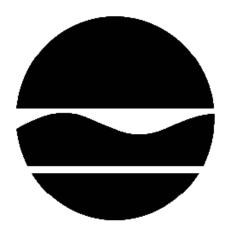
DECISION DOCUMENT

Capital Center Brownfield Cleanup Program Albany, Albany County Site No. C401070 August 2016



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

DECLARATION STATEMENT - DECISION DOCUMENT

Capital Center Brownfield Cleanup Program Albany, Albany County Site No. C401070 August 2016

Statement of Purpose and Basis

This document presents the remedy for the Capital Center 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 Capital Center 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

A remedial design program will be implemented to provide the details necessary for the construction, operation, optimization, 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 gases 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

The remnants of on-site buildings will be demolished and materials which cannot be beneficially reused on site will be taken off-site for proper disposal in order to implement the remedy.

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

• grossly contaminated soil, as defined in 6 NYCRR Part 375-1.2(u);

• removal of any underground storage tanks (USTs), fuel dispensers, underground piping or other structures associated with a source of contamination; and

• soils 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.

All on-site soils which exceed unrestricted SCOs, as defined by 6 NYCRR Part 375-6.8, will be excavated and transported off-site for disposal. Approximately 34,700 cubic yards of contaminated soil will be removed from the site.

On-site soil which does not exceed the above excavation criteria may be used to backfill the excavation to establish the designed grades at the site.

Clean fill meeting the requirements of 6 NYCRR Part 375-6.7(d) may be brought in to replace some of the excavated soil and establish the designed grades at the site.

3. Groundwater Monitoring

Periodic groundwater monitoring will be performed following excavation of the contaminated soil to assess the performance and effectiveness of the remedy and to ensure that Track 1 has been achieved.

4. Vapor Intrusion Evaluation

As part of the track 1 remedy, a soil vapor intrusion evaluation will be completed. The evaluation will include a provision for implementing actions recommended to address exposures related to soil vapor intrusion.

5. Conditional Track 1

The intent of the remedy is to achieve a Track 1 unrestricted use, therefore, no environmental easement or site management plan is anticipated. If the soil vapor intrusion (SVI) evaluation is not completed prior to completion of the Final Engineering Report, then a Site Management Plan (SMP) and Environmental Easement (EE) will be required to address the SVI evaluation and implement actions as needed; if a mitigation or monitoring action is needed, a Track 1 cleanup can only be achieved if the mitigation system or other required action is no longer needed within 5 years of the date of the Certificate of Completion.

In the event that Track 1 unrestricted use is not achieved, including achievement of groundwater and soil vapor remedial objectives, the following contingent remedial elements will be required and the remedy will achieve a Track 4 restricted residential cleanup.

6. Cover System

A site cover will be required to allow for restricted residential 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 two feet of exposed surface soil will exceed the applicable soil cleanup objectives (SCOs). Where the soil cover is required it will be a minimum of two feet of soil placed over a demarcation layer, with the upper six inches of soil of sufficient quality to maintain a vegetative layer. Soil cover material, including any fill material brought to the site, will meet the SCOs for cover material as set forth in 6 NYCRR Part 375-6.7(d). If a Track 1 of Track 2 restricted residential cleanup is achieved, a cover system will not be a required element of the remedy.

7. Institutional Control

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

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

• allow the use and development of the controlled property for restricted residential use as defined by Part 375-1.8(g), although land use is subject to local zoning laws;

• restrict the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by the NYSDOH or County DOH; as noted in Section 6.4, public water is supplied to the surrounding area; and

• require compliance with the Department approved Site Management Plan.

8. 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 above in Paragraph 6.

Engineering Controls: The Cover System discussed in Paragraph 5 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; maintaining site access controls and Department notification;

• descriptions of the provisions of the environmental easement including any land use and groundwater use restrictions;

• a provision for evaluation of the potential for soil vapor intrusion for any reoccupied existing or future buildings developed on the site, including provision for implementing actions recommended to address exposures related to soil vapor intrusion;

- provisions for the management and inspection of the identified engineering controls;
- maintaining site access controls and Department notification; and

• the steps necessary for the periodic reviews and certification of the institutional 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 and soil vapor / indoor air to assess the performance and effectiveness of the remedy;

• a schedule of monitoring and frequency of submittals to the Department;

• monitoring for vapor intrusion for any reoccupied existing or future buildings developed on the site, as may be required by the Institutional and Engineering Control Plan discussed above.

