

---

# EXPLANATION OF SIGNIFICANT DIFFERENCE RGE – EAST STATION

---



---

Rochester / Monroe County / Site No. 828204 / September 2025

---

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

## 1.0 INTRODUCTION

The purpose of this notice is to describe the progress of the cleanup at the RGE - East Station site, a former manufactured gas plant (MGP) site (the “site” or “Former MGP site”), and to inform the public about a change in the site remedy.

The site is located at 1 Suntru Street in Rochester, Monroe County. It is bordered to the east by the Genesee River Gorge wall and Suntru Street, to the south by the Bausch Street Bridge, the west by the Genesee River, and to the north by a former Bausch and Lomb (B&L) research facility. Splitting the site into quadrants, the northeast quadrant of the site formerly housed the purifier area of the MGP operations. The southeast quadrant of the site was where the oil tanks and tar well were located. The southwest quadrant and southern portion of the northwest quadrant was the location of the Former Light Oil Plant and gas holders.

On June 1, 2022, the New York State (NYS) Department of Environmental Conservation (“NYSDEC” or “Department”) issued a Record of Decision (ROD) which selected a remedy to address MGP-related contamination related to former MGP operations (MGP wastes) at the site.

The original remedy included excavation conducted at various depths up to 30 feet below ground surface (ft bgs) or to competent bedrock, as feasible at the Former MGP site. Approximately 299,500 cubic yards (CY) of soil is proposed to be excavated, including the former purifier area, the Former Light Oil Plant, a former gas holder, other underground structures, residual MGP wastes and near-river soil (soil along the riverbank).

The remedy selected in the 2022 ROD included:

1. A remedial design program 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;
2. Excavation and off-site disposal of contaminant source areas, including grossly impacted soil, soil containing hazardous lead concentrations, soil exceeding 500 parts per million (ppm) semi-volatile organic compounds (SVOCs), and soil exceeding protection of groundwater soil cleanup objectives (PGWSCOs) for those compounds also found in site groundwater above standards. The upper 10 ft of soil will be stockpiled and sampled for potential on-site reuse. The on-site soil excavation is anticipated to extend to bedrock, of which the anticipated maximum depth is approximately 30 ft bgs. Excavation will include near-river soil between the existing on-site in-situ solidification (ISS) wall and the river. Off-site soil excavation on the northern adjacent B&L property is anticipated to extend to approximately 24 ft bgs, the anticipated depth to bedrock. In addition, sediment within the Genesee River exceeding 35 parts per million (ppm) total

polycyclic aromatic hydrocarbons (tPAHs) will also be excavated. Importing clean fill meeting the established soil cleanup objectives for use as backfill, restricted residential for on-site and unrestricted for off-site, to replace excavated soil;

3. Continued non-aqueous phase liquid (NAPL) monitoring and recovery;
4. Implementation of monitored natural attenuation of groundwater with a contingency for oxygen injection as an additional remedial action, if necessary;
5. A cover system to be placed on-site to allow for restricted residential use. Where remaining subsurface impacts exceed restricted residential soil cleanup objectives a minimum of two (2) feet of soil meeting restricted residential SCO's will be placed over a demarcation layer with the upper six (6) inches of soil of sufficient quality to maintain a vegetative layer;
6. Implementation of Institutional Controls, including development of a Site Management Plan (SMP); and recording of an Environmental Easement (EE) to document the engineering controls, to require compliance with the SMP, and to ensure proper use of the site in the future.

During the pre-design investigation to inform the remedial design, it was determined that it was not feasible to implement all elements of the selected remedy as described in the ROD, namely element 2 above. Soil analytical data indicated the top 10 feet of soil will not be available for reuse. Therefore, rather than excavating MGP-impacted soil to approximately 30 ft bgs at MGP source areas on the Former MGP site, this material (10-30 ft bgs) will undergo ISS with the top 10 ft bgs of soil excavated, to allow for bulking of the solidified material, and properly disposed of off-site.

The selected remedy presented in the ROD was proposed in the May 2021 Feasibility Study (FS) as Alternative 4. The changes to this remedy were presented in the FS as Alternative 6. Attached Figure 1 presents the selected on-site remedy as presented in the ROD. Attached Figure 2 presents the revised on-site remedy. Figure 3 presents the unchanged off-site remedy. Figure 4 presents the unchanged sediment remedy.

This Explanation of Significant Difference (ESD) will become part of the Administrative Record for this site. The information here is a summary of what can be found in greater detail in documents that have been placed in the following repositories:

DECInfo Locator - Web Application

<https://www.dec.ny.gov/data/DecDocs/828204/>

Central Library of Rochester and Monroe County  
115 South Avenue  
Rochester, New York 14604  
585-428-7300

Monday-Thursday 9am – 7pm, Friday 9am – 5pm, Saturday 10am – 5pm, Closed Sunday

Although this is not a request for comments, interested persons are invited to contact NYSDEC's Project Manager for this site, Greta Kowalski [greta.kowalski@dec.ny.gov](mailto:greta.kowalski@dec.ny.gov) 518-402-2029, to obtain more information or have questions answered.

## **2.0 SITE DESCRIPTION AND ORIGINAL REMEDY**

### **2.1 Site History, Contamination, and Selected Remedy**

#### **2.1.1 Site Location, Size, and Significant Features**

The Rochester Gas and Electric (RG&E) East Station Former MGP site is located in the City of Rochester, Monroe County in an industrial/commercial area. The site is on the eastern bank of the Genesee River, at the foot of Suntru Street, north of the Inner Loop Highway. The site is relatively flat with the Genesee River Gorge wall rising to the east and the river to the west. The majority of the Former MGP site is open space with four vacant RG&E buildings located in the northern portion of the parcel. A high-pressure gas main is located in the central portion of the Former MGP site, and a natural gas regulator station is located

in the northeastern quadrant. The site is approximately 13.4 acres and is bounded to the north by property owned by B&L, to the west by a 2.25-acre parcel owned by New York State along the Genesee River, to the east by Suntru Street and the gorge wall, and to the south by the Bausch Street Bridge.

Site soil generally consists of approximately 10 to 20 feet of urban fill, underlain by silt, sand and gravel to a depth of approximately 30 ft bgs. Another one (1) to three (3) feet of weathered bedrock is encountered before competent rock. The bedrock surface slopes gently to the north and west toward the Genesee River where it outcrops. Overburden groundwater is typically encountered 6 to 20 ft bgs. Groundwater flow direction is to the west toward the Genesee River which flows south to north, eventually discharging to Lake Ontario.

