# APPENDIX

G. Site Safety and Health Plan (SSHP)

# SITE SAFETY AND HEALTH PLAN

## Lakeview Amphitheater Project
## Geddes, Onondaga County, NY

Prepared for:

**Onondaga County**

Prepared by:

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January 2015

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# LIST OF ACRONYMS AND ABBREVIATIONS

| | |
|---|---|
| ºC | degrees Celsius |
| ºF | degrees Fahrenheit |
| ACGIH | American Conference of Governmental Industrial Hygienists |
| AHA | Activity Hazard Analysis |
| ANSI | American National Standards Institute |
| bpm | beats per minute |
| CAMP | Community Air Monitoring Plan |
| CFR | Code of Federal Regulations |
| CIH | Certified Industrial Hygienist |
| COC | contaminant of concern |
| CPR | cardiopulmonary resuscitation |
| CSP | Certified Safety Professional |
| CTO | Contract Task Order |
| dBA | decibels A-weighted |
| DFOW | definable feature of work |
| DOT | Department of Transportation |
| eV | electron volt |
| EZ | Exclusion Zone |
| Gilbane | Gilbane Building Company |
| GSP | Gilbane's Onondaga Lake Amphitheater Safety Program |
| HAZWOPER | Hazardous Waste Operations and Emergency Response Standard |
| HSM | Health and Safety Manager |
| IDW | investigation-derived waste |
| mg/kg | milligrams per kilogram |
| $mg/m^3$ | milligrams per cubic meter |
| MSDS | material safety data sheet |
| NIOSH | National Institute for Occupational Safety and Health |
| OEL | occupational exposure level |
| PAH | polycyclic aromatic hydrocarbons |
| PCB | polychlorinated biphenyl |
| PDR | personal data-logging real-time aerosol monitor |
| PEL | permissible exposure limit |
| PID | photoionization detector |
| PPE | personal protective equipment |
| ppm | parts per million |
| SDS | Safety Data Sheet |
| SOW | Statement of Work |
| SPF | sun protection factor |
| SSHP | Site Safety and Health Plan |
| STEL | ACGIH Short-Term Exposure Limit |
| SWP | Safe Work Procedure |
| TLV | threshold limit value |

## LIST OF ACRONYMS AND ABBREVIATIONS (Continued)

| | |
|---|---|
| TPH | total petroleum hydrocarbons |
| TWA | time-weighted average |
| UL | Underwriters Laboratories |

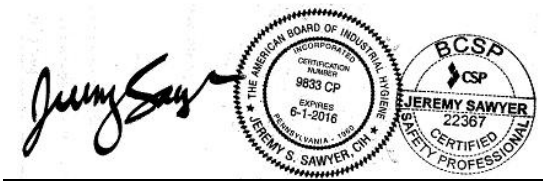
# CERTIFICATION OF HAZARD ASSESSMENT

This Site Safety and Health Plan (SSHP) is project-specific and addresses safety and health-related hazards anticipated to be encountered during project activities. This site-specific plan is intended to apply to the project activities at Onondaga Lake Amphitheater Project only, and must not be extrapolated to other substances, activities, or project locations without modification to address the specific hazards associated with those substances, activities, locations, and/or any other specific regulatory requirements.

A Personal Protective Equipment (PPE) Hazard Assessment in accordance with Occupational Safety and Health Administration (OSHA) regulation 29 Code of Federal Regulations (CFR) 1910.132 has been made to determine the likelihood of excessive exposure to physical and chemical site hazards. This plan addresses the potential hazards associated with each phase of the work and provides for appropriate protective measures for the specific tasks involved.

It is not possible in advance to discover, evaluate, and protect against all possible hazards that may be encountered during the duration of this project. Therefore, this SSHP may not be appropriate if the work is not performed by or using the methods presently anticipated. In addition, as the work is performed, conditions different from those anticipated may be encountered and this SSHP may have to be modified.

Adherence to the requirements of this SSHP will significantly reduce, but not eliminate, the potential for occupational injury and illness at the project site. The guidelines contained in this SSHP were developed specifically for the activities described herein and should not be used at any other site without the review and approval of a qualified safety and health professional.




Jeremy Sawyer CIH, CSP
Industrial Hygiene Manager
Gilbane

01/30/2015
Date

# 1.0 INTRODUCTION

This Site Safety and Health Plan (SSHP) was prepared by Gilbane Building Company (Gilbane), based on the Onondaga Lake Amphitheater Request for Proposal-Design-Bid Services (RFP) submitted by Onondaga County; the Honeywell Wastebeds 1-8 Remedial Investigation, revised report (August 11, 2014); The Wastebeds 1-8 HHRA (OBG, April 29, 2011); and the Supplemental Human Health Risk Evaluation, Onondaga Lake Superfund Site, Wastebeds 1-8, Lakeview Amphitheater Facility, Geddes, NY (June 02, 2014.) This purpose of this SSHP is to identify and analyze the hazards associated with intrusive activities during the building of the new Amphitheater.

This SSHP and Gilbane's Onondaga Lake Amphitheater Safety Program (GSP) were developed in accordance with the Code of Federal Regulations (CFR) Title 29, Part 1926, Safety and Health Regulations for Construction; 29 CFR 1910.120, Hazardous Waste Operations (as general guidance); New York's Division of Safety and Health (DOSH) other applicable regulations; and good industrial hygiene and safety practice.

This SSHP is designed to be part of Gilbane's overall Corporate Health & Safety Program. The Corporate Program is incorporated into this SSHP by reference. This SSHP is project-specific and addresses safety and health-related hazards anticipated to be encountered during project activities. This SSHP incorporates Gilbane's Hazard Communication Program and Codes of Safe Practice by reference. If, in any instance, there is a conflict between this SSHP and any employer's corporate health and safety program, the more stringent requirement will apply to the work.

This SSHP covers all Gilbane employees, and serves as the minimum requirement for protective measures for all trade contractors on the project working at the site. A copy of this SSHP will be provided to all trade contractors on site during project field activities. All trade contractors working on the project at the site are responsible for the health and safety of their own employees, and are responsible for compliance with the provisions of the applicable health and safety regulations. Each trade contractor will provide health and safety equipment for its employees. All on-site personnel, including visitors, are expected to be familiar with and comply with the provisions of this SSHP.

This SSHP is intended as a practical approach to the activities in light of the potential occupational and public health hazards identified. The procedures and guidelines herein are based on the best information available at the time of the preparation of this SSHP. Specific requirements may be revised during the course of the field work if new information is received or conditions change. Written amendments will document any changes made to this plan and will be included as an addendum.

