RECORD OF DECISION

Former Hall-Welter Site
State Superfund Project
Rochester, Monroe County
Site No. 828194
March 2022

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

DECLARATION STATEMENT - RECORD OF DECISION

Former Hall-Welter Site
State Superfund Project
Rochester, Monroe County
Site No. 828194
March 2022

Statement of Purpose and Basis

This document presents the remedy for the Former Hall-Welter 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 Former Hall-Welter 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. 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 will include, at a minimum, a 20-mil vapor barrier/waterproofing membrane on the foundation to improve energy efficiency as an element of construction.

2. Cover System

A site cover currently exists in areas not occupied by buildings and will be maintained to allow for restricted residential, commercial, or industrial use of the site. Any site redevelopment will maintain the existing site cover. The site cover may include paved surface parking areas, sidewalks or soil where the upper two feet of exposed surface soil meets the applicable SCOs for restricted residential use. Any fill material brought to the site will meet the requirements for the identified site use as set forth in 6NYCRR part 375-6.7(d).

3. Soil Vapor Extraction (SVE)

Soil vapor extraction (SVE) will be implemented to remove volatile organic compounds (VOCs) from the subsurface. VOCs will be physically removed from the soil by applying a vacuum to wells that have been installed into the vadose zone (the area below the ground but above the water table). These wells are proposed to be installed horizontally below the building, but a final decision will be determined during remedial design. The vacuum draws air through the soil matrix which carries the VOCs from the soil to the SVE well. The air extracted from the SVE wells is then treated as necessary prior to being discharged to the atmosphere.

4. Treatment Remedy Shutdown

The operation of the components of the remedy will continue until the remedial objectives have been achieved, or until the Department determines that continued operation is technically impracticable or not feasible.

5. Vapor Mitigation

Any on-site buildings and off-site buildings impacted by the site will be required to have a sub-slab depressurization system (SSDS), or other acceptable measures, to mitigate the migration of vapors into the building from soil and groundwater.

6. Engineering and Institutional Controls

Institutional Control:

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

- require the remedial party or site owner to complete and submit to the Department a periodic certification of institutional and engineering controls in accordance with Part 375-1.8 (h)(3);
- allow the use and development of the controlled property for restricted residential, commercial, and 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 County DOH; and
- require compliance with the Department approved Site Management Plan.

7. Site Management Plan

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

• 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

Engineering Controls: The soil cover discussed in #2, the soil vapor extraction system discussed in #3 and the sub-slab depressurization system discussed in #5 above.

This plan includes, but may not be limited to:

o an Excavation Plan which details the provisions for management of future excavations in areas of remaining contamination;

o a provision for further investigation and remediation should large scale redevelopment occur, if any of the existing structures are demolished, or if the subsurface is otherwise made accessible. The nature and extent of contamination in areas where access was previously limited or unavailable will be immediately and thoroughly investigated pursuant to a plan approved by the Department. Based on the investigation results and the Department determination of the need for a remedy, a Remedial Action Work Plan (RAWP) will be developed for the final remedy for the site, including removal and/or treatment of any source areas to the extent feasible. Citizen Participation Plan (CPP) activities will continue through this process. Any necessary remediation will be completed prior to, or in association with, redevelopment. This includes areas underneath the existing building.

o a provision should redevelopment occur to ensure no soil exceeding protection of groundwater concentrations will remain below storm water retention basin or infiltration structures.

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

o a provision that should a building foundation or building slab be removed in the future, a cover system consistent with that described in Paragraph #2 above will be placed in any areas where the upper two feet of exposed surface soil exceeds the applicable SCOs

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

o maintaining site access controls and Department notification;

o the steps necessary for the periodic reviews and certification of the institutional and/or engineering controls; and

o a provision to monitor the ownership status of off-site locations where mitigation was recommended, but not conducted by the Department.

o 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;

• 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:

o procedures for operating and maintaining the remedy;

o compliance monitoring of treatment systems to ensure proper O&M as well as providing the data for any necessary permit or permit equivalent reporting;

- o maintaining site access controls and Department notification; and
- o providing the Department access to the site and O&M records.

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.

March 31, 2022 — Susan Edwards

Date — Susan . Edwards, P.E., Director
Division of Environmental Remediation

RECORD OF DECISION

Former Hall-Welter Site
Rochester, Monroe County
Site No. 828194
March 2022

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 repository:

DECInfo Locator - https://gisservices.dec.ny.gov/gis/dil/index.html?rs=828194

A public meeting was also conducted. At the meeting, the findings of the remedial investigation (RI) and the feasibility study (FS) 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 the 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 Former Hall-Welter site is located at 38-46 Mount Hope Avenue on a 0.39-acre parcel. The site is located in the South Wedge area of the City of Rochester, Monroe County.

Site Features: The site is occupied by a one story, multi-use commercial structure and a small parking lot. It is bordered to the north and south by commercial properties, to the east by residential and commercial properties, and to the west by Mount Hope Avenue.

Current Zoning/Use(s): The site is currently a multi-occupant commercial structure and is zoned Center City Riverfront (CCD-R) which allows for mixed commercial and residential. The building is currently vacant.

Past Use of the Site: Prior to 1942 the site was used to repair vehicles and as a brass warehouse. The Hall-Welter Company, Inc. purchased the property in 1942 and did defense contracting during World War II. Hall-Welter later manufactured check printing machines until they sold the property in 1988. Years of manufacturing and solvent use lead to contamination at the site. The site was occupied by The Rochester Rehabilitation center from 1988-2014. After 2014, the site has had numerous commercial tenants. Volatile organic compound (VOC) contamination was encountered during phase II investigations conducted from 2014 through 2016 which led to the Department listing the site on the New York State Inactive Hazardous Waste Site Registry in 2017.

Site Geology and Hydrogeology: Data from the site investigations indicate that groundwater flow is generally to the northwest. Groundwater was encountered at an average depth of approximately 8-12 feet below ground surface. Soils consist of fill material above sand and gravel deposits. Bedrock was encountered at approximately 17 feet below ground surface.

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:

Hall Welter Company, Inc. and
Center Properties

The PRPs for the site declined to implement a full 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.

Center Properties elected to install and operate a sub slab depressurization system (SSDS) under an Order-on-Consent with the Department. The system was installed under an interim remedial measure (IRM) and is being managed by an interim site management plan (ISMP).

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
- soil
- indoor air
- sub-slab vapor

6.1.1: Standards, Criteria, and Guidance (SCGs)

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

To determine whether the contaminants identified in various media are present at levels of concern, the data from the RI were compared to media-specific SCGs. The Department has developed SCGs for groundwater, surface water, sediments, and soil. The NYSDOH has developed SCGs for drinking water and soil vapor intrusion. 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)
1,2-dichloroethene
trichloroethene (TCE)
trans-1,2-dichloroethene
vinyl chloride

As illustrated in Exhibit A, 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 Record of Decision.

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

Installation of a sub slab depressurization system.

Prior to the site being listed, the site owner attempted to address soil vapor intrusion by installing two SSDSs in the building. Those systems did not adequately depressurize the extent of the building's footprint or reduce indoor air contaminants to levels below applicable air guidelines. When the site was listed, additional SSDSs were installed by the site owner to mitigate indoor air contaminants as an IRM. This IRM was done under an Order-on-Consent between Center Properties (site owner) and the Department. The site owner prepared an IRM work plan for the construction of an SSDS to address the entire building footprint. An additional fan and multiple suction points were added to the site's SSDS in order to completely depressurize the slab and address indoor air concerns. The SSDS is being managed under an interim site management plan (ISMP) by the site owner which requires annual indoor air monitoring and confirms that indoor air remains below NYSDOH air guidelines.

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 Fish and Wildlife Resources Impact Analysis (FWRIA) for OU 01, which is included in the RI report, presents a detailed discussion of the existing and potential impacts from the site to fish and wildlife receptors.

Based upon investigations conducted to date, the primary contaminants of concern include tetrachloroethene (PCE), trichloroethene (TCE), cis-1,2-dichloroethene (cis-1,2-DCE), trans 1,2-dichloroethene (trans-1,2-DCE) and vinyl chloride.

Soil - Chlorinated VOCs are present in soils under the southern portion of the building and in the alley way but were below commercial use soil cleanup objectives (SCOs). Due to limited access to the suspected source area, a complete evaluation of soil contamination could not be conducted. Sample results from four locations adjacent to the suspected source area were above the protection of groundwater (PGWSCOs) of 1.3 parts per million (ppm), 0.47 ppm, and 0.25 ppm for PCE, TCE, and cis-1,2-DCE respectively. PCE was detected as high as 3.5 ppm, TCE as high as 44 ppm, and cis-1,2-DCE as high as 1.6 ppm.

Groundwater - PCE was detected in groundwater at concentrations up to 960 parts per billion (ppb). TCE was detected in groundwater at concentrations up to 93 ppb. Cis-1,2-DCE was detected in groundwater at concentrations up to 120 ppb. PCE, TCE and cis-1,2-DCE all have a New York State groundwater standard of 5 ppb. Groundwater concentrations at the

downgradient property lines are above New York State groundwater standards; however, groundwater use is prohibited as a potable water source within the City of Rochester, and SVI investigations were performed.

Soil Vapor - Sub-slab soil vapor samples taken on-site indicate that PCE (350 ug/m3), TCE (33,000 ug/m3), and cis-1,2 DCE (52 ug/m3) are present in the soil vapor.

Indoor Air - TCE was detected in indoor air at concentrations above the NYSDOH air guideline of 2 ug/m3. Historically, indoor air levels of TCE were as high as 158 ug/m3. With the installation of a SSDS, the latest expansion of the SSDS and sealing of slab cracks or penetrations, the last round of indoor air samples showed all samples below NYSDOH air guidelines.

Soil vapor intrusion investigations were performed at five off-site locations where access was granted. Indoor air concentrations for contaminants of concern were not found above DOH air guidelines at any of the locations. However, based on elevated sub-slab vapor levels detected (TCE), actions to address this contamination were recommended to the site owners of two off-site locations.

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.*

People are not drinking contaminated groundwater because the area is served by a public water supply that is not affected by site-related contamination. People may contact contaminated soil and groundwater if they dig below the building foundation or surface/site cover. Volatile organic compounds (VOCs) in the groundwater or soil may move into the soil vapor (air spaces within the soil), which in turn may move into overlying buildings and affect the indoor air quality. This process, which is similar to the movement of radon gas from the subsurface into the indoor air of buildings, is referred to as soil vapor intrusion. Actions have been taken in the on-site building and at two off-site buildings to address the potential for soil vapor intrusion. Environmental data collected at other off-site locations did not indicate the need for additional actions to address soil vapor intrusion.

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 (FS) 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 the Soil Vapor Extraction (SVE) and Site Management remedy.

