Superfund Construction Project – Funding Pending

Hemphill Road TCE Superfund Site
Gastonia, North Carolina

Site Description

The Hemphill Road TCE Superfund site is located at 5009 Hemphill Road, Gastonia, Gaston County, North Carolina. The contamination at the site is believed to be a result of the property owner in the 1950s accepting liquid waste, dumping the contents on the ground, burning residues, and flattening the drums for scrap metal sale. Gastonia Industrial Truck (GIT), which sold and maintained forklifts, operated on the site from the 1970s to 2016. TCE contamination was initially detected at the GIT facility and two nearby private wells in the late 1980s. Further health department investigation identified two additional private wells with contamination greatly exceeding state drinking water requirements. After a series of state and EPA investigations over the next 10 years, the site was placed on the NPL in 2013. The site includes a contaminated groundwater plume that extends beyond the property. Residential properties are located on all sides of the site.

Site Status and Cleanup Actions to Date

- From 2014 through 2017, a remedial investigation (RI) was conducted to determine the vertical and lateral extent of the contamination. The investigation included extensive surface and subsurface soil sampling in addition to groundwater and privately owned community groundwater wells. This investigation also included a vapor intrusion study which consisted of several rounds of groundwater, soil gas, crawl space/sub-slab vapor, indoor air, and ambient air sampling.

- Wells at 8 nearby private residences have detections of TCE in drinking water. Filter systems are in place at 4 of the 8 residences, where TCE is present at greater than the maximum contaminant level (MCL) of 5 ppb. Four (4) additional residences have TCE detections below the MCL of 5 ppb and are being monitored.

- In September 2018, the EPA issued an interim Record of Decision (IROD) to remediate high-concentration areas of the solvent plume and to connect 8 homes to the municipal water supply. The interim remedy includes in-situ treatment of soils and residuum (shallow aquifer/weather soil), monitoring, and installation of water lines. The IROD doesn't address the bedrock aquifer. Following the interim action and monitoring, the need for additional remedial action will be evaluated.

- The EPA completed the Remedial Design (RD) for the interim remedy in July 2020. The RD includes the design for remediation of the soil and residuum, as well as connection of the municipal water supply to the 8 affected residential wells.

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

This work consists of treating the subsurface soil and shallow groundwater with in-situ chemical oxidation to break down the TCE in the groundwater and installation of water lines to provide an alternative source of water to impacted residences.

Funding through Fiscal Year 2020

EPA has provided approximately $3 million for cleanup activities at the Site.