RECORD OF DECISION

Ace Cleaners
State Superfund Project
Brockport, Monroe County
Site No. 828133
July 2023

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

DECLARATION STATEMENT - RECORD OF DECISION

Ace Cleaners
State Superfund Project
Brockport, Monroe County
Site No. 828133
July 2023

Statement of Purpose and Basis

This document presents the remedy for the Ace Cleaners Site (Site) a Class 2 inactive hazardous waste disposal 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 and is not inconsistent with the National Oil and Hazardous Substances Pollution Contingency Plan of March 8, 1990 (40CFR300), as amended.

This decision is based on the Administrative Record of the New York State Department of Environmental Conservation (the Department) for the Ace Cleaners Site and the public's input to the proposed remedy presented by the Department. A listing of the documents included as a part of the Administrative Record is included in Appendix B of the ROD.

Description of Selected Remedy

The elements of the selected remedy are as follows:

1. 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 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. The existing on-site building 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. Dust and storm water run-off control measures will be employed to minimize any short-term impacts.

3. Excavation and off-site disposal of contaminant source areas, including grossly contaminated soil, as defined in 6 NYCRR Part 375-1.2(u) 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 on-site groundwater above standards. Approximately 1,500 cubic yards of contaminated soil will be removed from the Site. Clean fill meeting the requirements of 6 NYCRR Part 375-6.7(d) will be brought in to replace the excavated soil and establish the designed grades at the Site. Dust and storm water run-off control measures will be employed to minimize any short-term impacts associated with the excavation.

4. In-situ enhanced biodegradation injections will be employed to treat chlorinated VOCs in groundwater in an area to be determined during the remedial design. The biological breakdown of contaminants through anaerobic reductive dichlorination will be enhanced by injecting nutrients, in water-based solutions, into the subsurface to enhance existing microbe growth. The nutrients, method and depth of injection will be determined during the remedial design.

5. Any new on-site building(s) will be required to have a sub-slab depressurization, or other acceptable measures, to mitigate the migration of vapors into the building from soil and/or groundwater.

6. 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; and
- require compliance with the Department approved Site Management Plan.

7. 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.

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;
- provisions for the management and inspection of the identified engineering controls;
- a provision for evaluation of the potential for soil vapor intrusion for any new buildings in off-site areas of contamination, including provision for implementing actions recommended to address exposures related to soil vapor intrusion;
- 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 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 new buildings, as may be required by the Institutional and Engineering Control Plan discussed above.

New York State Department of Health Acceptance

The New York State Department of Health (NYSDOH) concurs that the remedy for this site is protective of human health.

Declaration

The selected remedy is protective of human health and the environment, complies with State and Federal requirements that are legally applicable or relevant and appropriate to the remedial action to the extent practicable, and is cost effective. This remedy utilizes permanent solutions and alternative treatment or resource recovery technologies, to the maximum extent practicable, and satisfies the preference for remedies that reduce toxicity, mobility, or volume as a principal element.

July 6, 2023
Date

Andrew Guglielmi
Andrew O. Guglielmi, Director
Division of Environmental Remediation

RECORD OF DECISION

Ace Cleaners
Brockport, Monroe County
Site No. 828133
July 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 hazardous wastes 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 hazardous wastes 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 Inactive Hazardous Waste Disposal Site Remedial Program (also known as the State Superfund Program) is an enforcement program, the mission of which is to identify and characterize suspected inactive hazardous waste disposal sites and to investigate and remediate those sites found to pose a significant threat to public health and environment.

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:

DECInfo Locator - Web Application
Index of /data/DecDocs/828133 (ny.gov)

Seymour Library
161 East Avenue
Brockport, NY 14420
Phone: (585) 637-1050

A public meeting was also conducted on February 28, 2023 at the Seymour Library. At the meeting, the findings of the Remedial Investigation (RI) and the Feasibility Study (FS) Report

were presented along with a summary of the proposed remedy. After the presentation, a question-and-answer period was held, during which verbal or written comments were accepted on the proposed remedy.

Comments on the remedy received during the comment period are summarized and addressed in the Responsiveness Summary section of this ROD.

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 Ace Cleaners Site consists of a 1.1-acre parcel located at 4626 South Lake Road in the Village of Brockport, Monroe County. The parcel is located along the southeast corner of the South Lake Road intersection with Sweden Lane.

Site Features: A 2,755 square foot, single story building, is the only structure located on the 4626 South Lake Road property. In addition to the Site building, the western half of the property consists of a paved parking area and a dirt and gravel driveway. The eastern half of the Site property is undeveloped and consists mostly of trees and brush. An unnamed tributary to the Brockport Creek borders the Ace Cleaners property line to the east and is located approximately 300 feet east of the site building.

Current Zoning and Land Use: The site is zoned for restricted-residential use and currently inactive and vacant.

Past Use(s) of the Site: Property ownership records indicate that it was used for dry cleaning purposes since at least 1967. The dry-cleaning operations were abandoned in 2009 and no operations are occurring at the site.

Site Geology and Hydrogeology: Site geology consists predominantly of silt and sand with minor amounts of sand and gravel. The overburden is approximately 8 to 17 feet thick and is underlain by sandstone of the Queenstown Formation. Groundwater occurs at a depth of approximately 5 feet beneath the ground surface. Groundwater flow is to the north-northeast toward the Brockport Creek and Lake Ontario.

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 restricted-residential use (which allows for commercial use and 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 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 included in the Tables for the media being evaluated in Exhibit A.

SECTION 5: ENFORCEMENT STATUS

Potentially Responsible Parties (PRPs) are those who may be legally liable for contamination at a site. This may include past or present owners and operators, waste generators, and haulers.

The PRPs for the site, documented to date, include:

Bruce Ribble d/b/a Ace Cleaners and Launderers

The PRPs for the site declined to implement a remedial program when requested by the Department. After the remedy is selected, the PRPs will again be contacted to assume responsibility for the remedial program. If an agreement cannot be reached with the PRPs, the Department will evaluate the site for further action under the State Superfund. The PRPs are subject to legal actions by the state for recovery of all response costs the state has incurred.

SECTION 6: SITE CONTAMINATION

6.1: Summary of the Remedial Investigation

A Remedial Investigation (RI) has been conducted. The purpose of the RI was to define the nature and extent of any contamination resulting from previous activities at the site. The field activities and findings of the investigation are described in the RI Report.

The following general activities are conducted during an RI:

- Research of historical information,
- Geophysical survey to determine the lateral extent of wastes,
- Test pits, soil borings, and monitoring well installations,
- Sampling of waste, surface and subsurface soils, groundwater, and soil vapor,

- Sampling of surface water and sediment,

- Ecological and Human Health Exposure Assessments.

The analytical data collected on this site includes data for:

- groundwater
- surface water
- 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. The tables found in Exhibit A list the applicable SCGs in the footnotes. 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 hazardous waste 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 in Exhibit A. Additionally, the RI Report contains a full discussion of the data. The contaminant(s) of concern identified at this site is/are:

tetrachloroethene (PCE)	vinyl chloride
trichloroethene (TCE)	cis-1,2-dichloroethene

As illustrated in Exhibit A, the contaminant(s) of concern exceed the applicable SCGs for:

- groundwater
- surface water
- 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 Record of Decision.

The following IRM(s) has/have been completed at this site based on conditions observed during the RI.

IRM - Soil Removal

Under the Division of Environmental Enforcement and the Spill Response Program a soil excavation was completed in April 2005. The 10-foot by 10-foot by 3-foot excavation was located adjacent to the backdoor of the facility and was part of an investigation of suspected dumping of used dry cleaning solvents. At the completion of the soil removal the site was referred to the State Superfund Program.

IRM - Sub Slab Depressurization System (SSD) Installation

To determine whether actions are needed to address exposure related to soil vapor intrusion, subslab vapor, indoor air, and outdoor air samples were collected at 16 off-site buildings from 2011-2021. Based on the sampling results, no further action was recommended for 15 structures, and the installation of a sub-slab depressurization system (SSDS) system was recommended at one structure. The system was installed in January 2022. Details of the IRM, are presented in a Construction Completion Report (CCR), dated July 2022.

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.

Based upon the resources and pathways identified and the toxicity of the contaminants of ecological concern at this site, a Fish and Wildlife Resources Impact Analysis (FWRIA) was deemed not necessary for the site.

Soil, sediment, surface water, and groundwater were analyzed for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), metals, polychlorinated biphenyls (PCBs), and pesticides. Groundwater samples were also analyzed for the emerging contaminants per and polyfluorinated alkyl substances (PFAS) and 1,4-dioxane. Soil vapor and indoor air were analyzed for VOCs. Based upon investigations conducted to date, the primary contaminants of concern are tetrachloroethene (PCE) and its associated degradation products in soil, groundwater and soil vapor.

Soil - Tetrachloroethene (PCE) is found in shallow (0 feet to approximately 5 feet below ground surface [bgs]) and deeper soil (5 feet to top of bedrock, approximately 15 feet bgs), predominantly

under and to the east of the on-site building. PCE was found in on-site soils up to 1,200 parts per million (ppm) at 13 feet bgs exceeding the protection of groundwater soil cleanup objective (PGWSCO) of 1.3 ppm. TCE was detected up to 20 ppm, exceeding the PGWSCOs of 0.47 ppm. Other PCE daughter products cis-1,2-dichloroethene (cis-1,2-DCE) and vinyl chloride (VC) contamination were distributed similarly to PCE contamination, and VC exceeded protection of groundwater SCO of 0.47 ppm in 13 of the 160 soil samples. Cis-1,2 DCE was detected up to 7.5 ppm compared to the PGWSCO of 0.25 ppm, and VC was detected up to 0.25 ppm compared to a PGWSCO of 0.02 ppm. Soil contamination has not been observed off-site above PGWSCOs.

Sediment - Four sediment samples were collected within the unnamed stream to the east of the site and in Brockport Creek, both up and downstream from the mouth of the unnamed stream. These samples were analyzed for VOCs and total organic carbon (TOC). PCE was detected in two samples, however neither was greater than the Class A Sediment Guidance Values. The highest concentration was detected in the sample collected at the mouth of the catch basin and its degradation compounds were not detected. PCE was detected at 47 ppb in that sample, well below the Class A sediment screening value of 16,000 ppb.

Groundwater and Surface Water - PCE and its associated degradation products are found in overburden groundwater on-site, exceeding groundwater standards, as follows: maximum concentrations of PCE, TCE and cis-1,2 DCE of 88,000 ppb, 9,400 ppb, and 16,000 ppb respectively, compared to their groundwater standard of 5 ppb. VC was detected up to 1,800 ppb compared to the groundwater standard of 2 ppb. PCE was detected in on-site bedrock groundwater up to 4,700 ppb, exceeding the groundwater standard of 5 ppb. PCE was detected in off-site bedrock groundwater up to 16 ppb.

