Site Characterization Sampling and Analysis Plan
Hawkeye Trade Center and Residences
NYSDEC Site No. 828220
City of Rochester, Monroe County, New York
September 2021

Prepared for: New York State Department of Environmental Conservation (NYSDEC)
Prepared by: Ecology and Environment Engineering and Geology, P.C. (E & E)

1 Objective

This Sampling and Analysis Plan (SAP) was prepared for site characterization activities driven by the discovery of volatile organic compound (VOC) and metals-affected soil and groundwater at the Hawkeye Trade Center and Residences (the Site) during Phase II Site Assessments conducted in 2003 and 2017 (Figure 1).

This SAP will be implemented during the site characterization activities. The primary elements of the site characterization include:

- Camera inspection of drains and piping leading to the former thorium settling pits and stormwater outfalls for potential leaks, breaks, or sediment source areas in the lines.
- Installation of soil borings and construction of new monitoring wells. Subsurface soil sampling will be conducted to determine if contamination is present in soil.
- Sampling of new and existing monitoring wells to determine if contamination is present in groundwater and to evaluate the extent of contamination at the site.
- Collection of sediment samples from manholes leading to stormwater outfalls and former thorium settling pits.

2 Background

2.1 Site Description and Topography

The Hawkeye Trade Center and Residences (Site) is located at 1447 St Paul Street in the city of Rochester, New York (Figure 1). The Site is comprised of eight buildings and two related parking lots located on 5 acres. Parking Lot No. 1 is in the northeaster quadrant of the property north of Building 11A (Figure 2). Parking Lot No. 2 is in the southwest corner of the property west of Buildings 5 and 12A.

The site was first developed by at least 1902 and operated by Kodak for the manufacture of glass lenses and optical equipment. Former buildings 1, 2, 3, 7, and 8 (demolished in 1999) occupied the location of Parking Lot No. 2 in the northern portion of the site and were operated by Rochester Photographic Products Company (also known as General Aristo Corporation in historical site documents; see Figure 2). The southern portion of the site, in the area now occupied by Building 5, was historically occupied by a gasoline filling station and repair shops for the Rochester Transit Corporation and Rochester Railway Company.

Historical uses of the existing Site buildings are as follows:

- Building 4 – Multi-floor. Powerhouse
- Building 5 – Multi-floor. Offices, assembly (Floors 1 and 2), non-hazardous and hazardous waste storage (90-day; Floor 2), laboratory (Floor 7).
- Building 6 – Multi-floor. Offices.
- Building 10 – Multi-floor. Offices.
- Building 11 – Multi-floor. Offices.
- Building 11A – Single floor. Offices, paint booth, material storage and waste accumulation.
- Building 12 and 12A – Multi-floor. Offices, clean room, maintenance/fabrication shops, photo processing.

Other site features of note include four former thorium glass settling pits located west of Buildings 2, 4, 11A, and 12A, a former drywell of unknown purpose located west of Building 5 in Parking Lot No. 1, and the associated underground piping leading to these features.

The Hawkeye site is relatively flat and primarily developed by parking lots and buildings. Several small plant and grassy areas are located east of Building 6 and Parking Lot No. 2, and east and west of Building 5. The western edge of the property drops precipitously into the Genesee River gorge, along the edge of which lie several existing and former stormwater outfalls and two of the four historical thorium settling pits.

2.2 Site Geology and Hydrogeology

The soil overburden at the site consists of sand and gravel with silt and clay at depth (possible till). The overburden in the northern portion of the Site includes urban fill to a depth of approximately 1 to 2 feet below ground surface (bgs) comprised of wood, glass, and brick fragments (LaBella 2017). Historical soil borings indicate that the thickness of the overburden at the Site generally ranges from of 4.0 to 12 feet with the shallowest refusal depths in the northwest portion of site under Parking Lot 2. Greater refusal depths were encountered along the west side of site just above the Genesee River gorge, and two borings were advanced to greater than 20 feet bgs east of Buildings 5 and 6 along St. Paul Street (LaBella 2017). The upper bedrock is shale of Silurian age (LaBella 2017).

Based on investigations and cleanup activities of historical petroleum spill at the former Cumberland Farms facility located south of the Site, groundwater flow in the overburden is along the bedrock interface to the northwest (LaBella 2017). Site conditions likely vary, but no groundwater elevation contours are yet available for the Hawkeye Facility.

2.3 Previous Investigations

2.3.1 2003 Phase I

In 2003, Leader Professional Services conducted a Phase I Environmental Site Assessment of the Hawkeye Trade Center and satellite parking lots. The following Recognized Environmental Conditions (RECs) were identified:

Building 4 USTs

Three former 20,000 gallon underground storage tanks (USTs) were located at Building 4 for storage of fuel oil. Contaminated soil and groundwater were discovered during their removal in 1989. Aside from removal of affected media within the excavation, no further remediation was required by NYSDEC.

Potential Thorium Residue

Thorium was used in the glass manufacturing process at the Hawkeye facility between the 1930's and 1980's, where thorium-contaminated dust and waste made its way into building cavities, some sewer drain pipes, air ducts, and portions of Genesee River gorge via outfalls from three four onsite settling pits.

Thorium use required a license from the Nuclear Regulatory Commission, which was managed by the New York State Department of Labor. Upon completion of thorium use at the facility, Kodak ended the license and cleaned up radioactivity to regulated levels in Buildings 5, 11A, 12, 12A and the courtyard between Buildings 4 and 12A, according to a 1993 Radiological Decommissioning Report.

Thorium Glass Settling Pits

Four former thorium glass settling pits were located at the site, west of Building 12, adjacent the southeast corner of Building 12A, west of Building 12A and inside Building 11A (northwest corner). These pits were designed to remove glass particulates and abrasive out of the wastewater stream. The pits were cleaned and backfilled either prior to or during the 1993 radiological decommissioning activities.

Thorium in Genesee River Gorge

Two of the former thorium settling pits were located immediately above the gorge, and in 1992 an investigation was initiated to determine if any thorium-containing glass residue had migrated offsite. Cleanup was conducted in 1993 after contamination related to a historical release of thorium was identified on the eastern side of the Genesee River gorge below the site.

Polychlorinated Biphenyl Contamination in Gorge

In 1991 a potential release of polychlorinated biphenyls (PCBs) and Resource Conservation and Recovery Act (RCRA) metals was identified in a stormwater discharge pipe west of Building 12 and in soil and rock along the Genesee River gorge slope. The discharge pipe was cleaned in 1991 or 1992 and the soil was sampled around several catch basins. No source of the PCBs was identified.

Drywell

A former drywell of unknown purpose and construction is located west of Building 5. The Phase I report indicated that the piping leading to the drywell was abandoned in place; however, no documentation of these activities could be found. At the time of the Phase I investigation soil and groundwater surrounding this location was of unknown environmental quality.

Photo Processing Wastewater Release

In 1976 or 1977 a tank truck released photographic processing wastewater at the loading dock on the north side of Building 12. The spill entered the stormwater system that discharges into the Genesee River gorge west of Building 4. No cleanup activities were conducted.

Former Rochester Transit Corporation

The former Rochester Transit Corporation historically operated a repair shop in the current locations of Buildings 5 and 12A. Likewise, a former gas station (Esso) was in the current location of Building 5. At the time of the Phase I investigation, the environmental impacts of these historical operations were not known, and soil and groundwater conditions below these buildings have not been characterized.

Rochester Photographic Products Company

The Rochester Photographic Products Company (also known as the General Aristo Company historically occupied the location of Parking Lot No. 2. Buildings. 1, 2, 3, 7, 8, 9, 13, which once occupied this site were demolished in 1999.

Other Spills, Permits, and Tanks

- In 1990, a spill of No. 6 fuel occurred in Building. 4. Contaminated soil and GW were removed, and spill file was closed in 1990.
- In 1996, a diesel spill was released by a privately-owned vehicle. The file was closed the same day.
- In 2000 an asbestos release occurred during building demolition. The file was closed 5 days after reporting.
- Kodak maintained Chemical Bulk Storage registration for five 475-gallon sodium hydroxide aboveground storage tanks (ASTs) located in Building 12 and used for water treatment.
- Kodak maintained a Petroleum Bulk Storage registration for a 33,000 gallon AST situated within a below-grade lined concrete vault for No. 5 or No. 6 fuel oil storage adjacent to Building 4. The tank was leak monitored during its use.

2.3.2 2004 Phase II – Leader

In 2004 Leader conducted a Phase II investigation to evaluate the following RECs (as reported in LaBella's 2017 Phase II Site Assessment report):

- Building 4 former USTs;
- Thorium settling pits;
- Drywell;
- Release of photo-processing wastewater north of Building 12;
- Downgradient of Building 12 photo processing operations; and
- Area used for manufacturing at General Aristo Co. (Former Buildings 1,2,3,7,.9, and 13).

Ten soil borings and seven bedrock/overburden interface monitoring wells were installed during the investigation (see Figure 2). Soil samples were collected for analysis of VOCs (site-

wide), semivolatile organic compounds (SVOCs) (site-wide), target analyte list (TAL) metals (site wide), and thorium (west of Building 12A, east of Building 5, southwest of Building 5). Select locations north and west of Building 12 were analyzed for general soil chemistry (i.e., pH, cyanide, nitrate, sulfate). Groundwater samples were collected for the analysis of VOCs, SVOCs, metals (site wide), and thorium (settling pits west of Building 12 and Building 11A, east of Building 5, and Parking Lot No. 2).

Finding of the 2004 Phase II included:

- Petroleum exceeded applicable NYSDEC Groundwater Quality Standards in groundwater at the former UST area north of Building 4.
- Low-levels of TCE and 1,2-DCE were detected in site-wide soil and groundwater at the Hawkeye site. Groundwater near Buildings 5, 11, and 12 exceeded applicable NYSDEC Groundwater Quality Standards. The highest concentration of TCE in groundwater identified was 28 parts per billion (ppb) in the sample collected from monitoring well IB12SW west of Building 12.
- Elevated nickel concentrations were detected in Parking Lot No. 2. Fill material was observed in several soil borings in Parking Lot No. 2.
- The ranges in thorium isotopes detected in soil and groundwater were determined not to be significant between upgradient and potential source areas.

2.3.2 2017 Phase II

In 2017 Labella Associates, P.C. conducted a Phase II investigation focused on the following areas of the site:

- Further evaluation of the extent of petroleum impacted soil and groundwater north of Building 4.
- Evaluate potential presence of PCBs in soil and GW at the site, in particular, west of Building 12 (i.e., 1991 PCB release identification).
- Further evaluate thorium in soil and groundwater.
- Further evaluate VOCs in soil and groundwater.
- Small building labeled “kerosene” storage on Sanborn map south of Building 10.
- Presence of cyanide in groundwater due to detection of cyanide in soil during 2005 Phase II.
- Further evaluate Parking Lot No. 2 urban fill.
- Evaluate the potential for soil vapor intrusion.

Thirteen soil borings were installed across the site, advanced from ground surface to bedrock. Two of the borings (SB-12 and SB-28) were not sampled (Figure 2). From the remaining eleven borings, soil samples were collected for analysis of United States Environmental Protection Agency (EPA) Target Compound List (TCL) VOCs (five samples), TAL metals (six samples), PCBs (three samples), and thorium (two samples).

Five of the soil borings were converted to new monitoring wells, but only two wells had sufficient water for sampling (i.e., MW-12 located west of Building 4 and MW-07 in Lot No. 2). Additionally, the monitoring wells installed by Leader in 2005 were sampled.

The following affected site media were identified during the 2017 Phase II investigation:

- Trace concentrations of trichloroethene (TCE) were detected below the Unrestricted Use Soil Cleanup Objective (SCO) from 6 NYCRR § 375-6.3, in soil at concentrations ranging from 1.2 to 43.6 ppb in SB-11 west of Building 12A, SB-14 and SB-18 in Parking Lot No. 2, and SB-29 between Buildings 5 and 10.
- Metals were detected above the Unrestricted use SCOs in the urban soil underlying Parking Lot No. 2. Silver was detected slightly above the Unrestricted use SCO in the sample collected from SB-18 at 0.4 to 1.7 feet bgs. Silver and mercury were detected above the Unrestricted Use SCOs in the sample collected from SB-15 at 5 to 6 feet bgs. Copper, nickel, and mercury were detected above the Unrestricted Use SCOs in the sample collected from boring SB-16, also located in Lot No. 2.
- A trace concentration of PCB-1242 was detected in the sample collected from SB-29, located between Buildings 5 and 10.
- Concentrations of thorium isotopes were detected in samples collected from SB-29 and SB-31 but at concentrations below general screening levels for migration to groundwater listed in USEPA's Soil Screening Guidance for Radionuclides.
- Three of newly installed wells (MW-5, MW-6, and MW-13) and one pre-existing well (SB4NE) were dry.
- TCE was detected in four of the monitoring wells above the evaluation criteria (i.e., IB11AW, IL2NE, MW-07, and MW-12). TCE was not detected in the 2017 sample collected at IB12SW, where the previous sampling in 2005 had the highest concentration at the site.
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2.6 Data Gaps

E & E has identified the following data gaps based on review of the previous investigations:

- Soil in Lot No. 2 has not been fully characterized for VOC and metals contamination.
- The source of chlorinated solvents in site-wide groundwater and soil vapor has not been identified. Specifically, no soil borings or monitoring wells have been advanced beneath any of the buildings at the site.
- According to site maps, the former thorium settling pit in Parking Lot 1 has not been properly investigated. Nearby soil borings and groundwater sampling locations do not characterize this location, which was a source of the historical down-slope radiological release in the Genesee River gorge.
- Groundwater prevalence and flow have not been established for the site. None of the monitoring well locations are surveyed and no elevation contours are available. The monitoring well network installed by Leader in 2003 is comprised of wells straddling the bedrock/overburden interface, whereas the monitoring wells installed by Labella in 2017 were only installed in the overburden, three of which on the Hawkeye property were dry at the time of sampling. Consequently, it is not known if the historical detections of VOCs are indicative of groundwater conditions in the overburden/bedrock, or both, except at MW-07 and MW-12, where VOCs were detected in the overburden groundwater.
- The source area and extent of petroleum-related VOCs and SVOCs in groundwater north of Building 4 has not been characterized.

- The purpose of the historical dry well is unknown and soil and groundwater in the vicinity of this site feature have not been fully characterized.

3 General Site Activities

A New York State-licensed land surveyor (Popli Design Group) will be subcontracted perform site surveying activities. Following completion of monitoring well installation and sampling activities, the survey crew will collect locations and elevations. In addition, they will survey the locations of site buildings and other important site features to aid in preparation of a site base map for reporting purposes. All locations will be surveyed to a horizontal accuracy of 0.5 foot. Well and surface water sampling location elevations will be surveyed to a vertical accuracy of 0.05 foot.

E & E's subcontractor, New York Leak Detection, will provide a video survey of up to 1,000 linear feet of sewer pipe leading to four former thorium settling pits, the former drywell, and former and existing stormwater outfalls to identify any potentials sources of subsurface contamination such as line breaks, and contaminated sediment.

E & E's subcontractor, LaBella Associates, will provide drilling and monitoring well installation services and will contact Dig Safely New York to request mark-outs of underground utilities prior to beginning intrusive activities in accordance with New York Code Rule 753.

All field activities listed below will be performed in accordance with E & E's Master Quality Assurance Project Plan (QAPP) (E & E 2020a) and Field Activities Plan (FAP) (E & E 2020b). Sampling and analysis for per- and polyfluoroalkyl substances (PFAs) shall be implemented in accordance with NYSDEC's January 2021 guidance, "Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAs) (NYSDEC 2021).

A Community Health and Safety Plan (CHSP) will be implemented during site activities (Appendix A). A site-specific Community Air Monitoring Plan is incorporated in the CHSP.

4 Soil Boring/Monitoring Well Installation and Sampling

4.1 Subsurface Soil Sampling

Up to 23 soil borings will be installed by LaBella using a direct push (i.e., Geoprobe or equivalent) drill rig (see Figure 1). Continuous macro-core sampling will be conducted from ground surface to the refusal depth at the top of bedrock (anticipated total depth of approximately 10 to 20 feet below ground surface). E & E will log results; screen soil for organic vapors with a photoionization detector (PID) and total gamma radiation using a digital ratemeter; and collect up to two soil samples per soil boring for laboratory analysis.

Nomenclature for soil sample identification will include the soil boring/well location name followed by the depth interval (e.g., SB01-Z02-04). Generally, two intervals will be sampled at each location to be determined in the field. One sample will be collected from a depth interval based on potential signs of contamination (PID/gamma readings), staining, or odors and one

from the 2-foot interval above the water table (or above bedrock if groundwater is not encountered).

Analytical parameters for soil sampling are shown in Table 1. All soil boring locations will be sampled for TCL/TAL parameters including VOCs, SVOCs, PCBs, and metals. In addition, up to 20% (nine) of the total number of soil samples will be analyzed for thorium isotopes, selection of which will be determined in the field based on gamma readings and other field observations. Furthermore, one soil sample will be selected for analysis of PFAS and 1,4-dioxane.

Figure 2 shows the general soil boring locations, which are described below:

- Three soil borings around 2004 well location B01HEB4NE04212004 where petroleum exceeded NYSDEC groundwater quality standards in groundwater at the former UST area north of Building 4.
- Two additional soil borings (to be later converted into monitoring wells) located inside and north of Building 4 to evaluate general soil conditions at this location.
- Three soil borings surrounding 2017 soil boring SB-18 (the northernmost of which will be converted to a monitoring well) where metals were detected above the Unrestricted Use SCOs.
- Three soil boring surrounding 2017 soil boring/monitoring well SB-15/MW-7 to further characterize metals-affected soil around this boring.
- One soil boring (to be converted to a monitoring well) at the northern property boundary north of Lot No. 2.
- One soil boring upgradient (east) of Building 5 to characterize general background conditions at the site.
- One soil boring north of the former thorium settling pit located east of Building 5.
- One soil boring each inside Buildings 10, 11A, and 12 (to be later converted to a monitoring wells).
- Two soil borings each inside buildings 12A and 5 ((to be later converted to a monitoring wells).
- One soil boring (to be converted to a monitoring well), located adjacent to the former thorium settling pit in Parking Lot No. 4.
- One soil boring (to be converted to a monitoring well), located adjacent to the former dry well in Parking Lot No. 4.

4.2 Monitoring Well Installation

Up to 13 new monitoring wells will be installed at a subset of the soil boring locations and are expected to average approximately 10 to 20 feet in depth. Each well will be constructed with a 5-foot-long, 1-inch-diameter, PVC screen. Screens will be set on top of bedrock (actual screen depth and length will be dependent on depth to bedrock and groundwater). Figure 1 shows the general monitoring well locations, which are described below:

- Two monitoring wells will be installed inside and north of Building 4, respectively.
- Two monitoring wells will be installed in Parking Lot No. 2.

- Three monitoring wells will be installed inside each of Buildings 10, 11A, and 12, respectively.
- Two monitoring wells will be installed inside Building 12.
- Two monitoring wells will be installed inside Building 5.
- One monitoring well will be installed adjacent to the former thorium settling pit in Parking Lot No. 1.
- One monitoring well will be installed adjacent the former dry well in Parking Lot No. 1.

4.3 Monitoring Well Development

All new monitoring wells will be developed no sooner than 24 hours after completion of well construction. The wells will be developed by surging and purging using bailers. Development will continue until water quality parameters (pH, temperature, conductivity, and turbidity) have stabilized and turbidity is less than 50 nephelometric turbidity units (NTU), not to exceed 2 hours.

4.4 Groundwater Sampling

One round of static groundwater level measurements will be collected from all new and existing monitoring wells at the site plus selected off-site wells in a single day prior to groundwater sampling. Groundwater levels will be measured with an electronic water-level indicator graduated to 0.01 foot.

