

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Remediation, Office of the Director
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www.dec.ny.gov

October 18, 2018

Mr. Richard Rienzo
Consolidated Edison of New York, Inc.
31-01 20th Avenue
Long Island City, NY 11105

Re: CE East 138th Street Bronx Works
Site ID No. 203108
New York, Bronx County
Remedial Action Work Plan & Decision Document

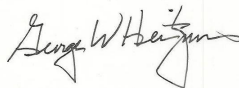
Dear Mr. Rienzo:

The New York State Department of Environmental Conservation (Department) and the New York State Department of Health (NYSDOH) have reviewed the Remedial Work Plan (RAWP) for the East 138th Street Bronx Works site dated April 17, 2017 and prepared by URS Corporation on behalf of Consolidated Edison of New York. The RAWP is hereby approved. Please ensure that a copy of the approved RAWP is placed in the document repository(ies). The draft plan should be removed.

Enclosed is a copy of the Department's Decision Document for the site. The remedy is to be implemented in accordance with this Decision Document. Please ensure that a copy of the Decision Document is placed in the document repository(ies).

Please contact the Department's Project Manager, Michael Squire, at 518-402-9662 or michael.squire@dec.ny.gov at your earliest convenience to discuss next steps. Please recall the Department requires seven days' notice prior to the start of field work.

Sincerely,



George Heitzman, P.E.
Assistant Director
Division of Environmental Remediation

Enclosure

ec w/enclosure:

Michael Ryan, NYSDEC Division Director
Amen Omorogbe, NYSDEC Section Chief
Michael Squire, NYSDEC Project Manager
Christine Vooris, NYSDOH Bureau Director
Justin Deming, NYSDOH Section Chief
Anthony Perretta, NYSDOH Project Manager
Richard Rienzo, Consolidated Edison of New York
Matt Gokey, matthew.gokey@tax.ny.gov
Matt Culotti, matthew.culotti@tax.ny.gov

DECISION DOCUMENT

CE - E. 138th St. - Bronx Works
State Superfund Project
Bronx, Bronx County
Site No. 203108
October 2018



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

DECLARATION STATEMENT - DECISION DOCUMENT

CE - E. 138th St. - Bronx Works
State Superfund Project
Bronx, Bronx County
Site No. 203108
October 2018

Statement of Purpose and Basis

This document presents the remedy for the CE - E. 138th St. - Bronx Works site, a Class 2 inactive hazardous waste disposal 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, and is not inconsistent with the National Oil and Hazardous Substances Pollution Contingency Plan of March 8, 1990 (40CFR300), as amended.

This decision is based on the Administrative Record of the New York State Department of Environmental Conservation (the Department) for the CE - E. 138th St. - Bronx Works 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:

The elements of the selected remedy, as shown in Figures 3 and 4, are as follows:

Based on the results of the investigations at the site and the evaluation presented here, the Department has selected Site Management with Monitoring and Institutional and Engineering Controls as the remedy for the site. This remedy includes the implementation of Institutional and Engineering Controls in the form of an Environmental Easement and a Site Management Plan as the selected remedy for the site. The Department believes that this remedy is protective of human health and the environment and satisfies the remediation objectives described in Section 6.5.

1. Green remediation principals 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 commercial 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 one foot of exposed surface soil meets the applicable soil cleanup objectives (SCOs) for commercial 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. Institutional Control

Imposition of an institutional control in the form of an environmental easement and a Site Management Plan, as described below, will be required. The remedy will achieve a commercial cleanup at a minimum and will include an environmental easement, and site management plan as described below.

Imposition of an institutional control in the form of an environmental easement for the controlled property which will:

- require 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);
- allow the use and development of the controlled property for commercial use as defined by Part 375-1.8(g), although land use is subject to local zoning laws;
- restrict 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
- require compliance with the Department approved Site Management Plan.

4. 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 Paragraph 3 above.

