DECISION DOCUMENT

USAI Lighting Facility
Brownfield Cleanup Program
New Windsor, Orange County
Site No. C336087
September 2015

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

DECLARATION STATEMENT - DECISION DOCUMENT

USAI Lighting Facility
Brownfield Cleanup Program
New Windsor, Orange County
Site No. C336087
September 2015

Statement of Purpose and Basis

This document presents the remedy for the USAI Lighting Facility 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 USAI Lighting Facility 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. Remedial Design/Green Remediation

A remedial design program will be implemented to provide the details necessary for the construction, operation, maintenance, and monitoring of the remedial program. Green remediation principles and techniques will be implemented to the extent feasible in the design, implementation, and site management of the remedy as per DER-31. The major green remediation components are as follows;

- Considering the environmental impacts of treatment technologies and remedy stewardship over the long term;
- Reducing direct and indirect greenhouse gas and other emissions;
- Increasing energy efficiency and minimizing use of non-renewable energy;
- Conserving and efficiently managing resources and materials;
- Reducing waste, increasing recycling and increasing reuse of materials which would otherwise be considered a waste;
- Maximizing habitat value and creating habitat when possible;
- Fostering green and healthy communities and working landscapes which balance ecological, economic and social goals; and
- Integrating the remedy with the end use where possible and encouraging green and sustainable re-development.

2. Excavation

Excavation and off-site disposal of contaminant source areas, including:

- grossly contaminated soil, as defined in 6 NYCRR Part 375-1.2(u);
- soil containing PCBs above 1 ppm in surface soils and 10 ppm in subsurface soils;
- soil containing PAHs exceeding 500 ppm;
- Light Non-Aqueous Phase Liquids (LNAPL);
- soil containing visual LNAPL;
- soil which exceed the protection of groundwater soil cleanup objectives (PGWSCOs), as defined by 6 NYCRR Part 375-6.8 for those contaminants found in site groundwater above standards; and
- soil that create a nuisance condition, as defined in Commissioner Policy (CP) 51 Section G.

There are three source areas to be excavated: southwest of the main building (Former Affron MOSF Area - Spill No.9903745 and No. 0913553); west of the main building (former Transformer Pad); and a small area northeast of the main building. Approximately 6,800 cubic yards of soil meeting these criteria is expected to be removed. Excavated on-site soil which does not exceed the excavation criteria may be used to backfill the excavation or re-grade the site, provided the soil is placed above the water table and below the site cover. On-site soil which does not exceed the above excavation criteria or the protection of groundwater SCOs for any constituent may be used anywhere beneath the cover system. Clean fill meeting the requirements of 6 NYCRR Part 375-6.7(d) for the lower of the SCOs for the protection of groundwater or for commercial use will be brought in to replace the excavated soil and establish the designed grades at the site. The site will be re-graded to accommodate installation of a cover system as described in remedial element 3.

3. Site Cover

A site cover will be required to allow for commercial use of the site. The cover will consist either of the structures such as buildings, pavement, sidewalks comprising the site development or a soil cover in areas where the upper one foot of exposed surface soil will exceed the applicable SCOs. Where the 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) for the lower of the SCOs for the protection of groundwater or for commercial use.

4. 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 Orange County DOH; and
- requires compliance with the Department approved Site Management Plan.

5. Site Management Plan

A Site Management Plan is required, which includes the following:

a. an Institutional and Engineering Control Plan that identifies all use restrictions and engineering controls for the site and details the steps and media-specific requirements necessary to ensure the following institutional and/or engineering controls remain in place and effective:
Institutional Controls: the Environmental Easement discussed in paragraph 5 above.
Engineering Controls: the soil cover discussed in paragraph 3 above.

This plan includes, but may not be limited to:

- an Excavation Plan which details the provisions for management of future excavations in areas of remaining contamination;
- a description of the provisions of the environmental easement including any land use, and groundwater use restrictions;
- a provision for implementing actions recommended to address exposures related to soil vapor intrusion for currently occupied buildings where a soil vapor intrusion evaluation is on-going.
- a provision for evaluation of the potential for soil vapor intrusion for new buildings developed on the site, including provision for implementing actions recommended to address exposures related to soil vapor intrusion;
- a provision 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 and/or engineering controls.

b. a Monitoring Plan to assess the performance and effectiveness of the remedy. The plan includes, but may not be limited to:
- monitoring of groundwater to assess the effectiveness of the excavation of source material in reducing groundwater contaminant levels;
- a schedule of monitoring and frequency of submittals to the Department; and
- monitoring for vapor intrusion for new buildings developed on the site, as may be required by the Institutional and Engineering Control Plan as discussed in section a. above.

