

DECISION DOCUMENT

Parcel E, OU2, Hunts Point Food Distribution Center
Voluntary Cleanup Program
Bronx, Bronx County
Site No. V00681
June 2011



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

DECLARATION STATEMENT - DECISION DOCUMENT

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Statement of Purpose and Basis

This document presents the remedy for the Hunts Point Parcel E, OU2 site, a voluntary cleanup site. The remedial program was chosen in accordance with the New York State Environmental Conservation Law and applicable guidance.

This decision is based on the Administrative Record of the New York State Department of Environmental Conservation (the Department) for the Hunts Point Parcel E, OU2 site and the public's input to the proposed remedy presented by the Department.

Description of Selected Remedy

The elements of the remedy are as follows:

1. A remedial design program would be implemented to provide the details necessary for the construction, operation, maintenance, and monitoring of the remedial program. Green remediation principals 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 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 re-use 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 end use where possible and encouraging green and sustainable redevelopment
2. All on-site soils located in the areas identified on Figure 2 which exhibit significant visual and olfactory signs of coal tar and purifier waste contamination would be excavated and transported off-site for disposal and/or thermal treatment. Documentation

samples will be collected after the contaminated soil removal has been performed to document the level of contamination remaining. Approximately 2,500 cubic yards of soil would be removed. Backfill material which meets the requirements of the Department-approved Site Management Plan would be brought in to replace the excavated soil and establish the designed grades at the site.

3. A site cover will be required to allow for commercial use of the site. The cover will consist either of the structures such as buildings, pavement, sidewalks comprising the site development, or a soil cover in areas where the upper one (1) foot of exposed surface soil will exceed the applicable soil cleanup objectives (SCOs). Where the soil cover is required it will be a minimum of one (1) foot of soil, meeting the SCOs for cover material as set forth in 6 NYCRR Part 375-6.7(d) for commercial use. The soil cover will be placed over a demarcation layer, with the upper six (6) inches of the soil of sufficient quality to maintain a vegetation layer. Any fill material brought to the site will meet the requirements for the identified use as set forth in 6 NYCRR Part 375-6.7(d).
4. Any on-site buildings would be required to have a vapor barrier and passive sub-slab depressurization system, or a similar engineered system, to prevent the migration of vapors into the building from the soil.
5. Imposition of an institutional control in the form of a deed restriction for the controlled property that:
 - a. 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).
 - b. Allows the use and development of the controlled property for commercial and industrial uses as defined by Part 375-1.8(g), though land use is subject to local zoning laws;
 - c. 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 New York City DOH;
 - d. Prohibits agriculture or vegetable gardens on the controlled property;
 - e. Requires compliance with the Department-approved Site Management Plan;
6. Since the remedy results in contamination remaining at the site that does not allow for unrestricted use, 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 controls remain in place and effective:

Institutional Controls: The Deed Restriction discussed in Paragraph 5 above.

Engineering Controls: The soil cover discussed in Paragraph 3 and the vapor

barrier and passive sub-slab depressurization system discussed in Paragraph 4 above.

This plan includes, but may not be limited to:

- i. Soil Management Plan which details the provisions for management of future excavations in areas of remaining contamination;
 - ii. Descriptions of the provisions of the deed restriction including any land use and groundwater use restrictions;
 - iii. 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;
 - iv. Provisions for the management and inspection of the identified engineering controls;
 - v. Maintain site access controls and Department notification; and
 - vi. The steps necessary for the periodic reviews and certification of the institutional and/or engineering controls;
- b. A Monitoring Plan to assess performance and effectiveness of the remedy. The plan includes, but may not be limited to:
- i. Monitoring of soil vapor to assess the performance and effectiveness of the remedy;
 - ii. A Schedule of monitoring and frequency of submittals to the Department; and
 - iii. Monitoring for vapor intrusion for any buildings occupied or developed on the site, as may be required pursuant to item 6 (a)(iii) 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.

