wells).

The majority of the wells are open to the surficial aquifer system. The surficial aquifer wells are open to the sand and gravel portion of the aquifer and range in depth from approximately 80 to 120 feet. However, four wells in the West wellfield (FB1 to FB4) are reportedly open to the Floridan aquifer system. The Belcher Canal wellfield (N15 to N21), West wellfield (W1 to W4;

FB1 to FB4) and most of the 25th Street wellfield (S1, N1 to N 14) are located within 1 mile of the site. The Lawnwood wellfield is located between 1.7 to 2.2 miles south-southeast of the site. The nearest well to the site, FPUA Well N11, is located only 75 feet north of the site. As indicated earlier, PCE and TCE have been detected in this production well. The FPUA well system currently serves approximately 45,100 people. A number of community/non-community well systems are located within 4 miles of the site. These systems collectively serve 1,373 people in the Ft Pierce/St. Lucie County area. The nearest community/non-community well, Colonial Engineering, serves 95 people and is located approximately 1 mile west of the site.

Response Strategy and Status (December 2020)

The site assessment has been completed. PCE and TCE contamination is present in both the soil and groundwater, extending onto two adjacent properties and the City right-of-way. The FPUA well, N11, appears to be capturing most of the groundwater contamination from the site. According to the St. Lucie County Health Department, the water from this well is treated prior to distribution therefore the risk to the public is limited. The remedy for this site primarily addresses the soil contamination and includes natural attenuation monitoring of the groundwater.

A decision memorandum; for installation of a soil vapor extraction (SVE) system with a contingency for source area excavation and disposal, should the owner raze the building, and natural attenuation monitoring of groundwater; was signed on December 22, 2011. A Remedial Action Plan was prepared and approved by DEP on March 1, 2012. The excavation portion of the decision memo has been put on hold pending demolition of the building, should it occur, but the SVE system has been installed. The SVE system start-up occurred on August 6, 2012. Due to diminishing concentrations, the system was pulsed in July – August 2014. The soil gas concentrations rebounded significantly during this event and the SVE was restarted. In February 2016, the SVE system was permanently shut down after a fire damaged the building and SVE system piping. The business remained closed for several months and the SVE system was removed in February 2017.

The remaining contamination is mainly located in an organic (peat) layer under the building, limiting the effectiveness of the current remedy. DEP is reevaluating the soil remedy at this site. Groundwater monitoring has occurred annually beginning in 2017. The April 2020 sampling report indicated PCE above the GCTL in two of the six monitor wells sampled, at concentrations of 40 ug/L and 55.8 ug/L. The groundwater contamination is localized onsite at concentrations that suggest ongoing attenuation monitoring. Soil may be contributing to groundwater contamination when groundwater levels are relatively high, but annual sampling results do not show an increasing trend in groundwater concentrations.

Schedule

Groundwater sampling is planned for 2021.