Declaration

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

September 15, 2015
Date

George Heitzman, Director
Remedial Bureau C

DECISION DOCUMENT

USAI Lighting Facility
New Windsor, Orange County
Site No. C336087
September 2015

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:

Newburgh Free Library
Attn: Jean Stiller
124 Grand Street
Newburgh, NY 12550
Phone: (845) 291-2332

NYSDEC Region 3 Headquarters
Attn: Sarah Shepard
21 South Putt Corners Road
New Paltz, NY 12561

Phone: (845) 256-3154

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 11.8 acre site is comprised of two tax parcels at 1116 and 1126 River Road in the Town of New Windsor, Orange County. The site consists of those portions of the two parcels that are above the mean high water level of the Hudson River.

Site Features: The northern parcel, located at 1126 River Road, contains the active LED light manufacturing plant and warehouse/distribution facility. The building occupies approximately 2.5 acres with associated paving and roadways occupying another 5.7 acres. The southern parcel, located at 1116 River Road, has two vacant structures on it. One of the structures is of concrete block construction and the other is metal-sided.

The site is bounded by railroad tracks to the east, River Road to the west, a soil reclamation facility to the south and a Major Oil Storage Facility (MOSF) to the north. The Hudson River is located further east of the site. In addition, there is a small pond or wet area in the north central part of the site that is hydraulically connected to the Hudson River and fluctuates with the tides.

Current Zoning and Land Use: The site is located within a Planned Industrial District (PID). The purpose of the PID is to encourage a full range of non-nuisance environmentally sensitive industrial activities. The surrounding parcels are currently used for fuel storage/distribution, petroleum soil processing, auto repair body shop, and transportation right-of-ways. To the south, a residential area is located within 100 feet of the site on the western side of River Road.

Past Use of the Site: In 1913, the northern portion of the site was used as a brick works and manufacturer of rail equipment. In 1957, the northern part of the site became part of the Mastic Tile Corporation, and the southern part of the site became the Affron MOSF (NYSDEC MOSF No. 3-1380). By the late 1960s, the northern part of the site was occupied by Ruberoid Floor Tile Division. The southern part of the site continued to operate as a MOSF until the mid-1990s, at which time it had seven bulk fuel oil storage tanks. In 1999, two 1,000 gallon underground petroleum storage tanks were removed. These were used for storage of fuel oil and diesel. Approximately 133 tons of soil was removed. In 2008 and 2010, subsurface soil was tested and groundwater monitoring began as part of the petroleum stipulation agreement with NYSDEC.

Site Geology and Hydrogeology: The ground surface across most of the property is relatively flat because this area along the Hudson River was built up using various fill materials. The types of historic fill include an extensive layer of crushed brick and other debris mixed with well sorted sand and gravel deposits. The native soil present below the man-made fill is silt and clay.

Groundwater is encountered at relatively shallow depths beneath the site, 6 to 8 feet below ground surface. The water-bearing units appear to be fill material found locally along the Hudson River shoreline. Groundwater flow is to the east and southeast, towards the Hudson River, and may be tidally influenced.

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
- soil
- indoor air
- sub-slab vapor

6.1.1: Standards, Criteria, and Guidance (SCGs)

The remedy must conform to promulgated standards and criteria that are directly applicable or that are relevant and appropriate. The selection of a remedy must also take into consideration guidance, as appropriate. Standards, Criteria and Guidance are hereafter called SCGs.