# 2.0 SITE DESCRIPTION AND CONTAMINATION CHARACTERIZATION

## 2.1 SITE BACKGROUND AND DESCRIPTION/SCOPE OF WORK

The Lakeview Amphitheater Project site is a unique formation in that it consists primarily of manmade land that was constructed in the early 1900's by the Solvay Process Company as a repository for wastes generated as a result of the production of soda ash. The waste material, known as Solvay Process Waste, is a chalky material consisting mainly of calcium carbonate with gypsum, sodium chloride, and calcium chloride. The wastebeds themselves were formed as a series of lagoons into which Solvay Process Waste was pumped as liquid slurry from approximately 1916 to 1943. The slurry was decanted over time forming the upper strata beneath the Project site. The depth of this material across the Project site ranges typically between 60 and 70 feet and is underlain by native soil material. The western portion of the site also includes a former steel mill landfill, which sits atop the Solvay Waste and was capped and closed in 1989.

Onondaga Lake was designated as a Superfund site (EPA ID: NYD986913580) in December, 1994. The Onondaga Lake Superfund site includes the lake bottom, and ten other subsites around the lake and along the tributaries that are potential sources of contamination. One of the subsites, known as the Wastebeds 1 – 8 site, contains the Project site. This area is also listed on the New York State Registry of Inactive Hazardous Waste Sites as a State Superfund Class 2 site (NYS Registry: 734081). Specifically, the amphitheater Project site is located predominately within the areas known as Wastebeds 5 and 6 however the entrance promenade will also traverse a portion of Wastebeds 1 through 4. Wastebed 5 also contains the Crucible Landfill which is a former steel mill solid waste fill site which covers an area of approximately 20 acres on Wastebed 5 and contains an estimated volume of about 225,000 cubic yards of both non-hazardous and hazardous wastes. These wastes included slag, construction and refractory debris, boiler house ashes, coolant swarves, mill scale, treatment plant sludge, waste caustic solids, acid pickling sludges and air pollution dust. This landfill was closed in and is capped with an engineered cover system which includes a 60 mil HDPE liner and a fabric/soil composite cover.

The environmental conditions observed at the Site are related to historical industrial activities which occurred there as well as former and current land uses, including the following as

referenced in the report entitled, "Revised Remedial Investigation Wastebeds 1-8 Site, Geddes, NY, August 2014", prepared for Honeywell by O'Brien and Gere Engineers (RI report).

The Lakeview Amphitheater will be an outdoor event complex, which will include an amphitheater with an estimated seating capacity of approximately 17,500 (both covered and lawn seats), a nature area, vendor/festival area, recreational trails, and other amenities.

Associated infrastructure will include access roads/driveways and site utilities (power, water, sewer, electric, data communication and natural gas. The amphitheater is a component of a larger community revitalization initiative for the Western Shore of Onondaga Lake, the Village of Solvay and Town of Geddes. The project will occur in phases and is anticipated to begin in December of 2014 and conclude in the fall of 2015.

## 2.2 CONTAMINATION CHARACTERIZATION

Contaminants of concern (COCs) that may be present at the site are listed below and in Table 1. These contaminants pose various physical, chemical, and toxicological hazards. Routes of exposure for these contaminants may include inhalation of contaminated airborne particulates, skin contact or absorption, or ingestion due to poor work practices and/or poor personal hygiene practices. The COCs may contaminate equipment, vehicles, instruments, and personnel. The overall health threat from exposure to these chemicals is uncertain because (1) actual concentrations to which personnel could be exposed cannot be predicted, (2) the actual duration of exposure is unknown, and (3) the effects of low-level exposure to a mixture of chemicals cannot be predicted. However, Gilbane believes that the potential for high-level exposure is limited. Specific information on potential chemical hazards at the site is provided below and health hazards, occupational exposure limits and exposure symptoms for the COC's are presented in Table 1.

The waste streams in the various areas of the site include:

- Solvay Waste - The historic use of the project site was primarily as a settling basin for Solvay Waste, an inert alkaline material consisting largely of calcium carbonate, calcium silicate, and magnesium hydroxide. pH values of this material may range from 7 to 8 at the surface to over 12 at depth. The settling basins were in active operation from approximately 1916 to 1943. In addition, over the operating time frame there was periodic co-disposal of former Allied Chemical Main Plant byproducts including benzene, toluene, ethyl benzene and xylenes (BTEX); naphthalene and other PAHs; and phenol during settling basin operations

from approximately 1916 to 1943. These activities resulted in impacts to lakeshore surface soils/fill, subsurface soils/fill, groundwater, and surface water.

- Crucible Landfill - The disposal of both hazardous and non-hazardous waste materials containing chromium, nickel and other metals from Crucible Specialty Metals in an on-site Landfill from 1973 until its regulated closure in 1988. This activity reportedly resulted in impacts to surface soils/fill, subsurface soils/fill, and groundwater.
- Municipal sewage sludge - The placement of municipal sewage sludge from the City of Syracuse and Onondaga County generally containing metals, PAHs, pesticides, and PCBs in the Biosolids Area of Wastebeds 1 and 2 from 1925 to 1978. This activity resulted in impacts to surface soils/fill and subsurface soils/fill.
- Other - Portions of the WB 1-8 site are used as parking lots for the New York State Fair and the Site is transected by Interstate-690 and the New York State (NYS) Route 695 interchange. In addition to site contaminants, storm water run-off from parking areas, Interstate 690 and NYS Route 695, and upstream areas (i.e., Bridge Street and Crucible Parking lots) may have resulted in impacts to site surface water and sediment in the area known as Ditch A near Wastebed 1. These impacts include constituents common in this environment and in general urban run-off such as BTEX, PAHs, pesticides, PCBs, and metals.

Experience on similar sites indicates that standard dust controls such as water spray and careful soil handling will prevent hazardous airborne concentrations of these constituents to site workers and the general public. Dust concentrations and Volatile Organic Carbon (VOC) concentrations near site workers' breathing zones and at the jobsite perimeter will be monitored both visually and with direct-reading Photoionization Detector (PID) and aerosol monitoring instrumentation.

