

**New York State  
Department of  
Environmental  
Conservation**

**Meeting Date and  
Location:**

7:00 PM,  
Thursday, March 6, 2008 at  
the  
LaGrange Town Hall  
120 Stringham Road  
LaGrangeville

*alternate date of March 20  
in case of postponement due  
to weather*

**Public Comment Period:**

February 27, 2008 through  
March 28, 2008

**Send Written**

**Comments to:**

Michael MacCabe, P.E.  
NYS Department of  
Environmental Conservation  
625 Broadway, 11<sup>th</sup> Floor  
Albany, NY 12233-7016

**Local Document**

**Repositories:**

LaGrange Town Clerk  
Town Hall  
120 Stringham Road  
LaGrangeville, NY 12540  
845-452-1830  
Mon-Fri 8:30 to 4:30

LaGrange Association  
Library  
488 Freedom Plains Rd.  
Poughkeepsie, NY 12603  
845-452-3141  
Mon - 9:30 to 8:00,  
Tue & Thurs - 9:30 to 5:00  
Wed & Fri - 2:00 to 8:00  
Sat - 9:30 to 5:00

# **PROPOSED REMEDIAL ACTION PLAN MEETING INVITATION AND FACT SHEET**

## **Apple Valley Shopping Center Site Town of LaGrange, Dutchess County, NY Site No. 3-14-084**

**The community is invited to attend a public meeting on Thursday, March 6 at 7:00 PM at the LaGrange Town Hall on 120 Stringham Road in**

**LaGrangeville** to discuss the Apple Valley Shopping Center Inactive Hazardous Waste Disposal Site (AVSC) project. This meeting is sponsored by the New York State Department of Environmental Conservation (NYSDEC) and the New York State Department of Health (NYSDOH) to present the Proposed Remedial Action Plan (PRAP) for remediating the contaminated groundwater at the shopping center. The NYSDEC will present several alternatives that were evaluated to address this contamination, along with the rationale for recommending the proposed alternative.

AVSC is located about seven miles east of the City of Poughkeepsie at the junction of Freedom Plains Rd. (New York State Route 55) and Titusville Road (County Route 49) in the Town of LaGrange, Dutchess County. Dry cleaner facilities operated in the shopping center from 1968 until the mid 1990's. A Pizza restaurant presently occupies the former location of the dry cleaners.

The site is the source of significant groundwater contamination from the dry cleaning solvent tetrachloroethene, also known as perchloroethene (PCE) or perc. PCE is from a category of chemicals known as volatile organic compounds (VOCs).

In 1989 the Dutchess County Department of Health identified fourteen residential wells with significant VOC contamination. In 1990, PCE was found at 5,150 parts per billion (ppb) in a former supply well at the shopping center. The New York State standard for PCE in public drinking water supplies is 5 ppb. Other related VOCs; trichloroethene and dichloroethene, were also detected in the same well above their respective drinking water standards. At that time, treatment systems were put on the impacted wells.

Under a 1991 agreement with the U.S. Environmental Protection Agency, the site owner was responsible for the construction, operation and maintenance of an on-site groundwater extraction and treatment system. Data indicated that the system's 20 gallon per minute pumping rate was restricting the migration of the groundwater contamination and containing most of the contamination to the shopping center property. This subsequently mitigated the impacts to the residential wells.

**Remedial Investigation:** A remedial investigation (RI) and feasibility study (FS) were funded under the New York State Superfund program. The RI consisted of sampling and analysis of groundwater, soil, surface water and sediment on and near the site. The objective of the investigation was to

determine the extent of the contamination and locate the source of the contamination that continues to impact groundwater. Copies of the RI and FS reports and other documents are available for public review at each of the document repositories listed in this fact sheet.

Initially, three former shopping center supply wells were sampled during the RI. Significant VOC contamination was in the two wells closest to the former location of the dry cleaner. Five additional groundwater monitoring wells were constructed and sampled in January 2002. PCE was detected at concentrations up to 2,600 ppb near the former dry cleaners. PCE was observed at a maximum concentration of 1,700 ppb in groundwater behind the laundromat at the shopping center.

Subsurface soil samples were collected from areas of suspected contamination throughout the site. The highest PCE concentration detected was 220 ppb in a soil sample collected from behind the former location of the dry cleaner. The recommended soil cleanup objective for PCE is 1,300 ppb. Due to the active businesses, most areas under the laundromat and the pizzeria were inaccessible during the RI. Therefore, there may be impacted soil in these source areas that was not identified.