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

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 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 to a plan approved by the Department. Based on the investigation results and the Department determination 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. Citizen Participation Plan (CPP) activities will continue through this process. Any necessary remediation will be completed prior to, or in association with, redevelopment. This includes all property within the site boundary;
- 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 occupied buildings on the site, including provision for implementing actions recommended to address exposures related to soil vapor intrusion;

o a provision that should a building foundation or building slab be removed in the future, a cover system consistent with that described in Paragraph 2 above will be placed in any areas where the upper one foot of exposed surface soil exceeds the applicable soil cleanup objectives (SCOs)

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:

c. monitoring of groundwater to assess the performance and effectiveness of the remedy;

d. a schedule of monitoring and frequency of submittals to the Department;

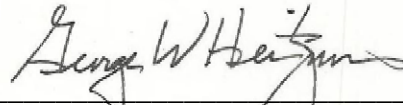
e. monitoring for vapor intrusion for any buildings on the site, as may be required by the Institutional and Engineering Control Plan discussed above.

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 10, 2018

Date



George Heitzman, Assist. Director
Division Direction

DECISION DOCUMENT

CE - E. 138th St. - Bronx Works
Bronx, Bronx County
Site No. 203108
October 2018

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.

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:

Bronx Community Board 1
Attn: Cedric Loftin
3024 Third Avenue
Bronx, NY 10455
Phone: 718-585-7117

Bronx Borough President's Office
Attn: James Rausse
851 Grand Concourse
Planning & Development Office, Room 209
Bronx, NY 10451
Phone: 718-590-3514

Mott Haven Branch, New York Public Library
321 East 140th Street

Bronx, NY 10454
Phone: 718-665-4878

NYSDEC Region 2 Office
1 Hunter's Point Plaza 47-40 21st Street
Long Island City, NY 11101
Phone: 718-482-4953

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 Description: The East 138th Street Works former Manufactured Gas Plant (MGP) site is located in an urban portion of Bronx County, NY. The site is approximately 12 acres in size and is located between East 138th St., East 141st St., Rose Feiss Blvd., east of the New York, New Haven, and Hartford Railroad tracks, and west of the East River. An adjacent 1.6-acre property, a former distribution center, located at 295 Locust Avenue was part of the site but was later separated and remediated under the Brownfield Cleanup Program - site number C203053.

Site Features: The site features include three large buildings, each of which occupies a block in the north, east, and northeast portions of the site. The western portion of the site is made up of three lots that occupy one block each. The southern portion of the site, closest to the East River, holds duct work, containers, and pipe lines.

Current Zoning and Land Use: The site is currently zoned for and occupied by commercial/industrial businesses, a bulk fuel terminal, and parking lots. The surrounding parcels are currently used for a combination of commercial and industrial purposes. The nearest residential area is approximately one quarter mile from the site.

Past Use of the Site: The former manufactured gas plant (MGP) was established in 1870 and was in operation until 1935. The former MGP generated gas using a coal gas process, and carbureted water gas processes. Former structures associated with this operation included four below grade gas holders, water purifier house, and a scrubber house. The site also held compressors, exhausters, condensers, tar extractors, scrubbers, purifiers, oil pumps, storage tanks, ammonia liquor tanks, oil heaters, and tar pumps which may have led to contamination.

Site Geology and Hydrogeology: The site is underlain by a 5 to 13-foot continuous layer of historic

fill material (sand, gravel, rock, and brick fragments, along with other anthropogenic materials). Below the historic fill is a 2 to 16-foot layer of silt, sand, and gravel. Below this layer is a 1 to 10-foot thick clayey silt that includes peat and other organic material. A sand layer and a silt and sand layer, between zero and 25 feet thick, are present above the top of bedrock. Bedrock in the region consists of the Fordham Gneiss rock formation.

The groundwater table was found to be between 3 and 6 feet below ground surface (bgs). Groundwater flow is slightly influenced by tidal fluctuations, but generally flows southeast towards 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 commercial use (which allows for 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

Potentially Responsible Parties (PRPs) are those who may be legally liable for contamination at a site. This may include past or present owners and operators, waste generators, and haulers.

The PRPs for the site, documented to date, include:

Consolidated Edison Co of NY, Inc.

The Department and Consolidated Edison Company of New York, Inc., entered into an Order on Consent (Index No. CO-20180516-519) on July 13, 2018. The Order obligates Con Edison to implement a full remedial program for MGP-related contamination both on and off the site.

