

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Remediation, Remedial Bureau E

625 Broadway, 12th Floor, Albany, NY 12233-7017

P: (518) 402-9813 | F: (518) 402-9722

www.dec.ny.gov

December 19, 2023

Tonawanda Storage Properties LLC
Attention: John Stevens
18 North Main Street
Pittsford, NY 14534

**Re: Bisonite Paint Co. Site
Site ID No. C915010
Tonawanda, NY – Erie County
Remedial Investigation and Alternatives
Analysis Report & Decision Document**

Dear John Stevens:

The New York State Department of Environmental Conservation (NYSDEC) and the New York State Department of Health (NYSDOH) have reviewed the revised Remedial Investigation and Alternative Analysis Report (RI/AAR) for the Bisonite Paint Co. site dated November 30, 2023 as prepared by Marsh Engineering, D.P.C. on behalf of the Tonawanda Storage Properties, LLC. The RI/AAR is hereby approved. Please ensure that a copy of the approved RI/AAR is placed in the document repository. The draft plan should be removed.

Attached is a copy of the NYSDEC's Decision Document for the site. The remedy is to be implemented in accordance with this Decision Document. Please ensure that a copy of the Decision Document is placed in the document repository.

Please contact the NYSDEC's Project Manager, Michael Keller, at (716) 851-7218 or michael.keller@dec.ny.gov at your earliest convenience to discuss next steps. Please recall that NYSDEC requires seven days advance notice prior to the start of field work.

Sincerely,

Michael Cruden

Michael Cruden, P.E.

Director

Remedial Bureau E

Division of Environmental Remediation



Enclosure

ec w/attachments:

Andrew Guglielmi, Esq. – NYSDEC
David Harrington, P.E. – NYSDEC
Michael Cruden, P.E. – NYSDEC
Andrea Caprio, P.E. – NYSDEC
Benjamin McPherson, P.E. – NYSDEC
Michael Keller, EIT – NYSDEC
Gregory Scholand, Esq. – NYSDEC
Charlotte Bethoney – NYSDOH
Shaun Surani – NYSDOH
Timothy Sheehan, tsheehan@midwest-fac.com
John Stevens, jstevens@icmcom.com
Dixon Rollins, P.E. drollins@leaderlink.com
Bruce Ahrens, bahrens@leaderlink.com
Alan Knauf, Esq., aknauf@nyenvlaw.com
Matt Gokey, matthew.gokey@tax.ny.gov
Paul Takac, paul.takac@tax.ny.gov

DECISION DOCUMENT

Bisonite Paint Co.
Brownfield Cleanup Program
Tonawanda, Erie County
Site No. C915010
December 2023



**Department of
Environmental
Conservation**

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

DECLARATION STATEMENT - DECISION DOCUMENT

Bisonite Paint Co.
Brownfield Cleanup Program
Tonawanda, Erie County
Site No. C915010
December 2023

Statement of Purpose and Basis

This document presents the remedy for the Bisonite Paint Co. 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 Bisonite Paint Co. 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;
- Integrating the remedy with the end use where possible and encouraging green and sustainable re-development; and
- Additionally, to incorporate green remediation principles and techniques to the extent feasible in the future development at this site, any future on-site buildings shall be constructed, at a minimum, to meet the 2020 Energy Conservation Construction Code of New York (or most

recent edition) to improve energy efficiency as an element of construction.

2. Source Area Excavation

Excavation and off-site disposal of contaminant source areas in the former settling lagoon and associated trench meeting any of the below criteria:

- Grossly contaminated soil, as defined in 6 NYCRR Part 375-1.2(u);
- Non-aqueous phase liquids;
- Soil with visual waste material or non-aqueous phase liquid; 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 (Mercury, Total PCBs, Ethylbenzene, Toluene, and Total Xylenes).

Approximately 750 tons of sub-surface material in the settling lagoon and associated trench meeting the above criteria will be excavated and transported for off-site disposal.

Collection and analysis of confirmation samples at the remedial excavation extents will be used to verify that SCOs for the site have been achieved. If confirmation/documentation sampling indicates that SCOs were not achieved, further remedial excavation will be necessary unless otherwise approved by the Department.

To ensure proper handling and disposal of excavated material, waste characterization sampling will be completed for all identified contaminated site material. Waste characterization sampling will be performed exclusively for the purposes of off-site disposal in a manner suitable to receiving facilities and in conformance with applicable federal, state, and local laws, rules, and regulations and facility-specific permits.

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, including below the water table, to backfill the excavation or re-grade the site. If sufficient on-site material is not available for reuse, clean fill meeting the requirements of 6 NYCRR Part 375-6.7(d) will be brought in to complete the backfilling of the excavation and establish the design grades at the site.

3. Surficial Soil Excavation

Soil from the northern and western site boundary in the upper one foot which exceeds the commercial SCOs will be excavated to facilitate installation of the site cover in remedial element 4 and transported off-site for disposal. Approximately 200 tons of material meeting the above criteria will be excavated and transported for off-site disposal.

Collection and analysis of documentation samples at the remedial excavation extents will be used to document the soil conditions remaining after excavation. Clean fill meeting the requirements of 6 NYCRR Part 375-6.7(d) will be brought in to complete the backfilling of the excavation and establish the designed grades at the site.