### ***2.1.2 Site Activities that Led to Contamination***

MGP operations operated between the early 1800s and mid-1900s, before the development of natural gas systems, to convert coal and oil into gas for heating, lighting, and cooking. Manufactured gas-production byproducts (i.e., coal tar) often account for the majority of the impacts at former MGP sites, including at East Station. East Station was first developed as an MGP in 1872. A light oil facility (i.e., Former Light Oil Plant) was constructed in the southwestern corner of the Former MGP site adjacent to the Genesee River and used to produce trinitrotoluene (TNT) compounds during World War I and was then later used to produce Bengas, a gasoline substitute. Operations ceased at the Former MGP site in 1976. The former MGP had several gas holders and gas manufacturing plant buildings which have since been demolished and the foundations filled in. However, four (4) buildings remain on-site but are neither used nor occupied.

### ***2.1.3 History of Site Investigation and Cleanup***

Five investigations and two interim remedial measures (IRMs) as well as supporting investigations have been completed at the Former MGP site since 1992. Investigations have included a soil gas survey, test pit excavations, surface and subsurface soil sampling, soil and bedrock borings, piezometer and monitoring well installations, sediment probing and coring, and groundwater sampling to evaluate Former MGP site conditions. These investigations identified the presence of MGP residuals in surface soil, subsurface soil, sediment, and groundwater. NAPL was typically observed near the weathered bedrock and overburden interface. NAPL and sheen were observed in competent bedrock to a maximum depth of 154 ft bgs. NAPL and sheen were also observed in sediment adjacent to the Former MGP site.

An IRM to address coal-tar impacts in the Former Tar Well area, located in the southeast portion of the Former MGP site, was performed between 2004 and 2005. The IRM included the removal and off-site thermal treatment of approximately 20,000 tons of impacted soil/fill material and the removal of the Former Tar Well structure. IRM activities also included the construction of a circular perimeter slurry wall surrounding the tar well, soil excavation immediately outside the tar well to the inside of the slurry wall, and excavation dewatering and off-site disposal of approximately 978,000 gallons of groundwater. The excavations were backfilled with soil from the site and from an off-site source, as approved by the NYSDEC for reuse and import.

An IRM to mitigate seeps along the bank of the Genesee River was completed in 2007 and 2008 and included the ISS of approximately 18,000 CY of soil to immobilize MGP residuals (including NAPL) in the overburden material near the riverbank and the installation of an additional slurry wall and NAPL collection trench with 22 NAPL recovery/monitoring wells east of the ISS area. Approximately 27,000 tons of overburden soil containing purifier box material was also removed and transported to an off-site disposal facility as part of the project.

From 2003 through 2018 the site was tracked under the Voluntary Cleanup Program (VCP) as site number V00358. NYSDEC terminated the VCP in its entirety, which required execution of a multi-site Order on Consent (Index Number; CO 8-20180517-48) under the NYS Superfund Program including the Former MGP site on May 17, 2018. The original ROD presenting the remedial action plan for the site was issued in June 2022.

### **2.1.4 Nature and Extent of Contamination**

Site investigations have identified contaminants of concern<sup>1</sup> for the site resulting from soil, groundwater, and sediments analyses for volatile organic compounds (VOCs), semi-VOCs (SVOCs), metals, polychlorinated biphenyls (PCBs), pesticides and cyanide. No PCBs or pesticides were detected in any media. Based on the investigations conducted to date, the primary contaminants of concern include SVOCs and metals in shallow soils; VOCs, SVOCs and metals in subsurface soils and groundwater, and VOCs and SVOCs in river sediment. Groundwater in several select monitoring wells was analyzed for the emerging contaminants per- and polyfluoroalkyl substances (PFAS) and 1,4-dioxane. These compounds have not been retained as contaminants of concern for the site.

Based on the various phases of investigation and the analysis of various media outlined above, the contaminants of concern identified at this site are:

- Arsenic
- Cyanide
- Lead
- Mercury
- Benzo(a)pyrene
- Benzo(b)fluoranthene
- Benzo(g,h,i)perylene
- Benzo(k)fluoranthene
- Benzo(a)anthracene
- Dibenz(a, h)anthracene
- Indeno(1,2,3-cd)pyrene
- Coal tar
- Benzene, toluene, ethylbenzene, and xylenes (BTEX)
- Naphthalene
- Polycyclic aromatic hydrocarbons (PAHs), total

The contaminant(s) of concern exceed the applicable Standards, Criteria and Guidance (SCGs) for:

- Groundwater
- Sediment
- Soil

The nature and extent of contamination and environmental media requiring action at the site are summarized in the following sections.

#### **Soil**

Comparing soil results to the 6 New York Codes, Rules, and Regulations (6 NYCRR) Part 375 Unrestricted Use Soil Cleanup Objectives (UUSCO) and Restricted-Residential Soil Cleanup Objectives (RRSCOs), both surface and sub-surface soil are impacted above standards by several SVOCs, including but not limited to PAHs, such as benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, and dibenz(a,h)anthracene and inorganic analytes (metals), notably arsenic and total cyanide. Subsurface soil was also identified as impacted by VOCs, namely BTEX. While minor staining was observed in fill material throughout the Former MGP site, coal tar in the form of NAPL and sheen observations were limited to certain areas of the parcel, typically found in these areas:

- in the vicinity of the former purifier area;
- in the vicinity of the former oil tanks, former tar well; and
- in the vicinity of the Former Light Oil Plant and along the riverbank west of the ISS area.

---

<sup>1</sup> 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.

Remaining former MGP structures investigated during the RI do not appear to be significant sources of contaminants. Negligible quantities of NAPL were observed, if present at all, in the structures.

### **Bedrock**

MGP-related impacts, including NAPL and sheen, are present in competent bedrock within the following bedrock units: the Irondequoit Limestone (from 37 to 40 ft bgs), the Reynales Limestone (from 63 to 67, 68 to 76, and at 94 ft bgs), the Maplewood Shale (from 86 to 89 and 96 to 101 ft bgs), and the Grimsby Sandstone (154 ft bgs). NAPL, when present, was typically encountered as blebs and was observed in deep bedrock in the southern portion of the adjacent B&L property, in the southern portion of the Former MGP site, and on the Former MGP site along the RG&E and B&L property boundary.

### **Overburden Groundwater**

Overburden groundwater across the Former MGP site exceeds NYS Division of Water Technical and Operational Guidance Series (1.1.1) (TOGS) Class GA Ambient Water Quality Standards (AWQS) for VOCs (typically BTEX), PAHs and several metals including arsenic and total cyanide. VOC and PAH concentrations in groundwater are typically lowest in the northwestern portion of the Former MGP site, which generally coincides with the distribution of MGP impacts observed in soil.

NAPL has been measured in overburden monitoring wells in the southwestern portion of the Former MGP site in the vicinity of the Former Light Oil Plant. However, NAPL has not been detected in passive recovery wells installed in the gravel collection trench west (upgradient) of the ISS area.

