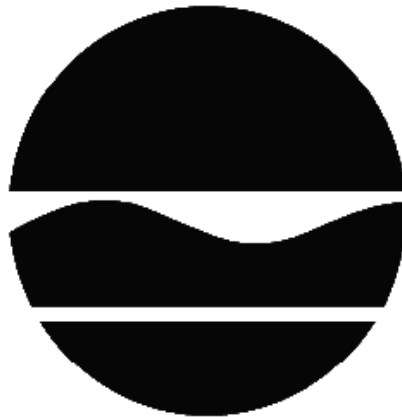


# PROPOSED DECISION DOCUMENT

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CE - W. 18th St. Gas Works  
Operable Unit Number 05: Bay View Correctional  
Facility  
Voluntary Cleanup Program  
New York, New York County  
Site No. V00530  
June 2018



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

# PROPOSED DECISION DOCUMENT

CE - W. 18th St. Gas Works  
New York, New York County  
Site No. V00530  
June 2018

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## **SECTION 1: SUMMARY AND PURPOSE OF THE PROPOSED PLAN**

The New York State Department of Environmental Conservation (the Department), in consultation with the New York State Department of Health (NYSDOH), is proposing 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 proposed by this Proposed Decision Document (PDD). The disposal or release of contaminants at this site, as more fully described in Section 6 of this document, has contaminated various environmental media. Contaminants include hazardous waste and/or petroleum.

The Voluntary Cleanup Program (VCP) is a voluntary program. The goal of the VCP is to enhance private sector cleanup of brownfields by enabling parties to remediate sites using private rather than public funds and to reduce the development pressures on "greenfields." This document is a summary of the information that can be found in the site-related reports and documents in the document repositories identified below.

## **SECTION 2: CITIZEN PARTICIPATION**

The Department seeks input from the community on all Proposed Decision Documents. This is an opportunity for public participation in the remedy selection process. The public is encouraged to review the reports and documents, which are available at the following repositories:

New York Public Library  
Attn: Attn: Ms. Lee  
Muhlenberg Branch  
209 West 23rd Street  
New York, NY 10011-2379  
Phone: (212) 924-1585

Manhattan Community Board 4  
330 West 42nd Street  
Suite 2618  
New York, NY 10036

**A public comment period has been set from:**

**6/6/2018 to 7/6/2018**

Written comments may be sent through 7/6/2018 to:

Douglas MacNeal  
NYS Department of Environmental Conservation  
Division of Environmental Remediation  
625 Broadway  
Albany, NY 12233  
douglas.macneal@dec.ny.gov

The proposed remedy may be modified based on new information or public comments. Therefore, the public is encouraged to review and comment on the proposed remedy identified herein.

### **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 site is the northwestern part of a larger, historic gas manufacturing site which once encompassed portions of five city blocks along the western side of Manhattan, New York City. Remediation has already been accomplished at several other portions of the larger site, as detailed below.

The portion of the site covered by this document (Operable Unit 5, as described below) is bounded by the West Side Highway (NY Route 9A) on the west, and West 20<sup>th</sup> Street to the north. To the east and south, the rest of the block is made up mixed use commercial properties.

**Site Features:** The site is almost flat, with a slight slope to the west, toward the Hudson River. Most recently, the site housed the Bayview Prison facility for women, which was closed following major flood damage from Tropical Storm Sandy in 2013. The entire site is covered with buildings or pavement.

**Current Zoning and Land Use:** The former prison building and a building annex remain vacant on the site. Current site zoning is C6-3, for commercial purposes. The site is included in the Special West Chelsea District, a 14-square block area established in 2005 to allow mixed

commercial and residential development, and to promote development around the adjacent High Line city park. Adjacent properties to the east are being redeveloped for residential and commercial uses.

**Past Use of the Site:** The West 18th Street Gas Works began operations in 1834 and continued to expand through most of the 1800s, but was closed in the early 1900s. Manufactured gas was produced by heating coal in a closed vessel, collecting and purifying it, and then delivering it through underground networks of pipes into the surrounding area. The gas was used in homes and businesses for heating, lighting, and cooking in much the same way that natural gas is used today. Operable Unit 5 contained one gas holder and portions of a second during the period when the MGP was active.