4. Cover System

A site cover will be required in areas where the upper one foot of exposed surface soil will

exceed the applicable soil cleanup objectives (SCOs), to allow for future commercial or industrial use of the site. Where a soil cover is to be used it will be a minimum of one foot 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 for the use of the site as set forth in 6 NYCRR Part 375-6.7(d). Substitution of other materials and components may be allowed where such components already exist or are a component of the tangible property to be placed as part of site redevelopment. Such components may include, but are not necessarily limited to pavement, concrete, paved surface parking areas, sidewalks, building foundations, and building slabs.

5. Groundwater Monitoring

To monitor the groundwater conditions, each of the four on-site monitoring wells and one off-site monitoring well (MW-1) will be sampled for volatile organic compounds (VOCs), polychlorinated biphenyls (PCBs), semi-volatile organic compounds (SVOCs), and metals, in addition to natural attenuation parameters. Groundwater monitoring will be required until reductions in monitoring are approved by the NYSDEC. Groundwater monitoring wells will be replaced in-kind if damaged or removed during remedial activities.

6. Vapor Intrusion Evaluation

A soil vapor intrusion evaluation will be completed due to a change in on-site building use since completion of the Remedial Investigation (RI). The evaluation will include a provision for implementing actions recommended to address any exposures related to soil vapor intrusion.

7. Institutional Controls

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 commercial or industrial 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 Erie County DOH; 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 in remedial element 7 above and the groundwater monitoring system discussed in remedial element 5 above.

Engineering Controls: The cover system discussed in remedial element 4 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;
- Descriptions of the provisions of the environmental easement including any land use, and groundwater use restrictions;
- A provision that should a building foundation or building slab be removed in the future, a cover system will be placed in any area of the removed foundation or slab where the upper one foot of exposed surface soil exceeds the applicable soil cleanup objectives (SCOs);
- A provision for evaluation of the potential for soil vapor intrusion for any new occupied buildings on the site, including provision for implementing actions recommended to address any 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 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 buildings on the site, as may be required by the Institutional and Engineering Control Plan discussed above.

c. An Operation and Maintenance (O&M) Plan to ensure continued operation, maintenance, optimization, monitoring, inspection, and reporting of any mechanical or physical components of the remedy. The plan includes, but is not limited to:

- Procedures for operating and maintaining the remedy;
- Compliance monitoring of treatment systems to ensure proper O&M as well as providing the data for any necessary permit or permit equivalent reporting;
- Maintaining site access controls and Department notification; and
- Providing the Department access to the site and O&M records.

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.

12/19/2023

Date

Michael Cruden

Michael Cruden, Director
Remedial Bureau E

DECISION DOCUMENT

Bisonite Paint Co.
Tonawanda, Erie County
Site No. C915010
December 2023

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, where a contaminant is present at levels exceeding the soil cleanup objectives or other health-based or environmental standards, criteria or guidance, based on the reasonably anticipated use of the property.

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 repository:

DECInfo Locator - Web Application
<https://gisservices.dec.ny.gov/gis/dil/index.html?rs=C915010>

Tonawanda Library
Attn: Mary Muscarella
333 Main Street
Tonawanda, NY 14150
Phone: (716) 693-5043

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 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 0.8-acre Bisonite Paint Co. site is located in a commercial/industrial area at 2266 and 2268 Military Road in the Town of Tonawanda, Erie County. It is approximately 0.3 miles north of Interstate Highway 290. The site is bounded by a property owned by Niagara Mohawk Power Corporation to the west, commercial rental space to the south, a lumber yard to the north, and a gasoline service station and warehouse across Military Road to the east.

Site Features:

The site consists of the northern portion of a commercial building surrounded by asphalt pavement and landscaped areas. A small portion of a separate concrete block building is located on the eastern part of the site. Immediately west of the site, the ground surface rises abruptly approximately four to six feet into a linear mound, which is just off-site, and separates the site from a railroad right-of-way. Further west is the Tonawanda Landfill.

Current Zoning and Land Use:

The site is zoned for commercial manufacturing and is currently used for commercial purposes. As of the time of this document the on-site portion of the building is occupied by office space and a carpet storage/installation company. The off-site portion of the building is occupied by various companies utilizing the space for minor office space and storage, and one vacant unit. Properties to the north, south, and east of the site have similar zoning and uses. The landfill and railroad corridor west of the site are zoned for landfill, railroad, and utility use. The nearest residential area is approximately 200-feet to the east.

Past Use of the Site:

Bisonite Paint Company, a manufacturer of water and oil-based paints, owned and operated the facility consisting of this site and two additional tax parcels from 1947 to 1991. The on-site building was used for paint manufacturing during this timeframe. A settling lagoon for on-site wastewater disposal was present west of the building and was connected to the building by an open trench. In 1994, Tonawanda Self Store began using the site for rental of commercial space and self-storage facilities.

Previous remedial actions have been taken on the off-site portion of the Bisonite Paint Company property. These areas were previously utilized for storage of materials (tank farm) and for

spreading paint pigments, solvents, and mineral spirits. In 1978, the DEC notified Bisonite Paint Company that all waste must be transported for disposal at an approved facility. The former settling lagoon was filled in, capped, and seeded between 1978 and 1983. In 1994, Tonawanda Self Store began using the site for rental of commercial space and self-storage facilities. In 1996, several "hot-spots" in the former spreading area and former tank farm area were voluntarily remediated by 2251 Military Road Associates, Inc. under the State Superfund Program (915010).