### **Bedrock Groundwater**

MGP-related dissolved-phase constituents in bedrock exceed AWQS for VOCs (typically BTEX) and total cyanide in several bedrock monitoring well locations and at varying depth intervals, primarily associated with the impacted bedrock intervals described above.

### **Sediment**

NAPL impacts in Genesee River sediment related to former MGP operations appear to be limited to an area along the southern portion of the Former MGP site adjacent to the Former Light Oil Plant. A discrete area of NAPL blebs was also observed adjacent to the B&L property located approximately 210 feet north (downstream) of the RG&E and B&L property boundary and consisted of VOCs, namely BTEX, and SVOCs consisting of total PAHs.

Sediment cores collected during the investigation indicated that sediment thickness was limited in the vicinity of the Former Light Oil Plant, with soft sediment thickness ranging from 1 to 3.5 feet in the area where NAPL was observed. Analytical testing indicated that sediment with the highest PAH concentrations were co-located with areas of visual and olfactory impacts.

### **Soil Vapor**

A soil vapor investigation was not conducted at the site due to unoccupied buildings. It is anticipated that all but one of the buildings will be demolished during the remedial action. A soil vapor intrusion evaluation will be performed if the on-site buildings become occupied or for any new buildings constructed on the site.

## ***2.1.5 Alternatives Analysis and Remedy Selection Process***

The remedial action 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.

Potential remedial alternatives for the site were identified, screened and evaluated in the FS (May 2021).

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. Both the original remedy as well as the revised remedy were presented in the FS.

### **2.1.6 Components of Original Remedy (2022 ROD)**

NYSDEC issued a ROD dated June 2022. Based on the results of the RI and the evaluation of alternatives presented in the FS, a remedy was selected, which was summarized in the ROD 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 Division of Environmental Remediation (DER) Program Policy 31 (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. Excavation**

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

- Grossly contaminated soil, as defined in 6 NYCRR Part 375-1.2(u);
- Soil exceeding the 6 NYCRR Part 371 hazardous criteria for lead;
- Concentrated solid or semi-solid hazardous substances per 6 NYCRR Part 375-1.2(a)(1);
- Soil with visual waste material or non-aqueous phase liquid;
- Soil containing total SVOCs exceeding 500 parts per million (ppm);
- Soils which exceed the protection of groundwater soil cleanup objectives (PGWSCO), as defined by 6 NYCRR Part 375-6.8 for those contaminants found in site groundwater above standards; and
- Soils that create a nuisance condition, as defined in Commissioner Policy (CP)-51 Section G.

Excavations will be conducted to various depths of up to approximately 30 ft bgs or to competent bedrock, as feasible at the Former MGP site, and up to 24 ft bgs at the B&L property adjacent to and north of the site or to competent bedrock, as feasible. The excavation will remove the former purifier area, the Former Light Oil Plant, a former gas holder, other underground structures, residual MGP wastes and near-river soil (soil between the ISS wall and the sediment). Lateral earth support and excavation dewatering will be required at the Former MGP site and B&L property off-site to the north

of the site. A pre-design investigation (PDI) will be conducted to confirm the footprint of NAPL and other MGP impacts in the near-river soil and sediment areas.

Approximately 33,400 CY of off-site MGP-impacted soil and 299,500 CY of on-site MGP-impacted soil will be excavated. The upper 10 feet of surface and subsurface soil from the former MGP site (approximately 251,600 CY) will be stockpiled on-site for potential reuse. Prior to reuse on-site, stockpiled soil will be analyzed to confirm compliance with 6 NYCRR 375-6.7 (d), CP-51, DER-10 Section 5.4(e) and with Department concurrence. On- and off-site soil deemed unacceptable for reuse will be transported off-site for disposal or may be evaluated in the remedial design for on-site thermal treatment. The site will be re-graded to accommodate installation of a cover system as described in Element 5 outside of the near-river soils footprint.

For the near-river soils, the pre-design investigation will confirm the presence of MGP contamination (including NAPL) and confirm continued impact on the river prior to remediation. Removals will be conducted only where MGP contamination (including NAPL) is present and influencing the river with the goal of preserving the bank topography and vegetation where possible.

On-site soil which does not exceed the PGWSCOs may be used below the cover system described in Element 5 to backfill the excavation.

Clean fill meeting lower of RRSCOs and PGWSCOs per 6 NYCRR Part 375-6.7(d) will be brought in on-site to replace the excavated soil or complete the backfilling of the excavation and establish the designed grades on-site. Clean fill meeting UUSCOs will be brought in to replace excavated soil on the B&L off-site property.

Following a PDI, sediment which contains MGP NAPL impacts and is above sediment PAH Class C Sediment Guidance Values (SGV) (*Screening and Assessment of Contaminated Sediments*, NYSDEC, June 2014), will be removed from the Genesee River. This is currently predicted to be excavation and off-site disposal/thermal treatment of approximately 2,500 CY of impacted sediment.

A restoration plan for the Genesee Riverbed and banks will be completed with the goal of restoring the stream bed, banks, and floodplain in-kind to the extent possible using natural stream restoration/bioengineering design principles and with the goal of re-establishing habitat function. The design will include a monitoring plan for areas disturbed by the remedy and all activities will be consistent with the requirements of 6 NYCRR Part 608.

### 3. NAPL Recovery

Installation and operation of NAPL, petroleum or coal tar recovery wells to remove potentially mobile petroleum or coal tar from the subsurface. The number, depth, type and spacing of the recovery wells will be determined during the design phase of the remedy. Petroleum or coal tar will be collected periodically from each well; however, if wells are determined by the NYSDEC to accumulate large quantities of NAPL, petroleum or coal tar over extended time periods, they can be converted to automated collection.

### 4. Monitored Natural Attenuation

Groundwater contamination (remaining after active remediation) will be addressed with monitored natural attenuation (MNA). Groundwater will be monitored for site related contamination and also for MNA indicators which will provide an understanding of the (biological activity) breaking down the remaining contamination. It is anticipated that contaminant concentrations will decrease steadily over a reasonable period of time. Reports of the attenuation will be provided periodically in accordance with the monitoring and reporting requirements in the site management plan, and additional active remediation will be evaluated if it appears that natural processes alone will not address the remaining groundwater contamination. The contingency remedial action will depend on the information collected, but it is currently anticipated that oxygen injection would be the expected contingency remedial action.

