EXPLANATION OF SIGNIFICANT DIFFERENCE

1510 BROADWAY DRY CLEANER SITE

City of New York / Kings County / Site No. C224280 / December 2022

Prepared by the New York State Department of Environmental Conservation
Division of Environmental Remediation

1.0 INTRODUCTION

The purpose of this notice is to describe the progress of the cleanup at the 1510 Broadway Dry Cleaner Site and to inform you about a change in the Site remedy. The 0.488-acre site is located at 1510 Broadway in Brooklyn (see Figure 1). On January 26, 2021, the New York State Department of Environmental Conservation issued a Decision Document (DD) which selected a remedy to clean up the Site. The intent of the remedy was to achieve a Track 1 unrestricted use for the entire site. In the event that a Track 1 unrestricted use was not achieved, the remedy would achieve a Track 2 restricted residential cleanup, including an Environmental Easement (EE) and Site Management Plan (SMP). Currently, soils along the southwestern property boundary which exceed unrestricted use soil cleanup objectives, as defined by 6 NYCRR Part 375-6.8, cannot be safely removed beyond a depth of 3 feet below ground surface (bgs) without causing risk to the structural integrity of an existing adjacent 2-story off-site building. The change to the original remedy involves allowing the area shown on Figure 2 to be excavated to a shallower depth than originally planned (3' bgs versus 20' bgs) resulting in a Track 4 restricted residential cleanup for this area of the site, including installation of a site cover system as an engineering control. Although not presented in the DD, a Track 4 remedy was evaluated in the publicly-noticed Remedial Action Work Plan (RAWP).

This Explanation of Significant Difference (ESD) will become part of the Administrative Record for this Site. The information here is a summary of what can be found in greater detail in documents that have been placed in the following repositories:

Brooklyn Public Library
10 Grand Army Plaza
Brooklyn, NY 11238
Tel: (718) 230-2100

Brooklyn Community Board 16
444 Thomas S. Boyland Street – Room 103
Brooklyn, NY 11212
Tel: (718) 385-0323

Although this is not a request for comments, interested persons are invited to contact the Department's Project Manager for this site to obtain more information or have questions answered.

2.0 SITE DESCRIPTION AND ORIGINAL REMEDY

2.1 Site History, Contamination, and Selected Remedy

The site is located at 1510 Broadway in the Bedford-Stuyvesant/Brownsville section of Brooklyn in a residential and commercial area. The 0.488-acre site is irregularly shaped and is bordered on west by Saratoga Avenue, on the south by Hancock Street, on the north by Jefferson Avenue, and on the

northeast by Broadway. There is also a two-story building bordering the southwest portion of the site.

The Sanborn maps indicated that the property was developed with four three-story buildings used as offices and storefronts by 1888. Nine additional four-story commercial buildings were developed by 1908, and by 1932, two additional buildings occupied the site. Past uses included a dry cleaner, a cleaning and dyeing facility, a paint and oils store, a dress house/dress manufacturer, a printer, and a watch and jewelry repair shop, and various office, manufacturing, and commercial uses. Industrial, automotive, and dry-cleaning uses were also noted in the surrounding area.

As part of the Remedial Investigation (RI) which was performed by the Applicant in May/June 2019, soil and groundwater were analyzed for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), metals, polychlorinated biphenyls (PCBs), pesticides, and polyfluoroalkylated substances (PFAS). Soil vapor was analyzed for VOCs. The primary contaminants are the VOC tetrachloroethylene (PCE) in groundwater; SVOCs and metals in soil; and the VOC trichloroethylene (TCE) in soil vapor.

