Superfund Construction Project – Funding Pending

Tower Chemical Co. Superfund Site
Clermont, Florida

Site Description

The Tower Chemical Co. site in Clermont, Florida, consists of contaminated soil, sediment, surface water and groundwater resulting from the facility’s waste and wastewater disposal practices. It includes an approximately 15-acre parcel of land and the groundwater underlying the site. There is an auto mechanic shop on the property, and portions of the Site are currently used as storage for semitrucks, boats, and recreational vehicles (RVs).

From 1957 to 1981, the Tower Chemical Company manufactured, formulated, and packaged various pesticides. The two main products produced by the Tower Chemical Company were chlorobenzilate (a miticide) and a copper-based agricultural fungicide with the trade name "Cop-o-cide". The Tower Chemical Company also manufactured dichlorobenzil in-house from dichlorodiphenyltrichloroethane (DDT). Contamination from pesticides, volatile organic compounds, semi-volatile organic compounds, and metals has been detected in soil, surface water and groundwater.

Site Status and Cleanup Actions to Date

- In 1987, an Operable Unit 1 (OU1) Record of Decision (ROD) addressed contaminated onsite soils and surficial groundwater at the Site. The two major components of this OU1 remedy were not implemented in 1991 when EPA did not find the high levels of contaminants originally anticipated.

- In 2000, an Operable Unit 2 (OU2) interim action ROD addressed offsite groundwater contamination through installation of carbon filtration systems on nearby residential drinking water wells. The systems required periodic particulate filter and carbon replacements.

- In 2006, an Operable Unit 3 (OU3) ROD addressed soil, sediment, and groundwater contamination at the Site and replaced the OU1 cleanup plan. This ROD required excavation of contaminated surface soils in the vadose zone and of select subsurface soil contamination that exceeded cleanup levels and called for a permanent solution to replace the private drinking water wells by connecting those residences to the public water supply line.

- From 2010 to 2011, approximately 63,000 tons of soil and sediment were excavated and disposed offsite in EPA-approved RCRA landfills. Sediments from a drainage ditch that exceeded the State of Florida Sediment Quality Guidelines (SQGs) were also removed and disposed in an offsite landfill.

- In 2011, a groundwater remedial design was initiated to address groundwater and soils with bioremediation. In 2013, an in situ chemical oxidation remedy pilot test was conducted. In 2014, bench scale treatability studies were initiated for a remedy utilizing persulfate, zero valent iron, and activated carbon impregnated with metallic iron. In 2015, a sorption isotherm study using granular activated carbon was also performed.

- In situ solidification/stabilization (ISS) bench scale testing was completed in 2017. All previous studies and tests failed to account for subsurface anomalies and proved to be ineffective at reducing the principal contaminant, 4,4’-Dichlorobenzophenone (DCBP). As a result, EPA approved the ISS remedial design in September 2020.

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

This work includes implementation of an ISS remedy to address DCBP contamination in groundwater and soil? and will include a groundwater recovery and treatment system to control the further migration of contaminated groundwater to surface water and wetland areas.

Funding Through Fiscal Year 2020

EPA has provided approximately $15M for cleanup activities at the site.