**Table 1**
**Contaminants of Concern**

| Compound | Maximum Concentration Detected in soil (mg/kg) | occupational exposure level (OEL) | Routes of Exposure | Symptoms |
|---|---|---|---|---|
| Acetone | 33 | PEL: 1000 ppm<br>TLV: 500 ppm | inhalation, ingestion, skin and/or eye contact | irritation eyes, nose, throat; headache, dizziness, central nervous system depression; dermatitis |
| Benzene | 210 | PEL 1.0 ppm<br>TLV 0.5 ppm | Inhalation, ingestion, skin and/or eye contact | Irritation of eyes, skin, nose, respiratory system; dizziness, headache, nausea, staggered gait, lassitude (weakness, exhaustion); , anorexia; dermatitis; bone marrow depression. Potential occupational carcinogen. |
| Toluene | 420 | PEL 200 ppm<br>TLV 20 ppm | Inhalation, ingestion, skin and/or eye contact | Irritation of eyes, nose; lassitude (weakness, exhaustion), confusion, euphoria, dizziness, headache; dilated pupils; lacrimation (discharge of tears); anxiety; muscle fatigue; insomnia; paresthesia; dermatitis; liver and kidney damage. |
| Ethylbenzene | 26 | PEL 100 ppm<br>TLV 20 ppm | Inhalation, ingestion, skin and/or eye contact | Irritation of eyes, skin, mucous membranes; headache; dermatitis; narcosis; coma. |
| Xylene | 500 | PEL:100 ppm<br>TLV 100 ppm | inhalation, ingestion, skin and/or eye contact | Irritation of eyes, skin, nose, throat; dizziness, excitement, drowsiness, incoordination, staggering gait; corneal vacuolization; anorexia; nausea; vomiting; abdominal pain; dermatitis. |
| Methylene chloride | 0.26 | PEL: 25 ppm<br>TLV: 50 ppm | inhalation, skin absorption, ingestion, skin and/or eye contact | irritation eyes, skin; lassitude (weakness, exhaustion), drowsiness, dizziness; numb, tingle limbs; nausea; [potential occupational carcinogen] |
| Naphthalene | 1,700 | PEL: 50 $mg/m^3$<br>TLV: 10 ppm | Inhalation, ingestion, skin and/or eye contact | Irritation of eyes, skin; lassitude (weakness, exhaustion), drowsiness, dizziness; numb and tingling limbs; nausea. Potential occupational carcinogen. |
| Pesticides Dieldrin, 4,4'-DDT, Alpha-chlordane, 4,4'-DDE | 1.6 (Dieldrin) | PEL, TLV: 0.25 $mg/m^3$ | inhalation, skin absorption, ingestion, skin and/or eye contact | headache, dizziness; nausea, vomiting, malaise (vague feeling of discomfort), sweating; myoclonic limb jerks; clonic, tonic convulsions; coma; [potential occupational carcinogen]; in animals: liver, kidney damage |
| Polycyclic aromatic hydrocarbons (PAHs | 620 | PEL: time-weighted average (TWA) 0.2 $mg/m^3$ (benzene-soluble fraction)<br>TLV: 0.2 $mg/m^3$ (benzene-soluble fraction) | Inhalation, ingestion, skin and/or eye contact | PAHs have been shown to cause carcinogenic and mutagenic effects and are potent immunosuppressants. Effects have been documented on immune system development, humoral immunity and host resistance. Also may cause dermatitis, bronchitis. |
| PCBs | 4.3 | PEL, TLV: 1 $mg/m^3$<br>PEL, TLV: 0.5 $mg/m^3$ | Inhalation, ingestion, skin | Irritation of eyes; chloracne; liver damage; reproductive effects; (potential occupational carcinogen). |
| Magnesium | 57 | PEL: 15 $mg/m^3$ | inhalation, skin and/or eye contact | irritation eyes, skin, respiratory system; cough |

| | | | | |
|---|---|---|---|---|
| | | TLV: 10 mg/m$^3$ | | |
| Chromium | 1.3 | PEL: 1 mg/m$^3$<br>TLV: 0.05 mg/m$^3$ | inhalation, ingestion, skin and/or eye contact | irritation eyes, skin; lung fibrosis (histologic) |
| Arsenic | 0.0773 | PEL, TLV: 0.01 mg/m$^3$ | inhalation, skin absorption, skin and/or eye contact, ingestion | Ulceration of nasal septum, dermatitis, gastrointestinal disturbances, peripheral neuropathy, resp irritation, hyperpigmentation of skin, [potential occupational carcinogen] |
| Lead | 1 | PEL: 15 mg/m$^3$<br>TLV: 10 mg/m$^3$ | inhalation, skin absorption, skin and/or eye contact, ingestion | lassitude (weakness, exhaustion), insomnia; facial pallor; anorexia, weight loss, malnutrition; constipation, abdominal pain, colic; anemia; gingival lead line; tremor; paralysis wrist, ankles; encephalopathy; kidney disease; irritation eyes; hypertension |

Notes:

| | | | |
|---|---|---|---|
| Max: | maximum concentration detected in soil | PEL: | Permissible Exposure Limit |
| Max:mg/kg: | milligrams per kilogram | TLV: | ACGIH Threshold Limit Value |
| Mg/m$^3$: | milligrams per cubic meter | TWA: | Time-weighted average |

### 2.2.1 Physical Hazards

As discussed above, Solvay waste pH values may range from 7 to 8 at the surface to over 12 at depth. Periodic pH readings will be collected during excavation. If readings indicate a pH value of 12 or greater Modified Level D (As described in Section 5.0) Personal Protective Equipment (PPE) will be required.

## 3.0 HEALTH AND SAFETY PERSONNEL AND RESPONSIBILITIES

Personnel on site will be responsible for continuous adherence to this SSHP during the performance of their assigned work. In no case may work be performed in a manner that conflicts with the requirements or intent of this SSHP. After due warnings, personnel violating safety procedures will be dismissed from the site and possibly terminated from this project. If there is any dispute with regard to health and safety, assistance should be requested from the Gilbane Safety Manager and/or CIH.

### 3.1 GILBANE COMPANY PROJECT MANAGER

The Gilbane Project Manager will have overall responsibility for successful and safe completion of the project. The PM will be responsible for assuring that project personnel are trained and qualified for their assigned tasks; setting expectations for the safe performance of their work; and assuring that all necessary safety equipment is provided to them. The PM also will be

responsible for assuring that all required recordkeeping is completed, including inspections, training documentation, and accident reporting and investigation.

### 3.2 GILBANE COMPANY CERTIFIED INDUSTRIAL HYGIENIST (CIH)

The Gilbane CIH for this project, Mr. Jeremy Sawyer, Certified Industrial Hygienist (CIH), Certified Safety Professional (CSP) has over 14 years of experience in managing safety and occupational health at hazardous waste site cleanup operations. Mr. Sawyer has developed and approved this SSHP, will approve all changes to the SSHP during the course of project activities, and will provide support to the project for questions or problems relating to industrial hygiene concerns at the site.