Soil - Several SVOCs were detected in soil samples to a depth of 17 feet below ground surface (bgs) at levels above unrestricted use soil cleanup objectives (UUSCOs) include the following with their respective UUSCO noted in parentheses: benzo(a)anthracene up to 36 parts per million (ppm) (1.0 ppm), benzo(a)pyrene up to 28 ppm (1.0 ppm), benzo(b)fluoranthene up to 34 ppm (1.0 ppm), benzo(k)fluoranthene up to 12 ppm (0.8 ppm), chrysene up to 36 ppm (1 ppm), dibenzo(a,h)anthracene up to 4.3 ppm (0.33 ppm), and indeno(1,2,3-cd)pyrenes up to 15 ppm (0.5 ppm). Metals were detected to a depth of 17 feet bgs above UUSCOs and include the following, with their respective UUSCO noted in parentheses: arsenic up to 15.5 ppm, barium up to 2,540 ppm (350 ppm), cadmium up to 11.6 ppm (2.5 ppm), copper up to 38,200 ppm (50 ppm), lead up to 20,800 ppm (63 ppm), mercury up to 8.2 ppm (0.18 ppm), nickel up to 36.8 ppm (30 ppm), and zinc up to 4,310 ppm (109 ppm). Total PCBs were detected in three samples up to 0.5 ppm compared to its UUSCO of 0.1 ppm. Several pesticides were detected to a depth of 17.5 feet bgs above UUSCOs, with their respective UUSCO noted in parentheses: 4,4'-DDD up to 0.25 ppm (0.005 ppm), 4,4'-DDE up to 0.2 ppm (0.0033 ppm), and 4,4'-DDT up to 0.96 ppm (0.0033 ppm). VOCs were not detected above UUSCOs in soil. 1,4-dioxane was not detected in any of the soil samples collected.

Perfluorooctanesulfonic acid (PFOS) was measured in subsurface soil at concentrations ranging from 0.25 parts per billion (ppb) to 8.87 ppb. The guidance value for unrestricted use is 0.88 ppb.

Data does not indicate any off-site impacts in soil related to this site.

Groundwater – Nine groundwater samples were collected on-site and three groundwater samples were collected off-site from beneath the adjacent sidewalk. The primary contaminant of concern in groundwater is the VOC, PCE which was found on-site in 6 wells up to 34 parts per billion (ppb) and in all the off-site wells with a maximum of 60 ppb. The Class GA Ambient Water Quality Standard (AWQS) for PCE is 5 ppb. Chloroform, detected at a maximum concentration of 36 ppb (7 ppb standard), was an additional VOC detected above standards. The only dissolved metal detected above AWQS was sodium at a maximum concentration of 118,000 ppb, above its AWQS of 20,000 ppb. Sodium is a naturally occurring metal commonly found in groundwater.

For PFAS, perfluorooctanoic acid (PFOA) and PFOS were reported at concentrations of up to 102 and 76 parts per trillion (ppt), respectively, exceeding the Maximum Contaminant Level (drinking water standard) of 10 ppt in groundwater. However, PFAS were not identified as a contaminant of concern for this site because the groundwater detections were located in monitoring wells at the upgradient

perimeter of the site. Additionally, there are no public water supply well within a half a mile and there is a municipal prohibition for use of groundwater at the site.

Soil Vapor – Twelve soil vapor samples were collected at 15 feet below the ground and analyzed. Several VOCs were detected in soil vapor samples throughout the site. The only notable detection was of trichloroethene (TCE) at 400 micrograms per cubic meter ($\mu g/m^3$) located in the middle of the site. Based on the available data, there is no indication that contaminated soil vapor is migrating from the site.

Based on the above-referenced RI completed by the Applicant under the Brownfield Cleanup Program, a Decision Document was issued in January 2021. The remedial actions outlined in the Decision Document included:

- Excavation and off-site disposal of contaminated soil to a depth of approximately 15 feet below surface grade across most of the site, and up to a depth of up to 20 feet below surface grade in 6 "hot spot" areas where deeper contamination was present;
- Treatment of groundwater by installation of two vertical permeable reactive barriers along the upgradient and downgradient boundaries of the site, respectively;
- Collection and analysis of end-point soil samples to evaluate the effectiveness of the remedy;
- Importing clean soil that meets the established Soil Cleanup Objectives (SCOs) for use as backfill;
- Installation of a vapor barrier as part of the foundation of the planned new building; and
- Installation of a sub-slab depressurization system to prevent migration of vapors into the building from soil and/or groundwater.

3.0 CURRENT STATUS

The Remedial Action is still ongoing including soil excavation and groundwater treatment. The Department is still awaiting submittal of the draft Site Management Plan (SMP) and Final Engineering Report (FER). A draft Environmental Easement (EE) was submitted to the Office of General Counsel on September 7, 2022. A revised EE to reflect the proposed Track 4 cleanup remedial component has not yet been submitted.

