

Fiscal Year 2017 Unfunded New Construction Project



Kauffman and Minter Superfund Site Springfield Township, New Jersey

Site Description

The [Kauffman and Minter site](#) (K&M) occupies 5.6 acres in Springfield Township, Burlington County, New Jersey. A garage and office building totaling approximately 10,000 square feet are located on site. The site is in a sparsely populated, predominantly rural area that primarily supports agriculture, horse ranching, and related businesses.

K&M provided transport services in company-owned tankers. It carried bulk liquids including solvents, plasticizers, resins, vegetable oils, soaps, petroleum oils, and alcohols. From 1960 through at least 1981, wastewater generated from the washing of tanker interiors was discharged to an on-site lagoon. The unlined lagoon had no overflow diversion structure to protect the system from overflowing during rainfall events.

Site Status and Cleanup Actions to Date

From 1991 to 1997, several removal actions were performed:

1. The disposal of the liquid in the lagoon and installation of a fence around the lagoon;
2. Collection and disposal of contaminated materials found in on-site tank trailers and deteriorating drums, removal of empty tank trailers, and removal and cleanup of two underground storage tanks;
3. Excavation and off-site disposal of approximately 12,000 tons of sludge and solidified material from the lagoon and restoration of the lagoon area;
4. Excavation and disposal of approximately 2,700 tons of contaminated soil from the drainage ditch area up to the water table, approximately 10 to 12 feet below the ground surface; and
5. Demolition of the west wash-bay area and excavation and disposal of approximately 3,400 tons of soil from that area up to the water table.

The record of decision for Operable Unit 1 (OU 1), which was issued in September 1996, called for the excavation and off-site disposal of approximately 1,000 cubic yards of lagoon sediments and for long-term monitoring and institutional controls of contaminated groundwater.

A pilot phytoremediation study was initiated in 1998 at the drainage ditch and near the wash-bay area. The purpose of the study was to determine whether selected trees could be used to reduce soil and groundwater contamination levels in the planted area and prevent further off-site migration of contaminated groundwater.

Groundwater samples collected between 1999 and 2003 revealed high concentrations of organics in monitoring wells west of the on-site building.

In August 2002, EPA issued a record of decision for OU 2 that addressed the groundwater contamination. It involved chemical in-situ treatment of the contaminated groundwater followed by discharge of the treated water to a surface water body and the establishment of a classification exception area along with groundwater monitoring.

In-situ chemical oxidation treatment of soil and highly contaminated groundwater was implemented between 2008 and 2011. The effort achieved approximately 70 percent reduction of contaminated mass.

From 2003 to 2012 a treatability study using in-situ chemical oxidation (ISCO) was conducted, a remedial design for ISCO was completed, and the remedial action using various ISCO treatment technologies was completed at the former west bay wash area and areas immediately downgradient.

A remedial design, which was completed in 2016, provided specifications for the extraction and on-site treatment of the contaminated groundwater through treatment barriers to remove volatile organics.

Unfunded Action

The unfunded fiscal year 2017 work includes the extraction and on-site treatment of the contaminated groundwater through treatment barriers to remove volatile organic compounds.

Funding Status

To date, EPA has spent \$7.2 million for site removal evaluation, removal action, and the remedial investigation/feasibility study.