Site Geology and Hydrogeology:

The undisturbed soils beneath the site consist of fine glacial sediments of clay with lenses of gravel, sand, and silt mixtures. These are found directly below the surficial development except in the former lagoon area, where fill and waste are present. The fill in the former lagoon has a thickness of approximately eight feet and consists of reworked clay, construction debris, white chips, white powder, and resin overlying approximately two feet of paint pigments and other manufacturing waste.

The first observation of groundwater ranged in depth from 4-feet below ground surface (bgs) at SB-6 to 17-feet bgs at SB-1. Once monitoring wells were installed and developed, the static water was measured between 0.5 to approximately 3.5-feet bgs on-site. Based on monitoring wells from the site and others at the adjacent Tonawanda Landfill, groundwater flow appears to be from the southeast to the northwest.

A site location map is attached as Figures 1 and 2.

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

One or more of the Applicants under the Brownfield Cleanup Agreement is a Participant. The Participant(s) has/have an obligation to address on-site and off-site contamination. Accordingly, no enforcement actions are necessary.

Additionally, the Department has determined that the site does not pose a significant threat to public health or the environment.

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
- 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: <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:

polychlorinated biphenyls (PCB)	chromium
methyl ethyl ketone	mercury
acetone	petroleum products
chloroform	benzo(a)anthracene
ethylbenzene	benzo(a)pyrene
toluene	benzo(b)fluoranthene
xylene (mixed)	benzo(b)fluoranthene
trichloroethene (TCE)	chrysene
benzene	indeno(1,2,3-cd)pyrene
dichlorobromomethane	dibenz[a,h]anthracene
lead	

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

- groundwater
- soil
- soil vapor intrusion
- indoor air

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:

During the remedial investigation soil and groundwater were analyzed for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), metals, cyanide, polychlorinated biphenyls (PCBs), per- and polyfluoroalkyl substances (PFAS), and pesticides. Soil vapor, sub-slab soil vapor, and indoor air samples were also collected and analyzed for VOCs. Based on the investigations conducted to date, the primary contaminants of concern for the site are total PCBs, methyl ethyl ketone, acetone, chloroform, ethylbenzene, toluene, xylene (mixed), TCE, benzene, dichlorobromomethane, lead, chromium, mercury, petroleum products, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(b)fluoranthene, chrysene, indeno(1,2,3-cd)pyrene, and dibenz[a,h]anthracene.

Shallow Soil:

44 total shallow soil samples (4 samples from the 2019 RI and 40 from the 2021 supplemental RI) were collected from 14 locations along the northern and western boundaries. 14 surface soil samples were taken from 0 to 2 inches in depth, 10 samples from 2 to 6 inches in depth, 10 samples from 6 to 12 inches in depth, and 10 samples from 12 to 24 inches in depth. The highest relative concentration of SVOCs were reported at locations SSA-4 and SS-3. The following contaminants of concern were detected exceeding commercial soil cleanup objectives (CSCOs):

- Benzo(a)anthracene (up to 53 parts per million (ppm)) exceeded the CSCO of 5.6 ppm at 10 sample locations.
- Benzo(a)pyrene (up to 89 ppm) exceeded the CSCO of 1.0 ppm at all 14 sample locations.
- Benzo(b)fluoranthene (up to 120 ppm) exceeded the CSCO of 5.6 ppm at 11 sample locations.
- Chrysene (up to 73 ppm) exceeded the CSCO of 56 ppm at four sample locations.
- Dibenz(a,h)anthracene (up to 12 ppm) exceeded the CSCO of 0.56 ppm at 11 sample locations.
- Indeno[1,2,3-cd]pyrene (up to 64 ppm) exceeded the CSCO of 5.6 ppm at 9 sample locations.

The above listed contaminants are all classified as PAHs. Based on the investigations completed to date, limited areas of surface soils are impacted with PAHs. Off-site migration of contaminants in surface soil has not been observed.

Subsurface Soil:

28 subsurface soil samples were collected from soil borings 11 locations ranging from 1 to 18 feet bgs at across the site. Contamination is primarily in the western portion of the site in the footprint of the former settling lagoon and the associated trench. The following contaminants of concern were detected exceeding CSCOs:

- Ethylbenzene (up to 790 ppm) exceeded the CSCO of 390 ppm at two sample locations.
- Toluene (up to 12,000 ppm) exceeded the CSCO of 500 ppm at two sample locations.
- Total Xylenes (up to 4,500 ppm) exceeded the CSCO of 500 ppm at two sample locations.
- Dibenz(a,h)anthracene (up to 0.64 ppm) exceeded the CSCO of 0.56 ppm at SB-3.
- Benzo(a)pyrene (up to 3.8 ppm) exceeded the CSCO of 1.0 ppm at SB-3.
- Total PCBs (up to 24.9 ppm) exceeded the CSCO of 1.0 ppm at four sample locations.
- Mercury (up to 3.11 ppm) exceeded the CSCO of 2.8 ppm at SB-7.