Concentrations of PCE and its breakdown products in groundwater extend off-site, approximately 430 ft northeast of the on-site source area at concentrations greater than groundwater standards. PCE (2.2 ppb) was detected just above the Class C guidance value of 1 ppb in a surface water sample near the mouth of the culvert. Site contaminants were detected at levels below guidance values in surface water in the unnamed stream just prior to its discharge to Brockport Creek., Site contaminants were not detected in groundwater in the residential area east of the unnamed stream, nor were they detected in media in Brockport Creek.

Perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS) were reported in groundwater at concentrations of up to 64 and 57 parts per trillion (ppt), respectively, located at the center of the source area. These levels exceed their respective ambient water quality guidance values (AWQGVs) of 6.7 ppt of PFOA and 2.7 ppt of PFOS. The total concentration of PFAS, including PFOA and PFOS, were reported at concentrations of up to 252 ppt. The highest concentrations are found on-site at the back of the on-site building. 1,4-dioxane did not exceed its groundwater standard of 1 ppb. Groundwater at the site is not used as a source of drinking water.

Sub-slab Vapor and Indoor Air - To determine whether actions are needed to address exposure related to soil vapor intrusion, sub-slab vapor, indoor air, and outdoor air samples were collected at 16 off-site buildings from 2011-2021. Collocated indoor air and sub-slab vapor concentrations were compared to the NYS Department of Health Soil Vapor Intrusion Matrices. Based on the sampling results, no further action was recommended for 15 structures, and the installation of a

sub-slab depressurization system (SSDS) system was recommended, and subsequently completed, at one structure. Soil vapor intrusion sampling was offered to two additional properties, but access was not granted. The maximum concentrations of PCE and TCE in sub-slab vapor samples off-site were as follows: 1100 micrograms per cubic meter (ug/m3) and 120 ug/m3, respectively. Similarly, PCE and TCE were found in indoor air samples at maximum levels of 0.53 ug/m3 and 0.12 ug/m3, respectively. The concentrations of these VOCs in outdoor air samples were found to be consistent with background ranges.

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, there are areas of exposed soil on site and persons who enter the site could contact contaminants in the soil by walking on the site, digging or otherwise disturbing the soil. People are not drinking contaminated groundwater because the area is served by a public water supply that is 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. Because the site is vacant, the inhalation of site-related contaminants due to soil vapor intrusion does not represent a current concern. However, the potential exists for the inhalation of site contaminants due to soil vapor intrusion for any future on-site development. A sub-slab depressurization system (system that ventilates/removes the air beneath the building) has been installed in one off-site building to prevent soil vapor intrusion. Environmental sampling indicates soil vapor intrusion is not a concern for other 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.

- 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: SUMMARY OF THE SELECTED REMEDY

To be selected the remedy must be protective of human health and the environment, be cost-effective, comply with other statutory requirements, and utilize permanent solutions, alternative technologies, or resource recovery technologies to the maximum extent practicable. The remedy must also attain the remedial action objectives identified for the site, which are presented in Section 6.5. Potential remedial alternatives for the Site were identified, screened, and evaluated in the Feasibility Study Report.

A summary of the remedial alternatives that were considered for this site is presented in Exhibit B. Cost information is presented in the form of present worth, which represents the amount of money invested in the current year that would be sufficient to cover all present and future costs associated with the alternative. This enables the costs of remedial alternatives to be compared on a common basis. As a convention, a time frame of 30 years is used to evaluate present worth costs for alternatives with an indefinite duration. This does not imply that operation, maintenance, or monitoring would cease after 30 years if remediation goals are not achieved. A summary of the Remedial Alternatives Costs is included as Exhibit C.

The basis for the Department's remedy is set forth at Exhibit D.

The selected remedy is referred to as Excavation and In-Situ Enhanced Biodegradation.

The estimated present worth cost to implement the remedy is $2,696,000. The cost to construct the remedy is estimated to be $2,018,000 and the estimated average annual cost is $22,600.

The elements of the selected remedy are as follows:

1. 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 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. The existing on-site building 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. Dust and storm water run-off control measures will be employed to minimize any short-term impacts.

3. Excavation and off-site disposal of contaminant source areas, including grossly contaminated soil, as defined in 6 NYCRR Part 375-1.2(u) 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 on-site groundwater above standards. Approximately 1,500 cubic yards of contaminated soil will be removed from the site. Clean fill meeting the requirements of 6 NYCRR Part 375-6.7(d) will be brought in to replace the excavated soil and establish the designed grades at the site. Dust and storm water run-off control measures will be employed to minimize any short-term impacts associated with the excavation.

4. In-situ enhanced biodegradation injections will be employed to treat chlorinated VOCs in groundwater in an area to be determined during the remedial design. The biological breakdown of contaminants through anaerobic reductive dichlorination will be enhanced by injecting nutrients, in water-based solutions, into the subsurface to enhance existing microbe growth. The nutrients, method and depth of injection will be determined during the remedial design.

5. Any new on-site building(s) will be required to have a sub-slab depressurization, or other acceptable measures, to mitigate the migration of vapors into the building from soil and/or groundwater.

6. 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; and
- require compliance with the Department approved Site Management Plan.

7. 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.

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;
- provisions for the management and inspection of the identified engineering controls;
- a provision for evaluation of the potential for soil vapor intrusion for any new buildings in off-site areas of contamination, including provision for implementing actions recommended to address exposures related to soil vapor intrusion;
- 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 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 new buildings, as may be required by the Institutional and Engineering Control Plan discussed above.

Exhibit A

Nature and Extent of Contamination

This section describes the findings of the Remedial Investigation for all environmental media that were evaluated. As described in Section 6.1, samples were collected from various environmental media to characterize the nature and extent of contamination.

For each medium for which contamination was identified, a table summarizes the findings of the investigation. The tables present the range of contamination found at the site in the media and compares the data with the applicable SCGs for the site. For comparison purposes, the SCGs are provided for each medium that allows for unrestricted use. For soil, if applicable, the Restricted Use SCGs identified in Section 4 and Section 6.1.1 are also presented.

Waste/Source Areas

As described in the RI report, waste/source materials were identified at the site and are impacting groundwater, soil and soil vapor.

Wastes are defined in 6 NYCRR Part 375-1.2(aw) and include solid, industrial and/or hazardous wastes. Source areas are defined in 6 NYCRR Part 375(au). Source areas are areas of concern at a site were substantial quantities of contaminants are found which can migrate and release significant levels of contaminants to another environmental medium.

As a result of the historic use of the site, dry cleaning chemicals were dumped to the ground surface and floor drains, where they flowed/leaked into the soil at the site. The source area is located beneath the vacant, on-site building and to the rear of the site building.

Certain waste/source areas identified at the site were addressed by the IRM(s) described in Section 6.2. The remaining waste/source area(s) identified during the RI will be addressed in the remedy selection process.

Groundwater

Groundwater samples were collected from overburden and bedrock monitoring wells. The samples were collected to assess groundwater conditions on and off-site.

PCE was found in overburden and bedrock groundwater on-site at a maximum concentration of 88,000 ppb and 4,700 ppb, respectively, compared to the groundwater standard of 5 ppb. PCE was detected in off-site bedrock groundwater up to 16 ppb. TCE had a maximum concentration of 9,400 ppb in groundwater, exceeding the groundwater standard of 5 ppb. Daughter products cis-1,2 DCE and vinyl chloride (VC) were present at maximum concentrations of 16,000 ppb and 1,800 ppb respectively, exceeding the groundwater standard of 5 ppb and 2 ppb.

Concentrations of PCE and its breakdown products in groundwater extend off-site, approximately 430 ft northeast of the on-site source area, at concentrations greater than groundwater standards.

Table #1 - Groundwater

Detected Constituents	Concentration Range Detected (ppb)[a]	SCG[b] (ppb)	Frequency Exceeding SCG
VOCs			
Tetrachloroethene (PCE)	ND – 88,000	5	34/59
Trichloroethene (TCE)	ND - 9,400	5	27/59
cis-1,2-Dichloroethene	ND – 16,000	5	31/59
Vinyl Chloride	ND – 1,800	2	15/59

a - ppb: parts per billion, which is equivalent to micrograms per liter, ug/L, in water.
b- SCG: Standard Criteria or Guidance - Ambient Water Quality Standards and Guidance Values (TOGs 1.1.1), 6 NYCRR Part 703, Surface water and Groundwater Quality Standards, and Part 5 of the New York State Sanitary Code (10 NYCRR Part 5).

Based on the findings of the RI, the past disposal of hazardous waste has resulted in the contamination of groundwater. The site contaminants identified in groundwater which are considered to be the primary contaminants of concern, to be addressed by the remedy selection process are, tetrachloroethene (PCE) and its associated degradation products.

Soil

Soil samples were collected at the site during the RI, from on-site and off-site locations to further delineate the source area. Soil samples were collected in the vicinity of the source area, beneath the former on-site building for analysis primarily for VOCs.

The RI soil sampling results were compared to the applicable Soil Cleanup Objectives (SCOs) for unrestricted use and restricted use/protection of groundwater, as discussed in Section 6.3 and summarized below, and indicate that the primary contaminants of concern on-site are VOCs that contribute to the potential for, soil vapor intrusion into buildings at the site. Based on the comparison of the soil sampling results to the restricted use SCOs, the protection of groundwater SCOs were selected for the evaluation of the data.

The soil VOC results indicate that a VOC contaminant source still exists on the site. The VOC contamination exceeding the unrestricted and protection of groundwater SCOs was determined to emanate from the source area beneath the vacant, on-site building and to the rear of the building.

Table #2 - Soil

Detected Constituents	Concentration Range Detected (ppm)[a]	Unrestricted SCG[b] (ppm)	Frequency Exceeding Unrestricted SCG	Restricted Use SCG[c] (ppm)	Frequency Exceeding Restricted SCG
VOCs					
Tetrachloroethene (PCE)	ND – 1200	1.3	75/160	1.3	75/160
Trichloroethene (TCE)	ND – 20	0.47	20/160	0.47	20/160
cis-1,2-Dichloroethene	ND – 7.5	0.25	13/160	0.25	13/160
Vinyl Chloride	ND – 0.25	0.47	13/160	0.47	13/160

a - ppm: parts per million, which is equivalent to milligrams per kilogram, mg/kg, in soil;
b - SCG: Part 375-6.8(a), Unrestricted Soil Cleanup Objectives.
c - SCG: Part 375-6.8(b), Restricted Use Soil Cleanup Objectives for the Protection of Groundwater.

Based on the findings of the Remedial Investigation, the past disposal of hazardous waste has resulted in the contamination of on and off-site soil. The site contaminants identified in soil which are considered to be the primary contaminants of concern, to be addressed by the remedy selection process are, tetrachloroethene (PCE) and its associated degradation products.

Soil Vapor

To determine whether actions are needed to address exposure related to soil vapor intrusion, sub-slab vapor, indoor air, and outdoor air samples were collected at 16 off-site buildings from 2011-2021. Collocated indoor air and sub-slab vapor concentrations were compared to the NYS Department of Health Soil Vapor Intrusion Matrices. Based on the sampling results, no further action was recommended for 15 structures, and the installation of a sub-slab depressurization system (SSDS) system was recommended, and subsequently completed, at one structure. Soil vapor intrusion sampling was offered to two additional properties, but access was not granted. The maximum concentrations of PCE and TCE in sub-slab vapor samples were as follows: 1100 micrograms per cubic meter (ug/m3) and 120 ug/m3, respectively. Similarly, PCE and TCE were found in indoor air samples at maximum levels of 0.53 ug/m3 and 0.12 ug/m3, respectively. The concentrations of these VOCs in outdoor air samples were found to be consistent with background ranges.