Thirteen new wells and thirteen existing monitoring wells will be sampled no sooner than 48 hours after well development. Where ample well recharge allows, sampling will be performed using EPA low-flow purging and sampling techniques using a peristaltic pump (for 1-inch wells) or a bladder pump (for 2-inch wells) equipped with dedicated polyethylene bladders and tubing. If recharge is insufficient to achieve stabilization of drawdown, such wells will be sampled by purging three static well volumes or until dry using a dedicated polyethylene bailer or pump. Upon stabilization of parameters or sufficient recharge, groundwater samples will be collected and submitted to the laboratory for the parameters listed in Table 1. Up to 20% (five) of the total number of wells will be analyzed for thorium isotopes, selection of which will be determined in the field based on gamma readings and other field observations. Furthermore, one well will be selected in the field for analysis of PFAS and 1,4-dioxane.

In addition, one monitoring well will be selected in the field and sampled for PFAS, and 1,4-dioxane (see Table 1).

5 Sediment Sampling

If sediment is present in the surveyed pipes and/or manholes E & E will collect representative samples for laboratory analysis. Sample collection methodology will be determined in the field based on the location and volume of sediment or related material. Generally, samples will be collected directly from the source areas using dedicated stainless-steel spoons or scoops. All samples will be analyzed for the parameters listed in Table 1.

6 Equipment Decontamination

The following procedures will be used for all non-dedicated equipment and tools including downhole equipment such as macro-core cutting shoes:

- Initially remove all foreign matter;
- Scrub with brushes in a laboratory-grade detergent solution;
- Rinse with potable water;
- Rinse with a 5-10% nitric acid solution (when sampling for metals); and
- Rinse with distilled water.

7 Quality Assurance/Quality Control

Quality assurance/quality control procedures will be performed in accordance with E & E's 2020 *Master Quality Assurance Project Plan for New York State Department of Environmental Conservation Projects*, Contract No. D009807. Specific quality assurance/quality control activities that apply to the implementation of this sampling plan include:

- Collect field duplicates at a rate of 1 per 20 samples per matrix.
- Collect additional volume for matrix spike/matrix spike duplicate (MS/MSD) analysis at a rate of 1 per 20 samples per matrix.
- Collect at least one equipment rinsate blank daily from sampling equipment. Typically, one sample per matrix per day will be collected for all analyses performed on that matrix. Additional rinsate blanks will be collected for PFAS analysis only and shall include dedicated sampling equipment such as sampling pump bladders and tubing, bailers, etc. Laboratory-supplied, analyte-free water shall be used for rinsate blanks.
- Document all data and observations on field data sheets and/or in the field logbooks.
- Operate and calibrate all field instruments in accordance with operating instructions as supplied by the manufacturer unless otherwise specified.
- Ensure all laboratory deliverables are validated by an E & E chemist prior to release.

8 Project Logbook and Photo-Documentation

Photos of the site will be taken, and associated notes will be recorded in the field logbook. A logbook will be maintained to record all on-site activities. Data from the sampling events will be forwarded to NYSDEC and summarized in the site characterization report.

9 Sample Packaging and Shipping

The sample containers will be placed inside sealed plastic bags as a precaution against cross-contamination caused by leakage or breakage. The samples will be placed in coolers with wet ice to begin the cooling process. If sample shipment by common carrier is required, inert packaging material such as bubble wrap will be added to the cooler to minimize the chance of breakage during transport.

Eurofins-TestAmerica Laboratories, Inc. will provide laboratory analytical services as a call-out laboratory under direct contract to NYSDEC. The call-out number shall be provided on all chain-of-custody documentation and related correspondence.

Delivery of sample containers and supplies to the field and return shipment of samples to the laboratory will be coordinated through Eurofins TestAmerica's Buffalo laboratory at the following address or an alternative location to be determined in coordination with the lab:

Eurofins TestAmerica - Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2223

The laboratory project manager is Steve Hartmann (413-642-2616)

10 Investigation-Derived Waste Disposal

Four investigation-derived waste streams are expected to be generated during sampling activities: expendable material solid wastes such as personal protective equipment, paper towels, etc.; excess soil from soil boring drilling; groundwater from development and pre-sample purging; and decontamination water. Expendable materials generated during the investigation will be bagged and disposed of off-site as non-hazardous solid waste by E & E or the drilling subcontractor. Soil generated during installation of soil borings/monitoring wells will be containerized in Department of Transportation-compliant 55-gallon steel drums. E & E will collect one composite sample from the soil drums for analyses to be determined based on disposal facility requirements but are expected to include Toxicity Characteristic Leaching Procedure for VOCs, SVOCs, and RCRA metals plus pH, PCBs, and thorium Purge water will be containerized in polyethylene tanks and characterized by E & E for later permitted disposal to the Monroe County sanitary sewer system. Analyses and permitting requirements will be determined in consultation with Monroe County.

11 Site-Specific Health and Safety Plan

A site-specific health and safety plan has been prepared for this fieldwork and is attached in Appendix C.

12 Reporting

E & E will document the details of daily field activities submitted electronically to NYSDEC.

The laboratory shall provide "Category B" deliverables as described in Appendix 2B of NYSDEC's Technical Guidance for Site Investigation and Remediation, DER-10 (NYSDEC 2010). Lab deliverable will include a complete electronic (PDF) report and NYSDEC EQuIS electronic data deliverable (EDD). An E & E chemist will review the report for completeness and process the EDD to assign appropriate location codes, sample matrices, parent sample codes, etc. The laboratory data will be validated by E & E and will include review of the deliverables, assessment of the validity and usability of the results, and preparation of data usability summary reports in accordance with Appendix 2B of DER-10 (NYSDEC 2010). The validator will

update the EDDs with validator qualifiers, prepare and submit an EQuIS EDD to NYSDEC, and prepare final report tables. Validated sample data will be presented in a table accompanied by site figures depicting the sampling locations.

Following completion of all sample analyses and completion of data validation, E & E will prepare a site characterization report that will include photos and a description of the activities performed, any deviations from proposed procedures, sampling locations depicted on site maps, and analytical results in tables. The draft report will be submitted electronically to NYSDEC for review, with a final electronic version of the report produced approximately two weeks after receiving draft report comments.

13 References

Ecology and Environment Engineering and Geology, P.C. (E & E). 2020a. *Master Quality Assurance Project Plan (QAPP) for New York State Department of Environmental Conservation Projects*, May 2020.

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LaBella Associates DPC. 2017. *Phase II Environmental Site Assessment*, October.

Leader Professional Services. 2003. *Phase I Environmental Site Assessment Eastman Kodak Company Hawkeye Facility*, December.

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SITE

Legend

Site Parcels

Adapted from Phase II Site Assessment Report (Labella 2017)

FIGURE 1

PROJECT:

Hawkeye Trade Center and Residences

1447 St. Paul Street
Rochester, New York

Site Location

CLIENT:

New York State Department of Environmental Conservation

N
W E
S

0 1,000 2,000 Feet

1 inch = 2,000 feet

INTENDED TO PRINT AS: 11" X 17"

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Hawkeye Trade Center and Residences

Dorbeth Rd

B01HEB4NE04212004 / SB4NE
Outdoor Air
BLDG 4
SS-09
SB-14
LOT #2
B03HEPL204182004
SB-15
IL2NE
B02HEPL204182004
B01HEB12N04192004
SB-16/MW-07
SB-18
SB-13/MW-06
B01HEPL204182004
B01HEB12W04212004
SB-17
IB11AW
SS-05
BLDG 11A
SS-02
SS-03
IB6NE
SS-01
BLDG 11
SB-12
B01HEB12SW04212004 / IB12SW
BLDG 12
BLDG 6
SS-04
BLDG 10
SB-29
SB-28
BLDG 12A
B01HEB12ASW04202004
SS-08
B01HEB5NE04212004 / IB5NE
SB-30/MW-12
SB-11
SS-06
BLDG 5
LOT #1
B01HEB5SW04192004 / IB5SW
SS-07
B01HEPL04182004 / SL11W
B02HEPL1104192004
SB-24/MW-10
LOT #11
SB-10/MW-05
B01HEB5SW04202004 / IB5SW2
SB-31/MW-13
TP-4
SB-25/MW-11
SB-27
SB-26
Avenue E St

SB-20
LOT #9
SB-19/MW-08
NOT IN STUDY AREA
Maling Dr

SB-22
LOT #5
LOT #8
SB-23
SB-07/MW-04
B01HEPL504172004
Saint Paul St
B02HEPL504172004
TP-1
SB-21/MW-09
Nox Aly
NOT IN STUDY AREA
TP-2
Carthage Dr
SB-06/MW-03
Avenue D
LOT #6
SB-05
SB-08
B01HEPL604172004 / SL6SE
SB-03/MW-01
LOT #7
B02HEPL604172004
SB-09
SB-01
TP-3
SB-02
SB-04/MW-02
Avenue C

Legend

- Proposed Overburden Well/Soil boring (E&E 2021)
- Proposed Soil Boring (E&E 2021)
- Site Parcels
- Site Buildings
- Soil Boring (LaBella 2017)
- Soil Boring/ Monitoring Well (LaBella 2017)
- Collocated Sub-Slab/ Indoor Air (LaBella 2017)
- Outdoor Air (LaBella 2017)
- Test Pits (LaBella 2017)
- Former Thorium Glass Settling Pit
- Drywell
- Outfalls

Previous Testing Locations (Leader 2005 Phase II ESA)

- Monitoring Well (Leader 2005)
- Soil Boring (Leader 2005)
- Soil Boring/ Monitoring Well (Leader 2005)

NOTES:
1) Property boundaries obtained from Monroe County GIS 2014 and are considered approximate.
2) Aerial image obtained from City of Rochester 2015 and may not represent current conditions.
3) Previous testing locations and Site features Georeferenced from reports by others and locations are considered approximate.
4) Test pit locations selected based on anomalies identified in 2004 Geophysical Survey.
5) LaBella testing locations measured from Site features and are considered approximate.

Adapted from Phase II Site Assessment Report (Labella 2017)

Figure 2

PROJECT:
Hawkeye Trade Center and Residences

Proposed Monitoring Well and Soil Boring Locations

July 2021

CLIENT:
New York State Department of Environmental Conservation

N
W E
S

0 50 100
Feet
1 inch = 100 feet
INTENDED TO PRINT AS: 11" X 17"

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Table 1 Analytical Summary for Hawkeye Trade Center and Residences

Analytes	Method	Matrix	Sample Quantity	Container	Field Duplicates	MS/ MSD	Rinse Blanks	Trip Blanks	Total
Soil Boring and Monitoring Well Installation (2 depth intervals at 23 locations)									
TCL VOCs	SW-846 8260C	SO	46	Terracore kit**	3	3	5	5	65
TCL SVOCs	SW-846 8270D	SO	46	8 oz. Glass Jar (1)	3	3	5	0	63
PCBs	SW-846 8082A	SO	46		3	3	5	0	
TAL Metals	SW-846 6010D & 7141A	SO	46	8 oz. Glass Jar (1)	3	3	5	0	63
Thorium Isotopes	HASL 300	SO	9	4 oz. Glass Jar (1)	1	1	1	0	14
Emerging Contaminants Soil Sampling (1 depth interval at 1 location)									
1,4-Dioxane	SW-846 8270D-SIM	SO	1	8 oz. Glass Jar (1)*	0	0	1	0	2
PFAS	EPA Method 537.1	SO	1	8 oz HDPE (1)	0	0	1	0	2
Sediment (3 estimated locations)									
TCL VOCs	SW-846 8260C	SD	5	Terracore kit**	1	1	0	1	9
TCL SVOCs	SW-846 8270D	SD	5	8 oz. Glass Jar (1)	1	1	0	0	9
PCBs	SW-846 8082A	SD	5		1	1	0	0	
TAL Metals	SW-846 6010D & 7141A	SD	5	8 oz. Glass Jar (1)	1	1	0	0	9
Thorium Isotopes	HASL 300	SD	5	4 oz. Glass Jar (1)	1	1	0	0	9
Groundwater (26 locations)									
TCL VOCs	SW-846 8260C	GW	26	40 mL VOA Vial (3)	2	2	5	5	44
TCL SVOCs	SW-846 8270D	GW	26	1 L Amber Glass (1)	2	2	5	0	39
PCBs	SW-846 8082A	GW	26	1 L Amber Glass (1)	2	2	5	0	39
TAL Metals	SW-846 6010D & 7140A	GW	26	1 L HDPE w/ HNO_3 (1)	2	2	5	0	39
Thorium Isotopes	HASL 300	GW	5	1 L poly w/ HNO3 (1)	1	1	2	0	11
PFAS	EPA Method 537.1	GW	1	250 mL HDPE (1)	0	0	1	0	2
1,4-Dioxane	SW-846 8270D-SIM	GW	1	1 L Amber Glass (1)	0	0	1	0	2

Notes:

1. Detection limits must meet requirements of NYSDEC unrestricted soil cleanup objectives (Part 375-6.8) and Guidelines for Sampling And Analysis of PFAS (January 2020)
2. Rinse blanks will be collected once per day for equipment set for PFAS and one per equipment set for all other analytes.
3. All quantities and volumes are estimated.

* Separate jar not required when sampling for full TCL/TAL parameters.

** QEC USA item number 0535-0001-DI, or equivalent.

APPENDIX A

FIELD ACTIVITIES PLAN

(Provided under separate cover)

APPENDIX B

COMMUNITY AIR MONITORING PLAN

Community Health and Safety Plan
Hawkeye Trade Center and Residences
Work Assignment Number D009807-19
Rochester, New York

1.0 Community Air Monitoring Plan

The Community Air Monitoring Plan (CAMP) for this site requires real-time monitoring for volatile organic compounds (VOCs) and particulates at the downwind perimeter of each designated work area when certain activities are in progress at potentially contaminated sites. The CAMP is not intended for use in establishing action levels for worker respiratory protection. Rather, its intent is to provide a measure of protection for the downwind community (i.e., off-site receptors including residences, businesses, and on-site workers not directly involved with the subject work activities) from potential airborne contaminant releases as a direct result of investigative and remedial work activities. The action levels specified herein require increased monitoring, corrective actions to abate emissions, and/or work shutdown. Additionally, the CAMP helps to confirm that work activities did not spread contamination off-site through the air.

Reliance on the CAMP should not preclude simple, common-sense measures to keep VOCs, dust, and odors at a minimum around the work areas.

Volatile Organic Compound Monitoring Plan
Periodic monitoring for VOCs will be required during non-intrusive activities such the collection of groundwater samples from monitoring wells. "Periodic" monitoring during sample collection might reasonably consist of taking a reading upon arrival at a sample location, monitoring while opening a well cap, monitoring during well baling/purging, and taking a reading prior to leaving a sample location. In some instances, depending upon the proximity of potentially exposed individuals and anticipated contaminant concentrations, continuous monitoring may be required during sampling activities. Examples of such situations include groundwater sampling at contaminated wells along busy urban streets adjacent to a residence/business.

For intrusive activities such as drilling and direct push sampling, VOCs must be monitored at the downwind perimeter of the immediate work area (i.e., the exclusion zone) continuously. Upwind concentrations shall be measured at the start of each workday and periodically thereafter to establish background conditions. VOC monitoring work shall be performed using equipment appropriate to measure the types of contaminants known or suspected to be present. For example, for total organic vapor concentrations, a photo-ionization detector (PID) shall be used. The equipment shall be calibrated at least daily.

VOC Response Levels

- If the sustained ambient air concentration of total organic vapors at the downwind perimeter of the work area or exclusion zone exceeds **1 part per million** (ppm) above background, work activities must be temporarily halted and monitoring continued. If the

total organic vapor level readily decreases (per instantaneous readings) below 1 ppm over background, work activities can resume with **continuous** monitoring.

- If sustained total organic vapor levels at the downwind perimeter of the work area or exclusion zone persist at levels exceeding 1 ppm over background but less than 5 ppm, work activities must be halted, the source of vapors identified, corrective actions taken to abate emissions, and monitoring continued. After these steps, work activities can resume provided that the total organic vapor level 200 feet downwind of the exclusion zone or half the distance to the nearest potential receptor or residential/commercial structure, whichever is less - but in no case less than 20 feet, is below 1 ppm.

- If the organic vapor level is above 5 ppm at the perimeter of the work area, activities must be shutdown and mitigative measures implemented before work can continue.

Particulate Monitoring Plan

For intrusive activities such as drilling and direct push sampling, particulate concentrations shall be monitored continuously at the upwind and downwind perimeters of the exclusion zone at temporary particulate monitoring stations. The particulate monitoring shall be performed using real-time monitoring equipment capable of measuring particulate matter less than 10 micrometers in size (PM-10) and capable of integrating over a period of 15 minutes (or less) for comparison to the airborne particulate action level. The equipment must be equipped with an audible alarm to indicate exceedance of the action level. In addition, fugitive dust migration shall be visually assessed during all work activities.

Particulate Response Levels

- If the downwind PM-10 particulate level is **100 micrograms per cubic meter (µg/m^3)** greater than background (upwind perimeter) for the 15-minute period or if airborne dust is observed leaving the work area, then dust suppression techniques must be employed. Work may continue with dust suppression techniques provided that downwind PM-10 particulate levels do not exceed **150 µg/m^3** above the upwind level and provided that no visible dust is migrating from the work area.

- If, after implementation of dust suppression techniques, downwind PM-10 particulate levels are greater than **150 µg/m^3** above the upwind level, work must be stopped and a re-evaluation of activities initiated. Work can resume provided that dust suppression measures and other controls are successful in reducing the downwind PM-10 particulate concentration to within **150 µg/m^3** of the upwind level and in preventing visible dust migration.

All readings must be recorded and be available for State (DEC and NYSDOH) and County Health personnel to review

2.0 Public Safety

Intrusive activities such as drilling and direct push sampling within the community will require the development of an exclusion zone at the perimeter of the work zone. The exclusion zone is meant to prevent pedestrians from entering the work zone and potentially being exposed to contaminants or safety hazards associated with the equipment used. The exclusion zone will be marked by the use of caution tape and/or cones. When working on or near a public road the regulations listed in the NYS Manual of Uniform Traffic Control Devices (Title 17b, NYCRR) will be implemented. This includes the correct formation and placement of cones and "Road Work Ahead" signs to divert and warn oncoming traffic. Depending on the type of work and length of time needed, traffic controllers and observers may be required.

3.0 Responsibility

It shall be the responsibility of the Site Safety Officer to conduct VOC monitoring at the downwind perimeter of the work zone as defined above and record all relevant data in the health and safety field notebook, which will be available for State (DEC and DOH) personnel to review. The Site Safety Officer shall also be responsible for visually monitoring the work zone for potential safety hazards and to prevent public intrusion in the work zone.

APPENDIX C

SITE-SPECIFIC HEALTH AND SAFETY PLAN

ecology and environment engineering and geology, p.c.
Environmental Specialists

SITE-SPECIFIC HEALTH AND SAFETY PLAN

(FOR WORK ASSOCIATED WITH POTENTIAL EXPOSURE TO HAZARDOUS CHEMICALS, INFECTIOUS AGENTS OR RADIOACTIVE MATERIALS)

Project: Hawkeye Trade Center and Residences

Project No.: EE1705007.0019.01

Client: NYSDEC

Project Location: Rochester, Monroe County, NY

Proposed Dates of Field Activities: September 27, 2021 through October 31, 2021

Project Director: Rick Watt

Project Manager: Erik Reinert

Prepared by: Erik Reinert Date Prepared: 9/16/2021

Approved by: Mike Donaldson Date Approved: 9/24/2021

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E&E / WSP USA

SITE-SPECIFIC HEALTH AND SAFETY PLAN ACCEPTANCE FORM

Project: Hawkeye Trade Center and Residences	
Project No.: EE1705007.19	
Project Location: Rochester, Monroe County, NY	
Project Manager: Erik Reinert	Project Director: Rick Watt

The undersigned acknowledge that they have read and understood and agree to abide by the site-specific health and safety plan.