## 5. Cover System

An on-site cover will be required to allow for restricted residential use of the site, which includes anticipated active recreation, where the upper two (2) feet of exposed surface soil exceed the RRSCOs. Where a soil cover is to be used it will be a minimum of two (2) feet of soil placed over a demarcation layer, with the upper six (6) inches of soil of sufficient quality to maintain a vegetative layer. In near-river soils, the upper two (2) feet will be sufficient quality to maintain a vegetative layer and the demarcation layer will not include any fabric. Soil cover material, including any fill material brought to the site, will meet the SCOs for cover material for the use of the site as set forth in 6 NYCRR Part 375-6.7(d). Substitution of other materials and components may be allowed where such components already exist or are a component of the tangible property to be placed as part of site redevelopment. Such components may include, but are not necessarily limited to pavement, concrete, paved surface parking areas, sidewalks, building foundations and building slabs. Off-site, a soil cover will not be required since the backfill shall meet UUSCOs.

Where the soil cover is required over the ISS treatment area, it will consist of a minimum of four (4) feet of soil with the top two (2) feet meeting the RRSCOs (active recreational) use. For areas where solidified material underlies the cover, the solidified material itself will serve as the demarcation layer due to the nature of the material. A cover system will not be used on the banks or within the floodplain of the Genesee River because ecological SCOs will be met through excavation and backfill.

## 6. 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 NYSDEC 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, uses 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 NYS Department of Health (NYSDOH) or County; and
- Require compliance with the NYSDEC-approved Site Management Plan.

## 7. Site Management Plan

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

- A. An Institutional and Engineering Control Plan that identifies all use restrictions and engineering controls for the site and details the steps and media-specific requirements necessary to ensure the following institutional and/or engineering controls remain in place and effective:

Institutional Controls:

- The Environmental Easement discussed in Element 6 above.

Engineering Controls:

- The soil cover noted discussed in Element 5 above.
- The previous IRMs performed, including the ISS barrier wall, slurry wall, NAPL collection trench; and NAPL monitoring/recovery wells in Element 3.

This plan includes, but may not be limited to:

- An Excavation Plan which details the provisions for management of future excavations in areas of remaining contamination on the former MGP site;
- Descriptions of the provisions of the environmental easement including any land use, and groundwater use restrictions;



- A provision should redevelopment occur to ensure no soil exceeding protection of groundwater concentrations will remain below storm water retention basin or infiltration structures; developed on site, and in off-site areas with site-related contamination, including provision for implementing actions recommended to address exposures related to soil vapor intrusion;
  - A provision that should a building foundation or building slab on the Former MGP site be removed in the future, a cover system consistent with that described in Element 5 above will be placed in any areas where the upper two (2) feet of exposed surface soil exceed the applicable SCOs;
  - Provisions for the management and inspection of the identified engineering controls;
  - Maintaining site access controls and Department notification; and
  - The steps necessary for the periodic reviews and certification of the institutional and/or engineering controls.
- B. A Monitoring and Maintenance Plan to assess the performance and effectiveness of the remedy. The plan includes, but may not be limited to:
- Monitoring of groundwater to assess the performance and effectiveness of the remedy;
  - Periodic NAPL monitoring and recovery, and recovery well maintenance, as appropriate;
  - Monitoring and maintenance of the cover system to assess the performance and effectiveness of the remedy, erosion, settlement, or other disturbances;
  - Monitoring of the riverbank to assess for NAPL seeps into sediment or the river, with contingencies to address this condition, as appropriate;
  - A contingent technology if MNA is not proven effective in the long-term;
  - A schedule of monitoring, maintenance and frequency of submittals to the NYSDEC;
  - Monitoring for vapor intrusion for any buildings developed on the site, and in off-site areas with site-related contamination, as may be required by the Institutional and Engineering Control Plan discussed above; and
  - Monitoring of remedial restoration success and repair actions, as needed.

### **3.0 CURRENT STATUS**

The 2022 original remedy has not been implemented. A remedial design will be completed after issuance of this ESD.

## **4.0 DESCRIPTION OF SIGNIFICANT DIFFERENCE**

### **4.1 New Information**

New information was obtained since the issuance of the ROD in 2022. Specifically, the FS and 2022 ROD assigned a beneficial reuse factor of 100% for approximately 250,000 CY of excavated material satisfying 6 NYCRR 375-6.7(d), CP-51, DER-10 Section 5.4(e), and NYSDEC concurrence. Application of a 100% reuse factor is generally not practical and the quantity of soil available for reuse did not fully consider existing site data (i.e., remedial investigation data).

The implications of the 100% reuse factor resulted in a significant underestimation of the following items:

- Off-site disposal volume;
- Clean fill volume for imported backfill;
- Environmental impact (e.g., truck traffic, construction duration, landfill capacities, etc.); and
- Cost to construct the original remedy.

Consequently, FS evaluation criteria for the original remedy was not accurately represented for the

purpose of the remedy selection process.

The lack of reuse availability (i.e., 100% off-site disposal and increased backfill import for excavated materials), when evaluating the original remedy versus other alternatives presented in the FS results in a significant loss of efficiencies, an overall inefficient use of resources, an increased environmental impact, and an increased remedy cost to construct. These factors, when combined, decrease the suitability of the original remedy as the preferred remedial alternative for the site.

The FS and associated alternatives were reviewed in consideration of the above factors and a different alternative was determined to be more suitable in consideration of the above factors, as outlined below.

## **4.2 Comparison of Changes with Original Remedy**

The primary differences between the original remedy and the amended remedy in this ESD are summarized below:

- The volume of the available beneficial reuse material up to depths of 10 ft bgs has been assumed to be 0 CY in the amended remedy as compared to 250,000 CY in the original remedy.
- On-site source area excavations will be completed to a depth of 10 ft bgs (Figure 1) as compared to depths of up to approximately 30 ft bgs (or to competent bedrock, as feasible), as presented in the original remedy. Soil deemed unacceptable for reuse will be transported off-site for disposal or may be evaluated in the remedial design for off-site treatment.
- Whereas the original remedy was to excavate on-site source areas to 30 ft bgs (anticipated depth to bedrock), impacted material from 10 to 30 ft bgs (anticipated maximum depth to bedrock) will now be solidified using ISS technology (Figure 1).
- All but one (1) of the existing on-site buildings will be demolished.
- The existing cover system over the on-site ISS barrier wall, along with the top four (4) feet of the existing ISS wall, will be removed to allow for a cover system and to meet design grades.
- The design is to include an evaluation of the remedy with respect to Green and Sustainable Remediation (GSR) and climate resiliency principles as per DER-31.

All other elements of the original remedy will remain consistent under the amended remedy.

## **4.3 Amended Remedy**

Based on the above considerations, the original remedy shall be amended to read<sup>2</sup>:

### **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;

---

<sup>2</sup> To maintain continuity, this section restates the Record of Decision Remedy as originally published with the exception of those elements that have been revised in accordance with this ESD. This section does not acknowledge project status changes (i.e., the completion of the PDI and design progress).

