

FACT SHEET

Brownfield Cleanup Program

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Site Name: IBM Gun Club, Burn Pit DEC Site #: C704044 Site Address: Robinson Hill Road Union, NY 13760 September 2012

Remedy Proposed for Brownfield Site Contamination; Public Comment Period Announced

The public is invited to comment on a proposed remedy being reviewed by the New York State Department of Environmental Conservation (NYSDEC or Department) to address contamination related to IBM Gun Club, Burn Pit ("site") located at Robinson Hill Road, Union, Broome County. Please see the map for the site location. Documents related to the cleanup of this site can be found at the location(s) identified below under "Where to Find Information."

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

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

How to Comment

NYSDEC is accepting written comments about the proposed plan for 45 days, from October 1, 2012 through November 15, 2012. The proposed plan is available for public review at the location(s) identified below under "Where to Find Information." Please submit comments to the project manager listed under Project Related Questions in the "Who to Contact" area below.

Draft Remedial Work Plan and Proposed Decision Document

The remedy proposed for the site includes:

1. A remedial design program will be implemented to provide the details necessary for the construction, operation, maintenance, and monitoring of the remedial program. Green remediation principles and techniques will be implemented to the extent feasible in the design, implementation, and site management of the remedy as per DER-31. The major green remediation components are as follows;

• Considering the environmental impacts of treatment technologies and remedy stewardship over the long term;

- Reducing direct and indirect greenhouse gas and other emissions;
- Increasing energy efficiency and minimizing use of non-renewable energy;
- Conserving and efficiently managing resources and materials;

• Reducing waste, increasing recycling and increasing reuse of materials which would otherwise be considered a waste;

• Maximizing habitat value and creating habitat when possible;

• Fostering green and healthy communities and working landscapes which balance ecological, economic and social goals; and

• Integrating the remedy with the end use where possible and encouraging green and sustainable re-development.

2. A site cover will be required to allow for restricted residential use within the Track 4 Cleanup area (see figure 2). The cover will consist either of the structures such as buildings, pavement, sidewalks comprising the site development or a soil cover in areas where the upper two feet of exposed surface soil will exceed the applicable soil cleanup objectives (SCOs). Where the soil cover is required it will be a minimum of two feet of soil, meeting the SCOs for cover material as set forth in 6 NYCRR Part 375-6.7(d) for 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).

3. Implementation of an Enhanced Biological Degradation (EBD) program to treat groundwater at the site. EBD is performed through a series of injections of an engineered amendment into the groundwater. The amendment (e.g., a substance such as molasses or soy bean oil) promotes microbial growth, and the microbes in turn aid in the breakdown of contaminants in the groundwater.

4. Planting of select species of trees and grasses to promote plant uptake of contaminated water, a process known as phytoremediation.

5. 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 the Department 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 within the Track 4 Cleanup area for restricted residential, commercial and industrial uses as defined by Part 375-1.8(g); and for Residential, restricted residential, commercial and industrial uses as defined by Part 375-1.8(g) throughout the remainder of the site, 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 the NYSDOH or County DOH;

• requires compliance with the Department approved Site Management Plan.

6. 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: The Environmental Easement discussed in Paragraph 5, above.

Engineering Controls: The soil cover discussed in Paragraph 2, above.

This plan includes, but may not be limited to:

• an Excavation Plan which details the provisions for management of future excavations in areas of remaining contamination;

• descriptions of the provisions of the environmental easement including any land use, groundwater use restrictions;

• a provision for evaluation of the potential for soil vapor intrusion for any buildings constructed on-site, as well as for those constructed off-site within the plume area; including a provision for implementing actions recommended to address exposures related to soil vapor intrusion;

- provisions for the management and inspection of the identified engineering controls;
- maintaining site access controls and Department notification; and

• 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:

- monitoring of groundwater to assess the performance and effectiveness of the remedy;
- a schedule of monitoring and frequency of submittals to the Department;

• monitoring for vapor intrusion for any buildings occupied or developed on the site, as well as for those constructed off-site within the plume area, as may be required by the Institutional and Engineering Control Plan discussed in item 2, above.

• requirements for the monitoring of the adequacy of any institutional controls (ICs) being relied upon to control potential exposures to contaminants off-site.

c. an Operation and Maintenance (O&M) Plan to ensure continued operation, maintenance, monitoring, inspection, and reporting of any mechanical or physical components of the remedy. The plan includes, but is not limited to:

• compliance monitoring of treatment systems to ensure proper O&M as well as providing the data for any necessary permit or permit equivalent reporting;

- maintaining site access controls and Department notification; and
- providing the Department access to the site and O&M records.

