

Pepper Steel and Alloys, Inc.
11100 Northwest South River Drive
Medley, Florida
County: Miami – Dade
District: Southeast
Site Lead: EPA
Placed on National Priorities List: September 1, 1983
HWC # 022
ERIC ID # 3795

Site Description and History

The Pepper Steel and Alloys, Inc. site occupies approximately 25 acres located at 11100 Northwest South River Drive in Medley (near Miami) in Township 52S, Range 40E, Section 33 at 25° 52' 26.3239" N, 80° 21' 12.6004" W. Past activities included manufacturing of batteries, and fiberglass boats. Additionally, Pepper Steel and Alloys operated as a scrap metal recovery facility from the mid-1960s to the early 1980s. A portion of the recovered metal was obtained from transformers and other electrical equipment. A waste product from this recovery operation was transformer oil containing polychlorinated biphenyls (PCBs). Reportedly, the waste transformer oil was discarded on the ground at the site.

The Biscayne Aquifer underlies the area. This unconfined aquifer; composed of limestone and an overlying sand unit, supplies approximately 500 million gallons of fresh water per day to the southeast Florida area. The flow of the groundwater in the region is southeastward. In the vicinity of the site, groundwater flows to the northeast, towards the Miami Canal.

Threat

Soil contaminated with lead and PCBs was remediated by on-site solidification/stabilization in December 1988. Monitoring has confirmed that groundwater meets criteria set forth in the Record of Decision (ROD).

Response Strategy and Status (December 2016)

In early 1983, EPA conducted a geophysical survey of the site and identified approximately a dozen zones requiring further investigation. A study by EPA's contractor was undertaken in 1983 to determine if PCBs were migrating through the groundwater toward the Miami Canal. The study, based on a single three-well cluster, indicated no evidence of off-site groundwater migration.

A concurrent sampling program was conducted by another EPA contractor. Sampling included water, sediment, and soil samples from canals, areas of suspected surface contamination, existing wells and newly installed monitoring wells. The report on this sampling effort documented soil contamination with polynuclear aromatic hydrocarbons and PCBs.

In August and September 1983, after receiving site access in federal court, EPA initiated an immediate removal of PCB contaminated soil, which was floating on the water table. Due to slow recharge, the oil recovery operation did not yield the expected quantities of oil.

EPA funded an enforcement Remedial Investigation/Feasibility Study (RI/FS) for the site, which was completed in September 1985. Florida Power and Light (FP&L), the main responsible party, and EPA were ordered by a federal judge to negotiate a remedy and cost reimbursement. The resulting ROD was signed in March 1986, and included the following cleanup actions: collection and offsite disposal of all free oil; solidification and stabilization of soil containing PCBs in excess of 1 ppm, lead in excess of 1000 ppm, or arsenic in excess of 5 ppm with a mixture of Portland cement and fly ash, with placement onsite. Provisions were also included for institutional controls to restrict future land use to industrial uses, and for verification of the effectiveness of the remedy.

FP&L completed the remedial design work in September 1986. A Consent Decree between EPA, the Florida Department of Environmental Regulation (FDER, now DEP), Dade County and FP&L was entered in March 1987. Construction was begun by FP&L in February 1987 and completed in December 1988. FP&L submitted the final Remedial Action (RA) Report documenting completion of construction in June 1989. EPA approved the RA Report in August 1989.

EPA settled with property owners of the Site in 1997. A portion of the money from the settlement was to be used by EPA to provide operation and maintenance (O&M) activities. A round of groundwater and soil sampling was performed in January 2012 following installation of two replacement monitoring wells onsite (one had been damaged by a vehicle and the other had continuing problems with low yield). All groundwater samples were below site cleanup goals and DEP MCLs. Two soil samples, taken from a boring on the west side of the site in the NW 97th Avenue right-of-way, showed slight exceedances for arsenic (2.5 & 2.8 mg/kg). DEP generated an offsite contamination notification package to the City of Medley as a result of these exceedances. The fourth Five Year Review Report, signed September 24, 2012, noted three outstanding issues: 1) permanent institutional controls (restrictive covenants) are needed for the four separately owned parcels that make up this site; 2) a site Operations & Maintenance (O&M) Plan needs to be finalized and implemented and; 3) a Groundwater Monitoring Plan needs to be developed and implemented.

Schedule

Periodic groundwater monitoring will continue to confirm the effectiveness of site remedy. Permanent institutional controls, based on the DEP model, are being developed and will be implemented for three of the parcels. A review of data for the fourth parcel indicates that institutional controls may not be necessary. All four parcels have been sold recently, which necessitates updates to the title work. Grading of the site by one of the real property owners may have affected the monolith and EPA is investigating. Also, the EPA has developed a new O&M manual and Groundwater Monitoring Plan for the site, however some additional updates may be needed due to the change in ownership. The next five-year review is in progress with the report due in 2017.