NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF ENVIRONMENTAL REMEDIATION
Site Classification Report

DATE: 11/22/2017

Site Code: 203003 **Site Name:** Hexagon Laboratories
City: Bronx **Town:** New York City
Region: 2 **County:** Bronx
Current Classification: 02 **Proposed Classification:** 04
Estimated Size (acres): 1.00 **Disposal Area:** Structure
Significant Threat: Previously **Site Type:**
Priority ranking Score: 430 **Project Manager:** Michael Mason

Summary of Approvals

Originator/Supervisor: David Harrington	**06/02/2017**
RHWRE: Jane O'Connell:	**06/26/2017**
BEEI of NYSDOH:	**05/11/2017**
CO Bureau Director: Michael Cruden, Director, Remedial Bureau E:	**06/23/2017**
Assistant Division Director: Michael J. Ryan, P.E.:	**11/01/2017**

Basis for Classification Change

Hazardous waste disposed at the site was addressed through the implementation of the selected remedy identified in the record of decision (ROD), March 2000. As recommended in the ROD the site was spl into two different operable units, OU1 and OU2. The remedies completed in both operable units confo with the ROD. There is an environmental notice in place filed with Bronx County February 21st, 2013 the Environmental Notice and the site management plan in place this site is recommended for reclassif to Class 4.

Site Description - Last Review: 11/01/2017

Location: The Hexagon Laboratories site is an inactive chemical manufacturing facility located at 3536 Peartree Avenue approximately 1.0 acres in size in the Eastchester section of Bronx County, New York. The site is bounded on the northwest by Boston Road (also referred to as Boston Post Road; US Route 1); on the northeast by a commercial business and parking area (this being a former industrial business) and Heathcote Avenue; on the southeast by used auto parts businesses and scrap yards; and on the southwest by Peartree Avenue.

Site Features: Prior to demolition activities that took place in late 1997 there were three main buildings and several smaller structures on site as well as aboveground and underground storage tanks. Removal of all tanks

from the site (48 aboveground storage tanks/reactor vessels, and removal of 30 underground storage tanks (USTs) left most of the site open with concrete floor slabs, footings, and pavement at the surface. In 1992 the site was secured by fencing around the perimeter.

Current Zoning & Land Use: The immediate area around the site consists of light industry and auto salvage facilities. The surrounding area (0.25 to 0.5 mile radius) is a relatively densely populated urban area. The northern edge of Co-op City, a large housing unit, is approximately 2,000 feet south of the site, and the New England Thruway (Interstate Route 95) is about 250 feet southeast of the site. Presently the site is zoned M2-1 (Medium Manufacturing). The land to the east and west is zoned M1-1 (Light Manufacturing) and the area to the northeast is M3-1 (Heavy Manufacturing). The land to the south of the site is zoned C4-1 (General Commercial District) and the area to the north/northwest is zoned R4 or General Residence District.

Past Use of the Site: Hexagon Laboratories operated as a chemical manufacturing facility that stored and produced a number of compounds and chemicals, medicinal and pharmaceutical, for industrial and commercial use from the mid-1940's until 1988. There were a total of 30 underground storage tanks (USTs) that were installed between 1956 and 1978. The tanks, which have been removed, were used for storage of several organic and inorganic acids, halogenated solvents, including: alcohols, naphtha, benzene, toluene, and methyler chloride.

A State Funded Phase I (PSA) was completed in 1993. EPA conducted an emergency removal action that included sampling, removal of drums and removal of other laboratory chemicals and packs from the property. The DEC completed a Remedial Investigation/Feasibility Study (RI/FS). Interim remedial measures (IRMs) consisting of asbestos removal, building demolition, and subsurface tank removal were completed in December 1997.

The site was divided into two 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. Operable Unit 1 (OU1) refers to the contaminated soil; and Operable Unit 2 (OU2) refers to the contaminated groundwater.

The RI/FS for OU1 was completed in May 1999 and the Record of Decision (ROD) was signed in February 2000. The OU2 RI/FS was subsequently completed and the ROD was signed in July 2002.

Site Geology and Hydrogeology: The geology of Hexagon includes near-surface glacial deposits and metamorphic bedrock. The unconsolidated deposits beneath the site consist of Upper Pleistocene glacial till. The till, which covers most of Bronx County, is poorly sorted and consists of brown, unsaturated clay, sand, and boulders. The overburden is underlain by the Manhattan Schist, a dark-green to black metamorphic rock. The thickness of overburden soils is typically between 2 feet and 6 feet across most of the site with the exception of the eastern corner of the South Yard where it is deeper, to about 16 feet.

Contaminants of Concern (Including Materials Disposed)	**Quantity Disposed**
OU 01	
ORGANIC AND INORGANIC ACIDS	0.00
HALOGENS	0.00

ALCOHOLS	0.00	
naphtha	0.00	
benzene	0.00	
toluene	0.00	
methylene chloride	0.00	
vinyl chloride		gal
chloroethane		gal
methylene chloride		gal
acetone		gal
1,1-dichloroethane		gal
chloroform		gal
1,2-dichloroethane		gal
1,1,1-TCA		gal
trichloroethene (TCE)		gal
tetrachloroethene (PCE)		gal
chlorobenzene		gal
ethylbenzene		gal
xylene (mixed)		gal
phenol		gal
1,2-dichlorobenzene		gal
acetone		gal
benzo(b)fluoranthene		gal
benzo(a)pyrene		gal
polychlorinated biphenyls (PCB)		gal
toluene		gal
ethylbenzene		gal
xylene (mixed)		gal
trichloroethene (TCE)		gal
tetrachloroethene (PCE)		gal
chlorobenzene		gal
methylene chloride		gal
1,1,1-TCA		gal

Analytical Data Available for : Groundwater, Soil

Applicable Standards Exceeded for: Groundwater, Drinking Water

Site Environmental Assessment- Last Review: 11/01/2017

Remediation at the site is complete. Prior to groundwater remediation, the contaminants of concern were benzene, toluene, ethylbenzene, and xylenes (BTEX compounds), chlorinated volatile organics, chlorinated benzenes, acetone, phenolic compounds, and aniline compounds.

SVOCs in the groundwater (primarily phenolic compounds, 4-chloroaniline, and 1,2-dichlorobenzene) were detected at concentrations greater than the NYSDEC Class GA groundwater standards.

Various metals in the total (unfiltered) metals samples including antimony, barium, beryllium, chromium, copp lead, mercury, nickel, selenium, thallium, and zinc were detected at concentrations greater than the NYSDEC Class GA groundwater standards. However, in the dissolved (filtered) samples, only antimony, barium,

chromium, nickel, selenium, thallium, and zinc were detected at concentrations greater than the NYSDEC Class GA groundwater standards.

There are no known users of groundwater in this area.

Residual contamination in the soil and groundwater is being managed under a Site Management Plan.

Site Health Assessment - Last Update: 07/03/2017

People will not come into contact with contaminated soil unless they dig below the surface. People are not drinking the contaminated groundwater because the area is served by a public water supply that is not affected by this contamination. Volatile organic compounds in the groundwater may move into the soil vapor (air spaces within the soil), which in turn may move into overlying buildings and affect the indoor air quality. This process, which is similar to the movement of radon gas from the subsurface into the indoor air of buildings, is referred to as soil vapor intrusion. Because the site is vacant the inhalation of site-related contaminants due to soil vapor intrusion does not represent a current concern. Environmental sampling indicates that there is a potential for soil vapor intrusion at one off-site building. Additional investigation into this potential has been recommended.

	Start		End	
OU 00				
OGC Docket - Environmental Easement	8/20/15	TRM	8/20/15	TRM
OGC Docket - Environmental Notice	12/22/11	ACT	3/7/13	ACT
Periodic Review	5/16/12	ACT	11/16/12	ACT
Site Management	3/31/12	ACT	3/31/42	PLN
OU 01				
Reclass Pkg.	6/2/17	ACT	11/30/17	PLN
Remedial Action	3/29/05	ACT	9/26/06	ACT
Remedial Design	11/17/01	ACT	12/12/02	ACT
Remedial Investigation	2/1/96	ACT	2/29/00	ACT
Site Characterization	8/1/91	ACT	3/1/93	ACT
OU 02				
OGC Docket - Environmental Easement	1/6/12	TRM	1/6/12	TRM
Remedial Action	2/1/10	ACT	3/31/12	ACT
Remedial Design	11/18/03	ACT	2/22/11	ACT
Remedial Investigation	2/1/96	ACT	7/9/02	ACT

Remedy Description and Cost

Remedy Description for Operable Unit 01

Based upon the results of the RI/FS the NYSDEC has selected excavation and off site disposal of contaminated soil.

The components of the remedy are as follows:

DATE: 11/22/2017

Site Code: 203003 **Site Name:** Hexagon Laboratories

1. Removal of the overburden (soil above bedrock) to bedrock or six feet below ground surface whichever is shallower in the western yard.
2. Removal of the overburden in the east yard to six feet below ground surface or to the watertable whichever is shallower.
3. Replacement of the overburden with clean fill.
4. Building demolition
5. UST removal
6. Asbestos Removal

Total Cost $2,266,000

Remedy Description for Operable Unit 02

Groundwater treatment using chemical oxidation or dual phase vapor extraction in conjunction with the OU1 soils remedy
1. A remedial design program including pilot tests to verify the components of the conceptual desig provide the details necessary for the construction, operation and maintenance, and monitoring of the remedial program. This will include a pilot test to verify whether or not fracturing of bedrock on sit allow greater access to contamination in the bedrock is
required.
2. Groundwater treatment using one of the following methods: installation of injection points on sit injection of Fenton's reagent, or similar oxidant, for the treatment of
groundwater; or installation and operation of extraction wells on site to capture the source area of th contamination with dual phase vapor extraction and construction and operation of a treatment syster the extracted liquid and gas phases.
3. The remedial program will also include institutional controls in the form of deed restrictions or notification. Either a restriction will be recorded in the chain of title of the property by the property or a notification will be sent to the county clerk and placed with the property's deed to limit the use groundwater from the affected areas as a source of potable or process water without the necessary w quality treatment as determined by the local health department authority.
4. The property owner will certify annually to the NYSDEC that these institutional controls are in p and that the site is in compliance with the institutional controls outlined in this ROD or the deed not will be verified annually by the NYSDEC, to ensure that the institutional controls are in place and th site is in compliance with the institutional
controls outlined in this ROD.
4. Since the remedy results in untreated hazardous waste residuals remaining at the site, a long term monitoring program will be instituted. This will include the collection and analysis of groundwater s at the site and off site on a periodic basis. This program will allow the effectiveness of the groundwa treatment system to be monitored and will be a component of the operation and maintenance for the
5. The operation of the components of the remedy will continue until the remedial objectives have b achieved, or until NYSDEC determines that continued operation is technically impracticable or not feasible.