The following contaminants of concern were detected exceeding Protection of Groundwater Soil Cleanup Objectives (PGWSCO):

- Ethylbenzene (up to 790 ppm) exceeded the PGWSCO of 1.0 ppm at three sample locations.
- Toluene (up to 12,000 ppm) exceeded the PGWSCO of 0.7 ppm at three sample locations.

- Total Xylenes (up to 4,500 ppm) exceeded the PGWSCO of 1.6 ppm at three sample locations.
- Total PCBs (up to 24.9 ppm) exceeded the PGWSCO of 3.2 ppm at three sample locations.
- Mercury (up to 3.11 ppm) exceeded the PGWSCO of 0.73 ppm at three sample locations.

Based on the investigations completed to date, the majority of the soil contamination is present in the footprint of the former settling lagoon and the associated trench. Off-site migration of contaminants in subsurface soil has not been observed.

Groundwater:

Groundwater samples were collected from 5 overburden monitoring wells installed from 12 to 15 feet below ground surface. Groundwater was sampled during a single sampling event in January 2020. The following contaminants of concern were detected exceeding groundwater quality standards (GWQS):

- Methyl ethyl ketone (up to 850,000 micrograms per liter (mcg/L)) exceeded the GWQS of 50 mcg/L at two sample locations.
- Acetone (up to 15,000 mcg/L) exceeded the GWQS of 50 mcg/L at two sample locations.
- Chloroform (up to 380 mcg/L) exceeded the GWQS of 7.0 mcg/L at two sample locations.
- Ethylbenzene (up to 1,800 mcg/L) exceeded the GWQS of 5.0 mcg/L at two sample locations.
- Toluene (up to 45,000 mcg/L) exceeded the GWQS of 5.0 mcg/L at two sample locations.
- Total Xylenes (up to 8,800 mcg/L) exceeded the GWQS of 5.0 mcg/L at two sample locations.
- Trichloroethene (TCE) (up to 8.1 mcg/L) exceeded the GWQS of 5.0 mcg/L at MW-2.
- Cis 1,2-Dichloroethene (up to 13 mcg/L) exceeded the GWQS of 5.0 mcg/L at MW-2.
- Benzene (up to 68 mcg/L) exceeded the GWQS of 5.0 mcg/L at MW-3.
- Naphthalene (up to 20 mcg/L) exceeded the GWQS of 5.0 mcg/L at two locations.
- Total Phenol (up to 350 mcg/L) exceeded the GWQS of 1.0 mcg/L at three locations.
- Lead (up to 2,830 mcg/L) exceeded the GWQS of 25 mcg/L at two locations.
- Mercury (up to 3.19 mcg/L) exceeded the GWQS of 0.4 mcg/L at two locations.

Investigation results indicate that groundwater is impacted by VOCs, SVOCs, and metals in the vicinity of the former lagoon and associated trench. Off-site migration of contaminants in groundwater has not been observed.

MW-4 Free Product:

A free product layer less than one-inch in thickness was found to be on the water surface within monitoring well MW-4. During sampling, the water within the monitoring well appeared to have an amber color, with the free product exhibiting a slightly darker shade and an oily texture. The

free product was analyzed for VOCs, SVOCs, PCBs, Pesticides, Herbicides, Cyanide, and metals. The following contaminants of concern were detected:

- Methyl ethyl ketone (590,000 mcg/L).
- Acetone (10,000 mcg/L).
- Chloroform (980 mcg/L).
- Ethylbenzene (2,000 mcg/L).
- Toluene (25,000 mcg/L).
- Total Xylenes (8,900 mcg/L).
- Bromodichloromethane (260 mcg/L).
- Bis(2-ethylhexyl) Phthalate (830 mcg/L).
- Total phenol (250 mcg/L).
- Chromium (73 mcg/L).
- Lead (2,260 mcg/L).
- Mercury (2.14 mcg/L).

Based on the elevation of the product layer, it is likely caused by wastes that remain in the former lagoon. Any potential migration is expected to be minimal as no other wells have exhibited the same conditions as MW-4. No off-site migration of free product has been observed.

Soil Vapor Intrusion Investigation:

One soil vapor sample was collected from the former settling lagoon area, two sub-slab soil vapor samples were collected from below the building slab, and one indoor air sample was collected from inside the building. TCE was detected in four samples: SV-1 at a concentration up to 3.65 micrograms per cubic meter (mcg/m³), Indoor-1 at a concentration up to 2.74 mcg/m³, the duplicate sample inside at a concentration up to 2.71 mcg/m³, and SS-1 at a concentration up to 2.86 mcg/m³. During the supplemental RI, methylene chloride was identified in two indoor air samples, IA-1 at a concentration of 24 mcg/m³ and IA-2 at a concentration of 16 mcg/m³. The elevated detections of methylene chloride are attributed to the use of furniture stripper by the building occupant that contains methylene chloride.

As the building had limited occupation at the times of sampling, no current concern for exposures were expected. However, should the building use change, a re-evaluation of the potential for soil vapor intrusion should occur.

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*.