- Fostering green and healthy communities and working landscapes which balance ecological, economic and social goals;
- Integrating the remedy with the end use where possible and encouraging green and sustainable re-development; and
- Additionally, to incorporate green remediation principles and techniques to the extent feasible in the future development at this site, any future on-site buildings shall be constructed, at a minimum, to meet the 2020 Energy Conservation Construction Code of New York (or most recent edition) to improve energy efficiency as an element of construction.

As part of the remedial design program, to evaluate the remedy with respect to green and sustainable remediation principles, an environmental footprint analysis will be completed. The environmental footprint analysis will be completed using an accepted environmental footprint analysis calculator such as SEFA (Spreadsheets for Environmental Footprint Analysis, USEPA), SiteWise(TM) (available in the Sustainable Remediation Forum [SURF] library) or similar NYSDEC accepted tool. Water consumption, greenhouse gas emissions, renewable and non-renewable energy use, waste reduction and material use will be estimated, and goals for the project related to these green and sustainable remediation metrics, as well as for minimizing community impacts, protecting habitats and natural and cultural resources, and promoting environmental justice, will be incorporated into the remedial design program, as appropriate. The project design specifications will include detailed requirements to achieve the green and sustainable remediation goals. Further, progress with respect to green and sustainable remediation metrics will be tracked during implementation of the remedial action and reported in the Final Engineering Report (FER), including a comparison to the goals established during the remedial design program.

Additionally, the remedial design program will include a climate change vulnerability assessment, to evaluate the impact of climate change on the project site and the proposed remedy. Potential vulnerabilities associated with extreme weather events (e.g., hurricanes, lightning, heat stress and drought), flooding, and sea level rise will be identified, and the remedial design program will incorporate measures to minimize the impact of climate change on potential identified vulnerabilities.

## 2. Excavation

### On-Site:

Excavation of site soil to a depth of 10 feet below grade in the portion of the site subject to ISS treatment described in remedial element 3. Approximately 98,700 cubic yards of soil will be excavated to facilitate ISS implementation. All soil exceeding restricted-residential SCOs or protection of groundwater SCOs for contaminants present in groundwater will be disposed of off-site at a permitted facility.

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

Clean fill meeting the lower of RRSCOs and PGWSCOs per 6 NYCRR Part 375-6.7(d) will be brought on-site to replace the excavated soil or complete the backfilling of the excavation and establish the designed grades on-site.

Soil which does not exceed the PGWSCOs may be used below the cover system described in Element 6 to backfill the excavation.

The site will be re-graded to accommodate installation of a cover system outside of the ISS area, as described in remedial element 6.

### Off-site

Excavations will be conducted at the off-site B&L property located adjacent to and north of the site as described below.

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

- Grossly contaminated soil, as defined in 6 NYCRR Part 375-1.2(u);
- Soil exceeding the 6 NYCRR Part 371 hazardous criteria for lead;
- Concentrated solid or semi-solid hazardous substances per 6 NYCRR Part 375-1.2(au)(1)
- Soil with visual waste material or non-aqueous phase liquid;
- Soil containing total SVOCs exceeding 500 ppm;
- Soil exceeding the PGWSCOs, as defined by 6 NYCRR Part 375-6.8 for those contaminants found in site groundwater above standards; and
- Soil that creates a nuisance condition, as defined in CP-51 Section G.

Excavations will be conducted to various depths of up to approximately 30 ft bgs or to competent bedrock, as feasible at the Former MGP site, and up to 24 ft bgs at the B&L property adjacent to and north of the site or to competent bedrock, as feasible. The excavation will remove the former purifier area, the Former Light Oil Plant, a former gas holder, other underground structures, residual MGP wastes and near-river soil (soil between the ISS wall and the sediment). Lateral earth support and excavation dewatering will be required at the Former MGP site and B&L property off-site to the north of the site. A pre-design investigation (PDI) will be conducted to confirm the footprint of NAPL and other MGP impacts in the near-river soil and sediment areas.

Clean fill meeting UUSCOs will be brought in to replace excavated soil on the B&L off-site property.

### Genesee River Soil and Sediment

For the near-river soil, the PDI will confirm the presence of MGP contamination (including NAPL) and confirm continued impact on the river prior to remediation. Removals will be conducted only where MGP contamination (including NAPL) is present and influencing the river with the goal of preserving the bank topography and vegetation where possible.

Following a PDI, sediment which contains MGP NAPL impacts and is above sediment PAH Class C SGV, will be removed from the Genesee River. This is currently predicted to be excavation and off-site disposal/ treatment of approximately 2,500 CY of impacted sediment.

A restoration plan for the Genesee Riverbed and banks will be completed with the goal of restoring the stream bed, banks, and floodplain in-kind to the extent possible using natural stream restoration/bioengineering design principles and with the goal of re-establishing habitat function. The design will include a monitoring plan for areas disturbed by the remedy and all activities will be consistent with the requirements of 6 NYCRR Part 608.

### 3. In situ Solidification

ISS will be performed on-site, on impacted subsurface soil to the top of competent bedrock as shown on Figure 2, which is estimated to be at depths of up to 30 ft bgs. Approximately 197,300 CY of subsurface soil will be treated by ISS. Given the presence of debris and buried structures, pre-clearing with an excavator may be required to remove obstructions. A minimum of a 4-foot soil cut will be excavated in these areas to contain the ISS spoils and increased soil volume created by the soil mixing. ISS is a process that binds the soil particles in place creating a low permeability mass. The contaminated soil in these areas will be mixed in place together with solidifying reagents or other binding reagents using an excavator or augers. Often Portland cement is used as the primary binder, although less carbon-intensive amendments will be considered. The soil and binding reagents are mixed to produce a solidified mass resulting in a low permeability monolith.

Prior to the implementation of this technology, bench-scale laboratory testing and on-site pilot scale studies will be conducted to more clearly define design parameters, amendment types and dosages.

Bench test will consist of collecting soil from source area and mixing with a variety of amendments and doses in a controlled atmosphere followed by testing resulting hydraulic conductivity and unconfined-compressive strength. Pilot tests will then be conducted using successful amendment mixes from the bench test prior to full scale design.

#### 4. NAPL Recovery

Installation and operation of NAPL, petroleum or coal tar recovery wells to remove potentially mobile petroleum or coal tar from the subsurface. The number, depth, type and spacing of the recovery wells will be determined during the design phase of the remedy. Petroleum or coal tar will be collected periodically from each well; however, if wells are determined by the NYSDEC to accumulate large quantities of NAPL, petroleum or coal tar over extended time periods, they can be converted to automated collection.