The estimated present worth cost to implement the remedy is $479,536. The cost to construct the remedy is estimated to be $291,400 and the estimated average annual cost are as follows: years 1 & 2: $45,200, years 3 – 7: $23,600, year 8 – 15: $5400, and every 5 years: $2500.

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 will include, at a minimum, a 20-mil vapor barrier/waterproofing membrane on the foundation to improve energy efficiency as an element of construction.

2. Cover System

A site cover currently exists in areas not occupied by buildings and will be maintained to allow for restricted residential, commercial, or industrial use of the site. Any site redevelopment will maintain the existing site cover. The site cover may include paved surface parking areas, sidewalks or soil where the upper two feet of exposed surface soil meets the applicable SCOs for restricted residential use. Any fill material brought to the site will meet the requirements for the identified site use as set forth in 6NYCRR part 375-6.7(d).

3. Soil Vapor Extraction (SVE)

Soil vapor extraction (SVE) will be implemented to remove volatile organic compounds (VOCs) from the subsurface. VOCs will be physically removed from the soil by applying a vacuum to wells that have been installed into the vadose zone (the area below the ground but above the water table). These wells are proposed to be installed horizontally below the building, but a final decision will be determined during remedial design. The vacuum draws air through the soil

matrix which carries the VOCs from the soil to the SVE well. The air extracted from the SVE wells is then treated as necessary prior to being discharged to the atmosphere.

4. Treatment Remedy Shutdown

The operation of the components of the remedy will continue until the remedial objectives have been achieved, or until the Department determines that continued operation is technically impracticable or not feasible.

5. Vapor Mitigation

Any on-site buildings and off-site buildings impacted by the site will be required to have a sub-slab depressurization system (SSDS), or other acceptable measures, to mitigate the migration of vapors into the building from soil and groundwater.

6. Engineering and Institutional Controls

Institutional Control:

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

- require the remedial party or site owner to complete and submit to the Department a periodic certification of institutional and engineering controls in accordance with Part 375-1.8 (h)(3);
- allow the use and development of the controlled property for commercial use as defined by Part 375-1.8(g), although land use is subject to local zoning laws;
- restrict the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by the NYSDOH or County DOH; and
- require compliance with the Department approved Site Management Plan.

7. Site Management Plan

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

- 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

Engineering Controls: The soil cover discussed in #2, the soil vapor extraction system discussed in #3 and the sub-slab depressurization system discussed in #5 above.

This plan includes, but may not be limited to:

o an Excavation Plan which details the provisions for management of future excavations in areas of remaining contamination;

o a provision for further investigation and remediation should large scale redevelopment occur, if any of the existing structures are demolished, or if the subsurface is otherwise made accessible. The nature and extent of contamination in areas where access was previously limited or unavailable will be immediately and thoroughly investigated pursuant to a plan approved by the Department. Based on the investigation results and the Department determination of the need for a remedy, a Remedial Action Work Plan (RAWP) will be developed for the final remedy for the site, including removal and/or treatment of any source areas to the extent feasible. Citizen Participation Plan (CPP) activities will continue through this process. Any necessary remediation

will be completed prior to, or in association with, redevelopment. This includes areas underneath the existing building.

o a provision should redevelopment occur to ensure no soil exceeding protection of groundwater concentrations will remain below storm water retention basin or infiltration structures.

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

o a provision that should a building foundation or building slab be removed in the future, a cover system consistent with that described in Paragraph #2 above will be placed in any areas where the upper two feet of exposed surface soil exceeds the applicable SCOs

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

o maintaining site access controls and Department notification;

o the steps necessary for the periodic reviews and certification of the institutional and/or engineering controls; and

o a provision to monitor the ownership status of off-site locations where mitigation was recommended, but not conducted by the Department.

o 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;

• 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:

o procedures for operating and maintaining the remedy;

o compliance monitoring of treatment systems to ensure proper O&M as well as providing the data for any necessary permit or permit equivalent reporting;

o maintaining site access controls and Department notification; and

o providing the Department access to the site and O&M records.

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. Wastes and Source areas were identified at the site.

Source material for volatile organic compounds (VOCs) was identified in soil samples below the southern portion of the site building and south of the site in the former loading dock area. Soil samples showed concentrations of VOCs in soils above the protection of groundwater standards. Due to limited access (i.e., loading docks, large slabs, and utilities described in the RI), source area delineation could not be performed. The waste/source areas identified 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. The results indicate that contamination in overburden groundwater at the site exceeds the SCGs for volatile organic compounds. Contaminant levels in bedrock groundwater exceeded the NYS Standards for volatile organic compounds as well. Groundwater was also sampled for metals, semi-volatile organic compounds (SVOCs), polychlorinated biphenyls (PCBs), pesticides, and per- and polyfluoroalkyl substances (PFAS), and there were no exceedances of site-related compounds.

Table 1 - Groundwater		Screening Criteria in use: NEW YORK STATE CLASS GA	
Detected Constituents	**Concentration Range Detected (ppb[a])**	**SCG[b] (ppb[a])**	**Frequency Exceeding SCG[b]**
VOC NYS CLASS GA			
Cis-1,2-Dichloroethene	2.90-120	5	18/21
Methylene Chloride	ND - 12	5	8/21
Tetrachloroethene (PCE)	0.410-960	5	17/21
Trans-1,2-Dichloroethene	ND - 26.0	5	11/21
Trichloroethene (TCE)	ND - 93.0	5	20/21
Vinyl Chloride	ND - 3.2	2	13/21
ND - Non-Detect			

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).

The primary groundwater contaminants are volatile organic compounds associated with former operations at the site. As noted on Figure 1, the primary groundwater contamination is associated with the soil contamination in the southern portion of the site.

Based on the findings of the RI, the presence of volatile organic compounds has resulted in the contamination of groundwater. The site contaminants that are considered to be the primary contaminants of concern which will drive the remediation of groundwater to be addressed by the remedy selection process are: cis-1,2-Dichloroethene (cis-1,2-DCE), tetrachloroethene (PCE), trans-1,2-Dichloroethene, trichloroethene (TCE) and vinyl chloride.

Soil

Subsurface soil samples were collected at the site during the RI from a depth of 2 - 20 feet to assess soil contamination impacts to groundwater. The results shown in Figure 2 indicate that soils at the site exceed the unrestricted and protection of groundwater SCOs for VOCs. Soil sampling indicated that the bulk of contamination is in the vadose zone above the water table. Site soils were also sampled for metals, SVOCs, PCBs, and pesticides, and there were no exceedances. There are no surface or exposed soils at this site; all soils are currently under the building or pavement/cement.

Table 2 - Soil		Screening Criteria in use: 375 SOIL - COMMERCIAL USE, 375 SOIL - PROTECTION OF GROUNDWATER, 375 SOIL - UNRESTRICTED USE				
Detected Constituents	Concentration Range Detected (ppm[a])	Exceeding Unrestricted SCO[b]	Commercial SCO[c] (ppm)	Exceeding Commercial SCO	Protection of Groundwater SCO[d] (POGW)/ Unrestricted Use SCO[b] (ppm)	Exceeding POGW/ Unrestricted SCO
VOC PART 375						
Cis-1,2-Dichloroethene	ND[e] - 1.60	1/43	500	0/43	0.25	1/43
Tetrachloroethene (PCE)	ND -1.90	2/43	150	0/43	1.3	2/43
Trichloroethene (TCE)	0.000950 - 44.0	4/43	200	0/43	0.47	4/43

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 Public Health for Commercial Use, unless otherwise noted.

d - SCG: Part 375-6.8(b), Restricted Use Soil Cleanup Objectives for the Protection of Groundwater

e – ND = Non-Detect

The primary soil contaminants are VOCs associated with the former operations of the site. As noted on Figure 2, the primary soil contamination is associated with the southern portion of the site including the southern portion of the building and loading dock area. Four sample locations adjacent to the suspected source area were above the protection of groundwater (POGW) SCOs of 1.3 ppm, 0.47 ppm and 0.25 ppm for PCE, TCE and cis-1,2-DCE respectively.

Based on the findings of the Remedial Investigation, the past disposal of hazardous waste has resulted in the contamination of 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 cis-1,2-DCE, PCE and TCE.

Soil Vapor

The evaluation of the potential for soil vapor intrusion resulting from the presence of site related soil or groundwater contamination was evaluated by the sampling of soil vapor, sub-slab soil vapor under structures, and indoor air inside structures.

Sub-slab vapor and indoor/outdoor air samples were collected from the Former Hall Welter site property and in five adjacent off-site properties. The samples were collected to assess the potential for soil vapor intrusion. The results indicate TCE was detected

at elevated levels, as high as 33,000 ug/m^3, in on-site sub-slab vapor and TCE was detected in the indoor air of the on-site structure at a concentration of up to 158 ug/m^3, above the NYSDOH air guideline value of 2 ug/m^3 for TCE in air. A sub-slab depressurization system was installed as an interim remedial measure to address exposures related to soil vapor intrusion. Soil vapor intrusion samples collected off-site identified two properties with detections of volatile organic compounds beneath the building slab at levels having the potential for soil vapor intrusion. Concentrations at those properties for volatile organic compounds in indoor air were below the NYSDOH air guideline values. Based on elevated sub-slab vapor levels detected (TCE), actions to address this contamination were recommended to the site owners of the two referenced locations. The owner of the two off site properties elected to install an SSDS without state involvement. No further actions were recommended at the remaining off-site locations.

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

Based on the findings of the Remedial Investigation, the disposal of hazardous waste has resulted in the contamination of soil vapor. The site contaminants that are considered to be the primary contaminants of concern which will drive the remediation of soil vapor to be addressed by the remedy selection process are, VOCs including PCE and TCE.

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 (ECs) which were part of the IRM and includes institutional controls (ICs), in the form of and environmental easement and site management plan (SMP), necessary to protect public health and the environment from contamination remaining at the site after the IRMs.