Bedrock is about eleven feet below grade surface in the source areas. Since no significant soil contamination was detected in accessible soil, the source of the groundwater contamination appears to be in the bedrock. PCE, in the form of dense non-aqueous phase liquid (DNAPL), is suspected to be present in the source areas, under and behind the laundromat and the former location of the dry cleaner. Although no DNAPL was found during the RI, the continuous source of groundwater contamination is indicative of a DNAPL source in the bedrock.

Surface water and sediment samples were collected from the wetland behind the shopping center and from the drainage ditch on the western portion of the site. No site-related contaminants were found in the surface water or the sediment.

**Supplemental Investigations:** Since the completion of the RI and FS, a design investigation was conducted by the responsible party (RP), the previous owner of the shopping center. The investigation was for the design and construction of an expansion of the groundwater extraction and treatment system as an interim remedial measure (IRM). The groundwater treatment system was expanded with three additional extraction wells and the replacement of the air stripper for treating the extracted groundwater. The groundwater monitoring program was expanded with the construction of two additional monitoring wells.

In June 2002, the New York State Health Department (NYSDOH) observed PCE impacts to indoor air in some tenant spaces in the shopping center. At the request of the NYSDEC and the NYSDOH, the RP has been conducting periodic sampling of indoor air and sub-slab soil vapor since January 2005. Based on the findings of these investigations, sub-slab depressurization systems have been constructed in the pizzeria (formerly the dry cleaner) and the grocery store. The sub-slab depressurization systems depressurize the sub-slab environment relative to the indoor space, thus restricting the migration of contaminant vapors into the building.

**Remedial Alternatives and the Proposed Remedy:** To address the contamination discussed above, the following four remedial alternatives were presented and evaluated in the FS.

- no action.
- monitored natural attenuation.
- hydraulic containment using the current extraction and treatment system and sub-slab depressurization.
- in-situ chemical oxidation, hydraulic containment, soil vapor extraction and sub-slab depressurization.

The NYSDEC has released a PRAP that summarizes the remedial alternatives, presents the proposed remedy, and explains the reasoning for the selection of hydraulic containment using current extraction and treatment system with sub-slab depressurization as the remedy proposed for the site. The proposed remedy consists of:

- destruction of contamination in the source areas by injection of chemical oxidants and the active removal of residual contamination by soil vapor extraction (SVE);
- continued operation of the existing hydraulic containment and groundwater treatment system with four extraction points;
- continued periodic sampling of monitoring, extraction and residential wells;
- continued operation of two sub-slab depressurization systems;
- continued monitoring of indoor air and sub-slab vapors at the shopping center;
- imposition of institutional controls to prevent the use of groundwater at the site as a source of potable or process water without necessary water quality treatment; and
- an off-site soil vapor investigation.

The NYSDEC, in conjunction with the NYSDOH, is committed to establishing effective two-way communication with the public. The public is encouraged to make use of the document repositories and to comment on the Proposed Remedial Action Plan (PRAP), either during the March 6 public meeting, or during the **public comment period from February 27 through March 28**. If the March 6 meeting is postponed due to weather conditions, the meeting will be held on the alternate date of March 20. **Written comments should be sent to Michael MacCabe at the NYSDEC's Albany office at the address listed.** After considering both verbal and written comments on the PRAP, the NYSDEC will select the remedy for the site and issue the Record of Decision (ROD). When the remedy is selected, a copy of the ROD will be placed in the document repositories and a Notice of ROD Availability will be mailed to the site's contact list.

#### **Contacts For Additional Information:**

##### **About the site:**

Project Manager  
Michael MacCabe, P.E.  
NYSDEC Albany Office  
625 Broadway  
Albany, NY 12233-7016  
518-402-9775  
mdmaccab@gw.dec.state.ny.us

##### **For health-related concerns:**

Public Health Specialist  
Fay Navratil  
NYSDOH  
547 River Street  
Troy, NY 12180  
518-402-7880  
800-458-1158 ext 27880