Direct contact with contaminants in the soil is unlikely because the majority of the site is covered with buildings and pavement, however persons who enter the site could contact contaminants along the northern and western site perimeters by walking, digging, or otherwise disturbing the soil. Contaminated groundwater at the site is not used for drinking or other purposes and the area

is served by a public water supply that obtains water from a different source not affected by this contamination. Volatile organic compounds in soil vapor (air spaces within the soil), 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. As the building had limited occupation at the times of sampling, no current concern for exposures were expected. An evaluation of the potential for soil vapor intrusion to occur will be completed should the current use of the site or adjoining off-site warehouse space change. Furthermore, environmental sampling indicates soil vapor intrusion is not a concern for off-site buildings including the adjoining off-site warehouse space.

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.
- 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 use with site-specific soil cleanup objectives remedy.

The selected remedy is referred to as the Excavation and Cover System remedy.

The elements of the selected remedy, as shown in Figure 2, 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;
- Integrating the remedy with the end use where possible and encouraging green and sustainable re-development; and
- Additionally, to incorporate green remediation principles and techniques to the extent feasible in the future development at this site, any future on-site buildings shall be constructed, at a minimum, to meet the 2020 Energy Conservation Construction Code of New York (or most recent edition) to improve energy efficiency as an element of construction.

2. Source Area Excavation

Excavation and off-site disposal of contaminant source areas in the former settling lagoon and associated trench meeting any of the below criteria:

- Grossly contaminated soil, as defined in 6 NYCRR Part 375-1.2(u);
- Non-aqueous phase liquids;
- Soil with visual waste material or non-aqueous phase liquid; 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 (Mercury, Total PCBs, Ethylbenzene, Toluene, and Total Xylenes).

Approximately 750 tons of sub-surface material in the settling lagoon and associated trench meeting the above criteria will be excavated and transported for off-site disposal.

Collection and analysis of confirmation samples at the remedial excavation extents will be used to verify that SCOs for the site have been achieved. If confirmation/documentation sampling indicates that SCOs were not achieved, further remedial excavation will be necessary unless otherwise approved by the Department.

To ensure proper handling and disposal of excavated material, waste characterization sampling will be completed for all identified contaminated site material. Waste characterization sampling will be performed exclusively for the purposes of off-site disposal in a manner suitable to receiving facilities and in conformance with applicable federal, state, and local laws, rules, and regulations and facility-specific permits.

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, including below the water table, to backfill the excavation or re-grade the site. If sufficient on-site material is not available for reuse, clean fill meeting the requirements of 6 NYCRR Part 375-6.7(d) will be brought in to complete the backfilling of the excavation and establish the design grades at the site.

3. Surficial Soil Excavation

Soil from the northern and western site boundary in the upper one foot which exceeds the commercial SCOs will be excavated to facilitate installation of the site cover in remedial element 4 and transported off-site for disposal. Approximately 200 tons of material meeting the above criteria will be excavated and transported for off-site disposal.

Collection and analysis of documentation samples at the remedial excavation extents will be used to document the soil conditions remaining after excavation. Clean fill meeting the requirements of 6 NYCRR Part 375-6.7(d) will be brought in to complete the backfilling of the excavation and establish the designed grades at the site.

4. Cover System

A site cover will be required in areas where the upper one foot of exposed surface soil will exceed the applicable soil cleanup objectives (SCOs), to allow for future commercial or industrial use of the site. Where a soil cover is to be used it will be a minimum of one foot 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 for the use of the site as set forth in 6 NYCRR Part 375-6.7(d). Substitution of other materials and components may be allowed where such components already exist or are a component of the tangible property to be placed as part of site redevelopment. Such components may include, but are not necessarily limited to pavement, concrete, paved surface parking areas, sidewalks, building foundations, and building slabs.

5. Groundwater Monitoring

To monitor the groundwater conditions, each of the four on-site monitoring wells and one off-site monitoring well (MW-1) will be sampled for volatile organic compounds (VOCs), polychlorinated biphenyls (PCBs), semi-volatile organic compounds (SVOCs), and metals, in addition to natural attenuation parameters. Groundwater monitoring will be required until reductions in monitoring are approved by the NYSDEC. Groundwater monitoring wells will be replaced in-kind if damaged or removed during remedial activities.

6. Vapor Intrusion Evaluation

A soil vapor intrusion evaluation will be completed due to a change in on-site building use since completion of the Remedial Investigation (RI). The evaluation will include a provision for implementing actions recommended to address any exposures related to soil vapor intrusion.

7. Institutional Controls

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 commercial or industrial 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 Erie County DOH; 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 in remedial element 7 above and the groundwater monitoring system discussed in remedial element 5 above.

Engineering Controls: The cover system discussed in remedial element 4 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;
- Descriptions of the provisions of the environmental easement including any land use, and groundwater use restrictions;
- A provision that should a building foundation or building slab be removed in the future, a cover system will be placed in any area of the removed foundation or slab where the upper one foot of exposed surface soil exceeds the applicable soil cleanup objectives (SCOs);

- A provision for evaluation of the potential for soil vapor intrusion for any new occupied buildings on the site, including provision for implementing actions recommended to address any 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.