Based on the concentration detected, and in comparison, with the NYSDOH Soil Vapor Intrusion Guidance, the potential for exposure to soil vapor contamination identified during the RI was addressed during the IRM described in Section 6.2.

Exhibit B

Description of Remedial Alternatives

The following alternatives were considered based on the remedial action objectives (see Section 6.5) to address the contaminated media identified at the site as described in Exhibit A.

Alternative 1: No Further Action

The No Further Action Alternative recognizes the remediation of the site completed by the IRM(s) described in Section 6.2. This alternative leaves the site in its present condition and does not provide any additional protection of the environment.

Alternative 2: No Further Action with Site Management

The No Further Action with Site Management Alternative recognizes the remediation of the site completed by the IRM(s) described in Section 6.2 and Site Management and Institutional Controls and Engineering Controls are necessary to confirm the effectiveness of the IRM. This alternative maintains engineering controls which were part of the IRM and includes institutional controls, in the form of an environmental easement and site management plan, necessary to protect public health and the environment from contamination remaining at the site after the IRMs.

Present Worth: *$173,000.00*
Capital Cost: *$33,000.00*
Annual Costs: *$4,700.00*

Alternative #3: Restoration to Pre-Disposal or Unrestricted Conditions

This alternative achieves all the SCGs discussed in Section 6.1.1 and Exhibit A and soil meets the unrestricted soil clean objectives listed in Part 375-6.8 (a). This alternative would include the demolition and off-site disposal of the on-site building, on-site thermal remediation, and on- and off-site bio-augmentation. Dual heater/soil vapor extraction wells will be spaced as needed over an approximately 10,500 square foot area and will heat soil to depths between 5 and 15 feet below ground surface to treat soil to unrestricted use criteria. Injection of bio-amendments will be implemented to address on- and off-site groundwater contamination. Injection wells and supporting monitoring points will be installed for use during amendment injection. Final decisions regarding well layout, use of permanent or temporary wells, and injection frequency will be made during remedy design.

Capital Cost: *$7,350,000.00*

Alternative #4: Monitored Natural Attenuation

Groundwater contamination will be addressed with monitored natural attenuation (MNA) under a Site Management Plan. This alternative maintains engineering controls which were part of the SSDS IRM and includes institutional controls, in the form of an environmental easement and site management plan, necessary to protect public health and the environment from contamination remaining at the site. Groundwater will be monitored for site related contamination and for MNA indicators which will provide an understanding of the (biological activity) breaking down the contamination. It is anticipated that contamination will decrease by an order of magnitude in a reasonable period of time. Reports of the attenuation will be provided at 5 and 10 years and active remediation will be proposed if it appears that natural processes alone will not address the contamination. The contingency remedial action will depend on the information collected, but it is currently anticipated that In-Situ Enhanced Biodegradation would be the expected contingency remedial action.

Present Worth: *$832,000.00*
Capital Cost: *$116,000.00*
Annual Costs: *$23,900.00*

Alternative #5: Excavation and In-Situ Enhanced Biodegradation

The existing on-site building 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). Approximately 1,500 cubic yards of contaminated soil will be removed from the site. Confirmation sampling for VOCs would be conducted during excavation activities, with analytical results verifying attainment of remediation goals. Clean fill meeting the requirements of 6 NYCRR Part 375-6.7(d) will be brought in to replace the excavated soil and establish the designed grades at the site. Any new on-site building(s) will be required to have a sub-slab depressurization, or other acceptable measures, to mitigate the migration of vapors into the building from soil and/or groundwater.

In-situ enhanced biodegradation will be employed to treat chlorinated VOCs in groundwater in the area depicted on Figure 8. The biological breakdown of contaminants through anaerobic reductive dichlorination will be enhanced by injecting nutrients, in water-based solutions, into the subsurface to enhance existing microbe growth. The nutrients, method and depth of injection will be determined during the remedial design. This alternative would also maintain engineering controls which were part of the SSDS IRM and includes institutional controls, in the form of an environmental easement and site management plan.

Present Worth: *$2,696,000.00*
Capital Cost: *$2,018,000.00*
Annual Costs: *$22,600.00*

Alternative #6: Excavation and Monitored Natural Attenuation

The existing on-site building will be demolished and materials which can't 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). Approximately 1,500 cubic yards of contaminated soil will be removed from the site. Confirmation sampling for

VOCs would be conducted during excavation activities, with analytical results verifying attainment of remediation goals. Clean fill meeting the requirements of 6 NYCRR Part 375-6.7(d) will be brought in to replace the excavated soil and establish the designed grades at the site. Any new on-site building(s) will be required to have a sub-slab depressurization, or other acceptable measures, to mitigate the migration of vapors into the building from soil and/or groundwater.

Groundwater contamination will be addressed with monitored natural attenuation (MNA). Groundwater will be monitored for site related contamination and for MNA indicators which will provide an understanding of the (biological activity) breaking down the contamination. It is anticipated that contamination will decrease by an order of magnitude in a reasonable period of time. Reports of the attenuation will be provided at 5 and 10 years and active remediation will be proposed if it appears that natural processes alone will not address the contamination. The contingency remedial action will depend on the information collected, but it is currently anticipated that In-Situ Enhanced Biodegradation would be the expected contingency remedial action. This alternative maintains engineering controls which were part of the IRM and includes institutional controls, in the form of an environmental easement and site management plan, necessary to protect public health and the environment from contamination remaining at the site.

Present Worth: *$2,268,000.00*
Capital Cost: *$1,552,000.00*
Annual Costs: *$23,900.00*

Exhibit C

Remedial Alternative Costs

Remedial Alternative	Capital Cost ($)	Annual Costs ($)	Total Present Worth ($)
1. No Action	$0	$0	$0
2. No Further Action w/Site Management	$33,000	$4,700	$173,000
3. Restoration to Pre-Disposal or Unrestricted Conditions	$7,350,000	$0	$7,350,000
4. MNA	$ 116,000	$23,900	$ 832,000
5. Excavation, In-Situ Enhanced Biodegradation	$2,018,000	$22,600	$2,696,000
6. Excavation, MNA	$ 1,552,000	$23,900	$ 2,268,000

Exhibit D

SUMMARY OF THE SELECTED REMEDY

The Department is proposing Alternative #5, Excavation and In-Situ Enhanced Biodegradation as the remedy for this site. Alternative #5 would achieve the remediation goals for the site by excavation of soil and the treatment of groundwater using in-situ enhanced biodegradation. The elements of this remedy are described in Section 7. The selected remedy is depicted in Figure #8.

Basis for Selection

The selected remedy is based on the results of the RI and the evaluation of alternatives. The criteria to which potential remedial alternatives are compared are defined in 6 NYCRR Part 375. A detailed discussion of the evaluation criteria and comparative analysis is included in the FS report.

The first two evaluation criteria are termed "threshold criteria" and must be satisfied in order for an alternative to be considered for selection.

1. Protection of Human Health and the Environment. This criterion is an overall evaluation of each alternative's ability to protect public health and the environment.

The selected remedy (Alternative 5) would satisfy this criterion by removing the source of groundwater contamination, treating the groundwater, and addressing the potential for exposures related to soil vapor intrusion. Alternative 5 addresses the source of the groundwater contamination, which is the most significant threat to public health and the environment. Alternative 1 (No Action) does not provide any protection to public health and the environment and will not be evaluated further. Alternative 3, by treating all soil contaminated above the Unrestricted soil cleanup objective, meets the threshold criteria. Alternatives 4, 5, and 6 also comply with this criterion but to a lesser degree or with lower certainty. Alternatives 4, 5, and 6 rely on a restriction of groundwater use at the site to protect human health. The potential for soil vapor intrusion will be significantly reduced by Alternatives 3, 5 and 6 due to in-situ treatment or excavation of soil containing VOCs. The potential for soil vapor intrusion (SVI) will remain high under Alternatives 2 and 4 since no source area excavation nor groundwater treatment is planned.

2. Compliance with New York State Standards, Criteria, and Guidance (SCGs). Compliance with SCGs addresses whether a remedy will meet environmental laws, regulations, and other standards and criteria. In addition, this criterion includes the consideration of guidance which the Department has determined to be applicable on a case-specific basis.

Alternative 5 complies with SCGs to the extent practicable. It addresses source areas of contamination and complies with the restricted use soil cleanup objectives at the surface through soil removal. It also creates the conditions necessary to restore groundwater quality to the extent practicable. Alternatives 2, 3, 4, and 6 also comply with this criterion but to a lesser degree or with lower certainty. Because Alternatives 2, 3, 4, 5, and 6 satisfy the threshold criteria, the remaining criteria are particularly important in selecting a final remedy for the site. It is expected Alternatives 3 and 5 will achieve groundwater SCGs sooner, while groundwater contamination above SCGs will remain on-site under Alternatives 2, 4, and 6 for many years.

The next six "primary balancing criteria" are used to compare the positive and negative aspects of each of the remedial strategies.

3. Long-term Effectiveness and Permanence. This criterion evaluates the long-term effectiveness of the remedial alternatives after implementation. If wastes or treated residuals remain on-site after the selected remedy has been implemented, the following items are evaluated: 1) the magnitude of the remaining risks, 2) the adequacy of the engineering and/or institutional controls intended to limit the risk, and 3) the reliability of these controls.

Long-term effectiveness is best accomplished by those alternatives involving excavation of the contaminated overburden soils (Alternatives 5 and 6). Alternative 3 results in removal of almost all the chemical contamination at the site and removes the need for property use restrictions and long-term monitoring. Alternatives 5 and 6 would result in the removal of most of the contaminated soil at the site, but it also requires an environmental easement and long-term monitoring. For Alternatives 2 and 4, site management remains effective, but it will not be desirable in the long term as no active remediation would be implemented and contamination would persist, likely for decades.

4. Reduction of Toxicity, Mobility or Volume. Preference is given to alternatives that permanently and significantly reduce the toxicity, mobility or volume of the wastes at the site.

Alternative 2 would control potential exposures with institutional controls only and will not reduce the toxicity, mobility or volume of contaminants remaining. Alternative 3 reduces the toxicity, mobility and volume of on-site waste by building and operating an in-situ treatment system for an unspecified period of time. Alternative 4 reduces the toxicity, mobility, and volume of on-site waste through monitored natural attenuation; however, the time frame will be much longer than Alternatives 3, 5 and 6. Alternatives 5 and 6, reduce the mobility and volume of on-site waste by transferring the material to an approved off-site location. However, depending on the disposal facility, the volume of the material would not be reduced. Alternatives 3 and 5 would permanently reduce the toxicity, mobility and volume of contaminants by use of thermal and/or chemical treatment.