To determine whether the contaminants identified in various media are present at levels of concern, the data from the RI were compared to media-specific SCGs. The Department has developed SCGs for groundwater, surface water, sediments, and soil. The NYSDOH has developed SCGs for drinking water and soil vapor intrusion. For a full listing of all SCGs see: http://www.dec.ny.gov/regulations/61794.html

6.1.2: RI Results

The data have identified contaminants of concern. A "contaminant of concern" is a contaminant that is sufficiently present in frequency and concentration in the environment to require evaluation for remedial action. Not all contaminants identified on the property are contaminants of concern. The nature and extent of contamination and environmental media requiring action are summarized below. Additionally, the RI Report contains a full discussion of the data. The contaminant(s) of concern identified at this site is/are:

Benzo(a)anthracene	Benzene, Toluene, Ethylbenzene and
Benzo(a)pyrene	Xylenes (BTEX)
Benzo(b)fluoranthene	Naphthalene
1,3,5-Trimethylbenzene	PCB Aroclor 1260
1,2,4-Trimethylbenzene	n-Propylbenzene
2-Methlynaphthalene	Butylbenzene
Trichloroethene (TCE)	1,1,1-Trichloroethane (1,1,1-TCA)
Tetrachloroethene (PCE)	Carbon Tetrachloride

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

- groundwater

- soil
- soil vapor intrusion

6.2: Interim Remedial Measures

An interim remedial measure (IRM) is conducted at a site when a source of contamination or exposure pathway can be effectively addressed before issuance of the Decision Document.

There were no IRMs performed at this site during the RI.

6.3: Summary of Environmental Assessment

This section summarizes the assessment of existing and potential future environmental impacts presented by the site. Environmental impacts may include existing and potential future exposure pathways to fish and wildlife receptors, wetlands, groundwater resources, and surface water. The RI report presents a detailed discussion of any existing and potential impacts from the site to fish and wildlife receptors.

Nature and Extent of Contamination: Based upon the investigations conducted to date, the primary contaminants of concern (COCs) for the site include polychlorinated biphenyls (PCBs), volatile organic compounds (VOCs) and semi-volatile organic compounds (SVOC).

Soil – SVOCs detected include benzo(a)anthracene, detected at a maximum of 6.4 parts per million (ppm) and benzo(b)fluoranthene detected at a maximum of 11 ppm. The commercial soil cleanup objective (SCO) is 5.6 ppm for each compound. In addition, benzo(a)pyrene was detected at a maximum concentration of 3.4 ppm which is above the commercial SCO of 1.1 ppm. VOCs were detected above standards, including n-butylbenzene detected at a maximum of 5.5 ppm (protection of groundwater SCO of 12 ppm) and n-propylbenzene at 5.1 ppm (protection of groundwater SCO of 3.9 ppm). Metals were not detected above commercial use SCOs. PCBs were detected in soil near a former transformer pad at up to 2.26 ppm, above the commercial SCO of 1 ppm.

Sampling of soil around the perimeter of the site contained some elevated levels of contaminants above residential SCOs. However, migration of site contaminants off-site to the north or west is not expected due to the site's topography, which slopes east towards the Hudson River. Test pits conducted on the southwest portion of the site did not contain any site related contamination.

Groundwater – VOCs detected above standards include, n-butylbenzene detected at a maximum of 110 parts per billion (ppb) (groundwater standard of 5 ppb), n-propylbenzene detected at a maximum of 190 ppb (groundwater standard of 5 ppb), benzene detected at a maximum of 45 ppb (groundwater standard of 1 ppb), toluene detected at a maximum of 18 ppb (groundwater standard of 5 ppb), xylene detected at a maximum of 32 ppb (groundwater standard of 10 ppb), 1,2,4-trimethylbenzene detected at a maximum of 40 ppb (groundwater standard of 5 ppb), and 1,3,5-trimethylbenzene detected at a maximum of 12 ppb (groundwater standard of 5 ppb). Free-phase floating petroleum was discovered in two on-site groundwater monitoring wells and in test pits in two areas, one in the north and the other within the southern parcel, the former Affron Major Oil Storage Facility (MOSF).

On-site contaminants in groundwater are related to the three source areas identified on the site. Groundwater contamination from two of these source areas is not expected to migrate to any upland off-site areas to the north, west or south due to the site's proximity to the Hudson River groundwater flow direction to the east and southeast towards the Hudson River. There is the potential for groundwater contamination to migrate off-site in a small area directly southeast of the site which would quickly discharge to the Hudson River.