Total Cost $3,130,000

OU 00 **Site Management Plan Approval: 03/31/2012** **Status: ACT**

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Site Management Form
11/22/2017

SITE DESCRIPTION

SITE NO. 203003

SITE NAMEHexagon Laboratories

SITE ADDRESS: 3536 Pear Tree Avenue ZIP CODE: 10475

CITY/TOWN: Bronx

COUNTY: Bronx

ALLOWABLE USE:

SITE MANAGEMENT DESCRIPTION

SITE MANAGEMENT PLAN INCLUDES:

IC/EC Certification Plan	NO
Monitoring Plan	NO
Operation and Maintenance (O&M) Plan	NO

Periodic Review Frequency: every five years

Periodic Review Report Submittal Date:

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF ENVIRONMENTAL REMEDIATION
Site Classification Report

DATE: 11/22/2017

Site Code: 203003 **Site Name:** Hexagon Laboratories

Description of Institutional Control

Louis Weiner
1 Claridge drive
3536 PEARTREE AVENUE
Environmental Notice
Block: 5283
Lot: 0043
Sublot: 000
Section: 000
Subsection: 000
S_B_L Image: 52830043
Ground Water Use Restriction
Landuse Restriction
Site Management Plan

Description of Engineering Control

Louis Weiner
1 Claridge drive
3536 PEARTREE AVENUE
Environmental Notice - Institutional Control Instrument
Block: 5283
Lot: 0043
Sublot: 000
Section: 000
Subsection: 000
S_B_L Image: 52830043
Cover System
Fencing/Access Control

NEW YORK STATE | Department of Environmental Conservation

November 2017

FACT SHEET

State Superfund Program

Receive Site Fact Sheets by *Email.* See "For More Information" to Learn How.

Site Name: Hexagon Laboratories
DEC Site #: 203003 Operable Units 01, 02 *
Address: 3536 Pear Tree Avenue
Bronx, NY 10475

Have questions? See "Who to Contact" Below

NYSDEC Announces Reclassification of Site on Superfund Registry; Certifies Cleanup Requirements Achieved at State Superfund Site

The New York State Department of Environmental Conservation (NYSDEC) has determined that the cleanup requirements to address contamination related to the Hexagon Laboratories site ("site") located at 3536 Pear Tree Avenue, Bronx, Bronx County under New York's State Superfund Program have been or will be met. Please see the map for the site location.

NYSDEC has approved a Final Engineering Report regarding the site. A copy of the report is available at the location(s) identified below under "Where to Find Information."

The cleanup activities were performed with oversight provided by NYSDEC.

Completion of Project
Following site cleanup, NYSDEC reclassified the site from Class 2 (significant threat to public health or environment - action required) to Class 4 (site properly closed – requires continued management) for the following reason(s):

Summary of the Remedy for OU 01:
The components of the remedy are as follows:

1. Removal of the overburden (soil above bedrock) to bedrock or six feet below ground surface whichever is shallower in the western yard.
2. Removal of the overburden in the east yard to six feet below ground surface or to the watertable whichever is shallower.
3. Replacement of the overburden with clean fill.
4. Building Demolition
5. UST Removal
6. Asbestos Removal
7. Institutional Controls in the form of an environmental notice and a site management plan restricting groundwater use.

**Operable Unit:* An administrative term used to identify a portion of a site that can be addressed by a distinct investigation and/or cleanup approach. An operable unit can receive specific investigation, and a particular remedy may be proposed.

Summary of the Remedy for OU 02:
The remedy of OU2 includes:

1. Installation of injection points on site and the injection of approximately 4,400 gallons of chemical oxidants.
2. Institutional Controls in the form of an environmental notice and a site management plan were implemented to restrict groundwater use on site.

Final Engineering Report Approved
The NYSDEC has approved the Final Engineering Report, which:

1) Describes the cleanup activities completed.
2) Certifies that cleanup requirements have been or will be achieved for the site.
3) Describes any institutional/engineering controls to be used.
4) Certifies that a site management plan for any engineering controls used at the site has been approved by NYSDEC.

Institutional and Engineering Controls
Institutional controls and engineering controls generally are designed to reduce or eliminate exposure to contaminants of concern. An *institutional control* is a non-physical restriction on use of the site, such as a deed restriction, when contamination left over after the cleanup action makes the site suitable for some, but not all uses. An *engineering control* is a physical barrier or method to manage contamination such as a cap or vapor barrier.

The following institutional controls have been or will be put in place on the site:

-Site Management Plan
-Environmental Notice
-Groundwater Use Restriction
-Land Use Restriction

The following engineering controls have been or will be put in place on the site:

-Fencing/Access Control
-Cover System

Background
Location: The Hexagon Laboratories site is an inactive chemical manufacturing facility located at 3536 Pear Tree Avenue approximately 1.0 acres in size in the Eastchester section of Bronx County, New York. The site is bounded on the northwest by Boston Road (also referred to as Boston Post Road; US Route 1); on the northeast by Tufo's Wholesale Dairy and parking area (this being the former Bronx Auto Wrecking and Salvage) and Heathcote Avenue; on the southeast by used auto parts businesses and scrap yards; and on the southwest by Pear Tree Avenue.

Site Features: Prior to demolition activities that took place in late 1997 there were three main buildings and several smaller structures on site as well as many aboveground and underground

storage tanks. Removal of four of seven buildings (Old Plant, New Plant, Hydrotherm No. 2 and Cylinder House) and all tanks from the site (48 aboveground storage tanks/reactor vessels, and removal of 31 underground storage tanks (USTs) ranging in capacity from 500 to 5,000 gallons) has left most of the site open with concrete floor slabs, footings, and pavement at the surface. In 1992 the site was secured by fencing around the perimeter.

Current Zoning and Land Use: An abandoned laboratory building and a second, small building located in the East Yard on the site have been demolished down to their concrete slabs. The immediate area around the site consists of light industry and auto salvage facilities. The surrounding area (0.25 to 0.5 mile radius) is a relatively densely populated urban area. The northern edge of Co-op City, a large housing unit, is approximately 2,000 feet south of the site, and the New England Thruway (Interstate Route 95) is about 250 feet southeast of the site. Presently the site is zoned M2-1 (Medium Manufacturing). The land to the east and west is zoned M1-1 (Light Manufacturing) and the area to the northeast is M3-1 (Heavy Manufacturing). The land to the south of the site is zoned C4-1 (General Commercial District) and the area to the north/northwest is zoned R4 or General Residence District.

Historical Use(s): Hexagon Laboratories operated as a chemical manufacturing facility that stored and produced a number of compounds and chemicals, medicinal and pharmaceutical, for industrial and commercial use from the mid-1940's until 1988. There were a total of 30 underground storage tanks (USTs) that were installed between 1956 and 1978. The tanks, which have been removed, were used for storage of several organic and inorganic acids, halogenated solvents, including: alcohols, naphtha, benzene, toluene, and methylene chloride. The plant had a history of chemical spillage; seven of these tanks failed tank integrity tests in 1977.

Complaints of strong odors and liquids seeping from the site along the Hexagon property line were first made to the NYSDEC by Bronx Auto Wrecking and Salvage, Inc., in 1980. The site was inspected several times by State and local environmental regulators in response to complaints. From 1981 through 1988 there were numerous violations of Federal, State, and local laws at the site including missing EPA hazard codes, missing manifests, unlabeled waste drums, and spilled chemicals. In 1986, the NYSDEC directed Hexagon to install monitoring wells and conduct groundwater sampling in response to past releases from their site. The plant was closed before a plan could be implemented.

Extensive groundwater contamination exists under and around the facility; a fifteen foot layer of hydrocarbons was found in an on-site well in 1987. Over one hundred drums were found abandoned on-site during an inspection in 1991. A State Funded Phase I (PSA) was completed in 1993. EPA conducted an emergency removal action that included sampling, removal of drums and removal of other laboratory chemicals and packs from the property. The DEC completed a Remedial Investigation/Feasibility Study (RI/FS). The initial phase of the RI showed some of the buildings to be structurally unsound. Interim remedial measures (IRMs) consisting of asbestos removal, building demolition, and subsurface tank removal were completed in December 1997. The RI/FS for OU1 was completed in May 1999 and the Record of Decision (ROD) was signed in February 2000. The remedy calls for soil excavation to bedrock or the water table. The OU2 RI/FS has been completed and the ROD was signed in July 2002.

Site Geology and Hydrogeology: The geology of Hexagon includes near-surface glacial deposits and metamorphic bedrock. The unconsolidated deposits beneath the site consist of Upper Pleistocene glacial till. The till, which covers most of Bronx County, is poorly sorted and consists of brown, unsaturated clay, sand, and boulders. The overburden is underlain by the Manhattan Schist, a dark-green to black metamorphic rock. The thickness of overburden soils is typically between two feet and six feet across most of the site with the exception of the eastern corner of the South Yard where it is deeper, to about sixteen feet.

Groundwater flows in an easterly direction across the site where the water table is generally between one foot deep near MW-5 and ten feet deep at MW-11.

Additional site details, including environmental and health assessment summaries, are available on NYSDEC's website at:
http://www.dec.ny.gov/cfmx/extapps/derexternal/haz/details.cfm?pageid=3&progno=203003

State Superfund Program: New York's State Superfund Program (SSF) identifies and characterizes suspected inactive hazardous waste disposal sites. Sites that pose a significant threat to public health and/or the environment go through a process of investigation, evaluation, cleanup and monitoring.

NYSDEC attempts to identify parties responsible for site contamination and require cleanup before committing State funds.

For more information about the SSF, visit: http://www.dec.ny.gov/chemical/8439.html

FOR MORE INFORMATION

Where to Find Information

Project documents are available at the following location(s) to help the public stay informed.

