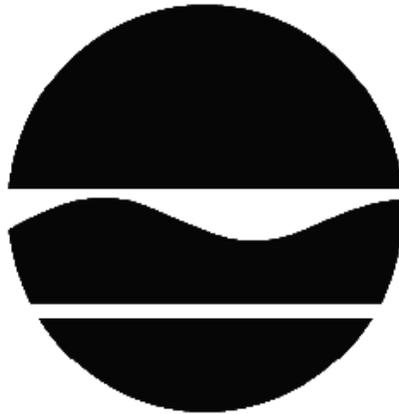


DECISION DOCUMENT

Fyn Paint and Lacquer Co., Inc.
Brownfield Cleanup Program
Brooklyn, Kings County
Site No. C224154
October 2016



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

DECLARATION STATEMENT - DECISION DOCUMENT

Fyn Paint and Lacquer Co., Inc.
Brownfield Cleanup Program
Brooklyn, Kings County
Site No. C224154
October 2016

Statement of Purpose and Basis

This document presents the remedy for the Fyn Paint and Lacquer Co., Inc. 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 Fyn Paint and Lacquer Co., Inc. 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 existing on-site building will be demolished to facilitate the proposed remedy. Following

completion of the building demolition, a sheeting system consisting of a waterproof hydraulic barrier will be installed at the perimeter of the site. The waterproof hydraulic barrier will consist of a series of interlocked steel sheets with a sealable cavity within each interlock. After installation, the interlock is flushed and a low permeability grout is injected into the entire length of the interlock. The hydraulic barrier will be installed to a sufficient depth to provide structural support which will facilitate the soil excavation within the property boundaries. Due to these requirements, the sheeting system will be installed to an approximate depth of 25-30 feet below grade.

After the waterproof hydraulic barrier is installed all on-site soils which exceed unrestricted soil cleanup objectives (SCOs), as defined by 6 NYCRR Part 375-6.8, will be excavated and transported off-site for disposal. This will include excavation and off-site disposal of contaminant source areas, including:

- grossly contaminated soil, as defined in 6 NYCRR Part 375-1.2(u);
- removal of any underground storage tanks (USTs), fuel dispensers, underground piping or other structures associated with a source of contamination;
- non-aqueous phase liquids; and
- soils which exceed the protection of groundwater soil cleanup objectives (PGWSCOs), as defined by 6 NYCRR Part 375-6.8 for those contaminants found in site groundwater above standards.

It is anticipated that soil will be excavated to a depth of 15 to 17 feet below grade. Approximately 3,600 tons of contaminated soil will be removed from the site. Clean fill meeting the requirements of 6 NYCRR Part 375-6.7(d) will be brought in to establish the designed grades at the site.

3. Groundwater Treatment

A dual phase extraction system (DPES) was designed and previously installed under the Voluntary Cleanup Program. The extraction system currently covers the area beneath the footprint of the on-site building and the adjacent parking lot. Prior to installing the hydraulic barrier and implementing the excavation discussed in remedy bullet 2, above, the on-site components of the DPES will be removed. The DPES components will be relocated and will continue to operate to address the off-site groundwater contamination.

Due to the planned excavation depth and the typical groundwater elevations at the site, dewatering will be required to facilitate the excavation work. Contaminated groundwater from dewatering operations will be treated as necessary prior to discharge to the municipal sewer system. It is expected that the dewatering will improve groundwater quality beneath the site.

Following completion of the excavation, in-situ chemical oxidation (ISCO) will be implemented to achieve a bulk reduction of VOCs in groundwater. A chemical oxidant will be injected into the subsurface to destroy the contaminants via injection wells. The method and depth of injection will be determined during the remedial design.

4. Vapor Intrusion Assessment

A post-remedial soil vapor intrusion evaluation will be completed prior to occupying any

buildings developed on the site. The assessment will include a provision for implementing actions recommended to address exposures related to soil vapor intrusion.