### 3.3 SITE SAFETY MANAGER

The site safety manager will assure that all activities are conducted in strict accordance with the GSP and SSHP requirements, while protecting the health and safety of on-site workers.

The site safety manager will oversee the work of Gilbane's trade contractors, and will communicate directly with the PM, CIH and client representatives. The site safety manager will be directly responsible for implementation of, and compliance of site personnel with, this SSHP, and will be on site or within ready communication at all times during field activities. The site safety manager will serve as the overall project competent person. The site safety manager also will enforce the minimum requirements of this SSHP for all personnel on site. The site safety manager has the responsibility and authority to modify and stop work, and/or to remove personnel from work areas, if conditions warrant. Other site safety manager responsibilities will include:

- Reviewing, understanding, and administering this SSHP in the field.
- Conducting health and safety oversight of Gilbane and trade contractor personnel.
- Monitoring daily weather and site conditions.
- Performing and documenting daily worksite inspections, tracking corrective actions and maintaining a site chemical inventory.
- Coordinating and conducting daily tailgate health and safety meetings.
- Halting project activities, when necessary, for significant noncompliance with this SSHP.

- Ensuring proper emergency notifications to client personnel.
- Investigating exposure incidents and injuries.
- Completing incident reports.
- Establishing on-site and off-site communications.

### 3.4 TRADE CONTRACTOR SITE SUPERVISORS

All trade contractors will be directly responsible for implementing and complying with this SSHP as the minimum health and safety requirements on site. Each trade contractor performing on-site activities will designate a responsible person to act as the company's Site Supervisor and competent person for health and safety. Each trade contractor Site Supervisor will act as response coordinator for that company's employees in case of an emergency. The on-site project supervisors for each trade contractor are responsible for oversight of the site activities for their own personnel. They are directly responsible for implementation of, and personnel compliance with this SSHP.

Trade contractor Site Supervisors will have the following responsibilities with respect to their employed personnel:

- Conducting and documenting daily health and safety inspections of the trade contractor's work areas.
- Ensuring that all site personnel receive the necessary training, medical monitoring, and respirator fit-testing, as required, prior to working on the site.
- Performing site-specific training as needed.
- Performing personal exposure air monitoring as required.
- Providing regular pre-task health and safety briefings.
- Ensuring that employees follow proper hygiene procedures.
- Reporting accidents and incidents.
- Preparing safety-related documentation and work logs.

### 3.5 SITE WORKERS

All site workers are expected to comply with the requirements of this SSHP, especially requirements for work practice controls and PPE. Employees must report all unsafe conditions, accidents, incidents, near misses, and/or injuries that occur at the jobsite to their supervisors immediately.

# 4.0 EMPLOYEE TRAINING REQUIREMENTS

## 4.1 EXCLUSION ZONES

All on-site personnel who may enter an EZ will be required to have the appropriate prior experience and training, in compliance with 29 CFR 1910.120. Required training includes the OSHA Hazardous Waste Operations and Emergency Response Standard (HAZWOPER) 40-hour basic training, 3 days of supervised field experience, 8-hour update training, and site-specific training as specified in Section 4.2.

## 4.2 SITE-SPECIFIC TRAINING

All personnel performing work on site will receive site-specific training prior to the initiation of the on-site activities to which the training applies. This training will include:

- Review of this SSHP.
- Key personnel and lines of authority.
- Project activities and potential hazards.
- Physical hazards on site.
- Chemical hazards on site.
- Hazard Communication training for handling chemical products, as necessary.
- Work zones.
- Training and medical monitoring requirements.
- Site safety rules and conditions of access.
- Required personal protective equipment.
- Emergency response procedures and route to the hospital.
- Hazard and accident reporting requirements.
- Rights to access medical and exposure monitoring records.

A copy of this SSHP, including all attachments, will be maintained on the site, and will be available to site employees. Documentation of this availability will be included with documentation of the training.

## 4.3 HAZARD COMMUNICATION TRAINING

All personnel on site who may be exposed to chemical hazards related to COC's and/or chemical products brought on site will receive Hazard Communication training. This training will include

a review of the chemical products present and the related Material Safety Data Sheet (MSDS)/Safety Data Sheet (SDS), routes of exposure, potential physical and toxicological hazards, appropriate handling procedures, safe storage, labeling, and personal protective equipment.

### 4.4 SITE SUPERINTENDENT

The Site Superintendent must have completed the 30-hour OSHA Construction Safety training and 8-hour HAZWOPER Supervisor Training.

### 4.5 SITE SAFETY MANAGER

The site safety manager must have completed the 30-hour OSHA Construction Safety training and 8-hour HAZWOPER Supervisor Training, with refresher training as appropriate.

### 4.6 FIRST AID AND CARDIOPLUMONARY RESUSCITATION

All on site Gilbane staff will be First Aid and Cardiopulmonary Resuscitation certified.

## 5.0 PERSONAL PROTECTIVE EQUIPMENT

The initial level of PPE required for project tasks will be either Level D or Modified Level D. These levels are also defined in the following lists.

Level D PPE will consist of the following, at a minimum:

- Standard work clothing (long sleeve shirt and pants required).
- ANSI-approved protective-toe work boots.
- ANSI-approved safety glasses with side shields.
- Hearing protection (if necessary) providing 25 dBA or greater protection.
- ANSI-approved hard hat.
- Gloves appropriate for the task, as necessary.

Level D-modified PPE will consist of the following, at a minimum:

- ANSI-approved protective-toe work boots.
- Tyvek®-type coveralls (may be constructed of other materials as appropriate).
- Gloves appropriate for the task, as necessary.
- Hearing protection (if necessary) providing 25 dBA or greater protection.
- ANSI-approved hard-hat.
- ANSI-approved safety glasses with side shields.

In the unlikely event that Level C PPE is used, it will consist of the following, at a minimum:

- National Institute for Occupational Safety and Health (NIOSH)-approved half-face or full-face air-purifying respirator with high-efficiency particulate air (filter) cartridges (P-100).
- ANSI-approved protective-toe boots.
- Tyvek® coveralls with hoods and elastic wrists and ankles.
- Gloves appropriate for the task, as necessary.
- Hearing protection (if necessary) providing 25 dBA or greater protection.
- ANSI-approved hard hat.
- ANSI-approved safety glasses with side shields, if a full-face air-purifying respirator is not worn.
- Overboots.