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
- 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 hazardous waste 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:

coal tar	phenanthrene
benzo(a)anthracene	pyrene
benzo(a)pyrene	barium
benzo[k]fluoranthene	lead
indeno(1,2,3-CD)pyrene	naphthalene
chrysene	arsenic
fluoranthene	copper

mercury
benzene
ethylbenzene
toluene

xylene (mixed)
acenaphthene
anthracene
m-cresol(s)

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

- groundwater
- 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:

Soil and groundwater were analyzed for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), metals, polychlorinated biphenyls (PCBs), and pesticides. Based upon the investigations conducted to date, the primary contaminants of concern include benzene, toluene, ethylbenzene, and xylenes (BTEX); volatile organic compounds (VOCs); and polycyclic aromatic hydrocarbons (PAHs) detected in both soils and groundwater. Sampling of soil beneath buildings on the site was limited due to inability to access the area with a drill rig. Sample results indicate that a source area of higher contaminant concentrations may be present beneath the buildings. It appears based on the sampling results that multiple off-site sources including fuel storage, vehicle maintenance shop, and dry cleaning facility may have and continue to contribute to on-site contamination.

Soil - Detections of BTEX, VOCs, SVOCs, and PAHs above commercial use soil cleanup objectives (SCOs) were mainly isolated to 12 sample locations nearest to the locations of former structures related to the gas manufacturing process. Maximum concentrations of benzene, ethylbenzene, toluene, and xylenes (2,600 parts per million [ppm], 2,600 ppm, 3,800 ppm, and 4,700 ppm, respectively) found at one on-site location at about 10 to 12 feet below grade near a former gas holder significantly exceed the SCOs for commercial use (44 ppm, 390 ppm, 500 ppm, and 500 ppm, respectively). Benzo(a)anthracene, benzo(a)pyrene, and benzo(b)fluoranthene were

detected above commercial use SCOs (5.6 ppm, 1 ppm, and 5.6 ppm, respectively), with maximum concentrations of 390 ppm, 290 ppm, and 370 ppm nearest to the location of the former coal shed. Remaining sample locations only slightly exceeded commercial use SCOs. Site-wide, few samples contained exceedances for metals. Contaminants detected in soil are not mobile and are located below the warehouse building floor slabs and surrounding sidewalks, generally at depths greater than 3 feet with the highest impact detected at 10 to 12 feet below the ground surface. MGP related soil contamination detected at the site is immobile and is not expected to migrate or extend to off-site locations. The site is fully developed with all the buildings fully occupied therefore making the contamination at the site, majority of which are located beneath the buildings, inaccessible for removal.

Groundwater - Concentrations of VOCs, SVOCs, and PAHs found in overburden groundwater exceed Class GA groundwater standards in 9 monitoring wells. Groundwater standards were exceeded for the following compounds (maximum concentration; groundwater standard): benzene (480 parts per billion (ppb); 1 ppb), toluene (150 ppb; 5 ppb), ethylbenzene (640 ppb; 5.5 ppb), xylenes (600 ppb; 5 ppb), isopropylbenzene (64 ppb; 5 ppb), 1,2-dichloroethane (14 ppb; 0.6 ppb), 1,2-dichloroethene(cis) (3,800 ppb; 5 ppb), vinyl chloride (2,700 ppb; 2 ppb), 1,1--biphenyl (32 ppb; 5 ppb), 3,4-methylphenol(m,p-cresol) (5.8 ppb; 1 ppb), acenaphthalene (67 ppb; 20 ppb), benzo(a)anthracene (0.97 ppb; 0.002 ppb), benzo(a)pyrene (0.95 ppb; non-detect), benzo(b)fluoranthene (0.92 ppb; 0.002 ppb), chrysene (1.0 ppb; 0.002 ppb), naphthalene (5700 ppb; 10 ppb), phenol (3.2 ppb; 1 ppb), cyanide (898 ppb; 200 ppb), meth tert-butyl ether (MTBE) (25 ppb; 10 ppb), and bis(2-ethylhexyl)phthalate (6.6 ppb; 5 ppb). Results from one of the wells indicated elevated levels of VOCs, including MTBE, that are not related to MGP activities, and are most likely attributed to a nearby fuel storage facility. Bedrock groundwater showed higher concentrations of VOCs, SVOCs, and PAHs than in the overburden in all samples across the site. Both overburden and bedrock wells contained exceedances of metals, typical of an urban, historically industrial, area. MGP related groundwater contamination is not expected to significantly affect groundwater migrating off-site.

