

# Reich Farm

## New Jersey

EPA ID#: NJD980529713

### EPA REGION 2

#### Congressional District(s): 03

Ocean

1 mile northeast of Toms River in Dover Township

#### NPL LISTING HISTORY

Proposed Date: 12/1/1982

Final Date: 9/1/1983

## Site Description

The Reich Farm site is an open, relatively flat, sandy area covering approximately 3 acres in Dover Township. The site is surrounded by commercial facilities and wooded areas. During a 5-month period in 1971, the site, which had been leased from the Reich Farm owners by an independent waste hauler, was used for the disposal of drums containing organic solvents, still bottoms, and residues from the manufacturing of organic chemicals, plastics, and resins. In December 1971, the owners of the property discovered approximately 4,500 drums containing wastes on a portion of the land that they had rented out. These drums bore labels indicating that they belonged to the Union Carbide Corporation. Trenches into which wastes were believed to have been dumped also were found. From 1972 to 1974, drums, trench waste, and contaminated soil were removed from the site by Union Carbide. In addition, contaminated private wells were closed and a zoning ordinance was passed preventing further ground-water use in the area. The population within a 3-mile radius of the site is approximately 33,500. The nearest residence is about 500 feet southwest of the site. Land use in the general vicinity of the site is predominantly commercial, residential, and agricultural. The area overlies the Cohansey aquifer, a major source of drinking water for Dover Township and the surrounding area. The site is located 1,000 feet from an intermittent stream draining into the Toms River.

Site Responsibility: This site is being addressed through Federal, State, and potentially responsible parties' actions.

## Threat and Contaminants

Groundwater is contaminated with organic compounds, including trichloroethylene (TCE). The town is on municipal water, and impacted wells are not being used as potable water supply. The surface soils on site showed no significant contamination; however, hot spots were present in the subsurface soils. Prior to the remediation, these hot spots were contaminated with both VOCs and semi-volatile organics. Potential health risks may have existed for individuals, especially on-site workers, who may have directly contacted or accidentally ingested the contaminated soils or groundwater.

## Cleanup Approach

The site is being addressed in two stages: initial actions and a long-term remedial phase directed at the cleanup of the entire site.

#### Response Action Status

Initial Actions: In 1972, approximately 5,095 drums and trench wastes were removed from the Site. In 1974, about 50 drums and approximately 1,100 cubic yards of contaminated soil were removed from the site by Union Carbide. Also in 1974, 148 private wells near the Reich Farm site were ordered closed by the Dover Township Board of Health after sampling of a number of wells indicated the presence of organic contaminants. A zoning ordinance restricting ground-water use was established in the area of Reich Farm, based on a recommendation by the New Jersey Department of Environmental Protection. Residences in the immediate vicinity of the site are connected to a permanent alternate water supply.

Entire Site: The remedies selected by the EPA to clean up the site include: (1) the installation of extraction wells; (2) treatment of extracted groundwater by air stripping and carbon adsorption; (3) reinjection of the treated groundwater into the ground; (4) excavation of contaminated soil and treatment in an enhanced volatilization unit; (5) backfilling the excavated area with the treated soils; (6) soils unable to be treated by the enhanced volatilization unit would be excavated and treated off site. Under EPA monitoring, Union Carbide has treated the contaminated soils to meet the soil

clean-up goals. The remedial action for site soils was fully completed by May 1995. In September 1995, an "Explanation of Significant Difference (ESD)" was issued which modified the groundwater remedy set forth in the ROD. Based on groundwater data, it was determined that continued pumping and treating of groundwater at an existing well field is the most effective and reliable method for protecting uncontaminated wells. Union Carbide agreed to further treat the water using a carbon adsorption unit. In March 1998, EPA issued a second ESD which modified the 1995 ESD by requiring the carbon adsorption unit to be added to the contaminated municipal wells (which are not currently being used as a source of potable water). In addition, the 1998 ESD allowed the treated water to be used for either a potable water source, discharged to a recharge area or to the Toms River.

Site Facts: Notification/Information Request Letters were sent to the parties potentially responsible for the contamination in October 1983. A Consent Decree between the potentially responsible parties and the EPA was entered in court in March 1990. Under this decree, Union Carbide has and will continue to perform cleanup activities at the site, and the property owners will continue to provide access.

## **Cleanup Progress**

The removal of drums, wastes, and contaminated soil and the restriction of groundwater use have reduced the threat of exposure to contaminants at the Reich Farm site. After treating over 15,000 cubic yards of contaminated soil, the potentially responsible party completed EPA's selected remedy to address soil contamination at the site. Completion of the soil clean-up eliminated contaminated soil as a source of ground-water contamination. In June 1997, four activated carbon units were added to the existing groundwater treatment system to remove recently identified compounds. The Reich Farm Site is believed to be the source of these compounds. To provide further protection to the unimpacted wells in the wellfield, an additional containment well (Well 26b) was installed in June 1999. Water from Well 26b is directed through the existing treatment system. Currently, the treated water pumped from the wellfield is not used as potable water supply, rather it is treated and discharged to a recharge area selected by EPA , the State and Dover Township.

## **Site Repositories**

EPA Region 2, 290 Broadway Records Center - 18th Floor, New York, NY 10007

Ocean County Library 101 Washington Street Toms River, N.J. 08753