#### 5. Monitored Natural Attenuation

Groundwater contamination (remaining after active remediation) will be addressed with MNA. Groundwater will be monitored for site related contamination and also for MNA indicators which will provide an understanding of the biological activity breaking down the remaining contamination. It is anticipated that contaminant concentrations will decrease steadily over a period of 30-years. Reports of the attenuation will be provided periodically in accordance with the monitoring and reporting requirements in the SMP, and additional active remediation will be evaluated if it appears that natural processes alone will not address the remaining groundwater contamination. The contingency remedial action will depend on the information collected, but it is currently anticipated that oxygen injection would be the expected contingency remedial action.

#### 6. Cover System

To allow for restricted residential use of the site, which includes anticipated active recreation, an on-site cover system will be required where surface and/or subsurface soil exceed RRSCOs. Where a soil cover is to be used it will be a minimum of two (2) feet of soil placed over a demarcation layer, with the upper six (6) inches of soil of sufficient quality to maintain a vegetative layer. In near-river soils, the upper two (2) feet will be sufficient quality to maintain a vegetative layer and the demarcation layer will not include any fabric. Soil cover material, including any fill material brought to the site, will meet the SCOs for cover material for the use of the site as set forth in 6 NYCRR Part 375-6.7(d). Substitution of other materials and components may be allowed where such components already exist or are a component of the tangible property to be placed as part of site redevelopment. Such components may include, but are not necessarily limited to pavement, concrete, paved surface parking areas, sidewalks, building foundations and building slabs. Off-site, a soil cover system will not be required since backfill shall meet UUSCOs.

Where the soil cover is required over the ISS treatment area backfilling to accommodate final site grades will be completed with the top four (4) feet meeting the RRSCOs (active recreational use) and for frost protection for the ISS monolith. For areas where solidified material underlies the cover, the solidified material itself will serve as the demarcation layer due to the nature of the material. A cover system will not be used on the banks or within the floodplain of the Genesee River because ecological SCOs will be met through excavation and backfill.

#### 7. Institutional Control

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

- Require the remedial party or site owner to complete and submit to the NYSDEC 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, uses 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; and

- Require compliance with the NYSDEC-approved SMP.

## 8. Site Management Plan

A SMP is required, which includes the following:

- A. An Institutional and Engineering Control Plan that identifies all use restrictions and engineering controls for the site and details the steps and media-specific requirements necessary to ensure the following institutional and/or engineering controls remain in place and effective:

Institutional Controls:

- The Environmental Easement discussed in Element 7 above.

Engineering Controls:

- The ISS engineering control discussed in Element 3 above.
- The previous IRMs performed, including the ISS barrier wall, slurry wall, NAPL collection trench; and NAPL monitoring/recovery wells, both existing and newly installed, in Elements 4 and 5.
- The soil cover system discussed in Element 6 above.

This plan includes, but may not be limited to:

- An Excavation Plan which details the provisions for management of future excavations in areas of remaining contamination on the Former MGP site;
  - Descriptions of the provisions of the environmental easement including any land use, and groundwater use restrictions;
  - A provision should redevelopment occur to ensure no soil exceeding protection of groundwater concentrations will remain below storm water retention basin or infiltration structures;
  - A provision for implementing actions recommended to address exposures related to soil vapor intrusion on-site and in off-site areas with MGP-related contamination;
  - A provision that should a building foundation or building slab on the Former MGP site be removed in the future, a cover system consistent with that described in Element 6 above will be placed in any areas where the upper two feet of exposed surface soil exceed the applicable SCOs;
  - Provisions for the management and inspection of the identified engineering controls;
  - Maintaining site access controls and Department notification; and
  - The steps necessary for the periodic reviews and certification of the institutional and/or engineering controls.
- B. A Monitoring and Maintenance Plan to assess the performance and effectiveness of the remedy. The plan includes, but may not be limited to:
    - Monitoring of groundwater to assess the performance and effectiveness of the remedy;
    - Periodic NAPL monitoring and recovery, and recovery well maintenance, as appropriate;
    - Monitoring and maintenance of the cover system to assess erosion, settlement, or other disturbances;
    - Monitoring of the riverbank to assess for NAPL seeps into sediment or the river, with contingencies to address this condition, as appropriate;
    - A contingent technology if MNA is not proven effective in the long-term;
    - A schedule of monitoring, maintenance and frequency of submittals to the NYSDEC;
    - Monitoring for vapor intrusion for any buildings developed on the site, and in off-site areas with site-related contamination, as may be required by the Institutional and Engineering Control Plan discussed above; and

- Monitoring of remedial restoration success and repair actions, as needed.

## **5.0 SCHEDULE AND MORE INFORMATION**

A detailed design for the amended remedy will be prepared during 2025. Remedial Action is anticipated to begin in 2027. After the remedial party completes the cleanup activities, a Final Engineering Report (FER) will be prepared and submitted to NYSDEC. The FER will describe the cleanup activities completed and certify that cleanup requirements have been achieved or will be achieved. When NYSDEC is satisfied that cleanup requirements have been achieved or will be achieved for the site, it will approve FER.

If you have questions or need additional information you may contact any of the following:

### **NYSDEC Project Manager**

Greta Kowalski, P.G.  
625 Broadway  
Albany, NY 12233  
(518) 402-2029

### **NYSDEC Public Participation Specialist**

Andrea Pedrick  
6274 E. Avon-Lima Rd  
Avon, NY 14414  
(585) 226-5363

### **NYSDEC Remediation Engineer (Region 8)**

David Pratt  
6274 E. Avon-Lima Rd  
Avon, NY 14414  
(585) 226-5449

### **NYSDOH Project Manager**

Anthony Perretta, BEEI  
Empire State Plaza, Corning Tower  
Room 1787  
Albany, NY 12237  
(518) 402-7860

## DECLARATION

The selected remedy is protective of public 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.