Soil Vapor/Indoor Air - Soil vapor and sub-slab samples collected during the Phase II investigation concluded that the indoor air VOC concentrations were significantly lower than sub-slab vapor levels beneath the buildings. Therefore, the sub-slab VOC concentrations were not impacting indoor air quality. No additional samples were collected during the remedial investigation.

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*.

NYSDOH has insufficient information to fully evaluate the potential for human exposures.

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.

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.
- Prevent impacts to biota from ingestion/direct contact with soil causing toxicity or impacts from bioaccumulation through the terrestrial food chain.

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.

The selected remedy is referred to as the Site Management with Institutional and Engineering Controls remedy.

The elements of the selected remedy, as shown in Figures 3 and 4, are as follows:

Based on the results of the investigations at the site and the evaluation presented here, the Department has selected Site Management with Monitoring and Institutional and Engineering Controls as the remedy for the site. This remedy includes the implementation of Institutional and Engineering Controls in the form of an Environmental Easement and a Site Management Plan as

the selected remedy for the site. The Department believes that this remedy is protective of human health and the environment and satisfies the remediation objectives described in Section 6.5.

1. Green remediation principals 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 commercial 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 one foot of exposed surface soil meets the applicable soil cleanup objectives (SCOs) for commercial 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. Institutional Control

Imposition of an institutional control in the form of an environmental easement and a Site Management Plan, as described below, will be required. The remedy will achieve a commercial cleanup at a minimum and will include an environmental easement, and site management plan as described below.

Imposition of an institutional control in the form of an environmental easement for the controlled property which will:

- require 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);
- allow the use and development of the controlled property for commercial use as defined by Part 375-1.8(g), although land use is subject to local zoning laws;
- restrict 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
- require compliance with the Department approved Site Management Plan.

4. 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 Paragraph 3 above.

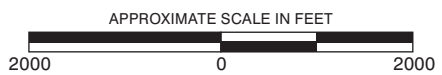
Engineering Controls: The cover system discussed in Paragraph 2 above.

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 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 to a plan approved by the Department. Based on the investigation results and the Department determination 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. Citizen Participation Plan (CPP) activities will continue through this process. Any necessary remediation will be completed prior to, or in association with, redevelopment. This includes all property within the site boundary;
- 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 occupied buildings on the site, including provision for implementing actions recommended to address exposures related to soil vapor intrusion;
- o a provision that should a building foundation or building slab be removed in the future, a cover system consistent with that described in Paragraph 2 above will be placed in any areas where the upper one foot of exposed surface soil exceeds the applicable soil cleanup objectives (SCOs)
- 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:
 - c. monitoring of groundwater to assess the performance and effectiveness of the remedy;
 - d. a schedule of monitoring and frequency of submittals to the Department;
 - e. monitoring for vapor intrusion for any buildings on the site, as may be required by the Institutional and Engineering Control Plan discussed above.