Present Worth: $382,052

Capital Cost:..... $30,000

Annual Costs:..... $27,220 and

Every 5 Years: $2500

Alternative 3: Soil Vapor Extraction, and Site Management

This alternative would include all of the Alternative 2 elements, plus one additional active remedy, soil vapor extraction (SVE), to reduce sorbed contaminant mass from vadose zone soils in the overburden of the site. Data collected below the building and in the rear of the building show contamination in soils. Though not tested to date due to access feasibility, based on data collected from other areas of the site, it appears that there is mass in subsurface soils underneath the rear (southeast) of the building. The presence of this mass in soils has the potential to contribute to contaminants in soil

vapor beneath the site building, as well as serve as a potential on-going source to groundwater, thereby adversely affecting groundwater quality and contributing to vapor migration concerns to other properties nearby. While vertical or horizontal SVE wells may be utilized, given the thickness of the slab in this area (which to date has impeded remedial investigations), the collection of empirical data, the presumed shallow impacts to soils, and the historic approach of conducting site investigation from the exterior, traditional vertical soil vapor extraction points may not be the most economical or feasible method to employ at this site. Horizontal SVE wells have the greatest potential to reach the targeted zone for treatment, being able to be installed from the exterior of the building while keeping the screened intervals in the shallow-most, and presumably, most impacted subsurface soils. By employing SVE at the site, sorbed mass can be removed from vadose zone soils thereby reducing concentrations in site soils, reducing concentrations in soil vapor over time, and reducing the contribution of contaminant mass to site groundwater and ultimately potential vapor from the dissolved-phase plume. SVE can be used in combination with ongoing sub-slab depressurization system (SSDS) as an engineering control, as well as monitoring of soil vapor and groundwater conditions through an SMP. This approach would be effective at removing mass if air permeability testing of the site soils supports soil venting in support of long-term monitored natural attenuation of groundwater, as well as reducing the period that SSDS operation may be necessary at the site and neighboring properties. This alternative may also include a pre-design investigation consisting of air permeability testing, additional soils testing if necessary, and collection of other data needed to fully design the SVE system based on the engineer's remedial design. These costs were not accounted for directly, however contingency costs were added.

Present Worth: $479,536

Capital Cost:..... $291,400

Annual Costs:..... Year 1 & 2: $45,200

Year 3 – 7: $23,600

Year 8 – 15: $5400

Every 5 Years: $2500

Alternative 4: Soil Vapor Extraction, In-Situ Enhanced Bioremediation of Groundwater, and Site Management

This Alternative includes all of Alternative 3, plus one additional active remedy to reduce concentrations in the dissolved phase beneath the site. This Alternative includes SVE to address source mass in the vadose zone, an engineering control to continue operation

of the SSDSs, as well as long-term monitoring under the SMP. The presence of PCE degradation products in groundwater presently suggest that anaerobic degradation is occurring at the site, the degree of which should be confirmed prior to selection of an injectant during full design and implementation. In addition, this alternative can use an injectant that supports anaerobic reductive dechlorination such as any number of electron donor solutions to enhance a reducing environment in the subsurface saturated zone. The site has elevated concentrations in groundwater above standards in the overburden groundwater, as well as in the bedrock beneath the site. However, known concentrations in both the overburden and bedrock are similar in magnitude, with a few hundred parts per billion of chlorinated volatile organic compounds (CVOCs) present. This Alternative takes one more step to reduce concentrations in groundwater over Alternative 3, in concept reducing the duration of active treatment periods via an engineered control (SSDS). An SMP may be necessary for site monitoring until such time that groundwater conditions meet criteria. As with Alternative 3, additional data may be necessary for design of such an approach including permeability testing (air) and evaluation for site-specific seepage velocities, additional soils testing, as well as obtaining interior access. In addition, groundwater geochemical data would be necessary to specify the chemical and dose to be used for in-situ groundwater treatment. These costs were not accounted for directly, however contingency costs were added.

Present Worth: $722,662

Capital Cost:..... $521,550

Annual Costs:..... Year 1 & 2: $66,450

Year 3: $32,200

Year 4: $23,200

Year 5: $26,200

Year 6 & 7: $14,200

Alternative 5: Source Area Excavation with In-Situ Enhanced Bioremediation of Groundwater, and Site Management

This alternative achieves all of the SCGs discussed in Section 6.1.1 and Exhibit A and soil meets the unrestricted soil cleanup objectives listed in Part 375-6.8 (a). This alternative would include removal of source material and active remediation of dissolved-phase contamination to return the site to pre-release conditions. Based on the data available, it is probable that subsurface soils are impacted beneath the thickest part of the site building's slab. For this reason, the building would be razed allowing free

access to the slab and what lies beneath. This alternative includes the demolition of the on-site building and slab to support soil sampling beneath the building to define the extent of the soil excavation and allow installation of active groundwater treatment infrastructure This alternative assumes that 1,750 cubic yards of soil would be excavated from the southeastern loading dock area. Persistent VOC concentrations in the bedrock groundwater would be further reduced to groundwater standards by injecting an amendment to support increased biological dechlorination of dissolved contaminants. A short-term IC and SMP would need to be implemented to ensure groundwater at the site is not used for drinking water until such time that groundwater conditions meet criteria (expected to be approximately 5 years).

Capital Cost:..... $1,782,200

Annual Costs:..... Year 1: $77,900

Year 2 & 3: $21,000

Year 4: $12,000

Exhibit C

Remedial Alternative Costs

Remedial Alternative	Capital Cost ($)	Annual Costs ($)	Total Present Worth ($)
#1: No Further Action	$10,000	$0	$10,000
#2: No Further Action with Site Management	$30,000	Annually: $27,220 Every 5 Years: $2500	$382,058
#3: Soil Vapor Extraction and Site Management	$291,400	Year 1 & 2: $45,200 Year 3 – 7: $23,600 Year 8 – 15: $5400 Every 5 Years: $2500	$479,556
#4: Soil Vapor Extraction, In-Situ Enhanced Biological Remediation of Groundwater, and Site Management	$521,550	Year 1 & 2: $66,450 Year 3: $32,200 Year 4: $23,200 Year 5: $26,200 Year 6 & 7: $14,200	$722,662
#5: Source Area Excavation with In-Situ Enhanced Biological Treatment of Groundwater, and Site Management	$1,782,200	Year 1: $77,900 Year 2 & 3: $21,000 Year 4: $12,000	$1,899,643

Exhibit D

SUMMARY OF THE SELECTED REMEDY

The Department is selecting Alternative 3, Soil Vapor Extraction, Engineering Controls, with Site Management Plan as the remedy for this site. Alternative 3 achieves the remediation goals for the site by implementing soil vapor extraction to remove contaminate mass sorbed to soils in the vadose zone, continued operation of the SSDS and implementation of a SMP. The elements of this remedy are described in Section 7. The selected remedy is depicted in Figure 5.

Basis for Selection

The 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 remedy, Alternative 3, would satisfy this criterion by removing contamination sorbed to soils from above the water table. Alternative 3 addresses the source of the groundwater contamination and soil vapor contamination, which are the most significant threats to public health and the environment. Alternative 1 (No Action) does not provide any protection to public health and the environment. The potential for soil vapor intrusion will remain high under Alternative 2. Soil vapor mitigation is required under Alternative 2 in order to protect human health and does not address remaining contamination. Alternative 5, by removing all soil contaminated above the unrestricted soil cleanup objective, meets the threshold criteria. Alternatives 3, and 4 also comply with this criterion but to a lesser degree or with lower certainty. Alternatives 2, 4 and 5 rely on a restriction of groundwater use at the site to protect human health. Alternative 3, 4 and 5 may require a short-term restriction on groundwater use; however, it is expected the restriction will be able to be removed in approximately fifteen years for Alternative 3, 5 years for Alternative 4 and 4 years for Alternative 5. The potential for soil vapor intrusion will be significantly reduced by Alternative 5 and, to a somewhat lesser extent, Alternative 3 and 4. Remedies 2, 3, 4 and 5 will also address SVI concerns at adjacent properties through the Site Management Plan if determined necessary in the future.

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 1 and 2 do not meet SCGs for soil or groundwater. Alternative 3 is expected to achieve compliance with chemical specific SCGs and site-specific cleanup levels in soil by reducing contaminant concentrations through physical treatment via SVE. Over time, reduction of sorbed mass in soils will reduce, then eliminate, contributions to the dissolved phase leading to an improvement in groundwater quality over time. In addition, remediation of CVOCs in vadose zone soils will improve soil vapor concentrations and allowing for discontinuation of the SSDS over time. Alternative 4 is expected to achieve chemical-specific SCGs and site-specific cleanup levels in soil by reducing contaminant concentrations through physical treatment via SVE. Remediation of CVOCs in vadose zone soils will improve soil vapor concentrations and allowing for discontinuation of the SSDS over time. Over time, reduction of sorbed mass in soils will reduce, then eliminate, contributions to the dissolved phase leading to an improvement in groundwater quality. Finally, chemical-specific SCGs and site-specific cleanup levels are expected to be achieved in the dissolved-phase by reducing contaminant concentrations through biological treatment. Alternative 5 is expected to achieve chemical-specific SCGs and site-specific cleanup levels by removing contaminants and reducing dissolved-phase concentrations through biological treatment.

Alternatives 1 and 2 do not meet the Threshold Criteria and were eliminated from further consideration. Because Alternative 3, 4 and 5 satisfy the threshold criteria, the remaining criteria are particularly important in selecting a final remedy for the site.

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.

Alternative 3 provides long-term effectiveness and permanence by treating contaminants sorbed to soils and reducing concentrations in soils, groundwater, and vapor phases. Alternative 3 will result in the indirect emissions of greenhouse gasses (GHGs) via the long-term use of electricity necessary to operate the SVE and SSDS systems. Alternative 3 will require the least use of heavy equipment of the alternatives which pass the Threshold Criteria. This would result in an overall lower environmental footprint of remediation compared to the other alternatives. Alternative 4 provides long-term effectiveness and permanence by treating contaminants sorbed to soils and reducing concentrations in soils, groundwater, and vapor phases. Alternative 4 will also

result in the indirect emissions of GHGs via the long-term use of electricity necessary to operate the SVE and SSDS systems. Alternative 4 will require slightly more use of heavy equipment than Alternative 3, but significantly less than Alternative 5. This would result in an overall slightly higher environmental footprint of remediation compared Alternative 3, but a much lower environmental footprint of remediation compared Alternative 5. Alternative 5 provides long-term effectiveness and permanence by treating contaminants to reduce concentrations to pre-release conditions. Although Alternative 5 would not require use of electricity to operate SVE or SSDS systems on-site, this alternative has the largest environmental remediation footprint of the evaluated remedies. The removal of soil requires the expenditure of fuel which produces GHGs. The impacted soil also occupies the limited available space in non-hazardous and hazardous waste landfills. The environmental impact of the remedy would be reduced if non impacted soil remained on-site as fill. The demolition of the on-site building would also produce additional waste that would need to be removed. Alternatives 3 and 4 would require long-term restrictions on groundwater and Alternative 5 would require a short-term restriction. All three alternatives would reduce the potential for soil vapor intrusion.

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 3 will reduce the contaminant mass through physical treatment via SVE, and mitigation through existing SSDS. Decreased concentrations and mass will also reduce chemical toxicity and, indirectly, mobility. Reduction in contaminant concentrations in soil will reduce dissolution to the dissolved phase, and thereby limit plume extents over time. Alternative 4 will reduce the contaminant mass through physical treatment via SVE, mitigation through existing SSDS, and will reduce the contaminant mass through biological treatment. Decreased concentrations and mass will also reduce chemical toxicity and, indirectly, mobility. Reduction in contaminant concentrations in soil and groundwater will reduce plume extents over time. This would occur more quickly with Alternatives 4 and 5 compared to Alternative 3. Alternative 5 will reduce the contaminant mass through excavation, and chemical or biological treatment. Decreased concentrations and mass will also reduce chemical toxicity and, mobility, indirectly. Reduction in contaminant concentrations in soil and groundwater will reduce plume extents over time. Alternatives 3 and 4 would require long-term restrictions on groundwater and Alternative 5 would require a short-term restriction. All three alternatives would reduce the potential for soil vapor intrusion.