Name (Printed)	**Name (Signature)**	**Date**

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Table of Contents

List of Tables

Table **Page**

List of Acronyms

µCi/mL	MicroCuries per milliliter
ALARA	As low as reasonably achievable
ANSI	American National Standards Institute
ASTM	American Society for Testing and Materials
APR	Air-purifying respirator
CFR	Code of Federal Regulations
CGI	Combustible gas indicator
CHSP	Corporate Health and Safety Program
CPR	Cardiopulmonary resuscitation
DAC	Derived air concentration
dBA	Decibels, adjusted
DOT	Department of Transportation
EEEPC	Ecology and Environment Engineering and Geology, P.C.
EPA	U.S. Environmental Protection Agency
eV	Electron volts
FRC	Flame resistant clothing
SHASP	Site-Specific Health and Safety Plan
HAZCOM	Hazard Communication Standard
HAZWOPER	Hazardous Waste Operations and Emergency Response
HSR	Health and safety record
IDLH	Immediately dangerous to life and health
LEL	Lower explosive limit
LOP	Level of protection
m	Meter
MeV	Megaelectron volt (= 10^6 Electron volts)
mR/hr	MilliRoentgens per hour
NFPA	National Fire Protection Association
OSC	Office Safety Coordinator
OSHA	Occupational Safety and Health Administration/Act
PAPR	Powered air purifying respirator
PEL	Permissible exposure limit
PID	Photoionization detector
PPE	Personal protective equipment
RCRA	Resource Conservation and Recovery Act
REL	Recommended exposure limit
RSC	Regional Safety Coordinator
SOPs	Standard operating procedures
SSO	Site Safety Officer
TLD	Thermoluminescent Dosimeter
TLV	Threshold limit value

TWA	Time-weighted average
UV	Ultraviolet
UVI	Ultraviolet index
WSP	WSP USA

1. INTRODUCTION

1.1 POLICY

It is the policy of Ecology and Environment Engineering and Geology, P.C., / WSP USA (EEEPC / WSP) to ensure the health and safety of its employees, the public, and the environment during the performance of work it conducts. This site-specific health and safety plan (SHASP) establishes the procedures and requirements to ensure EEEPC / WSP employees' health and safety for the above-named project. EEEPC / WSP's overall safety and health program is described in the *Corporate Health and Safety Program* (CHSP). After reading this plan, applicable EEEPC / WSP employees shall read and sign the Site-Specific Health and Safety Plan Acceptance form, which is incorporated into this document.

This SHASP format is specific to project sites that contain known or potential chemical hazards, radiological hazards, or infectious agents. This SHASP has been developed for EEEPC / WSP employees' sole use and is not intended for use by firms not participating in EEEPC / WSP's training and health and safety programs. Subcontractors are responsible for developing and providing their own safety plans.

This SHASP has been prepared to meet the following applicable regulatory requirements and guidance:

Applicable Regulation/Guidance
29 CFR 1910.120, Hazardous Waste Operations and Emergency Response (HAZWOPER) 29 CFR 1910 General Industry Standards 29 CFR 1926 Construction Industry Standards
Other:

1.2 SCOPE OF WORK

Description of Work: Site is an inactive manufacturing and offices facility that has been previously investigated. Current work is a site characterization focused on determining source areas of VOCs, metals, petroleum-related compounds, PCBs, and thorium istopes previously detected in soil and groundwater.

The primary elements of the site characterization include:

- Camera inspection of drains and piping leading to the former thorium settling pits and stormwater outfalls for potential leaks, breaks, or sediment source areas in the lines.
- Installation of soil borings and construction of new monitoring wells. Subsurface soil sampling will be conducted to determine if contamination is present in soil.
- Sampling of new and existing monitoring wells to determine if contamination is present in groundwater and to evaluate the extent of contamination at the site.
- Collection of sediment samples from manholes leading to stormwater outfalls and former thorium settling pits.

Equipment/Supplies: Appendix A contains a checklist of equipment and supplies that are needed for this work.

The following is a description of each numbered task:

Task Number	Task Description
1	Sewer pipe camera survey and sediment sampling
2	Monitoring well and soil boring installation oversight and soil sample collection.

Task Number	Task Description
3	Groundwater Sampling.

1.3 SITE DESCRIPTION

Site Map: Applicable site maps and/or figures are presented in Appendix B.

Site History/Description (see project Work Plan for detailed site history and description):

The Hawkeye Trade Center and Residences (Site) is located at 1447 St Paul Street in the city of Rochester, New York (Figure 1). The Site is comprised of 8 buildings and 2 related parking lots located on 5 acres. Parking Lot No. 1 is in the northeaster quadrant of the property north of Building 11A (Figure 2). Parking Lot No. 2 is in the southwest corner of the property west of Buildings 5 and 12A.

The site was first developed by at least 1902 and operated by Kodak for the manufacture of glass lenses and optical equipment. Former buildings 1,2,3,7, and 8 (demolished in 1999) occupied the location of Parking Lot No. 2 in the northern portion of the site and were operated by Rochester Photographic Products Company (also known as General Aristo Corporation in historical site documents; Figure 2). The southern portion of the site, in the area now occupied by Building 5, was historically occupied by a gasoline filling station and repair shops for the Rochester Transit Corporation and Rochester Railway Company.

Historical uses of the existing Site Buildings are as follows:

- Building 4 – Multi-floor. Powerhouse
- Building 5 – Multi-floor. Offices, assembly (Floors 1 and 2), non-hazardous and hazardous waste storage (90-day; Floor 2), laboratory (Floor 7).
- Building 6 – Multi-floor. Offices.
- Building 10 – Multi-floor. Offices.
- Building 11 – Multi-floor. Offices.
- Building 11A – Single floor. Offices, paint booth, material storage and waste accumulation.
- Building 12 and 12A – Multi-floor. Offices, clean room, maintenance/fabrication shops, photo processing.

Other site features of note include four former thorium glass settling pits located west of Buildings 2, 4, 11A, and 12A, a former drywell of unknown purpose located west of Building 5 in Parking Lot No. 1, and the associated underground piping leading to these features.

The Hawkeye site is relatively flat and primarily developed by parking lots and buildings. Several small planters and grassy areas are located east of Building 6 and Parking Lot No. 2, and east and west of Building 5. The western edge of the property drops precipitously into the Genesee River Gorge, along the edge of which lie several existing and former stormwater outfalls and two of the four historical thorium settling pits.

Is the site currently in operation? No

Locations of Contaminants/Wastes: Subsurface soil, groundwater, and sewer sediment.

Types and Characteristics of Contaminants/Wastes:

☒ Liquid	☒ Solid	☐ Sludge	☒ Gas/Vapor
☐ Flammable/Ignitable	☒ Volatile	☐ Corrosive	☐ Acutely Toxic
☐ Explosive	☐ Reactive	☐ Carcinogenic	☒ Radioactive
☐ Medical/Pathogenic	Other: _____		

2. ORGANIZATION AND RESPONSIBILITIES

EEEPC / WSP team personnel shall have on-site responsibilities as described in EEEPC / WSP's standard operating procedure (SOP) for Site Control Procedures for Potentially Contaminated Sites (ENV 3.2). The project team, including qualified alternates, is identified below.

Name	Site Role/Responsibility
Erik Reinert	Project/Task Manager
Erik Reinert	Field Team Leader
Erik Reinert	Site Safety Officer
	Command Post Supervisor (if applicable)
	Decontamination Station Officer (if applicable)
	Rescue Team (if applicable)
Charles Porreca	Work Team Member
Madeline Hanford	Work Team Member

3. TRAINING

Prior to initiating fieldwork, EEEPC / WSP team personnel shall have received training as indicated below. As applicable, EEEPC / WSP personnel shall read the project work plan, sampling and analysis plan, health and safety plan, and quality assurance project plan prior to project work.

Training	Required
40-Hour Initial Health and Safety Training and Annual Refresher	☒
Biennial First Aid/CPR	☒
Hazard Communication (29 CFR 1910.1200)	☒
40-Hour Radiation Protection Procedures and Investigative Methods	☐
8-Hour General Radiation Health and Safety	☐

Training	Required
Radiation Refresher	☐
DOT/IATA Hazmat and Biannual Refresher	☐
Railroad Roadway Worker Protection	☐
Other:	☐

4. MEDICAL SURVEILLANCE

4.1 MEDICAL SURVEILLANCE PROGRAM

EEEPC / WSP field personnel shall actively participate in EEEPC / WSP's medical surveillance program as described in the CHSP and shall have received, within the past year, an appropriate physical examination and health rating.

EEEPC / WSP's health and safety record (HSR) form for each employee are maintained by EEEPC / WSP in the employee's medical file. EEEPC / WSP employees should inform the site safety officer (SSO) of any allergies, medical conditions, or similar situations that are relevant to the safe conduct of the work to which this SHASP applies.

Is there a concern for radiation at the site? ☒ Yes ☐ No

If yes, this safety plan must be reviewed by a health physicist.

If no, go to Section 5.1.

4.2 RADIATION EXPOSURE

4.2.1 External Dosimetry

Thermoluminescent Dosimeter (TLD) Badges: TLD badges are to be worn by all EEEPC / WSP field personnel on project sites where they are required by the customer, regulation or by EEEPC / WSP's health physicist.

Pocket Dosimeters: _____

Other: _____

4.2.2 Internal Dosimetry

☐ Whole body count ☐ Bioassay ☐ Other _____

Requirements: _____

4.2.3 Radiation Dose

Dose Limits: EEEPC / WSP's radiation dose limits are stated below. Implementation of these dose limits may be designated on a site-specific basis. Radiation limits at the site are expected to be negligible based on previous sampling events. A digital ratemeter will be employed during sample screening in order to log soil and sediment and select sampling intervals. Background concentrations will be measured around the perimeter of the site prior to beginning work in order to determine a baseline of expected site conditions. Periodic monitoring of the work zone will be conducted thereafter.

Site-Specific Dose Limits: Three times background. If the background radiation in the work zone exceeds the baseline established during the initial site survey, work will stop and a reassessment of site procedures will be conducted.

ALARA Policy: Radiation doses to EEEPC / WSP personnel shall be maintained as low as reasonably achievable (ALARA), taking into account the work objective, state of technology available, economics of improvements in dose reduction with respect to overall health and safety, and other societal and socioeconomic considerations.

5. SITE CONTROL

5.1 SITE LAYOUT AND WORK ZONES

Site Work Zones: Refer to the site map and/or site figure(s) in Appendix B for designated work zones. Follow procedures in SOP ENV 3.2 Site Control Procedures for Potentially Contaminated Sites for work zone set-up.

Site Access Requirements and Special Considerations: Access is unrestricted. A winery (currently closed) is located on the site. There is lots of room to stay sufficiently far from winery.

☐ Signed access agreement X Property owner notified by client ☐ Client-owned property

Illumination Requirements: Site activities will be conducted during:

X Daylight hours only (tasks). ☐ Nighttime* only with portable lighting (tasks)

☐ Both daytime and nighttime* hours (tasks).

***If nighttime work is being conducted, describe lighting to be used: _____**

Sanitary Facilities (e.g., toilet, shower, potable water) where applicable shall comply with 29 CFR 1910.120(n): _____

On-Site Communications: Cell phone

Other Site-Control Requirements: _____

5.2 SAFE WORK PRACTICES

Daily Safety Meeting: A daily safety meeting will be conducted for all EEEPC / WSP personnel and documented on the Daily Safety Meeting Record form (Appendix C) AND in the field logbook. The information and data obtained from applicable site characterization and analysis will be addressed in the safety meetings and also used to update this SHASP, as necessary.

Work Limitations: Work shall be limited to a maximum of 12 hours per day. If 12 consecutive days are worked, at least one day off shall be provided before work is resumed. Work will be conducted in daylight hours unless prior approval is obtained and the illumination requirements in 29 CFR 1910.120(m) are satisfied.

Weather Limitations: Work shall not be conducted during electrical storms. Work conducted in other inclement weather (e.g., rain, snow) will be approved by project management and the regional safety coordinator or designee.

Other Work Limitations:

Buddy System: Field work will be conducted in pairs of team members according to the buddy system.
Line of Sight: Each field team member shall remain in the line of sight and within verbal communication of at least one other team member.

Eating, Drinking, and Smoking: Eating, drinking, smoking, and the use of tobacco products shall be prohibited in the exclusion and contamination reduction areas, at a minimum, and shall only be permitted in designated areas.

Contamination Avoidance: Field personnel shall avoid unnecessary contamination of personnel, equipment, and materials to the extent practicable.

Sample Handling: Protective gloves of a type designated in Section 7 will be worn when containerized samples are handled for labeling, packaging, transportation, and other purposes.

Standard Operating Procedures: Standard Operating Procedures that are applicable to this project are presented in Appendix D.

Other Safe Work Practices: _____

6. HAZARD EVALUATION AND CONTROL

6.1 PHYSICAL HAZARD EVALUATION AND CONTROL

Physical and biological hazard evaluation and controls associated with this project are presented in Appendix E.

6.2 CHEMICAL HAZARD EVALUATION AND CONTROL

6.2.1 Chemical Hazard Evaluation

Potential chemical hazards are described by task number in Table 6-1. Hazard Evaluation Sheets for major known site contaminants are presented in Appendix F. Safety data sheets (SDSs) for chemical products brought to the site by EEEPC / WSP staff are presented in Appendix G. Those products include the following: _____

6.2.2 Chemical Hazard Control

An appropriate combination of engineering/administrative controls, work practices, and PPE shall be used to reduce and maintain employee exposures to a level at or below published exposure levels as indicated in Table 6-1.

Applicable Engineering/Administrative Control Measures: contaminant avoidance, appropriate training for exclusion zone work,

PPE: See Section 7.

6.3 RADIOLOGICAL HAZARD EVALUATION AND CONTROL

6.3.1 Radiological Hazard Evaluation

Potential radiological hazards are described below by task number. Hazard Evaluation Sheets for major known site radiological contaminants are presented in Appendix E. If there are no radiological hazards on this site, enter ""**N/A**"" in the first cell under the ""Task Number"" column.

Task Number	Radionuclide	DAC (µCi/ml)	Route(s) of Exposure	Major Radiation(s)	Energy(s) (MeV)	Half-Life
1,2,3	Thorium-232	5E-13	Ingestion, Inhalation	Alpha, weak gamma		1.4E10 yrs
1,2,3	Thorium-230	3E-12	Ingestion, Inhalation	Alpha, weak gamma		7.5E4 yrs
1,2,3	Thorium-228	4E-12	Ingestion, Inhalation	Alpha, weak gamma		1.91 yrs

TABLE 6-1
CHEMICAL HAZARD EVALUATION

Task(s)	Chemical	Exposure Limits			Dermal Hazard (Y/N)	IDLH	Routes of Exposure	Symptoms of Acute Exposure	Odor Threshold/ Odor Description	Ionization Potential [a] (eV)	PID Relative Response [b]
		PEL	REL	TLV							
1,2,3	Trichloroethene	100 ppm	25 ppm	TWA 10 ppm, STEL, 25 ppm	Y	1000 ppm	Inhalation, Absorption, Ingestion, Ocular	irritation eyes, skin; headache, visual disturbance, lassitude (weakness, exhaustion), dizziness, tremor, drowsiness, nausea, vomiting; dermatitis; cardiac arrhythmias, paresthesia; liver injury; [potential occupational carcinogen]	1.4 ppm	9.45 eV	0.5
1,2,3	Cis-1,2-Dichlorethene	200 ppm	200 ppm	200 ppm	Y	1000 ppm	Inhalation, Absorption, Ingestion, Ocular	irritation eyes, respiratory system; central nervous system depression	17 ppm	9.65 eV	0.45

Note: Use an asterisk (*) to indicate known or suspected carcinogens.

[a] PIDs will detect chemical only if lamp energy is greater than the 'chemical's ionization potential. If ionization potential for a chemical is greater than lamp energy of the PID, an alternative monitoring instrument will be used.

[b] With PID calibrated to isobutylene in air.

Key:

-- = Information not available
C = Ceiling limit
CGH = Cough
CNS = Central nervous system effects
DIZZ = Dizziness
E/N/T = Eyes/Nose/Throat
eV = Electron volts
f/cc = Fibers per cubic centimeter
FA = fatigue
GD = Giddiness
GI = Gastrointestinal tract
HA = Headache
IDLH = Immediately dangerous to life and health
ING = Ingestion
INH = Inhalation
IRR = Irritation
LOC = Loss of consciousness
mg/m^3 = Milligrams per cubic meter
N = No
NAU = nausea
PEL = Permissible exposure limit
PID = Photoionization detector
ppm = Parts per million
REL = Recommended exposure limit
SP = Slow pulse
STEL = Short-term exposure limit
TLV = Threshold limit value
URT = Upper respiratory tract
V = Vomiting
WK = Weakness
Y = Yes

6.3.2 Radiological Hazard Control

Engineering/administrative controls and work practices shall be instituted to reduce and maintain employee exposures to a level at or below the permissible exposure/dose limits (see sections 4.2.3 and 6.3.1). Whenever engineering/administrative controls and work practices are not feasible or effective, any reasonable combination of engineering/administrative controls, work practices, and PPE shall be used to reduce and maintain employee exposures to a level at or below permissible exposure/dose limits.

Thorium was used at the site in the manufacture of glass lenses during the first half of the 20th Century. However, based on previous sampling at the site, EEEGPC does not believe there will be a thorium risk. A Phase 2 investigation of the entire site was completed in 2017, and no radiation was detected in soil or groundwater samples. However, out of an abundance of caution, field staff must wear TLD badges, and use a radiation scintillator to scan all work zones, samples, and downhole equipment. An action level of 3 times background has been established for the site. If gamma readings exceed the action level, work must stop, and the field team will reassess the hazard and activities. Background radiation levels will be established by taking multiple readings throughout the area prior to starting work and from upgradient soil at the beginning of field work.

Applicable Engineering/Administrative Control Measures: personnel will maintain a safe distance from all heavy equipment (e.g. drill rig and excavator) when it is operating.

PPE: See Section 7.

6.4 COVID-19

Coronavirus disease 2019 (COVID-19) is an infectious disease caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). The primary exposure route is through ingestion/inhalation of airborne aerosols, and direct contact with surfaces. Symptoms include fatigue, cough, fever, chills, aches/pains, and shortness of breath. However, it should be noted that asymptomatic carriers can spread the disease.

The WSP COVID-19 Employee Field Work Guidance document is included in Appendix H. In order to protect WSP employees and contractors at the Site, this guidance document must be observed and followed. In addition, the WSP COVID-19 screening tool (WSP Working Together) will be used to assess employee health on a daily basis prior to mobilization to the Site. WSP personnel will not mobilize to the site if they are not well of if they are determined to be a risk to others by the WSP screening tool.

WSP field personnel are responsible to be up-to-date with Federal and State travel restrictions and curfews, as well as WSP company policy and procedures regarding travel and performance of field activities.

When onsite, but prior to commencement of work, a review of prevention and risk-reduction measures must occur daily. WSP must practice good personal hygiene and social distancing of 6 feet (2 meters) or more whenever possible. Personnel must wash hands frequently and thoroughly (at least 20 seconds), with soap and water. Hand sanitizers with at least 60% alcohol will be used between hand washings. After daily field activities, personnel must wipe down all equipment used with disinfectant.