**East 138th Street Works
Former MGP Site**

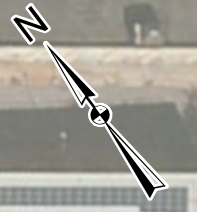


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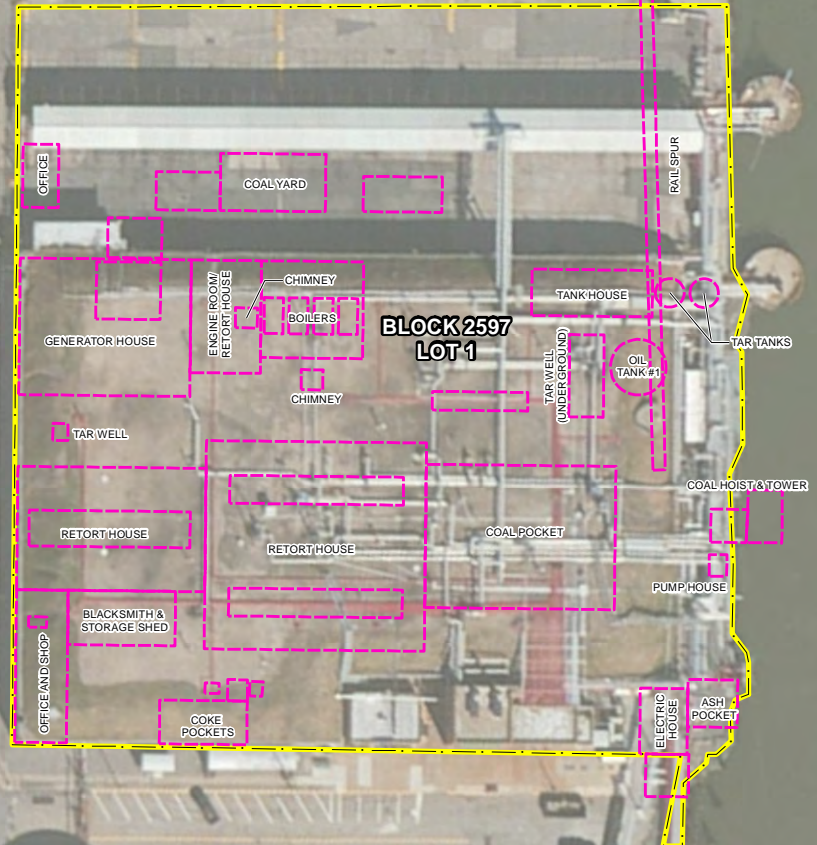
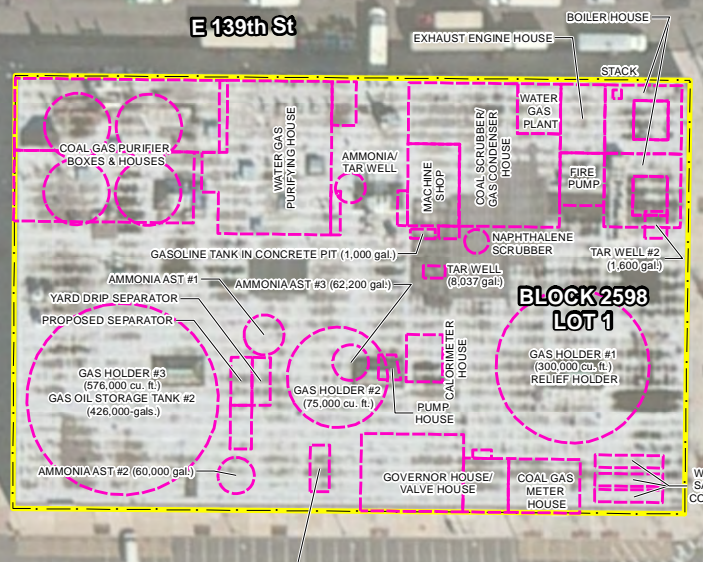