The gas manufacturing process produced a black, oily liquid waste known as coal tar. This tar escaped from underground storage tanks and pipes into surrounding subsurface soils. The tar is resistant to decay and is commonly found in soils at former MGP sites decades after operations ceased. Most of the tar contamination found at the West 18th Street MGP was found on neighboring properties, which have already been remediated or are in the process of being remediated. Relatively minor impacts have been detected on Operable Unit 5.

Following closure of the MGP, the gas manufacturing facility was torn down and the site was subdivided and sold to a number of different owners. Subsurface structures such as building foundations and subsurface piping, however, were often not removed and remain in place today. A variety of commercial and industrial operations developed throughout the former MGP site in the middle and late 1900s. Based on investigation work conducted to date, it appears that gas holder foundations still exist beneath Operable Unit 5.

**Operable Units:** An operable unit represents a portion of a remedial program for a site that for technical or administrative reasons can be addressed separately to investigate, eliminate or mitigate a release, threat of release or exposure pathway resulting from the site contamination.

Although the entire West 18th Street MGP site is included in a Voluntary Cleanup Agreement with Consolidated Edison, the former MGP site is now split between several different current owners and operable units, which has enabled a piece-by-piece approach to site cleanup. Some of this cleanup work has been accomplished under the original Voluntary Cleanup Agreement, and some has been accomplished by third party developers under the New York State Brownfield Cleanup program. The following is a summary of the operable units comprising the site.

Operable Unit 1 (OU 01) is the entire historical footprint of the MGP site.

Operable Unit 2 (OU 02), the West Chelsea Development property (535 West 19th Street), was designated as OU-2 to facilitate redevelopment. Remedial Action took place from September 2006-February 2008, for which a release letter, closing out remediation of this property, was issued in November 2009.

Operable Unit 3 (OU 03), 524 West 19th Street, also known as the Gasser Property, was

remediated from September 2007 - September 2008. A final engineering report was approved in August, 2009, and a deed restriction was filed in October 2009.

Operable Unit 4 (OU 04) is the portion of the site that sits between West 16th and West 17th Street and 10th and 11th Avenue.

Another part of the original MGP site, the 19th Street Development site, located at 80 11th Avenue, was remediated under the Brownfield Cleanup Program as site number C231017, and received a Certificate of Completion in September 2006. No formal Operable Unit designation was made for this property.

The block bounded by West 17th and 18th Streets, and by 10th and 11th Avenues, entered into the BCP as two different projects. The western portion (known as the 17th Street Development Site, C231036) completed remedial action in December 2014, and is currently being redeveloped. The eastern portion, surrounding the High Line Park, is known as the 515 West 18th Street Site (C231093) has been thoroughly investigated and is currently awaiting remedial action. No formal Operable Unit designation was made for this property.

#### Site Geology and Hydrogeology:

Between 50 and 80 feet of unconsolidated materials overlie Cambrian Hartland Formation bedrock. The unconsolidated units are divided into three distinct stratigraphic units. From the surface down, the units consist of a fill unit (highly heterogeneous, generally highly permeable) a silty-clay unit (a low-permeability aquitard consisting of tidal marsh deposits), and a sand unit (highly permeable stratified alluvial sands).

Operable Unit 5 (OU 05) is the subject of this document, and represents one of the last two portions of the West 18th Street MGP Site which have not been remediated or have a remedy selected. A remedy for the other remaining portion at the northeastern corner of the site, and the city streets which traverse the site, will be determined in the future.

Operable Unit (OU) Number 05 is the subject of this document.

A Decision Document was issued previously for OU 02, 03, and 04. A Decision Document will be issued for OU 01 in the future.

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, at a minimum, 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 DER-10, Technical Guidance for Site Investigation and Remediation are/is being evaluated.

A comparison of the results of the investigation to the appropriate standards, criteria and

guidance values (SCGs) for the contemplated land use for the site contaminants is available in the Remedial Investigation (RI) Report.