7. LEVEL OF PROTECTION AND PERSONAL PROTECTIVE EQUIPMENT

7.1 LEVEL OF PROTECTION

The following levels of protection (LOPs) have been selected for each work task based on an evaluation of the potential or known hazards, the routes exposure of potential hazard, and the performance specifications of the PPE. On-site monitoring results and other information obtained from on-site activities will be used to modify these LOPs and the PPE, as necessary, to ensure sufficient personnel protection. The authorized LOP and PPE shall only be changed with the approval of the Regional Safety Coordinator or designee. Level A is not included below because Level A activities, which are performed infrequently, will require special planning and addenda to this SHASP.

It is anticipated that all 3 tasks (sediment sampling, soil boring/monitoring well installation, groundwater sampling) will be completed in Level D PPE, however Level C respiratory protection will be available on site if required.

Task Number	B	C	D	Modifications Allowed
1,2,3			X	

Task Number	B	C	D	Modifications Allowed

Note: Use "X" for initial levels of protection. Use "(X)" to indicate levels of protection that may be used as site conditions warrant.

7.2 PERSONAL PROTECTIVE EQUIPMENT

The PPE selected for each task is indicated below. EEEPC / WSP's PPE program complies with 29 CFR 1910.120 and 29 CFR 1910 Subpart I and is described in detail in the CHSP. Refer to 29 CFR 1910 for the minimum PPE required for each LOP.

PPE	Task Number/LOP					
	1	2	3			
Full-face APR	☐	☐	☐	☐	☐	☐
Half-face APR	☐	☐	☐	☐	☐	☐
PAPR	☐	☐	☐	☐	☐	☐
Cartridges:						
P100	☐	☐	☐	☐	☐	☐
GMC-P100	☐	☐	☐	☐	☐	☐
GME-P100	☐	☐	☐	☐	☐	☐
Other:	☐	☐	☐	☐	☐	☐
Positive-pressure, full-face SCBA	☐	☐	☐	☐	☐	☐
Spare air tanks (Grade D air)	☐	☐	☐	☐	☐	☐
Positive-pressure, full-face, supplied-air system	☐	☐	☐	☐	☐	☐
Cascade system (Grade D air)	☐	☐	☐	☐	☐	☐
Manifold system	☐	☐	☐	☐	☐	☐
5-Minute escape mask	☐	☐	☐	☐	☐	☐
Safety glasses	X	X	X	☐	☐	☐
Monogoggles	☐	☐	☐	☐	☐	☐
Coveralls/clothing	☐	☐	☐	☐	☐	☐
Protective clothing:						
Tyvek	☐	☐	☐	☐	☐	☐
Saranex	☐	☐	☐	☐	☐	☐
FRC	☐	☐	☐	☐	☐	☐
Other:	☐	☐	☐	☐	☐	☐
Splash apron	☐	☐	☐	☐	☐	☐
Inner gloves:						
Cotton	☐	☐	☐	☐	☐	☐

PPE	Task Number/LOP					
	1	2	3			
Nitrile	X	X	X	☐	☐	☐
Latex	☐	☐	☐	☐	☐	☐
Other:	☐	☐	☐	☐	☐	☐
Outer gloves:						
Viton	☐	☐	☐	☐	☐	☐
Rubber	☐	☐	☐	☐	☐	☐
Neoprene	☐	☐	☐	☐	☐	☐
Nitrile	☐	☐	☐	☐	☐	☐
Other:	☐	☐	☐	☐	☐	☐
Work gloves	☐	☐	☐	☐	☐	☐
Safety boots (as per ASTM F2412 & F2413)	X	X	X	☐	☐	☐
Neoprene safety boots (as perASTM F2412 & F2413)	X	X	X	☐	☐	☐
Boot covers (type: _____)	☐	☐	☐	☐	☐	☐
Hearing protection (type: _____)	☐	☐	☐	☐	☐	☐
Hard hat	X	X	☐	☐	☐	☐
Face shield	☐	☐	☐	☐	☐	☐
High visibility vest (Class *see Table 7-1 below*)	X	X	X	☐	☐	☐
Personal flotation device (Type I, II, III or Type V)	☐	☐	☐	☐	☐	☐
Other:	☐	☐	☐	☐	☐	☐
Other:	☐	☐	☐	☐	☐	☐

Table 7-1 - ANSI 107, Classes of Conspicuity for High-Visibility Garments

Conspicuity Class	Use Description
1	▪ Worker can give full and undivided attention to approaching traffic. ▪ Ample separation between worker and vehicular traffic. ▪ Background is not too complex. ▪ Vehicle/equipment speeds do not exceed 25 mph.
2	▪ Greater visibility is desired during inclement weather. ▪ Complex backgrounds are present. ▪ Employees perform tasks that divert attention away from approaching vehicles. ▪ Vehicle/equipment speeds exceed 25 mph, but less than 50 mph. ▪ Work activities take place in or near vehicle traffic space.
3	▪ Vehicle/equipment speeds exceed 50 mph. ▪ Worker and vehicle operator have high task loads. ▪ Wearer must be conspicuous through the full range of body motions at a minimum of a 1/4 mile (390 m) and must be identifiable as a person.

8. HEALTH AND SAFETY MONITORING

Health and safety monitoring will be conducted to ensure proper selection of engineering/administrative controls, work practices, and/or PPE so that employees are not exposed to hazardous substances at levels that exceed permissible exposure/dose limits or published exposure levels. Health and safety monitoring will be conducted using the instruments, frequency, and action levels described in Table 8-1. Health and safety monitoring instruments shall have been appropriately calibrated and/or performance-checked prior to use.

TABLE 8-1
HEALTH AND SAFETY MONITORING

Instrument	Task Number	Contaminant(s)	Monitoring Location	Monitoring Frequency	Action Levels[a]	
X PID – lamp 10.6 eV (e.g., MultiRAE, Mini RAE) ☐ FID (e.g., OVA 128-) ☐ Combo FID/PID (e.g., TVA 1000)	1,2,3	Trichloroethene	General	Continuous	**Unknown Vapors** Background to 1 ppm above background: Level D 1 to 5 ppm above background: Level C 5 to 500 ppm above background: Level B >500 ppm above background: Level A	**Contaminant-Specific** One-half the TLV of 10 ppm.
Oxygen Meter/Explosimeter					**Oxygen** <19.5% or >22.0%: Evacuate area; eliminate ignition sources; reassess conditions. 19.5 to 22.0%: Continue work in accordance with action levels for other instruments.	**Explosivity** ≤10% LEL: Continue work in accordance with action levels for other instruments; monitor continuously for combustible atmospheres. >10% LEL: Evacuate area; eliminate ignition sources; reassess conditions.
Radiation Alert Monitor (Rad-mini or RAM-4)					<0.1 mR/hr: Continue work in accordance with action levels for other instruments. ≥0.1 mR/hr: Evacuate area; reassess work plan and contact radiation safety specialist.	
Mini-RAM or Other Particulate Monitor	2				**General/Unknown** Evaluate health and safety measures when dust levels exceed 2.5 milligrams per cubic meter.	**Contaminant-Specific**
HCN/H_2S (Monitox)					≥4 ppm: Leave area and consult with SSO.	
Draeger Colorimetric Tubes					**Tube** **Action Level** **Action**	
Air Monitor/Sampler Type: _____ Sampling medium: _____					**Action Level**	**Action**

TABLE 8-1
HEALTH AND SAFETY MONITORING

Instrument	Task Number	Contaminant(s)	Monitoring Location	Monitoring Frequency	Action Levels[a]
Personal Sampling Pump Type: _____ Sampling medium: _____					**Action Level** **Action**
Micro R Meter					<2 mR/hr: Continue work in accordance with action levels for other instruments. 2 to 5 mR/hr: In conjunction with a radiation safety specialist, continue work and perform stay-time calculations to ensure compliance with dose limits and ALARA policy. >5 mR/hr: Evacuate area to reassess work plan and evaluate options to maintain personnel exposures ALARA and within dose limits.
Ion Chamber					See micro R meter action levels above.
Radiation Survey Ratemeter/Scaler with External Detector(s)	1,2	Thorium Istopes	Breathing Zone/Work Zone	Continuously while disturbing subsurface	**Detector Type** **Action Level** **Action** 1 Gamma Scintillator Probe 3 times background Stop work and reassess 2 3
Noise Dosimeter (Sound Level Meter)					≤85 decibels as measured using the A-weighed network (dBA): Use hearing protection if exposure will be sustained throughout work shift. >85 dBA: Use hearing protection. >120 dBA: Leave area and consult with safety personnel.
Other:					
Other:					

[a] Unless stated otherwise, airborne contaminant concentrations are measured as a time-weighted average in the worker's breathing zone. Acceptable concentrations for known airborne contaminants will be determined based on OSHA/NIOSH/ACGIH and/or NRC exposure limits. As a guideline, 1/2 the PEL/REL/TLV, whichever is lower should be used.

Note: Monitoring frequency may be adjusted based on site conditions, when work begins at different areas of the site, when contaminants other than those previously identified are being handled or when employees encounter uncontrolled release of liquid contaminants.

9. DECONTAMINATION PROCEDURES

All equipment, materials, and personnel will be evaluated for contamination upon leaving the exclusion area. Equipment and materials will be decontaminated and/or disposed and personnel will be decontaminated, as necessary. Decontamination will be performed in the contamination reduction area or any designated area such that the exposure of uncontaminated employees, equipment, and materials will be minimized. The Site Safety Officer, or their designee, shall monitor decontamination procedures for effectiveness. Specific procedures are described below. SOP ENV 3.15 Sampling and Field Equipment Decontamination and ENV 3.2 Site Control Procedures for Potentially Contaminated Sites provide procedures for equipment and personal decontamination.

Equipment/Material Decontamination Procedures (specified by work plan): Dry decon using paper towels.

Ventilation: All decontamination procedures will be conducted in a well-ventilated area.

Personnel Decontamination Procedures: Boot wash as needed.

PPE Requirements for Personnel Performing Decontamination: Nitrile Gloves

Personnel Decontamination in General: Following appropriate decontamination procedures, all field personnel will wash their hands and face with soap and potable water. Personnel should shower at the end of each work shift.

Disposition of Disposable PPE: Disposable PPE must be rendered unusable and disposed as indicated in the work plan.

Disposition of Decontamination Wastes (e.g., dry wastes, decontamination fluids, etc.): (refer to work plan, if applicable)

General: PPE and equipment shall be decontaminated, cleaned, laundered, maintained or replaced as needed to maintain effectiveness. If non-impermeable clothing becomes wet with hazardous substances, the clothing shall be removed and properly disposed of or cleaned in the contamination reduction area. Unauthorized personnel shall not remove contaminated PPE or equipment from contamination reduction area.

10. EMERGENCY RESPONSE

This section contains additional information pertaining to on-site emergency response and does not duplicate pertinent emergency response information contained in earlier sections of this plan (e.g., site layout, monitoring equipment, etc.). Where applicable, emergency response procedures will be compatible with local, state and federal agencies. Emergency response procedures will be rehearsed regularly, as applicable, during project activities. Emergency response procedures shall be reviewed periodically and, as necessary, be amended to keep it current with new or changing site conditions or information. All EEEPC / WSP employees shall routinely be trained in emergency recognition and prevention.

10.1 EMERGENCY RESPONSIBILITIES

All Personnel: All personnel shall be alert to the possibility of an on-site emergency; report potential or actual emergency situations to the Field Team Leader and SSO; and notify appropriate emergency resources, as necessary. EEEPC / WSP personnel shall only respond to emergencies if appropriately trained based on the type of emergency (i.e., fire, medical, chemical spill, etc.).

Field Team Leader: The Field Team Leader will determine the emergency actions to be performed by EEEPC / WSP personnel and will direct these actions. The Field Team Leader also will ensure that applicable incidents are reported to appropriate EEEPC / WSP and client project personnel and government agencies. The Field Team Leader shall establish the onsite meet site for EEEPC / WSP personnel to report in the event of an emergency that does not require site evacuation. The Field Team Leader shall establish evacuation routes and off site meet site for EEEPC / WSP personnel to report in the event of an emergency that requires evacuation from the site.

SSO: The SSO will recommend health/safety and protective measures appropriate to the emergency.

Other: _____

10.2 LOCAL AND SITE RESOURCES (including phone numbers). Ensure that 911 service is available before initiating field work.

Ambulance: 911

Hospital (name, address, phone number:

Strong Memorial Hospital
601 Elmwood Avenue
Rochester, NY 14642
(585) 275-4551

Directions to Hospital (map attached at the end of this plan as Appendix I):

Head south on St Paul St toward Avenue E - 2.0 mi

Continue onto South Ave - 0.2 mi

Use the middle 2 lanes to stay on South Ave - 141 ft

Keep left to stay on South Ave - 0.3 mi

Turn right onto Mt Hope Ave - 1.8 mi

Turn right onto Elmwood Ave - 0.3 mi

Continue on Thomas H Jackson Drive to your destination

Poison Control: National Poison Control Center (800) 222-1222

Police Department: 585-428-5990 or 911

Fire Department: 911

Client Contact: Danielle Miles (585) 226-5349

Site Contact: Erik Reinert (E&E) 315-374-1773

On-Site Telephone Number: NA

Mobile Phone Number: NA

Radios Available: NA

Other: _____

10.3 EEEPC / WSP EMERGENCY CONTACTS

EEEPC / WSP Office, Buffalo, NY (716) 684-8060

Erik Reinert, Project Manager (315) 374-1773 (mobile)

Carl Sall, Site Health and Safety Coordinator (610) 400-4938 (mobile)

Michael Donaldson, Alternate Site Health and Safety Coordinator (612) 373-8931 (office); (360) 536-3321 (mobile)

10.4 OTHER EMERGENCY RESPONSE PROCEDURES

On-Site Evacuation Signal/Alarm (must be audible and perceptible above ambient noise and light levels): 3 vehicle horn blasts

On-Site Assembly Area: Parking lot No. 1.

Emergency egress route to get off site: Access is uncontrolled. Move to the road.

Off-Site assembly area: Parking Lot No. 5, south of site on opposite side of Avenue E.

Preferred means of reporting emergencies: Cell phone / 911.

Site security and control: In an emergency situation, personnel will attempt to secure the affected area and control site access.

Spill Control Procedures: Isolate the source of the spill (e.g., hydraulic fluid) by turning off equipment or shutting valves, if possible. Use shovels to construct temporary earthern berms to prevent migration to sewers or ditches. Scrape oily soil and place in buckets or double-bag in 3-mil trash can liners. Dispose of clean-up materials according to state and federal regulations.
Other:

Emergency Medical Treatment and First Aid: Field team members shall be trained in basic first aid practices. If emergency medical treatment is necessary, immediately call for emergency medical service response (911).

Emergency Decontamination Procedures: Remove contaminated clothing. Flush with copious amounts of water.

PPE: Personnel will don appropriate PPE when responding to an emergency situation. The SSO and Section 7 of this plan will provide guidance regarding appropriate PPE.

Emergency Equipment: Appropriate emergency equipment is listed in Appendix A. Adequate supplies of this equipment shall be maintained in the support area or other approved work location.

Incident Reporting Procedures: Injuries/exposures should be reported verbally to the Office Safety Coordinator (OSC), Regional Safety Coordinator (RSC), the office manager, or the affected person's direct supervisor. The affected person (or the RSO or supervisor if the injured person is unable) must complete an incident report, which is to be submitted to the Corporate Health and Safety Director as soon as possible. The injury/exposure should also be verbally reported to the CHSD.

APPENDIX A

EQUIPMENT AND SUPPLIES CHECKLIST

APPENDIX A - EQUIPMENT AND SUPPLIES CHECKLIST

EQUIPMENT	Quant.
INSTRUMENTATION	
FID	
Thermal desorber	
O_2/explosimeter w/calibration kit	
Photovac tip	
PID (lamp: 10.6 eV)	1
Magnetometer	
Pipe locator	
Weather station	
Colorimetric (e.g., Draeger) tube kit (tubes: _____)	
Brunton compass	
Real-time cyanide monitor	
Real-time H_2S monitor	
Heat stress monitor	
Noise equipment	
Personal sampling pumps and supplies	
MiniRam dust monitor	1
Mercury monitor	
Spare batteries (type: _____)	
RADIATION EQUIPMENT/SUPPLIES	
TLD badge for each field staff member	3
Documentation forms	
Portable ratemeter	1
Scaler/ratemeter	
NaI gamma probe: ☐ 1-in. ☐ 2-in. ☐ 3-in.	
Documentation forms	
GM pancake probe	1
Tungsten-shielded GM probe	
Micro R meter	
Ion chamber	
Alert monitor	
Pocket dosimeter	

EQUIPMENT	Quant.
RADIATION EQUIPMENT/SUPPLIES (Cont.)	
Dosimeter charger	
Radiation warning tape	
Radiation decontamination supplies	
Spare batteries (type: _____)	
SAMPLING EQUIPMENT	
8-oz. bottles	X
Half-gallon bottles	X
VOA bottles	X
String	X
Hand bailers	X
Thieving rods with bulbs	
Spoons	X
Knives	X
Filter paper	
Bottle labels	X
MISCELLANEOUS	
Pump	X
Surveyor's tape	
100' Fiberglass tape	
300' Nylon rope	
Nylon string	
Surveying flags	X
Camera	X
Film	
Bung wrench	
Soil auger	
Pick	
Shovel	
Catalytic heater	

EQUIPMENT	Quant.
MISCELLANEOUS (Cont.)	
Propane gas	
Banner tape	
Surveying meter stick	
Chaining pins and ring	
Logbooks (1 large, _____ small)	X
Required MSDSs	X
Intrinsically safe flashlight	
Potable water	X
Gatorade or equivalent	
Tables	
Chairs	
Weather radio	
Two-way radios	
Binoculars	
Megaphone	
Cooling vest	
EMERGENCY EQUIPMENT	
First aid kit	X
Stretcher	
Portable eye wash	X
Blood pressure monitor	
Fire blanket	
Fire extinguisher	X
Thermometer (medical)	
Spill kit (list contents:)	
DECONTAMINATION EQUIPMENT	
Wash tubs	X
Buckets	X
Scrub brushes	X
Pressurized sprayer	
Spray bottle	X
Detergent (type: alconox)	X

EQUIPMENT	Quant.
DECONTAMINATION EQUIPMENT (Cont.)	
Solvent (type: _____)	
Plastic sheeting	X
Tarps and poles	
Trash bags	X
Trash cans	
Masking tape	
Duct tape	X
Paper towels	X
Face mask	
Face mask sanitizer	
Step ladders	
Distilled water	X
Barrier tape	
SHIPPING EQUIPMENT	
Coolers	X
Hazmat shipping kits	
Absorbent	
Shipping labels	X
DOT/IATA labels:	
Orientation arrows	
Excepted quantity mark	
Limited quantity mark	
Hazard Class(es)	
Strapping tape	X
Baggies	X
Custody seals	X
Chain-of-custody forms	X
FedEx airbill forms	X
Dangerous goods declaration(s)	
Permanent markers	
Clear packing tape	X

APPENDIX B

SITE MAPS AND SITE FIGURES

SITE

Legend

Site Parcels

Adapted from Phase II Site Assessment Report (Labella 2017)

FIGURE 1

PROJECT:

Hawkeye Trade Center and Residences
1447 St. Paul Street
Rochester, New York

Site Location

CLIENT:

New York State Department of Environmental Conservation

N
W E
S

0 1,000 2,000
Feet

1 inch = 2,000 feet
INTENDED TO PRINT AS: 11" X 17"

ecology and environment engineering and geology, p.c.

