



FACT SHEET **Brownfield Cleanup Program**

FORMER TEUTONIA HALL SITE
Site Number: C360085
Yonkers, Westchester County, NY



April 2008

**Remediation Report under Review: Report
Recommends Remediation of Brownfield Site Contamination**

An investigation has been completed for the Former Teutonia Hall BCP site located at 41-53 Buena Vista Avenue in the City of Yonkers, Westchester County, New York (site) under New York's Brownfield Cleanup Program (BCP). See Figure 1 for the location of the site. Teutonia Buena Vista, LLC has submitted to the New York State Department of Environmental Conservation (NYSDEC) and New York State Department of Health (NYSDOH) a "Remedial Investigation Report" which is under review. The Remedial Investigation (RI) Report describes the results of the environmental investigation of the site and recommends action to address contamination.

NYSDEC previously accepted an application submitted by Teutonia Buena Vista, LLC to participate in the BCP. The application proposes that the site will be used for residential housing and parking purposes.

Highlights of the Remedial Investigation(s)

The RI Report has several goals:

- 1) describe the investigation activities completed;
- 2) describe the nature and extent of contamination at the brownfield site;
- 3) provide information about off-site contamination issues, and
- 4) recommend whether the Applicant believes that remediation is required. "Remediation" means all necessary actions to address any known or suspected contamination associated with the site

Brownfield Cleanup Program:

New York's Brownfield Cleanup Program (BCP) encourages the voluntary cleanup of contaminated properties known as "brownfields" so that they can be reused and redeveloped. These uses include recreation, housing and business.

A **brownfield** is any real property that is difficult to reuse or redevelop because of the presence or potential presence of contamination.

For more information about the BCP, visit:
www.dec.state.ny.us/website/der/bcp

As shown on the attached Sample Location Map (Figure 2) Remedial Investigation activities included:

- 1. A total of forty-nine (49) soil borings were drilled to facilitate the collection of on-site soil materials. The soil samples were examined to determine the physical properties of site soil materials and to screen samples to be submitted for chemical analyses. Analytical results were compared to NYSDEC Soil Cleanup Objectives.
- 2. Thirty seven (37) sub-surface soil vapor samples were collected within the project site boundaries and submitted for Volatile Organic Compound analyses. The analytical results were compared to USEPA Indoor Air screening criteria and selected VOC criteria developed by the New York State Department of Health (NYSDOH).

3. Six groundwater monitoring wells were installed at selected borehole locations for the purpose of collecting groundwater samples. Selected groundwater samples were submitted for chemical analyses and the results compared to the NYSDEC Class GA groundwater quality (drinking water) standards to identify contaminant impacts to the groundwater ;
4. A qualitative Human Health Evaluation (HHE) was performed to facilitate an environmental characterization of on-site subsurface soil vapor, soil/fill and groundwater media to evaluate their potential impact on human health and the environment. The human health evaluation examined Chemicals of Potential Concern (COPC) with regards to relevant exposure pathways and the most likely human receptors in the context of current and proposed land use.

The work was performed by representatives of Teutonia Buena Vista, LLC with regulatory oversight provided by the NYSDEC and the NYSDOH.

Remedial Investigation Findings

Completion of the RI report facilitated the characterization of soil vapor, soil materials and groundwater samples. An evaluation of investigation and analytical results determined the following:

Two stratigraphic units or layers identified as fill material and native soil were characterized at the Site. The uppermost layer is composed of fine to coarse grained sand and silt admixed with construction and demolition debris. Native soil material below the top layer was characterized as a fine to coarse grained sand unit with lenses of silt and cobbles. When compared to the NYSDEC Restricted Residential Recommended Soil Cleanup Objectives the soil has elevated levels of poly aromatic hydrocarbons (PAHs) and selected metals including chromium and mercury.

Based on analysis of the subsurface soil vapor, elevated levels of the chlorinated volatile organic compound tetrachloroethene, also known as PCE, were identified at each of the soil vapor sampling locations. The source of these elevated concentrations may be attributed to a potential source area beneath the buildings at #51 and #53 Buena Vista Avenue with the highest concentrations of PCE detected in soil vapor samples collected beneath the former auto repair shop at #53 Buena Vista Avenue.

The depth to the groundwater table was variable across the site based on the proximity to the steep topographic slope along the western site boundary. The water table was measured at depths that ranged from approximately 30-40 feet below ground surface within the monitoring well network. Examination of a tabulated summary of groundwater analytical results identified levels of pesticides and metals in excess of Class GA groundwater standards at the downgradient monitoring well location.

The qualitative human health evaluation identified chemicals of potential concern in the soil vapor and overburden soil. Based on the proposed site development plans, potentially complete exposure pathways were identified for trespassers, site workers and off-site/on-site residents if the site is not remediated. Other receptor populations were evaluated and exposure to surface and subsurface soils via ingestion, dermal contact or inhalation was found to be likely. Remediation of the Former Teutonia Hall BCP Site is recommended to protect human health and the environment.

Next Steps

After approval of the RI Report by the NYSDEC, a Remedial Action Work Plan (RAWP) will be prepared that will evaluate remedial alternatives to address known site contamination. The RAWP will identify a preferred remedial alternative and will be available for a 45 day public comment period prior to implementation. Remedial actions, demolition and construction work are expected to proceed at the Former Teutonia Hall site as the property is developed. To protect human health and the environment, current remedial plans will require the demolition of the site building complex to:

- eliminate the soil vapor trapping mechanism caused by the existing building foundations beneath Buildings #51 and 53;
- provide for the excavation, identification and disposal of contaminated soil material(s);
- provide for the removal of the existing petroleum bulk storage tanks;
- facilitate better characterization of the site groundwater regime.