## **SECTION 5: ENFORCEMENT STATUS**

The Department and Consolidated Edison (the responsible party, or RP) entered into an Order on Consent D2-0002-02-08 in August 2002. The Order obligates RP to implement a full remedial program.

## **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:

- air
- groundwater
- soil
- soil vapor
- indoor air
- 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 for this Operable Unit at this site is/are:

- Coal Tar
- Total Polycyclic Aromatic Hydrocarbons (PAHs)
- Mercury

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

- 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.

OU5: Nature and Extent of Contamination: Sampling at the site was limited due to the presence of buildings that did not permit extensive sampling. Based on the limited sampling to date, which included analysis for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), and metals, no significant contamination has been detected on this operable unit. There is a possibility that some source material may be present within the holder structure under

the former prison building, however, there is no evidence that source material is migrating from the operable unit.

The soil samples collected on Operable Unit 5 contained SVOCs and metal contamination; the highest concentration of total SVOCs is 610 parts per million (ppm). Concentrations of mercury exceed the restricted residential SCOs, with a maximum concentration of 1.9 ppm. Groundwater collected north of this operable unit met ambient water quality standards, and the groundwater south of the adjacent operable unit (south of the site) contained minor contamination of SVOCs, with only naphthalene exceeding its groundwater standards at a concentration of 11 parts per billion. Soil vapor and indoor air sampling have not indicated the potential for soil vapor exposure.

#### **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*.

Public water is provided to the area, thereby preventing exposures to groundwater. The area is covered with buildings or pavement, thereby preventing direct contact with contamination. The investigation of the whole site is on-going and data will be evaluated as they become available.

#### **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.

###### **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 PROPOSED REMEDY**

The alternatives developed for the site and 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.

The proposed remedy is referred to as the Cover System Maintenance and Site Management remedy.

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

1. Green remediation principles and techniques will be implemented to the extent feasible in the 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.

2. A site cover currently exists in areas not occupied by buildings and will be maintained to allow for restricted residential use of the site. Any site redevelopment will maintain the existing site cover. The site cover may include paved surface parking areas, sidewalks or soil where the upper two feet of exposed surface soil meets the applicable soil cleanup objectives (SCOs) for restricted residential use. Any fill material brought to the site will meet the requirements for the identified site use as set forth in 6NYCRR part 375-6.7(d).

3. Imposition of an institutional control in a form of an Environmental Easement for the controlled property (the site) 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 Department, NYSDOH or NYCDOH, and
- requires compliance with the Department approved Site Management Plan.