## 5.1 PERSONAL PROTECTIVE EQUIPMENT UPGRADE/DOWNGRADE

As site activities progress, levels of PPE are subject to change or modification. PPE may be upgraded when action levels are exceeded or whenever the need to protect the health of site personnel arises. All PPE level upgrades or downgrades will be communicated between the project CIH and the site safety manager and are based on the results of real-time and integrated air sampling data. Levels of PPE will not be downgraded without prior approval from the project CIH.

## 5.2 RESPIRATOR CARTRIDGE REPLACEMENT SCHEDULE

If the use of air purifying respirators becomes necessary, a respirator cartridge replacement schedule will be determined by the CIH based on air monitoring data, contaminants of concern, and the cartridge service life program supplied by the cartridge manufacturer. At a minimum, respirator cartridges will be changed at the end of each shift, when a contaminant-warning property such as odor or irritation is detected, or when breathing becomes more difficult than when the respirator was donned.

## 6.0 MEDICAL MONITORING

Based on historical information, our planned exposure controls and the OSHA medical surveillance requirements [29 CFR 1926.65(f)(2)] Gilbane will not require initial medical surveillance for our subcontractors. Medical surveillance may be required if any of the following OSHA thresholds are approached:

- All employees who are or may be exposed to hazardous substances or health hazards at or above the permissible exposure limits or, if there is no permissible exposure limit, above the published exposure levels for these substances, without regard to the use of respirators, for 30 days or more a year;
- All employees who wear a respirator for 30 days or more a year or as required by 1926.103;
- All employees who are injured, become ill or develop signs or symptoms due to possible overexposure involving hazardous substances or health hazards from an emergency response or hazardous waste operation; and
- Members of HAZMAT teams.

If these thresholds are met all personnel working on site will participate in a medical monitoring program appropriate to their work, in accordance with 29 CFR 1910.120 (f). Employees not directly involved with materials handling or disposal, and not likely to be exposed to site contaminants, are not subject to the medical monitoring requirements. Any site personnel and visitors who have not received medical clearance will be excluded from the active work areas where COC exposure is possible.

All on-site personnel working in an EZ will participate in a medical monitoring program in compliance with 29 CFR 1910.120. The monitoring program will consist of either a corporate annual physical examination or a pre-employment physical (if the employee was hired specifically for this job) provided by a board-certified occupational medicine physician, which includes:

- Medical and occupational history.
- Physical exam.
- Pulmonary function test.
- Electrocardiogram.
- Audiogram.

- Blood chemistry.
- Complete blood count with differential and platelets.
- Urinalysis with dipstick and microscopic morphology.
- Chest X-rays.

For those employees who work infrequently in the EZ (e.g., site visitors and those needing only occasional access), the medical exam will be that which the examining physician determines is sufficient given the potential level of exposure.

All personnel wearing respiratory protection must have medical clearance to wear respirators, in accordance with 29 CFR 1910.134. The medical exam will be that which the examining physician determines is sufficient to provide clearance to use respiratory protection.

Post-project physical examinations will be conducted in light of actual site conditions and exposures. Additional monitoring may be required based upon initial results of examination, employee symptoms, or physician request. Employee medical records will be maintained to preserve their confidentiality. Medical and exposure records will be managed in accordance with the provisions of Section 16.0 - Logs, Reports, and Recordkeeping.

# 7.0 EXPOSURE MONITORING / AIR SAMPLING PROGRAM

Airborne dust will be monitored visually on a continual basis. Water spray and careful soil handling will be used to prevent airborne dust from reaching workers' breathing zones and to prevent dust from escaping the perimeter of the Exclusion Zone. In addition, air monitoring instrumentation will be used to document that all field personnel are protected adequately from airborne contaminants during intrusive activities. Project-specific action levels are specified below in Table 2. The instrument and action levels to be used for this project are described in the following subsections.

Personal integrated air sampling (worker breathing zone) will be initiated for each type of worker (operator, ground personnel, etc.) performing intrusive work. After negative exposure assessments are established, no more samples would be necessary unless the process or noticeable change in soil conditions. Samples will be collected on each operator (3 days) and 3 ground personnel (3 days) for each COC.

## 7.1 REAL-TIME AEROSOL MONITOR

The data-logging real-time aerosol monitors (personal: TSI SidePak; area/perimeter: TSI DustTrak) are highly sensitivity photometric monitors with a light scattering sensing configuration that has been optimized for the measurement of the respirable fraction of airborne dust, smoke, fumes, and mists. Aerosol monitors will be used for real-time monitoring of airborne dust concentrations, and these measurements will be used to evaluate the need for additional dust control and/or personal protection and to determine the response action in emergency situations. Upwind and downwind dust monitoring stations will be established to monitor particulate emissions during intrusive activities.

Real-time monitoring for dust will initially be performed in all work areas with ongoing intrusive activities. Real-time monitoring locations for dust may be reduced by the CIH to include only the work areas with the highest potential for generating airborne dust, such as loading and unloading trucks, if previously conducted monitoring indicates airborne dust levels are consistently below action levels. Real-time Monitoring will also be conducted at the site perimeter at various locations in accordance with the Community Air Monitoring Plan (CAMP).

## 7.2 MULTIGAS METER PLUS PHOTOIONIZTION DETECTOR

A multigas meter plus photoionization detector (Multigas+PID) is a type of gas detector that measures oxygen ($O_2$), hydrogen sulfide ($H_2S$), carbon monoxide (CO), lower explosive limit (LEL) and VOCs (e.g. Benzene, Toluene, Ethylbenzene, and Xylene) in concentrations from sub-parts per billion to 10,000 parts per million (ppm). The Multigas+PID produces instantaneous readings and operates continuously. The Multigas+PIDs will be used for real-time monitoring of $O_2$, $H_2S$, CO, LEL and VOC's. These measurements will be used to evaluate the need for additional engineering and/or administrative controls or personal protection and to determine the response action in emergency situations.

Real-time monitoring for $O_2$, $H_2S$, CO, LEL and VOC's will be initially performed in all work areas with ongoing intrusive activities. Real-time monitoring locations for $O_2$, $H_2S$, CO, LEL and VOC's may be reduced by the CIH to include only the work areas with the highest potential for generating airborne dust, such as loading and unloading trucks, if previously conducted monitoring indicates airborne $O_2$, $H_2S$, CO, LEL and VOC's levels are consistently below action levels. Real-time Monitoring will also be conducted at the site perimeter at various locations in accordance with the Community Air Monitoring Plan (CAMP).