The intent of the above remedial elements is to achieve Track 1 unrestricted use; therefore, no environmental easement or site management plan is anticipated. No groundwater use restriction is needed because the area is served by public water and Article 141 of the NYCDOH code prohibits potable use of groundwater without prior approval.

Contingent Remedial Elements:

In the event that a Track 1 cleanup is not achieved, including achievement of the groundwater and soil vapor remedial action objectives, imposition of an institutional control in the form of an environmental easement and a Site Management Plan, as described below, will be required and the site will achieve a Track 2 residential cleanup.

5. Institutional Control

Imposition of an institutional control in the form of an environmental easement will be required 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 NYCDOH; and
- requires compliance with the Department approved Site Management Plan.

6. 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: The Environmental Easement discussed in remedy bullet 5.
- Engineering Controls: the in-situ chemical oxidation discussed in remedy bullet 3.

This plan includes, but may not be limited to:

- o an Excavation Plan which details the provisions for management of future excavations in areas of remaining contamination
- o descriptions of the provisions of the environmental easement including any land use, and groundwater use restrictions;
- o 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;
- o provisions for the management and inspection of the identified engineering controls;
- o maintaining site access controls and Department notification; and
- o 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:
 - o a schedule of monitoring and frequency of submittals to the Department; and monitoring for vapor intrusion for any buildings developed on the site, as may be required by the Institutional and Engineering Control Plan.
- c. an Operation and Maintenance (O&M) Plan to ensure continued operation, maintenance, optimization, monitoring, inspection, and reporting of any mechanical or physical components of the remedy. The plan includes, but is not limited to:
 - o procedures for operating and maintaining the remedy;
 - o compliance monitoring of treatment systems to ensure proper O&M as well as providing the data for any necessary permit or permit equivalent reporting;
 - o maintaining site access controls and Department notification; and
 - o providing the Department access to the site and O&M records.

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.

October 28, 2016



Date

Robert Cozzy, Director
Remedial Bureau B

DECISION DOCUMENT

Fyn Paint and Lacquer Co., Inc.
Brooklyn, Kings County
Site No. C224154
October 2016

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 repositories:

Brooklyn Public Library - Leonard Branch
81 Devoe Street at Leonard St.
Brooklyn, NY 11211
Phone: 718-486-6006

Brooklyn Public Library - Greenpoint Branch
107 Norman Avenue at Leonard St.
Brooklyn, NY 11222
Phone: 718-349-8504

Brooklyn Community Board No. 1
435 Graham Avenue
Brooklyn, NY 11211
Phone: 718 389 0000

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 Fyn Paint and Lacquer Co., Inc. site is located in an urban area at 230 Kent Avenue in Brooklyn, Kings County. The site is situated on the block bounded by Kent Avenue to the east, Metropolitan Avenue to the north, North First Street to the south and River Street to the west. Alternate addresses for the property are: 230-232 Kent Avenue; 76-80 River Street; and 29-37 North First Street.

Site Features: The site consists of a 0.135-acre lot improved with an unoccupied two-story industrial/warehouse building with a gross floor area of approximately 5,862 square feet. A small basement contains the heating oil tank, furnace and controls for the sprinkler system.

Current Zoning and Land Use: The site land use is currently recorded as Industrial and Manufacturing. Zoning for the property is M3-1, which is designated for areas with heavy industries that generate noise, traffic or pollutants. The on-site building is currently vacant.

Past Use of the Site: Past land uses associated with the site include a chemical and coatings company (circa 1949) and paint and lacquer manufacturing (1959 - 2011). Prior to entry into the BCP, the site was managed under New York State's Voluntary Cleanup Program (VCP). Under the VCP a dual phase extraction system was installed to address on-site and off-site contamination in soil and groundwater. The system has been operating intermittently since 2012.

Site Geology and Hydrogeology: The ground surface at the property consists of concrete and asphalt pavement. The shallow soil beneath the property consist of medium and coarse grained brown sand with some silt and a trace of gravel. In general, the subsurface consists of interbedded layers of sand, gravel, clay and silt to approximately 65 feet below ground surface (fbgs).

