Superfund Construction Project – Funding Pending

Anodyne, Inc. Superfund Site
North Miami Beach, Miami-Dade County, Florida

Site Description

The Anodyne, Inc. Superfund site in North Miami Beach, Dade County, Florida, lays within the Sunshine State Industrial State Park, which is a mixed-land use area consisting of residential, commercial and industrial facilities. The facility is located on a parcel of land approximately 4.25 acres in size.

The Anodyne, Inc. facility was involved in silk screening, lithography and metal anodizing from the early 1960s through 1975. The manufacturing processes were conducted within the Anodyne, Inc. buildings. Some storage of process chemicals occurred in aboveground tanks enclosed by concrete block structures along the buildings’ south side. The EPA added the site to the National Priorities List (NPL) in 1990 due to surface and groundwater contamination.

The site’s contaminants of concern (COCs) are chlorinated solvents, specifically tetrachloroethene (PCE), trichloroethylene (TCE), cis/trans-1,2-dichloroethene (DCE), and vinyl chloride. Waste was discharged directly onto the ground via pipes through the building’s wall(s). In addition, a 10-inch inside diameter, 81-foot deep injection well was installed at the site during the manufacturing phase of the facility’s operation. The injection well is located on the site’s south side. Reportedly, spent solvents were disposed of within the injection well. There is indication that dumping of waste solvents through the injection well affected the deep zone aquifer from approximately 90 to 175 feet below surface within the Biscayne aquifer, a federally designated sole-source aquifer.

Site Status and Cleanup Actions to Date

- EPA signed a record of decision (ROD) in 1993; the ROD was subsequently amended in 2016.

- The site’s selected remedy separates the contamination into two separate zones: Zone 1 includes metal-contaminated soils and shallow groundwater, and Zone 2 includes deep volatile organic compound- (VOC) contaminated groundwater.

- The selected remedy for Zone 1 contamination was excavation and disposal of metal-contaminated soils. The ROD also states that residual contaminants in the shallow groundwater zone following excavation would naturally attenuate within 2 to 6 years. A Zone 1 cleanup design was completed in 1995. The potentially responsible parties completed Zone 1 remediation in 2005 after signing a consent decree with EPA in 2000.

- The chosen remedy for Zone 2, deep groundwater VOC contamination, included recovery and onsite treatment of VOC contaminated groundwater from the lower portion of the aquifer. The treated groundwater would be recycled back into the Biscayne aquifer through an onsite injection well(s). Implementation of the Zone 2 remedy was not conducted. After many years of complex groundwater investigations and remedy pilot testing, EPA signed a ROD amendment in 2016 to address Zone 2; the amendment entailed actions to address specific concentrated areas on site with monitored natural attenuation. EPA completed a remedial design in June 2018.

Project Pending Funding, as of the end of Fiscal Year 2020

This work will address contamination through treatment in three specific areas identified as the Source Area C, D and E zones; zones indicate the groundwater treatment depth.

Funding Through Fiscal Year 2020

EPA has provided approximately $4 million for cleanup activities at the site.