Fiscal Year 2017 Unfunded New Construction Project

McGaffey and Main Groundwater Plume Superfund Site
Roswell, New Mexico

Site Description

The McGaffey and Main Groundwater Plume site is in a mixed-use area with commercial and residential development. The 550-acre site consists of a groundwater plume characterized by the presence of tetrachloroethene (PCE) and trichloroethene (TCE) originating from historical releases at former dry cleaning facilities.

The groundwater plume has affected water quality in the Roswell groundwater basin alluvial aquifer, which supplies groundwater to wells used for domestic and irrigation purposes. The New Mexico Environment Department discovered the site in 1994. EPA added the site to the National Priorities List in 2002.

Site Status and Cleanup Actions to Date

- In the record of decision signed in 2008, EPA selected a multi-component remedy employing a phased implementation approach. The remedy included:
    - A component for source area soil, soil vapor, and indoor air, which consists of a vapor intrusion and mitigation system, soil vapor extraction system, and vapor phase treatment. This remedy component has been designed, constructed, and is currently operating;
    - Source area groundwater (pump, pretreat and discharge to the Roswell publicly owned treatment works); and
    - Groundwater plume (pump and discharge to Roswell POTW for treatment), and enhanced reductive dechlorination for plume hot spot area.

- The New Mexico Environmental Department (NMED) performed remedial design investigations for the groundwater plume and hot spot areas. In September 2013, NMED completed the enhanced reductive dechlorination remedial design for the hot spot area of the plume. NMED also initiated the remedial action at the hot spot in May 2014 where 30 monitoring and injection wells were installed. However, no amendment injections have been delivered yet due to discovery of changed site conditions.

- The EPA Optimization Team completed a study of ongoing and future remedy construction and operations and recommended prioritizing remedial activities to:
    - Improve understanding of risks associated with current and future PCE exposure to contaminated groundwater and mitigate exposure to site contaminants where current exposure risks are found to be unacceptable;
    - Address source area contamination with a higher priority on source area groundwater than source area soil; and
    - Evaluate the need for further characterization and remediation of the groundwater plume hotspot or plume core.

- The source area groundwater remedial design was completed in September 2017.

Unfunded Action

The unfunded fiscal year 2017 work included installation and operation for up to 20 years of a groundwater extraction and ex-situ treatment system to reduce contaminant concentrations in source area groundwater.

Funding Status

To date, no funding has been provided for the remedial action of the source area groundwater.