Declaration

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

Date

Robert Cozzy, Director Remedial Bureau B

DECISION DOCUMENT

Capital Center Albany, Albany County Site No. C401070 August 2016

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: <u>CITIZEN PARTICIPATION</u>

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 repository:

Albany Public Library 161 Washington Avenue Albany, NY 12210-2398 Phone: 518-427-4300

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 site is located at the corner of Broadway and Spencer Street in downtown Albany, approximately 900 feet west of the Hudson River. The site is bordered to the north by Spencer Street, to the east by Montgomery Street, to the south by commercial buildings and to the west by Broadway.

Site Features: The site consists of 16 parcels totaling about 1.8 acres. The site is vacant, almost entirely covered with one relatively small building, building slabs or paved surfaces. On September 12, 2015, a large fire significantly damaged most of the buildings on the site. Those buildings were deemed unsafe by the city and were demolished. One single-story brick and concrete building remains. As discussed in Section 7 below, the last remaining building and the remnants of on-site buildings will be demolished as a part of the remedy.

Current Zoning and Land Use: The presently vacant site is currently zoned Central Business District (C-3) which is a commercial zoning that allows for residential use. Surrounding property uses include a visitors' center, two restaurants, parking lots, a parking garage and several high-rise office buildings.

Past Use of the Site: In the past the site has been used for various manufacturing operations including a box factory, a roofing supplier, a tin shop, a meat packing plant, an insecticide factory, produce storage and a gas station that conducted auto repairs.

The site had been in the BCP previously as the Amos at Quackenbush site (Site No. C401052). Due to lack of progress on the project the Brownfield Cleanup Agreement (BCA) with the Applicant for the Amos at Quackenbush site was terminated in September 2012.

Site Geology and Hydrogeology: The top layer of soil is fill and is comprised of varying quantities of sand, silt, clay, and gravel mixed with brick, ash, wood, small roots and metal debris. This material extends to a depth of 4 to 12 feet below grade

The native soil immediately below the fill is lacustrine (lake bottom) varved (layered) silt with clay. This deposit includes a stiffer brown crust of silt and clay overlying soft, wet, grey silt and clay, extends to a depth of 16-37 feet, being generally thicker to the west toward Broadway. This stratum is soft to very stiff.

Beneath the varved silt and clay stratum, there is a stratum of sand with varying amounts of clay, silt, and gravel. This layer extends to depths of 32 to 47 feet below grade and is loose to dense and wet. Beneath this is a glacial till layer extending to a depth of 40-50 feet below grade. This stratum is very dense and is dry to moist.

Groundwater generally occurs within the unconsolidated sediments at average depths of 2 feet to 16 feet below ground surface. Groundwater generally flows in a southeasterly direction across the site.

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, an alternative which allows for unrestricted use of the site was evaluated.

A comparison of the results of the Remedial Investigation (RI) against unrestricted use standards, criteria and guidance values (SCGs) for the site contaminants is available in the RI Report.

SECTION 5: ENFORCEMENT STATUS

The Applicants under the Brownfield Cleanup Agreement are Volunteers. The Applicants 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: <u>Summary of the Remedial Investigation</u>

A remedial investigation (RI) serves as the mechanism for collecting data to:

- characterize site conditions;
- determine the nature of the contamination; and
- assess risk to human health and the environment.

The RI is intended to identify the nature (or type) of contamination which may be present at a site and the extent of that contamination in the environment on the site, or leaving the site. The RI reports on data gathered to determine if the soil, groundwater, soil vapor, indoor air, surface water or sediments may have been contaminated. Monitoring wells are installed to assess groundwater and soil borings or test pits are installed to sample soil and/or waste(s) identified. If other natural resources are present, such as surface water bodies or wetlands, the water and sediment may be sampled as well. Based on the presence of contaminants in soil and groundwater, soil vapor will also be sampled for the presence of contamination. Data collected in the RI influence the development of remedial alternatives. The RI report is available for review in the site document repository and the results are summarized in section 6.3.

