NEW CASSEL/HICKSVILLE GROUND WATER CONTAMINATION
NY0001095363 | Region: 02 | NY

Site Summary

The New Cassel/Hicksville Ground Water Contamination site (Site) is an area of widespread groundwater contamination in the Towns of North Hempstead, Hempstead and Oyster Bay in Nassau County, New York. Sampling found contaminants in four Town of Hempstead wells, six Hamlet of Hicksville wells and one Village of Westbury well. The primary contaminants observed in groundwater at the Site are tetrachloroethylene (PCE), trichloroethylene (TCE) and other volatile organic compounds (VOCs). VOCs are contaminants that evaporate easily into the air and dissolve in water. VOCs are often used as ingredients in paints, solvents, aerosol sprays, cleaners, disinfectants, automotive products and dry cleaning fluids. It is believed that past industrial and commercial activities in the area may have contributed to the groundwater contamination at the site. Consistent with the Safe Drinking Water Act that protects public drinking water supplies throughout the nation, the public water suppliers in the area of the Site monitor water quality regularly and have previously installed treatment systems to remove VOCs from groundwater.

From 1988 to 2010, the New York State Department of Environmental Conservation (NYSDEC) identified a number of sources of the contamination and further investigated the contaminated groundwater pursuant to New York State authorities. In 2010, NYSDEC requested that EPA list the Site on the Superfund program's National Priorities List (NPL). The Site was listed on the NPL in September 2011. EPA is addressing the Site in discrete phases or components known as operable units or OUs. After the Site's NPL listing, site investigations to determine the nature and extent of contamination and to identify and evaluate remedial alternatives began.

EPA's Involvement at this Site

EPA listed the Site on the Superfund program's National Priorities List in September 2011.

EPA is addressing the cleanup of the Site in discrete phases or components known as operable units or OUs. An operable unit represents a part of a site that for technical or administrative purposes can be addressed separately to eliminate or mitigate a release, threat of release or exposure pathway resulting from site contamination.

Operable Unit 1

In September 2013, EPA selected a remedy to clean up contaminated groundwater for operable unit 1 (OU1) as outlined in the September 2013 Record of Decision. The OU1 Record of Decision addresses groundwater contamination in the area downgradient of Old Country Road, Grand Boulevard, and the New Cassel Industrial Area (NCIA) in the Towns of North Hempstead and Hempstead. OU1 is primarily located in Salisbury, an unincorporated area of the Town of Hempstead; however the portion of OU1 north of Grand Boulevard is located within the Hamlet of New Cassel in the Town of North Hempstead. Please refer to Figure 1 in the 2013 Record of Decision for a Site location map, which notes the area encompassing OU1.

The 2013 OU1 ROD selected a remedy which, depending on the area within OU1 to be addressed, included a combination of the following: 1) in-situ treatment of groundwater via in-well vapor stripping; 2) extraction of groundwater via pumping and ex-situ treatment of groundwater prior to discharge to publicly owned treatment works or reinjection to groundwater; and/or 3) in-situ chemical treatment to target high concentrations contamination areas, as appropriate.

As a next step, the selected remedy for OU1 will be designed. EPA expects that the parties responsible for the contamination, also known as potentially responsible parties (PRPs) will design and ultimately implement the remedy. The New York State Department of Environmental Contamination (NYSDEC) has evaluated 17 individual sites within the NCIA located in North Hempstead, which are listed on the Registry of Inactive Hazardous Waste Sites in New York State and which are believed to be sources of contamination to OU1. Responsible parties for these sites have implemented remedial actions associated with VOC contamination in soils and on-site groundwater. This work was conducted, and these NCIA sites remain, under NYSDEC's oversight.

Operable Unit 2

A remedial investigation/feasibility study (RI/FS) to determine the nature and extent of contamination and to identify and evaluate remedial alternatives is currently underway at operable unit 2 (OU2) of the Site. OU2 of the Site includes contaminated groundwater that is located at and downgradient three separate but contiguous properties including 140 Cantiague Rock Road, 100 Cantiague Rock Road, and 70 Cantiague Rock Road (Sylvania property) and 600 West John Street (General Instruments property) in Hicksville. ~~and is impacting the Hicksville municipal supply wells~~.

The United States Army Corps of Engineers (USACE) is conducting the RI/FS of the groundwater under the Formerly Utilized Sites Remedial Action Program (FUSRAP) in accordance with guidance and procedures for Superfund sites. The Sylvania property was formerly utilized for the manufacture of Government and commercial nuclear elements for reactors used in research and electric power generation between the 1950s and 1960s. Operations at Sylvania used natural, enriched, and depleted uranium, and to a lesser extent thorium. Contamination associated with the Sylvania property consists of these radioactive materials as well as nickel and VOCs. Prior to the Site's listing on the NPL, GTE, a corporate predecessor to Verizon entered into a voluntary agreement with the NYSDEC to remediate soils at the Sylvania property.

The General Instruments property was formerly used for research and manufacturing operations associated with the production of semiconductors. The property was also been used to produce radar system and electronic equipment. Past investigations conducted by NYSDEC of the General Instruments property, indicated the presence of VOC contamination. Prior to the Site's NPL listing, General Instruments entered into agreements with NYSDEC to conduct soil excavation and removal, groundwater pump and treat, and soil vapor extraction activities. This work was conducted under NYSDEC oversight.

After completion of the RI/FS for OU2, a proposed cleanup plan will be released for public comment.

Operable Unit 3

The 2013 ROD for OU1 called for the performance of an investigation of groundwater contamination in an area downgradient of OU1, called the far-field area. This far-field area is being handled by EPA as operable unit 3 (OU3) of the Site. EPA will perform the RI/FS for OU3 and is scheduled to begin field work in 2016. After completion of the RI/FS, a proposed cleanup plan will be released for public comment.

Additional Work

EPA anticipates that separate investigations of more operable units to address groundwater contamination at the Site will be conducted.

What is the current site status?

Operable Unit 1 – EPA finalized selection of the remedy to cleanup contaminated groundwater in a September 2013 Record of Decision (ROD). As a next step, the selected remedy in the OU1 ROD, will be designed. It is anticipated that as part of the remedial design, additional data to support design of the remedy will be collected. After completion of the remedial design, the remedial action (the cleanup) will be implemented. EPA anticipates that the remedial design and the remedial action will be performed by PRPs under EPA oversight.

Operable Unit 2 – The RI is ongoing. It is anticipated that USACE will complete their investigative field work including groundwater sampling and analysis of those samples in 2016. Those data will be incorporated into the RI Report, which will include a human health risk assessment. After completion of the RI/FS, a proposed cleanup plan will be released for public comment.

Operable Unit 3 – The RI is ongoing and investigative field work is in the planning stage. Upon completion of the field work, the RI/FS, including a human health risk assessment will be drafted. After completion of the RI/FS, a proposed cleanup plan will be released for public comment.

What's being done to protect human health and the environment?

The Site is a widespread area of groundwater contamination in Hempstead, Hicksville and Westbury. Residents of this area receive drinking water from public water supplies that have installed treatment systems to meet drinking water standards and thus supply water that meets these standards.

Staying Informed and Involved

Information repositories for the Site have been established at the following locations:

Westbury Public Library, Reference Section, 445 Jefferson Street, Westbury, NY 11590

Telephone number: (516) 333-0176

U.S. Environmental Protection Agency, Region 2, Superfund Records Center 290 Broadway, 18th Floor, New York, NY 10007-1866
Telephone number: (212) 637-4308