NPL Site Narrative for Stanton Cleaners Area Ground Water Contamination

STANTON CLEANERS AREA GROUND WATER CONTAMINATION
Great Neck, New York

Conditions at Proposal (January 1999): The Stanton Cleaners Area Ground Water Contamination site is located in the area of Stanton Cleaners, which is an active dry cleaning facility located at 110 Cutter Mill Road in a commercial area of Great Neck, Nassau County, New York. The facility is bordered to the west by Cutter Mill Road, to the north and east by indoor tennis courts, and to the south by a gasoline station.

On April 6, 1998, the U.S. Environmental Protection Agency (EPA) received a written request from the New York State Department of Environmental Conservation (NYSDEC), requesting that an emergency response action be conducted at the site. On July 23, 1998, an EPA Action Memorandum was signed, authorizing Removal Action activities to be conducted at the site. Removal Action activities proposed in this memorandum included the implementation of a Soil Vapor Extraction (SVE) system for reducing the volatile organic compounds (VOCs) entrapped within the soils at the site.

During a June 1983 Nassau County Department of Health inspection of the Stanton Cleaners facility, debris and empty drums were observed in the rear yard of the site. In addition, a pipe was observed to be protruding from the rear side of the building. This pipe was connected to the dry cleaning fluid-water separator that discharged onto the ground in the rear yard sloping away from the building. Background information indicates that this discharge was discontinued by July 1983 and was eventually routed to the sewer. Surface and subsurface soil samples, collected by NCDH, indicated the presence of tetrachloroethylene (PCE), which is used as a dry cleaning solvent.

Due to these elevated levels of PCE, NCDH ordered Stanton Cleaners to conduct a subsurface soil and groundwater investigation at the site. The site was referred to NYSDEC in January 1984. As a result of the subsequent investigations conducted at the site, a plume of contaminated ground water, consisting primarily of PCE, had been documented to be migrating from the site. PCE was detected in ground water samples at concentrations exceeding the State and Federal maximum contaminant level (MCL) of 5 micrograms per liter (?g/L).

From 1996 to 1998, NYSDEC conducted a remedial investigation (RI) at the Stanton Cleaners facility, which included a soil vapor survey, soil sampling, and ground water sampling. The results of soil sampling conducted in October 1997 showed PCE concentrations up to 6,200,000 micrograms per kilogram (?g/kg). Analytical results of ground water samples collected from on- and off-site monitoring wells in January 1998 indicated PCE concentrations at concentrations up to 17,000 ?g/L downgradient of the Stanton Cleaners facility. In addition, nearby downgradient public water supply wells have been impacted by PCE above the MCL; water from this system currently undergoes treatment before distribution.

The Stanton Cleaners Area Ground Water Contamination site was evaluated as having one waste source: PCE-contaminated soil resulting from the dry cleaning fluid-water separator discharge from Stanton Cleaners. Although the Stanton Cleaners facility contributes to the ground water contamination in the area, monitoring wells in areas not expected to be impacted by the Stanton facility exhibited elevated

concentrations of PCE, indicating that other sources may be contributing to this area of contaminated ground water.

An observed release of PCE to ground water is documented by the chemical analyses of ground water samples collected from monitoring wells during the NYSDEC RI in January 1998. Drinking water, within the site's 4-mile radius, is derived from public supply wells screened in the Upper Glacial, Magothy, and Lloyd aquifers. The Upper Glacial and Magothy aquifers are interconnected and evaluated as the aquifer of concern. The nearest well drawing from the aquifer of concern is located approximately 1,000 feet south and downgradient of the site. Potable wells within 4 miles of the site, and drawing from the aquifer of concern, serve approximately 96,646 people.

Status (May 1999): Under EPA's Removal authority, a soil vapor extraction (SVE) system was installed and is currently operational. The SVE system actively reduces PCE concentrations in the affected soils. The SVE system has been designed to mitigate the associated impact of PCE releases to indoor air and ground water.

For more information about the hazardous substances identified in this narrative summary, including general information regarding the effects of exposure to these substances on human health, please see the Agency for Toxic Substances and Disease Registry (ATSDR) ToxFAQs. ATSDR ToxFAQs can be found on the Internet at ATSDR - ToxFAQs (http://www.atsdr.cdc.gov/toxfaqs/index.asp) or by telephone at 1-888-42-ATSDR or 1-888-422-8737.