The analytical data collected on this site includes data for:

- groundwater
- soil
- soil vapor
- 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: <u>http://www.dec.ny.gov/regulations/61794.html</u>

6.1.2: <u>RI Results</u>

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 contaminants of concern identified at this site is/are:

tetrachloroethene (PCE)	benzo(a)pyrene
MTBE (methyl-tert-butyl ether)	chrysene
benzene	lead
ethylbenzene	mercury
benzo(a)anthracene	chromium

The contaminants of concern exceed the applicable SCGs for:

- groundwater - soil

6.2: Interim Remedial Measures

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

The following IRM has been completed at this site based on conditions observed during the RI.

Underground storage tank removal

The IRM consisted of the excavation, cleaning and off-site disposal of ten 4,000-gallon gasoline USTs, ancillary piping, the associated pump island and overhead canopy from the site in August 2010. The original plan was for the removal of five tanks. But, five additional tanks were discovered and were also removed.

In addition to the USTs:

• approximately 5,089 gallons of liquids (petroleum and water) were extracted from the USTs with a vacuum truck;

• approximately 750 tons of petroleum impacted soil was excavated from the former USTs locations for off-site disposal once the tanks were removed and post-excavation sampling was conducted;

• the excavation was backfilled with clean soil from the excavation and with clean fill brought to the site that met the requirements of 6 NYCRR Part 375-6.7(d) for residential use; and

• nine drums of tank bottom sludge were removed on September 21, 2010.

6.3: <u>Summary of Environmental Assessment</u>

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

Nature and Extent of Contamination:

Soil and groundwater were analyzed for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), metals, polychlorinated biphenyls (PCBs), and pesticides; soil vapor was analyzed for VOCs. Several sources for the contaminants detected in soil, groundwater and soil vapor include historic, exhumed and possible existing underground storage tanks, building floor drains, automotive repair operations, surface runoff from gasoline fueling areas, historic petroleum spills, historic railroad spurs and historic industrial and commercial uses resulting in petroleum-related contaminants, solvents and metals impacts to on-site media.

<u>Soil</u>

Some soil samples had concentrations of lead (up to a maximum concentration of 2270 ppm / compared to its restricted residential use soil cleanup objective (RRSCO) of 400 ppm), chromium (42.8 ppm / 110 ppm) and mercury (4.55 ppm / 0.81 ppm) above the restricted residential use SCOs.

Semi-volatile organic compounds (SVOCs) were detected in about 10% of soil samples. The SVOCs above USCOs were all polycyclic aromatic hydrocarbons (PAHs) associated with petroleum and located in the area of the gas station and auto repair facility. The most prevalent PAHs were benzo(a)anthracene (up to a maximum concentration of 12.5 ppm / compared to its RRSCO of 1.0 ppm), benzo(a)pyrene (1.5 ppm / 1.0 ppm) and chrysene (8.3 ppm/ 3.9 ppm).

VOCs generally were not present in soil. However, PCE (up to a maximum concentration of 6.1 ppm / compared to its RRSCO of 19 ppm) was detected in a floor drain in the auto repair facility.

Thirteen post-excavation soil samples were obtained from the 2010 UST excavation IRM for laboratory analysis of volatile and semi-volatile organic compounds and metals. Based on the post-excavation soil sample results, all thirteen soils samples show total chromium values up to 17.5 parts per million (ppm), above the unrestricted use soil cleanup objective (USCO) of 1 ppm but below the RRSCO of 36 ppm.

In addition, lead was reported above the USCO of 63 ppm along the north and south walls and, northwest corner of the excavation. All other lead concentrations are reported below the USCO. Mercury was also reported above the USCO of 0.18 ppm along the four excavation walls and in the northwest corner. Mercury was detected in two locations (up to 1.1 ppm) above its RRSCO of 0.81 ppm.

VOC concentrations in all of the post-excavation samples were all non-detect and/or below their respective USCOs.

The PAHs, benzo(a)anthracene (maximum concentration of 12.5 ppm), benzo(a)pyrene (1.5 ppm) and chrysene (8.3 ppm) were detected in four locations just above their respective USCOs all of which are 1 ppm. Three of the locations were in the former location of the auto repair facility.

The available data does not indicate site-related impacts to off-site soil.