Background

The NYSDEC and NYSDOH are currently reviewing the RI Report submitted by representatives of the Teutonia Buena Vista, LLC. The report documents the activities and results of investigations completed at the Former Teutonia Hall Site for the purpose of characterizing the nature, extent and potential impacts of subsurface soil vapor and contaminated soil materials. The Site, which encompasses 0.75 acres was previously used for a variety of industrial and petroleum-related commercial purposes, including but not limited to, auto repair, a garage with underground storage tanks, a knitting mill, a dry cleaner, a toy manufacturer, a jewelry manufacturer and a printing facility. The planned building end use will include lower level parking space with the upper floors committed to residential living spaces. (See location map, Figure 1)

The site, which was admitted into the Brownfield Cleanup Program (BCP) in March 2007, has been the focus of investigation activities since that time. Investigative activities were also performed at the site in May-June 2005 and May-July 2006 prior to entry into the BCP. The most recently completed supplemental RI work elements (July-August 2007) were based on the NYSDEC Remedial Investigation Work Plan approved in July 2007 which described the scope of work and specific investigation activities required to evaluate site soil vapor, soil materials and groundwater.

FOR MORE INFORMATION

Document Repositories

Document repositories have been established at the following locations to facilitate public access to important project documents.

Yonkers Public Library
1 Larkin Center
Yonkers, New York 10708
(914) 337-1500
<http://www.yonkerslibrary.org/>

NY State Dept. of Environmental Conservation
21 S. Putt Corners Rd.
New Paltz, NY 12561
(845) 256-3154
(By appointment only)

To date, the following documents have been entered into the public record.

- Approved application to participate in the BCP;
- Final Remedial Investigation Work Plan;
- Fact Sheets
- RI draft Report (presently under review)

Who to Contact

Comments and questions are always welcome and should be directed as follows:

Project Related Questions

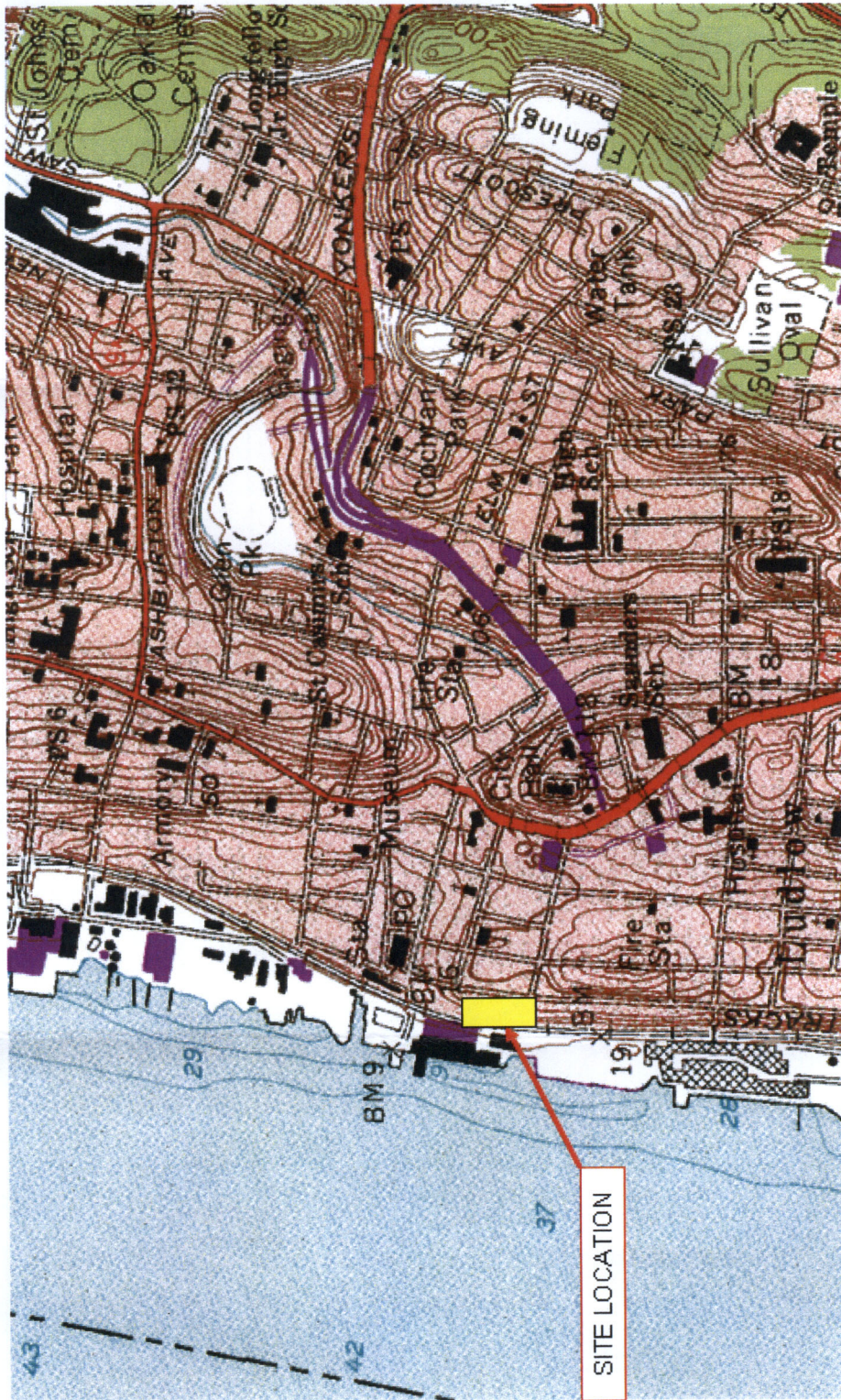
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Health Related Questions:

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Site Location Map

Figure 1



Sample Location Map

Figure 2