Bronx Community Board No. 12
4101 White Plains Road
229th Street, Old Precinct Building
Bronx, NY 10467
phone: (718) 881-4455

NYSDEC Region 2 Office
1 Hunters Point Plaza
4740 21st Street
Long Island City, NY 11101
phone: (718) 482-4900

Project documents are also available on the NYSDEC website at:
http://www.dec.ny.gov/chemical/37550.html

Who to Contact
Comments and questions are always welcome and should be directed as follows:

Project Related Questions
Michael Mason
Department of Environmental Conservation
Division of Environmental Remediation
625 Broadway
Albany, NY 12233-7017
518-402-9813
michael.mason@dec.ny.gov

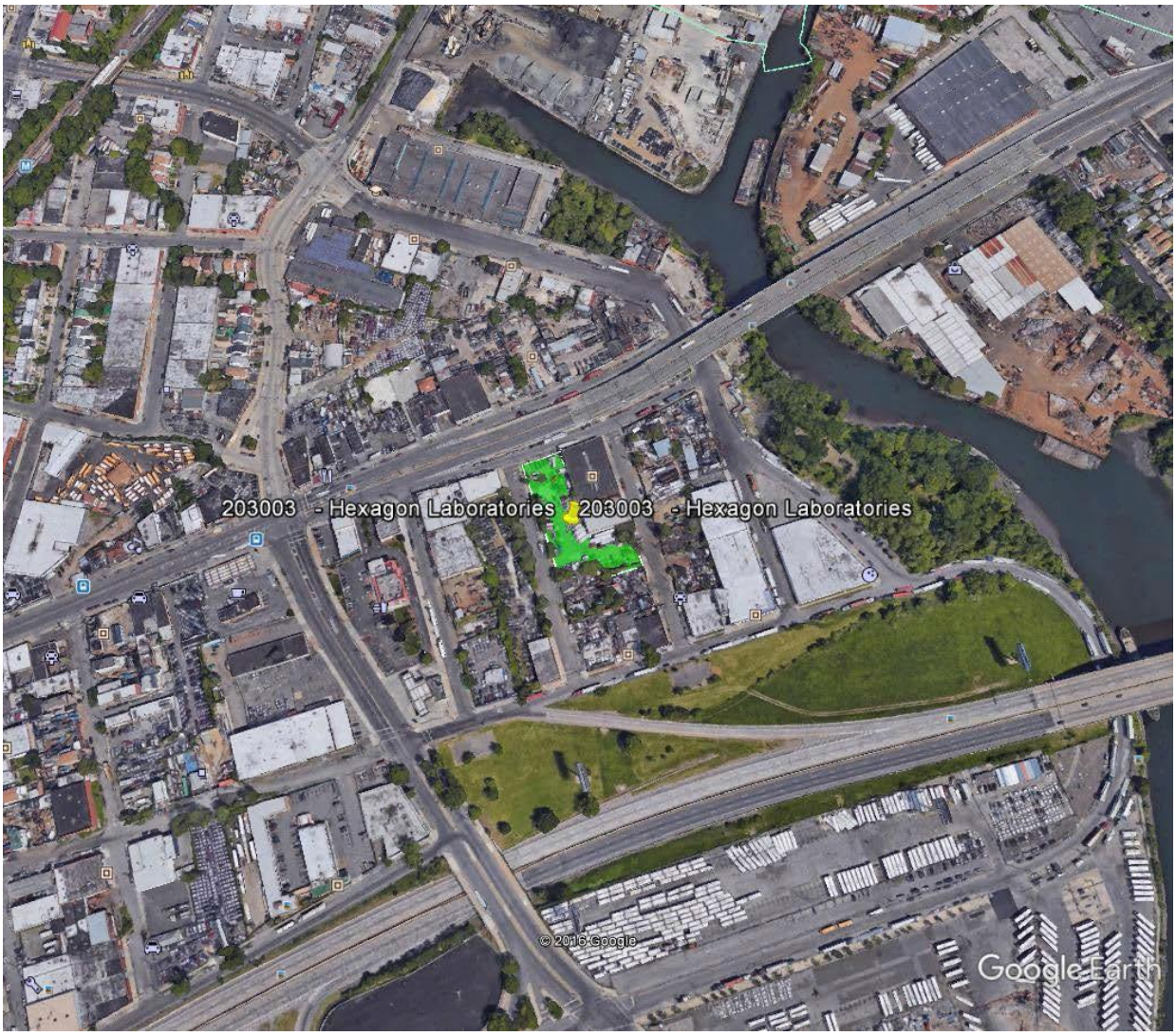
Site-Related Health Questions
Bridget Boyd
New York State Department of Health
Corning Tower Empire State Plaza
Albany, NY 12237
518-402-7860
BEEI@health.ny.gov

We encourage you to share this fact sheet with neighbors and tenants, and/or post this fact sheet in a prominent area of your building for others to see.

Receive Site Fact Sheets by Email

Have site information such as this fact sheet sent right to your email inbox. NYSDEC invites you to sign up with one or more contaminated sites county email listservs available at the following web page: http://www.dec.ny.gov/chemical/61092.html. It's quick, it's free, and it will help keep you *better informed*.

As a listserv member, you will periodically receive site-related information/announcements for all contaminated sites in the county(ies) you select.


203003 - Hexagon Laboratories
203003 - Hexagon Laboratories
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Louis Wiener, Facility Owner
1 Claridge Drive
Verona, NJ 07044

Hexagon Laboratories, On-site Operator
3536 Pear Tree Avenue
Bronx, NY 10475

Tofu Wholesale Bakery
4180 Boston Road
Bronx, NY 10475

Marbo Used Auto Parts (Neighbor)
3515 Heathcote Ave
Bronx, NY 10475

Honorable Eliot L Engel, Congressman
3655 Johnson Avenue
Bronx, NY 10463

Mayor Bill De Blasio
City Hall
New York, NY 10007

Honarable Charles Schumer
United States Senate
Suite 17-02
757 Third Avenue
New York, NY 10017

Honorable Kirsten Gilibrand
United States Senate
Suite 2601
780 Third Avenue
New York, NY 10017

Nativity of Our Blessed Lady Church
1531 East 233rd Street
Bronx, NY 10466

Nativity of Our Blessed Lady School
3893 Dyre Avenue
Bronx, NY 10466

Scott Stringer, NYC Comptroller
Room 517
1 Centre Street
New York, NY 10007

Dr. Robert Kulikowski, Director, NYC Office of Environmental Coordination
14th Floor
253 Broadway
New York, NY 10007

Marisa Lago, Chair
NYC Planning Commission
31st Floor
120 Broadway
New York, NY 10271

Vincent Sapienza, Acting Commissioner,
NYC Department of Environmental Protection
59-17 Junction Blvd.
Flushing, NY 11373

Tracy Pardo
Bronx County Clerk's Office
Room 118
851 Grand Concourse
Bronx, NY 10451

Ruben Diaz, Jr., Bronx Borough President
3rd Floor
851 Grand Concourse
Bronx, NY 10451

Joseph Kelleher
Bronx Chamber of Commerce
Suite 106
1200 Waters Place
Bronx, NY 10461

William Hall, Chair
Bronx Community Board 12
4101 White Plains Road
Bronx, NY 10466

George Torres, District Manager
Bronx Community Board 12
4101 White Plains Road
Bronx, NY 10466

Andy King, NYC Councilmember
3rd Floor
3586 Boston Road
Bronx, NY 10469

Honorable Mark Gjonaj
New York State Senate
1126 Pelham Pkwy S
Bronx, NY 10461

Honorable Carl E. Heastie
NYS Assembly Member
1351 Gun Hill Road
Bronx, NY 10469

Bronx County Clerks Office
851 Grand Councourse #124
Bronx, NY 10451

Mary Travis Bassett, MD, MPH, Commissioner
NYC Department of Health and Mental Hygiene
42-09 28th Street
Long Island City, NY 11101

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Remediation, Bureau of Technical Support
625 Broadway, 11th Floor, Albany, NY 12233-7020
P: (518) 402-9543 I F: (518) 402-9547
www.dec.ny.gov

November 2, 2017

Mr. Louis Weiner
1 Claridge Drive
Verona, NJ 07044

Dear Property Owner:

As mandated by Section 27-1305 of the Environmental Conservation Law (ECL), the New York State Department of Environmental Conservation (DEC) must maintain a Registry of all inactive disposal sites suspected or known to contain hazardous waste. The ECL also mandates that DEC notify the owner of all or any part of each site or area included in the Registry of Inactive Hazardous Waste Disposal Sites as to changes in site classification.

Our records indicate that you are the owner or part owner of the site listed below. Therefore, this letter constitutes notification of change in the classification of such site in the Registry of Inactive Hazardous Waste Disposal Sites in New York State.

DEC Site No.: 203003
Site Name: Hexagon Laboratories
Site Address: 3536 Pear Tree Avenue, Bronx, 10475
Classification change: Class 2 to 4

The reason for the change is as follows:

Remedial activities completed at the site included hydraulic fracturing of on-site bedrock and in-situ chemical oxidation. In addition, as part of Operable Unit 1 (on-site soil), the majority of on-site soils were excavated to bedrock. Institutional controls in the form of a deed restriction have been imposed to address human exposures to residual soil, groundwater, and soil vapor contamination at the site. The easement restricts the use of the property to commercial or industrial use as described in 6 NYCRR Part 375-1.8 (g) and prohibits the use of groundwater at the site as a source or potable water. Access to the vacant property is controlled and the site is covered by a minimum of 24 inches of clean soil, geotextile fabric and 6 inches of crushed bluestone gravel. Monitoring at the site will include the collection of groundwater samples and soil vapor samples in accordance with the Site Management Plan. Compliance with the approved Site Management Plan and annual certification by the property owner to the New York State Department of Environmental Conservation will ensure that the institutional and engineering controls remain effective.

Enclosed is a copy of DEC's Inactive Hazardous Waste Disposal Site Report form as it appears in the Registry. An explanation of the site classifications is available at http://www.dec.ny.gov/chemical/8663.html. The Law allows the owner and/or operator of a site listed in the Registry to petition the Commissioner of DEC for deletion of such site, modification

of site classification, or modification of any information regarding such site, by submitting a written statement setting forth the grounds of the petition.

Such petition may be addressed to:

Honorable Basil Seggos
Commissioner, NYS Department of Environmental Conservation
625 Broadway
Albany, New York 12233-1010

For additional information, please contact Michael Mason, the project manager at 518-402-9806.

Sincerely,

Kelly A. Lewandowski, P.E.
Chief, Site Control Section

Enclosure

ec w/Enc:
M. Ryan
L. Zeppetelli
J. Quinn
K. Lewandowski
M. Mason, Project Manager

bec w/Enc: (Do Not send the following list to owner, but ec on email being sent only to NYSDEC, NYSDOH and county)

K. Anders, NYSDOH
J. Deming, NYSDOH Regional Chief
M. Cruden, Director, Remedial Bureau E
D. Harrington, Chief, Bureau E – Section A
K. Mintzer, Regional Attorney, Region 2
S. Watts, Regional Permit Administrator, Region 2
J. O'Connell, RHWRE, Region 2
B. Anderson, Site Control Section

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF ENVIRONMENTAL REMEDIATION
Inactive Hazardous Waste Disposal Report

Site Code	203003				
Site Name	Hexagon Laboratories	**Address**	3536 Pear Tree Avenue		
Classification	04	**City**	Bronx	**Zip**	10475
Region	2	**County**	Bronx	**Town**	New York City
Latitude	40 degrees, 53 minutes, 9.90 seconds			**Estimated Size**	1.0000
Longitude	-73 degrees, 49 minutes, 31.69 seconds				
Site Type	Structure				

Site Description

Location: The Hexagon Laboratories site is an inactive chemical manufacturing facility located at 3536 Peartree Avenue approximately 1.0 acres in size in the Eastchester section of Bronx County, New York. The site is bounded on the northwest by Boston Road (also referred to as Boston Post Road; US Route 1); on the northeast by a commercial business and parking area (this being a former industrial business) and Heathcote Avenue; on the southeast by used auto parts businesses and scrap yards; and on the southwest by Peartree Avenue.

Site Features: Prior to demolition activities that took place in late 1997 there were three main buildings and several smaller structures on site as well as aboveground and underground storage tanks. Removal of all tanks from the site (48 aboveground storage tanks/reactor vessels, and removal of 30 underground storage tanks (USTs) left most of the site open with concrete floor slabs, footings, and pavement at the surface. In 1992 the site was secured by fencing around the perimeter.

