DECISION DOCUMENT

Undeveloped Parcel
Brownfield Cleanup Program
Mount Kisco, Westchester County
Site No. C360112
December 2014

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

DECLARATION STATEMENT - DECISION DOCUMENT

Undeveloped Parcel
Brownfield Cleanup Program
Mount Kisco, Westchester County
Site No. C360112
December 2014

Statement of Purpose and Basis

This document presents the remedy for the Undeveloped Parcel 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 Undeveloped Parcel 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. Green Remediation

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; and
- Reducing waste, increasing recycling and increasing reuse of materials which would otherwise be considered a waste.

2. Site Cover

A site cover, consisting of at least one foot of soil, currently exists on-site that meets commercial use soil cleanup objectives (CUSCOs) and will be maintained to allow for commercial use of the site. Any site redevelopment will maintain the site cover, which may consist either of structures such as buildings, pavement, and sidewalks comprising the site development, or a soil cover in areas where the upper one foot of exposed surface soil will exceed the applicable SCOs. Where a soil cover is required it will be a minimum of one 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 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 site use as set forth in 6 NYCRR Part 375-6.7(d).

3. Institutional Control

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

- requires the remedial party or site owner to complete and submit to the Department a periodic certification of institutional and engineering controls in accordance with Part 375-1.8 (h)(3);
- allows the use and development of the controlled property for commercial and industrial uses as defined by Part 375-1.8(g), although land use is subject to local zoning laws;
- restricts the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by the NYSDOH or County DOH; and
- requires compliance with the Department approved Site Management Plan.

4. Site Management Plan

A Site Management Plan is required, which includes 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 Item 3, above.

Engineering Controls: The site cover discussed in Item 2, above.

This plan includes, but may not be limited to:

- an Excavation Plan which details the provisions for management of future excavations on the controlled property;
- descriptions of the provisions of the environmental easement including any land use restrictions;
- provisions for the management and inspection of the identified engineering controls;
- maintaining site access controls and Department notification; and
- the steps necessary for the periodic reviews and certification of the institutional controls.

Declaration

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

December 16, 2014
Date

George Heitzman, Director
Remedial Bureau C

DECISION DOCUMENT

Undeveloped Parcel
Mount Kisco, Westchester County
Site No. C360112
December 2014

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:

The Mount Kisco Public Library
Attn: Reference Desk
100 Main Street
Mount Kisco, NY 10549
Phone: 914-666-8041

NYSDEC Region 3 Office
Attn: Call for Appointment
21 South Putt Corners Rd.
New Paltz, NY 12561

Phone: (845) 256-3018

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 Undeveloped Parcel Site is located at 6 Morgan Drive in the Radio Circle Business Park in the Town and Village of Mount Kisco, Westchester County. The site is bounded on the north and east by State wetlands, a town service road and the Kisco River; to the southeast by vacant land (the Morgan Drive Lot 3 BCP Site, C360137); to the southwest by Morgan Drive and the United States Postal Service; and to the south by Radio Circle Drive and additional commercial and industrial properties.

Site Features: The site consists of one tax parcel that is approximately 4.0 acres in size identified as Parcel 80.55-1-2.1/3 (Section 80, Sheet 55, Lot 2.1/3) on the property tax records. The property is currently vacant; however, the topsoil has been stripped and stockpiled on-site. Additionally, two storm water management basins have been excavated in the northern and eastern portions of the site, and the excavated soil is also stockpiled on-site. There is also a stockpile of imported processed aggregate material on-site. The remainder of the site is generally flat.

Current Zoning and Land Use: The subject site is located in a commercial/industrial park in a Research and Development Zoning District, and is undeveloped. The surrounding area consists of commercial and industrial properties, as well as vacant and undeveloped wooded parcels. The nearest residential properties are located approximately 200 yards northeast of the site.

Past Use of the Site: The subject site was previously part of a larger parcel that was occupied by a sewage treatment and disposal facility, constructed in 1907 for the New York City Department of Environmental Protection (NYCDEP). The facility ceased operation in 1963/64 and remained on standby through the 1980s. The components located on the subject site included eight sand filter beds, two sludge beds, four former structures for chlorination, a 10-inch cast iron force main, vitrified clay pipes to convey the partially treated sewage from the adjacent parcel, and additional clay pipes to collect the treated water from below the sand filter beds. Additionally, a sludge disposal area was identified on the subject site.

