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New York State Department of Environmental Conservation

FACT SHEET

Brownfield Cleanup Program

*Receive site fact sheets by *email*. See **For More Information** to learn how.

Site Name: 275 Franklin Street
DEC Site #: C915208
Site Address: 275 Franklin Street; Buffalo, NY 14202

July 2013

Have questions? See **Who to Contact** below

275 Franklin Street Update: Remedy Proposed for Brownfield Site Contamination; Public Comment Period Announced

The public is invited to comment on a proposed remedy being reviewed by New York State Department of Environmental Conservation (DEC) to address contamination related to the 275 Franklin Street site ("site") located at 275 Franklin Street, Buffalo, Erie County. Please see the map for the **Site Location**. Documents related to the cleanup of this site can be found at the location identified below under **Where to Find Information**.

Based on the findings of the investigation, DEC in consultation with New York State Department of Health (DOH) has determined that the site poses a significant threat to public health or the environment due to elevated concentrations of contaminants in groundwater, soil, and soil vapor. The activities in the report have been designed to address the identified contamination and the threat posed.

How to Comment

DEC is accepting written comments about the proposed plan for 45 days, from **July 29, 2013 through September 12, 2013**. The proposed plan is available for public review at the location identified below under **Where to Find Information**. Please submit comments to the DEC project manager listed under *Project Related Questions* in the **Who to Contact** area below.

Draft Remedial Work Plan and Proposed Decision Document

The cleanup plan is described in DEC's Proposed Decision Document, which is based on a more detailed "Remedial Work Plan". The proposed remedy consists of:

1. SITE COVER

A site cover currently exists (asphalt) and will be maintained to allow for continued restricted residential use of the site until future redevelopment plans are implemented. Because the multi-use zoning district allows restricted residential use, any site redevelopment will maintain a site cover, which may consist either of the structures such as buildings, pavement, sidewalks comprising the site development or a soil cover in areas where the upper two foot of exposed surface soil will exceed the applicable soil cleanup objectives (SCOs). Where a soil cover is required, it will be a minimum of two foot, meeting the SCOs for cover material as set forth in 6 NYCRR Part 375-6.7(d) for restricted residential use. The soil cover will be placed over a demarcation layer, with the upper six inches of the soil of sufficient quality to maintain a vegetation layer. Any fill material brought to the site will meet the requirements for the identified site use as set forth in 6 NYCRR Part 375-6.7(d).

2. ENHANCED SHALLOW GROUNDWATER BIOREMEDIATION

In-situ shallow groundwater treatment of the highest residual VOC contaminated shallow groundwater in the immediate vicinity of MW-5 (residual source area) through enhanced natural attenuation of chlorinated VOCs (PCE and its breakdown products) is proposed for site C915208 residual source only. The biological breakdown of contaminants through anaerobic reductive dechlorination will be enhanced by a combination of microbial inoculation and injecting a hydrogen release compound (molasses) into the subsurface to promote dechlorinating microbe growth. The microbial reductive dechlorination process will also be enhanced with the injection of micron scale zero valent iron (ZVI). The treatment materials will be injected into the shallow groundwater source area via injection probes at a depth ranging from 10 to 20 feet. The injection materials may be supplemented with additional buffers and nutrients that will be determined during the remedial design.

Although there is residual chlorinated VOC contamination in the deep groundwater zone, no measures to address this residual chlorinated VOC contamination in the deep groundwater zone are proposed.

3. PLUME REDUCTION

Plume reduction will be accomplished by treating the groundwater via in-situ treatment methods such that the groundwater leaving the site has been effectively treated to water quality criteria.

At this site, the shallow chlorinated VOC contaminant plume has migrated onto an adjoining property at 267 Franklin Street which is part of the adjoining BCP project site C915237 (432 Pearl Street Site). Though there is residual chlorinated VOC contamination in the deep groundwater zone at both BCP sites C915208 and C915237, no measures to address this residual chlorinated VOC contamination in the deep groundwater zone is proposed. Contaminant plume reduction will be accomplished by injecting in-situ treatment materials along a series of injection points 10 to 20 feet in depth along an accessible western perimeter area of the site forming a vertical permeable reactive treatment zone. This vertical permeable reactive treatment zone will continue southward along the accessible western and southern perimeter areas of adjoining BCP site C915237 (267 Franklin Street parcel). The in-situ treatment materials will utilize the same materials used in the source area treatment system to promote enhanced natural attenuation of residual chlorinated VOC contamination in the shallow groundwater zone. No remediation measures are proposed to address off-site migration of residual chlorinated VOC contamination in the deep groundwater zone.

4. INSTITUTIONAL CONTROL

Imposition of an institutional control in the form of an environmental easement for the controlled property that:

- Requires the remedial party or site owner to complete and submit to DEC a periodic certification of institutional and engineering controls in accordance with Part 375-1.8 (h)(3);
- Allows the use and development of the controlled property for restricted residential, commercial and industrial uses as defined by Part 375-1.8(g), although land use is subject to local zoning laws;
- Restricts the use of groundwater as a source of potable or process water, without Necessary water quality treatment as determined by DOH or County DOH;
- Prohibits agriculture or vegetable gardens on the controlled property; and
- Requires compliance with DEC approved Site Management Plan.