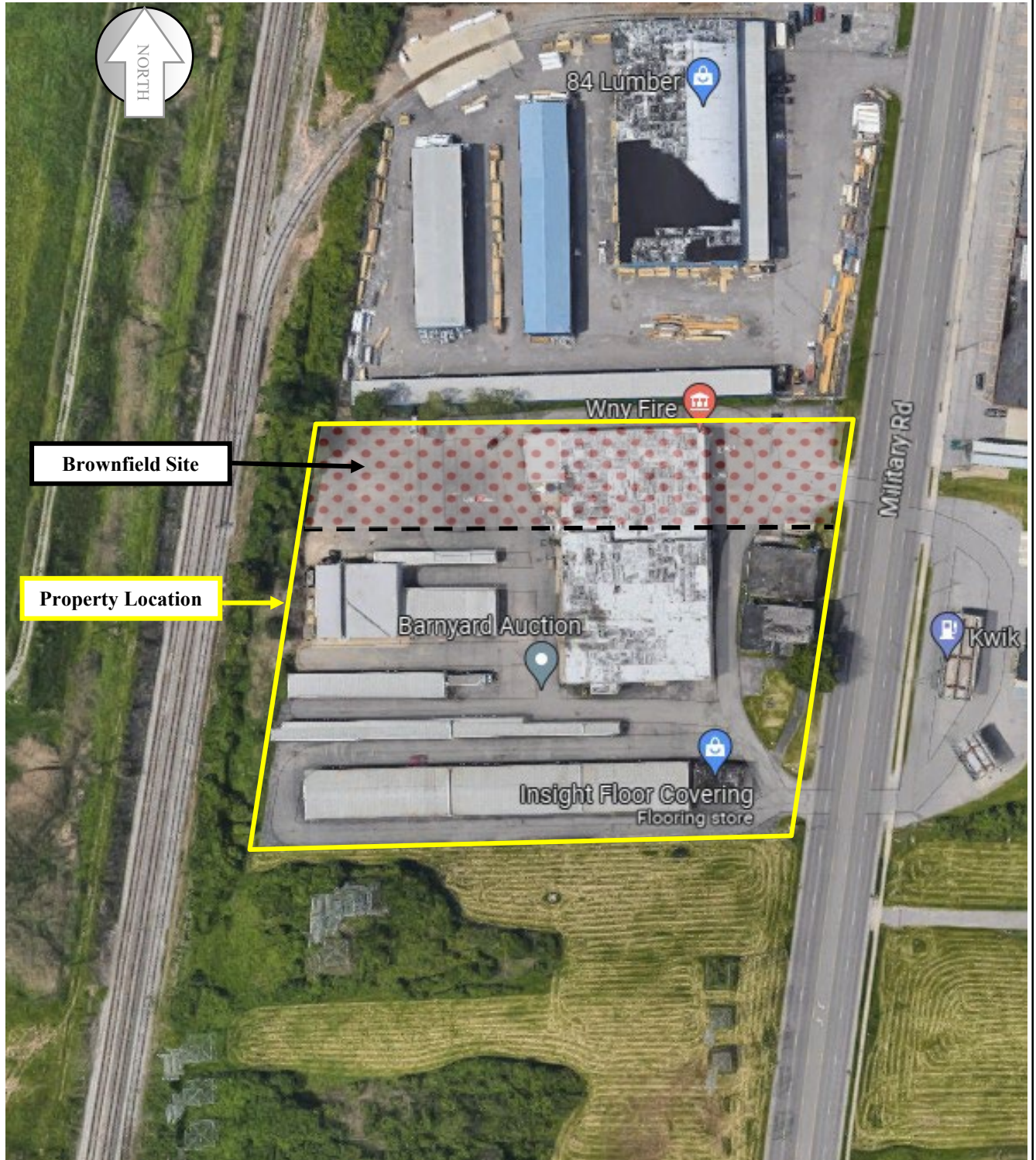
b. A Monitoring Plan to assess the performance and effectiveness of the remedy. The plan includes, but may not be limited to:

- Monitoring of groundwater 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 buildings on the site, as may be required by the Institutional and Engineering Control Plan discussed above.

c. An Operation and Maintenance (O&M) Plan to ensure continued operation, maintenance, optimization, monitoring, inspection, and reporting of any mechanical or physical components of the remedy. The plan includes, but is not limited to:

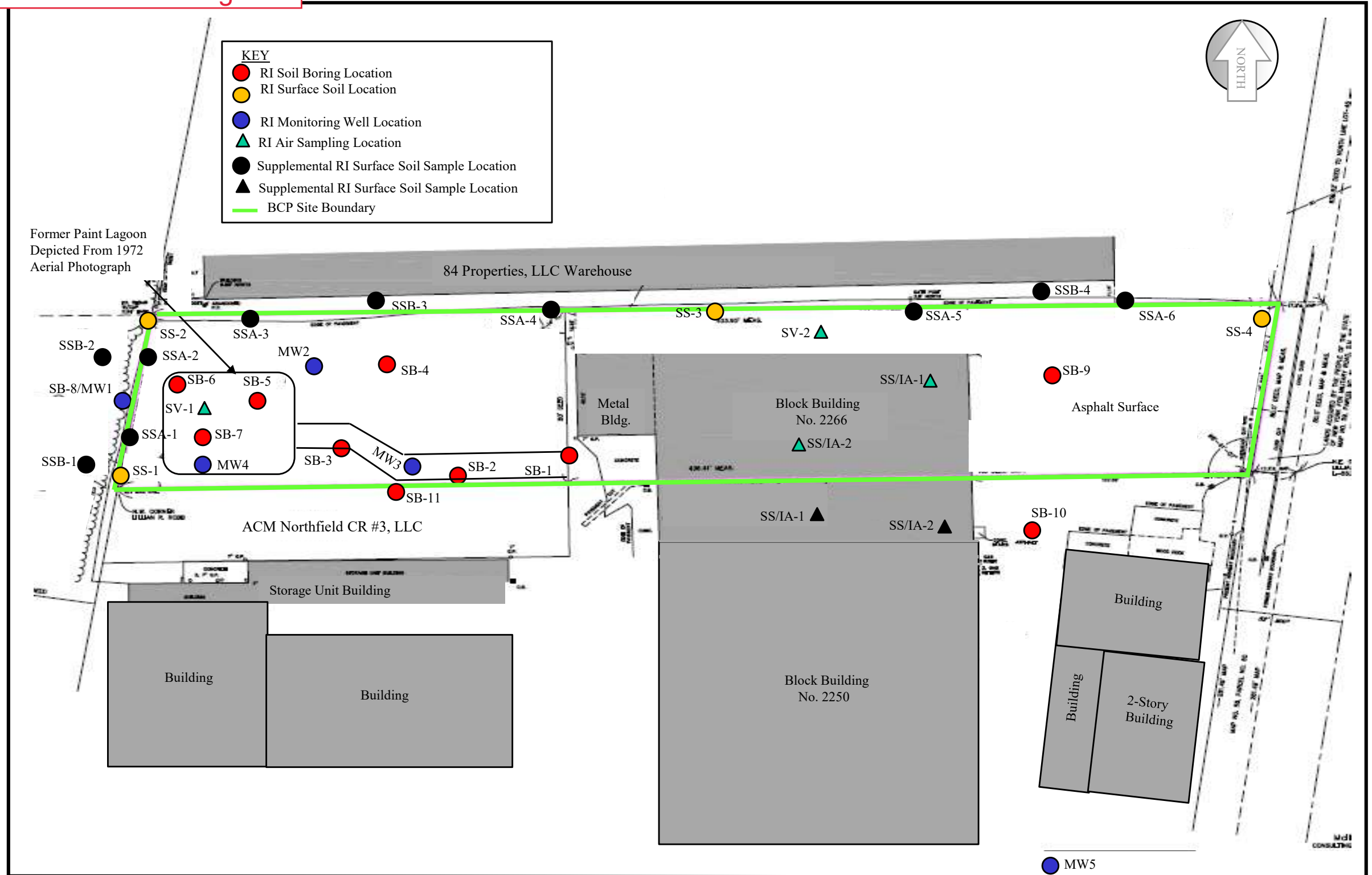
- Procedures for operating and maintaining the remedy;
- Compliance monitoring of treatment systems to ensure proper O&M as well as providing the data for any necessary permit or permit equivalent reporting;
- Maintaining site access controls and Department notification; and
- Providing the Department access to the site and O&M records.

Decision Document Figure 1



<p>Title Site Plan 2266 and 2268 Military Road Tonawanda, New York</p>		<p>Project 1077.003 Date 8/14/2023 Scale Not to Scale</p>	<p>Drawn SF Checked BWA File Name Site Map</p>	<p>Figure 2</p>
<p>Prepared For Tonawanda Storage Properties, LLC 1400 Crossroads Building 2 State Street, Rochester, New York</p>				

Decision Document Figure 2



Title: RI & SRI Investigation Sample Locations
2266 and 2268 Military Road
Tonawanda, New York

Prepared For: Tonawanda Storage Properties LLC
1400 Crossroads Building
2 State Street, Rochester, New York