Current Zoning & Land Use: The immediate area around the site consists of light industry and auto salvage facilities. The surrounding area (0.25 to 0.5 mile radius) is a relatively densely populated urban area. The northern edge of Co-op City, a large housing unit, is approximately 2,000 feet south of the site, and the New England Thruway (Interstate Route 95) is about 250 feet southeast of the site. Presently the site is zoned M2-1 (Medium Manufacturing). The land to the east and west is zoned M1-1 (Light Manufacturing) and the area to the northeast is M3-1 (Heavy Manufacturing). The land to the south of the site is zoned C4-1 (General Commercial District) and the area to the north/northwest is zoned R4 or General Residence District.

Past Use of the Site: Hexagon Laboratories operated as a chemical manufacturing facility that stored and produced a number of compounds and chemicals, medicinal and pharmaceutical, for industrial and commercial use from the mid-1940's until 1988. There were a total of 30 underground storage tanks (USTs) that were installed between 1956 and 1978. The tanks, which have been removed, were used for storage of several organic and inorganic acids, halogenated solvents, including: alcohols, naphtha, benzene, toluene, and methylene chloride.

A State Funded Phase I (PSA) was completed in 1993. EPA conducted an emergency removal action that included sampling, removal of drums and removal of other laboratory chemicals and packs from the property. The DEC completed a Remedial Investigation/Feasibility Study (RI/FS). Interim remedial measures (IRMs) consisting of asbestos removal, building demolition, and subsurface tank removal were completed in December 1997.

The site was divided into two 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. Operable Unit 1 (OU1) refers to the contaminated soil; and Operable Unit 2 (OU2) refers to the contaminated groundwater.

The RI/FS for OU1 was completed in May 1999 and the Record of Decision (ROD) was signed in February 2000. The OU2 RI/FS was subsequently completed and the ROD was signed in July 2002.

Site Geology and Hydrogeology: The geology of Hexagon includes near-surface glacial deposits and metamorphic bedrock. The unconsolidated deposits beneath the site consist of Upper Pleistocene glacial till. The till, which covers most of Bronx County, is poorly sorted and consists of brown, unsaturated clay, sand, and boulders. The overburden is underlain by the Manhattan Schist, a dark-green to black metamorphic rock. The thickness of overburden soils is typically between 2 feet and 6 feet across most of the site with the exception of the eastern corner of the South Yard where it is deeper, to about 16 feet.

Materials Disposed at Site

OU 01

ORGANIC AND INORGANIC ACIDS	UNKNOWN
HALOGENS	UNKNOWN
ALCOHOLS	UNKNOWN
naphtha	UNKNOWN
benzene	UNKNOWN
toluene	UNKNOWN
methylene chloride	UNKNOWN
vinyl chloride	UNKNOWN
chloroethane	UNKNOWN
methylene chloride	UNKNOWN
acetone	UNKNOWN
1,1-dichloroethane	UNKNOWN
chloroform	UNKNOWN
1,2-dichloroethane	UNKNOWN
1,1,1-TCA	UNKNOWN
trichloroethene (TCE)	UNKNOWN
tetrachloroethene (PCE)	UNKNOWN
chlorobenzene	UNKNOWN
ethylbenzene	UNKNOWN
xylene (mixed)	UNKNOWN
phenol	UNKNOWN
1,2-dichlorobenzene	UNKNOWN
acetone	UNKNOWN
benzo(b)fluoranthene	UNKNOWN
benzo(a)pyrene	UNKNOWN
polychlorinated biphenyls (PCB)	UNKNOWN
toluene	UNKNOWN
ethylbenzene	UNKNOWN
xylene (mixed)	UNKNOWN
trichloroethene (TCE)	UNKNOWN
tetrachloroethene (PCE)	UNKNOWN
chlorobenzene	UNKNOWN
methylene chloride	UNKNOWN
1,1,1-TCA	UNKNOWN

Analytical Data Available for : Groundwater, Soil

Applicable Standards Exceeded for: Groundwater, Drinking Water

Assessment of Environmental Problems

Remediation at the site is complete. Prior to groundwater remediation, the contaminants of concern were benzene, toluene, ethylbenzene, and xylenes (BTEX compounds), chlorinated volatile organics, chlorinated benzenes, acetone, phenolic compounds, and aniline compounds.

SVOCs in the groundwater (primarily phenolic compounds, 4-chloroaniline, and 1,2-dichlorobenzene) were detected at concentrations greater than the NYSDEC Class GA groundwater standards.

Various metals in the total (unfiltered) metals samples including antimony, barium, beryllium, chromium, copper, lead, mercury, nickel, selenium, thallium, and zinc were detected at concentrations greater than the NYSDEC Class GA groundwater standards. However, in the dissolved (filtered) samples, only antimony, barium, chromium, nickel, selenium, thallium, and zinc were detected at concentrations greater than the NYSDEC Class GA groundwater standards.

There are no known users of groundwater in this area.

Residual contamination in the soil and groundwater is being managed under a Site Management Plan.

Assessment of Health Problems

People will not come into contact with contaminated soil unless they dig below the surface. People are not drinking the contaminated groundwater because the area is served by a public water supply that is not affected by this contamination. Volatile organic compounds in the groundwater may move into the soil vapor (air spaces within the soil), which in turn may move into overlying buildings and affect the indoor air quality. This process, which is similar to the movement of radon gas from the subsurface into the indoor air of buildings, is referred to as soil vapor intrusion. Because the site is vacant the inhalation of site-related contaminants due to soil vapor intrusion does not represent a current concern. Environmental sampling indicates that there is a potential for soil vapor intrusion at one off-site building. Additional investigation into this potential has been recommended.

Owners

Current Owner(s)

Louis Wiener

1 Claridge Drive

Verona NJ 07044

Disposal Owner(s)

*** MULTIPLE SITE OWNERS ***

Operators

Current Operator(s)

Pharma Investment Limited

Disposal Operator(s)

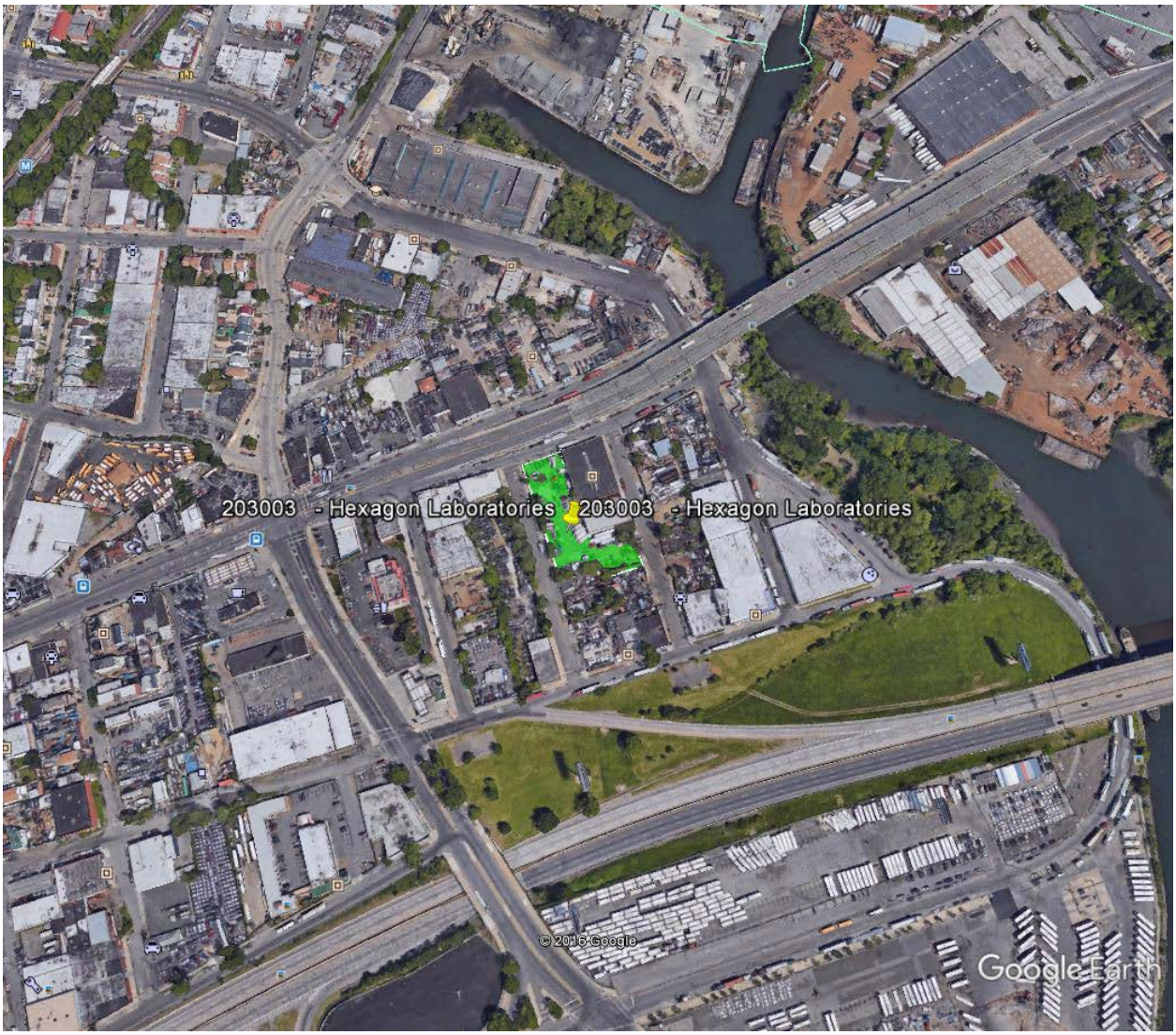
Pharma Investment Limited

Hexagon Laboratories

3536 Pear Tree Avenue

Bronx NY 10475

Holchem Limited


203003 - Hexagon Laboratories
203003 - Hexagon Laboratories
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New York State Department of Environmental Conservation
Division of Environmental Remediation, 12th Floor
Phone: (518) 402-9706 **Fax:** (518) 402-9020
Website: www.dec.state.ny.us

SSF FINAL ENGINEERING REPORT
& RECLASSIFICATION APPROVAL MEMO

TO: Michael Ryan, Assistant Director
Division of Environmental Remediation

FROM: Michael Cruden, Bureau Director

SUBJECT: Final Engineering Report and
Site Reclassification to Class ☑ 4 □ 5 □ C
Remedial Party: State Superfund
Site Name: Hexagon Laboratories
Site No.: 203003

DATE: 6/22/2017

Conclusions: The Remedial party has met all the requirements of the Remedial Work Plan. The Final Engineering Report and Site Management Plan have been reviewed and meet the guidelines in the PM checklists.

Health Department Concurrence: The NYSDOH has reviewed and accepted the Final Engineering Report and concurs with site reclassification.

Registry Status and Site Classification: The Site's registry classification has been reassessed pursuant to internal guidance and the Site can be reclassified to Class ☑ 4 □ 5 □ C.