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.

Alternative 3 will have a short-term impact during remediation construction. The potential will exist during remediation for fugitive dust and emissions that may impact the surrounding community, which will be lessened by the implementation of a Community Air Monitoring Plan (CAMP). Alternative 3 can be effective because SVE removes contaminants sorbed to vadose zone soils by partitioning CVOCs from the sorbed-phase to vapor phase for removal from the subsurface. Based on the soil and groundwater concentrations, an expected active treatment duration of approximately 5 years followed by a period of monitoring to confirm soil vapor has been reduced could lead to discontinued operation of the SSDSs. Finally, long-term groundwater monitoring would be required under the SMP, as no direct treatment of groundwater is proposed under this alternative. Alternative 4 will have a short-term impact during remediation construction. The potential will exist during remediation for fugitive dust and emissions that may impact the surrounding community. Alternative 4 is effective because SVE removes contaminants sorbed to vadose zone soils by partitioning CVOCs from the sorbed-phase to vapor phase for removal from the subsurface. Alternative 4 is effective because the biological treatment will remove dissolved-phase contaminants through biological dechlorination to innocuous byproducts. Treatment time is anticipated to be relatively short owning to the relatively low concentrations found presently in site soils and groundwater (<5 years), followed by a period of monitoring to confirm soil vapor has been reduced sufficiently to discontinue operation of SSDS. Alternative 5 will have a short-term impact during remediation construction and excavation. The potential will exist during remediation and excavation actions for fugitive dust and emissions that may impact the surrounding community. Alternative 5 is effective because the excavation removes contaminants for off-site disposal, while biological treatment of groundwater reducing concentrations in groundwater through a permanent reductive dechlorination. The expected treatment time is anticipated to be less than one year.

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.

Alternative 3 is readily implementable using horizontal drilling techniques, along with standard equipment installation. Alternative 4 is also readily implementable using horizontal drilling techniques, along with standard equipment installation. The biological amendments are commercially available for nationwide distribution. Regarding installation of off-site wells, access agreement and permits may need to be obtained prior to implementation. Alternative 5 is best implemented if the existing building were to be removed. It is not readily implementable (large-scale excavation) should the building remain in place as access to the sub-slab materials would not be feasible. The biological amendment is commercially available for nationwide distribution, and best

applied to the areas where source material was formerly present (presumed to be beneath the building footprint).

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 3 has the lowest cost but would require engineering controls, institutional controls and longer restrictions for impacts to groundwater. Alternative 4 has a higher cost due to additional actions being taken, but would still require institutional and engineering controls, as well as short term groundwater restrictions. Alternative 5 is the costliest by a wide margin since the building would be demolished, excavation would take place and in-situ groundwater treatment would be conducted. Alternative 5 would require the least amount of post remedial work but has a very high upfront cost.

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.

The anticipated use is commercial, consistent with the current zoning. Alternative 3 and 4 do not alter the current land use of the site and would institute restrictions on future use through institutional controls. Alternative 5 does alter the current land use of the site, as it is best applied in circumstances where the current building is demolished. The land use could remain the same (commercial) and could be modified to be used for residential purposes under this Alternative.

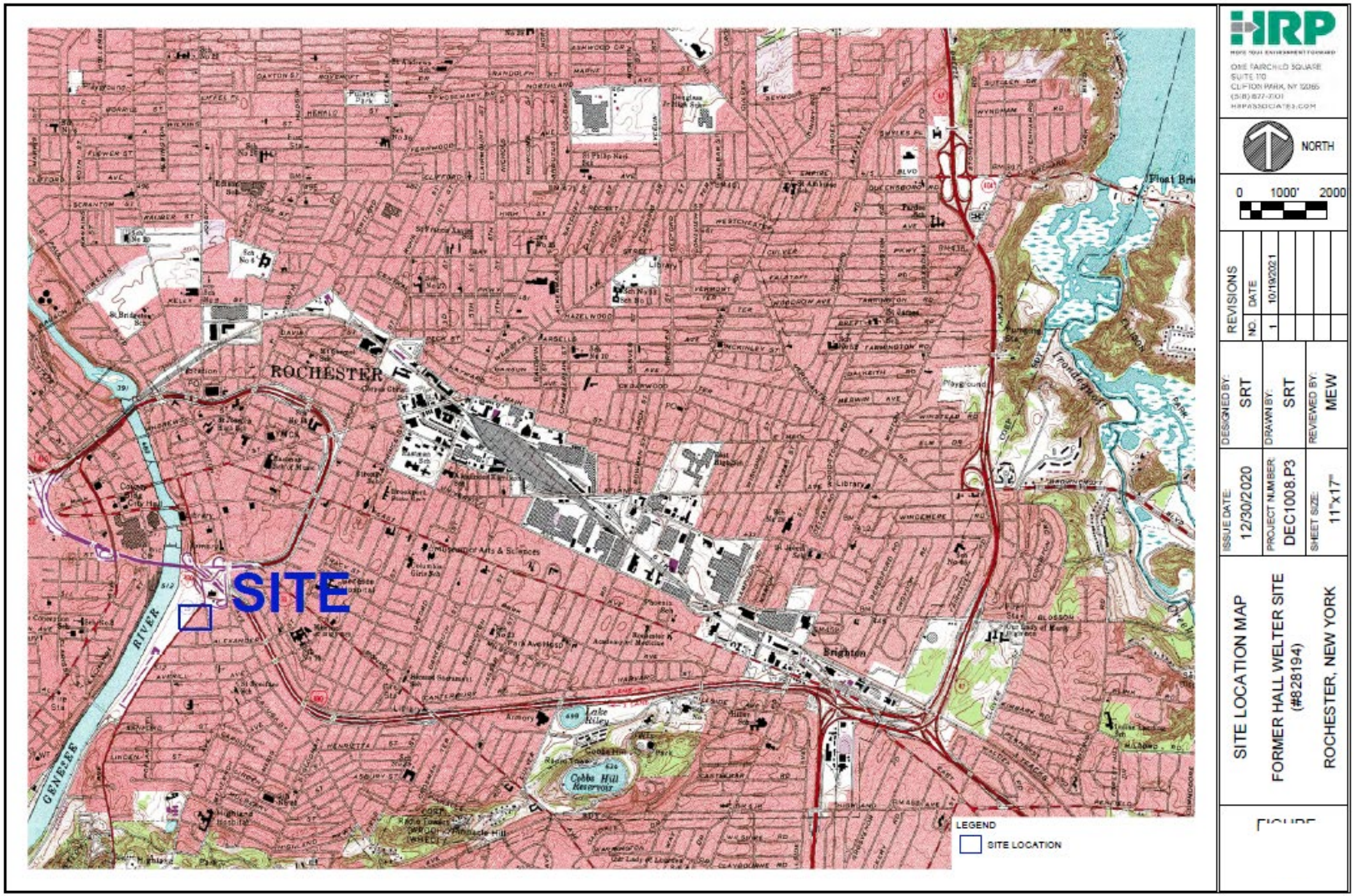
The final criterion, Community Acceptance, is considered a "modifying criterion" and is taken into account after evaluating those above. It is evaluated after public comments on the Proposed Remedial Action Plan have been received.

9. Community Acceptance. Concerns of the community regarding the investigation, the evaluation of alternatives, and the PRAP are evaluated. A responsiveness summary has been prepared that describes public comments received and the manner in which the Department will address the concerns raised.

Alternative #3 has been selected because, as described above, it satisfies the threshold criteria and provides the best balance of the balancing criterion.

Figures

Site Location:




Mt Hope Ave
South Ave
71
22-32
397-399
401-405
38-46
407-409
415
48
50
417
60-66
70
76
429
50
Site

Figure 1:

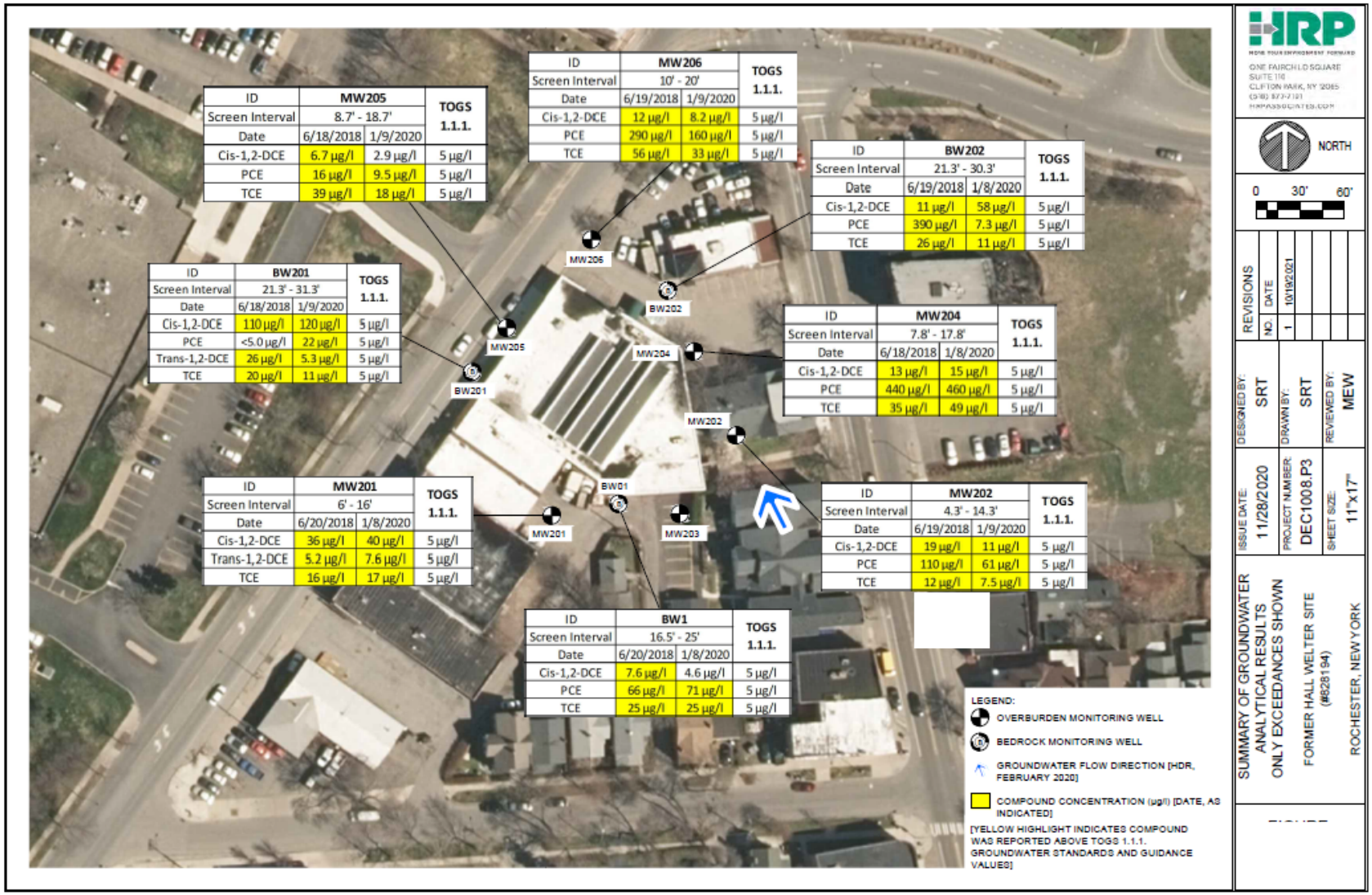

ID | MW205 | TOGS 1.1.1.
Screen Interval | 8.7' - 18.7'
Date | 6/18/2018 | 1/9/2020
Cis-1,2-DCE | 6.7 µg/l | 2.9 µg/l | 5 µg/l
PCE | 16 µg/l | 9.5 µg/l | 5 µg/l
TCE | 39 µg/l | 18 µg/l | 5 µg/l
ID | MW206 | TOGS 1.1.1.
Screen Interval | 10' - 20'
Date | 6/19/2018 | 1/9/2020
Cis-1,2-DCE | 12 µg/l | 8.2 µg/l | 5 µg/l
PCE | 290 µg/l | 160 µg/l | 5 µg/l
TCE | 56 µg/l | 33 µg/l | 5 µg/l
ID | BW202 | TOGS 1.1.1.
Screen Interval | 21.3' - 30.3'
Date | 6/19/2018 | 1/8/2020
Cis-1,2-DCE | 11 µg/l | 58 µg/l | 5 µg/l
PCE | 390 µg/l | 7.3 µg/l | 5 µg/l
TCE | 26 µg/l | 11 µg/l | 5 µg/l
ID | BW201 | TOGS 1.1.1.
Screen Interval | 21.3' - 31.3'
Date | 6/18/2018 | 1/9/2020
Cis-1,2-DCE | 110 µg/l | 120 µg/l | 5 µg/l
PCE | <5.0 µg/l | 22 µg/l | 5 µg/l
Trans-1,2-DCE | 26 µg/l | 5.3 µg/l | 5 µg/l
TCE | 20 µg/l | 11 µg/l | 5 µg/l
ID | MW204 | TOGS 1.1.1.
Screen Interval | 7.8' - 17.8'
Date | 6/18/2018 | 1/8/2020
Cis-1,2-DCE | 13 µg/l | 15 µg/l | 5 µg/l
PCE | 440 µg/l | 460 µg/l | 5 µg/l
TCE | 35 µg/l | 49 µg/l | 5 µg/l
ID | MW201 | TOGS 1.1.1.
Screen Interval | 6' - 16'
Date | 6/20/2018 | 1/8/2020
Cis-1,2-DCE | 36 µg/l | 40 µg/l | 5 µg/l
Trans-1,2-DCE | 5.2 µg/l | 7.6 µg/l | 5 µg/l
TCE | 16 µg/l | 17 µg/l | 5 µg/l
ID | MW202 | TOGS 1.1.1.
Screen Interval | 4.3' - 14.3'
Date | 6/19/2018 | 1/9/2020
Cis-1,2-DCE | 19 µg/l | 11 µg/l | 5 µg/l
PCE | 110 µg/l | 61 µg/l | 5 µg/l
TCE | 12 µg/l | 7.5 µg/l | 5 µg/l
ID | BW1 | TOGS 1.1.1.
Screen Interval | 16.5' - 25'
Date | 6/20/2018 | 1/8/2020
Cis-1,2-DCE | 7.6 µg/l | 4.6 µg/l | 5 µg/l
PCE | 66 µg/l | 71 µg/l | 5 µg/l
TCE | 25 µg/l | 25 µg/l | 5 µg/l
MW206
BW202
MW205
BW201
MW204
MW202
BW01
MW201
MW203
LEGEND:
OVERBURDEN MONITORING WELL
BEDROCK MONITORING WELL
GROUNDWATER FLOW DIRECTION [HDR, FEBRUARY 2020]
COMPOUND CONCENTRATION (µg/l) [DATE, AS INDICATED]
[YELLOW HIGHLIGHT INDICATES COMPOUND WAS REPORTED ABOVE TOGS 1.1.1. GROUNDWATER STANDARDS AND GUIDANCE VALUES]
HRP
ONE FAIRCHILD SQUARE
SUITE 110
CLIFTON PARK, NY 12065
NORTH
0 30' 60'
REVISIONS
NO. DATE
1 10/19/2021
DESIGNED BY: SRT
DRAWN BY: SRT
REVIEWED BY: MEW
ISSUE DATE: 11/28/2020
PROJECT NUMBER: DEC1008.P3
SHEET SIZE: 11"x17"
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS ONLY EXCEEDANCES SHOWN
FORMER HALL WELTER SITE (#828194)
ROCHESTER, NEW YORK
FIGURE

Figure 2:

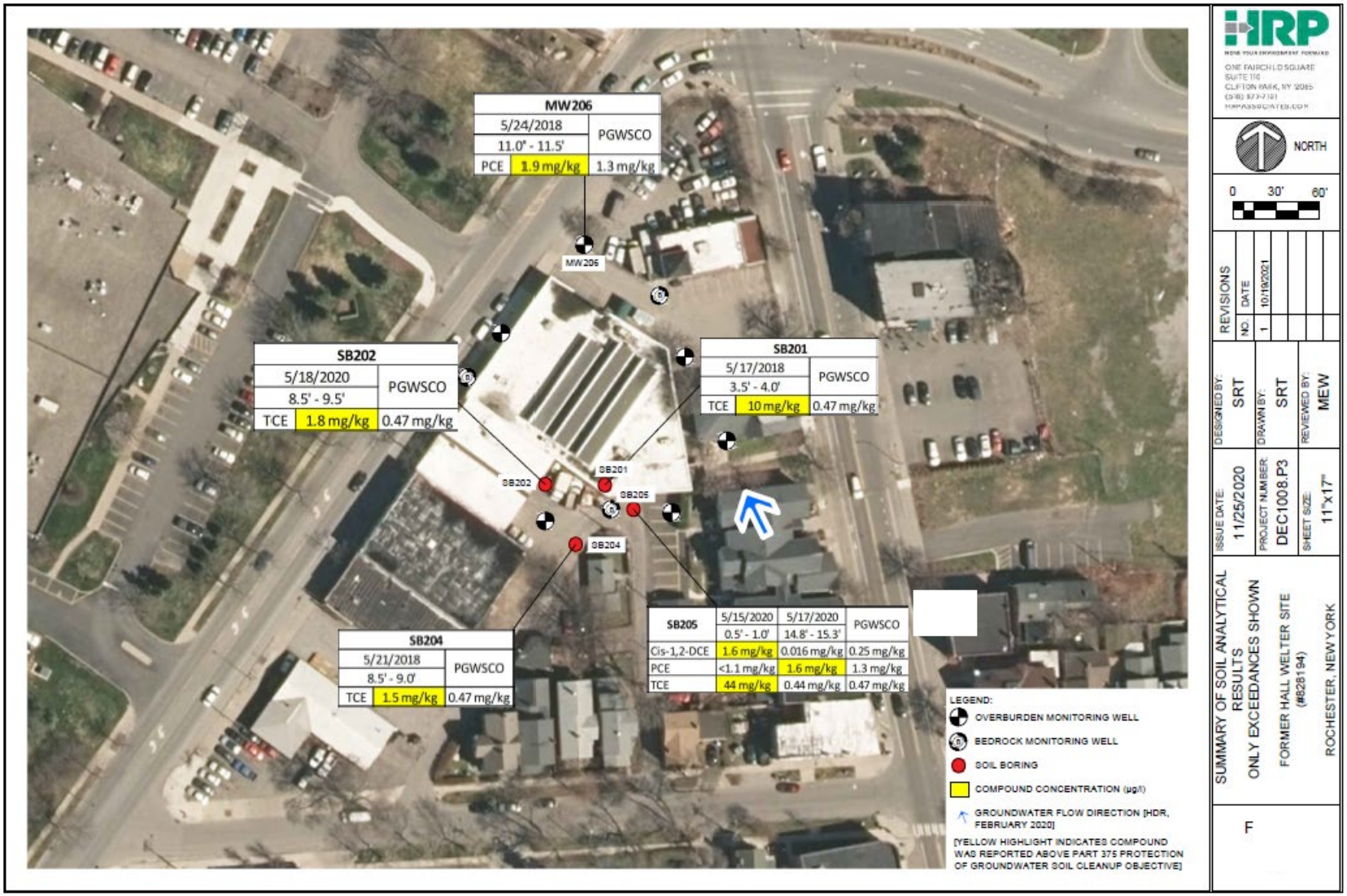

MW206
5/24/2018
11.0' - 11.5'
PCE
1.9 mg/kg
PGWSCO
1.3 mg/kg
MW206
SB202
5/18/2020
8.5' - 9.5'
TCE
1.8 mg/kg
PGWSCO
0.47 mg/kg
SB201
5/17/2018
3.5' - 4.0'
TCE
10 mg/kg
PGWSCO
0.47 mg/kg
SB202
SB201
SB205
SB204
SB204
5/21/2018
8.5' - 9.0'
TCE
1.5 mg/kg
PGWSCO
0.47 mg/kg
SB205
5/15/2020
0.5' - 1.0'
5/17/2020
14.8' - 15.3'
PGWSCO
Cis-1,2-DCE
1.6 mg/kg
0.016 mg/kg
0.25 mg/kg
PCE
<1.1 mg/kg
1.6 mg/kg
1.3 mg/kg
TCE
44 mg/kg
0.44 mg/kg
0.47 mg/kg
LEGEND:
OVERBURDEN MONITORING WELL
BEDROCK MONITORING WELL
SOIL BORING
COMPOUND CONCENTRATION (µg/l)
GROUNDWATER FLOW DIRECTION [HDR, FEBRUARY 2020]
[YELLOW HIGHLIGHT INDICATES COMPOUND WAS REPORTED ABOVE PART 375 PROTECTION OF GROUNDWATER SOIL CLEANUP OBJECTIVE]
HRP
ONE FAIRCHILD SQUARE
SUITE 110
CLIFTON PARK, NY 12065
NORTH
0
30'
60'
REVISIONS
NO.
DATE
1
10/19/2021
DESIGNED BY:
SRT
DRAWN BY:
SRT
REVIEWED BY:
MEW
ISSUE DATE:
11/25/2020
PROJECT NUMBER:
DEC1008.P3
SHEET SIZE:
11"x17"
SUMMARY OF SOIL ANALYTICAL RESULTS
ONLY EXCEEDANCES SHOWN
FORMER HALL WELTER SITE
(#828194)
ROCHESTER, NEW YORK
F

