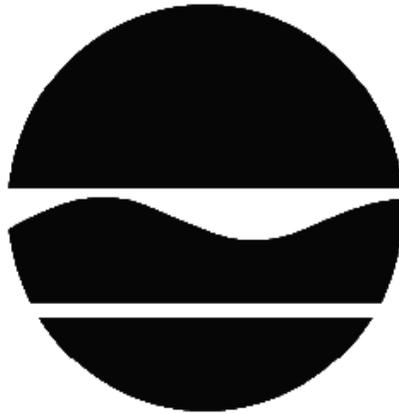


DECISION DOCUMENT

Former Driggs Plywood Corp.
Brownfield Cleanup Program
Brooklyn, Kings County
Site No. C224178
November 2013



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

DECLARATION STATEMENT - DECISION DOCUMENT

Former Driggs Plywood Corp.
Brownfield Cleanup Program
Brooklyn, Kings County
Site No. C224178
November 2013

Statement of Purpose and Basis

This document presents the remedy for the Former Driggs Plywood Corp. site, a brownfield cleanup site. The remedial program was chosen in accordance with the New York State Environmental Conservation Law and Title 6 of the Official Compilation of Codes, Rules and Regulations of the State of New York (6 NYCRR) Part 375.

This decision is based on the Administrative Record of the New York State Department of Environmental Conservation (the Department) for the Former Driggs Plywood Corp. site and the public's input to the proposed remedy presented by the Department.

Description of Selected Remedy

The elements of the selected remedy are as follows:

1. Remedial Design

A remedial design program will be implemented to provide the details necessary for the construction, operation, optimization, 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 gases 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. Excavation

The entire site will be excavated, as necessary to remove all on-site soil which exceeds restricted residential soil cleanup objectives (SCOs), as defined by 6 NYCRR Part 375-6.8, to a depth of 15 feet below grade; the excavated material will be transported off-site for disposal. Approximately 1,470 cubic yards of soil will be removed from the site. Fill meeting the requirements of 6 NYCRR Part 375-6.7(d) will be brought in as needed.

3. Institutional Controls

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 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 the NYSDOH or County DOH; and
- requires compliance with the Department approved Site Management Plan.

4. Site Management Plan

A Site Management Plan is required, which includes an Institutional Control Plan that identifies all use restrictions for the site and details the steps and media-specific requirements necessary to ensure the following institutional controls remain in place and effective:

Institutional Controls: The environmental easement discussed 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 and groundwater use restrictions;
- a provision for evaluation of the potential for soil vapor intrusion for any buildings developed on the site, including provision for implementing actions recommended to address exposures related to soil vapor intrusion;
- maintaining site access controls and Department notification; and
- the steps necessary for the periodic reviews and certification of the institutional controls.

Declaration

The remedy conforms with promulgated standards and criteria that are directly applicable, or that are relevant and appropriate and takes into consideration Department guidance, as appropriate. The remedy is protective of public health and the environment.

November 25, 2013



Date

Robert J. Cozzy, Director
Remedial Bureau B

DECISION DOCUMENT

Former Driggs Plywood Corp.
Brooklyn, Kings County
Site No. C224178
November 2013

SECTION 1: SUMMARY AND PURPOSE

The New York State Department of Environmental Conservation (the Department), in consultation with the New York State Department of Health (NYSDOH), has selected a remedy for the above referenced site. The disposal of contaminants at the site has resulted in threats to public health and the environment that would be addressed by the remedy. The disposal or release of contaminants at this site, as more fully described in this document, has contaminated various environmental media. Contaminants include hazardous waste and/or petroleum.

The New York State Brownfield Cleanup Program (BCP) is a voluntary program. The goal of the BCP is to enhance private-sector cleanups of brownfields and to reduce development pressure on "greenfields." A brownfield site is real property, the redevelopment or reuse of which may be complicated by the presence or potential presence of a contaminant.

The Department has issued this document in accordance with the requirements of New York State Environmental Conservation Law and 6 NYCRR Part 375. This document is a summary of the information that can be found in the site-related reports and documents.