SVOCs detected in groundwater include 2-methlynaphthalene detected at a maximum of 11,000 ppb (groundwater standard of 50 ppb), and naphthalene detected at a maximum of 142 ppb (groundwater standard of 10 ppb). Metals and PCBs were not detected above groundwater standards.

Soil Vapor & Indoor Air - Two buildings slated for demolition are present in impacted areas and therefore are not included in the current on-site soil vapor intrusion evaluation that is on-going. A portion of the on-site building complex in the northern half of the site has been evaluated for soil vapor intrusion to date and the initial results indicate that sub-slab soil vapor is a concern, contaminants include: trichloroethene at 58.6 micrograms per cubic meter (ug/m3); tetrachloroethene at 97.6 ug/m3; 1,1,1-trichloroethane at 3,460 ug/m3, toluene at 22.6 ug/m3; m,p-xylene at 20.5 ug/m3; and carbon tetrachloride at 1.61 ug/m3. Indoor air samples contained: trichloroethene at 0.172 ug/m3; tetrachloroethene at 0.827 ug/m3; benzene at 1.06 ug/m3; toulene at 34.7 ug/m3; m,p-xylene at 96.9 ug/m3; ethylbenzene at 28.6 ug/m3; and carbon tetrachloride at 0.484 ug/m3. The evaluation to determine the potential for soil vapor intrusion to occur in the remaining on-site building spaces is currently on-going. The need for mitigation will be determined when the entire SVI evaluation for the building complex is completed.

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.*

The site is not fenced and persons who enter the site could contact contaminants in the soil by walking on the soil, digging or otherwise disturbing the soil. 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. The potential exists for people to inhale site contaminants in indoor air due to soil vapor intrusion in the existing buildings and in any future on-site building development and occupancy. Soil vapor intrusion evaluations are currently on-going in the existing on-site buildings. Soil vapor intrusion is not a concern for off-site buildings.

6.5: Summary of the Remediation Objectives

The objectives for the remedial program have been established through the remedy selection process stated in 6 NYCRR Part 375. The goal for the remedial program is to restore the site to pre-disposal conditions to the extent feasible. At a minimum, the remedy shall eliminate or mitigate all significant threats to public health and the environment presented by the contamination identified at the site through the proper application of scientific and engineering principles.

The remedial action objectives for this site are:

Groundwater

RAOs for Public Health Protection

- Prevent ingestion of groundwater with contaminant levels exceeding drinking water standards.
- Prevent contact with, or inhalation of volatiles, from contaminated groundwater.

RAOs for Environmental Protection

- Restore ground water aquifer to pre-disposal/pre-release conditions, to the extent practicable.
- Prevent the discharge of contaminants to surface water.
- Remove the source of ground or surface water contamination.

Soil

RAOs for Public Health Protection

- Prevent ingestion/direct contact with contaminated soil.
- Prevent inhalation of or exposure from contaminants volatilizing from contaminants in soil.

RAOs for Environmental Protection

- Prevent migration of contaminants that would result in groundwater or surface water contamination.

Soil Vapor

RAOs for Public Health Protection

- Mitigate impacts to public health resulting from existing, or the potential for, soil vapor intrusion into buildings at a site.

SECTION 7: ELEMENTS OF THE 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 Commercial use with site-specific soil cleanup objectives remedy.

The selected remedy is referred to as the Excavation of Petroleum & PCB-Contaminated Soil (Source Areas), SVI Evaluation, and Cover System remedy.

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

1. Remedial Design/Green Remediation

A remedial design program will be implemented to provide the details necessary for the construction, operation, maintenance, and monitoring of the remedial program. Green remediation principles and techniques will be implemented to the extent feasible in the design, implementation, and site management of the remedy as per DER-31. The major green remediation components are as follows;

- Considering the environmental impacts of treatment technologies and remedy stewardship over the long term;
- Reducing direct and indirect greenhouse gas and other emissions;
- Increasing energy efficiency and minimizing use of non-renewable energy;
- Conserving and efficiently managing resources and materials;
- Reducing waste, increasing recycling and increasing reuse of materials which would otherwise be considered a waste;
- Maximizing habitat value and creating habitat when possible;
- Fostering green and healthy communities and working landscapes which balance ecological, economic and social goals; and
- Integrating the remedy with the end use where possible and encouraging green and sustainable re-development.