Remediation of the Site: The remedial program was conducted in accordance with the work plan and the results of the remedial action are documented in the Final Engineering Report.

Final Engineering Report: The Final Engineering Report (FER) has been reviewed by NYSDEC and NYSDOH technical staff and the FER checklist has been completed recommending approval of the FER. The FER is signed and sealed by a Professional Engineer licensed to practice in New York State.

Certifications of Report Contents: The FER includes all applicable certifications pursuant to DER-10.

UIS Updates: All project-related updates have been made in the UIS.

Recommendation: We have reviewed the documentation for the completion of this project and

recommend that the Final Engineering Report and site reclassification be approved.

ec:

Michael Cruden, Project Manager
K. Lewandowski
DOH PM

Documents Attached:

☑ Site Investigation Information Form
☑ UIS Generated Final Engineering report & Reclassification Approval Form

Supporting Documents in EDMS:

☑ Site Management Plan
☑ Remedial Investigation Report
☑ Remedial Action Work Plan
☑ Remedial Design Documents
☑ Deed Restriction
☑ Final Engineering Report
☑ DOH Concurrence
☑ Site Management Plan Checklist
☑ Final Engineering Report Checklist

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF ENVIRONMENTAL REMEDIATION
Final Engineering Report & Reclassification Approval Form

DATE: 6/20/2017

Site 203003 **Site Name:** Hexagon Laboratories
City: Bronx **Town:** New York City
Region: 2 Page 1 of 9 **County:** Bronx
Current Classification: 02 **Proposed Classification:** 04
Estimated Size (acres): 1.00 **Disposal Area:** Structure
Significant Threat: Previously **Site Type:**
Priority ranking Score: 430 **Project Manager:** Michael Mason

Summary of Approvals

Originator/Supervisor: Michael Cruden

RHWRE: Jane O'Connell:

BEEI of NYSDOH:

CO Bureau Director: Michael Cruden, Director, Remedial Bureau
E:

Assistant Division Director: Michael J. Ryan, P.E.:

Basis for Classification Change:
Hazardous waste disposed at the site was addressed through the implementation of the selected remedy identified in the record of decision (ROD), March 2000. As recommended in the ROD the site was split up into two different operable units, OU1 and OU2. The remedies completed in both operable units conform with the ROD. There is an environmental notice in place filed with Bronx County February 21st, 2013. With the Environmental Notice and the site management plan in place this site is recommended for reclassification to Class 4.

Site Description- Last Review: 03/20/2017

Location: The Hexagon Laboratories site is an inactive chemical manufacturing facility located at 3536 Peartree Avenue approximately 1.0 acres in size in the Eastchester section of Bronx County, New York. The site is bounded on the northwest by Boston Road (also referred to as Boston Post Road; US Route 1); on the northeast by Tufo's Wholesale Dairy and parking area (this being the former Bronx Auto Wrecking and Salvage) and Heathcote Avenue; on the southeast by used auto parts businesses and scrap yards; and on the southwest by Peartree Avenue.

Site Features: Prior to demolition activities that took place in late 1997 there were three main buildings and several smaller structures on site as well as many aboveground and underground storage tanks. Removal of four of seven buildings (Old Plant, New Plant, Hydrotherm No.2 and Cylinder House) and all tanks from the site (48 aboveground storage tanks/reactor vessels, and removal of 31 underground storage tanks (USTs) ranging in capacity from 500 to 5,000 gallons) has left most of the site open with concrete floor slabs, footings, and pavement at the surface. In 1992 the site was secured by fencing around the perimeter.

DATE: 6/20/2017

Site Code: 203003 **Site Name:** Hexagon Laboratories

Current Zoning/Use(s): An abandoned laboratory building and a second, small building located in the East Yard on the site have been demolished down to their concrete slabs. The immediate area around the site consists of light industry and auto salvage facilities. The surrounding area (0.25 to 0.5 mile radius) is a relatively densely populated urban area. The northern edge of Co-op City, a large housing unit, is approximately 2,000 feet south of the site, and the New England Thruway (Interstate Route 95) is about 250 feet southeast of the site. Presently the site is zoned M2-1 (Medium Manufacturing). The land to the east and west is zoned M1-1 (Light Manufacturing) and the area to the northeast is M3-1 (Heavy Manufacturing). The land to the south of the site is zoned C4-1 (General Commercial District) and the area to the north/northwest is zoned R4 or General Residence District.

Historical Use(s): Hexagon Laboratories operated as a chemical manufacturing facility that stored and produced a number of compounds and chemicals, medicinal and pharmaceutical, for industrial and commercial use from the mid-1940's until 1988. There were a total of 30 underground storage tanks (USTs) that were installed between 1956 and 1978. The tanks, which have been removed, were used for storage of several organic and inorganic acids, halogenated solvents, including: alcohols, naphtha, benzene, toluene, and methylene chloride. The plant had a history of chemical spillage; seven of these tanks failed tank integrity tests in 1977.

Complaints of strong odors and liquids seeping from the site along the Hexagon property line were first made to the NYSDEC by Bronx Auto Wrecking and Salvage, Inc. in 1980. The site was inspected several times by State and local environmental regulators in response to complaints. From 1981 through 1988 there were numerous violations of Federal, State, and local laws at the site including missing EPA hazard codes, missing manifests, unlabeled waste drums, and spilled chemicals. In 1986 the NYSDEC directed Hexagon to install monitoring wells and conduct groundwater sampling in response to past releases from their site. The plant was closed before a plan could be implemented.

After the completion of the investigation, it was clear that the soil contamination required remediation.
However, the extent of off-site groundwater contamination is not yet quantified. Given that the soil needs remediation and groundwater investigation will take additional time and effort, the NYSDEC decided to split the site administratively into two sections: one section is the entire site except for the groundwater and is referred to as Operable Unit 1 (OU1); the other section is the groundwater and is referred to as
Operable Unit 2 (OU2). Dividing the site into two operable units allows the NYSDEC to address the soil contamination without delay while additional investigation is being conducted for the groundwater. Also the NYSDEC is interested in observing how the soil remediation will affect the existing groundwater contamination.

Site Code: 203003 **Date:** 6/20/17 **Site Name: Hexagon Laboratories**

Extensive groundwater contamination exists under and around the facility; a fifteen foot layer of hydrocarbons was found in an on-site well in 1987. Over one hundred drums were found abandoned on-site during an inspection in 1991. A State Funded Phase I (PSA) was completed in 1993. EPA conducted an emergency removal action that included sampling, removal of drums and removal of other laboratory chemicals and packs from the property. The DEC completed a Remedial Investigation/Feasibility Study (RI/FS). The initial phase of the RI showed some of the buildings to be structurally unsound. Interim remedial measures (IRMs) consisting of asbestos removal, building demolition, and subsurface tank removal were completed in December 1997. The RI/FS for OU1 was completed in May 1999 and the ROD was signed in February 2000. The remedy for OU-1 calls for soil excavation to bedrock or the water table. The OU2 RI/FS has been completed and the ROD was signed in July 2002.

Site Geology and Hydrogeology: The geology of Hexagon includes near-surface glacial deposits and metamorphic bedrock. The unconsolidated deposits beneath the site consist of Upper Pleistocene glacial till. The till, which covers most of Bronx County, is poorly sorted and consists of brown, unsaturated clay, sand, and boulders. The overburden is underlain by the Manhattan Schist, a dark-green to black metamorphic rock. The thickness of overburden soils is typically between 2 feet and 6 feet across most of the site with the exception of the eastern corner of the South Yard where it is deeper, to about 16 feet.

Groundwater flows in an easterly direction across the site where the water table is generally between one foot deep near MW-5 and 10 feet deep at MW-11.

DATE: 6/20/2017

Site Code: 203003 **Site Name:** Hexagon Laboratories

Contaminants of Concern (Including Materials Disposed)	**Quantity Disposed**	
OU 01		
ORGANIC AND INORGANIC ACIDS	0.00	
HALOGENS	0.00	
ALCOHOLS	0.00	
naphtha	0.00	
benzene	0.00	
toluene	0.00	
methylene chloride	0.00	
vinyl chloride		gal
chloroethane		gal
methylene chloride		gal
acetone		gal
1,1-dichloroethane		gal
chloroform		gal
1,2-dichloroethane		gal
1,1,1-TCA		gal
trichloroethene (TCE)		gal
tetrachloroethene (PCE)		gal
chlorobenzene		gal
ethylbenzene		gal
xylene (mixed)		gal
phenol		gal
1,2-dichlorobenzene		gal
acetone		gal
benzo(b)fluoranthene		gal
benzo(a)pyrene		gal
polychlorinated biphenyls (PCB)		gal
toluene		gal
ethylbenzene		gal
xylene (mixed)		gal
trichloroethene (TCE)		gal
tetrachloroethene (PCE)		gal
chlorobenzene		gal
methylene chloride		gal
1,1,1-TCA		gal

Analytical Data Available for: Groundwater, Soil

Applicable Standards Exceeded for: Groundwater, Drinking Water

Site Environmental Assessment- Last Review: 03/20/2017

Remediation at the site is complete. Prior to groundwater remediation the contaminants of concern were benzene, toluene, ethylbenzene, and xylenes (BTEX compounds), chlorinated volatile organics, chlorinated benzenes, acetone, phenolic compounds, and aniline compounds.

While the presence of SVOCs is less significant in the groundwater as compared to the surface and subsurface soil, several SVOCs (primarily phenolic compounds, 4-chloroaniline, and
1,2-dichlorobenzene) were detected at concentrations greater than the NYSDEC Class GA groundwater

standards.

Various metals in the total (unfiltered) metals samples including antimony, barium, beryllium, chromium, copper, lead, mercury, nickel, selenium, thallium, and zinc were detected at concentrations greater than the NYSDEC Class GA groundwater standards. However, in the dissolved (filtered) samples, only antimony, barium, chromium, nickel, selenium, thallium, and zinc were detected at concentrations greater than the NYSDEC Class GA groundwater standards.

There are no known users of groundwater in this area.

Pelham Bay Park is located less than one mile east of the site, on the east side of the Hutchinson River. Two tidal marsh areas are located in the Pelham Bay Park as is the Thomas Pell Wildlife Refuge and Sanctuary. At its nearest point, the Hutchinson River is less than 1,000 feet northeast of the site with an associated underground stream.

In October 2011 approximately 4,400 gallons of chemical oxidants were injected into three wells at the site (MW-16, MW-17, and IW-01). The chemical oxidant mixture was a 20% (by weight solution) sodium persulfate (Klozur)/water mixture with a 25% (by weight solution) sodium hydroxide activator injected at 6 to 7 gpm in 5-foot-long intervals. At the conclusion of the initial remedial injection and monitoring, NYSDEC decided that no further remediation would be performed on OU-2 for the Hexagon Laboratories site.