SECTION 2: CITIZEN PARTICIPATION

The Department seeks input from the community on all remedies. A public comment period was held, during which the public was encouraged to submit comment on the proposed remedy. All comments on the remedy received during the comment period were considered by the Department in selecting a remedy for the site. Site-related reports and documents were made available for review by the public at the following document repository:

Brooklyn Public Library-Leonard Branch
81 Devoe Street
Brooklyn, NY 11211
Phone: 718-486-3365

Receive Site Citizen Participation Information By Email

Please note that the Department's Division of Environmental Remediation (DER) is "going paperless" relative to citizen participation information. The ultimate goal is to distribute citizen participation information about contaminated sites electronically by way of county email

listservs. Information will be distributed for all sites that are being investigated and cleaned up in a particular county under the State Superfund Program, Environmental Restoration Program, Brownfield Cleanup Program, Voluntary Cleanup Program, and Resource Conservation and Recovery Act Program. We encourage the public to sign up for one or more county listservs at <http://www.dec.ny.gov/chemical/61092.html>

SECTION 3: SITE DESCRIPTION AND HISTORY

Location: The BCP site is located in the Williamsburg section of Brooklyn (Kings County) at 11 Jackson Street at the intersection with Meeker Avenue where it runs under the Brooklyn-Queens Expressway.

Site Features: One one-story building covers the entire 0.20 acre site.

Current Zoning and Land Use: The site is zoned R6-residential and is presently unoccupied. In 2005 the site was rezoned from M1-2 industrial to R6-Residential as part of the Greenpoint-Williamsburg Rezoning Action to “provide opportunities for the development of residential uses on underutilized and vacant land and legalize existing non-conforming uses.”

Jackson Street intersects with Meeker Avenue at the southeast corner of the site. Meeker Avenue is a commercial corridor that runs under the Brooklyn-Queens Expressway. Immediately north and behind the site is a street of single family homes. Nearby, there is significant redevelopment that is occurring or has recently been completed that largely consists of multi-story, multi-unit residential buildings.

Past Use of the Site: The site was first developed sometime prior to 1887 as three residential lots. Circa 1962 until about 1973, Driggs Plywood operated at the site. From the early 1950s through 2007 the three lots were combined as one and occupied by a building labeled lumber storage that encompassed the entire lot. Arnmart Beer Distributors occupied a portion of the site in the late 1990s and Car Fashion Seat Covers operated on site in the 2000s. The building is currently vacant but was most recently occupied by a charter bus maintenance/repair garage in the western half of lot and a metal fabrication shop on the east.

Site Geology and Hydrogeology: Subsurface soils at the site include a mixture of silty non-native fill to approximately 6 feet below grade followed by sandy-silt to approximately 10 feet below grade. Groundwater table at the site is approximately 8 feet below surface grade within the native silty-sand. Based upon regional contour maps groundwater flow is expected to be west toward the East River.

A site location map is attached as Figure 1.

SECTION 4: LAND USE AND PHYSICAL SETTING

The Department may consider the current, intended, and reasonably anticipated future land use of the site and its surroundings when evaluating a remedy for soil remediation. For this site, alternatives (or an alternative) that restrict(s) the use of the site to restricted-residential use

(which allows for commercial use and industrial use) as described in Part 375-1.8(g) were/was evaluated in addition to an alternative which would allow for unrestricted use of the site.

A comparison of the results of the Remedial Investigation (RI) to the appropriate standards, criteria and guidance values (SCGs) for the identified land use and the unrestricted use SCGs for the site contaminants is available in the RI Report.

SECTION 5: ENFORCEMENT STATUS

The Applicant(s) under the Brownfield Cleanup Agreement is a/are Volunteer(s). The Volunteer(s) does/do not have an obligation to address off-site contamination. The Department has determined that this site poses a significant threat to human health and the environment and there are off-site impacts that require remedial activities; accordingly, enforcement actions are necessary.