5. Short-term Impacts and Effectiveness. The potential short-term adverse impacts of the remedial action upon the community, the workers, and the environment during the construction and/or implementation are evaluated. The length of time needed to achieve the remedial objectives is also estimated and compared against the other alternatives.

Alternatives 2 through 6 all have short-term impacts which could easily be controlled; however, Alternative 2 and 4 would have the smallest impacts, but would be the least effective in addressing the contamination. Alternative 3 activities that could impact the local community would be noise from drilling activities to install the heating/vacuum extraction wells and constructing the treatment system. Heating would need to be evaluated for short term impacts to sub-surface utilities or structures and the adjacent wetlands because the temperatures will reach 100 degrees C in the subsurface. Alternatives 5 and 6 could impact the local community with noise from the excavation and increased truck traffic with the transportation and disposal of soil, and the delivery of backfill. There is the potential for airborne exposure; however, community air monitoring and dust and VOC control/mitigation measures would be implemented to address this potential.

6. Implementability. The technical and administrative feasibility of implementing each alternative are evaluated. Technical feasibility includes the difficulties associated with the construction of the remedy and the ability to monitor its effectiveness. For administrative feasibility, the availability of the necessary personnel and materials is evaluated along with potential difficulties in obtaining specific operating approvals, access for construction, institutional controls, and so forth.

All alternatives are implementable. Alternatives 5 and 6 are favorable in that they are readily implementable. Alternative 3 is also implementable, but the power requirement for the dual heater/soil vapor extraction wells may not be available and are inconstant with green remediation goals.

7. Cost-Effectiveness. Capital costs and annual operation, maintenance, and monitoring costs are estimated for each alternative and compared on a present worth basis. Although cost-effectiveness is the last balancing criterion evaluated, where two or more alternatives have met the requirements of the other criteria, it can be used as the basis for the final decision.

The costs of the alternatives vary significantly. Alternative 2 and 4 have lower costs, but the contaminated soil would not be addressed other than by institutional controls and any natural attenuation that may occur (not monitored under Alternative 2; monitored under Alternative 4); in either instance, contaminated soil would remain on-site. With its large volume of soil to be treated, Alternative 3 (dual heater/soil vapor extraction) would have the highest present worth cost. Alternative 5 would be much less expensive than Alternative 3, yet it would provide equal protection of the groundwater resource, and so is more cost-effective. Alternative 5 is slightly more expensive than Alternative 6, but the time to achieve the remediation goals is greater under Alternative 6.

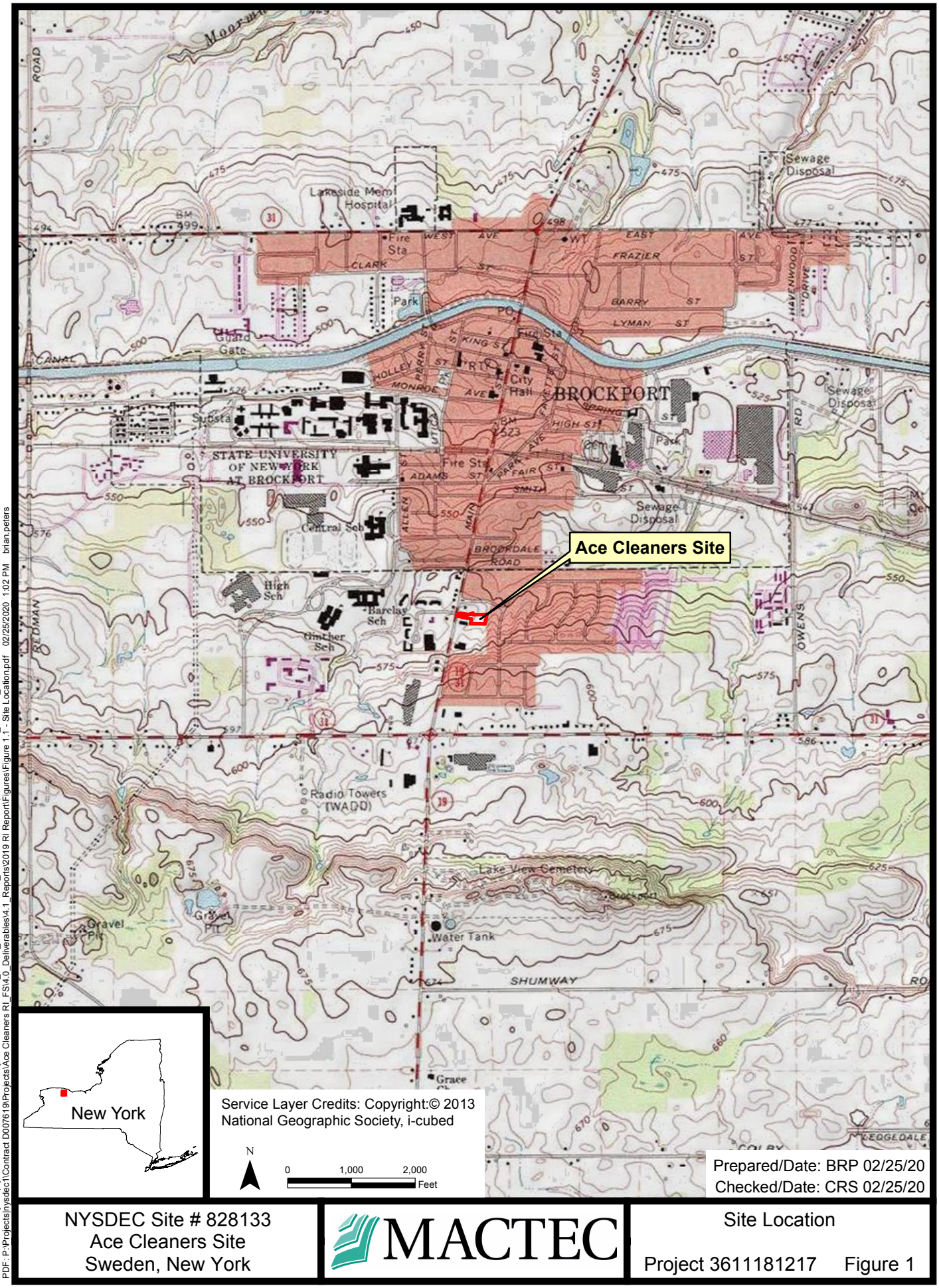
8. Land Use. When cleanup to pre-disposal conditions is determined to be infeasible, the Department may consider the current, intended, and reasonable anticipated future land use of the site and its surroundings in the selection of the soil remedy.

Since the anticipated use of the site is commercial, Alternatives 2 and 4 would be less desirable because contaminated soil would remain on the property, whereas Alternatives 3, 5 and 6 would remove or treat the contaminated soil permanently. However, the residual contamination with Alternatives 2 and 4 would be controllable with implementation of a Site Management Plan and an environmental easement.

The final criterion, Community Acceptance, is considered a "modifying criterion" and is taken into account after evaluating those above. It is evaluated after public comments on the Selected Remedial Action Plan have been received.

9. Community Acceptance. Concerns of the community regarding the investigation, the evaluation of alternatives, and the PRAP are evaluated. A responsiveness summary is attached to this ROD as Appendix A that describes public comments received and the Department's response. If the selected remedy differed significantly from the selected remedy, notices to the public would be issued describing the differences and reasons for the changes. However, the PRAP remedy was unchanged, and is finalized in this ROD.

Alternative #5 has been selected because, as described above, it satisfies the threshold criteria and provides the best balance of the balancing criterion.



NYSDEC Site # 828133
Ace Cleaners Site
Sweden, New York

MACTEC

Site Location

Project 3611181217 Figure 1

Legend

- Approximate Property Lines
- Approximate Historic Excavation
- Stream Section in Culvert
- Stream Flow Direction

N

0 25 50 Feet

Monroe County color digital orthoimagery (2015) obtained from New York State GIS Clearinghouse at: gis.ny.gov

Prepared/Date: BRP 02/25/20
Checked/Date: CRS 02/25/20

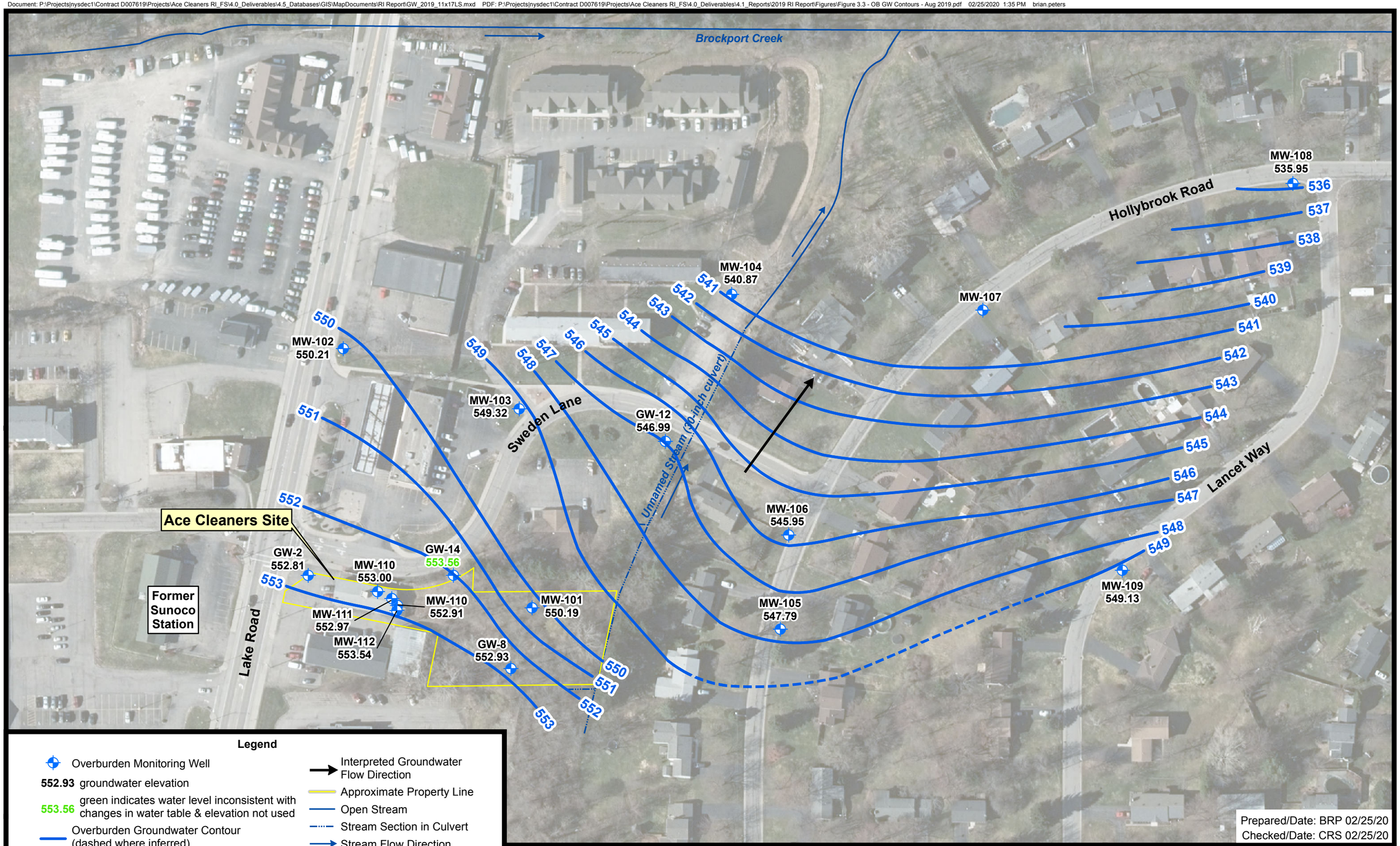
NYSDEC Site # 828133
Ace Cleaners Site
Sweden, New York