08/25/2025

Date



Greta Kowalski, Project Manager  
Section C, Bureau C

8/25/25

Date



Kiera Thompson, Section Chief  
Section C, Bureau C

9/2/2025

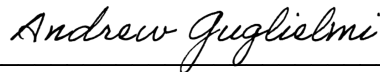
Date



Sarah Saucier, Director  
Bureau C

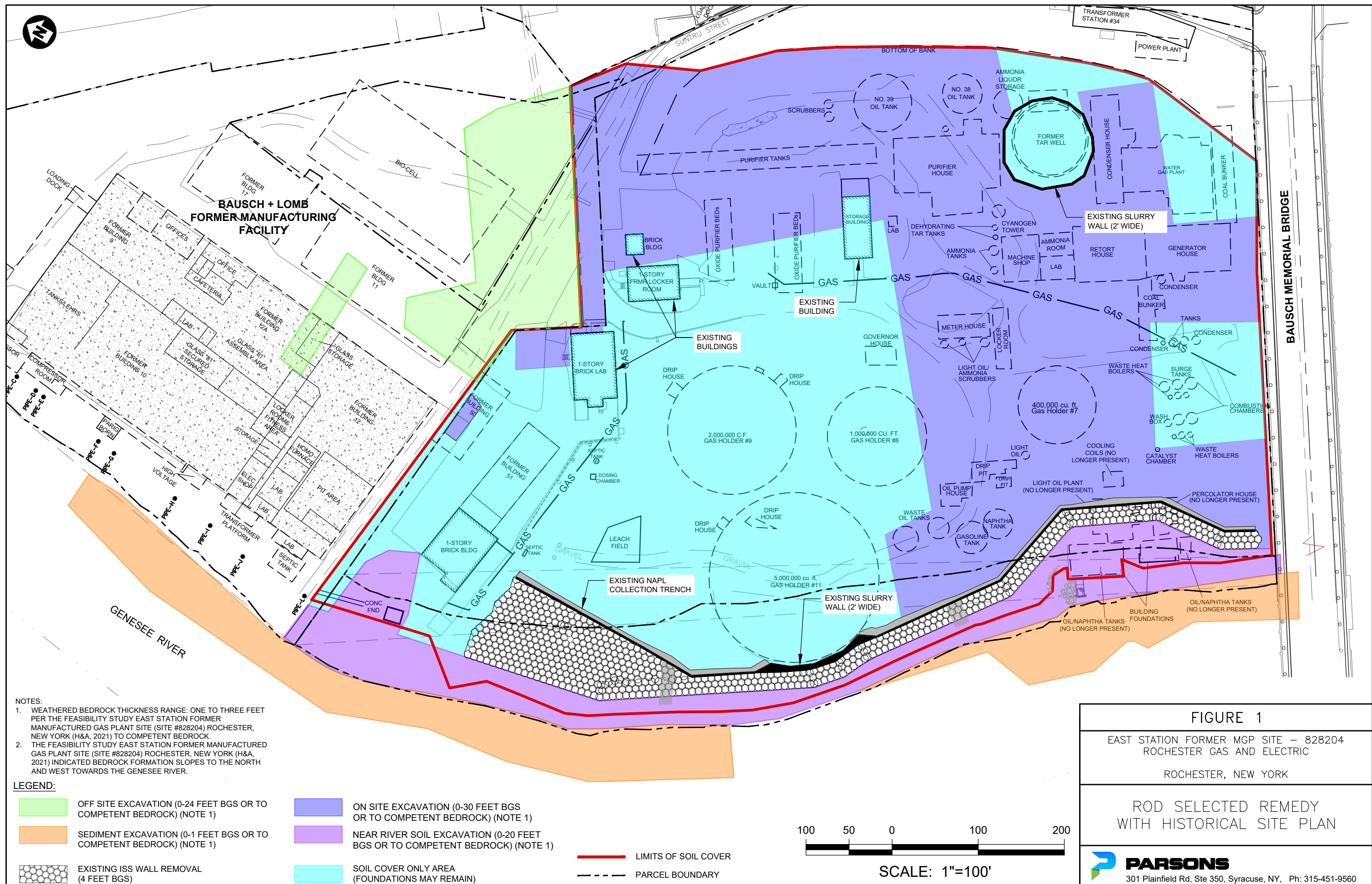
9/15/2025

Date

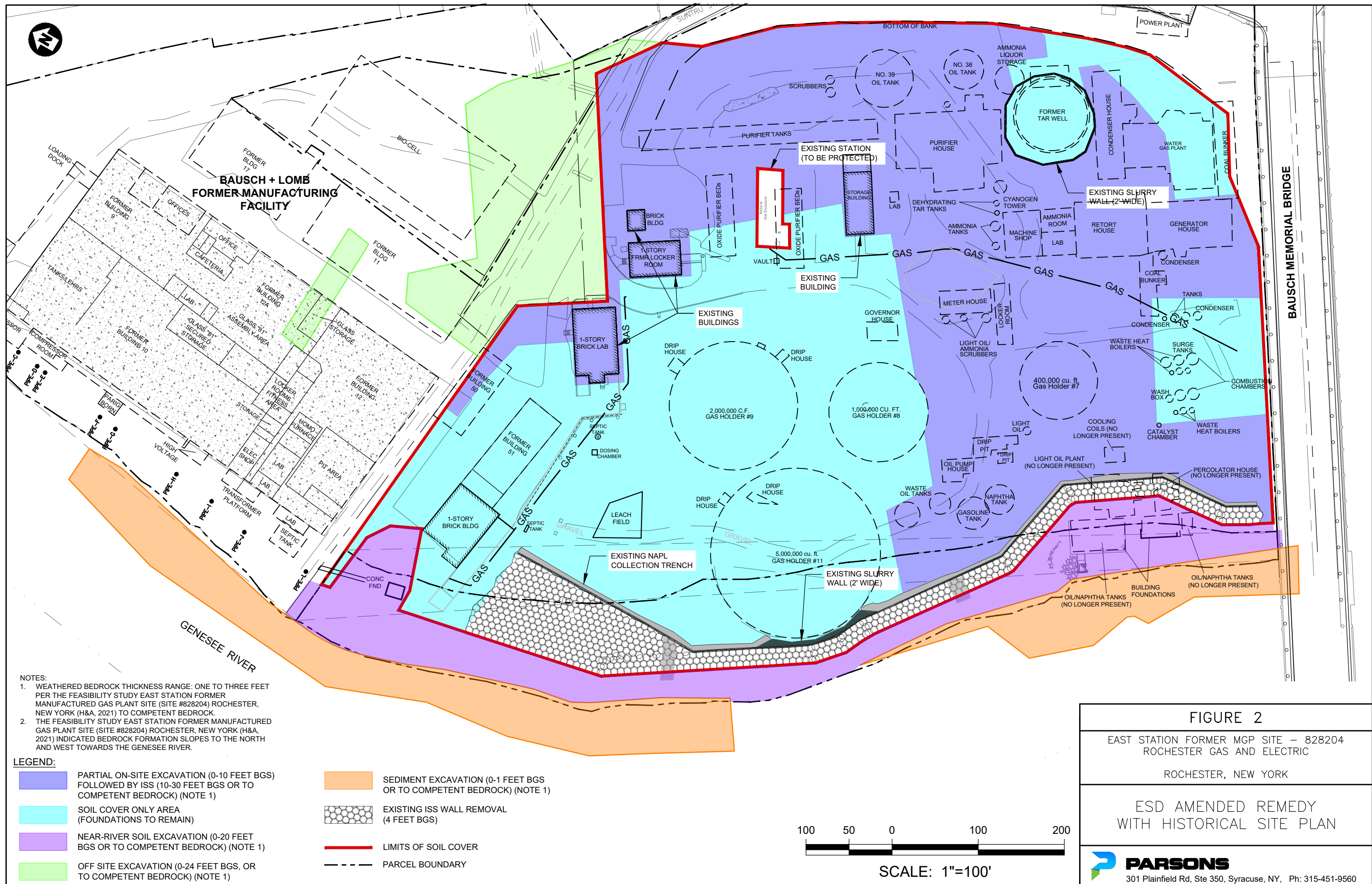


Andrew Guglielmi, Director  
Division of Environmental Remediation

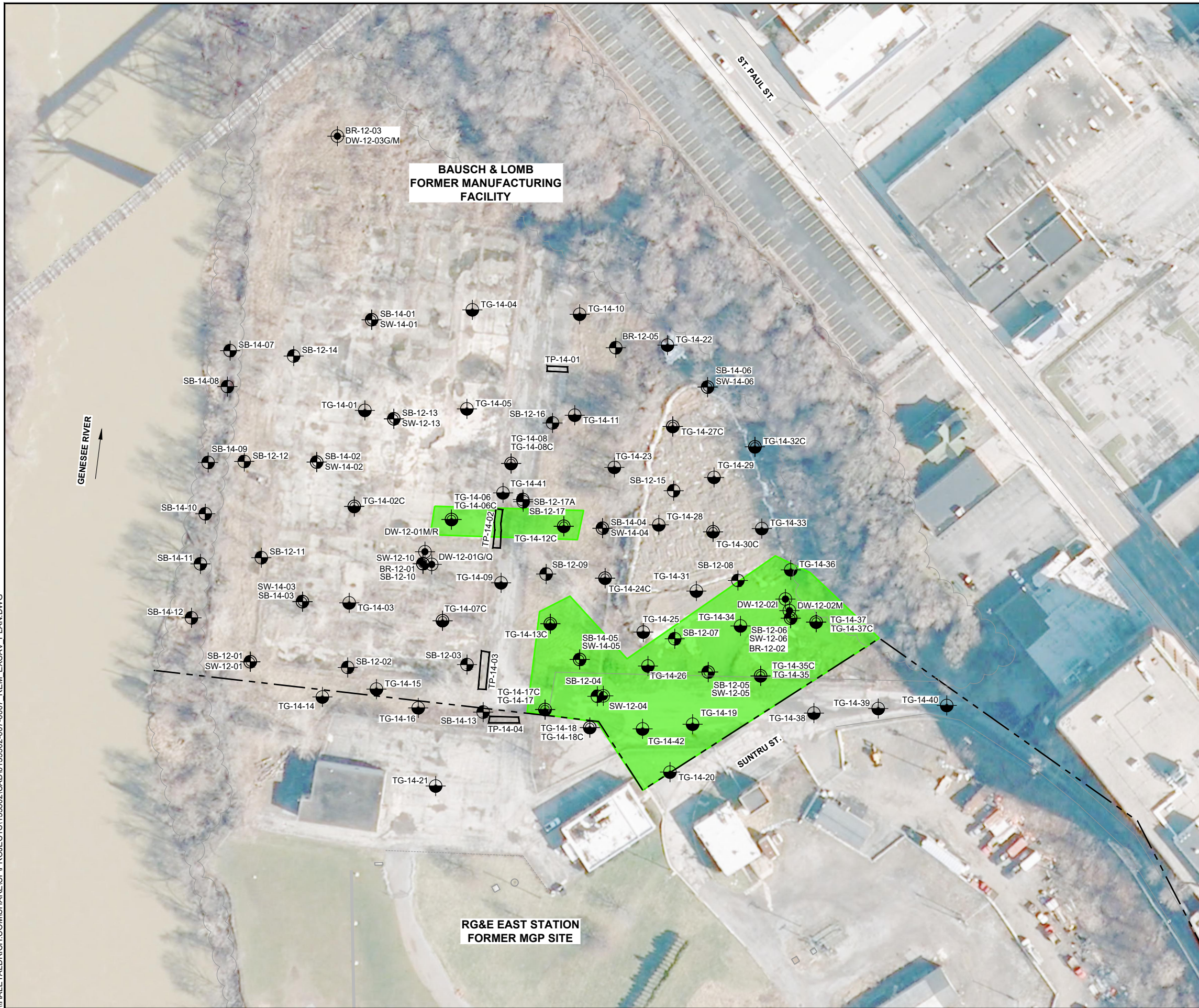












#### LEGEND

- PROPERTY BOUNDARY
- SOIL BORING LOCATION  
SB = SOIL BORING
- SOIL BORING/OVERBURDEN MONITORING WELL LOCATION  
SW = SHALLOW (OVERBURDEN) WELL
- BEDROCK MONITORING WELL LOCATION  
BR = BEDROCK CORING, DW = DEEP (BEDROCK) WELL
- TARGOST LOCATION  
TG = TARGOST
- TARGOST WITH CONFIRMATION SOIL BORING  
TG-14-XXC
- TEST PIT
- OFF-SITE EXCAVATION (0-24 FEET BGS OR  
TO COMPETENT BEDROCK) (NOTES 3 AND 5)

#### NOTES

1. AERIAL PHOTO DATED APRIL 2009 OBTAINED FROM THE NEW YORK STATE GIS CLEARINGHOUSE OPERATED BY THE STATE OF NEW YORK.