The Department will seek to identify any parties (other than the Volunteer) known or suspected to be responsible for contamination at or emanating from the site, referred to as Potentially Responsible Parties (PRPs). The Department will bring an enforcement action against the PRPs. If an enforcement action cannot be brought, or does not result in the initiation of a remedial program by any PRPs, the Department will evaluate the off-site contamination for action under the State Superfund. The PRPs are subject to legal actions by the State for recovery of all response costs the State incurs or has incurred.

SECTION 6: SITE CONTAMINATION

6.1: Summary of the Remedial Investigation

A remedial investigation (RI) serves as the mechanism for collecting data to:

- characterize site conditions;
- determine the nature of the contamination; and
- assess risk to human health and the environment.

The RI is intended to identify the nature (or type) of contamination which may be present at a site and the extent of that contamination in the environment on the site, or leaving the site. The RI reports on data gathered to determine if the soil, groundwater, soil vapor, indoor air, surface water or sediments may have been contaminated. Monitoring wells are installed to assess groundwater and soil borings or test pits are installed to sample soil and/or waste(s) identified. If other natural resources are present, such as surface water bodies or wetlands, the water and sediment may be sampled as well. Based on the presence of contaminants in soil and groundwater, soil vapor will also be sampled for the presence of contamination. Data collected in the RI influence the development of remedial alternatives. The RI report is available for review in the site document repository and the results are summarized in section 6.3.

The analytical data collected on this site includes data for:

- groundwater
- soil
- soil vapor

6.1.1: Standards, Criteria, and Guidance (SCGs)

The remedy must conform to promulgated standards and criteria that are directly applicable or that are relevant and appropriate. The selection of a remedy must also take into consideration guidance, as appropriate. Standards, Criteria and Guidance are hereafter called SCGs.

To determine whether the contaminants identified in various media are present at levels of concern, the data from the RI were compared to media-specific SCGs. The Department has developed SCGs for groundwater, surface water, sediments, and soil. The NYSDOH has developed SCGs for drinking water and soil vapor intrusion. For a full listing of all SCGs see: <http://www.dec.ny.gov/regulations/61794.html>

6.1.2: RI Results

The data have identified contaminants of concern. A "contaminant of concern" is a contaminant that is sufficiently present in frequency and concentration in the environment to require evaluation for remedial action. Not all contaminants identified on the property are contaminants of concern. The nature and extent of contamination and environmental media requiring action are summarized below. Additionally, the RI Report contains a full discussion of the data. The contaminant(s) of concern identified at this site is/are:

- | | |
|----------------------|---------------------------|
| BENZO(A)PYRENE | MERCURY |
| BENZ(A)ANTHRACENE | BARIUM |
| BENZO(B)FLUORANTHENE | COPPER |
| BENZO[K]FLUORANTHENE | TETRACHLOROETHYLENE (PCE) |
| Chrysene | TRICHLOROETHENE (TCE) |
| DIBENZOFURAN | NAPHTHALENE |
| LEAD | |

The contaminant(s) of concern exceed the applicable SCGs for:

- soil
- soil vapor intrusion

6.2: Interim Remedial Measures

An interim remedial measure (IRM) is conducted at a site when a source of contamination or exposure pathway can be effectively addressed before issuance of the Decision Document.

There were no IRMs performed at this site during the RI.

6.3: Summary of Environmental Assessment

This section summarizes the assessment of existing and potential future environmental impacts presented by the site. Environmental impacts may include existing and potential future exposure pathways to fish and wildlife receptors, wetlands, groundwater resources, and surface water. The RI report presents a detailed discussion of any existing and potential impacts from the site to fish and wildlife receptors.

Nature and Extent of Contamination:

Nine soil samples to six feet below grade have been collected; the soil data show polycyclic aromatic hydrocarbons (PAHs) (in surface soil) and metals (in surface and subsurface soil) above restricted residential use SCOs at concentrations indicative of historic fill. No PCBs, pesticides or volatile organic compounds (VOCs) were observed in the soil samples collected.

There are three monitoring wells at the site; one compound, bis(2-ethylhexyl)phthalate, was detected in groundwater just above its groundwater standard. Only one other semi-volatile organic compound (SVOC) and two VOCs (MTBE and PCE) were detected in groundwater, but at concentrations well below their respective standards. In the filtered groundwater samples analyzed for metals, only naturally occurring iron, sodium, magnesium and manganese were above standards.