MACTEC

Site Features

Project 3611181217 Figure 2

Document: P:\Projects|nysdec1\Contract D007619\Projects\Ace Cleaners RI_FS\4.0_Deliverables\4.5_Databases\GIS\MapDocuments\RI Report\GW_2019_11x17LS.mxd PDF: P:\Projects|nysdec1\Contract D007619\Projects\Ace Cleaners RI_FS\4.0_Deliverables\4.1_Reports\2019 RI Report\Figures\Figure 3.3 - OB GW Contours - Aug 2019.pdf 02/25/2020 1:35 PM brian.peters



Legend

- Overburden Monitoring Well
- **552.93** groundwater elevation
- **553.56** green indicates water level inconsistent with changes in water table & elevation not used
- Overburden Groundwater Contour (dashed where inferred)
- Interpreted Groundwater Flow Direction
- Approximate Property Line
- Open Stream
- Stream Section in Culvert
- Stream Flow Direction

N

0 60 120 Feet

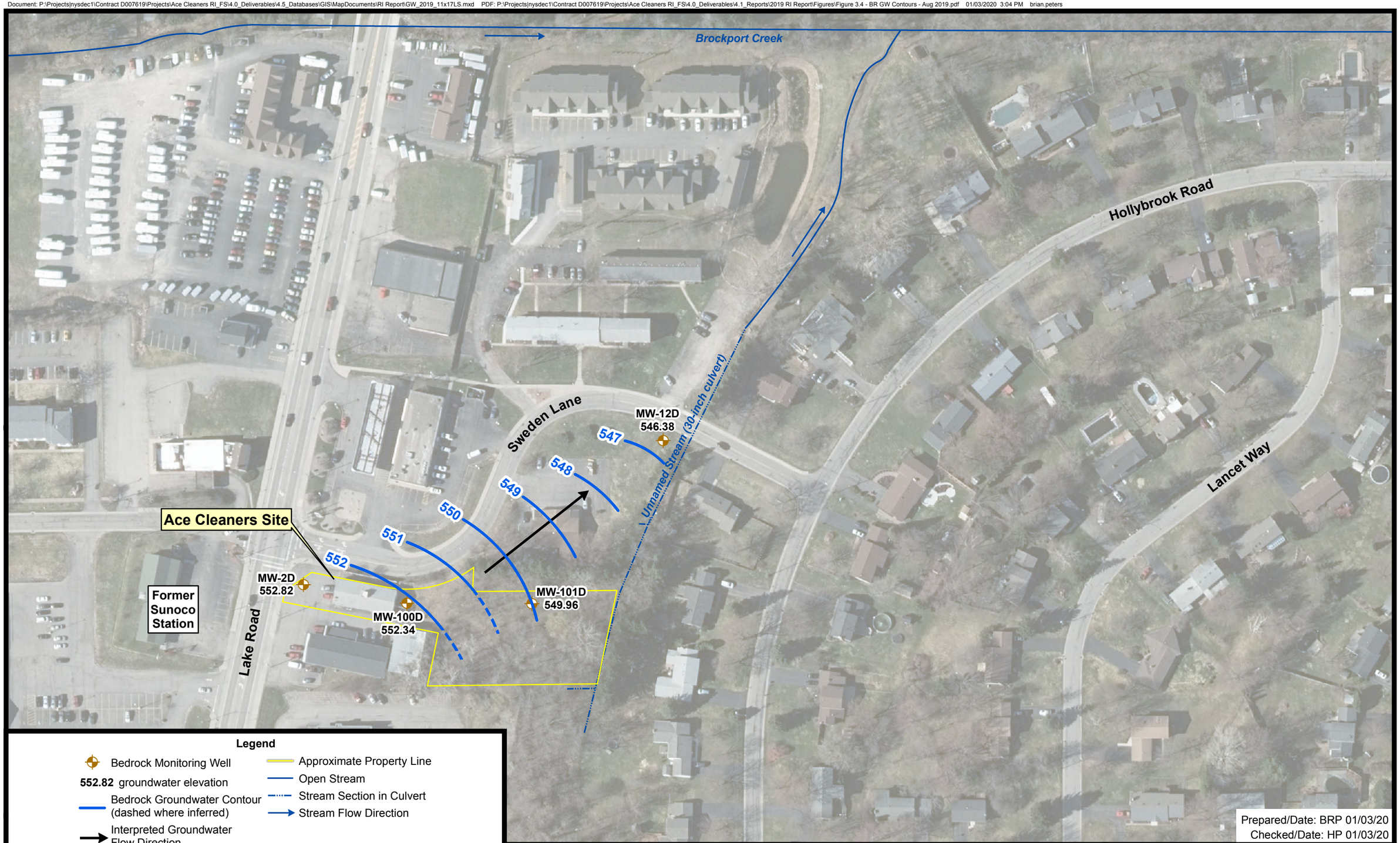
Notes:
1. Water levels measured by MACTEC on 8/19/19.
2. Monroe County color digital orthoimagery (2015) obtained from New York State GIS Clearinghouse at: gis.ny.gov

Prepared/Date: BRP 02/25/20
Checked/Date: CRS 02/25/20

NYSDEC Site # 828133
Ace Cleaners Site
Sweden, New York

MACTEC

Overburden Groundwater Contours
August 2019
Project 3611181217 Figure 3



Legend

- Bedrock Monitoring Well
- **552.82** groundwater elevation
- Bedrock Groundwater Contour (dashed where inferred)
- Interpreted Groundwater Flow Direction
- Approximate Property Line
- Open Stream
- Stream Section in Culvert
- Stream Flow Direction

N

0 60 120 Feet

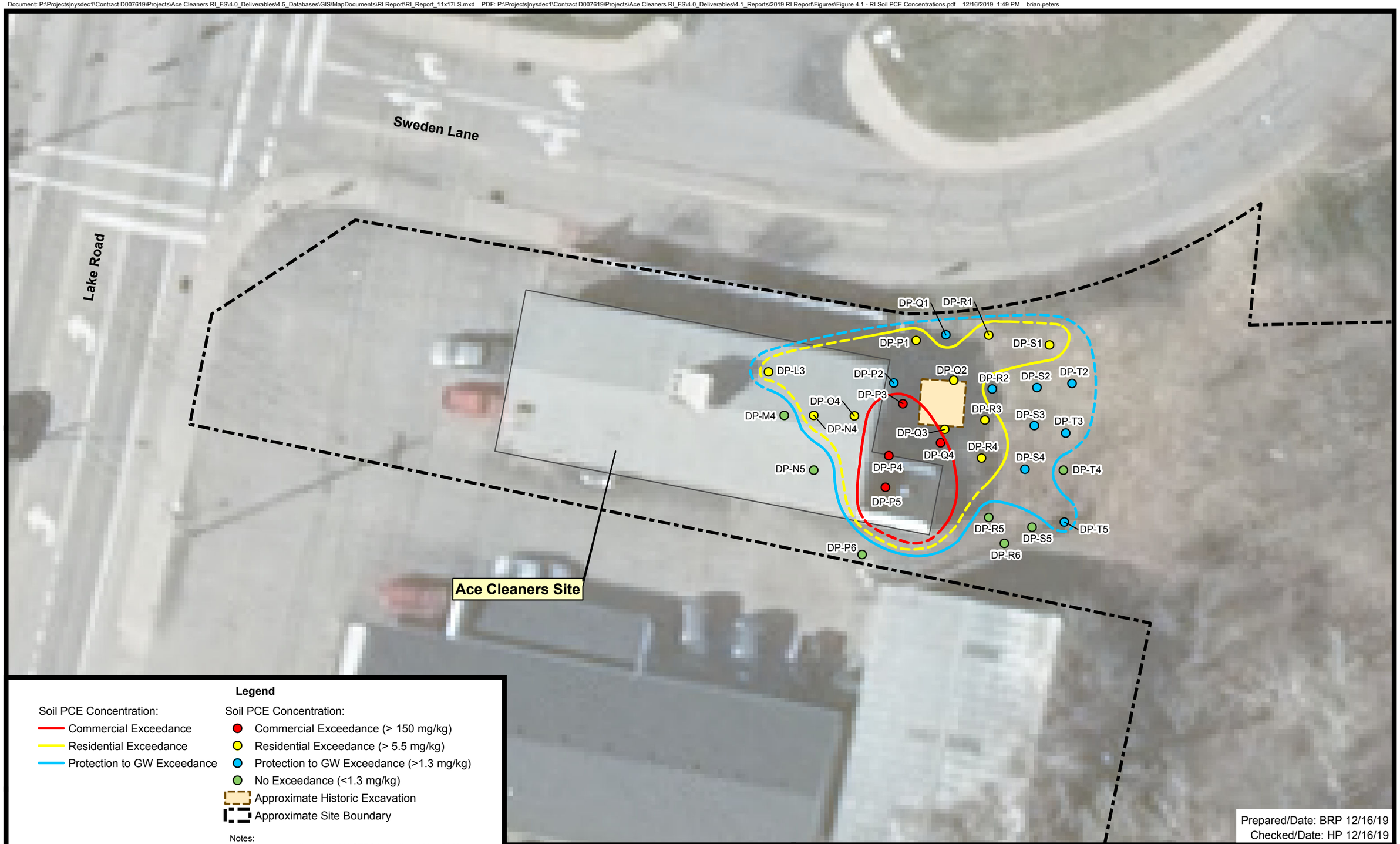
Notes:
1. Water levels measured by MACTEC on 8/19/19.
2. Monroe County color digital orthoimagery (2015) obtained from New York State GIS Clearinghouse at: gis.ny.gov

Prepared/Date: BRP 01/03/20
Checked/Date: HP 01/03/20

NYSDEC Site # 828133
Ace Cleaners Site
Sweden, New York

MACTEC

Bedrock Groundwater Contours
August 2019
Project 3611181217 Figure 4



Legend

Soil PCE Concentration:
- Commercial Exceedance
- Residential Exceedance
- Protection to GW Exceedance

Soil PCE Concentration:
- Commercial Exceedance (> 150 mg/kg)
- Residential Exceedance (> 5.5 mg/kg)
- Protection to GW Exceedance (>1.3 mg/kg)
- No Exceedance (<1.3 mg/kg)
- Approximate Historic Excavation
- Approximate Site Boundary