Figure 3:

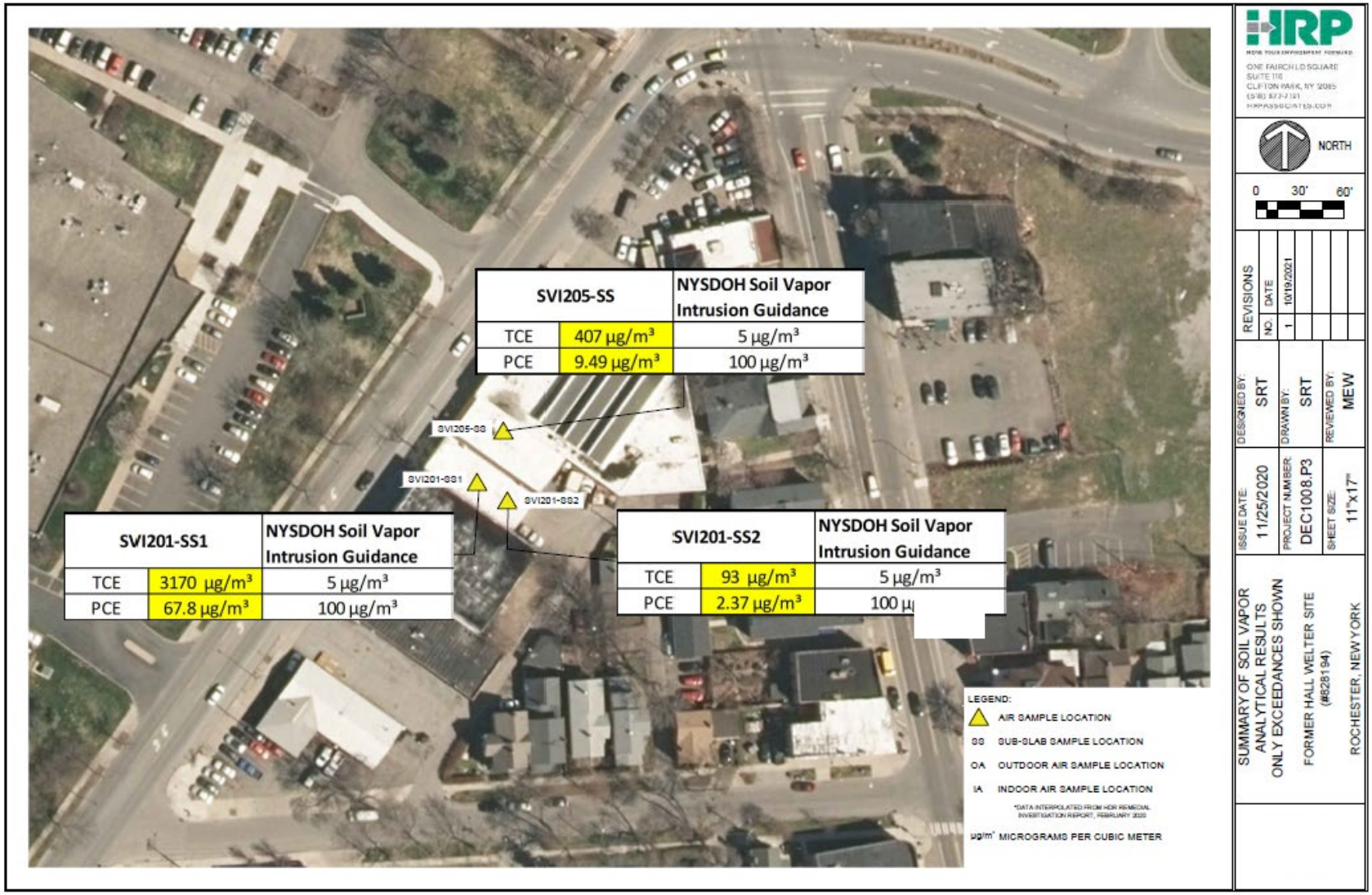

SVI205-SS
NYSDOH Soil Vapor Intrusion Guidance
TCE 407 µg/m³ 5 µg/m³
PCE 9.49 µg/m³ 100 µg/m³
SVI205-SS
SVI201-SS1
SVI201-SS2
SVI201-SS1
NYSDOH Soil Vapor Intrusion Guidance
TCE 3170 µg/m³ 5 µg/m³
PCE 67.8 µg/m³ 100 µg/m³
SVI201-SS2
NYSDOH Soil Vapor Intrusion Guidance
TCE 93 µg/m³ 5 µg/m³
PCE 2.37 µg/m³ 100 µ
LEGEND:
AIR SAMPLE LOCATION
SS SUB-SLAB SAMPLE LOCATION
OA OUTDOOR AIR SAMPLE LOCATION
IA INDOOR AIR SAMPLE LOCATION
*DATA INTERPOLATED FROM HDR REMEDIAL INVESTIGATION REPORT, FEBRUARY 2020
µg/m³ MICROGRAMS PER CUBIC METER
HRP
ONE FAIRCHILD SQUARE
SUITE 110
CLIFTON PARK, NY 12065
NORTH
0 30' 60'
REVISIONS
NO. DATE
1 10/19/2021
DESIGNED BY: SRT
DRAWN BY: SRT
REVIEWED BY: MEW
ISSUE DATE: 11/25/2020
PROJECT NUMBER: DEC1008.P3
SHEET SIZE: 11"x17"
SUMMARY OF SOIL VAPOR ANALYTICAL RESULTS ONLY EXCEEDANCES SHOWN
FORMER HALL WELTER SITE (#828194)
ROCHESTER, NEW YORK

Figure 4:

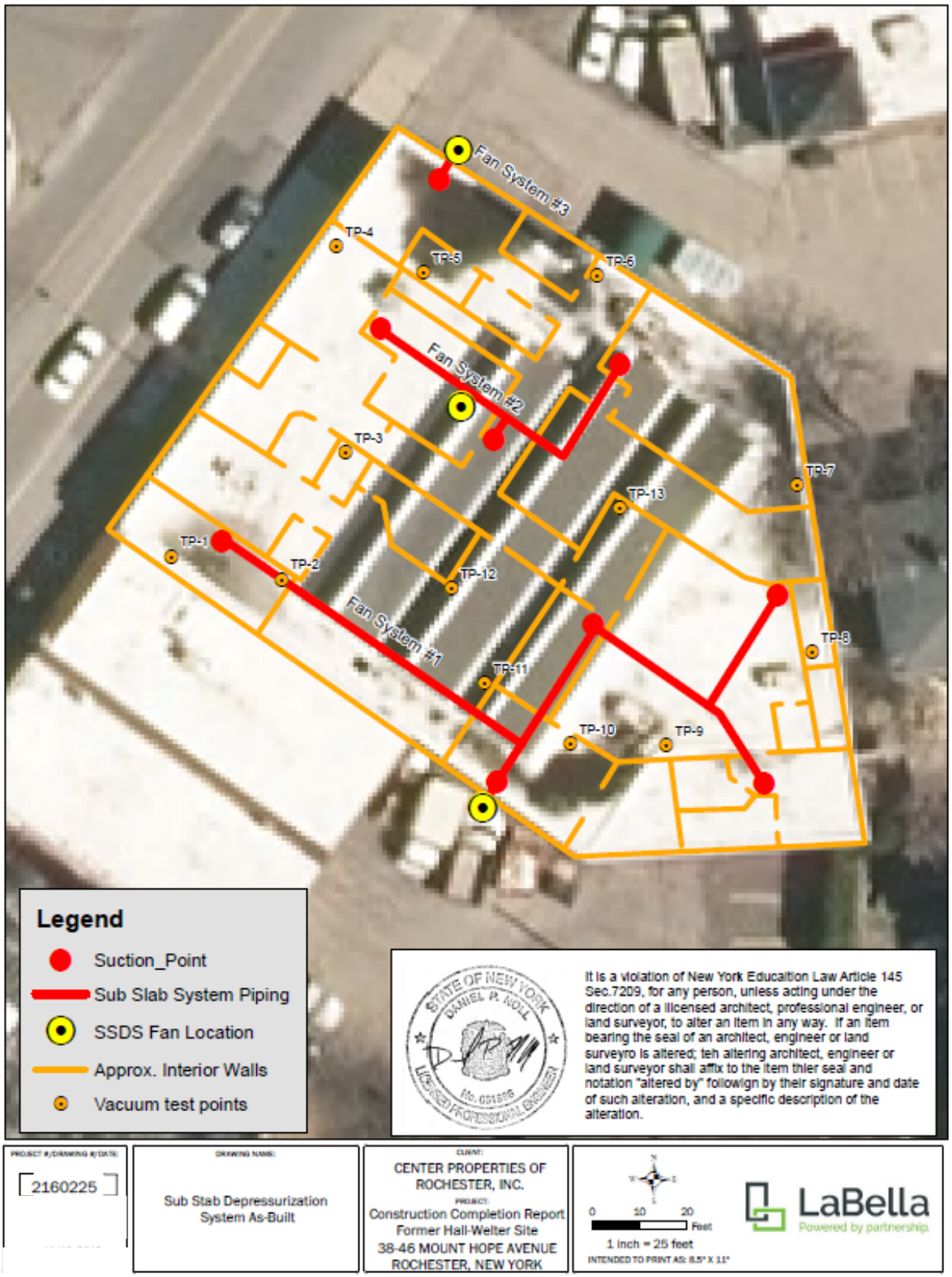
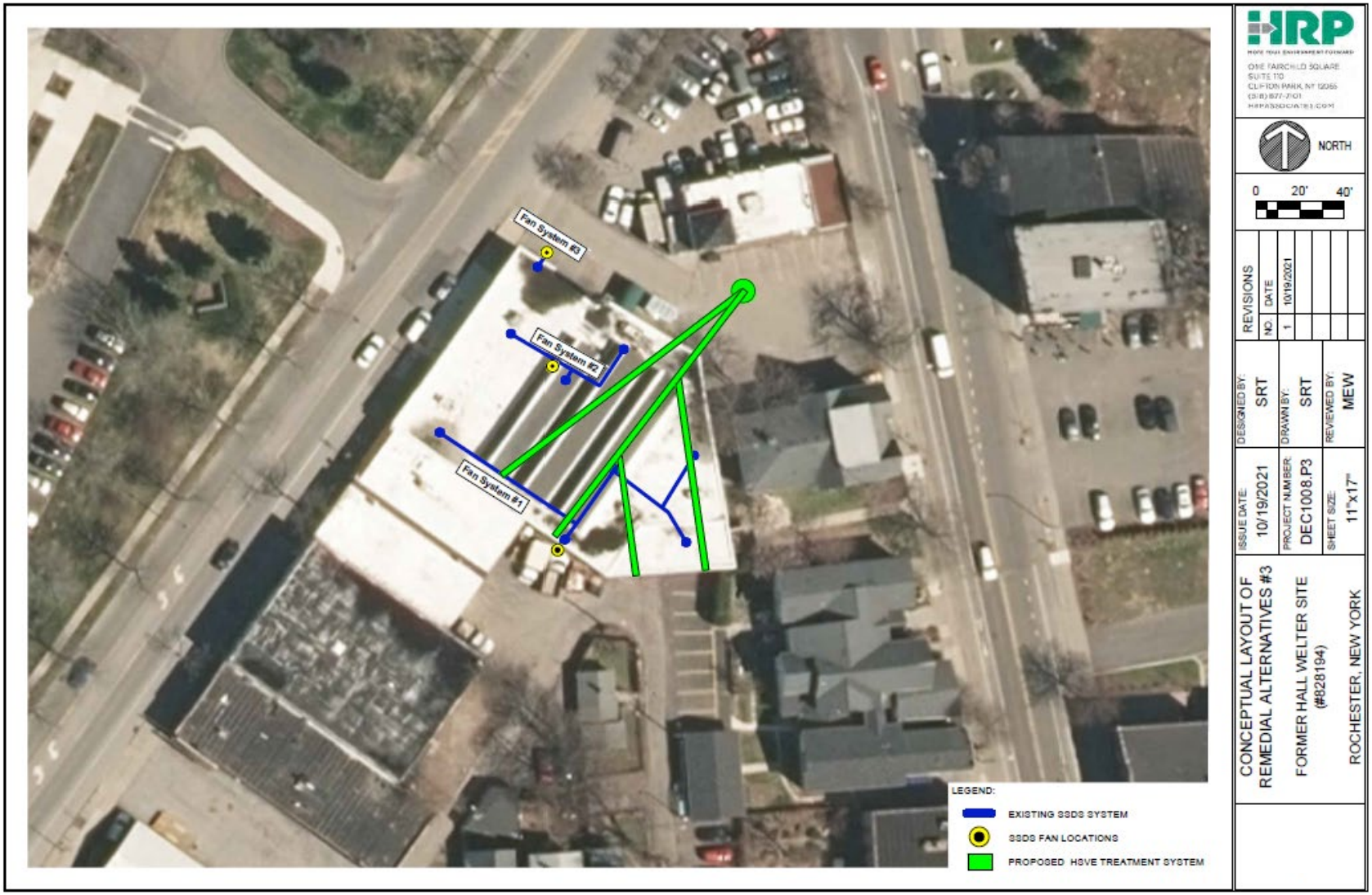