Ecology and Environment Engineering and Geology, P.C.
50 Lakefront Boulevard
Suite 111 WATERFRONT VILLAGE CENTER
Buffalo, NY 14202

Tel.: +1 716 853-1220
Fax: +1 716 853-1322

Hawkeye Trade Center and Residences

Dorbeth Rd

B01HEB4NE04212004 / SB4NE
Outdoor Air
BLDG 4
SS-09
SB-14
LOT #2
B03HEPL204182004
SB-15
IL2NE
B02HEPL204182004
B01HEB12N04192004
SB-16/MW-07
SB-18
SB-13/MW-06
B01HEPL204182004
B01HEB12W04212004
SB-17
IB11AW
SS-05
BLDG 11A
SS-02
SS-03
IB6NE
SS-01
BLDG 11
SB-12
B01HEB12SW04212004 / IB12SW
BLDG 12
BLDG 6
SS-04
BLDG 10
SB-29
SB-28
BLDG 12A
B01HEB12ASW04202004
SS-08
B01HEB5NE04212004 / IB5NE
SB-30/MW-12
SB-11
SS-06
BLDG 5
LOT #1
B01HEB5SW04192004 / IB5SW
SS-07
B01HEPL04182004 / SL11W
B02HEPL1104192004
SB-24/MW-10
LOT #11
SB-10/MW-05
B01HEB5SW04202004 / IB5SW2
SB-31/MW-13
TP-4
SB-25/MW-11
SB-27
SB-26
Avenue E St

SB-20
LOT #9
SB-19/MW-08
NOT IN STUDY AREA
Maling Dr

SB-22
LOT #5
LOT #8
SB-23
SB-07/MW-04
B01HEPL504172004
Saint Paul St
B02HEPL504172004
TP-1
SB-21/MW-09
Nox Aly
NOT IN STUDY AREA
TP-2
Carthage Dr
SB-06/MW-03
Avenue D
LOT #6
SB-05
SB-08
B01HEPL604172004 / SL6SE
SB-03/MW-01
LOT #7
B02HEPL604172004
SB-09
SB-01
TP-3
SB-02
SB-04/MW-02
Avenue C

Legend

- Proposed Overburden Well/Soil boring (E&E 2021)
- Proposed Soil Boring (E&E 2021)
- Site Parcels
- Site Buildings
- Soil Boring (LaBella 2017)
- Soil Boring/ Monitoring Well (LaBella 2017)
- Collocated Sub-Slab/ Indoor Air (LaBella 2017)
- Outdoor Air (LaBella 2017)
- Test Pits (LaBella 2017)
- Former Thorium Glass Settling Pit
- Drywell
- Outfalls

Previous Testing Locations (Leader 2005 Phase II ESA)

- Monitoring Well (Leader 2005)
- Soil Boring (Leader 2005)
- Soil Boring/ Monitoring Well (Leader 2005)

NOTES:
1) Property boundaries obtained from Monroe County GIS 2014 and are considered approximate.
2) Aerial image obtained from City of Rochester 2015 and may not represent current conditions.
3) Previous testing locations and Site features Georeferenced from reports by others and locations are considered approximate.
4) Test pit locations selected based on anomalies identified in 2004 Geophysical Survey.
5) LaBella testing locations measured from Site features and are considered approximate.

Adapted from Phase II Site Assessment Report (Labella 2017)

Figure 2

PROJECT:
Hawkeye Trade Center and Residences

Proposed Monitoring Well and Soil Boring Locations

July 2021

CLIENT:
New York State Department of Environmental Conservation

N
W E
S

0 50 100
Feet
1 inch = 100 feet
INTENDED TO PRINT AS: 11" X 17"

ecology and environment engineering and geology, p.c.
Ecology and Environment Engineering and Geology, P.C.
50 Lakefront Boulevard
Suite 111 WATERFRONT VILLAGE CENTER
Buffalo, NY 14202

Tel.: +1 716 853-1220
Fax: +1 716 853-1322

APPENDIX C

DAILY SAFETY MEETING RECORD

DAILY SAFETY MEETING RECORD

Project Name:	Project Number:
Project Location (city/state):	
Date/time:	Weather:

DAILY ACTIVITIES:

MEETING TOPICS (see site-specific health and safety plan for details):

Hazards Discussed			Other Safety Topics
☐ Biological (insects, plants, etc.)	☐ Fire/explosion	☐ Railroads	☐ Buddy system
☐ Cold stress	☐ Hand tool usage	☐ Sunburn (skin/eyes)	☐ Communication
☐ Chemical hazards	☐ Heat stress	☐ Slips, trips, falls	☐ Decontamination procedures
☐ Compressed gas cylinders	☐ Heavy equipment (working near)	☐ Traffic (working near)	☐ Emergency procedures
☐ Confined space	☐ Heights	☐ Utility lines	☐ First aid
☐ Drilling/Geoprobe	☐ Infectious material	☐ Unoccupied buildings	☐ Hospital route
☐ Driving (general)	☐ Manual lifting	☐ Weather (storms, wind, lightning, etc.)	☐ Monitoring requirements
☐ Driving (off road)	☐ Noise	☐ Other:	☐ PPE requirements
☐ Drums/containers	☐ Overhead obstructions	☐ Other:	☐ Work zones
☐ Electrical (incl. extension cords)	☐ Power tools (electric & gas)	☐ Other:	☐ Other:
☐ Excavation/trenching	☐ Radiological	☐ Other:	☐ Other:

Note: First day on site should include topics from HASP. Subsequent days may include a subset of topics applicable to the day's activities.

SITE-SPECIFIC TRAINING /KEY SAFETY ELEMENTS DISCUSSED

Examples may include operation of specialized tools or equipment and team members' specific roles and responsibilities.

UPDATES/MODIFICATIONS*:

*This section should include hazards or conditions identified in the field that have changed since the site-specific health and safety plan was prepared. Updates in hazards and control measures, monitoring requirements, and PPE requirements must be included in a safety plan addendum. Approval of the addendum by a safety coordinator (OSC, RSC, CHSD) must be documented (signed addendum form and/or documented in logbook).

SAFETY MEETING ATTENDEES:

Name (printed)	Signature	Organization

Additional attendees shall sign the back of this form.

DAILY SAFETY MEETING RECORD

Project Name:	Project Number:
Project Location (city/state):	
Date/time:	Weather:

DAILY ACTIVITIES:

MEETING TOPICS (see site-specific health and safety plan for details):

Hazards Discussed			Other Safety Topics
☐ Biological (insects, plants, etc.)	☐ Fire/explosion	☐ Railroads	☐ Buddy system
☐ Cold stress	☐ Hand tool usage	☐ Sunburn (skin/eyes)	☐ Communication
☐ Chemical hazards	☐ Heat stress	☐ Slips, trips, falls	☐ Decontamination procedures
☐ Compressed gas cylinders	☐ Heavy equipment (working near)	☐ Traffic (working near)	☐ Emergency procedures
☐ Confined space	☐ Heights	☐ Utility lines	☐ First aid
☐ Drilling/Geoprobe	☐ Infectious material	☐ Unoccupied buildings	☐ Hospital route
☐ Driving (general)	☐ Manual lifting	☐ Weather (storms, wind, lightning, etc.)	☐ Monitoring requirements
☐ Driving (off road)	☐ Noise	☐ Other:	☐ PPE requirements
☐ Drums/containers	☐ Overhead obstructions	☐ Other:	☐ Work zones
☐ Electrical (incl. extension cords)	☐ Power tools (electric & gas)	☐ Other:	☐ Other:
☐ Excavation/trenching	☐ Radiological	☐ Other:	☐ Other:

Note: First day on site should include topics from HASP. Subsequent days may include a subset of topics applicable to the day's activities.

SITE-SPECIFIC TRAINING /KEY SAFETY ELEMENTS DISCUSSED

Examples may include operation of specialized tools or equipment and team members' specific roles and responsibilities.

UPDATES/MODIFICATIONS*:

*This section should include hazards or conditions identified in the field that have changed since the site-specific health and safety plan was prepared. Updates in hazards and control measures, monitoring requirements, and PPE requirements must be included in a safety plan addendum. Approval of the addendum by a safety coordinator (OSC, RSC, CHSD) must be documented (signed addendum form and/or documented in logbook).

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Name (printed)	Signature	Organization

Additional attendees shall sign the back of this form.

DAILY SAFETY MEETING RECORD

Project Name:	Project Number:
Project Location (city/state):	
Date/time:	Weather:

DAILY ACTIVITIES:

MEETING TOPICS (see site-specific health and safety plan for details):

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☐ Drums/containers	☐ Overhead obstructions	☐ Other:	☐ Work zones
☐ Electrical (incl. extension cords)	☐ Power tools (electric & gas)	☐ Other:	☐ Other:
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Examples may include operation of specialized tools or equipment and team members' specific roles and responsibilities.

UPDATES/MODIFICATIONS*:

*This section should include hazards or conditions identified in the field that have changed since the site-specific health and safety plan was prepared. Updates in hazards and control measures, monitoring requirements, and PPE requirements must be included in a safety plan addendum. Approval of the addendum by a safety coordinator (OSC, RSC, CHSD) must be documented (signed addendum form and/or documented in logbook).

SAFETY MEETING ATTENDEES:

Name (printed)	Signature	Organization

Additional attendees shall sign the back of this form.

APPENDIX D

STANDARD OPERATING PROCEDURES

APPENDIX E

PHYSICAL AND BIOLOGICAL HAZARD EVALUATION AND CONTROL TABLE

PHYSICAL AND BIOLOGICAL HAZARD EVALUATION AND CONTROL

1. Complete the following table of potential physical and biological hazards and control measures associated with site activities.
2. Delete all non-applicable rows (shade them only until reviewed) and add rows as needed.
3. For each hazard, assign a risk level (i.e., likelihood - high, medium, low) for each task as applicable.
4. Edit specific hazard control measures based on tasks and site conditions.
5. **SOPs and attachments pertinent to the physical and biological hazards referenced below shall be attached to this Health and Safety Plan. Health and Safety SOPs are located on The Point.**
6. Be sure to edit information in columns as appropriate for the site work (additions and deletions). Hazard control measures listed for each hazard are for guidance only.

Physical and Biological Hazard Evaluation and Control

Hazard	Source or Contributing Factor(s)	Risk Level by Task (H = High; M = Medium; L = Low)	Hazard Control Measures
Physical Hazards			
Cold Stress	Low ambient temperatures with: ▪ High wind conditions ▪ Lack of adequate warm clothing ▪ Wet clothing	Task 1: low Task 2: low Task 3: low Task 4:	▪ Provide warm break area and adequate breaks. ▪ See WSP SOP for Cold Stress. ▪ Provide warm non-caffeinated beverages. ▪ Promote cold stress awareness. ▪ Wear layered wind & water resistant clothing. ▪ Other:
Compressed Gas Cylinders	X Calibration gases ☐ Helium cylinder ☐ Hydrogen cylinder ☐ Other (specify):	Task 1: low Task 2: low Task 3: low Task 4:	▪ Use caution when moving or storing cylinders. ▪ Store away from heat or area where physical damage may occur. ▪ A cylinder is a projectile hazard if it is damaged or its valve stem is broken. ▪ Store cylinders upright and secure them by chains or other means. ▪ Calibration gas cylinders should be stored to protect from physical damage and temperatures above 125°F. ▪ Other:
Cut/puncture	Sharp/pointed objects (nails sticking out of lumber, broken glass in windows, sharp edges on metal, jagged edges - on broken concrete, etc.) Abrasions and skin irritations are also attributed to a variety of causes during large-scale emergencies.	Task 1: low Task 2: low Task 3: low Task 4:	▪ Watch your step, especially in areas with large amounts of debris. ▪ Bring adequate lighting if entering structures. ▪ Wear proper foot and hand protection. ▪ Flatten or remove any nails that might cause puncture wounds. ▪ Other:
Drilling/Geoprobe	Physical injury and noise exposure - pinch points, unguarded moving parts, extended boom instability, buried utilities, etc. List drilling equipment (including Geoprobe): <u>Geoprobe and hollow stem auger drill rig</u> Driller: ☐ WSP X WSP subcontractor ☐ Other:	Task 1: Task 2: low Task 3: Task 4:	▪ Landfill caps will not be penetrated without prior discussions with corporate health and safety staff. ▪ Establish exclusion zone around the rig or Geoprobe. ▪ Wear appropriate hearing protection. ▪ Ensure that the local underground utilities protection agency has been contacted and markings are confirmed. ▪ Other:

Physical and Biological Hazard Evaluation and Control

Hazard	Source or Contributing Factor(s)	Risk Level by Task (H = High; M = Medium; L = Low)	Hazard Control Measures
Driving (general)	Accidents with injuries caused by: ▪ Driving while tired ▪ Cell phone use (including texting) and other distractions ▪ Congested roads ▪ Not wearing seat belts ▪ Not sitting on a proper car seat ▪ Aggressive driving ▪ Improperly maintained vehicle ▪ Distractions within or outside the vehicle	Task 1: low Task 2: low Task 3: low Task 4:	▪ Conduct vehicle inspection before use (e.g., the tires appear properly inflated; the spare tire and jack are located; head and tail lights, turn signal, and brake lights work; windshield solvent tank is full, and there is an ice scraper if it is winter). ▪ Do not drive when tired (i.e., check into a hotel, if necessary). ▪ Company policy forbids talking on phone or texting (including hands-free) while driving. ▪ Drive within the speed limit. ▪ Wear seatbelt at all times (driver and all passengers). ▪ Sit only on a seat (not coolers, boxes, etc.). ▪ Avoid aggressive driving. ▪ Refrain from non-essential activities that can distract the driver. ▪ Other:
Drums and Containers	Drums, tanks, or other containers that may contain flammable materials or other hazardous materials and may have special storage, handling, and opening requirements. ☐ Fuel storage: ☐ Waste storage: ☐ Abandoned drums/ containers:	Task 1: low Task 2: low Task 3: low Task 4:	▪ Refer to 29 CFR 1910.120(j) for further guidance associated with this hazard. ▪ See WSP SOP for drum and container sampling. ▪ Consider unlabeled drums or containers to contain hazardous substances and handle accordingly until the contents are identified. ▪ Inspect drums or containers and assure integrity prior to handling. ▪ Move drums or containers only as necessary; use caution and warn nearby personnel of potential hazards. ▪ Open, sample, and/or move drums or containers in accordance with established procedures; use approved drum/container-handling equipment. ▪ Other:

Physical and Biological Hazard Evaluation and Control

Hazard	Source or Contributing Factor(s)	Risk Level by Task (H = High; M = Medium; L = Low)	Hazard Control Measures
Excavation and Trenching	Will WSP staff be entering an excavation/trench? ☐ Yes ☐ No Potential for: ☐ Risk of cave-in and engulfment of personnel within trenches and excavations ☐ Fall hazard near excavation edges ☐ Hazardous atmosphere Personnel will not enter test pits.	Task 1: Task 2: Task 3: Task 4:	▪ Refer to 29 CFR 1926 Subpart P for further guidance associated with this hazard. ▪ See WSP SOP for Excavation and Trenching. ▪ Identify special personal protective equipment (PPE) (see Section 7) and monitoring (see Section 8) needs if personnel are required and approved to enter excavated areas or trenches. ▪ Maintain line of sight between equipment operators and personnel in excavations/trenches. Such personnel are prohibited from working in close proximity to operating machinery. ▪ Suspend or shut down operations at signs of cave in, excessive water, defective shoring, changing weather, or unacceptable monitoring results. ▪ Do not stand within 2 feet of leading edge. ▪ Place a visual (banner guard) or physical (construction fencing) barrier around the excavation. ▪ Other:
Fire and Explosion	Possible fuel and ignition sources: ▪ Vehicles ▪ Fuels ▪ Dry vegetation ▪ Equipment ▪ Propane use	Task 1: low Task 2: low Task 3: low Task 4:	▪ Inform personnel of the location(s) of potential fire/explosion hazards. ▪ Establish site-specific procedures for working around flammables. ▪ Ensure that appropriate fire suppression equipment and systems are available and in good working order. ▪ Define requirements for intrinsically safe equipment. ▪ Identify special monitoring needs (see Section 8). ▪ Remove ignition sources from flammable atmospheres. ▪ Coordinate with local fire-fighting groups regarding potential fire/explosion situations. ▪ Establish contingency plans and review daily with team members. ▪ Periodically monitor boreholes and vicinity of drilling and excavation sites for combustible gases. ▪ Other:
Heat Stress	Contributing factors: ▪ High ambient temperatures ▪ Heavy work load ▪ High humidity with low wind ▪ PPE use ▪ Being near radiant heat source ▪ Poor physical condition ▪ Certain medications ▪ Not acclimatized	Task 1: low Task 2: low Task 3: low	▪ Provide cool break area and adequate breaks. ▪ See WSP SOP for Heat Stress ▪ Provide cool non-caffeinated beverages. ▪ Promote heat stress awareness. ▪ Use active cooling devices (e.g., cooling vests) where specified. ▪ Other:

Physical and Biological Hazard Evaluation and Control

Hazard	Source or Contributing Factor(s)	Risk Level by Task (H = High; M = Medium; L = Low)	Hazard Control Measures
Heavy Equipment (working near)	Equipment operating on site: ☐ Backhoe ☐ Track hoe ☐ Skid loader ☐ Front-end loader ☐ Grader ☐ Crane ☐ Dump truck (standard) ☐ Potential for: ▪ Being struck by equipment ▪ Being injured by falling suspended loads	Task 1: Task 2: Task 3: Task 4:	▪ Define equipment routes, traffic patterns, and site-specific safety measures. ▪ Never cross the path of a piece of equipment without getting acknowledgement from the operator, that he/she sees you (i.e., nod or wave). ▪ Wear high visibility gear when working near heavy equipment. ▪ Stay out of the 'equipment's swing radius. ▪ Confirm that operators are properly trained and equipment has been properly inspected and maintained. Verify back-up alarms. ▪ Discuss proper hand signals and communication protocols between ground spotters and operators. ▪ Identify special PPE (Section 7) and monitoring (Section 8) needs. ▪ Avoid working in close proximity to operating equipment. ▪ Discuss lifting capacities, load limits, etc., based on expected work each day. ▪ Avoid being under suspended loads. ▪ Other:
Noise	Potential hearing damage caused by: (List sources of noise) Drill rig	Task 1: Task 2: low Task 3: Task 4:	▪ Use earplugs or muffs. ▪ Establish noise level standards for on-site equipment/operations. ▪ Inform personnel of hearing protection requirements (Section 7). ▪ Define site-specific requirements for noise monitoring (Section 8). ▪ Other:
Sunburn (skin and eyes)	Exposure to sunlight, either direct or reflected (i.e., by water or snow).	Task 1: low Task 2: low Task 3: low Task 4:	▪ Apply sunscreen. ▪ Wear hats/caps and long sleeves. ▪ Wear sunglasses. ▪ Monitor the 'day's UV index forecast on 'EPA's Sunwise website or using the Sunwise smart phone app. Risk of sunburn is moderate to high when the UV index ≥ 5 ▪ Other:

Physical and Biological Hazard Evaluation and Control

Hazard	Source or Contributing Factor(s)	Risk Level by Task (H = High; M = Medium; L = Low)	Hazard Control Measures
Slips, Trips, & Falls	▪ Uneven surfaces ▪ Debris/clutter ▪ Plastic sheeting (especially slippery when wet) ▪ Wet, icy, oily, muddy, or moss-covered surfaces ▪ Tangles of vegetation ▪ Steep slopes ▪ Mired footing ▪ Nighttime/darkness ▪ Inattentiveness ▪	Task 1:medium Task 2:medium Task 3:medium Task 4:	▪ Stay in good physical condition. ▪ See WSP SOP for Housekeeping for slip, trip and fall prevention. ▪ Wear appropriate and properly fitted footwear ▪ Stay well hydrated ▪ 'Don't be in a hurry ▪ Use handrails. ▪ Be attentive; constantly scan the way ahead when walking ▪ Avoid walking in dark places without portable lighting. ▪ Other:
Utility Lines	▪ Excavations and trenching work ▪ Damaged buildings ▪ Downed lines caused by high winds ▪ Heavy equipment activities during demolition ▪ Soil boring/drilling operations ▪ Raised boom during delivery and pick-up of roll off boxes ▪ Tree removal operations ▪	Task 1: Task 2: low Task 3: Task 4:	▪ Contact utilities to confirm underground locations. ▪ Identify/locate existing underground utilities prior to work. Call 811 or otherwise contact the state utility protection organization for utility location identification and contract with a private locator for private facilities. Have lines de-energized as necessary. ▪ Verify that overhead utility lines are at least 25 feet away from project activities and 10 feet from heavy equipment for electrical lines. ▪ Other:
Weather Extremes	Potential hazards: ☐ High winds ☐ Tornados X Lightning ☐ Blizzard X Heavy rain	Task 1: low Task 2: low Task 3: low Task 4:	▪ Establish site-specific contingencies for severe weather situations. ▪ Provide for frequent weather broadcasts. ▪ Do not work outdoors when lightning is present. Follow the **30-30 Rule**: ***If it takes less than 30 seconds to hear thunder after seeing the flash, lightning is near enough to pose a threat; after the storm ends, wait 30 minutes before resuming outdoor activities.*** ▪ Weatherize safety gear, as necessary (e.g., ensure eyewash units cannot freeze, etc.). ▪ Identify special PPE (Section 7) needs. ▪ Discontinue work during severe weather. ▪ Other:
Other:		Task 1: Task 2: Task 3: Task 4:	▪ ▪

Physical and Biological Hazard Evaluation and Control

Hazard	Source or Contributing Factor(s)	Risk Level by Task (H = High; M = Medium; L = Low)	Hazard Control Measures
Biological Hazards			
Biting and stinging insects and ticks	Outdoor areas where the following exist: X Mosquitos - can carry West Nile and other diseases) X Ticks – can cause Lyme disease, Rocky Mountain Spotted Fever and other diseases ☒ Bees, wasps, hornets ☐ Chiggers ☐ Fire ants	Task 1: low Task 2: low Task 3: low Task 4:	▪ Wear insect repellent on clothing that contains Permethrin, DEET or Picaridin. ▪ Wear light-colored long pants, socks, and long-sleeved shirts. Use head nets in high mosquito and tick areas. ▪ Perform tick checks throughout the day. ▪ Carry EpiPen or equivalent if needed. Inform other team members of its presence. ▪ Treat bites and stings with over-the-counter products that relieve pain and prevent infection. ▪ Avoid fire ants; their bites are painful and cause blisters. ▪ Other:
COVID-19 (Coronavirus)	Human-to-human transmission possible when not maintaining appropriate social distance	Task 1: low Task 2: low Task 3: low	▪ Workers should maintain proper social distance from one-another. ▪ Wear appropriate face covering when working close to one-another. ▪ See Section 6.4 and Appendix H for details.
Poisonous plants	Contact w/vegetation. Site is within range of the following: X Poison ivy ☐ Poison oak ☐ Poison sumac ☐ Poison hemlock ☐ Wild parsnip ☐ Giant Hogweed	Task 1: low Task 2: low Task 3: low Task 4:	▪ Wear appropriate PPE when walking in areas where these plants may grow. If potentially poisonous plants are encountered, alert other team member of their proximity. If contacted: ▪ Wash clothing and shoes with soap and hot water. Oil can linger on them. Use Technu® products to remove poisonous plant oil. ▪ DO NOT touch skin or clothing that still has the oil. ▪ DO NOT burn poisonous plants for any reason. The oil can be spread via smoke. ▪ Other:
Other:		Task 1: Task 2: Task 3: Task 4:	▪ ▪

Key:

CHSD = Corporate Health and Safety Director; **EPA** = Environmental Protection Agency; **DEET** = N,N-Diethyl-meta-toluamide; **DOT** = Department of Transportation; **GFCI** = Ground fault circuit interrupter; **N/A** = Not applicable; **NIOSH** = National Institute for Occupational Safety and Health ; **PFD** = Personal flotation device; **PM** = Project Manager; **PPE** = Personal protective equipment; **ROW** = Right-of-way; **SOP** = Standard operating procedure; **USCG** = U.S. Coast Guard; **UV** = Ultraviolet

APPENDIX F

CHEMICAL HAZARD EVALUATION SHEETS

Trichloroethylene	Formula: $ClCH=CCl_2$	CAS#: 79-01-6	RTECS#: KX4550000	IDLH: Ca [1000 ppm]
Conversion: 1 ppm = 5.37 mg/m^3	**DOT:** 1710 160			
Synonyms/Trade Names: Ethylene trichloride, TCE, Trichloroethene, Trilene				

Exposure Limits:
NIOSH REL: Ca
See Appendix A
See Appendix C
OSHA PEL†: TWA 100 ppm
C 200 ppm
300 ppm (5-minute maximum peak in any 2 hours)

Measurement Methods (see Table 1):
NIOSH 1022, 3800
OSHA 1001

Physical Description: Colorless liquid (unless dyed blue) with a chloroform-like odor.

Chemical & Physical Properties:
MW: 131.4
BP: 189°F
Sol: 0.1%
Fl.P: ?
IP: 9.45 eV
Sp.Gr: 1.46
VP: 58 mmHg
FRZ: -99°F
UEL(77°F): 10.5%
LEL(77°F): 8%
Combustible Liquid, but burns with difficulty.

Personal Protection/Sanitation (see Table 2):
Skin: Prevent skin contact
Eyes: Prevent eye contact
Wash skin: When contam
Remove: When wet or contam
Change: N.R.
Provide: Eyewash
Quick drench

Respirator Recommendations (see Tables 3 and 4):
NIOSH
¥: ScbaF:Pd,Pp/SaF:Pd,Pp:AScba
Escape: GmFOv/ScbaE

Incompatibilities and Reactivities: Strong caustics & alkalis; chemically-active metals (such as barium, lithium, sodium, magnesium, titanium & beryllium)

Exposure Routes, Symptoms, Target Organs (see Table 5):
ER: Inh, Abs, Ing, Con
SY: Irrit eyes, skin; head, vis dist, lass, dizz, tremor, drow, nau, vomit; derm; card arrhy, pares; liver inj; [carc]
TO: Eyes, skin, resp sys, heart, liver, kidneys, CNS [in animals: liver & kidney cancer]

First Aid (see Table 6):
Eye: Irr immed
Skin: Soap wash prompt
Breath: Resp support
Swallow: Medical attention immed

1,2-Dichloroethylene	Formula: ClCH=CHCl	CAS#: 540-59-0	RTECS#: KV9360000	IDLH: 1000 ppm
Conversion: 1 ppm = 3.97 mg/m^3	**DOT:** 1150 130P			
Synonyms/Trade Names: Acetylene dichloride, cis-Acetylene dichloride, trans-Acetylene dichloride, sym-Dichloroethylene				
Exposure Limits: **NIOSH REL:** TWA 200 ppm (790 mg/m^3) **OSHA PEL:** TWA 200 ppm (790 mg/m^3)			**Measurement Methods (see Table 1):** **NIOSH** 1003 **OSHA** 7	
Physical Description: Colorless liquid (usually a mixture of the cis & trans isomers) with a slightly acrid, chloroform-like odor.				

Chemical & Physical Properties:	Personal Protection/Sanitation (see Table 2):	Respirator Recommendations (see Tables 3 and 4):
MW: 97.0 **BP:** 118-140°F **Sol:** 0.4% **FI.P:** 36-39°F **IP:** 9.65 eV **Sp.Gr(77°F):** 1.27 **VP:** 180-265 mmHg **FRZ:** -57 to -115°F **UEL:** 12.8% **LEL:** 5.6% Class IB Flammable Liquid	**Skin:** Prevent skin contact **Eyes:** Prevent eye contact **Wash skin:** When contam **Remove:** When wet (flamm) **Change:** N.R.	**NIOSH/OSHA** **1000 ppm:** Sa:Cf£/PaprOv£/CcrFOv/GmFOv/ScbaF/SaF **§:** ScbaF:Pd,Pp/SaF:Pd,Pp:AScba **Escape:** GmFOv/ScbaE
	Incompatibilities and Reactivities: Strong oxidizers, strong alkalis, potassium hydroxide, copper [**Note:** Usually contains inhibitors to prevent polymerization.]	

Exposure Routes, Symptoms, Target Organs (see Table 5):	First Aid (see Table 6):
ER: Inh, Ing, Con **SY:** Irrit eyes, resp sys; CNS depres **TO:** Eyes, resp sys, CNS	**Eye:** Irr immed **Skin:** Soap wash prompt **Breath:** Resp support **Swallow:** Medical attention immed

APPENDIX G

SAFETY DATA SHEETS

Safety Data Sheet
according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and GHS

Effective date: 11/20/2014 **Revision:** 05/12/2015

ALCONOX

1 Identification of the Substance/mixture and of the Company/Undertaking

1.1 Product identifier
Trade name: ALCONOX
Application of the substance / the preparation: Cleaning material/ Detergent

1.2 Relevant identified uses of the substance or mixture and uses advised against:
No additional information available.

1.3 Details of the supplier of the Safety Data Sheet
Manufacturer/Supplier:
Alconox, Inc.
30 Glenn St., Suite 309
White Plains, NY 10603
Phone: 914-948-4040

Further information obtainable from: Product Safety Department

1.4 Emergencytelephone number:
ChemTel Inc.: (800)255-3924, +1 (813)248-0585

2 Hazards Identification

2.1 Classification of the substance or mixture Classification according to Regulation (EC) No 1272/2008:

Eye Irrit. 2B; H320: Causes eye irritation.

Information concerning particular hazards for human and environment:
The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.
Classificationsystem:
The classification is according to the latest editions of the EU-lists, and extended by company and literature data

2.2 Label elements
Labelling according to Regulation (EC) No 1272/2008:
The product is classified and labelled according to the CLP regulation.

Hazardpictograms:

Signal word: Warning

Hazard-determining components of labelling:
Sodium Alkylbenzene Sulfonate
Hazardstatements:
H320: Causes eye irritation.

Precautionary statements:
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P264: Wash thoroughly after handling.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses,if present and easy to do. Continue rinsing.
P337+P313: If eye irritation persists: Get medical advice/attention.

Safety Data Sheet
according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and GHS

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ALCONOX

Other Hazard description:
WHMIS-classification and symbols:
D2B - Toxic material causing other toxic effects

NFPA ratings (scale 0 - 4)

Health = 1
Fire = 0
Reactivity = 0

HMIS-ratings (scale 0 - 4)

HEALTH	1	
FIRE	0	
REACTIVITY	0	

Health = 1
Fire = 0
Reactivity = 0

2.3 Other hazards
Results of PBT and vPvB assessment
PBT: Not applicable.
vPvB: Not applicable.

3 Composition/Information on Ingredients

3.2 Chemical characterization: Mixture
Description: Hazardous ingredients of mixture listed below.

Identifying Nos.	Description	Wt. %
CAS: 68081-81-2	Sodium Alkylbenzene Sulfonate	10 - 25%
CAS: 497-19-8	Sodium Carbonate	5-15%
CAS: 7722-88-5	Tetrasodium pyrophosphate	5-15%
CAS: N/A	Proprietary (non-classified)	40-60%

Additional information: For the wording of the listed risk phrases refer to section 16.

4 First Aid Measures

4.1 Description of first aid measures
General information:
Contaminated individuals of chemical exposure must be taken for medical attention if any adverse effect occurs. Rescuers should be taken for medical attention, if necessary. Take copy of label and SDS to health professional with contaminated individual.
After inhalation:
Supply fresh air; consult doctor in case of complaints.
After skin contact:
Immediately wash with water and soap and rinse thoroughly. If skin irritation continues, consult a doctor.

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After eye contact:
Remove contact lenses if worn. Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

After swallowing:
Rinse out mouth and then drink plenty of water. Do not induce vomiting; call for medical help immediately.

4.2 Most important symptoms and effects, both acute and delayed:
No additional information available.

4.3 Indication of any immediate medical attention and special treatment needed:
No additional information available.

5 Firefighting Measures

5.1 Extinguishing media:
Suitable extinguishing agents:
CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

5.2 Special hazards arising from the substance or mixture:
No additional information available.

5.3 Advice for firefighters:
Protective equipment:
Wear self-contained respiratory protective device.
Wear fully protective suit.

6 Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures:
Product forms slippery surface when combined with water.

6.2 Environmental precautions:
Do not allow product to reach sewage system or any water course.

6.3 Methods and material for containment and cleaning up:
Pick up mechanically.
Clean the affected area carefully; suitable cleaners are: Warm water

6.4 Reference to other sections:
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information

7 Handling and Storage

7.1 Precautions for safe handling:
Ensure good ventilation/exhaustion at the workplace.
Keep receptacles tightly sealed.
Prevent formation of dust.
Information about fire - and explosion protection: No special measures required.

7.2 Conditions for safe storage, including any incompatibilities:
Storage:
Requirements to be met by storerooms and receptacles: No special requirements.
Information about storage in one common storage facility: None required.
Further information about storage conditions: Protect from humidity and water.

7.3 Specific end use(s): No additional information available.

Safety Data Sheet
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ALCONOX

8 Exposure Controls/Personal Protection

8.1 Control parameters

Ingredients with limit values that require monitoring at the workplace: Not required.

Additional information: The lists valid during the making were used as basis.

8.2 Exposure controls:

Personal protective equipment:

General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing.
Wash hands before breaks and at the end of work.
Avoid contact with the skin.
Avoid contact with the eyes and skin.

Respiratory protection:

Not required under normal conditions of use.
In case of brief exposure or low pollution use respiratory filter device.
In case of intensive or longer exposure use self-contained respiratory protective device.

Protection of hands:


Protective gloves

The glove material has to be impermeable and resistant to the product. Selection of the glove material should be based on the penetration time, rates of diffusion and the degradation of the glove material.

Material of gloves:

The selection of a suitable gloves does not only depend on the material, but also on the quality, and varies from manufacturer to manufacturer.

Penetration time of glove material:

The exact break through time has to be determined by the manufacturer of the protective gloves. DO NOT exceed the breakthrough time set by the Manufacturer.

For long term contact, gloves made of the following materials are considered suitable:

Butyl rubber, BR
Nitrile rubber, NBR
Natural rubber (NR)
Neoprene gloves

Eye protection:


Safety glasses

Body protection: Protective work clothing

9 Physical and Chemical Properties

9.1 Information on basic physical and chemical properties:

General Information:	
Appearance:	
Form:	Powder
Color:	White
Odor:	Odorless
Odor threshold:	Not determined.
pH-value (10 g/l) at 20 °C:	9.5 (NA for Powder form)
Change in condition:	
Melting point/Melting range:	Not determined.
Boiling point/Boiling range:	Not determined.

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Flash point:	Not applicable.
Flammability (solid, gaseous):	Not determined.
Ignition temperature:	Not determined.
Decomposition temperature:	Not determined.
Self-igniting:	Product is not selfigniting.
Danger of explosion:	Product does not present an explosion hazard.
Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
Vapor pressure:	Not applicable.
Density at 20°C:	1,1 g/cm³
Relative density:	Not determined.
Vapor density:	Not applicable.
Evaporation rate:	Not applicable.
Solubility in / Miscibility with water:	Soluble.
Segregation coefficient (n-octanol/water):	Not determined.
Viscosity:	
Dynamic:	Not applicable.
Kinematic:	Not applicable.
Solvent content:	
Organic solvents:	0.0 %
Solids content:	100 %
9.2 Other information:	No additional information available.

10 Stability and Reactivity

10.1 Reactivity:

10.2 Chemical stability:

Thermal decomposition / conditions to be avoided:

No decomposition if used according to specifications.

10.3 Possibility of hazardous reactions:

Reacts with acids.
Reacts with strong alkali.
Reacts with strong oxidizing agents.

10.4 Conditions to avoid:

No additional information available.

10.5 Incompatible materials:

No additional information available.

10.6 Hazardous decomposition products:

Carbon monoxide and carbon dioxide
Phosphorus compounds
Sulphur oxides (SOx)

11 Toxicological Information

11.1 Information on toxicological effects:

Toxicity data: No additional information available.

Primary irritant effect:

On the skin: Irritating to skin and mucous membranes.

On the eye: Strong irritant with the danger of severe eye injury.

Sensitization: No sensitizing effects known.

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Additional toxicological information:
The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version: Irritant.
Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation ofesophagus and stomach.

12 Ecological Information

12.1 Toxicity:
Aquatic toxicity: No additional information available.
12.2 Persistence and degradability: No additional information available.
12.3 Bioaccumulative potential: Not worth-mentioning accumulating in organisms.
12.4 Mobility in soil: No additional information available.
Ecotoxical effects:
Remark: Harmful to fish
Additional ecological information:
General notes:
Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water.
Do not allow product to reach ground water, water course or sewage system.
Danger to drinking water if even small quantities leak into the ground.
12.5 Results of PBT and vPvB assessment:
PBT: Not applicable.
vPvB: Not applicable.
12.6 Other adverse effects: No additional information available.

13 Disposal Considerations

13.1 Waste treatment methods:
Recommendation:
Smaller quantities can be disposed of with household waste.
Small amounts may be diluted with plenty of water and washed away. Dispose of bigger amounts in accordance with Local Authority requirements.
The surfactant used in this product complies with the biodegradability criteria as laid down in Regulation (EC) No. 648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.
Uncleaned packaging:
Recommendation: Disposal must be made according to official regulations.
Recommended cleansing agents: Water, together with cleansing agents, if necessary.

14 Transport Information

14.1 UN-Number:
DOT, ADR, ADN, IMDG, IATA: Not Regulated

14.2 UN proper shipping name:
DOT, ADR, IMDG, IATA: Not Regulated

14.3 Transport hazard class(es):
DOT, ADR, IMDG, IATA:
Class: Not Regulated
Label: -

14.4 Packing group:
DOT, ADR, IMDG, IATA: Not Regulated

Safety Data Sheet
according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and GHS

Effective date: 11/20/2014 **Revision:** 05/12/2015

ALCONOX

14.5 Environmental hazards:
Marine pollutant: No

14.6 Special precautions for user: Not applicable.

14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: Not applicable.

UN "Model Regulation": Not Regulated

15 Regulatory Information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture:
United States (USA):
SARA:
Section 355 (extremely hazardous substances): None of the ingredient is listed.
Section 313 (Specific toxic chemical listings): None of the ingredient is listed.
TSCA (Toxic Substances Control Act): All ingredients are listed.

Proposition 65 (California):
Chemicals known to cause cancer: None of the ingredient is listed.
Chemicals known to cause reproductive toxicity for females: None of the ingredient is listed.
Chemicals known to cause reproductive toxicity for males: None of the ingredient is listed.
Chemicals known to cause developmental toxicity: None of the ingredient is listed.

Carcinogenic Categories:
EPA (Environmental Protection Agency): None of the ingredient is listed.
TLV (Threshold Limit Value established by ACGIH): None of the ingredient is listed.
NIOSH-Ca (National Institute for Occupational Safety and Health): None of the ingredient is listed.
OSHA-Ca (Occupational Safety & Health Administration): None of the ingredient is listed.

Canadá:
Canadian Domestic Substances List (DSL): All ingredients are listed.
Canadian Ingredient Disclosure list (limit 0.1%): None of the ingredient is listed.
Canadian Ingredient Disclosure list (limit 1%):

497-19-8	Sodium Carbonate
7722-88-5	Tetrasodium pyrophosphate
151-21-3	Sodium dodecylsulphate

15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other Information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Relevant phrases:

H320: Causes eye irritation.

