



FACT SHEET#6

Brownfield Cleanup Program

Cornerstone B-1

C203044

Bronx, NY

December 2010

NYSDEC Certifies Cleanup Requirements Achieved at Brownfield Site

The New York State Department of Environmental Conservation (NYSDEC) has determined that CS Melrose Site B LLC (“applicant”) will achieve cleanup requirements to address contamination related to the Cornerstone B-1 site (“site”) located at 3100 Third Avenue in the Bronx, NY under New York’s Brownfield Cleanup Program. See map for site location.

NYSDEC has issued a Certificate of Completion to the applicant regarding the site. The applicant is now eligible to redevelop the site. A copy of the Notice of the Certificate of Completion is available at the location identified below under “Where to Find Information”.

Completion of Project

The dry cleaning solvent tetrachloroethene (PCE) is the main contaminant of concern at the Cornerstone B1 Brownfield Site. The presence of PCE in on-site soil and groundwater resulted in various cleanup activities during the site redevelopment to achieve Track#2 Restricted Residential cleanup levels for on-site soils and provide a means to achieve groundwater standards through the operation of a groundwater treatment system. The significant components of the cleanup action included the following:

- Removal of existing vacant building in June 2009;
- Removal of three 275-gallon aboveground petroleum storage tanks in July 2009;
- Site-wide excavation of soil/fill to approximately 15 feet below grade or bedrock to facilitate construction of the new building’s foundation. The excavation activities were conducted during August, September, October and November of 2009 and resulted in the removal of 3,530.46 tons of soil /fill materials to licensed off-site disposal facilities. The excavation

removed all soil/fill exceeding the Track 2 Restricted Residential Soil Cleanup Objectives and soil vapor source areas at the site;

- Injection of a chemical oxidation treatment known as Regenox™ in October 2009 into the soil above bedrock and soil/groundwater interface in select portions of the site to help breakdown PCE in the groundwater beneath the site;
- An engineered composite cover system consisting of concrete-covered sidewalks,

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, business or other uses.

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.ny.gov/chemical/8450.html

foundation walls, a ventilated parking garage, and concrete building slabs to prevent human exposure to residual contaminated soil/fill remaining under the site was installed along with building construction activities;

- A groundwater pump and treat system was installed in the building basement during the Winter and Spring of 2010 to collect and treat groundwater impacted with PCE and its degradation products within shallow bedrock fractures;
- A Site Management Plan (SMP) for long term management of remaining contamination as required by the Environmental Easement was approved by NYSDEC in August 2010. The SMP includes (1) Institutional Controls/Engineering Controls (2) monitoring, (3) operation and maintenance of the groundwater treatment system, and (4) reporting; and
- A post-remedial groundwater monitoring program has been implemented with sample collection and analysis on a quarterly basis to evaluate performance of the remedy.

Institutional Controls/Engineering Controls

Institutional controls and engineering controls generally are designed to reduce or eliminate exposure to contaminants of concern. An *institutional control* is a non-physical restriction on use of the site, such as a deed restriction, when contamination left over after the cleanup action makes the site suitable for some, but not all uses. An *engineering control* is a physical barrier or method to manage contamination such as a cap or vapor barrier.

The following institutional and/or engineering controls have been put in place on the site:

- A vapor barrier known as Stego™ 15 was installed underneath the entire building foundation in December 2009 for additional protection against soil vapor intrusion;
- A Sub-Slab Depressurization (SSD) system was installed beneath the foundation of the building in December 2009. The SSD system consists of horizontal trenches containing perforated pipe and gravel beneath the building slab. The horizontal pipes are connected to vertical risers that extend to a fan located above the roof of the building. The SSD system is utilized to further prevent potential soil vapor intrusion by creating a negative pressure beneath the building and venting any recovered vapors to the roof; and
- An Environmental Easement was recorded on the property deed and survey in September 2010. The Environmental Easement includes Institutional Controls (ICs) and is utilized to prevent future exposure to any residual contamination remaining at the site. The ICs include limiting the site use to restricted residential, which will allow commercial use; restricting the use of groundwater as a source of potable or process water; without necessary quality treatment; and submission of periodic certification of institutional and engineering controls.

Next Steps

NYSDEC issued the Certificate of Completion based on review and approval of a Final Engineering Report submitted by the applicant. The Final Engineering Report includes: 1) a description of the cleanup activities completed; 2) certification that cleanup requirements will be achieved for the site; 3) a description of any institutional/engineering controls to be used; and 4) a certification that a site management plan for any engineering controls used at the site has been approved by NYSDEC.

With its receipt of a Certificate of Completion, the applicant is eligible to redevelop the site. In addition, the applicant:

- has no liability to the State for contamination at or coming from the site, subject to certain conditions; and
- is eligible for tax credits to offset the costs of performing cleanup activities and for redevelopment of the site.

A Certificate of Completion may be modified or revoked if, for example, the applicant does not comply with the terms of its Brownfield Cleanup Agreement with NYSDEC, or if the applicant commits fraud regarding its application or its certification that it has met cleanup levels.