7. The operation of the components of the remedy would continue until the remedial objectives have been achieved, or until the Department determines that continued operation is technically impracticable or not feasible.

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

Next Steps

NYSDEC will consider public comments, revise the plan as necessary, and issue a final Decision Document. New York State Department of Health (NYSDOH) 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(s) may then design and perform the cleanup action to address the site contamination, with oversight by NYSDEC and NYSDOH.

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

Background

Location:

The IBM Gun Club Burn Pit site is located on Robinson Hill Road, in the Town of Union, N.Y. The site is on the western side of the road, approximately one mile north of the intersection of Country Club Rd. and Robinson Hill Rd. Once on the IBM Gun Club property, one must proceed south on a dirt road to a fenced area. Inside the fenced area is an electronics testing facility and the former burn pit.

Site Features:

The main site features include a one story unoccupied building formerly used for electronics testing. The former burn pit is located on the southeastern corner of the fenced property, in a grassy area.

Current Zoning/Use:

The site is zoned as Planned Unit Development, a category which allows for residential use of

the property, but restricts the property from being used for agricultural purposes.

Except for the on-going environmental investigation, the site is no longer used by IBM.

The immediately surrounding area includes unused property also owned by IBM, as well as the former IBM Gun Club skeet and rifle range. Beyond the IBM-owned property, there are residential areas, a golf course and a hiking area.

Historic Use:

The site was the home to a small electronics testing laboratory. The burn pit, which appears to have been unrelated to other site activities, was used for several years as a disposal area for waste chemicals generated at the IBM Endicott facility. These chemicals included chlorinated solvents.

Site Geology and Hydrogeology:

Site soils range from inches to several feet in thickness, and overlay shale bedrock. Groundwater occurs between five and ten feet below ground surface, and flow is generally to the south.

Additional site details, including environmental and health assessment summaries, are available on NYSDEC's website at:

http://www.dec.ny.gov/cfmx/extapps/derexternal/haz/details.cfm?pageid=3&progno=C704044

FOR MORE INFORMATION

Where to Find Information

Project documents are available at the following location(s) to help the public stay informed.

Village of Johnson City Library 107 Main Street Johnson City, NY 13790 phone: (607) 797-4816

George F. Johnson Memorial Library 1001 Park Street Endicott, NY 13760 phone: (607) 757-5350

Who to Contact

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

Project Related Questions

Jonathan Greco Department of Environmental Conservation Division of Environmental Remediation 625 Broadway Albany, NY 12233-7016 518-402-9694 jxgreco@gw.dec.state.ny.us <u>Site-Related Health Questions</u> Justin Deming New York State Department of Health Bureau of Environmental Exposure Investigation Empire State Plaza Corning Tower, Room 1787 Albany, NY 12237 518-402-7880 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.

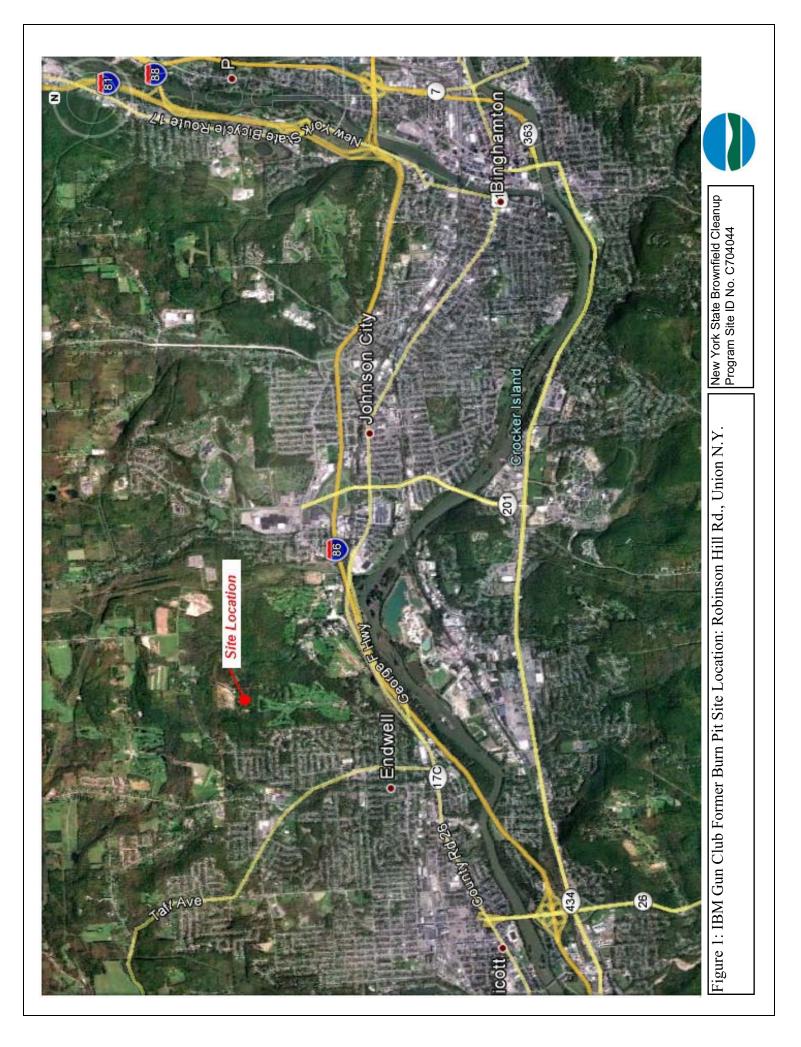
Receive Site Fact Sheets by Email Have site information such as this fact sheet sent right to your email inbox. NYSDEC invites you to sign up with one or more contaminated sites county email listservs available at the following web page: <u>http://www.dec.ny.gov/chemical/61092.html</u>. It's quick, it's 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.