Groundwater

Along with naturally occurring metals detected in most of the monitoring wells, lead was observed at 50.2 parts per billion (ppb), which is above its groundwater standard of 25 ppb, in two of eight wells sampled.

The only off-site groundwater sampling was conducted in 2005; pre-dating the 2010 tank pull and soil excavation. In 2005, the VOCs detected above groundwater standards were the petroleum-related compounds; benzene (up to a maximum concentration of 44.9 ppb compared to the groundwater standard of 0.5 ppb) and ethylbenzene (536 ppb/5 ppb) in a down-gradient, off-site monitoring well and methyl tertiary butyl ether (MTBE) (620 ppb/10 ppb) in the former location of the service station. Future off-site groundwater monitoring is planned as part of the remedy.

Soil Vapor

PCE was detected in four sampling points at up to 5,800 micrograms per cubic meter (μ g/m3). Additional soil vapor sampling was conducted at two points along the southern border in July 2015. PCE was detected in one of the points at 1,300 μ g/m3.

In December 2015, a soil vapor intrusion investigation was conducted in the adjacent commercial structure to the south. Air samples were collected from beneath, within and outside of the structure. Based on the results of that investigation no additional actions were needed to address soil vapor intrusion offsite.

6.4: <u>Summary of Human Exposure Pathways</u>

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*.

People are not drinking contaminated groundwater because the area is served by a public water supply that is not affected by site-related contamination. Access to the site is unrestricted. People may come into contact with contaminated soil or groundwater if they dig below the surface/site cover (e.g., building foundations, pavement). 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. The potential exists for the inhalation of site contaminants due to soil vapor intrusion in any future on-site redevelopment. Environmental sampling indicates that soil vapor intrusion is not a concern for off-site buildings.

6.5: <u>Summary of the Remediation Objectives</u>

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

• Remove the source of ground or surface water contamination.

<u>Soil</u>

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 Conditional Track 1 remedy.

The selected remedy is referred to as the contingent Track 1 unrestricted use soil excavation remedy.

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

1. Remedial Design

A remedial design program will be implemented to provide the details necessary for the construction, operation, optimization, 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 gases 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

The remnants of on-site buildings will be demolished and materials which cannot be beneficially reused on site will be taken off-site for proper disposal in order to implement the remedy.

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

- grossly contaminated soil, as defined in 6 NYCRR Part 375-1.2(u);
- removal of any underground storage tanks (USTs), fuel dispensers, underground piping or other structures associated with a source of contamination; and

• soils 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.

All on-site soils which exceed unrestricted SCOs, as defined by 6 NYCRR Part 375-6.8, will be excavated and transported off-site for disposal. Approximately 34,700 cubic yards of contaminated soil will be removed from the site.

On-site soil which does not exceed the above excavation criteria may be used to backfill the excavation to establish the designed grades at the site.

Clean fill meeting the requirements of 6 NYCRR Part 375-6.7(d) may be brought in to replace some of the excavated soil and establish the designed grades at the site.

3. Groundwater Monitoring

Periodic groundwater monitoring will be performed following excavation of the contaminated soil to assess the performance and effectiveness of the remedy and to ensure that Track 1 has been achieved.

4. Vapor Intrusion Evaluation

As part of the track 1 remedy, a soil vapor intrusion evaluation will be completed. The evaluation will include a provision for implementing actions recommended to address exposures related to soil vapor intrusion.

5. Conditional Track 1

The intent of the remedy is to achieve a Track 1 unrestricted use, therefore, no environmental easement or site management plan is anticipated. If the soil vapor intrusion (SVI) evaluation is not completed prior to completion of the Final Engineering Report, then a Site Management Plan (SMP) and Environmental Easement (EE) will be required to address the SVI evaluation and implement actions as needed; if a mitigation or monitoring action is needed, a Track 1 cleanup can only be achieved if the mitigation system or other required action is no longer needed within 5 years of the date of the Certificate of Completion.

In the event that Track 1 unrestricted use is not achieved, including achievement of groundwater and soil vapor remedial objectives, the following contingent remedial elements will be required and the remedy will achieve a Track 4 restricted residential cleanup.