##### **For citizen participation activities:**

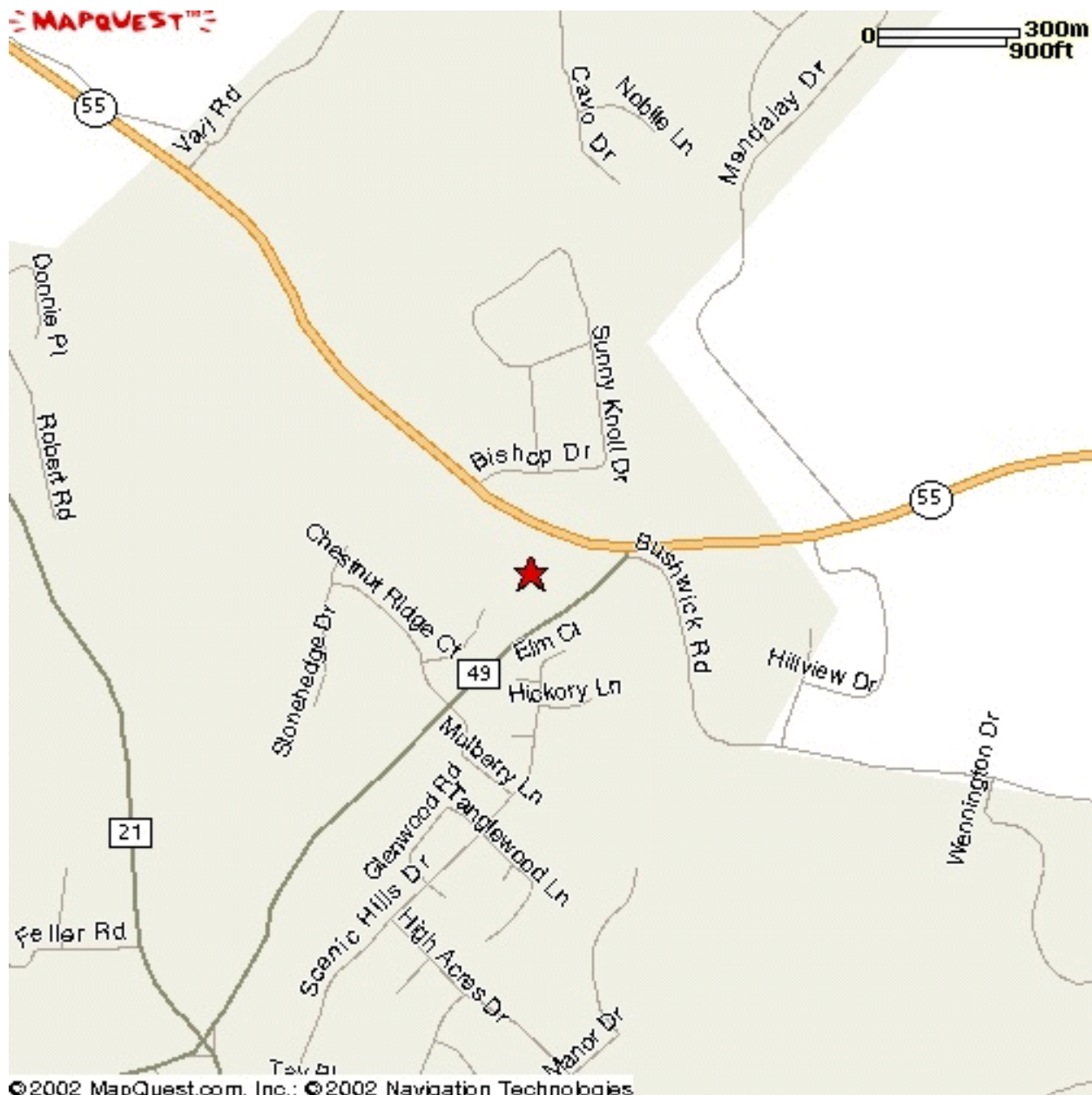
Citizen Participation Specialist  
Michael Knipfing  
NYSDEC Region 3 Office  
21 South Putt Corners Rd.  
New Paltz, NY 12561  
845-256-3154

#### **Additional Document Repositories:**

NYSDEC Central Office  
625 Broadway, 11<sup>th</sup> Floor  
Albany, NY 12233-7016  
Attn: Michael MacCabe  
Phone: 518-402-9620  
Mon-Fri: 8:00-4:15

NYSDEC Region 3 Hdqrs.  
21 South Putt Corners Rd  
New Paltz, NY 12561  
Attn.: Michael Knipfing  
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Mon-Fri - 8:30 to 4:45

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