Project 100.001
Date 10/12/2022
Scale Not to Scale

Drawn FRT
Checked MPR
File Name Sample Locations

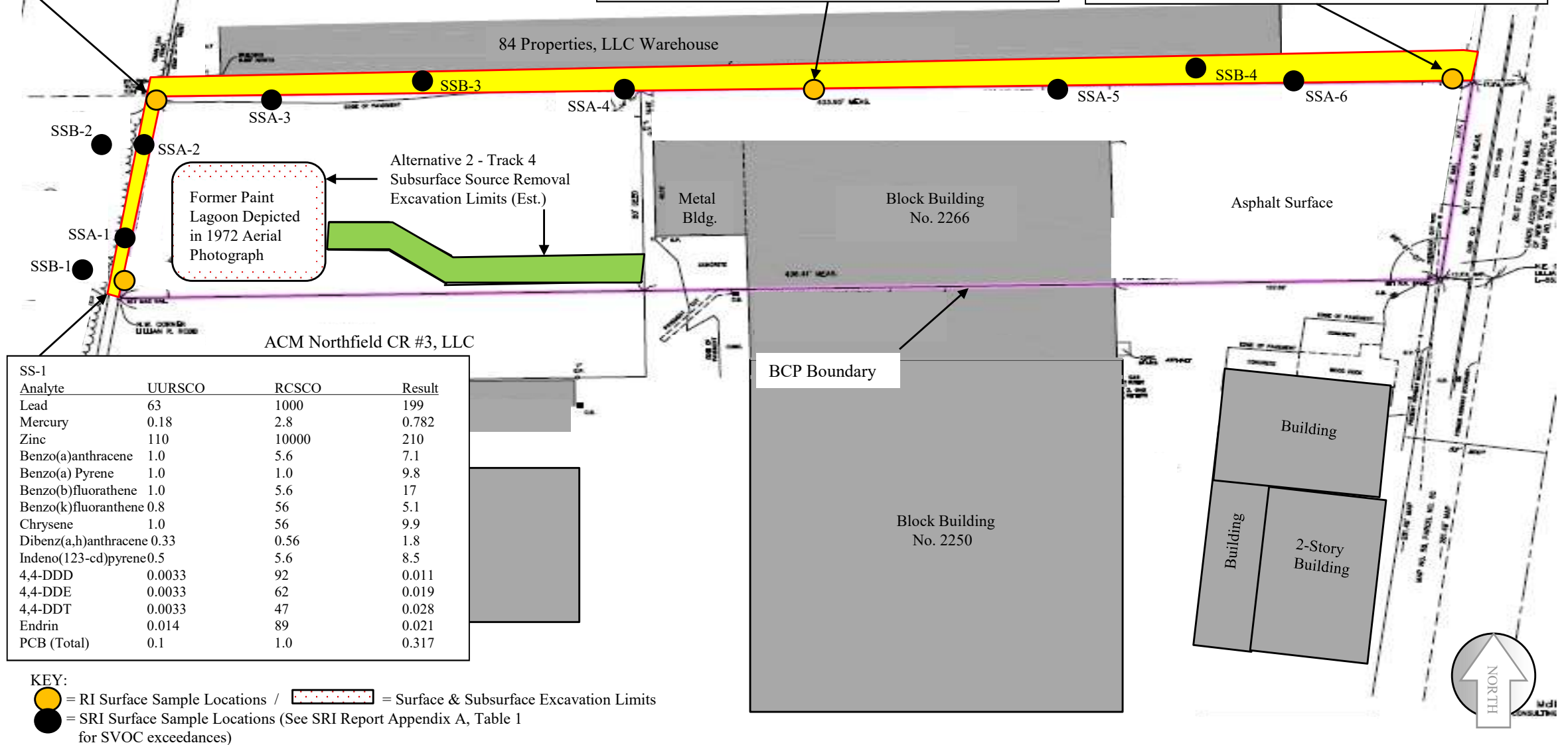
Figure
5

Decision Document Figure 3

Analyte	UURSCO	RCSCO	Result
Zinc	110	10000	176
Benzo(a)anthracene	1.0	5.6	6.3
Benzo(a) Pyrene	1.0	1.0	8.2
Benzo(b)fluorathene	1.0	5.6	13
Benzo(k)fluoranthene	0.8	56	4.5
Chrysene	1.0	56	9.5
Dibenz(a,h)anthracene	0.33	0.56	1.4
Indeno(123-cd)pyrene	0.5	5.6	6.8
4,4-DDT	0.0033	47	0.024

Analyte	UURSCO	RCSCO	Result
Chromium	1/30	400/1500	40.1
Lead	63	1000	105
Zinc	110	10000	226
Benzo(a)anthracene	1.0	5.6	52
Benzo(a) Pyrene	1.0	1.0	70
Benzo(b)fluorathene	1.0	5.6	110
Benzo(k)fluoranthene	0.8	56	19
Chrysene	1.0	56	73
Dibenz(a,h)anthracene	0.33	0.56	11
Indeno(123-cd)pyrene	0.5	5.6	64
4,4-DDD	0.0033	92	0.014
Endrin	0.014	89	0.058

Analyte	UURSCO	RCSCO	Result
Lead	63	1000	95.3
Mercury	0.18	2.8	0.225
Zinc	110	10000	218
Benzo(a)anthracene	1.0	5.6	36
Benzo(a) Pyrene	1.0	1.0	45
Benzo(b)fluorathene	1.0	5.6	69
Benzo(k)fluoranthene	0.8	56	17
Chrysene	1.0	56	48
Dibenz(a,h)anthracene	0.33	0.56	7.1
Indeno(123-cd)pyrene	0.5	5.6	42
4,4-DDD	0.0033	92	0.021
Endrin	0.014	89	0.046



Analyte	UURSCO	RCSCO	Result
Lead	63	1000	199
Mercury	0.18	2.8	0.782
Zinc	110	10000	210
Benzo(a)anthracene	1.0	5.6	7.1
Benzo(a) Pyrene	1.0	1.0	9.8
Benzo(b)fluorathene	1.0	5.6	17
Benzo(k)fluoranthene	0.8	56	5.1
Chrysene	1.0	56	9.9
Dibenz(a,h)anthracene	0.33	0.56	1.8
Indeno(123-cd)pyrene	0.5	5.6	8.5
4,4-DDD	0.0033	92	0.011
4,4-DDE	0.0033	62	0.019
4,4-DDT	0.0033	47	0.028
Endrin	0.014	89	0.021
PCB (Total)	0.1	1.0	0.317

Title: Surface and Subsurface Soils – Track 4 Excavation Limits
2266 and 2268 Military Road
Tonawanda, New York

Prepared For: Tonawanda Storage Properties LLC
1400 Crossroads Building
2 State Street Rochester, New York



Project 100.001
Date 10/05/2022
Scale Not to Scale

Drawn FRT
Checked MPR
File Name Track 4 Removal

Figure 13