2. SOIL BORINGS, MONITORING WELLS, TEST PITS, AND TARGOST LOCATIONS ON BAUSCH & LOMB PROPERTY WERE SURVEYED BY HOFFMAN LAND SURVEYING & GEOMATICS ON 25 NOVEMBER 2013 AND 7 AUGUST 2014.
3. WEATHERED BEDROCK THICKNESS RANGE: ONE TO THREE FEET PER THE FEASIBILITY STUDY EAST STATION FORMER MANUFACTURED GAS PLANT SITE (SITE #828204) ROCHESTER, NEW YORK (H&A, 2021) TO COMPETENT BEDROCK.
4. THE FEASIBILITY STUDY EAST STATION FORMER MANUFACTURED GAS PLANT SITE (SITE #828204) ROCHESTER, NEW YORK (H&A, 2021) INDICATED BEDROCK FORMATION SLOPES TO THE NORTH AND WEST TOWARDS THE GENESEE RIVER, WHERE THE SHALLOWER BEDROCK IS TYPICALLY EXHIBITED.
5. APPROXIMATE DEPTH RANGE TO COMPETENT BEDROCK (H&A, 2021) IS 21-24 FEET BGS WITHIN THE OFF-SITE EXCAVATION AREA.



0 100 200  
SCALE IN FEET

**HALEY  
ALDRICH**

RG&E EAST STATION FORMER MGP SITE  
ROCHESTER, NEW YORK

OFF-SITE REMEDY  
EXCAVATION  
(ALTERNATIVES 3, 4 & 6)

SCALE: AS SHOWN  
AUGUST 2025

FIGURE 3