Notes:
1. Soil samples collected by MACTEC in April and May 2019.
2. PCE = tetrachloroethene
3. mg/kg = milligrams per kilogram
4. Monroe County color digital orthoimagery (2015) obtained from New York State GIS Clearinghouse at: gis.ny.gov

N

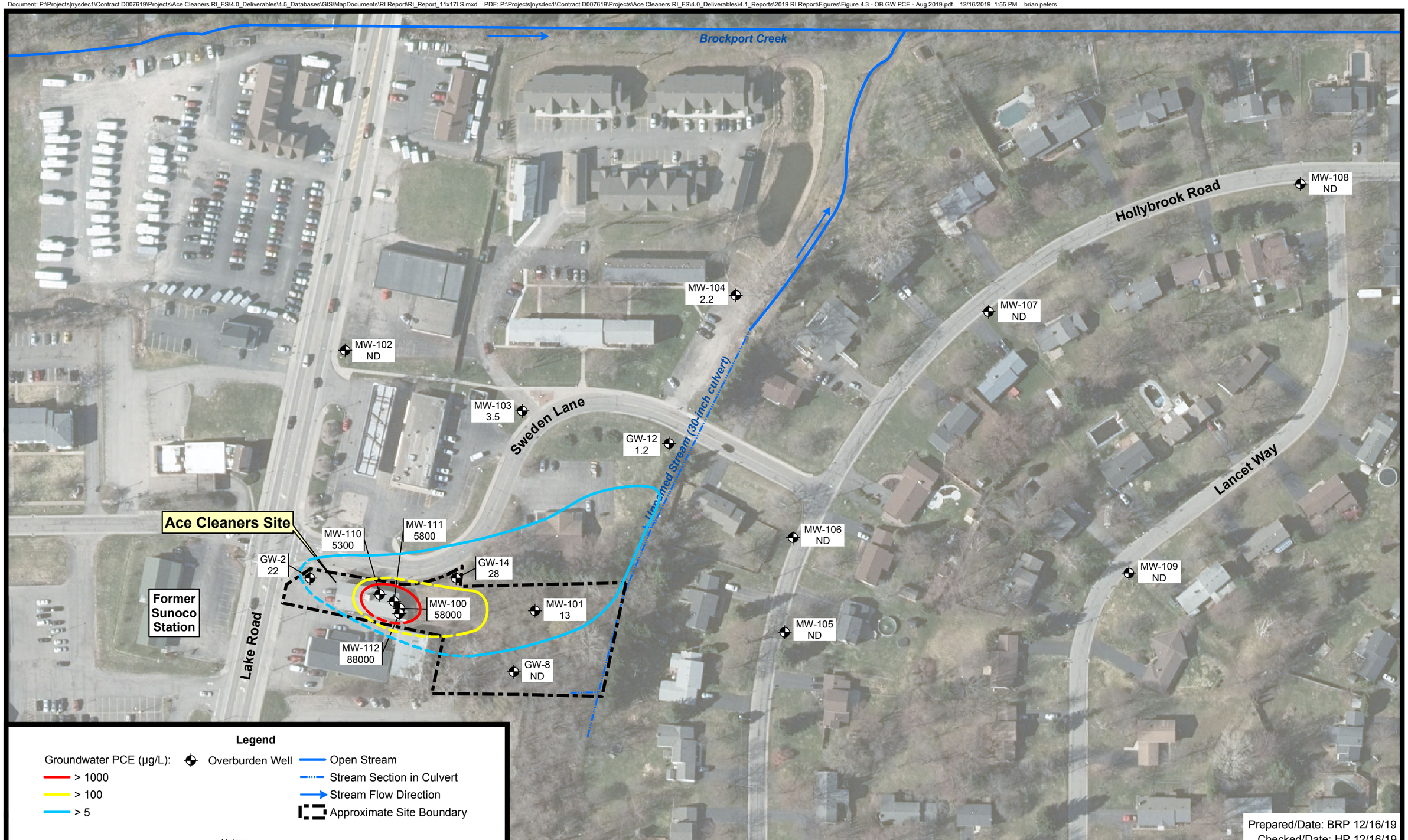
0 10 20 Feet

Prepared/Date: BRP 12/16/19
Checked/Date: HP 12/16/19

NYSDEC Site # 828133
Ace Cleaners Site
Sweden, New York

MACTEC

Remedial Investigation
Soil PCE Concentrations
Project 3611181217 Figure 5



Legend

Groundwater PCE (µg/L):
- > 1000
- > 100
- > 5

Overburden Well

Open Stream
Stream Section in Culvert
Stream Flow Direction
Approximate Site Boundary

N

0 60 120 Feet

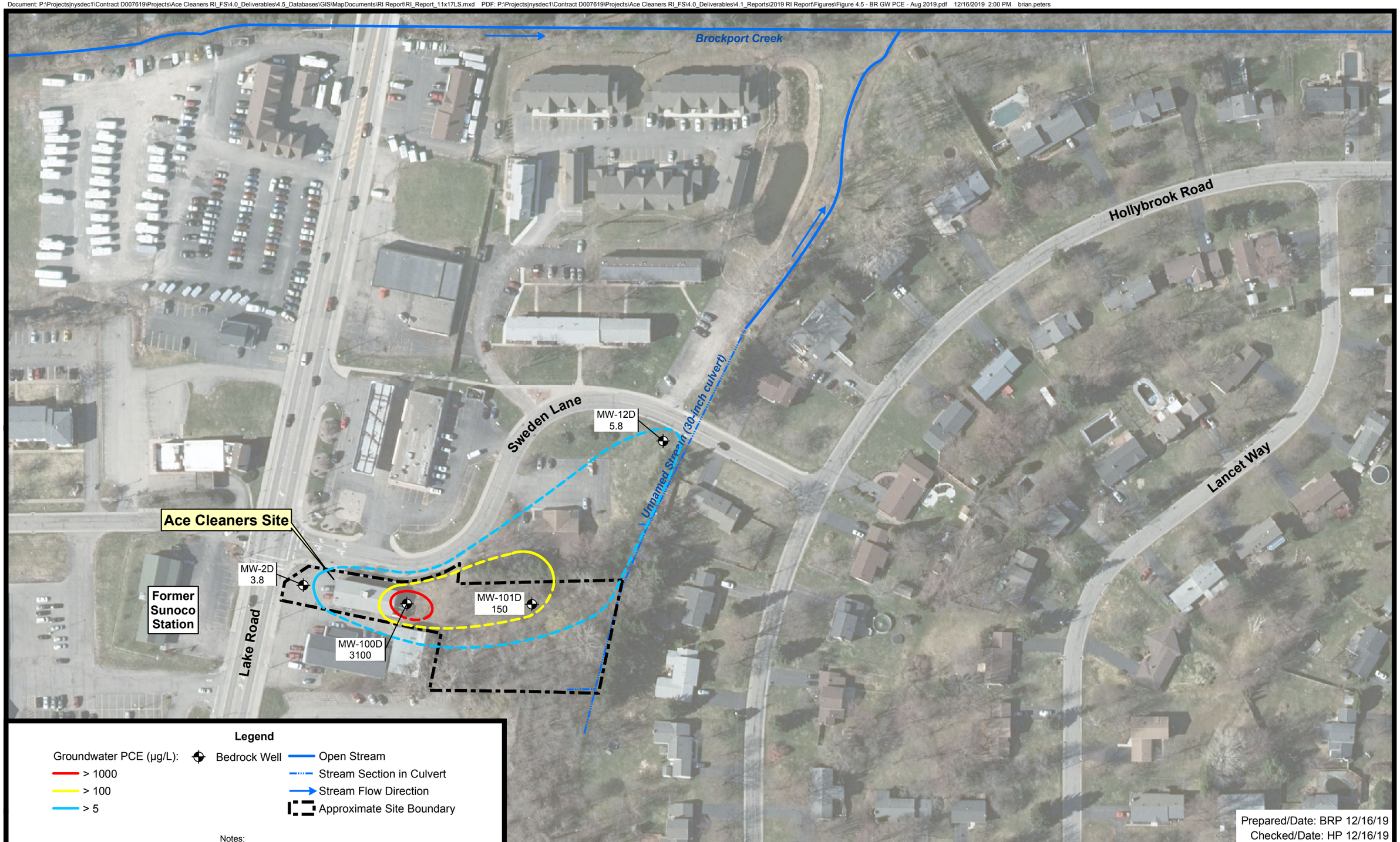
Notes:
1. Groundwater samples collected by MACTEC in August 2019.
2. PCE = tetrachloroethene
3. µg/L = micrograms per liter
4. Monroe County color digital orthoimagery (2015) obtained from New York State GIS Clearinghouse at: gis.ny.gov

Prepared/Date: BRP 12/16/19
Checked/Date: HP 12/16/19

NYSDEC Site # 828133
Ace Cleaners Site
Sweden, New York

MACTEC

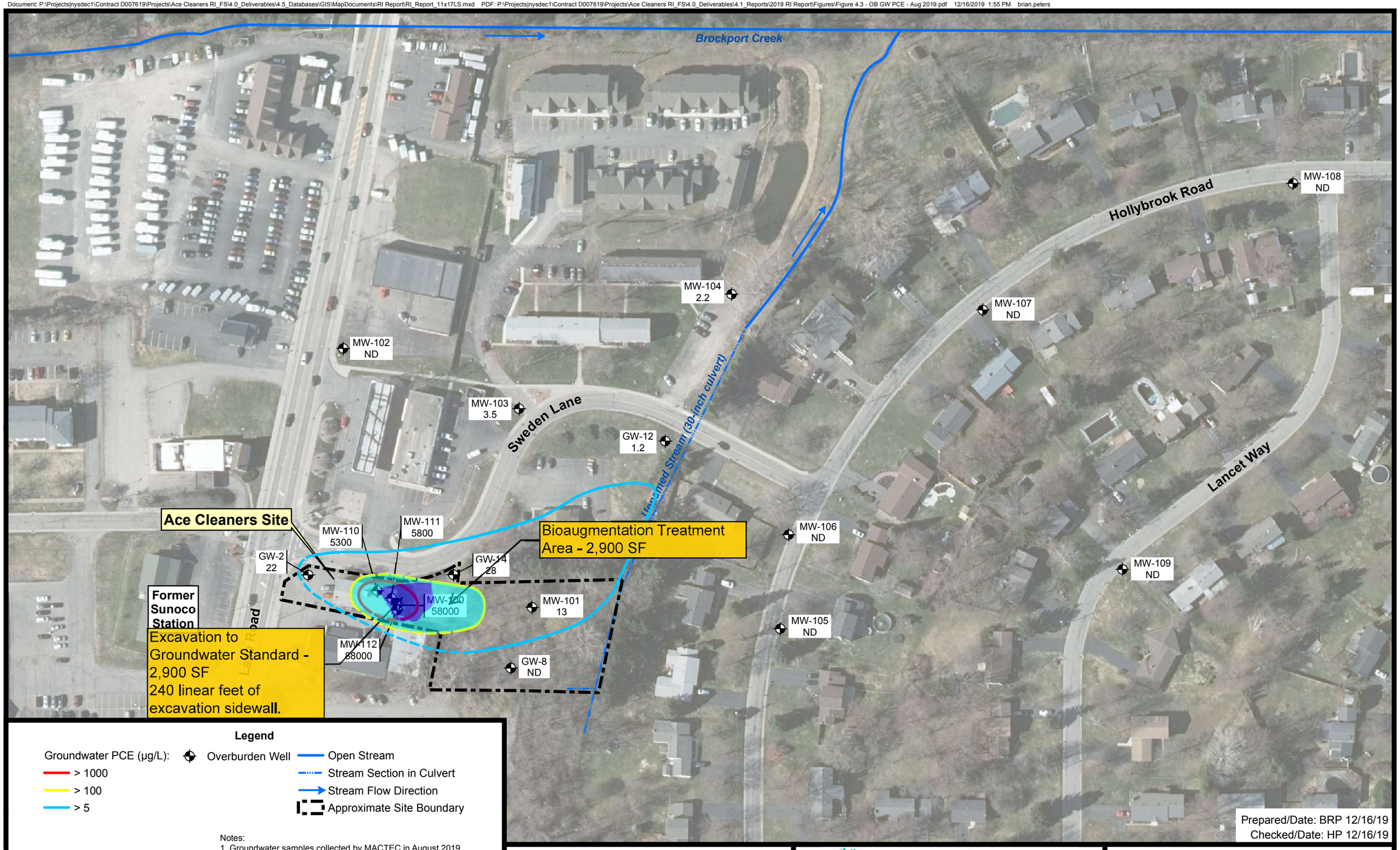
Overburden Groundwater
PCE Concentrations August 2019
Project 3611181217 Figure 6