06/03/2011

Date



Robert Cozzy, Director
Remedial Bureau B

DECISION DOCUMENT

Parcel E, OU2, Hunts Point Food Distribution Center
Bronx, Bronx County
Site No. V00681
June 2011

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 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.

SECTION 2: SITE DESCRIPTION AND HISTORY

Location:

Parcel E, OU2 is located within the Hunts Point Food Distribution Center (HPFDC) which lies on the Hunts Point peninsula in the South Bronx. The 3.69-acre site is an L-shaped portion of land located in the northwestern portion of the HPFDC in NYSDEC Region 2, Bronx County. It is bounded to the north by Food Center Drive (formerly East Bay Avenue), to the west by Halleck Street, to the east by Hunt Point Parcel E,OU1 (Site No. V00414), and to the south by the Con Edison Gas Compressor Station Easement Area, the Con Edison Gas Compressor Station Site (Site No. V00605), and the Meat Market portion of the HPFDC. The HPFDC was the former location of the Con Edison Hunts Point Manufactured Gas Plant (MGP), also known as the Hunts Point Coking Station.

Current Zoning/Uses:

The site is currently inactive, and is zoned for business district, light commercial, light industrial, and local service district.

Historical Uses:

While the site is currently inactive, the Con Edison MGP (coal gasification facility) operated from 1925 through the early 1950s. The site is located generally upgradient of the main MGP facility, but on-site contamination appears to be associated with the gasification process which has been known to yield large quantities of contaminants including polycyclic aromatic hydrocarbons (PAHs), light aromatic hydrocarbons, phenolic compounds, miscellaneous organic compounds, and various inorganic compounds such as iron, lead, copper, zinc, sulfides, cyanides and nitrates. A Remedial Investigation was completed in 2006. An Interim Remedial Measure Work Plan for the limited excavation of coal tar and purifier waste hot spots on the site was approved on January 16, 2008 and will be implemented as part of the final remedy for this site.

Site Geology and Hydrogeology:

The soil stratigraphy varies across the HPFDC as a result of previous filling activities. Typically, a 1- to 2-foot thick layer of sandy topsoil/fill overlays fill material that consistently includes soil, construction and demolition debris, ash, cinders, residual coal, and material that is moderately to significantly impacted by MGP waste (coal tar and purifier waste). The underlying MGP fill layer varies in thickness across the site, but is generally 5 to 7 feet thick. Underlying the MGP fill layer is a native clay layer.

Site groundwater was generally encountered on top of the native clay whose depth varies from 7 to 12 feet below ground surface. The depth to groundwater changes throughout the year.

A site location map is attached as Figure 1.

SECTION 3: 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 commercial use (which allows for industrial use) as described in DER-10, Technical Guidance for Site Investigation and Remediation were/was evaluated.

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 4: ENFORCEMENT STATUS

The voluntary cleanup agreement is with a Volunteer. If the Volunteer elects not to complete the remedial program under the VCP, the Department will make a determination if the site poses a significant threat to human health and the environment. If the site is determined to pose a significant threat, the Department will approach the potentially responsible parties (PRPs) to implement the remedy. 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.

SECTION 5: SITE CONTAMINATION

5.1: 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 5.4.

5.1.1: 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>

5.1.2: RI Information

The analytical data collected on this site includes data for:

- groundwater
- soil

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:

arsenic	chrysene
naphthalene	benzo(b)fluoranthene
cyanides(soluble cyanide salts)	benzo[k]fluoranthene
phenanthrene	benzo(a)pyrene
fluoranthene	indeno(1,2,3-cd)pyrene
pyrene	benzene

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

- soil

5.2: 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.

5.3: 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*.

