

# Wayne Court and Passaic Avenue Ground Water Contamination Area

North Haledon Borough, Passaic County

June 4, 2012

## Background on the Contamination Area

The discovery of a contaminated well occurred in March 2012 when a private well was sampled for the sale of the property. Private Well Testing Act sampling conducted identified a well on Wayne Court that was contaminated with carbon tetrachloride (also known as carbon tet). After a confirmation sample was taken, the Passaic County Department of Health sent notices to over 100 residences within a 1,000-ft. radius of the affected well. This notice, sent in late March, recommended that well owners have their wells tested for Volatile Organic Compounds.

By the end of April approximately ten wells were identified as containing carbon tetrachloride exceeding the NJ Ground Water Quality Standard (GWQS) of 1 part per billion (ppb). The case was referred to the NJ Department of Environmental Protection (DEP) for further sampling and evaluation. On May 9 North Haledon sent a letter to over 300 residents within a 2,000 foot radius urging residents to test their wells, and alerting them to the DEP Spill Fund Program and the upcoming public meeting.

To date, DEP is aware of 24 private wells in this area that have contamination at or above the GWQS. These homes are located on Wayne Court, Wayne Avenue, Passaic Avenue, North Haledon Avenue, Manchester Avenue and Gemeinhardt Place.

## Background on Carbon Tetrachloride

Carbon tetrachloride is a clear heavy organic liquid with a sweet aromatic odor similar to chloroform. Most

carbon tetrachloride is used to make chlorofluorocarbon propellants and refrigerants, though this has been declining steadily. It has also been used as a dry cleaning agent and fire extinguisher; in making nylons; as a solvent for rubber cement, soaps, insecticides, etc.

The Ground Water Quality Standard (GWQS), similar to a Drinking Water Standard, is the highest amount of a specific contaminant allowed in ground water in order to provide a margin of safety to protect public health. Some people who drink water containing carbon tetrachloride well in excess of the GWQS for many years could experience problems with their liver and may have an increased risk of getting cancer. The GWQS for carbon tetrachloride is 1 ppb; data submitted to date indicates that the carbon tetrachloride levels in this area range up to 34 ppb. The source of the carbon tetrachloride contamination is unknown.

## Point-of-Entry Treatment Systems (POET)

Property owners with confirmed contamination are eligible to have the DEP fund installation of a POET on their well. The POET system typically consists of two activated carbon units plumbed into the waterline coming into the house. Granular Activated Carbon treatment units are very effective at removing carbon tetrachloride from the water used in the home.

Financial assistance for the cost to install, maintain and monitor the POETS may be obtained by filing a claim with the Spill Compensation Fund. Eligible claims must include two tests from certified laboratories showing contamination at or above the GWQS. The DEP's Environmental Claims Administration (ECA) administers

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**New Jersey Department of Environmental Protection  
Site Remediation Program  
Office of Community Relations**



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the Spill Fund program. Spill Fund related questions should be directed to Ben Martin at (609) 633-0629. Claim forms are also available at [www.nj.gov/dep/srp/finance/ecaclaim.htm](http://www.nj.gov/dep/srp/finance/ecaclaim.htm).

### **Future Actions**

DEP will conduct additional private well sampling in the area to determine the extent of the groundwater contamination. This sampling is planned for Wednesday, June 13. Please contact Mark Herzberg, DEP Community Relations Coordinator, at (609) 633-1369 if you have not sampled your well yet.

Once the extent of contamination is determined then a project area, known as a CKE (Currently Known Extent) will be drawn. The CKE defines the project area upon which the Alternative Water Supply Analysis is based.

The Alternative Water Supply Analysis document contains an evaluation and comparison of various long-term water supply options (such as Public Waterline Extension, Long-term Use of POET units and Replacement Wells) and concludes with a recommendation for the implementation of the most cost-effective, reliable, long-term water supply alternative. The Analysis will be sent to the municipality for review and comment. Subsequently, the municipality informs the DEP of their preferred long-term water supply alternative. A public meeting may be held again at this phase to review the recommendation with the residents in the area.

Lastly, DEP will evaluate what additional investigations may be necessary and/or feasible. This might include assessing the potential for vapor intrusion, as well as determining what steps could be taken to investigate the source of the carbon tetrachloride in the ground water. Identifying a source is often very difficult when dealing with widespread, low-level ground water contamination like that found in this area.

### **Contacts for further information**

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