NYSDEC Site # 828133
Ace Cleaners Site
Sweden, New York

MACTEC

Bedrock Groundwater
PCE Concentrations August 2019
Project 3611181217 Figure 7



NYSDEC Site # 828133
Ace Cleaners Site
Sweden, New York

MACTEC

Selected Remedy

Project 3616206125 Figure 8

APPENDIX A

Responsiveness Summary

RESPONSIVENESS SUMMARY

Ace Cleaners
State Superfund Project
Brockport, Town of Sweden, Monroe County, New York
Site No. 828133

The Proposed Remedial Action Plan (PRAP) for the Ace Cleaners site was prepared by the New York State Department of Environmental Conservation (the Department) in consultation with the New York State Department of Health (NYSDOH) and was issued to the document repositories on February 8, 2023. The PRAP outlined the remedial measures proposed for the contaminated soil and groundwater at the Ace Cleaners site.

The release of the PRAP was announced by sending a notice to the public contact list, informing the public of the opportunity to comment on the proposed remedy.

A public meeting was held on February 28th, 2023, at the Seymour Public Library which included a presentation of the remedial investigation/feasibility study (RI/FS) for the Ace Cleaners site as well as a discussion of the proposed remedy. The meeting provided an opportunity for citizens to discuss their concerns, ask questions, and comment on the proposed remedy. These comments have become part of the Administrative Record for this site. Written comments were also accepted at the time of the meeting and by mail at any point during the comment period. The public comment period for the PRAP ended on March 10, 2023.

This responsiveness summary responds to all questions and comments raised during the public comment period.

The following public comments were received at the February 28, 2023, meeting with the Department's responses**:**

COMMENT 1:

When will demolition of the building take place?

RESPONSE 1:

Demolition will likely be completed after the issuance of the ROD, following design of the remedy**.**

COMMENT 2:

Where is the SSDS installed?

RESPONSE 2:

The SSDS is installed in one of the Patriot Landing apartment buildings.

COMMENT 3:

Is it likely that additional or worse contamination will be found?

RESPONSE 3:

Through extensive sampling and laboratory analysis, the Remedial Investigation (RI) identified the nature and extent of contamination, including the levels of contamination in surface water, groundwater, soils, air, and sediment; defined the pathways and mechanisms of contaminant migration, as well as potential contaminant exposure pathways. Therefore, it is unlikely that unknown contamination will be found. This data is presented in the RI Report available at Index of /data/DecDocs/828133 (ny.gov).

COMMENT 4:

Can my home be tested for radon?

RESPONSE 4:

Radon is not a site related contaminant and testing for radon is beyond the scope of this project. However, additional information on radon, including testing, can be found at: https://www.health.ny.gov/environmental/radon/

COMMENT 5:

Has NYSDEC reached out to former owner of the site to complete the clean up?

RESPONSE 5:

Under the Environmental Conservation Law and the State Finance Law, the Commissioner of DEC is required to make "all reasonable efforts" to secure responsible party action prior to development and implementation of a State-funded remedial program. As part of the State Superfund (SSF) Program, the site offers the owner several opportunities to investigate, and if necessary, remediate the site. When these offers are declined, the state proceeds with the investigation and remediation and may pursue the owner(s) and potentially responsible parties (PRPs) for cost recovery. PRPs were contacted and asked to implement a remedial program at the Ace Cleaners site. The Department negotiated an Order on Consent with the site owner in 2006, which required the site owner to complete a site investigation. The site owner failed to abide by this Order and did not complete an investigation. Because of this, the site was entered into the SSF Program.

COMMENT 6:

Had the pond by the apartment buildings been tested?

RESPONSE 6:

Stormwater retention ponds are a common feature constructed to manage surface water runoff, and this pond was constructed to manage stormwater specifically for the apartment building property. The pond was inspected and photographed by DER personnel but has not been tested. Based on observations of the pond, including its distance from the site, the fact that the most recent (August 2019) groundwater concentrations detailed in the RIFS are below standards for several hundred feet between the site and the pond, as well as the pond's apparent depth and construction, contamination by site-related contaminants is unlikely. If evidence of site-related contamination is observed, additional evaluation will be conducted.

COMMENT 7:

Is living next to the Brockport Creek an exposure concern now or in the past?

RESPONSE 7:

Samples from the surface water, sediment, and the pore water of the creek were collected for the RI, and the concentrations of the site-related contaminants were below the applicable guidance values in Brockport Creek.

COMMENT 8:

How is the cleanup funded?

RESPONSE 8:

At sites where responsible parties cannot be found or are unable or unwilling to fund an investigation, the State pays for the investigation and cleanup using money from the 1986 Environmental Quality Bond Act, also known as the "State Superfund." The State may try to recover costs from a responsible party after the investigation and cleanup are complete.

COMMENT 9:

Who owns the property?

RESPONSE 9:

The property is privately owned. Bruce Ribble is listed as the current owner in county tax records.

Mr. Jim Bareis submitted a letter via email and via Certified Mail, dated March 3, 2023, which included the following questions and comments:

COMMENT 10:

Can you please explain how the toxins disappeared between the tributary and the creek?

RESPONSE 10:

Contaminants of concern at this site are tetrachloroethene (PCE), trichloroethene (TCE), vinyl chloride, and cis-1,2-dichlorothene. These are volatile organic compounds, or VOCs. When exposed to air, they volatilize and turn into a gas. This gas disperses to the atmosphere. In the case of these specific contaminants of concern, they break down in the atmosphere. When the VOCs volatilize the concentration in the water decreases.

COMMENT 11:

Has the history of cancer in the neighborhood been studied?

RESPONSE 11:

A cancer study has not been completed in the neighborhood. The results of the Remedial Investigation (RI) and soil vapor intrusion evaluations indicated that the potential for exposure to site-related contaminants off-site is minimal. Additional information about cancer cases in New York State can be found here:
https://apps.health.ny.gov/statistics/cancer/environmental_facilities/mapping/map/

COMMENT 12:

Right behind our house, on the opposite side of Brockport Creek, is a large, corrugated pipe, open above the normal level of the creek (see images 2 & 3). We have since learned that it is an overflow pipe, and when it is underwater when the creek is high it feeds runoff into the village's wastewater system. In conversation with the Supervisor of Public Works at the village of Brockport, I was told that there actually was a second such pipe somewhere near this one that was deemed unneeded and capped off several years ago. Could there be standing water or residue of toxins buried and forgotten within the second pipe as well?

RESPONSE 12:

Although this pipe is not known to exist, if it did in the vicinity specified, it is unlikely to contain levels of site-related contaminants at concentration which would require remedial action. Sediment, surface water, and pore water samples collected on the site side of the Brockport Creek did not identify contaminant concentrations at levels greater than applicable standards and guidance values. In addition, DER does not have any information indicating that there are abandoned utilities on the site. The possibility exists that unknown, older utility lines run through

the site, but this is unlikely given the utility surveys that were completed prior to digging or drilling work completed at the site.

COMMENT 13:

Where have these toxins travelled to from these overflow pipes in all of the year's toxins were present?

RESPONSE 13:

The RI investigated the nature and extent of contamination at the site and did not find any evidence of overflow pipes being associated with the site.

COMMENT 14:

Can you provide evidence that toxins do not now, or, as your presentation seemed to indicate, never actually effected Brockport Creek or its environs?

RESPONSE 14:

Samples from the surface water, sediment, and the pore water of the creek were collected for the RI and the concentrations of the site-related contaminants were below the applicable standards and guidance values in Brockport Creek.

COMMENT 15:

Have any studied been done regarding the era before the "spill"?

RESPONSE 15:

No. However, the RI fully investigated the nature and extent of contamination which would have found evidence of any prior releases of significance.

COMMENT 16:

Is this information in anywhere in the public record?

RESPONSE 16:

Additional site related data is available at DECInfoLocator, at:
https://www.dec.ny.gov/data/DecDocs/828133.
Selected documents are available at the document repository located at the Seymour Public Library, 161 East Ave, Brockport, NY 14420.

COMMENT 17:

When does the DEC plan more testing of all the waters that are potentially affected?

RESPONSE 17:

No additional sampling of surface water is planned at this time. If determined appropriate for long-term remedial effectiveness, additional sampling may be conducted during long-term Site Management.

COMMENT 18:

(Referring to DEC decision makers) Who are these people?

RESPONSE 18:

NYSDEC and NYSDOH technical staff present the proposed remedy at an internal project (peer) review to ensure the proposed remedy will be effective and protective of public health and the environment. Once NYSDEC and NYSDOH management agree/concur with the proposed remedy, NYSDEC releases a Proposed Remedial Action Plan (PRAP) for public comment and discussion at a public meeting. Assuming no significant changes to the remedy occur as a result of the public comments, the selected remedy is memorialized in the NYSDEC's Record of Decision (ROD), signed by NYSDEC's Division of Environmental Remediation's Division Director, with concurrence from the NYSDOH.

COMMENT 19:

If they are making the decision, what criteria are they basing the decision on?

RESPONSE 19:

The Feasibility Study (FS) uses RI information to develop and evaluate a range of remedial alternatives remedies that will eliminate the site's threat to public health or the environment. Whenever feasible, the state selects a remedy that permanently reduces or eliminates the contamination. The state evaluates the remedial alternatives to reach a balanced decision that protects people and the environment. Each alternative is screened to ensure the remedy is technically suitable for the site. Following the initial screening, NYSDEC and NYSDOH weigh the remaining alternatives against a number of other conditions, including:

- Overall protection of public health and the environment
- Reduction in toxicity, mobility, and volume of hazardous waste
- Long-term effectiveness and permanence
- Short-term effectiveness and potential impacts during remediation
- Implementation and technical reliability
- Compliance with statutory requirements
- Community acceptance

- Cost

This process for this site is described in Exhibit D in this ROD.