Groundwater flow direction beneath the property is toward the west. The depth to groundwater is approximately 12 to 15 fbgs. The East River is approximate 500 feet to the west of the site

boundary.

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, an alternative which allows for unrestricted use of the site was evaluated.

A comparison of the results of the Remedial Investigation (RI) against unrestricted use standards, criteria and guidance values (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(s)) 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
- sub-slab 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:

benzene	toluene
ethylbenzene	acetone
xylene (mixed)	

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

- air
- groundwater
- soil

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:

A remedial investigation for the site was completed under the Voluntary Cleanup Program, site code V00380. Soil and groundwater samples were analyzed for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), metals, pesticides/herbicides, and PCBs. The investigation identified the primary contaminants of concern in the soil, soil vapor and groundwater as VOCs including acetone, ethylbenzene, toluene, and mixed xylenes from the 14 closed-in-place underground storage tanks (USTs), and from spills which occurred during 50 years of manufacturing of paint and lacquer.

Soil:

VOCs in soil extend across the footprint of the Fyn Paint building and beneath the adjacent property and sidewalks to the north and west. The contaminants in soil include xylene at concentrations of up to 7,000 parts per million (ppm), acetone at 19 ppm, toluene at 4,000 ppm, and ethylbenzene at 1,700 ppm.

Groundwater:

During the groundwater monitoring sampling event conducted in October 2015, non-aqueous phase liquid (NAPL) and dissolved-phase contamination was detected in on-site and off-site monitoring wells. In on-site monitoring wells the dissolved toluene was as high as 16,000 parts per billion (ppb), xylene was as high as 13,400 ppb, and ethylbenzene was as high as 1,700 ppb. In the adjacent off-site monitoring wells the toluene was as high as 240,000 ppb, xylene was as high as 108,000 ppb, ethylbenzene was as high as 18,000 ppb, and acetone was as high as 35,000 ppb. An off-site monitoring well across Kent Avenue had toluene as high as 370,000 ppb.

Sub-slab vapor:

Sub-slab vapor samples were collected beneath the on-site building's basement slab and the following VOCs were detected: acetone at up to 6,400 micrograms per cubic meter (ug/m³); benzene at 1,200 ug/m³; toluene at 180,000 ug/m³; xylene at 186,000 ug/m³ and ethylbenzene at 36,000 ug/m³. Contaminants in sub-slab vapor extend to the property boundaries and likely extend off-site.

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*.

People may contact contaminated soils or groundwater if they dig below the surface. People are not drinking contaminated groundwater associated with the site because the area is served by a public water supply that is 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 on-site. Further evaluation is needed to determine whether soil vapor intrusion is a concern for off-site structures.

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.

RAOs for Environmental Protection

- Restore ground water aquifer to pre-disposal/pre-release conditions, to the extent practicable.
- Remove the source of ground or surface water contamination.

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.

RAOs for Environmental Protection

- Prevent migration of contaminants that would result in groundwater or surface water contamination.

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 1: Unrestricted use remedy.

The selected remedy is referred to as the excavation and groundwater treatment 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;
- 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 existing on-site building will be demolished to facilitate the proposed remedy. Following completion of the building demolition, a sheeting system consisting of a waterproof hydraulic barrier will be installed at the perimeter of the site. The waterproof hydraulic barrier will consist of a series of interlocked steel sheets with a sealable cavity within each interlock. After installation, the interlock is flushed and a low permeability grout is injected into the entire length of the interlock. The hydraulic barrier will be installed to a sufficient depth to provide structural support which will facilitate the soil excavation within the property boundaries. Due to these requirements, the sheeting system will be installed to an approximate depth of 25-30 feet below grade.

After the waterproof hydraulic barrier is installed all on-site soils which exceed unrestricted soil cleanup objectives (SCOs), as defined by 6 NYCRR Part 375-6.8, will be excavated and transported off-site for disposal. This will include excavation and off-site disposal of contaminant source areas, including:

- grossly contaminated soil, as defined in 6 NYCRR Part 375-1.2(u);
- removal of any underground storage tanks (USTs), fuel dispensers, underground piping or other structures associated with a source of contamination;
- non-aqueous phase liquids; and
- soils which exceed the protection of groundwater soil cleanup objectives (PGWSCOs), as defined by 6 NYCRR Part 375-6.8 for those contaminants found in site groundwater above standards.