A Modified Phase I Environmental Site Assessment (ESA) and subsequent Phase II Environmental Site Investigation (ESI) were performed in late 2007. The purpose of these

previous investigations, performed outside of the current remedial program, were to evaluate potential environmental issues on the property, which led to the application to the BCP.

Site Geology and Hydrogeology: The site topography generally slopes to the north and northwest towards the Kisco River. Site soils generally consist of sand and gravel with minor amounts of debris, extending to depths of 3 to 12 feet below ground surface (bgs), sand (approximately 1 to 4 feet in thickness), gravel (approximately 0.25 to 1 foot in thickness), organic silt and peat (approximately 0.5 to 6 feet in thickness), and sandy silt to depths ranging from 12 to 24 feet bgs. The shallow water bearing zone varies in depth from 3 to 9 feet bgs. Groundwater flows to the north and northwest towards the Kisco 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

The Applicant(s) under the Brownfield Cleanup Agreement is a/are Volunteer(s). The Applicant(s) does/do not have an obligation to address off-site contamination. However, the Department has determined that this site does not pose a significant threat to public health or the environment; accordingly, no enforcement actions are necessary.

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
- surface water
- soil
- sediment

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:

MERCURY	BENZ(A)ANTHRACENE
BARIUM	BENZO(A)PYRENE
CADMIUM	BENZO(B)FLUORANTHENE
COPPER	DIBENZ[A,H]ANTHRACENE

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

- 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: Based upon investigations conducted to date, the primary contaminants of concern are metals and semi-volatile organic compounds (SVOCs) in subsurface soil.

Soil - No volatile organic compounds (VOCs), pesticides or polychlorinated biphenyls (PCBs) exceeding commercial use SCOs (CUSCOs) were detected in any of the soil samples collected during the remedial investigation. No compounds were detected above the CUSCOs in the top 1 foot of soil and only mercury was detected slightly above the residential use SCO.

Limited detections of SVOCs exceeding CUSCOs include: benzo(a)anthracene which was detected at a maximum concentration of 6.3 ppm (CUSCO is 5.6 ppm), benzo(a)pyrene which was detected at a maximum concentration of 4.7 ppm (CUSCO is 1 ppm), benzo(b)fluoranthene which was detected at a maximum concentration of 5.8 (CUSCO is 5.6 ppm), and dibenz(a,h)anthracene which was detected at a maximum concentration of 0.75 ppm (CUSCO is 0.56 ppm). SVOCs exceeding CUSCOs were detected in only one isolated subsurface sample location at a depth exceeding 8 feet bgs.

Metals were detected at levels exceeding CUSCOs at three sporadic locations across the site at depths greater than 6.5 feet bgs, including mercury at a maximum concentration of 8.4 ppm (CUSCO is 2.8 ppm), copper at a maximum concentration of 718 ppm (CUSCO is 270 ppm), barium at a maximum concentration of 1,190 ppm (CUSCO is 400 ppm), and cadmium at a maximum concentration of 15.1 ppm (CUSCO is 9.3 ppm).

Groundwater – No VOCs were detected above the SCGs in any of the groundwater samples collected on-site. Additionally, no SVOCs, pesticides or PCBs were detected in any of the groundwater samples collected on-site. No site-related metals were detected in groundwater samples collected on-site above their SCG. However, certain naturally-occurring metals (eg., iron, magnesium, manganese and sodium) were detected above drinking water standards.

Surface Water – Surface water samples were collected from four locations along the Kisco River, including samples upstream and downstream of the site. VOCs, SVOCs and metals were detected in the surface water samples; however, no pesticides or PCBs were found.

Tetrachloroethene (PCE) was the only VOC found exceeding the applicable SCG of 0.7 parts per billion (ppb). PCE levels were found ranging from 4.4 to 5.3 ppb in the four surface water samples collected, with the highest level found in one of the upstream samples. Since PCE was not detected in any of the soil or groundwater samples collected from the site and higher levels were found upstream of the site, it appears that an upgradient source is affecting PCE levels in the Kisco River.

Aluminum and iron were the only metals found at levels exceeding the applicable SCGs; however, both are naturally occurring and are not site related.