COMMENT 20:

Do area residents' concerns and questions have any consideration?

RESPONSE 20:

After the PRAP is subject to public comment, the final criterion, community acceptance, is considered. This modifying criterion is evaluated after any public comments on the remedy have been received, prior to DER selection of the remedy (issuance of the ROD). Public comment can make a difference in the remedial action plan. The public was encouraged to review the PRAP and make comments either at the public meeting or during the comment period. The comments were reviewed and compiled in this Responsiveness Summary, and if appropriate, modifications to the PRAP are incorporated into the ROD. If new information comes to light or conditions change in the future, RODs may be amended to address the condition to ensure the site remedy remains protective of public health and the environment.

COMMENT 21:

If indeed I understand this is eligible for a Superfund cleanup, how can "no remediation" be an option?

RESPONSE 21:

Including an option of either "no remediation" or "no additional remediation" is included as an option to establish a baseline or minimum to compare other alternatives against.

COMMENT 22:

How could the initial 2005 soil removal have been considered effective if testing in 2021-2022 showed unacceptable levels of chemicals, on-site and at the start of the tributary creek?

RESPONSE 22:

The initial 2005 soil removal was completed as an Interim Remedial Measure (IRM). An Interim Remedial Measure or "IRM" is a discrete set of activities to address both emergency and non-emergency site conditions, without extensive investigation and evaluation in order to prevent, mitigate, or remedy environmental damage or the consequences of environmental damage and/or mitigate potential public health exposure concerns attributable to a site. NYSDEC's Spills Program (Spill # 0500215) and the Division of Environmental Enforcement evaluated allegations that wastewater containing dry cleaning solvents (tetrachloroethene [PCE]) were discharged to a sump inside the building and to the ground behind the facility. Based on the results of this investigation, approximately 14 tons of soil was excavated from an area approximately 10 ft by 10 ft by 3 ft deep

(225 cubic feet) from behind (east side) the facility. Post excavation confirmation sample results indicated additional soil characterization was needed. Subsequently the RI determined the nature and extent of post-IRM contamination.

COMMENT 23:

What was DEC's goal in holding this meeting? Was it to make attendees feel like they were "heard"?

RESPONSE 23:

A PRAP public meeting is held for every SSF site to present the results of the RI/FS and proposed remedy to the public. The public is encouraged to review and comment on the proposed remedy identified in the PRAP. Public comments are addressed in this Responsiveness Summary. The public meeting is held in order to give the public the opportunity to learn about the site and to ask questions and offer comments in person.

COMMENT 24:

What will happen to the content of this meeting?

RESPONSE 24:

The presentation slides from the public meeting are publicly available at DEC InfoLocator found at: https://www.dec.ny.gov/data/DecDocs/828133. Following the close of the public comment period (March 10, 2023), all comments received on the PRAP in person, in writing, or via email, were compiled and responded to in this Responsiveness Summary and appended to this ROD. A fact sheet will be released announcing the issuance of this ROD. Both the ROD fact sheet and the ROD are publicly-available at https://www.dec.ny.gov/data/DecDocs/828133. Further, key documents in the administrative record for this site are listed in Appendix B of this ROD, and are available at the above link.

COMMENT 25:

How many other DEC personnel have come and gone in the last 18 years?

RESPONSE 25:

To date, this project has had four DEC project managers in the past nearly 20 years, as necessitated by the project needs and personnel changes.

COMMENT 26:

What have they gotten done regarding this site over all that time?

RESPONSE 26:

The site has moved through the process the DEC follows for completing a remedial program since the DEC became aware of contamination at the site, including, but not limited to, the following:

- site characterization and investigation to determine the nature and extent of contamination;
- implementation of an IRM to remove contaminated soils from a source area;
- development, evaluation, and selection of a site remedy as set forth in this ROD; and
- ongoing and often protracted legal processes DEC is required to follow under the law to use State Superfund monies. Site related documents can be found on DECInfoLocator: https://www.dec.ny.gov/data/DecDocs/828133 .

COMMENT 27:

Could the DEC consider sending a mass mailing out to residents in affected areas?

RESPONSE 27:

The Department's Division of Environmental Remediation (DER) has gone "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 is distributed via 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. However, if “paperless” is not an option for you, call or write to the NYSDEC project manager (contact information below) indicating that you need to receive paper copies of fact sheets through the US Postal Service. Please include the site name and site code (if available), as well as complete contact information.

Evelyn Hussey, Project Manager
NYSDEC Division of Environmental Remediation
625 Broadway Albany, NY 12233-7017
518-402-6787
evelyn.hussey@dec.ny.gov

COMMENT 28:

Who is the final decision maker on the remediation? Name, email, phone number

RESPONSE 28:

The ROD is signed by the NYSDEC’s Division of Environmental Remediation’s Division Director, Andrew Guglielmi, andrew.guglielmi@dec.ny.gov, (518) 402-9706, with concurrence from NYSDOH Director of the Bureau of Environmental Exposure Investigation. However, project specific inquiries can be directed to the DEC Project Manager, Evelyn Hussey, either by email at evelyn.hussey@dec.ny.gov or by phone at (518) 646-3143. All health-related questions should be directed to the NYSDOH Project Manager:

Shaun J. Surani, Project Manager
NYSDOH BEEI
Empire State Plaza Corning Tower, Room 1787
Albany, NY 12237
(518) 402-7860
beei@health.ny.gov

DEC and DOH contact information are also included in DEC fact sheets announcing key project milestones.

COMMENT 29:

Also concerning was the lack of awareness on the DEC's part that a pond exists adjacent to the unnamed tributary creek feeding Brockport Creek, and It appears from the presentation that monitoring has not been done in or reasonably close to that pond or ponds. The tributary run--off behind Ace Cleaners went below ground (under Sweden Lane) over to what are now Patriot Landing apartments.

RESPONSE 29:

See response to comment 6.

COMMENT 30:

Our house is roughly 70 feet from Brockport Creek. We garden—and have gardened for all of the years my wife has lived here—in soil that may have been affected by creek water. We imagined that our homegrown food was safe. This is a neighborhood with many children who play in that creek. We should expect and trust an assurance that they are safe.

RESPONSE 30:

Soil contamination has not been detected off-site, and concentrations in the Brockport Creek were below guidance values. Based on sampling completed as part of the Remedial Investigation, there is no evidence that soil adjacent to the Brockport Creek contains site-related contamination above applicable guidance values. Additional information on healthy gardening can be found here: https://www.health.ny.gov/environmental/outdoors/garden/

COMMENT 31:

My experience is that one goes to a meeting, which is held just so that it can be recorded in the public record as a public meeting, and then the town/city/village does whatever they wanted to do in the first place.

RESPONSE 31:

Public comments received during a PRAP meeting and associated comment period are considered as modifying criteria in selecting the remedy. See Exhibit D for the remedy evaluation criteria. See response to comment 23.

COMMENT 32:

It was asked at the meeting what would be the timeline for action we could expect. We were told it would "take some time", that the next steps would "take several months", and not to expect any action most likely for "years."

RESPONSE 32:

Your noted timeframe is not unusual to implement a full remedial program from investigation through remediation. Following issuance of this ROD, the remedy enters the design phase. A design and oversight consultant will be selected. Once the design is complete, the remedial work will go out to bid. The selected contractor will implement the remedy. Once remedy implementation is complete, the site will go into site management – a long term monitoring program to ensure the remedy remains effective as designed

COMMENT 33:

At the 2/28/23 meeting, attendees were told that they could contact Shaun Surani (NYSDOH) if they wished to get any testing done at their homes. I know I took this to mean that testing would be available. In a phone call on Friday, 3/3/23, Shaun said that this testing would not be provided for residents outside the area they feel was affected. This is troubling, given all the questions and concerns in this letter, and the impression given that further support was offered, but not seriously intended. Again, this just gives us further concern.

RESPONSE 33:

Soil vapor intrusion (SVI) evaluations have been completed outward of the site using a step-wise approach starting with properties closest to the site and following the data. Based on the results of those evaluations, action (e.g., installation of a sub-slab depressurization system) was needed at one of 16 properties tested. Further step out was not deemed necessary as supported by the data. At the February 23, 2023 meeting, NYSDOH offered to discuss SVI sampling results on an individual basis with any residents whose homes have been sampled or to discuss any individual requests for sampling. Please contact the DOH project manager, Shaun Surani at the contact information provided in response #28 with any concerns.

Jim Bareis called Shaun Surani (DOH) on March 3, 2023, and commented the following verbally:

COMMENT 34:

Will remedial work impact air quality in the surrounding neighborhood?

RESPONSE 34:

A community air monitoring plan (CAMP) will be implemented during all on-site ground intrusive activities. The CAMP will require continuous monitoring of total volatile organic compounds and particulates (dust) at the upwind (background) and downwind perimeter of the work area. Action levels have been established that indicate when the site work is beginning to impact the air at the work site boundary. When an action level is reached, measures such as a work shutdown or wetting the surface to reduce airborne dust, will be taken to address the identified condition. These measures will prevent the off-site migration of contaminants to protect the surrounding community.

Greta Bohn submitted an email dated February 21, 2023, which included the following comments:

COMMENT 35:

I am looking for information about contaminants found in the different ground wells that were dug around the neighborhood. We live in the neighborhood adjacent to this property and would like to know the findings of each of the ground well sites.

RESPONSE 35:

The area is served by public water not impacted by this contamination. Site-related documents can be found on DECInfoLocator https://www.dec.ny.gov/data/DecDocs/828133. The Remedial Investigation report (RI) has the most complete summary of the groundwater monitoring well data as of the date of this ROD:
https://www.dec.ny.gov/data/DecDocs/828133/Report.HW.828133.2022-06-28.Ace_Cleaners_RIFS_Report_FINAL.pdf

Elliot Cooper submitted an email on February 2, 2023, which included the following question:

COMMENT 36:

Can you provide me with a consultant contact who will be implementing this work?

RESPONSE 36:

See response 32.

APPENDIX B

Administrative Record

Administrative Record

Ace Cleaners
State Superfund Project
Brockport, Monroe County, New York
Site No. 828133

1. *Proposed Remedial Action Plan for the Ace Cleaners site,* dated January 2023, prepared by the Department.

2. *Letter dated March 3, 2023, from Jim Bareis, local resident*

3. *Remedial Investigation and Feasibility Study Report*, dated June 2022, prepared by MACTEC.

4. *Remedial Investigation Work Plan*, dated July 2010, prepared by the Department.

5. *Ace Cleaners Site Characterization Report*, dated June 2010, prepared by the MACTEC.

6. *SSF Referral Memorandum,* dated June 19, 2009, for a state-funded Remedial Program.

7. *Spill Report*, dated May 2005, prepared by the Department.