2. Excavation

Excavation and off-site disposal of contaminant source areas, including:

- grossly contaminated soil, as defined in 6 NYCRR Part 375-1.2(u);
- soil containing PCBs above 1 ppm in surface soils and 10 ppm in subsurface soils;
- soil containing PAHs exceeding 500 ppm;
- Light Non-Aqueous Phase Liquids (LNAPL);
- soil containing visual LNAPL;
- soil which exceed the protection of groundwater soil cleanup objectives (PGWSCOs), as defined by 6 NYCRR Part 375-6.8 for those contaminants found in site groundwater above standards; and
- soil that create a nuisance condition, as defined in Commissioner Policy (CP) 51 Section G.

There are three source areas to be excavated: southwest of the main building (Former Affron MOSF Area - Spill No.9903745 and No. 0913553); west of the main building (former Transformer Pad); and a small area northeast of the main building. Approximately 6,800 cubic yards of soil meeting these criteria is expected to be removed. Excavated on-site soil which does not exceed the excavation criteria may be used to backfill the excavation or re-grade the site, provided the soil is placed above the water table and below the site cover. On-site soil which does not exceed the above excavation criteria or the protection of groundwater SCOs for any constituent may be used

anywhere beneath the cover system. Clean fill meeting the requirements of 6 NYCRR Part 375-6.7(d) for the lower of the SCOs for the protection of groundwater or for commercial use will be brought in to replace the excavated soil and establish the designed grades at the site. The site will be re-graded to accommodate installation of a cover system as described in remedial element 3.

3. Site Cover

A site cover will be required to allow for commercial use of the site. The cover will consist either of the structures such as buildings, pavement, sidewalks comprising the site development or a soil cover in areas where the upper one foot of exposed surface soil will exceed the applicable SCOs. Where the 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) for the lower of the SCOs for the protection of groundwater or for commercial use.

4. 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 Orange County DOH; and
- requires compliance with the Department approved Site Management Plan.

5. Site Management Plan

A Site Management Plan is required, which includes the following:

a. an Institutional and Engineering Control Plan that identifies all use restrictions and engineering controls for the site and details the steps and media-specific requirements necessary to ensure the following institutional and/or engineering controls remain in place and effective:
Institutional Controls: the Environmental Easement discussed in paragraph 5 above.
Engineering Controls: the soil cover discussed in paragraph 3 above.

This plan includes, but may not be limited to:

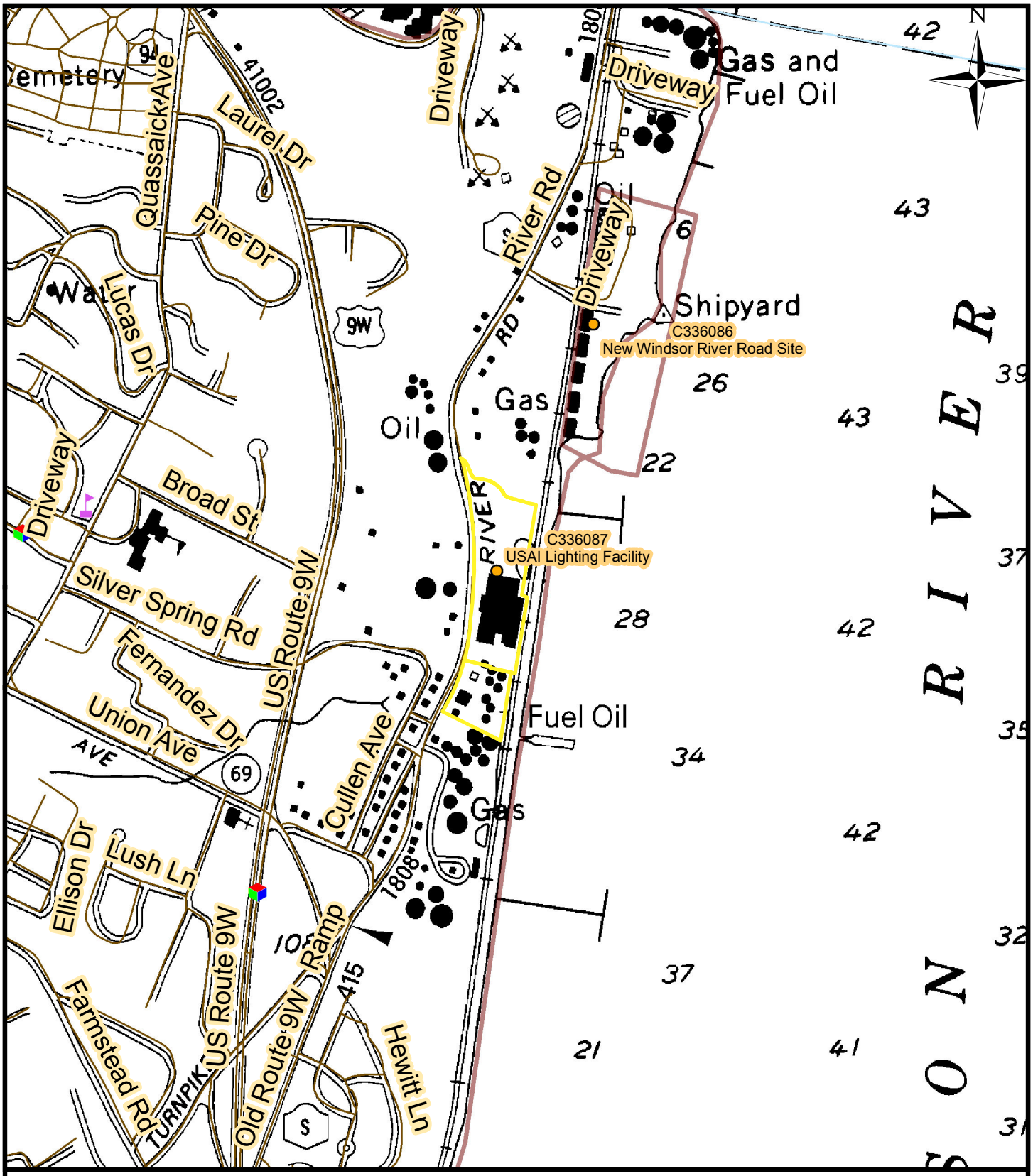
- an Excavation Plan which details the provisions for management of future excavations in areas of remaining contamination;
- a description of the provisions of the environmental easement including any land use, and

groundwater use restrictions;

- a provision for implementing actions recommended to address exposures related to soil vapor intrusion for currently occupied buildings where a soil vapor intrusion evaluation is on-going.
- a provision for evaluation of the potential for soil vapor intrusion for new buildings developed on the site, including provision for implementing actions recommended to address exposures related to soil vapor intrusion;
- a provision 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 and/or engineering controls.

b. a Monitoring Plan to assess the performance and effectiveness of the remedy. The plan includes, but may not be limited to:

- monitoring of groundwater to assess the effectiveness of the excavation of source material in reducing groundwater contaminant levels;
- a schedule of monitoring and frequency of submittals to the Department; and
- monitoring for vapor intrusion for new buildings developed on the site, as may be required by the Institutional and Engineering Control Plan as discussed in section a. above.



NEW YORK STATE Department of Environmental Conservation

Figure 1 Site Location
USAI Lighting Facility
Site No. C336087

Site Boundary

USAI Lighting

0 150 300 FT

1 inch = 150 feet

Legend

- Monitoring Well
- Soil Boring
- Test Pit
- Silt Fence
- Excavation Areas
- Site Boundary
- Orange County Tax Parcels

Project Number: 14.4337
Data Source: NYSGIS Clearinghouse, BING
Projection: State Plane NAD83 NYE (Feet)
Date: June 25, 2014
File: USAI_Figure4_11x17.mxd
GIS: C Secor

Map Note: The locations and features depicted on this map are approximate and do not represent an actual field survey.

Figure 2: Remedial Action Implementation Plan

Town of New Windsor — **Orange County, New York**

C.T. MALE ASSOCIATES
ENGINEERING, SURVEYING, ARCHITECTURE & LANDSCAPE ARCHITECTURE, D.P.C
50 CENTURY HILL DRIVE, LATHAM, NEW YORK 12110
(518) 786-7400 * FAX (518) 786-7299 * WWW.CTMALE.COM
FOUNDED IN 1910