It is anticipated that soil will be excavated to a depth of 15 to 17 feet below grade. Approximately 3,600 tons of contaminated soil will be removed from the site. Clean fill meeting the requirements of 6 NYCRR Part 375-6.7(d) will be brought in to establish the designed grades at the site.

3. Groundwater Treatment

A dual phase extraction system (DPES) was designed and previously installed under the Voluntary Cleanup Program. The extraction system currently covers the area beneath the footprint of the on-site building and the adjacent parking lot. Prior to installing the hydraulic barrier and implementing the excavation discussed in remedy bullet 2, above, the on-site components of the DPES will be removed. The DPES components will be relocated and will continue to operate to address the off-site groundwater contamination.

Due to the planned excavation depth and the typical groundwater elevations at the site, dewatering will be required to facilitate the excavation work. Contaminated groundwater from dewatering operations will be treated as necessary prior to discharge to the municipal sewer system. It is expected that the dewatering will improve groundwater quality beneath the site.

Following completion of the excavation, in-situ chemical oxidation (ISCO) will be implemented to achieve a bulk reduction of VOCs in groundwater. A chemical oxidant will be injected into the subsurface to destroy the contaminants via injection wells. The method and depth of injection will be determined during the remedial design.

4. Vapor Intrusion Assessment

A post-remedial soil vapor intrusion evaluation will be completed prior to occupying any buildings developed on the site. The assessment will include a provision for implementing actions recommended to address exposures related to soil vapor intrusion.

The intent of the above remedial elements is to achieve Track 1 unrestricted use; therefore, no environmental easement or site management plan is anticipated. No groundwater use restriction is needed because the area is served by public water and Article 141 of the NYCDOH code prohibits potable use of groundwater without prior approval.

Contingent Remedial Elements:

In the event that a Track 1 cleanup is not achieved, including achievement of the groundwater and soil vapor remedial action objectives, imposition of an institutional control in the form of an environmental easement and a Site Management Plan, as described below, will be required and the site will achieve a Track 2 residential cleanup.

5. Institutional Control

Imposition of an institutional control in the form of an environmental easement will be required 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 NYCDOH; and
- requires compliance with the Department approved Site Management Plan.

6. 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: The Environmental Easement discussed in remedy bullet 5.
- Engineering Controls: the in-situ chemical oxidation discussed in remedy bullet 3.

This plan includes, but may not be limited to:

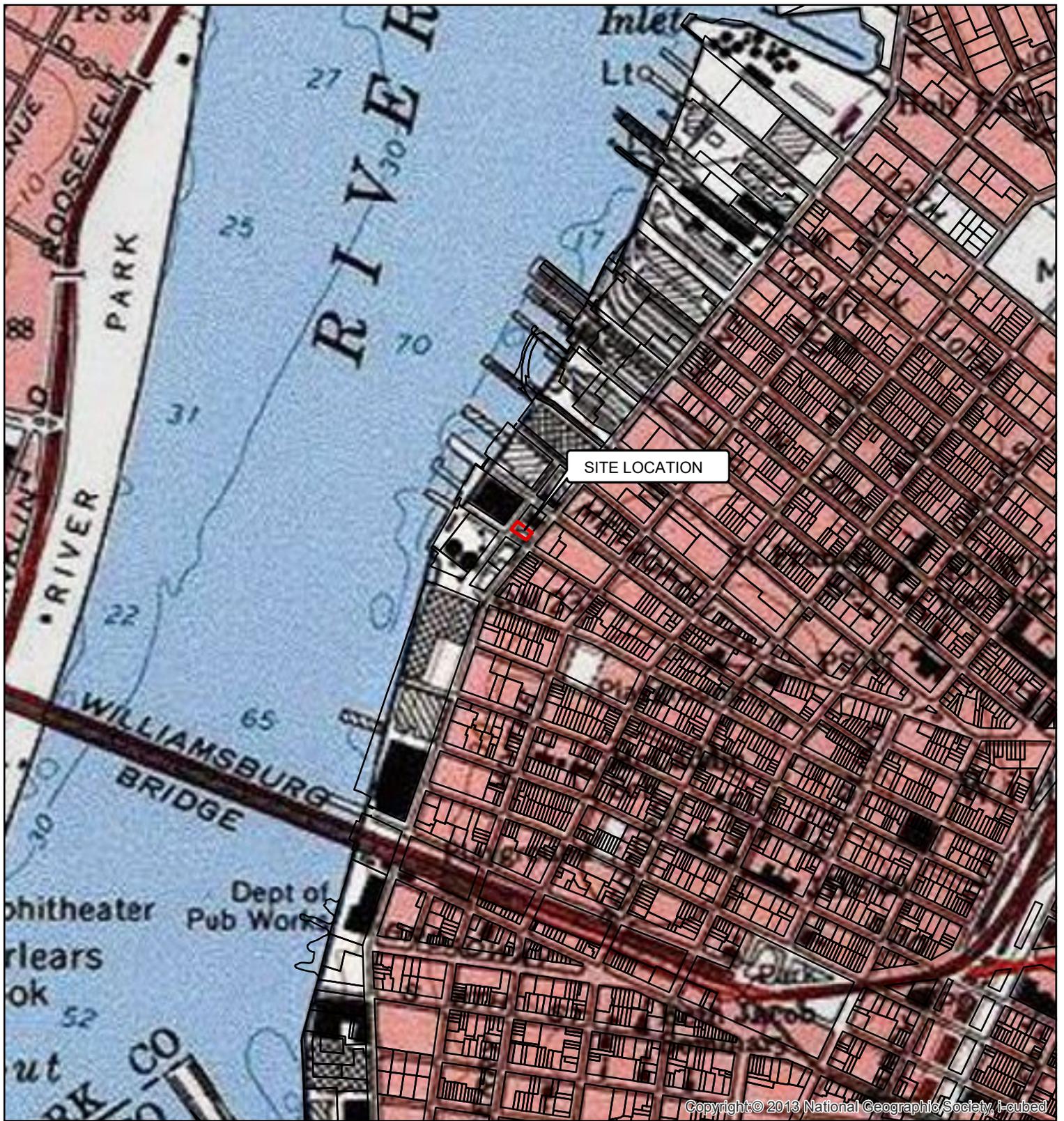
- o an Excavation Plan which details the provisions for management of future excavations in areas of remaining contamination
- o descriptions of the provisions of the environmental easement including any land use, and groundwater use restrictions;
- o a provision for evaluation of the potential for soil vapor intrusion for any buildings developed on the site, including provision for implementing actions recommended to address exposures related to soil vapor intrusion;
- o provisions for the management and inspection of the identified engineering controls;
- o maintaining site access controls and Department notification; and
- o 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:

- o a schedule of monitoring and frequency of submittals to the Department; and monitoring for vapor intrusion for any buildings developed on the site, as may be required by the Institutional and Engineering Control Plan.

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

- o procedures for operating and maintaining the remedy;
- o compliance monitoring of treatment systems to ensure proper O&M as well as providing the data for any necessary permit or permit equivalent reporting;
- o maintaining site access controls and Department notification; and
- o providing the Department access to the site and O&M records.



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LEGEND

- SITE PROPERTY BOUNDARY
- PARCEL BOUNDARY



0 1,000



SCALE IN FEET

**FYN PAINT & LACQUER CO., INC.
230 KENT AVENUE
BROOKLYN, NEW YORK**

SITE LOCATION MAP

DATE	REVISED	
DRAWN:	SG	CHECKED: SG
DATE: 08/17/16		FIGURE: 1

SOURCE:
NYC Department of City Planning, MapPLUTO 14V1, June 6, 2014
ArcGISOnline, National Geographic Society, i-cubed, 2013