## 7.3 ACTION LEVELS

The action level for worker exposures to airborne contaminants is listed in Table 2 and is based on equivalent dust concentration calculations, the Permissible Exposure Limits (PEL) enforced by the Occupational Safety and Health Administration (OSHA), the Threshold Limit Values (TLV) enforced by the New York Division of Safety and Health (DOSH) and the maximum site contaminant concentrations, with an additional safety factor.

The site specific action level for real-time dust and VOC monitoring near intrusive activities will provide a large margin of safety. Using these maximum values, the total dust concentrations needed to exceed current PELs/TLVs have been calculated as indicated below:

**Table 2**

**Action Levels**

| Method | Monitoring Location | Monitoring Frequency [a] | Action Level [b] | Action |
|---|---|---|---|---|
| Visual dust observation | All areas | Ongoing | Any visible airborne dust | Apply water or other suppression method. |
| Real-time Aerosol Monitor | Near workers' breathing zones | At least hourly | <5 $mg/m^3$<br><br>>5 $mg/m^3$ | Level D PPE.<br><br>Increase dust controls until concentrations are reduced. |
| | Within the exclusion zone | Continuously | >10.0 $mg/m^3$ | Gilbane will revise the construction and/or engineering controls to limit further emissions. |
| PID with 10.6 electron volt (eV) lamp | Worker breathing zone/various locations | During all intrusive activities and handling of materials that may generate VOC vapors | 0 ≤ 1 ppm in the breathing zone for 5 minutes<br><br>>1 and ≤ 10 ppm for 5 minutes or more<br><br>> 10 ppm for 5 minutes or more | Air monitoring will be increased in order to identify the source of the vapors and increase vapor controls.<br><br>Work activities will be modified or suspended immediately in order to reduce vapor levels and air monitoring will be conducted continuously.<br><br>Work will be suspended and personnel removed from the area. Notify CIH. |
| Notes(s): | | | | |
| No one is permitted to downgrade levels of PPE without authorization from the CIH. | | | | |
| a | Frequency of air monitoring may be adjusted by the project CIH after sufficient characterization of site contaminants has been completed, tasks have been modified, or site controls have proven effective. | | | |
| b | Five readings exceeding the action level in any 15-minute period, or a sustained reading exceeding the action level for 5 minutes, will trigger a response. Action levels represent airborne particulate concentrations in excess of background particulate concentrations. | | | |
| $mg/m^3$ = | milligrams per cubic meter | | | |

# 8.0 SITE SAFETY PROVISIONS

## 8.1 EXPOSURE CONTROL METHODS

### 8.1.1 General Approach and Schedule of Implementation

Employee exposures to the site contaminants will be minimized through engineering and administrative controls, and through the use of PPE. Engineering and administrative controls will be used wherever possible, even if PPE will also be used. Exposure control methods will be implemented before any work with contaminated materials is performed on site, and protective measures will be used at all times during activities with the potential to create exposure. These controls may include proactive use of water spray; careful handling of soils and other materials; establishment of work zones; establishment of appropriate housekeeping and decontamination procedures; assignment of the appropriate personal protective equipment; and provision of hygiene facilities for hand- and face-washing. In addition, all personnel must show proof of the appropriate level of training before working on the site.

### 8.1.2 Work Zones

Work zones will be established during all work involving contaminated material handling, in accordance with the provisions of Section 11. Access to the work areas will be limited to authorized personnel with the appropriate protective equipment and training. All personnel working in an EZ or Regulated Area must perform the required decontamination procedures upon exiting the work zone.

### 8.1.3 Engineering and Work Practice Controls

Engineering controls for any soils or contaminated materials handling activities will consist of those methods that produce the least airborne dust, and the judicious use of water spray to minimize dust emissions. All work will be performed with the goal of eliminating visible airborne dust emissions. All work activities will be evaluated prior to implementation for their potential to produce dust, and the appropriate proactive measures will be implemented.

Visible dust will be used as an indicator of the need to increase water application. Dust control on site will be accomplished through water spray on excavated materials, roads, and other open soil or waste surfaces as necessary. Water application will be increased and work will be slowed down as necessary during higher wind conditions. Water spray will be applied in advance of the

work activities wherever possible, to allow the water to soak into the soil as a means of avoiding muddy conditions. Water will be applied carefully in order to avoid slick conditions.

Wastes will be handled in a manner that will minimize their spread.

Dermal exposure will be controlled by limiting contact, the use of protective clothing as appropriate, and proper personal hygiene. Ingestion hazards will be controlled by strict prohibition of eating, drinking, and smoking in the EZs and decontamination zones, and by rigorous enforcement of decontamination and personal hygiene protocols.

### 8.1.4 Housekeeping

Active work areas and equipment must be cleaned daily to prevent the accumulation of contaminated dust and debris, and waste materials must be contained on an ongoing basis. Dry sweeping and blowing with compressed air will not be used to clean up or remove contaminated debris or dirt. Removal of materials from equipment or protective clothing by blowing, shaking, or any other means, which may disperse materials into the air, is prohibited. All eating areas shall be kept clean and sanitary.

### 8.1.5 Inspections

The site safety manager and/or the Site Supervisor will make daily inspections of the work site and employee work practices to ensure compliance with this SSHP, note changed conditions, and identify new hazards. These inspections will be recorded in the daily log, or using SafetyNet and all necessary corrective actions will be implemented in a timely manner. Additionally, periodic in-depth inspections will be performed. These inspections should include, but are not limited to: housekeeping, implementation of tailgate meetings, employee training, employee exposure monitoring, project recordkeeping, accident investigation and recordkeeping, equipment maintenance and inspection, compliance with standard work procedures, response to employee safety concerns, and specific hazard communications.

### 8.1.6 Hazard Communication Program and Labeling

A chemical inventory and MSDS/SDS for chemical products that may be required during site operations will be maintained on site, and will be updated by the site safety manager as new chemicals are brought on site. Employees will receive training in the safe handling of hazardous

materials purchased for project activities. All chemical containers must remain labeled with the manufacturer's original label that describes the hazardous properties of the material. If the label is damaged during shipment and cannot be read, a new one must be obtained from the manufacturer. If chemicals are transferred to other containers, the second container must be labeled with the chemical product identity and primary hazards.

All on-site personnel are expected to conduct themselves in a professional manner on site. Appropriate conduct includes following established work rules, and supporting the safety of others. A violation of established work rules will result in disciplinary action, which may include verbal warning, written reprimand, removal from the site, and/or termination of employment.