5. SITE MANAGEMENT PLAN

A Site Management Plan is required, which includes the following:

a) An Institutional and Engineering Control Plan that identifies all use restrictions and engineering controls for the site and details the steps and media-specific requirements necessary to ensure the following institutional and/or engineering controls remain in place and effective:

Institutional Controls: (ICs) discussed above.

Engineering Controls: The site cover discussed above, enhanced shallow groundwater bioremediation discussed in above, and plume reduction as discussed in Paragraph 3 above.

This plan includes, but may not be limited to:

i. An Excavation Plan which details the provisions for management of future excavations in areas of remaining contamination;
ii. A Monitoring Plan to ensure groundwater quality and to assess the performance and effectiveness of the site cover;
iii. Descriptions of the provisions of the environmental easement including any land use and groundwater use restrictions;
iv. Provisions for evaluation of the potential for soil vapor intrusion into any new buildings developed on the site, including provision for implementing actions recommended to address exposures related to soil vapor intrusion;
v. Provisions for the management and inspection of the identified engineering controls;
vi. Maintaining site access controls and DEC notification; and
vii. The steps necessary for the periodic reviews and certification of the institutional and/or engineering controls.

b) A Monitoring Plan to assess the performance and effectiveness of the remedy. The plan includes, but may not be limited to:

i. Monitoring of groundwater to assess the performance and effectiveness of the remedy;
ii. A schedule of monitoring and frequency of submittals to DEC; and
iii. Monitoring for vapor intrusion for any buildings occupied or developed on the site, as may be required pursuant to item a.iv. above.

The proposed remedy was developed by Buffalo Development Corporation ("applicant(s)") after performing a detailed investigation of the site under New York's Brownfield Cleanup Program (BCP).

Summary of the Investigation

PRE-REMEDIATION: An RI commenced in late 2006 to supplement earlier environmental site assessment in 2004. Results from this work revealed chlorinated solvents commonly used by dry cleaners (tetrachloroethene [PCE]) in soils up to 20,000 microgram/kilogram (ug/kg) PCE and shallow groundwater up to 19 parts per million (ppm) PCE at 275-277 Franklin St parcel. The water quality standard for PCE is 0.005 ppm. The source area in shallow groundwater contamination appears to be centered around MW-5. The RI investigation included an adjoining lot at 267 Franklin Street (see Site C915237) currently owned by the applicant also revealed chlorinated solvents in shallow groundwater at levels up to 18 ppm for PCE. A supplemental site investigation was conducted in 2008 to develop an IRM for the site. Because of a silty clay soil lens midway between the surface and bedrock, two distinct groundwater zones exist at the site. The silty clay soil lens has

limited some downward migration of the dissolved contamination. However, the 2008 supplemental investigation confirmed that deeper groundwater zone is contaminated with the chlorinated solvents, with one monitoring well containing 9.4 ppm PCE. PCE levels at this monitoring point have dropped to 0.091 ppm PCE during the 2012 sampling event (post IRM – see below). The supplemental investigation confirmed that the bedrock zone does not appear to be contaminated with the chlorinated solvents.

Chlorinated solvent vapors were detected during soil vapor evaluations at the 279 Franklin Street parcel.

Investigation of off-site areas by DEC on adjoining properties revealed an extensive elongated off-site chlorinated VOC plume in shallow groundwater. The offsite impacts to deep groundwater zone were limited to one of the off-site sampling points hydraulically downgradient of the BCP site (south of the BCP site). Dissolved levels of PCE and its breakdown products at this off-site deep groundwater well have been found at 0.101 ppm total VOCs.

POST-IRM: An IRM was implemented in 2008 on the site to address VOC contamination in vadose zone soils and in the shallow groundwater zone. The vapor extraction system appeared to have effectively addressed vadose zone contamination in the soil column above the groundwater source plume. However PCE at shallow well MW-5 rebounded to 70 ppm based upon sampling in 2012. Additional measures to remediate chlorinated VOC contamination in shallow and deep groundwater zones are necessary. An additional investigative boring and deep monitoring well to further assess deep groundwater impacts was installed in 2012 at 267 Franklin Street (adjoining BCP site C915237). Deep groundwater sampling confirmed dissolved chlorinated VOC contamination at levels up to 0.069 ppm total VOCs at this new deep well.

The SVE system reduced the chlorinated VOCs in the vadose (soil) zone in the source area to restricted residential SCG guidance levels.

Because of the extent of the dissolved shallow plume, vapor intrusion (VI) from the chlorinated solvents was a concern with offsite neighboring structures. A soil VI evaluation completed by DEC in 2008 revealed PCE impacts to indoor air quality inside the 267 Franklin Street apartment building. DEC subsequently installed a sub-slab depressurization system (SSDS) inside the apartment building to address VI and reduce indoor air concentrations of PCE. This building and parcel were subsequently acquired by the applicant and allowed into the BCP as site C915237. Vapor intrusion was confirmed in another off-site building and an SSDS was installed in 2012.