Safety Data Sheet
according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and GHS

Effective date: 11/20/2014 **Revision:** 05/12/2015

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Abbreviations and Acronyms:

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.
IMDG: International Maritime Code for Dangerous Goods.
DOT: US Department of Transportation.
IATA: International Air Transport Association.
GHS: Globally Harmonized System of Classification and Labelling of Chemicals.
ACGIH: American Conference of Governmental Industrial Hygienists.
NFPA: National Fire Protection Association (USA).
HMIS: Hazardous Materials Identification System (USA).
WHMIS: Workplace Hazardous Materials Information System (Canada).
VOC: Volatile Organic Compounds (USA, EU).
LC50: Lethal concentration, 50 percent.
LD50: Lethal dose, 50 percent.

SDS Created by:

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APPENDIX H

COVID-19 EMPLOYEE FIELD WORK GUIDANCE

Ecology and Environment, Inc.

Novel Coronavirus 2019 (COVID-19) Action Plan

Confidential Business Information – Do Not Disseminate Beyond E & E and Clients

Ecology and Environment Inc. (E & E) has prepared this plan in response to the COVID-19 pandemic in the United States. E & E is committed to complying with the requirements and recommendations of recognized national and international health organizations such as the Centers for Disease Control and Prevention and the World Health Organization. Also, E & E shall comply with all federal, state, and local mandates associated with the COVID-19 pandemic. The health and safety of our employees, clients and community is of paramount importance, therefore E & E shall adhere to the following practices and restrictions through the course of this pandemic. This plan shall be updated as needed.

1.0 Travel - General

International travel is prohibited, and domestic travel is highly restricted. All travel requests are routed to E & E's Regional Directors and corporate health and safety for consideration. Only critical business travel shall be considered for approval. Travel to Level 3 risk zones (i.e., high-risk zones) is prohibited.

2.0 Work Practices

The work practices listed in this section are intended to reduce the likelihood of contracting COVID-19 or spreading the virus if diagnosed with COVID-19.

- All personnel must perform a daily self-assessment prior to conducting work outside the home (fieldwork or office work). Personnel may complete the self-assessment by answering the questions on the **E & E Daily Safety Meeting Addendum Health Screening Questionnaire** (Exhibit 2), or using electronic means developed by WSP.
- The **E & E Daily Safety Meeting Addendum Health Screening Questionnaire** is required to be completed daily by field personnel (or remotely by a supervisor) prior to commencement of fieldwork., and preserved with the project file to document that site workers passed health screening for COVID-19 prior to being allowed on-site. Personnel that cannot answer "No" to all of the questions should not complete the questionnaire, and should not enter the site, but should instead follow the instructions in Exhibit 1.
- Stay home if you are sick. If COVID-19 symptoms present (fever, cough, sore throat, shortness of breath or difficulty breathing, chills, repeated shaking with chills, muscle pain, headache, sore throat and new loss of taste or smell) contact your healthcare provider (HCP). Employees that do not have a primary HCP or if employees cannot get in contact with their primary HCP should contact E & E's Corporate Medical Director (see Section 4.0). COVID-19 self-quarantine protocol is presented in Exhibit 1.
- Work from home where possible. Make arrangements with your supervisor to work from home to avoid potential contact with others in the workplace and community.
- If feeling sick while at work, notify your supervisor, leave the workplace and isolate at home. If COVID-19 symptoms present (fever, cough, sore throat, shortness of breath or difficulty breathing) contact your HCP.
- Avoid close contact with others, especially with sick people. Maintain at least 6 feet of separation from others around you where possible and do not shake hands.
- Avoid assembling in large groups. All meetings should be held using remote technology (e.g., conference calls, Teams).
- Practice good hand-washing hygiene. Wash your hands with soap and water for at least 20 seconds frequently. This should be done after touching common surfaces, going to the bathroom, blowing your nose, coughing or sneezing. If hand soap and water is not available, use hand sanitizer with at least 60% alcohol.

- Avoid direct hand contact with frequently touched common surfaces (e.g., door handles, stairway railings, elevator buttons). Use a tissue or other disposable material as a barrier.
- Avoid hand to face contact, especially hand contact with eyes, nose or mouth.
- Cover your mouth with a tissue when coughing or sneezing and dispose of the tissue in the trash. If tissues are not available, cough or sneeze into the crook of your elbow.
- Routinely clean and disinfect frequently touched common surfaces. Disinfecting wipes or solutions shall be the type that is effective against a broad spectrum of pathogens including bacteria, antibiotic resistant bacteria, viruses and fungi. If these types of disinfecting wipes or solutions are not commercially available, employees may use a 10% bleach to 90% water solution.
- Ensure that disinfecting procedures follow U.S. Environmental Protection Agency (USEPA) guidance. These guidelines include information about how long each treatment needs to be in contact with a surface before it can be considered disinfected. Disinfecting guidelines are available on the USEPA website (search List N: Disinfectants for Use Against SARS-CoV-2).
- Make sure you are aware of and comply with any customer requirements regarding COVID-19 prior to working at their project sites.

3.0 Fieldwork Guidance

Fieldwork must be client-required and should be minimized whenever possible. If you are uncomfortable traveling or conducting fieldwork, please contact your manager for options. No employee will be forced to conduct fieldwork. Traveling (not including commute) more than 1 hour or 60 miles for fieldwork must be approved by your Regional Director. Air travel for fieldwork must also be approved by your Regional Director. The Regional Director shall issue E & E's Essential Services letter to project team members for all approved fieldwork. Project team members shall maintain this letter in their possession to show to enforcement agencies upon request.

<u>Your Safety</u>

- Before heading out, consider all risks associated with the work you will be performing.
- If visiting a client site, ask the client what their current plan is for pandemic response and if they have any positive cases.
- Determine if the client requires specific PPE for the site before you go.
- The CDC recommends wearing facial coverings when travelling outside of the home. While not normally considered PPE, you should determine if your client will want you to wear one while working or travelling.
- Assess your health. If you are not well, stay home and contact your manager and Human Resources. Do not attempt fieldwork if you are not well.
- Practice good personal hygiene and social distancing of 6 feet or more.
- Health compromised employees should consider not conducting fieldwork.
- If at any point during fieldwork or travel the employee feels ill, they must self-isolate and contact Human Resources. Avoid any contact with other people.
- Employees should practice good hygiene practices while in the office or in the field. Don't shake hands.

<u>Travel</u>

- Limit all travel. Postpone or delay if possible.

- Project managers should attempt to find local resources to complete the work. Talk with local offices and sectors to see if other employees can perform the work.
- If possible, avoid air travel and staying in hotels. Hotels and other travel necessities can close without notice.
- If staying in a hotel, verify that the hotel is thoroughly cleaning and disinfecting the rooms between each guest. The hotel should post what they are doing on their website.
- Avoid all hotel common spaces such as bars, restaurants, pools, and hot tubs.
- If airline travel is necessary, situation-specific safety plans will be developed and must be followed.
- Check out restaurants that offer carry out and verify their hours of operation. Meals may be difficult to acquire in some areas.

Vehicle Use

- When driving to and from the field location, no more than two employees should be in the same vehicle. Neither employee should have any symptoms of illness. This should be communicated between employees to confirm. If two vehicles are available, take both vehicles.
- All work vehicle interiors shall be cleaned with a disinfecting agent before and after use. When cleaning, staff shall focus on high use items such as steering wheels, gear shifters, blinkers, armrests, radio/AC controls, and door handles.
- If the field staff can remain in their vehicle to observe work, then do so.

Field Equipment

- When loading equipment used for fieldwork, practice social distancing. Consider loading and unloading equipment at times that will minimize contact.
- Equipment should not be used by multiple people if possible.
- Any equipment that will be handled by employees should be cleaned and disinfected before and after each use. If this is impractical during use, nitrile, vinyl, or latex gloves should be worn whenever handling equipment. Even if disinfection before each use is practical, gloves should still be worn.
- When working around heavy equipment (forklifts, skid steers, excavators, etc.) employees should consider wearing respiratory protection (e.g., N95 filtering facepiece respirator). Exposure to airborne particles generated by these activities can result in respiratory irritation (e.g., coughing or sneezing). Wearing respiratory protection can also protect employees from breathing in respirable particulates that can carry the COVID-19. Where applicable, implement dust suppressions measures and avoid working downwind of heavy equipment to the extent practicable.

Field Offices

- Staff should clean their work areas, to include testing or inspection equipment, daily at the start and end of their day.
- Clean offices, including restrooms, nightly (conclusion of each shift), contact surfaces wiped down with a disinfecting agent.
- We should not have any in-person staff, group, or client meetings. We will conduct all meetings using a conference call or Teams whenever possible. Daily site safety meetings are required at all project sites. Participants shall maintain social distancing of 6 feet from other meeting attendees.

- Employees maintain social distancing of 6 feet from people while in the field and in the office, whenever possible.
- Where we control a field office, minimize visitors into the office, and attempt to conduct meetings using a conference call or Teams. Where possible, arrange for field office/trailer for E & E staff only to avoid working in a shared office setting.
- If an employee has a potential exposure, they shall work from home, if possible, and avoid coming into the office. Staff shall monitor their health for 14 days. Should any symptoms develop, employees shall contact Human Resources.
- Staff shall not come into an office if they are showing symptoms.
- Refer to the corporate guidelines for time charges related to self-quarantine, illness or remote working. If you have any questions speak with your manager and Human Resources.

4.0 Key Contacts

- Human Resources (humanresources@ene.com)
- Regional Directors:
  - Dennis Kasner, Eastern Region (dkasner@ene.com)
  - Brenda Powell, Gulf Coast Region (bpowell@ene.com)
  - Bill Richards, Western Region (wrichards@ene.com)
- Health and Safety:
  - Mike Donaldson, Health and Safety Compliance Manager, WSP Water and Environment (michael.donaldson@wsp.com)
  - Bill Sass, East Region Safety Coordinator (wsass@ene.com)
  - Tom Vroman, West Region Safety Coordinator (tvroman@ene.com)
- Patricia O'Donnell, Corporate Medical Director (podonnell@ene.com)

Revision History

Date	Section	Description	Initials
April 29, 2029	Title	Added "Confidential Business Information…" to title	TV
	2	Added additional COVID-19 symptoms to the first bullet.	TV
	3	Added CDC recommendation for face coverings when outside the home.	TV
	Exhibit 1	Added additional COVID-19 symptoms to the introductory paragraph.	TV
June 2, 2020	--	Added revision history table.	DPT
	--	Added "Confidential" to footer	DPT
	2	Added requirements for daily self-assessments and completion of the daily health assessment questionnaire for site work.	DPT
	4	Added Regional Safety Coordinators	DPT
	Exhibit 1	Modified language at the end of Exhibit 1 to indicate employees should contact personal HCP and HR if they believe they are affected by COVID-19 and moved paragraph to top of the Exhibit.	DPT
	Exhibit 2	Added Daily Safety Meeting Addendum Health Screening Questionnaire.	DPT

Exhibit 1

SELF-QUARANTINE PROTOCOL

Exhibit 1

Self-Quarantine Protocol

Employees shall immediately notify Human Resources (HR) and their personal health care provider if directly or potentially affected by COVID-19. HR will review information with the employee to allow E & E to initiate contact tracing, make appropriate notification to others potentially affected, and to implement appropriate sanitization measures.

Self-quarantine is required for employees that have been diagnosed with COVID-19, have been in close contact with another that has been diagnosed with COVID-19, have traveled to a COVID-19 high-risk region or experiences COVID-19 symptoms (fever, cough, sore throat, shortness of breath or difficulty breathing, chills, repeated shaking with chills, muscle pain, headache, sore throat and new loss of taste or smell). Self-quarantine protocol is described in the following scenarios.

Employee diagnosed with COVID-19	Employee shall recover at home and follow their HCP directions. Employee may return to their workplace only after being cleared by their HCP and shall forward a return to work note from their HCP to their workplace prior to their return.
Employee in close contact with another diagnosed with COVID-19	Employee shall self-quarantine for 14 days and monitor for COVID-19 symptoms. If symptoms present during the self-quarantine period, employee shall contact their HCP and follow their directions. If the employee is subsequently diagnosed with COVID-19, the employee shall recover at home and follow their HCP directions. Employee may return to their workplace only after being cleared by their HCP and shall forward a return to work note from their HCP to their workplace prior to their return. If employee does not experience COVID-19 symptoms during the 14-day quarantine period and no other person(s) in the quarantine setting has symptoms, the employee may return to the workplace.
Employee traveled to high-risk region	Employee that returns from personal travel to high-risk regions shall self-quarantine for 14 days and monitor for COVID-19 symptoms (international travel for business purposes is prohibited). If symptoms present during the self-quarantine period, employee shall contact their HCP and follow their directions. If the employee is subsequently diagnosed with COVID-19, the employee shall recover at home and follow their HCP directions. Employee may return to their workplace only after being cleared by their HCP and shall forward a return to work note from their HCP to their workplace prior to their return. If employee does not experience COVID-19 symptoms during the 14-day quarantine period and no other person(s) in the quarantine setting has symptoms, they may return to the workplace.
Employee has COVID-19 symptoms	Employee should stay home, or if at work, remove themselves from the workplace, contact their HCP and follow their directions. The HCP will determine if a COVID-19 test is relevant. If the employee is subsequently diagnosed with COVID-19, the employee shall recover at home and follow their HCP directions. Employee may return to their workplace only after being cleared by their HCP and shall forward a return to work note from their HCP to their workplace prior to their return.

Any employee that discovers they have been in the same general area (e.g., supermarket, waiting room), but not in close contact (within 6 feet), where a COVID-19 case has been confirmed shall monitor themselves for COVID-19 symptoms. Self-quarantine would only be required under these conditions if employee has symptoms or if required by the local health organization or their HCP.

Exhibit 2

E & E DAILY SAFETY MEETING ADDENDUM

HEALTH SCREENING QUESTIONNAIRE

E & E Daily Safety Meeting Addendum
Health Screening Questionnaire

Date: _____

Project Name: _____

Project Number: _____

City/State: _____

If remote screening is conducted:

Screener Name: _____

Screener Title: _____

Screener Signature _____

Each employee must answer "Yes" or "No" in the table below in response to the following questions:

1. Have you knowingly been in close or proximate contact in the past 14 days with anyone who has tested positive for COVID-19 or who has or had symptoms of COVID-19?
2. Have you tested positive for COVID-19 in the past 14 days?
3. Have you experienced any symptoms of COVID in the last 14 days (e.g.***, fever, cough, shortness of breath or other respiratory problem, chills, loss of taste or smell***)

Printed Name	Certification Questions* *Answer "Yes" or "No"*			Signature *(Unless completed remotely)*
	Q1	Q2	Q3	

*Immediately notify the Human Resources if "Yes" is answered for any of the questions. The affected employee should follow the self-quarantine protocol as described in the COVID-19 Action plan. Completed forms should be maintained with project records to confirm compliance with applicable requirements.

NEW YORK STATE | Department of Health

INTERIM GUIDANCE FOR CONSTRUCTION ACTIVITIES DURING THE COVID-19 PUBLIC HEALTH EMERGENCY

When you have read this document, you can affirm at the bottom.

As of May 13, 2020

Purpose

This Interim Guidance for Construction Activities during the COVID-19 Public Health Emergency ("Interim COVID-19 Guidance for Construction") was created to provide owners/operators of construction projects and their employees and contractors with precautions to help protect against the spread of COVID-19 as indoor and outdoor construction sites reopen.

These guidelines are minimum requirements only and any employer is free to provide additional precautions or increased restrictions. These guidelines are based on the best-known public health practices at the time of Phase I of the State's reopening, and the documentation upon which these guidelines are based can and does change frequently. Construction sites must adhere to all local, state and federal requirements relative to construction activities. All construction-involved entities are also accountable for staying current with any updates to these requirements, as well as incorporating same into any construction activities and/or Site Safety Plan.

Background

On March 7, 2020, Governor Andrew M. Cuomo issued Executive Order 202, declaring a state of emergency in response to COVID-19. Community transmission of COVID-19 has occurred throughout New York. To minimize further spread, social distancing of at least six feet must be maintained between individuals, where possible.

On March 20, 2020, Governor Cuomo issued Executive Order 202.6, directing all non-essential businesses to close in-office personnel functions. Essential businesses, as defined by Empire State Development Corporation (ESD) guidance, were not subject to the in-person restriction, but were, however, directed to comply with the guidance and directives for maintaining a clean and safe work environment issued by the New York State Department of Health (DOH), and were strongly urged to maintain social distancing measures to the extent possible.

On April 12, 2020, Governor Cuomo issued Executive Order 202.16, directing essential businesses to provide employees, who are present in the workplace, with a face covering, at no-cost, that must be used when in direct contact with customers or members of the public during the course of their work. On April 15, 2020, Governor Cuomo issued Executive Order 202.17, directing that any individual who is over age two and able to medically tolerate a face-covering must cover their nose and mouth with a mask or cloth face-covering when in a public place and unable to maintain, or when not maintaining, social distance. On April 16, 2020, Governor Cuomo issued Executive Order 202.18, directing that everyone using public or private transportation carriers or other for-hire vehicles, who is over age two and able to medically tolerate a face covering, must wear a mask or face covering over the nose and mouth during any such trip. It also directed any operators or drivers of public or private transport to wear a face covering or mask which covers the nose and mouth while there are any passengers in such a vehicle.

On April 26, 2020, Governor Cuomo announced a phased approach to reopen industries and businesses in New York in phases based upon a data-driven, regional analysis. On May 4, 2020, the Governor provided that the regional analysis would consider several public health factors, including new COVID-19 infections, as well as health care system, diagnostic testing, and contact tracing capacity. On May 11, 2020, Governor Cuomo announced that the first phase of reopening would begin on May 15, 2020 in several regions of New York, based upon available regional metrics and indicators.

In addition to the following standards, both essential and non-essential businesses must continue to comply with the guidance and directives for maintaining clean and safe work environments issued by DOH.

Please note that where guidance in this document differs from other guidance documents issued by New York State, the more recent guidance shall apply.

Standards for Responsible Construction Activities in New York State

No construction activity can occur without meeting the following minimum State standards, as well as applicable federal requirements, including but not limited to such minimum standards of the Americans with Disabilities Act (ADA), Centers for Disease Control and Prevention (CDC), Environmental Protection Agency (EPA), and United States Department of Labor's Occupational Safety and Health Administration (OSHA).

The State standards contained within this guidance apply to all construction activities – both essential and non-essential – in operation during the COVID-19 public health emergency until rescinded or amended by the State.

The following guidance is organized around three distinct categories: people, places, and processes.

I. PEOPLE

A. Physical Distancing

- For any work occurring indoors (e.g. construction within an existing building), no more than 1 worker per 250 square feet is allowed on site, excluding supervisors, unless additional personal protective measures are implemented; or

- A distance of at least six feet must be maintained among workers at all times, unless safety of the core activity requires a shorter distance (e.g. dry walling, glazing, lifting). Any time employees must come within six feet of another person, acceptable face coverings must be worn. Employees must be prepared to don a face covering if another person unexpectedly comes within six feet.
    - Acceptable face coverings for COVID-19 include but are not limited to cloth-based face coverings and disposable masks that cover both the mouth and nose.
    - However, cloth, disposable, or other homemade face coverings are not acceptable face coverings for workplace activities that typically require a higher degree of protection for personal protective equipment due to the nature of the work. For those activities, N95 respirators or other personal protective equipment (PPE) used under existing industry standards should continue to be used, as is defined in accordance with OSHA guidelines.