Site Health Assessment- Last Update: 06/12/2008

Soils contaminated with volatile organic compounds (VOCs) have been excavated to bedrock across most of the site and disposed of properly eliminating the potential for exposure. Groundwater will be remediated using chemical oxidation. Although groundwater is contaminated with VOCs, the area surrounding the site is served by public water. Therefore, exposure to contaminated groundwater is not expected.

	Start		End	
OU 00				
OGC Docket - Environmental Easement	8/20/15	TRM	8/20/15	TRM
OGC Docket - Environmental Notice	12/22/11	ACT	3/7/13	ACT
Periodic Review	5/16/12	ACT	11/16/12	ACT
Site Management	3/31/12	ACT	3/31/42	PLN
OU 01				
Reclass Pkg.	5/31/17	PLN	10/31/17	PLN
Remedial Action	3/29/05	ACT	9/26/06	ACT
Remedial Design	11/17/01	ACT	12/12/02	ACT
Remedial Investigation	2/1/96	ACT	2/29/00	ACT
Site Characterization	8/1/91	ACT	3/1/93	ACT
		ACT	10/1/97	ACT

Remedial Design	4/1/97	ACT	5/1/97	ACT
OU 02				
OGC Docket - Environmental Easement	1/6/12	TRM	1/6/12	TRM
Remedial Action	2/1/10	ACT	3/31/12	ACT
Remedial Design	11/18/03	ACT	2/22/11	ACT
Remedial Investigation	2/1/96	ACT	7/9/02	ACT

Remedy Description and Cost

Remedy Description for Operable Unit 01

Based upon the results of the RI/FS the NYSDEC has selected excavation and offsite disposal of contaminated soil.

The components of the remedy are as follows:
1. Removal of the overburden (soil above bedrock) to bedrock or six feet below ground surface whichever is shallower in the western yard.
2. Removal of the overburden in the east yard to six feet below ground surface or to the water table whichever is shallower.
3. Replacement of the overburden with clean fill.

Total Cost $2,266,000

DATE: 6/20/2017

Site Code: 203003 **Site Name:** Hexagon Laboratories

Remedy Description for Operable Unit 02

Groundwater treatment using chemical oxidation or dual phase vapor extraction in conjunction with the OU1 soils remedy

1. A remedial design program including pilot tests to verify the components of the conceptual design and provide the details necessary for the construction, operation and maintenance, and monitoring of the remedial program. This will include a pilot test to verify whether or not fracturing of bedrock on site to allow greater access to contamination in the bedrock is required.
2. Groundwater treatment using one of the following methods: installation of injection points on site and injection of Fenton's reagent, or similar oxidant, for the treatment of groundwater; or installation and operation of extraction wells on site to capture the source area of the contamination with dual phase vapor extraction and construction and operation of a treatment system for the extracted liquid and gas phases.
3. The remedial program will also include institutional controls in the form of deed restrictions or notification. Either a restriction will be recorded in the chain of title of the property by the property owner or a notification will be sent to the county clerk and placed with the property's deed to limit the use of groundwater from the affected areas as a source of potable or process water without the necessary water quality treatment as determined by the local health department authority.
4. The property owner will certify annually to the NYSDEC that these institutional controls are in place and that the site is in compliance with the institutional controls outlined in this ROD or the deed notification will be verified annually by the NYSDEC, to ensure that the institutional controls are in place and that the site is in compliance with the institutional controls outlined in this ROD.
4. Since the remedy results in untreated hazardous waste residuals remaining at the site, a long term monitoring program will be instituted. This will include the collection and analysis of groundwater samples at the site and off site on a periodic basis. This program will allow the effectiveness of the groundwater treatment system to be monitored and will be a component of the operation and maintenance for the site.
5. The operation of the components of the remedy will continue until the remedial objectives have been achieved, or until NYSDEC determines that continued operation is technically impracticable or not feasible.

Total Cost $3,130,000

OU 00 **Site Management Plan Approval: 03/31/2012** **Status: ACT**

DATE: 6/20/2017

Site Code: 203003 **Site Name:** Hexagon Laboratories

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Site Management Form
6/20/2017

SITE DESCRIPTION

SITE NO. 203003

SITE NAME Hexagon Laboratories

SITE ADDRESS: 3536 Pear Tree Avenue ZIP CODE: 10475

CITY/TOWN: Bronx

COUNTY: Bronx

ALLOWABLE USE: Commercial/ Industrial

SITE MANAGEMENT DESCRIPTION

SITE MANAGEMENT PLAN INCLUDES:

IC/EC Certification Plan	Yes
Monitoring Plan	Yes
Operation and Maintenance (O&M) Plan	Yes

Periodic Review Frequency: every five years

Periodic Review Report Submittal Date:

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF ENVIRONMENTAL REMEDIATION
Site Classification Report

DATE: 6/20/2017

Site Code: 203003 **Site Name:** Hexagon Laboratories

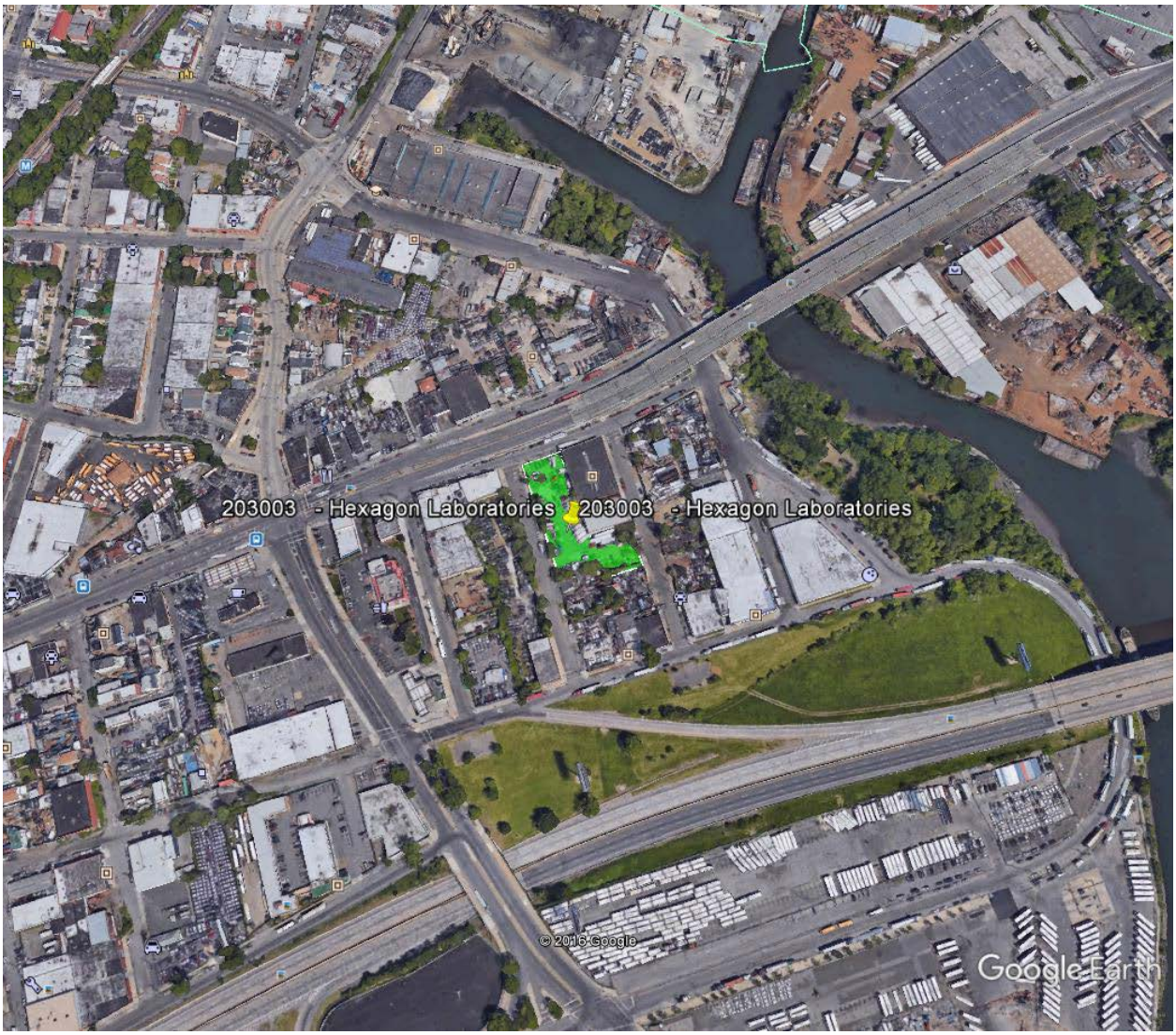
Description of Institutional Control

HEXAGON LABORATORIES

HEXAGON LABORATORIES-NY 3536 PEARTREE AVE
3536 PEARTREE AVENUE
Environmental Notice
Block: 5283
Lot: 001
Sublot: 000
Section: 000
Subsection: 000
S_B_L Image: 52830043
Ground Water Use Restriction
Site Management Plan

Description of Engineering Control

HEXAGON LABORATORIES- Institutional Control Instrument
HEXAGON LABORATORIES-NY 3536 PEARTREE AVE
3536 PEARTREE AVENUE
Site Management Plan
Block: 5283
Lot: 001
Sublot: 000
Section: 000
Subsection: 000
S_B_L Image: 52830043
Soil Cover


203003 - Hexagon Laboratories
203003 - Hexagon Laboratories
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NEW YORK STATE OF OPPORTUNITY. Department of Health

ANDREW M. CUOMO
Governor

HOWARD A. ZUCKER, M.D., J.D.
Commissioner

SALLY DRESLIN, M.S., R.N.
Executive Deputy Commissioner

May 11, 2017

Michael Cruden, Director
Remedial Bureau E
Division of Environmental Remediation
NYS Department of Environmental Conservation
625 Broadway, 12th Floor
Albany, New York 12233

Re: **Final Engineering Report and Site Management Plan**
Hexagon Laboratories
Operable Unit 2 (Groundwater)
Site #203003
Bronx County

Dear Mr. Cruden:

At your request, we have reviewed the March 2013 *Final Engineering Report* and March 2013 *Site Management Plan* (as amended February 2017*)* for the referenced site. I understand that remedial activities completed included hydraulic fracturing of on-site bedrock and in-situ chemical oxidation. In addition, as part of Operable Unit 1 (on-site soil), the majority of on-site soils were excavated to bedrock.

Institutional controls in the form of a deed restriction have been imposed to address human exposures to residual soil, groundwater, and soil vapor contamination at the site. The easement restricts the use of the property to commercial or industrial use as described in 6 NYCRR Part 375-1.8 (g) and prohibits the use of groundwater at the site as a source or potable water. Access to the vacant property is controlled and the site is covered by a minimum of 24 inches of clean soil, geotextile fabric and 6 inches of crushed bluestone gravel. Monitoring at the site will include the collection of groundwater samples and soil vapor samples in accordance with the Site Management Plan. Compliance with the approved Site Management Plan and annual certification by the property owner to the New York State Department of Environmental Conservation will ensure that the institutional and engineering controls remain effective.