The site is completely fenced, which restricts public access. However, persons who enter the site could contact contaminants in the soil by walking on the site, digging or otherwise disturbing the soil. Contaminated groundwater at the site is not used for drinking or other purposes and the area is served by a public water supply that obtains water from a different source not affected by this contamination. Volatile organic compounds in the groundwater may move into the soil vapor (air spaces within the soil), which in turn may move into overlying buildings and affect the indoor air quality. This process, which is similar to the movement of radon gas from the subsurface into the indoor air of buildings, is referred to as soil vapor intrusion. Currently there are no occupied buildings on the site. A vapor barrier and passive sub-slab depressurization system (systems that ventilate/remove the air beneath the building) will be installed in future on-site buildings to prevent soil vapor intrusion from occurring.

5.4: 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:

The primary contaminants of concern at the site include benzene, naphthalene, polyaromatic hydrocarbons (PAHs), arsenic and cyanide. Investigations conducted at the site indicate subsurface soil contamination associated with historic on-site manufactured gas plant operations. The underlying groundwater, on the other hand, does not appear to be significantly impacted. The subsurface soils exceeded soils guidance values for benzene, naphthalene, PAHs, arsenic and cyanide.

SECTION 6: ELEMENTS OF THE SELECTED REMEDY

The alternatives developed for the site and evaluation of the remedial criteria are present 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 elements of the selected remedy, as shown in Figure 2, are as follows:

1. A remedial design program would be implemented to provide the details necessary for the construction, operation, maintenance, and monitoring of the remedial program. Green remediation principals 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:
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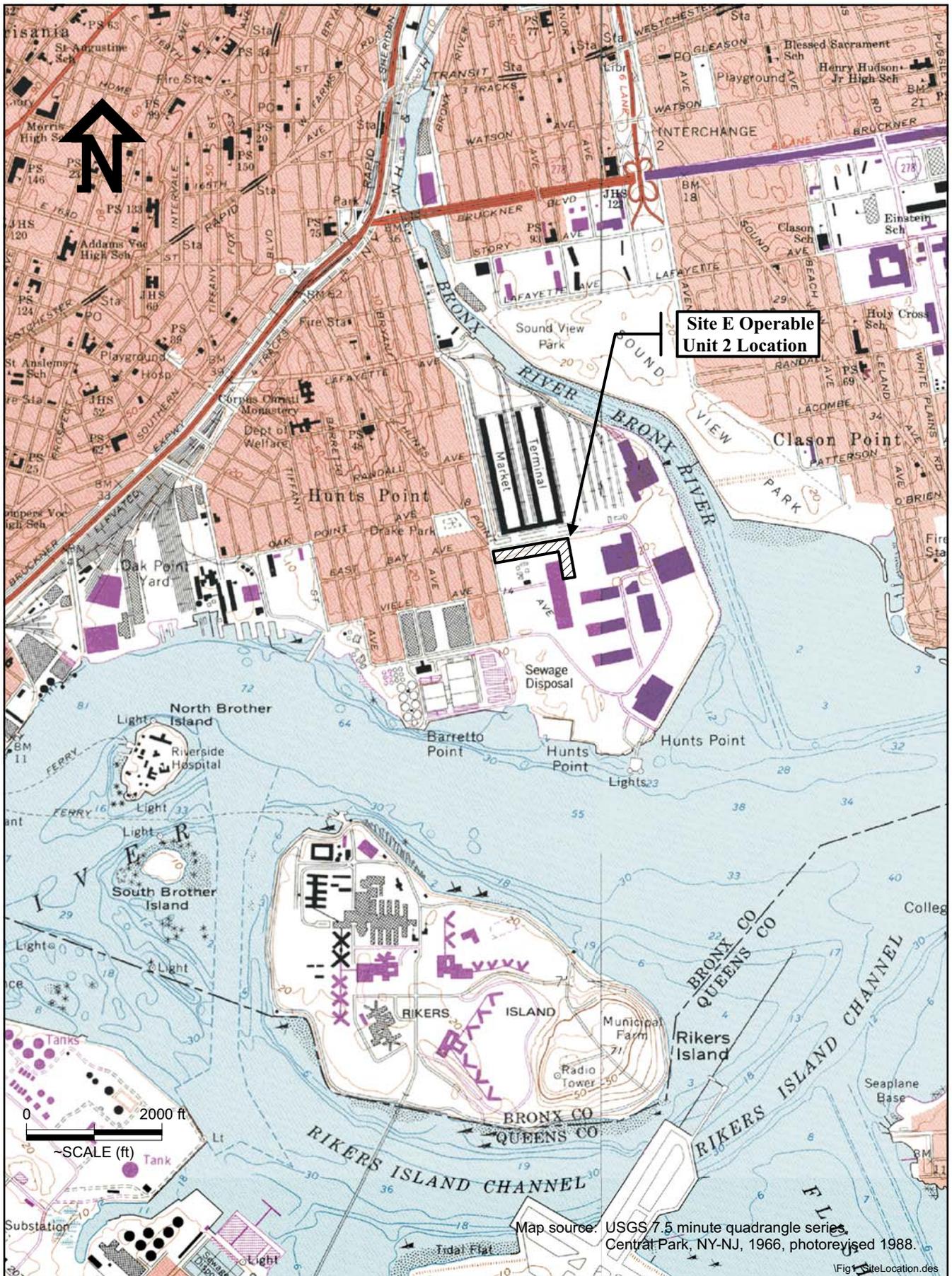
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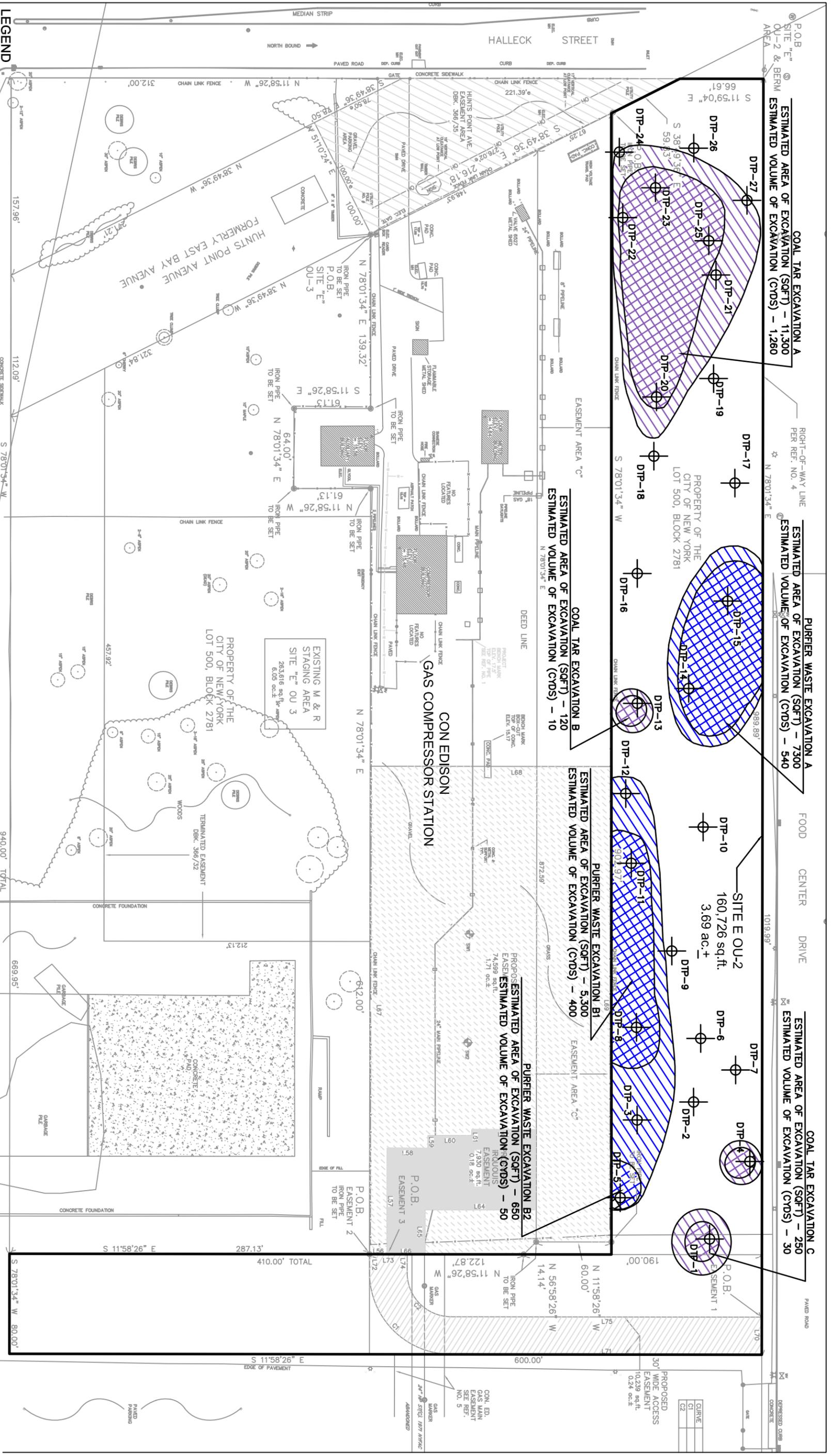
Henningson, Durham & Richardson
Architecture and Engineering, P.C.