4. A Site Management Plan is required for the site. This Site Management Plan will include the following:

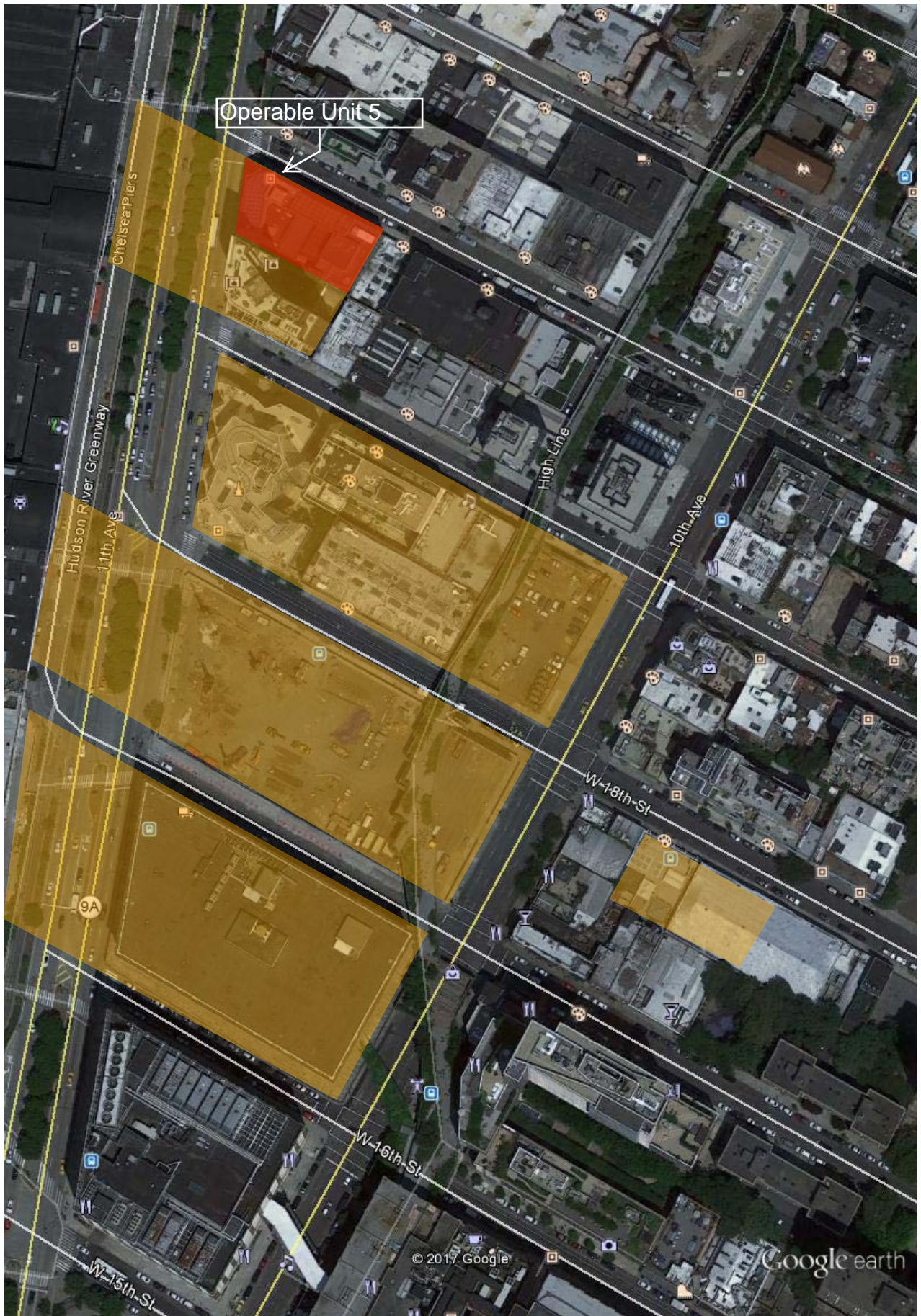
- a. an Institutional and Engineering Control Plan that identifies all use restrictions and engineering controls for the site and details the steps and media-specific requirements necessary to ensure the following institutional and/or engineering controls remain in place and effective:

Institutional Controls: The Environmental Easement discussed in Paragraph 3 above.

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

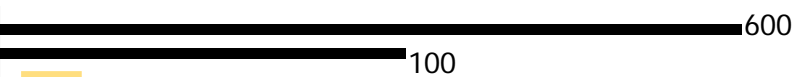
This plan includes, but may not be limited to:

- an Excavation Plan which details the provisions for management of limited excavations in areas of remaining contamination;
- a provision for further investigation and remediation should large scale redevelopment occur, if any of the existing structures are demolished, or if the subsurface is otherwise made accessible. The nature and extent of contamination in areas where access was previously limited or unavailable will be immediately and thoroughly investigated pursuant a plan approved by the Department. Based on the investigation results and the determination by the Department of the need for a remedy, a Remedial Action Work Plan (RAWP) will be developed for the final remedy for the site, including removal and/or treatment of any source areas to the extent feasible. The Citizen Participation Plan (CPP) will continue to be in effect through this process. Any necessary remediation will be completed prior to, or in association with, redevelopment;
- a provision for evaluation of the potential for soil vapor intrusion for any existing buildings which are significantly modified or for buildings which may be constructed on the site in the future, including 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;
- descriptions of the provisions of the environmental easement including any land use and groundwater use restrictions;
- the steps necessary for the periodic reviews and certification of the institutional and/or engineering controls.