Fan System #3
Fan System #2
Fan System #1
TP-1
TP-2
TP-3
TP-4
TP-5
TP-6
TP-7
TP-8
TP-9
TP-10
TP-11
TP-12
TP-13
Legend
Suction_Point
Sub Slab System Piping
SSDS Fan Location
Approx. Interior Walls
Vacuum test points
STATE OF NEW YORK
DANIEL P. ROLL
No. 031896
LICENSED PROFESSIONAL ENGINEER
It is a violation of New York Education Law Article 145 Sec.7209, for any person, unless acting under the direction of a licensed architect, professional engineer, or land surveyor, to alter an item in any way. If an item bearing the seal of an architect, engineer or land surveyro is altered; teh altering architect, engineer or land surveyor shall affix to the item thier seal and notation "altered by" followign by their signature and date of such alteration, and a specific description of the alteration.
PROJECT #/DRAWING #/DATE:
2160225
DRAWING NAME:
Sub Stab Depressurization System As-Built
CLIENT:
CENTER PROPERTIES OF ROCHESTER, INC.
PROJECT:
Construction Completion Report
Former Hall-Welter Site
38-46 MOUNT HOPE AVENUE
ROCHESTER, NEW YORK
0 10 20 Feet
1 inch = 25 feet
INTENDED TO PRINT AS: 8.5" X 11"
LaBella
Powered by partnership

Figure 5:


Fan System #3
Fan System #2
Fan System #1
LEGEND:
EXISTING SSDS SYSTEM
SSDS FAN LOCATIONS
PROPOSED HSVE TREATMENT SYSTEM
HRP
ONE FAIRCHILD SQUARE
SUITE 110
CLIFTON PARK, NY 12065
(518) 877-7101
HRPASSOCIATES.COM
NORTH
0 20' 40'
REVISIONS
NO. DATE
1 10/19/2021
DESIGNED BY: SRT
DRAWN BY: SRT
REVIEWED BY: MEW
ISSUE DATE: 10/19/2021
PROJECT NUMBER: DEC1008.P3
SHEET SIZE: 11"x17"
CONCEPTUAL LAYOUT OF REMEDIAL ALTERNATIVES #3
FORMER HALL WELTER SITE (#828194)
ROCHESTER, NEW YORK

APPENDIX A

Responsiveness Summary

RESPONSIVENESS SUMMARY

Former Hall Welter Site

State Superfund Project

City of Rochester, Monroe County, New York

Site No. 828194

The Proposed Remedial Action Plan (PRAP) for the Former Hall Welter 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 16th, 2022. The PRAP outlined the remedial measure proposed for the contaminated soil, groundwater, and soil vapor at the Former Hall Welter 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 virtually on March 10th, 2022, which included a presentation of the remedial investigation, feasibility study (RI/FS) for the Former Hall Welter 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. The public comment period for the PRAP ended on March 18th, 2022.

This responsiveness summary responds to all questions and comments raised during the public comment period. The following are the comments received, with the Department's responses:

COMMENT 1: There was some discussion in the virtual public meeting about residential versus commercial/industrial use of the Site. Redevelopment of the site for residential use would most likely involve removal of the existing building. Could a viable remedial approach be something short of "return to pre-release conditions" (Feasibility Study Alternative 5) where some (but not all) contamination was removed, and a cap in the form of a ground-level open-air parking garage (with apartments above) was put into place? We note that approach was used for a portion of the 625 South Goodman Street apartments (former Sherman Shoe Company Site C828201, with similar CVOC contamination).

RESPONSE 1: Future use of the site as commercial was based on the current site zoning and discussions with the owner and operator of the site prior to the Feasibility Study being conducted. It is the Department's understanding now that the City of Rochester zoning does allow residential in this area. Therefore, a restricted residential cleanup could be achieved under the current remedy without removing the building, however if the current impermeable site cover (i.e., the building and asphalt parking lot) was ever removed, then the replacement cover system would need to be designed to support restricted residential rather than commercial use if no longer impermeable. Based on comments from stakeholders, the Record of Decision has been updated to a restricted residential use, which still allows for commercial and industrial use, at the site.

COMMENT 2: With respect to the exclusion of additional data collection costs for Alternative 3, I understand estimating is complicated by site conditions. However, those difficulties did not seem to prevent the estimating of the costs for "investigation to delineate excavation" and "remedial investigation and design" for Alternative 5. As the Proposed Remedial Action Plan compares alternatives for effectiveness and cost, it would seem to me Alternative 3 should also include estimates for the additional investigations required for design.

RESPONSE 2: Based on the engineer's estimate for Alternative 3 in the Feasibility Study, it was not anticipated that significant additional investigations would be necessary to design the system. Please note that costs for the Alternatives 3 (and 4) include contingency funds.

COMMENT 3: I noted during the public meeting that the need for additional investigations to better define the source area(s) in support of the Soil Vapor Extraction system design was reinforced. We feel strongly the extent of the contaminant source area(s) have not been definitively identified, and the area of most concentrated contaminants could very well be off-site. How will these additional costs for the additional investigations would be handled in Alternatives 3 and 4 (as the estimates in the Feasibility Study appear to have excluded those costs)?

RESPONSE 3: See Question 2 response. Any source area delineation, if needed beyond the data collected to date, will be addressed in the remedial design.

COMMENT 4: My questions relate to the cost estimate for Alternative 3, the remedy proposed in the Proposed Remedial Action Plan. As I interpret the Remedy Description in Table 3 - Alternative 3 Cost Analysis in the Feasibility Study, the cost estimate is based upon the Soil Vapor Extraction system and the Sub Slab Depressurization System both operating together for a period of 5 years, and the Sub Slab Depressurization System operating alone an additional two years following completion of Soil Vapor Extraction operation. It also appears the existing Sub Slab Depressurization System would not require significant modifications. Under that scenario, I would think that the first 5 years of "Monthly O&M" costs would be higher (representing the sum of the Soil Vapor Extraction and Sub Slab Depressurization System costs) and then drop down to just the Sub Slab Depressurization System cost for years 6 & 7. Table 3 of the Feasibility Study seems to present a reversed scenario, where there is a higher " Sub Slab Depressurization System and Soil Vapor Extraction Monthly O&M" cost for just years 1 and 2, and then a drop to a lower cost (even lower than the monthly Sub Slab Depressurization System O&M cost in Alternate 2) for years 3 through 7. Am I missing something, or should the costs be at the higher rate for years 3 through 5, as well? A follow-up question: why is the reduced annualized monthly O&M cost (presumably for just the Sub Slab Depressurization System) of $7,200 in Table 3 significantly lower than the annualized monthly O&M cost of operating the Sub Slab Depressurization System under Alternative 2 (Feasibility Study Table 2, $10,560)?

RESPONSE 4: The higher costs for year one and two of Sub Slab Depressurization System / Soil Vapor Extraction O&M have to do with the engineer's estimate for "system testing and carbon breakthrough." This will be further evaluated during the remedial design and construction, but the initial year or two should see the highest amounts of contaminate removal and therefore the highest emissions from the Soil Vapor Extraction system to be treated. During those first two years, the monitoring of the system will need to be more frequent to evaluate carbon change intervals, carbon breakthrough, etc. Since each system is so different, the first few years allow the engineer to set up a precise maintenance schedule. Based on discussion with the engineer, Sub Slab Depressurization System O&M estimates were larger than Sub Slab Depressurization System and Soil Vapor Extraction estimates for years 3-7 for reasons which include but are not limited to: level of technical experience needed at that point in the project (i.e., field tech vs project manager vs professional engineer), time required, and travel/lodging costs. These costs are based on the professional engineer's estimates and experience. The feasibility study does not get into a deeper level of detail since the costs are estimates and will be further refined during the remedial design. It should be noted that Alternative 2, while addressing Soil Vapor Intrusion concerns, does not protect from other human health exposures or protect the environment. Therefore, even if the costs associated with O&M were equivalent to the Alternative 3 costs, it is not protective of human health and the environment and is therefore not a viable cleanup option for this site. This is discussed in section 6.1.2 of the Feasibility Study.