Based on this information, I believe that the remedial actions have been satisfactorily completed in accordance with the June 2002 Record of Decision and that measures are in place to prevent human exposures to residual contamination at the site. If you have any questions, please contact me at (518) 402-7860.

Sincerely,

Justin H. Deming
Chief - Regions 2, 4, & 8
Bureau of Environmental Exposure Investigation

ec: K. Anders / B. Boyd / e-File
C. Westerman – NYSDOH MARO
M. Mason – NYSDEC Central Office
J. O'Connell – NYSDEC Region 2

Checklist for Final Engineering Report (FER) Approval

Applies to sites in the Brownfield Cleanup Program (BCP), Environmental Restoration Program (ERP), Voluntary Cleanup Program (VCP) and Inactive Hazardous Waste Disposal Site Program (SSF)

Site Name: Hexagon Laboratories Site, OU-1 and OU-2 (groundwater remediation)
Municipality:
County: Bronx County
Site No.:203003

This FER is for a project which:

☑ Includes a summary of one or more construction completion reports (CCRs) - if checked the FER must reference of these previous CCRs for the areas identified below.
□ Is for a single remedial action

All FERs submitted to DEC for approval will be prepared by an individual licensed or otherwise authorized in accordance with article 145 of the education law of the State of New York to practice the profession of engineering, and include the following:

Technical Content of the Report:

The FER must include the following:

☑ **Yes** Clear identification of the boundaries of the site as described in the Brownfield Cleanup Agreement (BCA), ERP State Assistance Contract, Voluntary Cleanup Agreement, or for a Superfund site as defined in the Order on Consent or the Inactive Hazardous Waste Disposal Site Registry.

☑ **Yes** ☐ **N/A** Clear identification of the boundaries of the real property subject to the environmental easement or other institutional controls, if different than the site boundaries described above.

- ☑ **Yes** A metes and bounds description and survey map must be included in the FER which corresponds to the above site boundaries. If no survey was required as part of and institutional control, (i.e., for Track 1 or unrestricted remedies of an entire tax parcel), then these can be the metes and bounds description from the property deed and the property tax map.

- ☑ **Yes** A description of the remedial activities completed at the site, including previous CCRs and the project which is the subject of this FER, completed in accordance with the remedial work plan(s) and/or decision document(s) for the site.

- ☑ **Yes** ☐ **N/A** A complete description of any ICs/ECs employed at the site.

- ☑ **Yes** Identification of the cleanup levels applied to the remedial actions, for each media of concern and area of concern at the site.

☑ **Yes** A summary of the implementation of the remedial actions, which includes as appropriate:

N/A A description of any problems encountered during construction and their resolution;

N/A A description of changes to the design documents and why the changes were made; including documentation of the approval of the change by DEC.

☑ Quantities and concentration of contaminants removed or treated;

N/A A listing of the waste streams, quantity of materials disposed and where they were disposed.

☑ **Yes** The FER substantially follows the guidance provided in DER-10: Technical Guidance for Site Investigation and Remediation and specifically includes the following, as appropriate to the remedy:

☐**Yes** ☐**No** ☑ **N/A** A detailed description of site restoration activities pursuant to DER-10.

☐**Yes** ☐**No** ☑ **N/A** A detailed description of the source and quality of imported fill pursuant to DER-10.

☑ **Yes** ☐**No** ☐**N/A** For active groundwater remedial actions consisting of groundwater extraction or control: The FER should also include figures representative of flow conditions immediately preceding initiation of the remedial action and flow conditions representative of pumping conditions required by the remedy.

☑ **Yes** ☐**No** ☐**N/A** For SSF and ERP projects, where State funding is provided: A detailed summary of actual costs including bid tabulations and change orders.

Tables and Figures: **Included** ☑ **Yes** ☐**No** ☐**N/A**

As set forth in DER-10 tables and figures presenting post-remedial data as appropriate to document the satisfactory completion of the remedial action. The figure/tables should clearly indicate the nature and extent of any contamination remaining at the site.

As-Built Drawings: **Included** ☑ **Yes** ☐**No** ☐**N/A**

"As-built" drawings, with a NYS P.E. stamp and signature on each drawing, were provided. The as-built drawings must identify:

☑ **Yes** The boundaries of the site, and if different, the real property subject to the environmental easement; other institutional controls must be incorporated on all figures.

☑ **Yes** ☐**N/A** The location and extent of all engineering controls including, without limitation, slurry walls, treatment units, piping and instrumentation wiring or other remedial structures which will remain in place after completion of the remedial action.

☑ **Yes** ☐**No** ☐**N/A** Permanent survey markers for horizontal and vertical control for site management, where required.

☐**Yes** ☐**No** ☑ **N/A** For projects with soil covers and/or caps: the areal and vertical (depth) extent of the covered/capped area, including identification of buildings and/or paving which are

considered part of the site cover/cap as well as a description of the material and depths of the demarcation layer.

☐ **Yes** ☐ **No** ☑ **N/A** (See OU1) For projects with soil removals: the limits of the excavation, the depth of the excavation and location of all documentation samples.

☐ **Yes** ☐ **No** ☑ **N/A** (See Ou1) For projects with underground storage tank removals: the size and contents of the tank(s) identified and addressed by the remedy, the surveyed location of the tanks removed or abandoned in place and the extent of any soil removal as per above.

Electronic Attachments: **Included** ☑ **Yes** ☐ **No** ☐ **N/A**
The following information should be submitted only in an electronic format that is acceptable to the DER with the FER.

☐ **Yes** ☐ **No** ☑ **N/A** Copies of all fully executed manifests documenting off-site transport and disposal of all material deemed hazardous or solid wastes.
☑ **Yes** ☐ **No** ☐ **N/A** All analytical data for pre and post-excavation samples, soil backfill analyses, treated water effluent analyses, and waste disposal characterizations, including all laboratory data sheets and the required laboratory data deliverables pursuant to DER-10.
☐ **Yes** ☐ **No** ☑ **N/A** Photographs

EQuIS Data Packages
☐ **Yes** ☐ **No** ☐ At a minimum, post-excavation soil data and baseline groundwater groundwater data must be submitted and accepted into EQuIS.

Site Management Plan (SMP):
☐ **N/A** If none is required for the remedy which is the subject of this FER, check here.
☑ **Yes** The approved SMP is included in, or specifically referenced by, the FER.
☐ **Yes** The required certification regarding the SMP is included in the Certification Section below.

Environmental Easement or Deed Restriction (where applicable)
☐ **N/A** If none is required for the remedy which is the subject of this FER, check here.
☑ **Yes** A filed copy of the environmental easement or deed restriction with proof of filing with the responsible municipal authority is included in the FER or has been provided to DEC.
☑ **Yes** A certification that the easement or deed restriction has been filed and the municipalities having jurisdiction over the easement or deed restriction have been notified is required. See Certification Section below for the language of this certification.
☑ **Yes** ☐ **No** The County Recording Identifier number is provided in the FER.

Financial Assurance
☑ **N/A** If none is required for the remedy which is the subject of this FER, check here.
☐ **Yes** ☐ **No** ☐ **N/A** Identify the financial assurance mechanisms required for the site and include the copy of the executed mechanism.
☐ **Yes** A certification that the Financial Assurance has been submitted by the applicant must be included in the FER. See Certification Section below for the language of this certification.

Citizen Participation
☐ **Yes** (BCP Only) A fact sheet was issued to the site contact list after the FER was submitted, but prior

to DEC approval of the FER.
☐ **Yes** (BCP Only) A fact sheet to the site contact list will also be issued within 10 days of when the Certificate of Completion is issued by DEC and, if applicable, will include a summary of the institutional and/or engineering controls implemented by the remedy.
☑ **Yes** (SSF Only) A Notice of the COC/Reclassification shall be combined into one Fact Sheet and mailed to the site contact list no sooner than 20 days after issuance of the of the COC. If the site is being delisted, the notice may be mailed immediately; allow for a 30 day public comment period and the classification will be changed 60 days after the COC issuance (or end of comment period if later)
☐ **N/A** (ERP)

FER Professional Engineer Certification and Stamp: **Included ☑ Yes ☐ No**

The FER will be prepared, stamped and the following certification signed by an individual licensed or otherwise authorized in accordance with article 145 of the education law to practice the profession of engineering:

☑ I, _____, am currently a registered professional engineer licensed by the State of New York, I had primary direct responsibility for implementation of the remedial program activities, and I certify that the [Remedial Action Work Plan or Remedial Design] was implemented and that all construction activities were completed in substantial conformance with the Department-approved [Remedial Action Work Plan or Remedial Design].

Included ☑ Yes ☐ No

If the RAWP or RD identifies time frames to be achieved by the remedial program:

☑ I certify that the data submitted to the Department with this Final Engineering Report demonstrates that the remediation requirements set forth in the [Remedial Action Work Plan or Remedial Design] and in all applicable statutes and regulations have been or will be achieved in accordance with the time frames, if any, established for the remedy.

Included ☑ Yes ☐ No

☑ I certify that all use restrictions, Institutional Controls, Engineering Controls, and/or any operation and maintenance requirements applicable to the Site are contained in an environmental easement created and recorded pursuant ECL 71-3605 and that all affected local governments, as defined in ECL 71-3603, have been notified that such easement has been recorded.

Included ☑ Yes ☐ No ☐ N/A

☑ I certify that a Site Management Plan has been submitted for the continual and proper operation, maintenance, and monitoring of all Engineering Controls employed at the Site, including the proper maintenance of all remaining monitoring wells, and that such plan has been approved by Department.

Included ☑ Yes ☐ No ☐ N/A

If financial assurance is required:

☐ I certify that any financial assurance mechanisms required by the Department pursuant to Environmental Conservation Law have been executed.

Included ☐ Yes ☐ No ☑ N/A

☑ I certify that all documents generated in support of this report have been submitted in accordance with the DER's electronic submission protocols and have been accepted by the Department.

Included ☑ Yes ☐ No

☑ I certify that all data generated in support of this report have been submitted in accordance with the Department's electronic data deliverable and have been accepted by the Department.

Included ☑ Yes ☐ No

☑ I certify that all information and statements in this certification form are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law. I, [name], of [business address], am certifying as Owner's Designated Site Representative (and if the site consists of multiple properties): [and I have been authorized and designated by all site owners to sign this certification] for the site.