Google earth

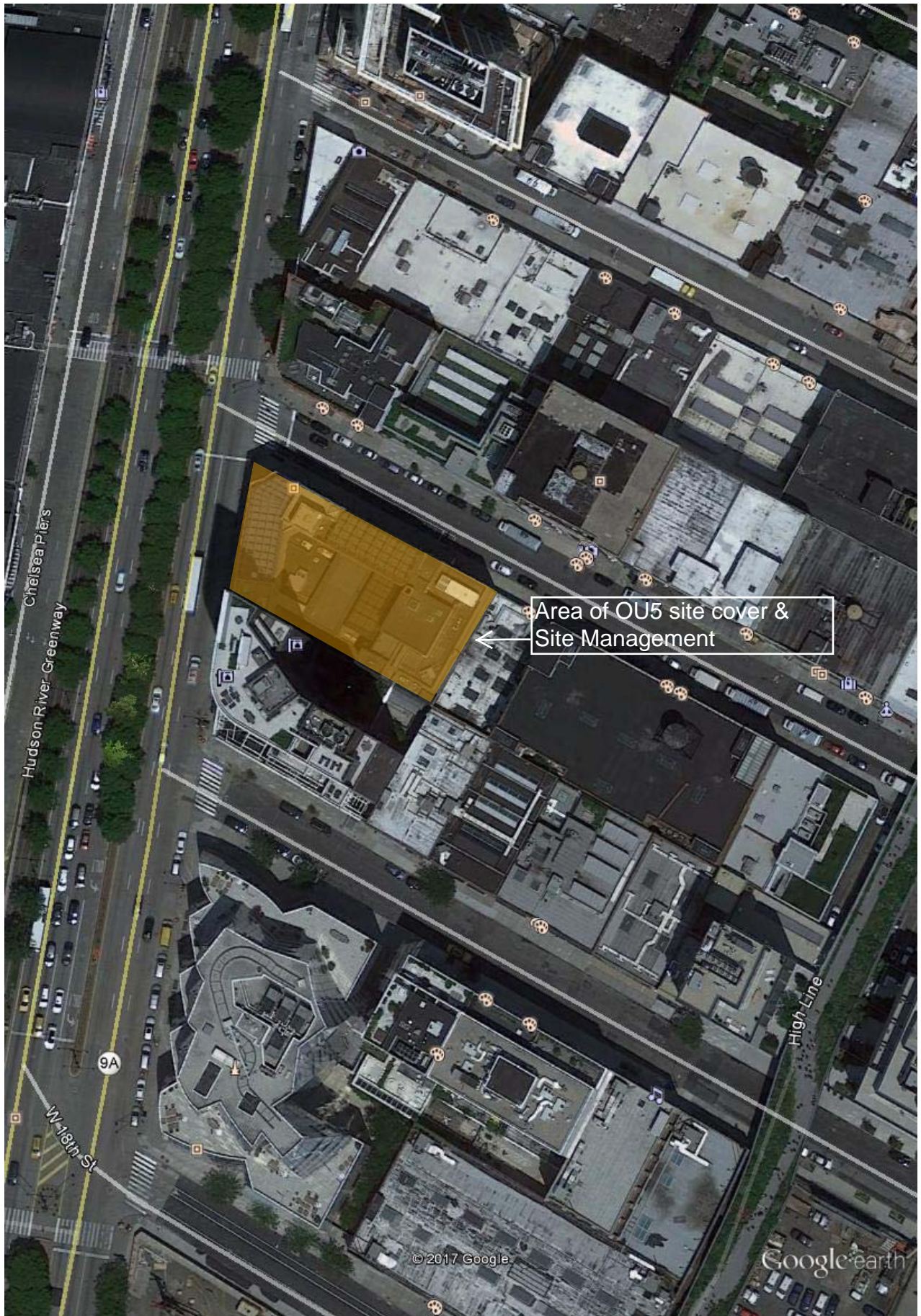
feet  
meters



Site Boundary



Figure 1



Google earth