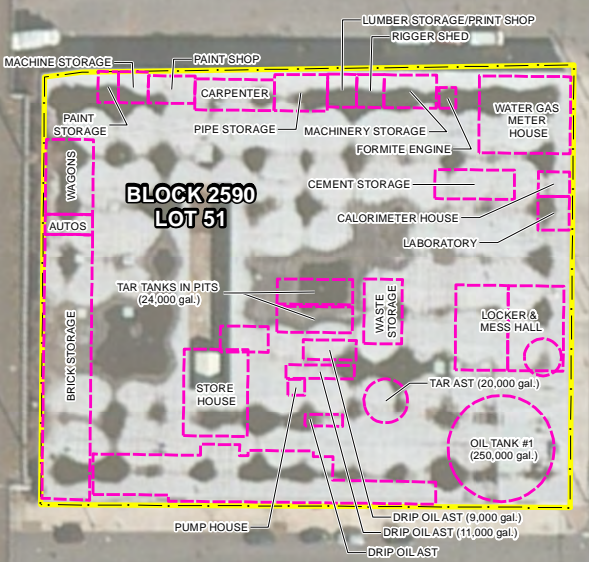
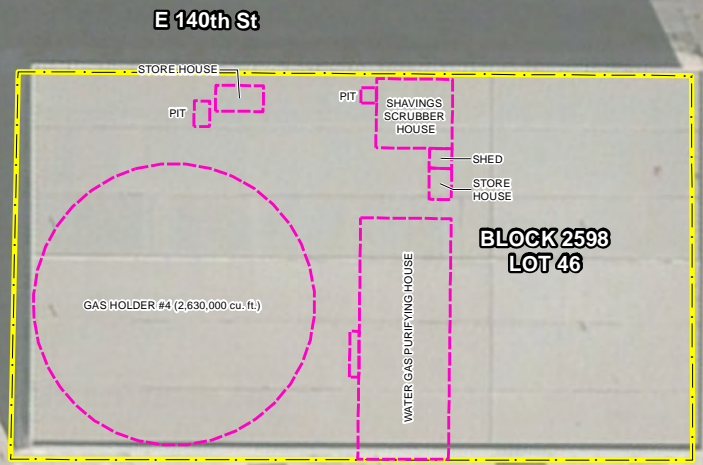
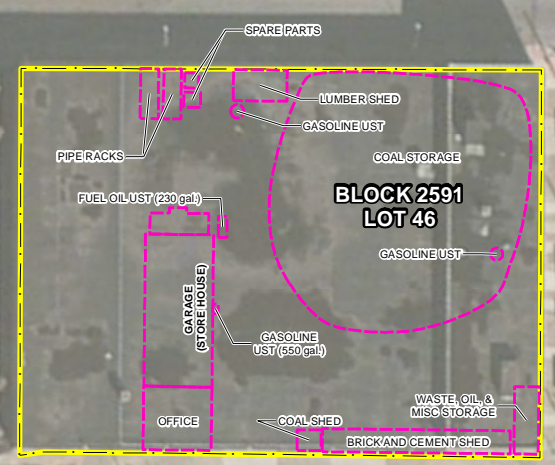
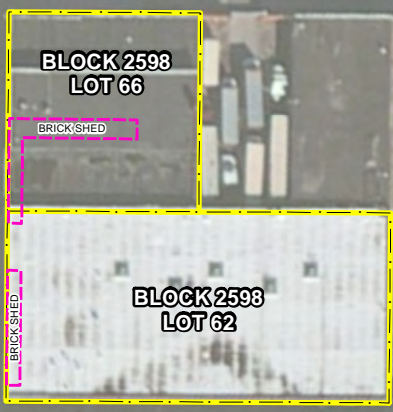
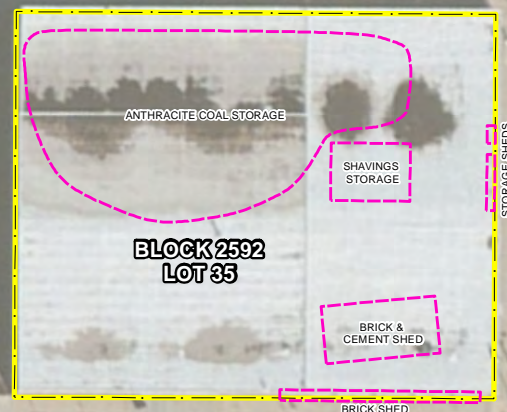