## 8.2 CONDITIONS OF ACCESS TO EZS

- All personnel must meet the medical monitoring requirements described in this SSHP. Failure to submit to, or pass, any examination will be grounds for excluding the employee from the site.
- As required for site-specific work, employees must participate in an air quality exposure-monitoring program by wearing personal monitors or other sampling designated by the CIH and/or the site safety manager. Any employee refusing to participate in the program, or tampering with a monitoring device or sample, will be subject to disciplinary action.
- All on-site personnel must wear the prescribed health and safety equipment, and go through specified decontamination procedures upon exiting an EZ.
- Protective clothing to be worn inside the work areas will be supplied. None of this clothing will be permitted to leave the site with any employee for personal use. Any equipment to be used elsewhere for another project will be fully decontaminated before it is removed from the site.
- Kneeling or sitting directly on the ground in an EZ is prohibited.
- All employees will utilize a buddy system while working on the site.

# 9.0 WORK ZONES AND SITE SECURITY

This section presents work zone designations and site security procedures. Restrictions within the overall site will consist of establishment of EZs at each area where contaminated materials are handled, Decontamination Zones for equipment and personnel cleanup, and Support Zones.

## 9.1 EXCLUSION ZONES

The active work areas around each location where contaminated materials are excavated, stockpiled, or may be encountered will be considered EZs. The EZs will be established to accommodate all equipment, personnel, and vehicular movement where the potential for exposure to hazardous materials exists (e.g., around pile drivers, loaders, dump truck operations, soil stockpiles, etc.)

The EZs will be modified, as necessary, as the work progresses at a specific location. The EZ will be demarcated by barricades, warning tape, temporary construction fence, and/or other appropriate measures, as well as signs posted in English and, if appropriate, in any other language necessary for all workers and visitors to clearly understand. Access to these areas will be limited to authorized personnel with the appropriate protective equipment, who have met the training and medical requirements appropriate for their work effort, as specified in the appropriate sections of this SSHP. Site activities in an EZ will stop if unauthorized personnel enter the area, and work will not resume until those individuals have exited the area. Eating, drinking, and smoking will be prohibited in these zones in order to prevent inadvertent ingestion of contaminated materials.

## 9.2 DECONTAMINATION ZONES

Decontamination zones will be located immediately adjacent to each EZ. All site personnel working in the EZs must pass through the Decontamination Zone before proceeding to the Support Zone. Personal protective equipment cleaning and storage areas will be included in the Decontamination Zone. Equipment and vehicle decontamination areas will be located immediately adjacent to the work areas, in a manner that prevents tracking of contamination from the source location to other areas. Temporary equipment decontamination wash pads will be constructed as necessary. All wash water will be collected for appropriate testing and subsequent disposal.

## 9.3 SUPPORT ZONE

A Support Zone will be established outside each Decontamination Zone. An eyewash station, first aid kit, fire extinguisher, potable water, emergency communications equipment, and sanitary facilities will be maintained in each support zone. Portable or fixed toilet facilities will be provided and maintained in sanitary condition. Hand-washing facilities will be provided adjacent to the toilets. Adequate supplies of paper towels, toilet paper, and hand soap will be maintained at all times.

# 10.0 PERSONAL HYGIENE AND DECONTAMINATION

## 10.1 HYGIENE FACILITIES AND SANITATION

Portable toilet and hygiene facilities for the work crews will be located in clean areas near the work area. The number of toilets and the servicing interval will be appropriate for the size of the work crew. There will be a minimum of one toilet for every 20 workers of each sex, or fraction thereof, at the site. Toilet facilities will be lockable. The supervisor or foreman will assure that adequate breaks are given for personnel to use the toilet facilities. A portable-hand washing facility with adequate supply of soap, running water, and towels also will be provided. The site safety manager and Site Supervisors will ensure that employees wash their hands and faces thoroughly before and after breaks, before lunch, and at the end of the work day. Potable water in closed containers will be available on site.

## 10.2 PERSONAL DECONTAMINATION

Disposable PPE will be placed in trash bags and disposed of in on-site trash receptacles for subsequent off-site disposal. As needed, wash tubs with soap and water and rinse tubs will be provided for decontamination of boots and outer gloves that will be re-used. Respirators, if required, will be cleaned with respirator wipes unless gross contamination requires heavier cleaning in separate wash and rinse tubs. Soap and running water will be available for personnel to wash up after work; prior to eating, drinking, or smoking; or if any skin contact occurs during the workday.

## 11.0 EQUIPMENT DECONTAMINATION

The primary method to be used to prevent equipment or truck contamination is to prevent or minimize travel through contaminated materials. Any equipment that comes in contact with contaminated materials will be properly cleaned before being removed from the site. Equipment decontamination will be in proportion to the degree of contamination encountered.

Equipment decontamination is expected to require only gross removal of soils from buckets or wheels. Shoveling, wet- or damp-brushing, and/or wiping will be the primary decontamination methods used for equipment. Wastes removed from equipment will be returned to the appropriate waste stockpiles or placed with the load of waste for transport.

If necessary, when heavier contamination is present, equipment and vehicles will be washed with a pressure washer. Any pressure washing will be performed over a lined area. Decontamination will proceed until all soil and residues are removed. Waste liquids will be contained and disposed of properly. Any equipment used for excavation or moving of Solvay waste materials on-site will be decontaminated (i.e. steam cleaned with a pressure washer) before removal off-site.

Small equipment (e.g., shovels) will be washed in the same manner as contaminated personal protective equipment (i.e., with a brush and soapy water and rinse water).

Employees exiting the work area will wash any boots and/or gloves to be re-used in the buckets provided for washing and rinsing, and will remove contaminated clothing items carefully and place them in the appropriate containers.

### 11.1 DECONTAMINATION WASTE HANDLING

Decontamination wastes are expected to include disposable PPE and wash/rinse fluids. Bags of contaminated PPE will be included in the loads of contaminated waste for transport to the appropriate disposal facility.

Decontamination fluids will be containerized on site in DOT-approved containers prior to disposal. If approval for discharge to the sanitary sewer is not received due to contaminants exceeding regulatory limits, liquid wastes will be disposed of at a licensed waste disposal facility based on analytical results from representative samples, under the appropriate documentation (e.g., bill of lading or manifest).

# 12.0 EMERGENCY RESPONSE

Potential on-site emergencies are expected to be restricted to fires, injuries to site personnel, or minor spills. Site conditions are expected to be within the limits of response measures that can be taken by on-site personnel. Any emergency that is life-threatening, or that poses a potential threat to the public, will be considered a situation requiring outside assistance from emergency response agencies.