Included ☑ Yes ☐ No

****

For DEC Internal Use Only:

Site Contact List:
☐ **N/A** (BCP, ERP, SSF if site locality was canvassed for list serve)
☑ **Yes** (SSF if not exempt thru list serve participation and deemed necessary by ADD) Provide to SCS as defined in Part 375-1.2(as). For additional guidance in preparing the SCL, go to http://internal.dec.state.ny.us/der/der309.html

UIS:

Update Remedial Site Information on Main Page

- ☑ **Site Description:** For guidance see http://internal.dec.state.ny.us/der/der274.html
- ☑ **Site Environmental Assessment:** Be sure it reflects conditions after the remedy is implemented (see http://internal.dec.state.ny.us/der/der274.html)
- ☑ **Site Health Assessment:** request from DOH to reflect post-remediation conditions.
- ☑ **Site Name, Address, & Size:** verify and notify SCS for changes
- ☑ **Contacts**: verify owner and all other affiliations are accurate and complete
- ☑ **Easement Identifier:** Enter the County Recording Identifier using the Cross Reference button on the main site page.
- ☐ **Clean Up Track:** (for BCP sites) provide to SCS for data entry

Class History File - A Class History file (A to C) should have been auto-generated when the COC project was created. However, for older projects, this may not have occurred, and one must be requested from Site Control. The Basis for Classification should be entered as follows:

- ☑ **Basis for Classification Change:** Use the standard language for this type of reclassification "Approval of the FER constitutes final approval of the Department's decision to reclassify the site to a class C. The classification in the UIS will be changed upon COC issuance and associated citizen participation." (see http://internal.dec.state.ny.us/der/der256.html)

IC/EC Module

☑ Property information is complete and accurate for all parcels

☐ Control information: If UNRESTRICTED USE/TRACK 1, check No Controls Needed in site property details

ICs: ☑ **Yes** Environmental Notice, Site Management Plan, Groundwater Use Restriction or; ☐ **N/A**

ECs: ☑ **Yes (**indicate all) Fencing and Locked Monitoring Well or; ☐ **N/A**

☑ Dates - applicable dates, e.g. ☑ Control In Place ☑ (21st February 2013) date (filed with County Clerk)

☑ Control Description - provide a summary of restrictions, in sufficient level of detail to list on the Site Management Form.

- Exposure to remaining contamination is prevented through a well cover system:
  - Locked j-plug
  - Bolted flush-mounted cover over the well
- The site is enclosed in chain-link fence topped with barbed wire.
- Groundwater monitoring wells should be continued to be monitored

UIS Projects - as applicable, verify start and end dates, status for all projects, especially;

☐ RA End Date – Set this for the month the COC issuance is anticipated. This will auto-update the COC End Date, SM Start Date, and first PRR dates. (OU-1 RA end date: 9/26/2012) (OU-2 RA end date: 3/31/2012)

Filed in DECdocs - as applicable, verify that all applicable documents or equivalent, are present and properly named;

☑ **Agreement/Order/SAC:** (e.g., agreement.C231011.2006-01-01.BCA.pdf)

☑ **Environmental Easement / Deed Restr.:** w/co. Clerk Certificate (e.g., easement.130058.2006-01-01.pdf)

☑ **Site Management Plan:** (e.g., workplan.130058.2006-01-01.SMP.pdf)

☑ **Final Engineering Report:** (e.g., report.E915182.2006-01-01.FER.pdf)

☑ **Site Boundary Map:** Provide tax map, or other that clearly indicates the site boundaries.

The review of the Final Engineering Report has been completed and found to satisfy all applicable requirements and guidance as detailed above. The Final Engineering Report is therefore recommended for approval.

Completed by: Michael Mason Date: 6/22/2017

Project Manager

Reviewed by: _____ Date: 6/22/2017

Section Chief/Regional HWR Engineer

Site Management Plan (SMP) Checklist
for BCP ERP SSF and VCP Sites

Site Name: Hexagon
Location: Bronx
Site No: 203003
Project Manager: Michael Mason

The SMP for a site remedial program must include at a minimum an Institutional and Engineering Control Plan as well as provision for the periodic certification of the institutional control and engineering controls (IC/EC certification) and may include, as required by the remedy, a Site Monitoring Plan and Operation & Maintenance Plan. Each of these individual areas of reporting must the minimum requirements detailed below.

The SMP being reviewed addresses:

☑ The entire site

☐ An operable unit of the site identified as: _____

☐ An IRM for operable unit _____ identified as: _____

☐ A groundwater use restriction or short term engineering control for an otherwise unrestricted use site

The SMP period for this site, after an initial 18 month review, will be:

☑ **Annually** ☐ **Every 3 years** ☐ **Every 5 years** ☐ **Every 10 years**

Institutional and Engineering Control Plan:

☑ Must include a complete description of all institutional and/or engineering controls employed at the site, including the mechanisms that will be used to continually implement, maintain, monitor, and enforce such controls both by the applicant, the applicant's successors and assigns, and by state or local government is presented.

☑ Appropriate plans for implementation of the engineering and institutional controls, such as for handling soils removed from beneath a soil cover or cap during maintenance or redevelopment of the site. This includes media-specific implementation plans, such as plans for:

☑ Soil management which detail procedures for handling soil excavated from below a soil cover or cap during maintenance or redevelopment of the site (e.g., a soils management plan);

N/A Installation/operation of sub-slab vapor depressurization systems, or other types of systems to address vapor intrusion;

☑ Engineering control inspection plans, for the remedy as implemented or to be installed as part of the site development, such as for a cap or cover system.

☑ A periodic review report which includes the IC/EC certification as well as all other reporting of the IC/ECs, site monitoring and/or operation and maintenance of the remedy. (Section 5)

Institutional Control and Engineering Control (IC/EC) Certification:

The applicant or site owner must make a periodic certification of the IC/EC to the Department. The requirements of this periodic IC/EC certification will be described in the SMP and the certification must be included in the periodic review report, which is prepared and submitted for the Department-approved certification period. The IC/EC certification will clearly identify the periodic review period and certify that:

☑ The institutional controls and/or engineering controls employed at such site are:

- unchanged from the date the control was put in place, unless otherwise approved by the Department;
  - o in place and effective;
  - o performing as designed;
- nothing has occurred that would impair the ability of the controls to protect the public health and environment; and
- nothing has occurred that constitutes a violation or failure to comply with any operation and maintenance plan for such controls.

☑ Use of the site complies with the environmental easement;

☑ Access to the site will be provided to the Department to evaluate the remedy and verify continued maintenance of such controls.

☐ If a financial assurance mechanism is required, the mechanism remains valid and sufficient for the intended purpose. N/A

If the remedy requires only institutional controls, the certification may be made by the property owner. If the remedy includes engineering controls, the certification must be made by a qualified environmental professional or, if engineering evaluations are required, a licensed professional engineer.

☐ N/A For BCP sites: For those sites determined to be non-significant threat sites, but where contaminants in groundwater contravene drinking water standards at the site border, in addition to the items noted above; the remedial party will also have to certify:

☐ That no new information has come to the site owner`s attention, including groundwater monitoring data from wells located at the site boundary, to indicate that the assumptions made in the qualitative exposure assessment of off-site contamination are no longer valid; and

☐ Every five years, that the assumptions made in the qualitative exposure assessment remain valid.

Site Monitoring Plan:

☐ No Site Monitoring Plan is required for the remedy controlled by this SMP

Or, the SMP includes, as appropriate for the site remedy, a sampling and analysis plan for the monitoring groundwater, soil vapor, or another media as identified by the decision document for the site, designed to:

- ☑ Assess the remedy's compliance with groundwater standards.
- ☑ Assess the remedy's compliance with the cleanup objectives of any other impacted media.
- ☑ Evaluate site information periodically to confirm that the remedy continues to be effective for the protection of public health and the environment.
- ☑ Prepare the necessary reports of the results of this monitoring for a period determined by the Department.

Operation & Maintenance Plan:

- ☑ No O&M Plan is required for the remedy controlled by this SMP

Or, the SMP includes, as appropriate for the site remedy, an O&M plan with provision to:

- ☐ Identify the operation and maintenance activities necessary for the continued operation of the components of the remedy, including provision for evaluation of the systems and recommendations to optimize performance.
- ☐ Evaluate site information periodically to confirm that the remedy continues to be effective for the protection of public health and the environment.
- ☐ Prepare the necessary reports of the results of this evaluation for a period determined by the Department.

********** For DEC Internal Use Only:

UIS Updates

Remedial Site Information page

- ☑ **Verify/Update Remedial Site Information** - Project update guidance for sites descriptions, environmental assessments as well as basis for classification/threat statements may be found at the following internal web address: http://internal/der/der274.html
  - ☑ **Site Description**
  - ☑ **Site Environmental Assessment**
  - ☑ **Site Health Assessment**: request from DOH by the DER PM, entered by SCS
  - ☑ **Site Name, Address, & Size**: verify and notify SCS to make adjustments
  - ☑ **View Contacts**: verify that all affiliation information is accurate, up-to-date, and complete
  - ☑ **Agreement/Order Ref. No.** (Cross Refs page link from main site page): enter corresponding identifying reference number.
  - ☑ **Significant threat** (on main page): verify status, contact SCS to make adjustments
  - ☑ **Allowable Use** (on main site page): verify most restrictive use allowed via drop down, entered by the SCS

For BCP sites only: N/A

- ☑ **BCP Clean Up Track** (on main site page for BCP sites): enter track via drop down, selection available in remedial projects only
- ☑ **Percent En-zone** (via Extra Details link on main site page) verify and/or select via drop down
- ☑ **BCP Off-Site Status** (enter in the Extra Details link on main site page) select via drop down (for sites with off-site issues)

☑ **Projects** (confirm status (ACT/PLN) for all projects, especially:

- ☑ Remedial Investigation/Design (ACT/ACT)
- ☑ Interim Site Management (ACT/ACT) (N/A)
- ☑ Remedial Action (ACT/PLN)
- ☑ Certificate of Completion (PLN/PLN) (N/A)
- ☑ Site Management (PLN/PLN)
- ☑ Periodic Review (PLN/PLN) **Monitored by PM, No RP

IC/EC Module

☑ **Site Property Information Summary Page**

- Verify that property information is complete and accurate for all parcels)
- Verify that “owner information” is complete and accurate for all parcels
- Verify that “contact information” is complete and accurate (this will be the certifying party)

☑ **Control Details Page**

Add Control information as follows:

☑ Options for Controls are listed below in hierarchical order - select the highest level that exists for the site:
- o Environmental Easement
- o Deed Restriction
- ☑ Environmental Notice
- o Decision Document
- o Other Controls

☑ ICs – Environmental Notice, Site Management Plan, Groundwater Use Restriction

☑ ECs – Soil Cover System, Locked Monitoring Well Cover System, and fencing

☑ Control Description - provide a bulleted summary of controls from the SMP.

- Cover system is comprised of:
  - Minimum 24 inches of clean soil
  - Geotextile fabric layer
  - 6 inches of crushed bluestone (gravel)
  - This should be monitored annually
- Exposure to remaining contamination is prevented through a well cover system:
  - Locked j-plug
  - Bolted flush-mounted cover over the well
- The site is enclosed in chain-link fence topped with barbed wire.
- Groundwater monitoring wells should be continued to be monitored

The controls (check boxes) and description are part of the certification, therefore be concise and accurate.

Documents required in DERDocs

☑ Agreement/Order/SAC, ROD, SMP (upon approval), and any other appropriate and pertinent documents pertaining to verifying IC/ECs

Completed by: Michael Mason Date: 6/22/2017

Project Manager

Reviewed by: _____ Date: 6/22/2017

Section Chief/Regional HWR Engineer