Additional investigations were required to assess off-site impacts, health and safety concerns, the presence of DNAPL, and bedrock aquifer contamination. DEC monitoring has confirmed an elongated PCE plume has migrated in a southwesterly direction across Franklin Street.

Next Steps

DEC will consider public comments, revise the plan as necessary, and issue a final Decision Document. DOH must concur with the proposed remedy. After approval, the proposed remedy becomes the selected remedy. The draft Remedial Work Plan and Proposed Decision Document are revised as needed to describe the selected remedy, and will be made available to the public. The applicant may then design and perform the cleanup action to address the site contamination, with oversight by DEC and DOH.

DEC will keep the public informed throughout the investigation and cleanup of the site.

Background

LOCATION: The brownfield site encompasses two contiguous parcels in the City of Buffalo, Erie County, and are identified as 275-277 Franklin Street (~0.13 acres), and 279 Franklin Street (~0.12 acres). The site is situated in an urban commercial district.

SITE FEATURES: The site is paved with asphalt and is currently used as a commercial surface parking lot approximately 0.25 acres in size.

CURRENT ZONING/USE: Both contiguous parcels that constitute the site are situated in the Downtown Opportunity (DO) zoning district which currently contains a mix of uses including apartment residences, restaurants, retail, entertainment, office and parking. Permitted use in the DO zoning district includes residential, office, (limited) retail, restaurant, hotel and entertainment. The surrounding parcels are currently used for a combination of commercial uses including surface parking, restaurant and entertainment.

PAST USE OF THE SITE: Record information concerning the use of both parcels dates back to the late 1800s where the area was predominantly closely spaced urban residential interspersed with commercial businesses and establishments.

279 Franklin Street: This lot was used for residential purposes from the late 1800s through the 1950s, and as a parking lot from the early 1980s to present. Previous use of the lot does not reveal any recognized environmental concerns.

275-277 Franklin Street: In the late 1800s, the lot contained a residence with a carriage shed facing Asbury Alley. By the 1950s, the residence was replaced with a commercial use building, and record information indicates that the structure was used by a dry cleaning business from approximately 1951 through the early 2000s. This parcel became delinquent in property taxes and the City of Buffalo foreclosed on the parcel for back taxes. The parcel was sold by the City in 2004. The building on the parcel was demolished in 2004 by the applicant. The building area of the parcel was subsequently paved over and is currently being used as a commercial surface parking lot.

According to the BCP application, future development plans for the site and adjoining BCP site (C915237) consists of a hotel with conference and parking facilities.

SITE GEOLOGY/HYDROGEOLOGY:
Overburden: The site is located within the Erie-Ontario lake plain physiographic province, which is typified by little topographic relief and gentle slope toward Lake Erie, except in the immediate vicinity of major drainage ways. The surficial geology of the Lake Erie plain generally consists of a thin glacial till layer, glaciolacustrine (lake-laid laminated silts and clays) deposits, alluvium, and soils derived by these deposits. Glacial till deposits were not encountered at the site except for a thin layer (1 to 2 feet thick) above limestone bedrock. The site geology consists of a lake-laid sandy ridge deposit about 40 to 45 feet thick with several inter-bedded silty clay lenses. The site is also covered by a thin soil/fill layer about 2 to 5 feet thick and is found throughout the site. The fill is characteristic of urban fill common in the City of Buffalo.

Bedrock: The site is situated over the Onondaga formation limestone. Limestone bedrock was encountered about 52 feet below the surface.

Hydrogeology: Unconfined shallow groundwater was encountered within the native soils at depths of approximately 10 to 12 feet below ground surface. Because of a silty clay soil lens within the sandy soil profile at a depth of approximately 25 to 30 feet below ground surface, the site has a defined shallow and deep groundwater zone. Site groundwater flow gradient (shallow and deep) appears to flow in a south/southwest direction. Regional groundwater appears to flow west/southwest toward Lake Erie and confluence of the Buffalo River.

Additional site details, including environmental and health assessment summaries, are available on DEC's website at:
http://www.dec.ny.gov/cfmx/extapps/derexternal/haz/details.cfm?pageid=3&progno=C915208

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: http://www.dec.ny.gov/chemical/8450.html.

Site Location

Where to Find Information

Public interest in this project is valued and appreciated. Project documents are available at the following location to help the public stay informed. For more information about the BCP, visit: http://www.dec.ny.gov/chemical/8450.html.

NYS DEC Region 9 Office
270 Michigan Avenue
Buffalo, New York 14203
716-851-7220
(Call for appointment)

Buffalo & Erie County Public Library
Attn: Michael Mahaney
1 LaFayette Square
Buffalo, NY 14203
716-858-8900

Who to Contact

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

Project Related Questions:
Michael Hinton
NYS DEC, Division of Environmental Remediation
270 Michigan Ave
Buffalo, NY 14203
716-851-7220
mjhinton@gw.dec.state.ny.us

Site-Related Health Questions:
Deanna Ripstein
NYS DOH
Empire State Plaza, Corning Tower, Room 1787
Albany, NY 12237
(518) 402-7860
beei@health.state.ny.us

For More Information

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.

***Receive Site Fact Sheets by Email**

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

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