Engineered introduction of amendments shown to enhance biochemical destruction of VOCs in site-specific pilot testing. The amendment will be injected into vertical boreholes designed for this application and open to the upper 20 or so feet of subsurface.



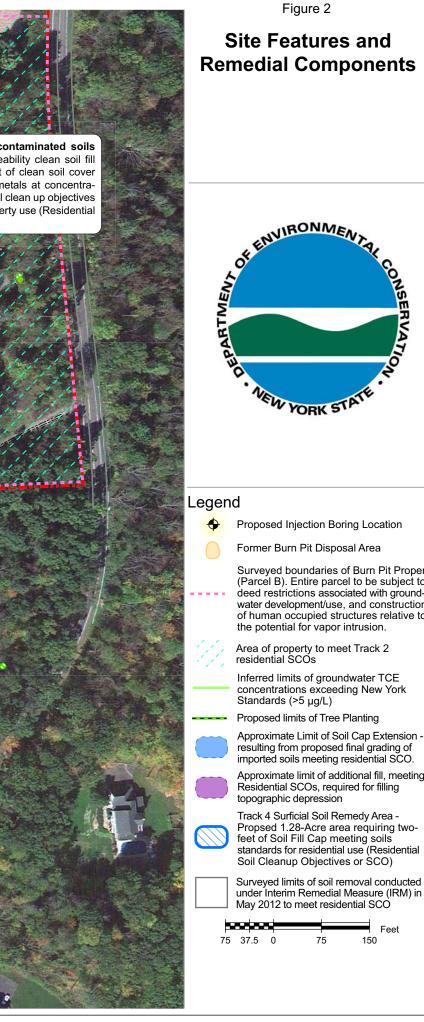
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Capping residual contaminated soils with an engineered low permeability clean soil fill providing a minimum of 2 feet of clean soil cover over soils containing certain metals at concentrations above New York State soil clean up objectives established for residential property use (Residential SCO).

Establishing and maintaining grass 3. and tree cover to both limit infiltration recharge and enhance direct uptake of VOC-containing shallow groundwater. The tree planting is to include fast growing tree species that have been commonly applied to VOC phytoremediation projects and native species that will cover about 2.3 acres of land.

2. Placement and compaction of engineered soil fill within a topographic depression where VOC-containing groundwater has been observed to breakout to the ground surface seasonally as seeps and springs.

5. Institutional Controls for the downgradient plume area: Development of groundwater supplies is to be restricted. Future construction of occupied structures would require testing and/or implementation of appropriate actions to address exposures related to soil vapor intrusion.



Site Features and **Remedial Components**



Proposed Injection Boring Location

Former Burn Pit Disposal Area

Surveyed boundaries of Burn Pit Property (Parcel B). Entire parcel to be subject to deed restrictions associated with groundwater development/use, and construction of human occupied structures relative to the potential for vapor intrusion.

Area of property to meet Track 2 residential SCOs

Inferred limits of groundwater TCE concentrations exceeding New York

Proposed limits of Tree Planting

Approximate Limit of Soil Cap Extension resulting from proposed final grading of imported soils meeting residential SCO.

Approximate limit of additional fill, meeting Residential SCOs, required for filling

Track 4 Surficial Soil Remedy Area -Propsed 1.28-Acre area requiring two-feet of Soil Fill Cap meeting soils standards for residential use (Residential Soil Cleanup Objectives or SCO)

Surveyed limits of soil removal conducted under Interim Remedial Measure (IRM) in May 2012 to meet residential SCO