One Blue Hill Plaza
Pearl River, NY 10965

Site Location Map

Hunts Point • Site E OU-2

**Figure
1**



P.O.B. SITE "E" ESTIMATED AREA OF EXCAVATION (SQFT) - 11,300
 OU-2 & BERM ESTIMATED VOLUME OF EXCAVATION (CYDS) - 1,260
 COAL TAR EXCAVATION A
 RIGHT-OF-WAY LINE PER REF. NO. 4 ESTIMATED AREA OF EXCAVATION (SQFT) - 7300
 ESTIMATED VOLUME OF EXCAVATION (CYDS) - 540
 PURIFIER WASTE EXCAVATION A
 PROPERTY OF THE CITY OF NEW YORK LOT 500, BLOCK 2781
 ESTIMATED AREA OF EXCAVATION (SQFT) - 120
 ESTIMATED VOLUME OF EXCAVATION (CYDS) - 10
 COAL TAR EXCAVATION B
 FOOD CENTER DRIVE
 ESTIMATED AREA OF EXCAVATION (SQFT) - 5,300
 ESTIMATED VOLUME OF EXCAVATION (CYDS) - 400
 PURIFIER WASTE EXCAVATION B1
 ESTIMATED AREA OF EXCAVATION (SQFT) - 650
 ESTIMATED VOLUME OF EXCAVATION (CYDS) - 50
 PURIFIER WASTE EXCAVATION B2
 ESTIMATED AREA OF EXCAVATION (SQFT) - 250
 ESTIMATED VOLUME OF EXCAVATION (CYDS) - 30
 COAL TAR EXCAVATION C

LEGEND

-  PURIFIER WASTE LENS
-  COAL TAR LENS
-  TEST PIT LOCATION

LEGEND

-  ESTIMATED PURIFIER WASTE EXCAVATION
-  ESTIMATED COAL TAR EXCAVATION

Note: All area and volume quantities are approximate
 Base Survey Source: The Reynolds Group Inc., Site "E" OU-2 & OU-3 & Berm Area, Boundary Survey of Con Ed Property Lot 500 Block 2781, 11/15/2002

HDR
 Henderson, Dunham & Richardson
 Architecture and Engineering, P.C.
 in association with HDR Engineering, Inc.

WASTE REMOVAL AREAS
 SITE E OU-2
 HUNTS POINT, NEW YORK

DATE	02/24/2011
FIGURE	2