Various VOCs were detected in soil vapor. PCE and TCE were detected at maximum concentrations of 8,270 µg/M³ and 12,300 µg/M³, respectively.

No off-site investigation work has been conducted yet. The on-site soil and groundwater data don't show evidence of significant contamination, but the elevated VOCs in soil vapor indicate the potential for an as-yet undetected source. Off-site soil vapor sampling will be performed in the future to determine the extent of contamination.

The site presents a significant health threat due to the elevated PCE and TCE concentrations in soil vapor.

6.4: Summary of Human Exposure Pathways

This human exposure assessment identifies ways in which people may be exposed to site-related contaminants. Chemicals can enter the body through three major pathways (breathing, touching or swallowing). This is referred to as *exposure*.

Direct contact with contaminants in soil is unlikely because the entire site is covered with a building. Contaminated groundwater at the site is not used for drinking or other purposes and the site is served by a public water supply that obtains water from a different source not affected by this contamination. Volatile organic compounds in the groundwater may move into the soil vapor (air spaces within the soil), which in turn may move into overlying buildings and affect the indoor air quality. This process, which is similar to the movement of radon gas from the subsurface into the indoor air of buildings, is referred to as soil vapor intrusion. The potential exists for the inhalation of site contaminants due to soil vapor intrusion for any future on-site redevelopment and occupancy.

6.5: Summary of the Remediation Objectives

The objectives for the remedial program have been established through the remedy selection process stated in 6 NYCRR Part 375. The goal for the remedial program is to restore the site to pre-disposal conditions to the extent feasible. At a minimum, the remedy shall eliminate or mitigate all significant threats to public health and the environment presented by the contamination identified at the site through the proper application of scientific and engineering principles.

The remedial action objectives for this site are:

Groundwater

RAOs for Public Health Protection

- Prevent ingestion of groundwater with contaminant levels exceeding drinking water standards.
- Prevent contact with, or inhalation of volatiles, from contaminated groundwater.

Soil

RAOs for Public Health Protection

- Prevent ingestion/direct contact with contaminated soil.
- Prevent inhalation of or exposure from contaminants volatilizing from contaminants in soil.

Soil Vapor

RAOs for Public Health Protection

- Mitigate impacts to public health resulting from existing, or the potential for, soil vapor intrusion into buildings at a site.

SECTION 7: ELEMENTS OF THE SELECTED REMEDY

The alternatives developed for the site and the evaluation of the remedial criteria are presented in the Alternative Analysis. The remedy is selected pursuant to the remedy selection criteria set forth in DER-10, Technical Guidance for Site Investigation and Remediation and 6 NYCRR Part 375.

The selected remedy is a Track 2: Restricted use with generic soil cleanup objectives remedy.

The selected remedy is referred to as the soil excavation and off-site disposal remedy.

The elements of the selected remedy, as shown in Figure 2, are as follows:

1. Remedial Design

A remedial design program will be implemented to provide the details necessary for the construction, operation, optimization, 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;
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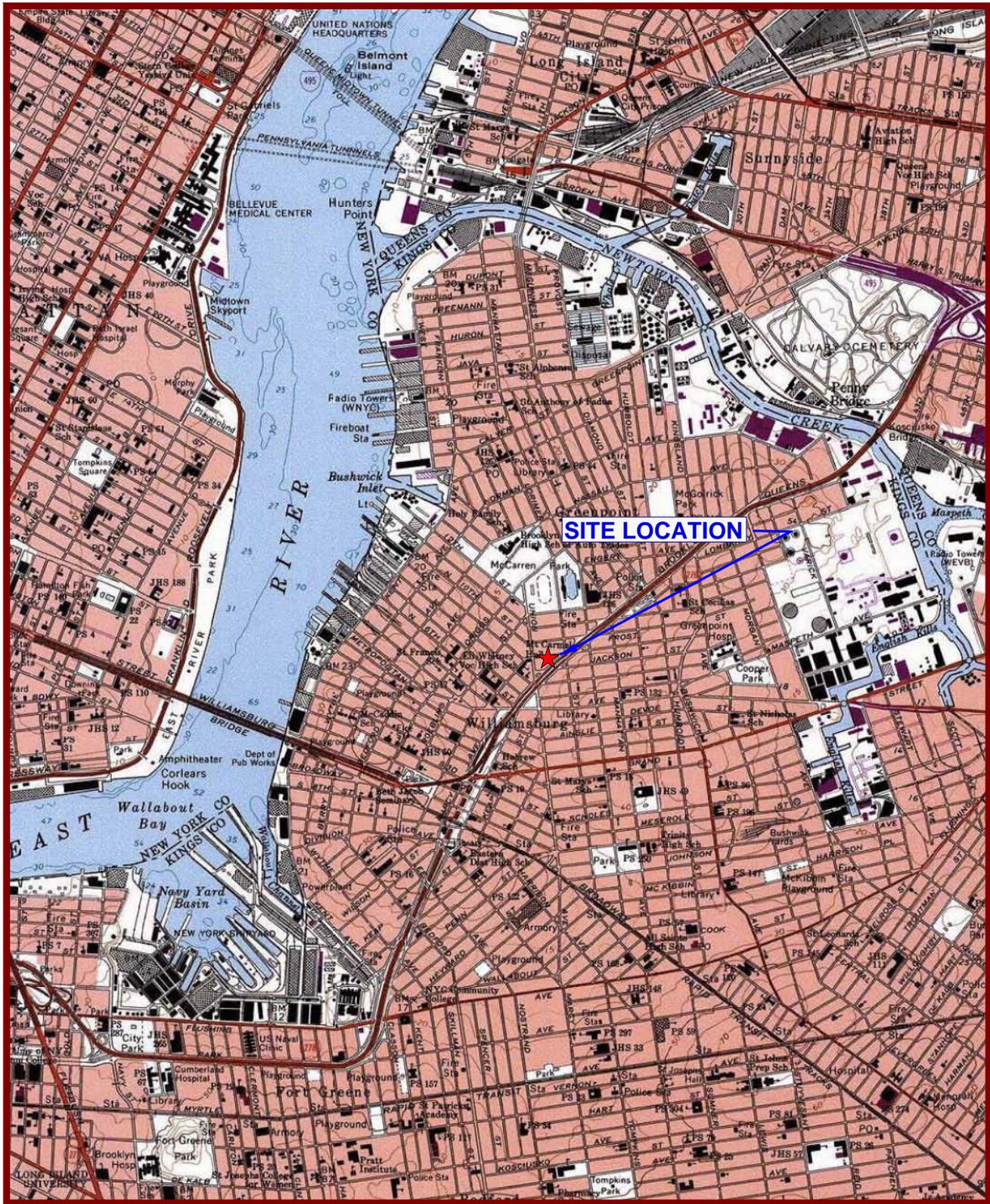
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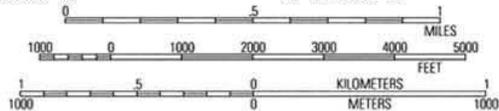
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- maintaining site access controls and Department notification; and
- the steps necessary for the periodic reviews and certification of the institutional controls.



40°45.000' N
40°44.000' N
40°43.000' N
40°42.000' N

73°59.000' W 73°58.000' W 73°57.000' W WGS84 73°56.000' W



06/04/11

USGS Brooklyn Quadrangle 1995, Contour Interval = 10 feet

EBC
ENVIRONMENTAL BUSINESS CONSULTANTS

Phone 631.504.6000
 Fax 631.924.2870

FORMER DRIGGS PLYWOOD CORP
 11 JACKSON STREET, BROOKLYN, NY

FIGURE 1 **SITE LOCATION MAP**



EBC

ENVIRONMENTAL BUSINESS CONSULTANTS
1808 MIDDLE COUNTRY ROAD, RIDGE, NY 11961

Phone: 631.504.6000
Fax: 631.924.2780

11 Jackson Street
BROOKLYN, NY 11211

FIGURE 2 PROJECT SITE AND ADJACENT PROPERTIES