6. Cover System

A site cover will be required to allow for restricted residential 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 two feet of exposed surface soil will exceed the applicable soil cleanup objectives (SCOs). Where the soil cover is required it will be a minimum of two feet of soil placed over a demarcation layer, with the upper six inches of soil of sufficient quality to maintain a vegetative layer. Soil cover material, including any fill material brought to the site, will meet the SCOs for cover material as set forth in 6 NYCRR Part 375-6.7(d). If a Track 1 of Track

2 restricted residential cleanup is achieved, a cover system will not be a required element of the remedy.

7. Institutional Control

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

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

• allow the use and development of the controlled property for restricted residential use as defined by Part 375-1.8(g), although land use is subject to local zoning laws;

• restrict the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by the NYSDOH or County DOH; as noted in Section 6.4, public water is supplied to the surrounding area; and

• require compliance with the Department approved Site Management Plan.

8. 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 above in Paragraph 6.

Engineering Controls: The Cover System discussed in Paragraph 5 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; maintaining site access controls and Department notification;

• descriptions of the provisions of the environmental easement including any land use and groundwater use restrictions;

• a provision for evaluation of the potential for soil vapor intrusion for any reoccupied existing or future buildings developed on the site, including provision for implementing actions recommended to address exposures related to soil vapor intrusion;

• provisions for the management and inspection of the identified engineering controls;

• maintaining site access controls and Department notification; and

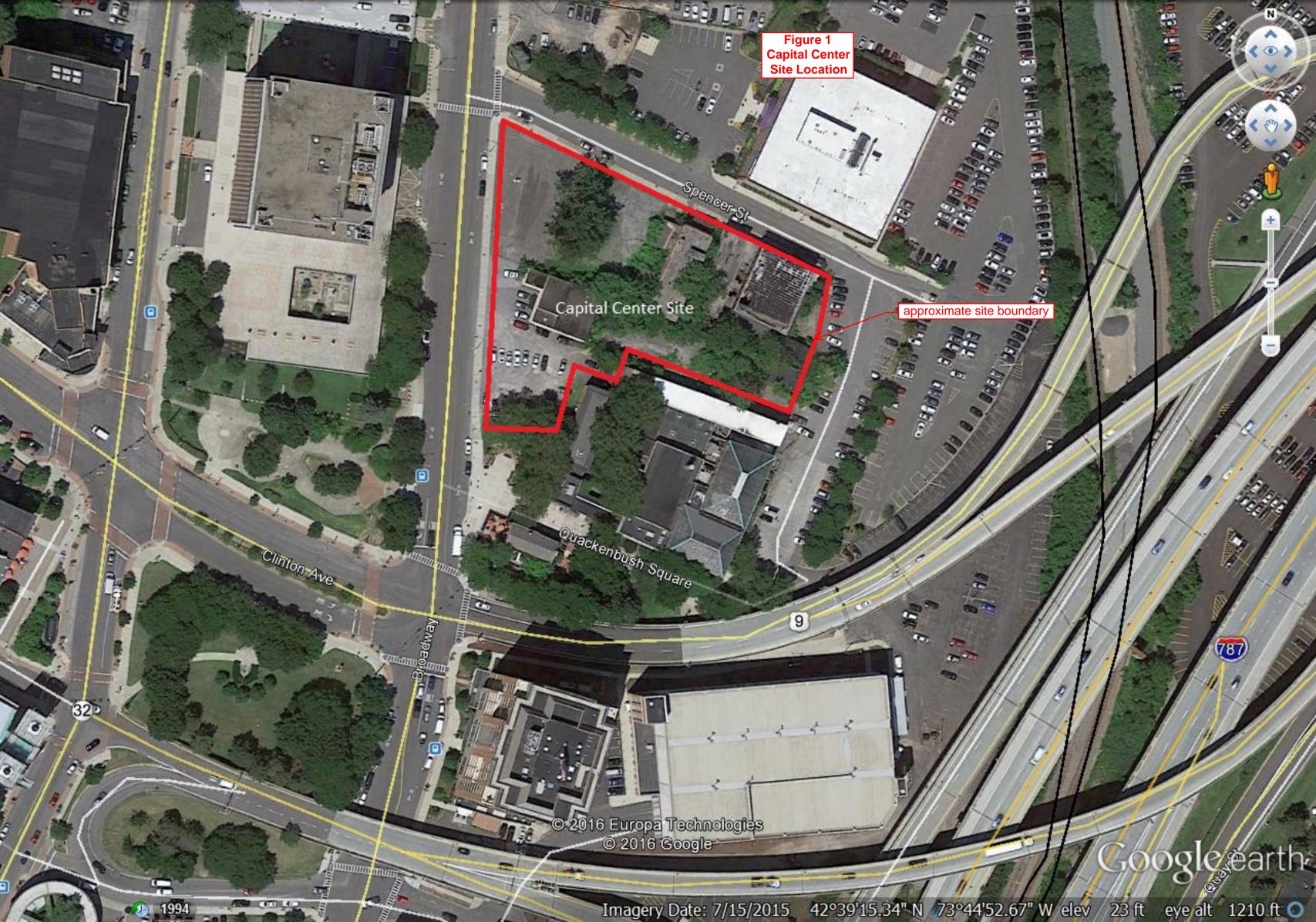
• the steps necessary for the periodic reviews and certification of the institutional and/or engineering controls.