Background

NYSDEC accepted an application from the applicant to participate in the Brownfield Cleanup Program. The application proposed that the site will be used for restricted residential and commercial purposes. The site is located on the northeast corner of the intersection of East 158th Street with Third Avenue and spans eastward. The site is located in an urban setting and is currently zoned residential (R8) with a C1-4 overlay. CS Melrose Site B LLC purchased the site from the New York City Department of Housing Preservation and Development (NYCHPD) in June 2009. NYCHPD owned the Site since January 1999 when it was acquired through condemnation as part of the Melrose Commons Urban Renewal Plan. The site was accepted into the BCP in October 2008. The Brownfield Cleanup Agreement was executed by NYSDEC on December 18, 2008 and amended on July 14, 2009. A Site Map is included as Figure 1.

Prior to entry into the BCP, the site consisted of an approximately 16,028 square foot lot with a vacant building. A single story building with a basement totaling 7,613 square feet was located on the western portion of the site until its demolition in June 2009. The building was originally developed circa 1951 and was occupied as a store, upholstery business and an undertaker. Circa 1969, the building was also developed as a dry cleaner and in 1989, the building operated as a medical center and a dry cleaner. The dry cleaner was the suspected source of the PCE contamination which was the main focus of the clean up activities

The presence of the dry cleaner was the likely source of soil and groundwater contamination beneath the site. The extent of the groundwater contamination was determined during a Remedial Investigation (RI) conducted during the Summer and Fall of 2007 and in April 2009. Based on the conclusions of the RI, a Remedial Action Work Plan (RAWP) and proposed remedy was submitted to NYSDEC in December 2007 and revised in May 2009. In addition, a Pre-Design Investigation Work Plan was prepared and submitted to NYSDEC to provide additional required information relative to soil and groundwater quality in targeted areas of the site to assist in the design of appropriate and effective groundwater remedial measures.

A Groundwater Investigation and Design Report was submitted to the NYSDEC in November 2009 recommending the injection of a chemical oxidation treatment known as Regenox™ and the installation injection of groundwater treatment system to address PCE concentrations in groundwater. A RAWP Addendum was submitted to NYSDEC in July 2009. A Site Management Plan was approved by the NYSDEC on August 24, 2010. The work items detailed in the RAWP have been completed and are included in the Final Engineering Report dated November 4, 2010.

FOR MORE INFORMATION

Where to Find Information

Project documents are available at the following location to help the public stay informed. These documents include the Notice of the Certificate of Completion.

New York Public Library – Woodstock Branch
761 East 160th Street,
Bronx, NY
Attn: Mr. Gene Shaw, Branch Librarian
Phone: (718) 665-6255
Hours: Mon Tue Wed Thu Fri Sat Sun
10-8 10-6 10-6 10-8 10-5 10-5 Closed

Who to Contact

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

Project Related Questions

Sadique Ahmed
New York State Department of Environmental
Conservation
625 Broadway
Albany, New York 12233-7020
518-402-9775
sxahmed@gw.dec.state.ny.us
Call for an appointment

Site-Related Health Questions

Christopher M. Doroski
New York State Department of Health
Bureau of Environmental Exposure Investigation
547 River Street
Troy, NY 12180
1-800-458-1158 x27860
BEEI@health.state.ny.us

We encourage you to share this fact sheet with neighbors and tenants, and/or post this fact sheet in a prominent area of your building for others to see.

A Spanish version of this fact sheet is available at Bronx Community Board 1, by calling Mr. Cedric L. Loftin, District Manager, at (718) 585-7117

La versión en español de esta hoja informativa está disponible en Bronx Community Board 1, llamando a Mr. Cedric L. Loftin, Jefe del Distrito: (718) 585-7117

Receive Site Fact Sheets by Email

Have site information such as this fact sheet sent right to your email inbox. NYSDEC invites you to sign up with one or more contaminated sites county email listservs available at the following web page: www.dec.ny.gov/chemical/61092.html . It's *quick*, it's *free*, and it will help keep you *better informed*.



As a listserv member, you will periodically receive site-related information/announcements for all contaminated sites in the county(ies) you select.

You may continue also to receive paper copies of site information for a time after you sign up with a county listserv, until the transition to electronic distribution is complete.

Note: Please disregard if you already have signed up and received this fact sheet electronically.



Cornerstone B1
BCP Site

3100 3rd Ave, Bronx, NY 10451

E 158th St

E 159th St

© 2009 Tele Atlas
Image © 2009 Sanborn

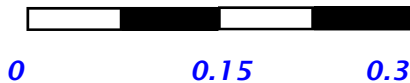
Google

40°49'18.10" N 73°54'42.16" W

2004

Eye alt 184 m

APPROX. SCALE (miles)



N

Adapted from Google Earth 2009

CA RICH CONSULTANTS, INC.

Environmental Specialists Since 1982
17 Dupont Street, Plainview, NY 11803

TITLE:

**SITE LOCATION MAP ON
AERIAL PHOTOGRAPH**

DATE:

10/19/10

SCALE:

AS SHOWN

FIGURE: **1**

**Cornerstone Site B-1
3100 Third Avenue
Bronx, New York**

DRAWN BY:

S.T.M.

APPR. BY:

S.J.O.