



New York State
Department of
Environmental
Conservation

Site Remediation Fact Sheet for S&S X-Ray Products Voluntary Cleanup Site

This fact sheet is to inform you about the remedial actions that have occurred at and request your comments on the operation, maintenance and monitoring actions planned for the S&S X-Ray Products site located at 1101 Linwood Street, Brooklyn, New York.

The former site owner performed the remedial actions under the supervision of the New York State Department of Environmental Conservation (NYSDEC). In 2002, the volunteer signed a voluntary cleanup agreement (VCA) and the NYSDEC entered into the State's Voluntary Cleanup Program (VCP) to investigate and remediate the site.

SITE LOCATION The site at 1101 Linwood Street is located in an industrial area of Brooklyn, Kings County. The property is a 2.23 acre parcel bounded by Cozine Avenue to the north, Flatlands Avenue to the South, Linwood Street to the West and Essex Street to the east, as shown on the attached map. The majority of the site area consists of a one-story industrial facility that is currently occupied by a self-storage facility. The rest of the site is a paved parking lot with a little landscaping at the south end.

SITE BACKGROUND The property was formerly owned by a manufacturer of various metal products. Solvents were used in a painting and preparatory process. The use of solvents ceased in 1986 when S&S X-Ray purchased the property. During an environmental site assessment performed for a potential buyer in 2001, two abandoned 550-gallon underground storage tanks (USTs) that had contained benzene, toluene, ethylbenzene and xylene (BTEX) solvents were discovered beneath the building. The investigation found that an underground fill pipe had leaked and resulted in BTEX contamination to soil and groundwater in the area of the leak.

REMEDIAL ACTIONS In January 2002, the two USTs and associated piping were removed, inspected, emptied, cleaned and disposed of properly. Approximately 40 cubic yards of contaminated soil was excavated from the area. The excavation was kept open at that time.

A soil gas investigation conducted in July 2003 found that significant sub-surface contamination remained in the UST area. In September 2003, soil samples were collected from the sidewalls of the excavation. The soil borings confirmed the

presence of significant BTEX contamination and delineated the extent of the contamination in the area around the UST excavation.

In July 2004, groundwater monitoring and extraction wells were constructed and sampled near and down gradient from the UST area. The sampling confirmed the presence of significant BTEX contamination in the

S&S X-RAY PRODUCTS

VOLUNTARY CLEANUP PROJECT

**30-day public
comment period
ending
November 23, 2006**

Documents relating to this investigation may be found in the following document repositories:

NYSDEC Region 2 Office
Regional Headquarters
One Hunters Point Plaza
47-40 21st Street
Long Island City, NY
11101
718-482-4995
M - F 8:30am - 4:45pm

Brooklyn Public Library
Spring Creek Branch
12143 Flatlands Avenue
Brooklyn, New York
11207
718-257-6571
M 1:00 - 8:00 pm
T,W,F 11:00 am - 6:00 pm
Th 1:00 - 6:00 pm
Sat 10:00 am - 5:00 pm

groundwater. Approximately 2,150 gallons of contaminated groundwater was pumped from four extraction wells on August 12, 2003 for off-site disposal. Groundwater sampling conducted later that month showed no significant reduction in contaminant concentrations.

In December 2004 and January 2005, approximately 250 cubic yards of contaminated soil was excavated from two locations in the UST area. Each excavation was on both sides of the exterior wall with soil removed from beneath the interior floor and the exterior sidewalk. The contaminated soil was properly disposed of, in accordance with NYSDEC regulations. Due to the building's footings location at twelve feet below grade, the soil excavation was limited to that depth. A plastic demarcation layer was placed on the bottom and on the walls of the excavation to separate the clean backfill from the remaining soil.

To mitigate impacts to workers and visitors via the infiltration of xylene and ethylbenzene vapors into the building, a sub-slab depressurization system (SSDS) was installed in January 2005.

To facilitate the degradation of the contaminants in soil and groundwater, approximately 3,960 lbs of an oxygen releasing compound (ORC) was injected into seven soil borings beneath the last excavation in January 2006. Before the ORC was injected into the borings, soil samples were collected to document the extent of remaining contamination. One down gradient well was constructed to monitor the groundwater migrating from the UST area. Sampling of the monitoring well found no site-related contaminants.

OPERATION, MAINTENANCE, & MONITORING ACTIVITIES The final actions planned for this project will consist of operation, maintenance, and monitoring (OM&M) activities. These OM&M activities will consist of:

- the placement of two borings to collect soil samples from beneath the excavation to determine the effectiveness of the ORC injection and document the current soil conditions;
- construction of two additional monitoring wells to document groundwater conditions in the UST area, monitor down gradient conditions, and survey the direction of groundwater flow; and
- operation and maintenance of the sub-slab depressurization system.

INSTITUTIONAL CONTROLS The institutional controls consist of a deed restriction in the form of a Declaration of Covenants and Restrictions that has been filed with the Kings County Clerk. The deed restriction prohibits the use of on-site groundwater and requires notification to and approval by the NYSDEC prior to any subsurface activities.

NEW YORK STATE'S VOLUNTARY CLEANUP PROGRAM To facilitate the continued use of the site, the volunteer has completed an investigation and has conducted remediation of the site under the provisions of the NYSDEC's Voluntary Cleanup Program (VCP). The VCP was developed to enhance private sector cleanup of properties by enabling businesses to remediate a site using private rather than public funds, and to reduce the development pressures on "greenfield" sites. Under the program, a volunteer agrees to investigate and remediate a site to a level that is protective of human health and the environment for the present or intended use of the property. Investigation and remediation are carried out under the oversight of the NYSDEC and the NYSDOH. When the volunteer completes the work, the State provides a release from State liability for the work done, returning the site to productive use.

CITIZEN PARTICIPATION You are encouraged to stay informed about activities at the S&S X-Ray Products site throughout the investigation and remediation process by taking advantage of the site's document repositories and contacting the staff listed below. As documents are generated during the remedial process, they will be added to the repositories. Documents currently available include the 2002 Voluntary Cleanup Agreement, the 2003 Interim Remedial Measures Work Plan, the 2005 Remedial Action Report, and the draft Operation, Maintenance and Monitoring Plan

For More Information: Call or write the following staff about:

Environmental Concerns:

Michael MacCabe
New York State
Department of Environmental Conservation
625 Broadway, 12th Floor
Albany, NY 12233-7016
(518) 402-97745

Health-Related Concerns:

Nathan Walz
New York State Department of Health
Flanigan Square, Room 300
547 River Street
Troy, NY 12180
1-800-458-1158, ext.27880

Site location