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 and soil vapor / indoor air to assess the performance and effectiveness of the remedy;

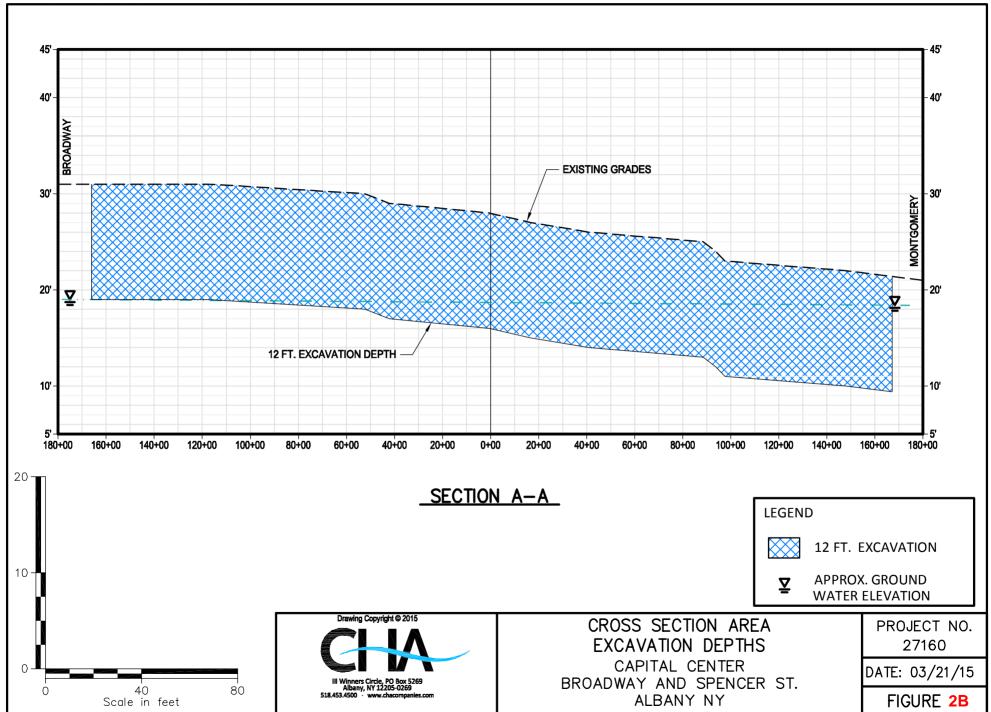
• a schedule of monitoring and frequency of submittals to the Department;

• monitoring for vapor intrusion for any reoccupied existing or future buildings developed on the site, as may be required by the Institutional and Engineering Control Plan discussed above.



STORM MH 0 W 12" WATER MM ROAM f metered space SPENCER STREE R=19.98 () TEL MH R=25.35 FF MH 14 CIES BROADWAY 3 LEGEND WIN NUM SANAS 12 FT. EXCAVATION Drawing Copyright @ 2015 PROJECT NO. **EXCAVATION DEPTHS** 27160 120 60 CAPITAL CENTER \cap DATE: 03/21/15 BROADWAY AND SPENCER ST. III Winners Circle, PO Box 5269 Albany, NY 12205-0269 518.453.4500 · www.chacompanies.e Scale in feet ALBANY NY FIGURE 2A

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