Sediment – Sediment samples were collected from four locations along the Kisco River, including samples upstream and downstream of the site. No VOCs, SVOCs, or metals were detected above applicable SCGs.

Chlordane was detected at a maximum concentration of 2.7 ppb (SCG of 1.0 ppb). PCBs were detected at a maximum concentration of 275 ppb (SCG of 0.8 ppb). Neither chlordane nor PCBs are contaminants of concern at the site; sediments appear to be contaminated as a result of upstream sources.

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.*

Persons who dig below the ground surface may come into contact with contaminants in subsurface soil. Contaminated groundwater at the site is not used for drinking or other purposes and the site is served by a public water supply that obtains water from a source not affected by this contamination.

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:

Soil

RAOs for Public Health Protection

- Prevent ingestion/direct contact with contaminated soil.

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 4: Restricted use with site-specific soil cleanup objectives remedy.

The selected remedy is referred to as the Institutional/Engineering Controls and Cover System remedy.

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

1. Green Remediation

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;
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2. Site Cover

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3. Institutional Control

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

- requires the remedial party or site owner to complete and submit to the Department a periodic certification of institutional and engineering controls in accordance with Part 375-1.8 (h)(3);
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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:

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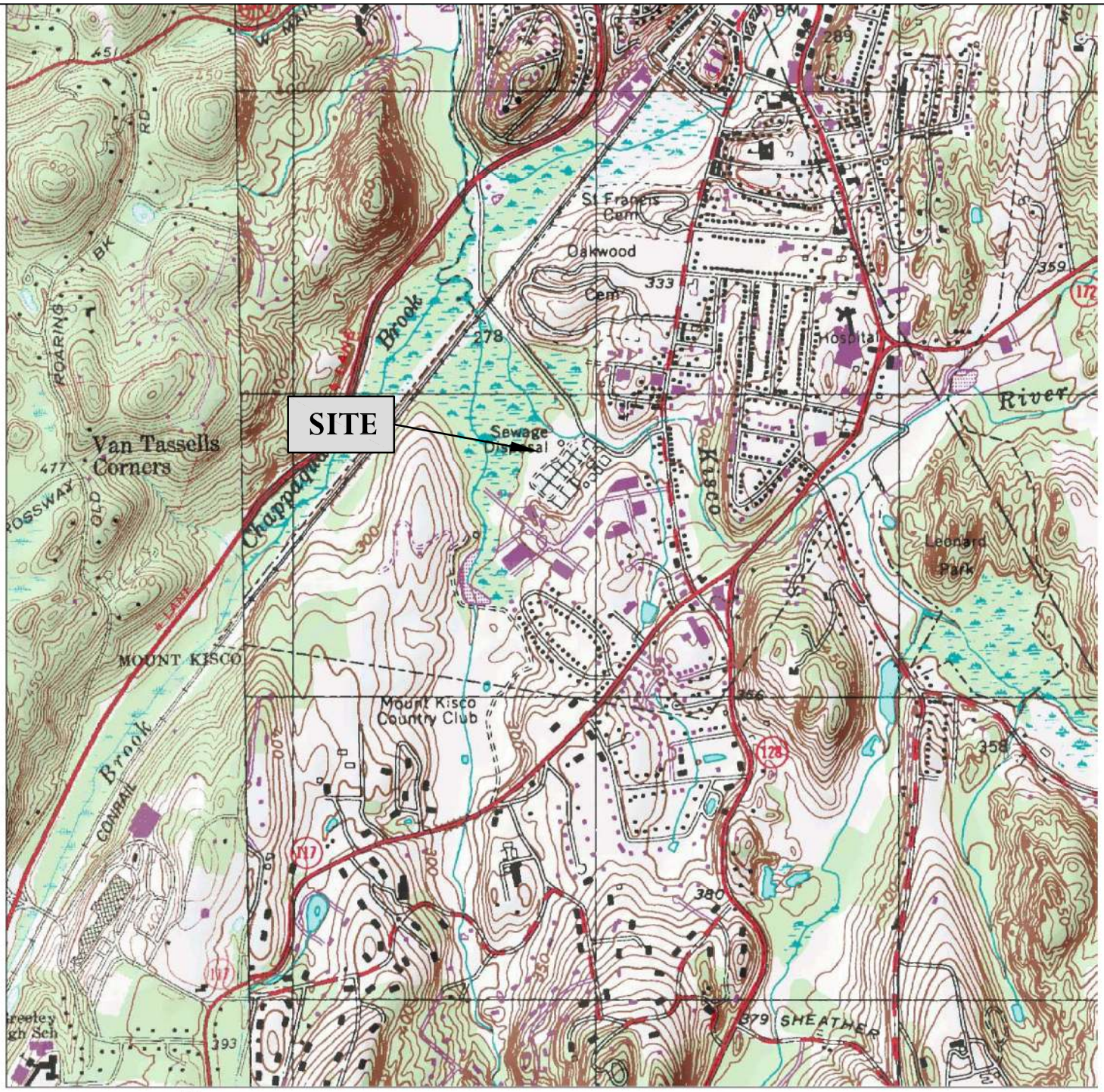
- descriptions of the provisions of the environmental easement including any land use restrictions;
- provisions for the management and inspection of the identified engineering controls;
- maintaining site access controls and Department notification; and
- the steps necessary for the periodic reviews and certification of the institutional controls.