**SITE LOCATION MAP
EAST 138TH STREET WORKS FORMER MGP
BRONX, NEW YORK**

FIGURE 1-1



J:\Projects\1175538_00\000\00\GIS\Maps\138th RAWP Report\HISTORIC SITE LAYOUT.mxd 1/4/2016



EAST RIVER

Rose Feiss Blvd

Locust Ave

E 141st St

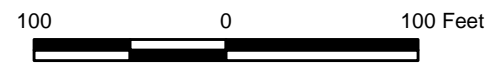
E 140th St

E 139th St

E 138th St

Legend

- Block/Lot Boundary
- Former MGP Structure






EAST 138TH STREET WORKS SITE FORMER MGP SITE PLAN

FIGURE 2

J:\Projects\1175538_00\000\DE\GIS\Maps\138th RAWP Report\RAWP Figure 4-1.mxd 3/21/2017



Legend

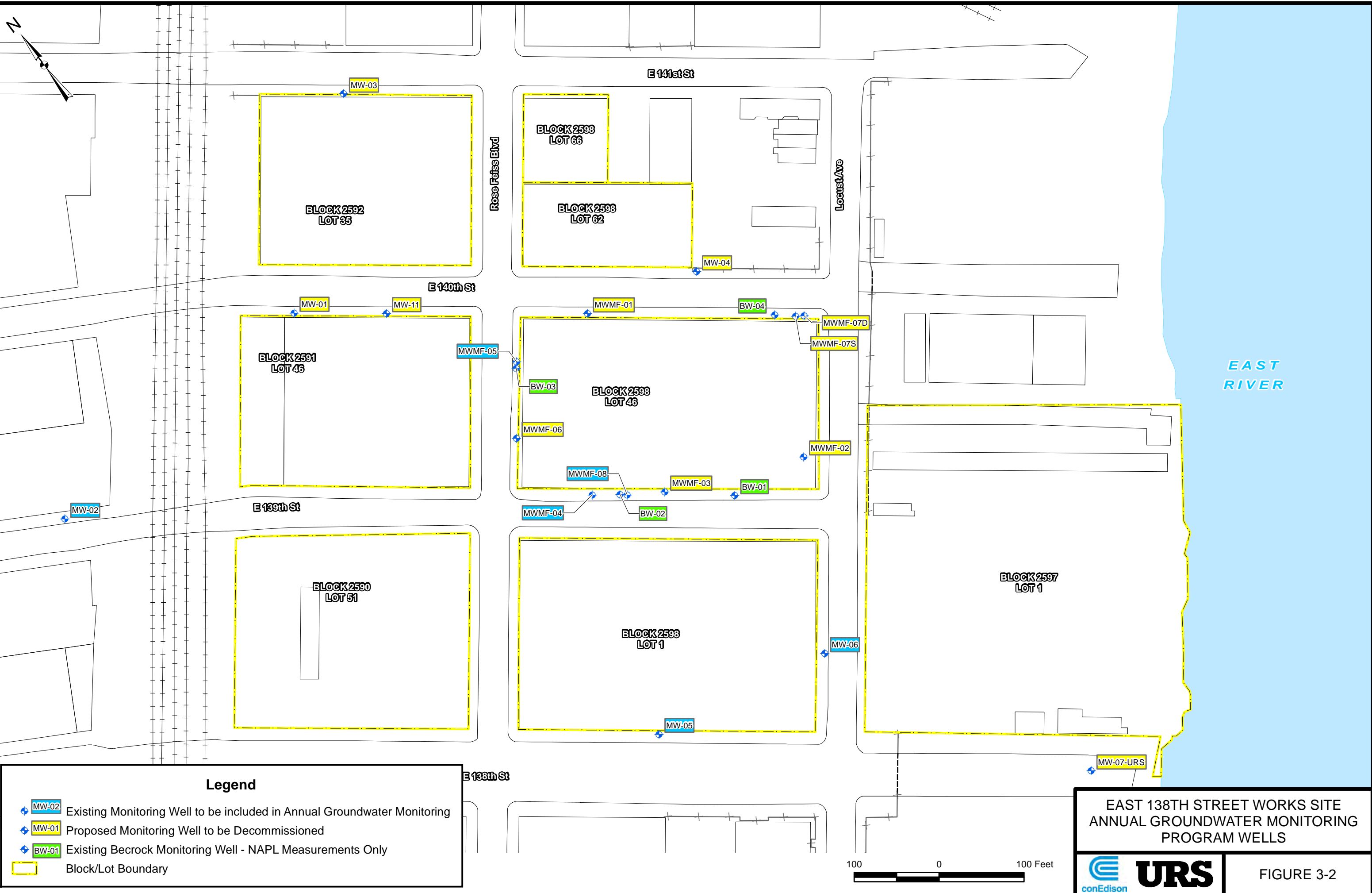
-  Area Subject to EE (#C203053) and BCP (#C203053-05-12)
-  Area Subject to ICs/ ECs and SMP Conditions
-  Block/Lot Boundary

EAST 138TH STREET WORKS
 FORMER MGP SITE
 PROPOSED REMEDIAL ALTERNATIVE
 PROPERTIES UNDER
 ENVIRONMENTAL EASEMENT/ SMP



FIGURE 3-1

J:\Projects\1175538_00\000\00\GIS\Maps\138th RAWP Report\RAWP Figure 4-2.mxd 4/6/2017



Legend

- MW-02 Existing Monitoring Well to be included in Annual Groundwater Monitoring
- MW-01 Proposed Monitoring Well to be Decommissioned
- BW-01 Existing Becrock Monitoring Well - NAPL Measurements Only
- Block/Lot Boundary

**EAST 138TH STREET WORKS SITE
ANNUAL GROUNDWATER MONITORING
PROGRAM WELLS**



FIGURE 3-2