COMMENT 5: Another question relates to the last sentence in the narrative for Alternative 3 in the Proposed Remedial Action Plan (page 19) which indicates that the alternative includes what appears to be a significant amount of testing and data collection to fully design the Soil Vapor Extraction system, while the present worth, capital and annual costs appear to be identical to costs presented in Table 3 of the Feasibility Study. Table 3 of the Feasibility Study notes in the "Remedy Description" section that "Costs assume that no additional data collection will be necessary to design the Soil Vapor Extraction system...". Would not the costs shown in the Proposed Remedial Action Plan need to be increased over what was shown in Table 3 of the Feasibility Study to account for the pre-design testing called out in the Proposed Remedial Action Plan (but apparently excluded from the Feasibility Study cost analysis)?

RESPONSE 5: For the discussion on page 19, the last sentence was meant to be omitted based on earlier revisions to the report and will be addressed in the Record of Decision (ROD). The costs for additional data collection were not directly addressed in the Proposed Remedial Action Plan since they are highly variable based on on-site conditions. The remedial design, conducted by a professional engineer, will evaluate at that time if additional data is needed to design the system. Some of that work is built into the cost of the installation and will be collected as the system is installed, like permeability testing and radius of influences for the system. As indicated previously, contingency costs were also included to make up for unforeseen costs that couldn't be estimated fully.

COMMENT 6: Is there a possible off-site source?

RESPONSE 6: The Department is evaluating the possibility of an off-site source contributing to the contamination present at the site.

COMMENT 7: You mentioned that the plan would only allow for Commercial and Industrial use. Does the possibility exist for a plan that would allow for a use outside of just industrial/commercial?

RESPONSE 7: As indicated in 1.a., the anticipated future use of the site was discussed with the owner and operator prior to the feasibility study being conducted and consistent with the current

property zoning. The current remedy would allow for restricted residential use, but as stated above the cover system element of the remedy would need to include a minimum two-foot soil cover if changed in the future from impervious cover. Based on comments from stakeholders, the Record of Decision has been updated to a restricted residential use, which still allows for commercial and industrial use, at the site.

COMMENT 8: The investigations to date do not appear to have definitively identified the contaminant source area(s). How effective will the under-building soil vapor extraction system proposed as part of the recommended remedy (Alternative 3) be when the data indicates higher contaminant levels in soil and groundwater off site (south of the building)?

RESPONSE 8: The system will be designed by a professional engineer to address the source area and to the extent possible the surrounding soil contamination in that area. Any source area delineation, if needed beyond the data collected to date, will be addressed in the remedial design.

COMMENT 9: The Feasibility Study and Proposed Remedial Action Plan reports suggest the presence of TCE and its degradation products in the soil and groundwater are related to historical use of TCE as a degreasing solvent at the Site. Why do the reports not address the origin/source(s) of PCE, which is higher up the degradation chain than TCE, also found in the soil and groundwater in and around the Site**?**

RESPONSE 9: Correct, it is documented that TCE was used at the site. It is possible PCE was also used at the site as a substitute for TCE when unavailable, or it is possible that an off-site source is leading to the groundwater PCE impacts. As indicated previously, the Department is evaluating the possibility of an upgradient PCE source.

COMMENT 10: If no PRPs are identified to assume responsibility for the remedial program, and the state proceeds with implementation of the recommended remedy under the state Superfund, what would be the anticipated timeline?

RESPONSE 10: At this time a timeframe cannot be committed to due to the large number of variables associated with the legal processes and project. The site's potentially responsible

parties will be given an opportunity to implement the remedy consistent with the Record of Decision. If the parties do not agree to implement the Record of Decision, the state will start the remedial design. The public will be kept up to date by the Department when major milestones are reached with the project.

COMMENT 11: Is there a possibility that the entity that you believed caused the pollution will be responsible to pay for all or some of the cleanup?

RESPONSE 11: It is possible. The site's potentially responsible parties will be given an opportunity to implement the remedy consistent with the Record of Decision, similar to when they were given the opportunity to perform investigations in 2017 when the class 2 listing was finalized. If the parties do not agree to implement the Record of Decision, the state would fund the remedy using State Superfund monies, and the NYS Attorney General would lead cost recovery efforts at a later date.

COMMENT 12: If the five year plan works as proposed, will there be any further restrictions on the property uses other than the additional 2 years of venting for interior areas?

RESPONSE 12: It is proposed that groundwater sampling and cover system inspection will continue after the Soil Vapor Extraction system operation is finished. Please note that the 5 years are currently an estimate. The Remedial Design conducted by a professional engineer will further define the operation timeframe, and the remedial system will be continuously evaluated and optimized as needed. The site management plan would continue to be in effect to manage remaining aspects of the remedy and would be updated to reflect current site conditions as appropriate.

COMMENT 13: Does commercial use include a person-dense retail (people occupying the property 24 hrs), office or other use?

RESPONSE 13: Retail and office space are both consistent with the commercial use. Further information is available on the New York State Department of Environmental Conservation's Remediation website (https://www.dec.ny.gov/chemical/brownfields.html) and DER-10

Technical Guidance for Site Investigation and Remediation
(https://www.dec.ny.gov/regulations/67386.html).

COMMENT 14: Do I understand that the property can be used now, prior to remediation?

RESPONSE 14: Yes, the sub slab depressurization system is addressing indoor air contamination concerns and the remedy would allow the site to be used while operating.

COMMENT 15: What are two properties off site in need mitigation?

RESPONSE 15: Two adjacent properties were sampled by the Department. The sampling recommended mitigation of the structures based on NYSDOH guidance. The Departments offered to mitigate those properties; however, the owner of the properties declined. The Department understands that the owner of those properties has installed mitigation systems on their own.

COMMENT 16: What happens at the end of 5 years? Does that system remain abandoned in place and no further action is required? Or is there additional responsibility after the 5 years of this plan?

RESPONSE 16: After the 5 years, if the remedy has effectively addressed contamination in soils at the site, the system would be deconstructed and evaluated for reuse/re-sale/etc. Extraction points or extraction wells would be decommissioned according to Department guidance. There are remedial aspects that continue after 5 years, such as the sub slab depressurization system, groundwater monitoring, etc.

COMMENT 17: If a new party were to purchase the building, would there be any obstacles to occupying the space for commercial/industrial purposes immediately while remediation is in place? Or would occupation/use of the space have to wait until cleanup is completed?

RESPONSE 17: As indicated in Response 14, the building could be occupied during remedial action. Any change in ownership would require a Change of Use form be submitted to the Department 60 days prior. In addition, a new owner could enter into an agreement with the Department to obtain a liability release.

COMMENT 18: Is the unsightly used car dealership with oil and gas filled cars next door of any concern related to the use of this property?

RESPONSE 18: Petroleum products like gas and oil were not identified as contaminants of concern for the site.

COMMENT 19: Who pays for the power used by the remedial system and pays to maintain the remedy?

RESPONSE 19: If no potentially responsible parties agree to implement the remedy, the Department would fund the remedy and the power required. At a future date cost recovery may be pursued by the Attorney Generals Office to recover costs expended, including on power.

COMMENT 20: With soil and groundwater contamination present, the likelihood of high-water events and the site's distance from the river, is flooding a concern?

RESPONSE 20: Flooding risk at the site from the Genesee River is minimized by the Court Street dam which is managed to minimize the risk of flooding to the area. The site is described as an "area of minimal flood hazard" by FEMA's National Flood Hazard Mapper.

COMMENT 21: An article in the D&C spoke about previous remedial action taken at the site being successful and people living at the property who shouldn't have been.

RESPONSE 21: It is not clear what article you are referring to. We suspect that the previous remediation mentioned is the 2017/2018 interim remedial measure conducted to address indoor

air concerns through the construction of a sub slab depressurization system (SSDS). The sub slab depressurization system addresses soil vapors entering the building and affecting indoor air. While that system is not meant to address contamination in soils, indoor air samples do indicate that it is addressing indoor air concerns successfully. The proposed remedy's soil vapor extraction (SVE) system would go beyond the sub slab depressurization system with significantly more vacuum to pull contamination from the soils and treat it before exhausting the air.

COMMENT 22: So am I to understand that the five year estimated timeframe would address all the contamination at the site?

RESPONSE 22: Five years was the engineer's estimate for the soil contamination below the building to be addressed. Addressing that soil contamination would decrease the likelihood for Soil Vapor Intrusion concerns and limit the migration of groundwater contamination. It is likely that even after the Soil Vapor Extraction system has operated that some residual contamination will be present in groundwater and bedrock groundwater. The proposed remedy includes monitoring the groundwater for 15 years after the estimated 5 years of Soil Vapor Extraction system operation to make sure contamination in groundwater is naturally biodegrading. There would be contingencies in place in case additional remedial measures are needed.

COMMENT 23: What are the risks to adjoining properties, both the clinic and transitional housing apartments? Is there risk of air contamination and is soil or water contamination affecting those properties?

RESPONSE 23: Soil Vapor Intusion sampling was conducted at both properties mentioned and evaluated by the New York State Department of Health. Neither property required further action for indoor air concerns. There is possibly groundwater contamination that extends onto adjacent properties; however, the groundwater is not used for drinking water purposes. The City of Rochester prohibits the potable use of groundwater within the city limits.

COMMENT 24: Are there any other alternatives to this plan that you would consider?

RESPONSE 24: A feasibility study, available online at https://www.dec.ny.gov/data/DecDocs/828194/, was conducted to evaluate many different

alternatives for the site. Remedial options considered ranged from No Action, which is not protective of human health or the environment, to a nearly 2-million-dollar cleanup involving removing the building, excavation, groundwater treatment, etc. The proposed remedy, Alternative 3, is protective of human health and the environment and also provides a good combination of the balancing criteria, as further discussed in the Feasibility Study.

APPENDIX B

Administrative Record

Administrative Record

Former Hall Welter Site

State Superfund Project

City of Rochester, Monroe County, New York

Site No. 828194

Proposed Remedial Action Plan for the Former Hall Welter site, dated February 2022 prepared by the Department

Class 2 Public Notice, dated February 2017, prepared by the Department.

Interim Remedial Measures Work Plan, dated August 2017, prepared by Labella Associates

Citizen Participation Plan, September 2017, prepared by the Department.

Remedial Investigation Work Plan/Scope of Work, dated December 2017, prepared by HDR Engineering

Sub Slab Depressurization System Interim Remedial Measure Construction Completion Report, dated November 2018, prepared by Labella Associates

Final Remedial Investigation Report, dated February 2020, prepared by HDR Engineering

Feasibility Study and remedial Alternatives Analysis, dated November 2021, prepared by HRP Associates