MAP SOURCE
USGS 7.5 Minute Quadrangle
Mount Kisco, New York

ROBERT B. SIMPSON, P.E.
PROFESSIONAL ENGINEER

081840	Robert Simpson	12/3/12
LICENSE NO.	SIGNATURE	DATE

SITE LOCATION MAP

BCP SITE NO.C360112
UNDEVELOPED PARCEL SITE
MT. KISCO, NEW YORK

DRAWN	SCALE
MRA	NTS
CHECKED	DATE
RBS	3 DEC 12
PROJECT NO.	DWG NO.
01-109	FIG -1
APPROVED	

CARLIN-SIMPSON AND ASSOCIATES
61 Main Street
Sayreville, NJ 08872

Consulting Geotechnical and Environmental Engineers

Figure 2
Undeveloped Parcel Site
Site No. C360112

DEPARTMENT OF ENVIRONMENTAL CONSERVATION • NEW YORK STATE •

GENERAL NOTES

1. GENERAL LAYOUT WAS OBTAINED FROM A DRAWING THAT WAS PREPARED BY JOHN MEYER CONSULTING, ENTITLED "SURVEY OF PROPERTY", DATED 8/22/12, ORIGINAL SCALE: 1"=30', DRAWING NO. SU-1.
2. SAMPLE LOCATIONS AND GROUND SURFACE ELEVATIONS WERE SURVEYED BY JOHN MEYER CONSULTING.

KATZ, SARA LEE GOLDSTEIN & BESS TEMPLES
DEED LIBER 9584 PAGE 34

N/F VILLAGE OF MOUNT KISCO

N/F UNITED STATES POSTAL SERVICE
DEED LIBER 10171 PAGE 147
-1-
FM 24079

N/F RADIO CITY VENTURES, LLC
DEED CN. 520443273
-3-
FM 28290

KISCO RIVER

MORGAN DRIVE

GRAVEL ROAD

CENTRAL SOIL PILE

IMPORTED STOCKPILE

EAST SOIL PILE

WEST SOIL PILE

SOUTH SOIL PILE

STORMWATER DETENTION AREA

RB CAP FND O.L. N/S 0.2' NE

RB FND 7.7' SE 0.2' NE

RB CAP FND O.L. N/S 0.1' E

RB FND O.L. NE/SW 0.1' SE

MON FND

SMH

DMH

CMP

CONC. CURB

GATE

ASPHALT

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.

Figure 3

ROBERT B. SIMPSON, P.E.
PROFESSIONAL ENGINEER

081840 — LICENSE NO.
Robert Simpson — SIGNATURE
12/3/12 — DATE

CONSTITUENTS THAT EXCEED COMMERCIAL USE OBJECTIVES

BCP SITE NO.C360112
UNDEVELOPED PARCEL SITE
MT. KISCO, NEW YORK

DRAWN: MRA	SCALE: 1" = 30'
CHECKED: RBS	DATE: 3 DEC 12
PROJECT NO.: 01-109	DWG NO.:
APPROVED:	

CARLIN-SIMPSON AND ASSOCIATES
61 Main Street
Sayreville, NJ 08872
Consulting Geotechnical and Environmental Engineers