4.0 DESCRIPTION OF SIGNIFICANT DIFFERENCE

4.1 New Information

The original remedy calls for excavation of all soils across the entire 0.488-acre site which exceed unrestricted soil cleanup objectives, as defined by 6 NYCRR Part 375-6.8 with a contingency for a Track 2 restricted residential remedy. A Track 4 restricted residential remedy is now being proposed for a 0.033-acre portion of the site which is adjacent to an off-site building, since excavation to the depth required to achieve a Track 1 or Track 2 remedy is not possible in this area without compromising the structural integrity of the adjacent, off-site building. The adjacent property owner has not agreed to allow underpinning of the building which would have allowed deeper excavation to be performed.

4.2 Comparison of Changes with Original Remedy

The only changes from the original remedy and contingent remedy presented in the DD, is the Track 4 area which will require an engineering control in the form of a site cover.

The original remedy called for a Track 1 cleanup for the entire site with a contingency for a Track 2 restricted residential, including an EE and SMP. The revised remedy still includes a Track 1 remedy for the majority (0.455 acres) of the site. The remaining 0.033 acres of the site will be cleaned up to a Track 4 restricted residential. Unlike the Track 1 area, the Track 4 area would require an engineering control in the form of a cover system to limit direct exposures to remaining contamination in subsurface soils. The Track 4 area will also require an EE and SMP, however those were included in the DD as contingent items for the Track 2 remedy. Additionally, a Track 4 remedy, including cover system, was evaluated as part of the publicly-noticed RAWP.

All other aspects of the revised remedy remain the same as the original remedy except for the engineering control which would be described in an SMP. Controls would include requirements for properly handling any contaminated soil which may be excavated in the Track 4 area during future construction activity.

From this point forward, the following will be occurring at the site:

- Completion of Remedial Action including contaminated soil excavation and groundwater treatment;
- Collection of one round of post-treatment groundwater samples prior to Certificate of Completion issuance (another round will be collected in Site Management);
- Development of a Site Management Plan (SMP) to address proper handling of contaminated soils which may be excavated at the site during future redevelopment;
- Preparation of a Final Engineering Report;
- The imposition of institutional controls in the form of an Environmental Easement (EE) that would require compliance with the SMP;
- Implementation of a long-term maintenance program;
- The property owner will certify periodically to the NYSDEC that the institutional and engineering controls put in place, pursuant to the Decision Document, are still in place, have not been altered, and are still effective.

5.0 SCHEDULE AND MORE INFORMATION

Essential remedial work associated with this project is still ongoing.

If you have questions or need additional information you may contact any of the following:

Ronnie Lee, Project Manager
NYSDEC Central Office
625 Broadway, 12th Floor
Albany, NY 12233-7016
(518) 402-9615
ronnie.lee@dec.ny.gov

Thomas Panzone, Public Participation Specialist
NYSDEC Region 2 Office
47-40 21st Street
Long Island City, NY 11101
(718) 482-4953
Thomas.panzone@dec.ny.gov

Julia Kenney
NYSDOH
Bureau of Environmental Exposure Investigation
Corning Tower, Room 1787
Albany, NY 12237
(518) 402-7873
julia.kenney@health.ny.gov

11/30/22
Date

Ronnie Lee, Project Manager
Remedial Section C
Remedial Bureau B

11/30/22
Date

Sarah Quandt, Section Chief
Remedial Section C
Remedial Bureau B

12/01/22
Date

Gerard Burke, Director
Remedial Bureau B

12/09/22
Date

Andrew Guglielmi
Andrew Guglielmi, Director
Division of Environmental Remediation

DECLARATION

The selected remedy is protective of public health and the environment, complies with State and Federal requirements that are legally applicable or relevant and appropriate to the remedial action to the extent practicable, and is cost effective. This remedy utilizes permanent solutions and alternative treatment or resource recovery technologies, to the maximum extent practicable, and satisfies the preference for remedies that reduce toxicity, mobility, or volume as a principal element.