- The number of work stations and employee seating areas, and their use, may be modified or restricted, so that workers are at least six feet apart in all directions (e.g. side-to-side and when

facing one another) and are not sharing workstations without cleaning and disinfection between use. When distancing is not feasible between workstations, the use of face coverings or physical barriers (e.g. plastic shielding walls, in lieu of face coverings in areas where they would not affect air flow, heating, cooling, or ventilation) must be provided and required.

  - Physical barriers should be put in place in accordance with OSHA guidelines.
  - Physical barrier options may include: strip curtains, plexiglass or similar materials, or other impermeable dividers or partitions.

- The use of tightly confined spaces (e.g. elevators, hoists, vehicles) by more than one individual at a time, unless all employees in such space at the same time are wearing acceptable face coverings, should be prohibited. However, even with face coverings in use, occupancy must never exceed 50% of the maximum capacity of the space or vehicle, unless it is designed for use by a single occupant. Ventilation with outdoor air should be increased to the greatest extent possible, while maintaining safety protocols, and additional measures to prevent congregation in elevator waiting areas and limit density in elevators, such as enabling the use of stairs, should be taken.

- Measures should be put in place to reduce bi-directional foot traffic using tape or signs with arrows in narrow aisles, hallways, or spaces, and post signage and distance markers denoting spaces of six feet in all commonly used areas and any areas in which lines are commonly formed or people may congregate (e.g. clock in/out stations, health screening stations, etc.).

- Signs must be posted throughout the site, consistent with DOH COVID-19 signage. Customized signage specific to a workplace or setting can be developed and used, provided that such signage is consistent with the Department's signage. Signage should be used to remind employees to:
  - Cover their nose and mouth with a mask or cloth face-covering when six feet of social distance cannot be maintained.
  - Properly store and, when necessary, discard personal protective equipment.
  - Adhere to physical distancing instructions.
  - Report symptoms of or exposure to COVID-19, and how they should do so.
  - Follow hand hygiene and cleaning guidelines.

B. Gatherings in Enclosed Spaces

- In-person gatherings (e.g. shapeups, toolbox talks, safety meetings) must be limited to the greatest extent possible and other methods such as video or teleconferencing must be used whenever possible, per CDC guidance "Interim Guidance for Businesses and Employers to Plan and Respond to Coronavirus Disease 2019 (COVID-19)". When videoconferencing or teleconferencing is not possible, meetings should be held in open, well-ventilated spaces and it should be ensured that individuals maintain six feet of social distance between one another (e.g. if there are chairs, leave space between chairs, have employees sit in alternating chairs).

- Practices for adequate social distancing in confined areas, such as restrooms and breakrooms, must be put in place, and signage and systems (e.g. flagging when occupied) to restrict occupancy when social distancing cannot be maintained in such areas should be developed; and

- Schedules should be staggered for employees to observe social distancing (i.e., six feet of space) for any gathering (e.g. coffee breaks, meals, and shift starts/stops).

C. Workplace Activity

- Measures should be taken to reduce interpersonal contact and congregation, through methods such as:
    - limiting in-person presence to only those staff who are necessary to be on site;
    - adjusting workplace hours;
    - reducing on-site workforce to accommodate social distancing guidelines;
    - shifting design (e.g. A/B teams, staggered arrival/departure times);
    - prioritizing tasks that allow for social distancing (e.g. steel erection) over those that do not (e.g. dry walling, glazing); and/or
    - avoiding multiple crews and/or teams working in one area by staggering scheduled tasks and using signs to indicate occupied areas.

D. Movement and Commerce

- Non-essential visitors on site should be prohibited.
- Designated areas for pickups and deliveries must be established, limiting contact to the extent possible.
- On-site interactions (e.g. designate an egress for workers leaving their shifts and a separate ingress for workers starting their shifts) and movements (e.g. employees should remain near their workstations as often as possible) should be limited.

II. PLACES

A. Protective Equipment

- In addition to necessary personal protective equipment (PPE) as required for certain workplace activities, acceptable face coverings must be procured, fashioned, or otherwise obtained, and such coverings must be provided to employees while at work at no cost to the employee. An adequate supply of face coverings, masks and other required PPE should be on hand in the event an employee needs a replacement, or a visitor is in need. Acceptable face coverings include, but are not limited to, cloth (e.g. homemade sewn, quick cut, bandana), surgical masks, N95 respirators, and face shields.
- Face coverings must be cleaned or replaced after use and may not be shared. Please consult CDC guidance for additional information on cloth face coverings and other types of personal protective equipment (PPE), as well as instructions on use and cleaning.
    - Note that cloth face coverings or disposable masks shall not be considered acceptable face coverings for workplace activities that impose a higher degree of protection for face covering requirements. For example, if N95 respirators are traditionally required for specific construction activities, a cloth or homemade mask would not suffice. OSHA standards for such safety equipment must be adhered to.
- Employees must be allowed to use their own acceptable face coverings, but cannot be required to supply their own face coverings. Further, this guidance shall not prevent employees from wearing their personally owned additional protective coverings (e.g. surgical masks, N95 respirators, or face shields). Compliance with all applicable OSHA standards is required.

- Measures should be put in place to limit the sharing of objects, such as tools, machinery, materials, and vehicles, as well as the touching of shared surfaces, such as railings and fences; or, require workers to wear gloves (trade-appropriate or medical) when in contact with shared objects or frequently touched surfaces; or, require workers to sanitize or wash their hands before and after contact.

- Workers must be trained on how to adequately put on, take off, clean (as applicable), and discard PPE, including but not limited to, appropriate face coverings.

B. Hygiene and Cleaning

- Adherence to hygiene and sanitation requirements as advised by the CDC and DOH, including "Guidance for Cleaning and Disinfection of Public and Private Facilities for COVID-19," and the "STOP THE SPREAD" poster, as applicable, is required. Cleaning logs that include the date, time, and scope of cleaning must be maintained.

- Hand hygiene stations must be provided and maintained on site, as follows:
    - For handwashing: soap, running warm water, and disposable paper towels.
    - For sanitizer: an alcohol-based hand sanitizer containing at least 60% alcohol for areas where handwashing facilities may not be available or practical.

- Appropriate cleaning / disinfection supplies for shared and frequently touched surfaces must be provided, and employees should be encouraged to use these supplies before and after the use of these surfaces, followed by hand hygiene.

- Regular cleaning and disinfection of the work site must be conducted, as well as more frequent cleaning and disinfection for high risk areas used by many individuals and for frequently touched surfaces. Cleaning and disinfecting must be rigorous and ongoing and should occur at least after each shift, daily, or more frequently as needed. Please refer to DOH's "Interim Guidance for Cleaning and Disinfection of Public and Private Facilities for COVID-19" for detailed instructions on how to clean facilities.
    - Regular cleaning and disinfecting of restrooms must be ensured. Restrooms should be cleaned more often depending on frequency of use.
        - Distancing rules must be adhered to by reducing restroom capacity where feasible.
    - Equipment and tools must be regularly disinfected using registered disinfectants, including at least as often as workers change workstations or move to a new set of tools. Refer to the Department of Environmental Conservation (DEC) list of products registered in New York State and identified by the EPA as effective against COVID-19.
    - If cleaning or disinfection products or the act of cleaning and disinfecting causes safety hazards or degrades the material or machinery, hand hygiene stations must be put in place for in between uses and/or disposable gloves must be supplied.

- Cleaning and disinfection of exposed areas must be provided for in the event of a positive case of COVID-19 of a worker, with such cleaning to include, at a minimum, all heavy transit areas and high-touch surfaces (e.g. shared tools, machines, vehicles, handrails, portable toilets).

- CDC guidelines on "Cleaning and Disinfecting Your Facility" if someone is suspected or confirmed to have COVID-19 infection are as follows:
    - Close off areas used by the person who is sick.

        - Operations do not necessarily need to be closed, if affected areas can be closed off.
    - Open outside doors and windows to increase air circulation in the area.
    - Wait 24 hours before you clean or disinfect. If 24 hours is not feasible, wait as long as possible.
    - Clean and disinfect all areas used by the person who is sick, such as offices, bathrooms, common areas, and shared equipment.
    - Once the area has been appropriately disinfected, it can be opened for use.
        - Workers without close contact with the person who is sick can return to the work area immediately after disinfection.
            - Per CDC's "Evaluating and Testing Persons for Coronavirus Disease 2019 (COVID-19)," considerations when assessing close contact include the duration of exposure (e.g. longer exposure time likely increases exposure risk) and the clinical symptoms of the person with COVID-19 (e.g. coughing likely increases exposure risk as does exposure to a severely ill patient).
    - If more than seven days have passed since the person who is sick visited or used the facility, additional cleaning and disinfection is not necessary, but routine cleaning and disinfection should continue.

- Shared food and beverages (e.g. buffet style meals) must be prohibited, bringing lunch from home should be encouraged, and adequate space for employees to observe social distancing while eating meals must be identified and reserved.

C. Phased Reopening

- Reopening activities are encouraged to be phased-in so as to allow for operational issues to be resolved before production or work activities return to normal levels. A limited number of employees and hours, when first reopening should be considered so as to provide operations with the ability to adjust to the changes.

D. Communications Plan

- Affirmation that the state-issued industry guidelines have been reviewed, are understood, and that they will be implemented, must be provided.

- A communication plan for employees, visitors, and customers should be developed that includes applicable instructions, training, signage, and a consistent means to provide employees with information. Development of webpages, text and email groups, and social media should be considered.

III. PROCESSES

A. Screening and Testing

- Mandatory daily health screening practices must be implemented.
    - Screening practices may be performed remotely (e.g. by telephone or electronic survey), before the employee reports to the work site, to the extent possible; or may be performed on site.

- Screening should be coordinated to prevent workers from intermingling in close contact with each other prior to completion of the screening.
- At a minimum, screening should be required of all workers and visitors and completed using a questionnaire that determines whether the worker or visitor has:
  (a) knowingly been in close or proximate contact in the past 14 days with anyone who has tested positive for COVID-19 or who has or had symptoms of COVID-19,
  (b) tested positive for COVID-19 in the past 14 days, or
  (c) has experienced any symptoms of COVID-19 in the past 14 days.

- According to the CDC guidance on "Symptoms of Coronavirus," the term "symptomatic" includes employees who have the following symptoms or combinations of symptoms: fever, cough, shortness of breath, or at least two of the following symptoms: fever, chills, repeated shaking with chills, muscle pain, headache, sore throat, or new loss of taste or smell.

- Employees should be required to immediately disclose if and when their responses to any of the aforementioned questions change, such as if they begin to experience symptoms, both during work hours or outside of work hours.

- Daily temperature checks may also be conducted per Equal Employment Opportunity Commission or DOH guidelines. Keeping records of employee health data (e.g. temperature data) is prohibited.

- Any personnel performing screening activities, including temperature checks, must be appropriately protected from exposure to potentially infectious workers or visitors entering the site. Personnel performing screening activities should be trained by employer-identified individuals who are familiar with CDC, DOH, and OSHA protocols.

- Screeners should be provided and use PPE, including at a minimum, a face mask, and may include gloves, a gown, and/or a face shield.

- An employee who screens positive for COVID-19 symptoms should not be allowed to enter the worksite and should be sent home with instructions to contact their healthcare provider for assessment and testing. The local health department and DOH must be immediately notified about the suspected case. Information on healthcare and testing resources should be provided to the employee.

- An employee who has responded that they have had close contact with a person who is confirmed or suspected for COVID-19 may not be allowed to enter the worksite without abiding by the precautions outlined below and documentation of the employee's adherence to those precautions has been done.

- All employee and visitor responses collected by the screening process on a daily basis must be reviewed and a record of such review must be maintained. A contact as the party for workers to inform if they later are experiencing COVID-19-related symptoms, as noted in the questionnaire, must be identified.

- A site safety monitor must be designated whose responsibilities include continuous compliance with all aspects of the site safety plan.

- To the extent possible, a log of every person, including workers and visitors, who may have close contact with other individuals at the work site or area must be maintained; excluding deliveries that are performed with appropriate PPE or through contactless means. Log should contain contact information, such that all contacts may be identified, traced and notified in the event an employee is

diagnosed with COVID-19. Cooperation with local health departments contact tracing efforts is required.

- Employers and employees should take the following actions related to COVID-19 symptoms and contact:
  - If an employee has COVID-19 symptoms AND EITHER tests positive for COVID-19 OR did not receive a test, the employee may only return to work after completing a 14-day self-quarantine. If an employee is critical to the operation or safety of a site, the local health department and the most up-to-date CDC and DOH standards on the minimum number of days to quarantine before an employee is safely able to return to work with additional precautions to mitigate the risk of COVID-19 transmission may be consulted.
  - If an employee does NOT have COVID-19 symptoms BUT tests positive for COVID-19, the employee may only return to work after completing a 14-day self-quarantine. If an employee is critical to the operation or safety of a site, the local health department and the most up-to-date CDC and DOH standards on the minimum number of days to quarantine before an employee is safely able to return to work with additional precautions to mitigate the risk of COVID-19 transmission may be consulted.
  - If an employee has had close contact with a person with COVID-19 for a prolonged period of time AND is symptomatic, the employee should notify their employer and follow the above protocol for a positive case.
  - If an employee has had close contact with a person with COVID-19 for a prolonged period of time AND is NOT symptomatic, the employee should notify their employer and adhere to the following practices prior to and during their work shift, which should be documented:
    1) Regular monitoring: As long as the employee does not have a temperature or symptoms, they should self-monitor under the supervision of their employer's occupational health program.
    2) Wear a mask: The employee should wear a face mask at all times while in the workplace for 14 days after last exposure.
    3) Social distance: Employee should continue social distancing practices, including maintaining, at least, six feet distance from others.
    4) Disinfect and clean work spaces: Continue to clean and disinfect all areas such as offices, bathrooms, common areas, and shared electronic equipment routinely.
  - If an employee is symptomatic upon arrival at work or becomes sick during the day, the employee must be separated and sent home immediately, following the above protocol for a positive case.

B. Tracing and Tracking

- The local health department and DOH must be notified immediately upon being informed of any positive COVID-19 test result by a worker at the site.

- In the case of a worker or visitor testing positive, cooperation with the local health department is required to trace all contacts in the workplace, and the local health department must be notified of all workers and visitors who entered the site dating back to 48 hours before the worker began experiencing COVID-19 symptoms or tested positive, whichever is earlier, but confidentiality must be maintained as required by federal and state law and regulations.

- Local health departments may, under their legal authority, implement monitoring and movement restrictions of infected or exposed persons including home isolation or quarantine.

- Employees who are alerted that they have come into close or proximate contact with a person with COVID-19, and have been alerted via tracing, tracking or other mechanism, are required to self-report to their employer at the time of alert and shall not be permitted to remain or return to the work site.

IV. EMPLOYER PLANS

Completed safety plans must be conspicuously posted on site. The State has made available a business reopening safety plan template to guide business owners and operators in developing plans to protect against the spread of COVID-19.

Additional safety information, guidelines, and resources are available at:

New York State Department of Health Novel Coronavirus (COVID-19) Website
https://coronavirus.health.ny.gov/

Centers for Disease Control and Prevention Coronavirus (COVID-19) Website
https://www.cdc.gov/coronavirus/2019-ncov/index.html

Occupational Safety and Health Administration COVID-19 Website
https://www.osha.gov/SLTC/covid-19/

At the link below, affirm that you have read and understand your obligation to operate in accordance with this guidance:

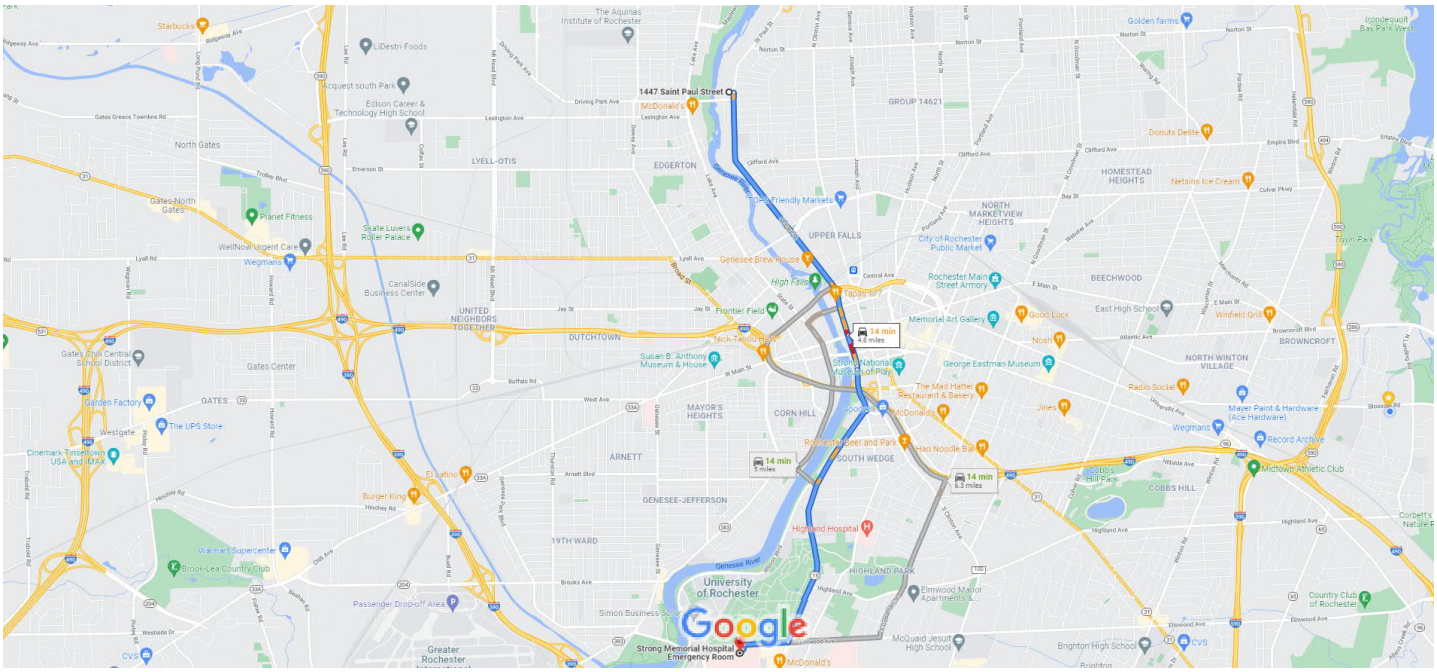
https://forms.ny.gov/s3/ny-forward-affirmation

APPENDIX I

ROUTE TO HOSPITAL MAP

1447 St Paul St, Rochester, NY 14621 to Strong Memorial Hospital Emergency Room

Drive 4.8 miles, 14 min



Map data ©2021 2000 ft

1447 St Paul St

Rochester, NY 14621

Take St Paul St and Mt Hope Ave to Thomas H Jackson Drive

13 min (4.7 mi)

1. Head south on St Paul St toward Avenue E

2.0 mi

2. Continue onto South Ave

0.2 mi

3. Use the middle 2 lanes to stay on South Ave

141 ft

4. Keep left to stay on South Ave

0.3 mi

5. Turn right onto Mt Hope Ave

1.8 mi

6. Turn right onto Elmwood Ave

0.3 mi

Continue on Thomas H Jackson Drive to your destination

47 s (348 ft)

7. Turn left onto Thomas H Jackson Drive

213 ft

8. Turn right

49 ft

9. Turn left

Destination will be on the left

85 ft

Strong Memorial Hospital Emergency Room

601 Elmwood Ave, Rochester, NY 14642

These directions are for planning purposes only. You may find that construction projects, traffic, weather, or other events may cause conditions to differ from the map results, and you should plan your route accordingly. You must obey all signs or notices regarding your route.