## 12.1 EMPLOYEE INJURY OR ILLNESS

If an employee is injured or becomes ill, he or she will be removed from the work area if it can be done safely and without aggravating medical conditions. An injured individual should be moved only under the following circumstances:

- When there is immediate danger (e.g., risk of fire/explosion, lack of oxygen, collapsing structure).
- When the location of the individual is obstructing co-workers or emergency personnel from caring for another individual who needs immediate attention.
- When the movement is necessary to administer proper care (e.g., transfer of the individual to a firm, flat surface for cardiopulmonary resuscitation).

Whenever possible, personnel injured on site who have been exposed to chemical hazards will be decontaminated prior to transport to the medical facility, so long as such procedures do not further compromise the health and safety of the injured individual. Emergency employee decontamination should consist of removing protective clothing and washing affected areas with soap and water as necessary. If necessary, protective clothing will be cut away to minimize additional trauma to the injured person.

## 12.2 CHEMICAL EXPOSURES

The following procedures will be initiated as soon as possible in response to chemical exposures:

- For eye exposure, wash the victim's eyes immediately at the emergency eyewash station using large amounts of water for 15 minutes and lifting the lower and upper eyelids occasionally. If irritation persists see a physician.
- For skin exposure, remove any contaminated clothing and wash the contaminated skin areas promptly using soap or mild detergent and water. Obtain medical attention immediately if there are symptoms of chemical exposure (e.g., redness, blistering, or ulceration of the skin).

- For inhalation exposure, move the person to an area with clean air immediately (unless the scene is determined to be unsafe, or other injuries make moving the victim inadvisable). Keep the affected individual warm and at rest. Do not give anything to drink to an unconscious person. If the person was or is unconscious, obtain medical attention immediately.
- For ingestion, contact the Poison Help Line (1-800-222-1222) regarding the emergency response procedures specific to the ingested chemical.

## 12.3 SPILLS

Care will be taken to prevent spills during handling of liquids. Any spill of contaminated soil, fuel, chemicals, or groundwater will be contained and cleaned up immediately. Hand tools (shovels) and/or heavy equipment can be used to berm and contain site spills utilizing soil if necessary. Liquids will be containerized for appropriate disposal. Personnel handling contaminated materials shall be current in the training specified in this SSHP. For personnel entering the EZ, this includes 40-hour HAZWOPER training, which, according to the OSHA standard, must include the elements of spill response. Drums and other liquid storage will be staged such that a spill in the vicinity of a storm water drain is avoided, if at all possible.

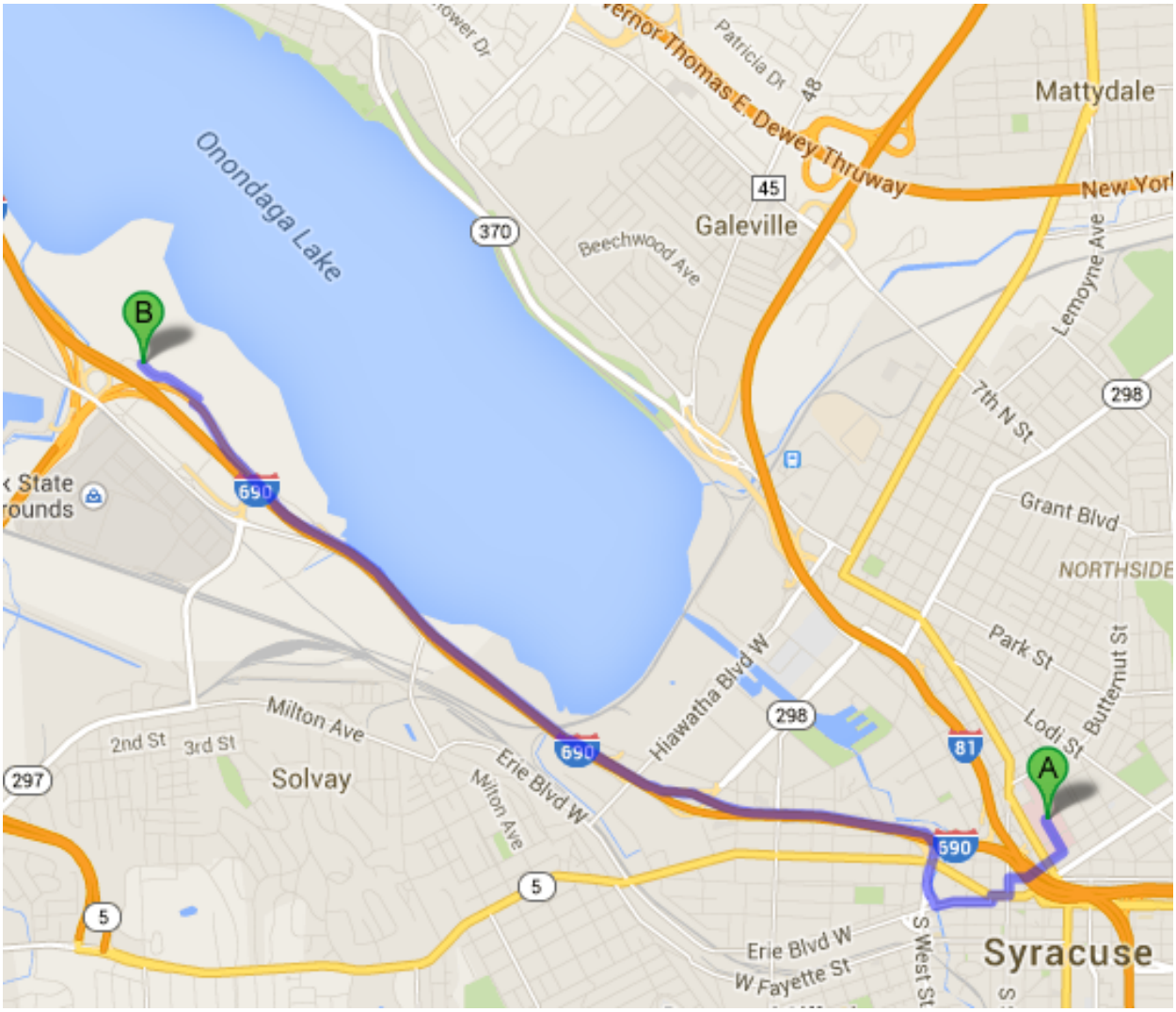
## 12.4 HOSPITAL EMERGENCY RESPONSE

In the event an incident requires response from an emergency response unit, site personnel shall meet the responding unit at the designated entrance to provide dispatch directions. Gilbane shall continually meet with emergency response units to ensure familiarity with the site.

In the event an incident occurs that requires off site medical treatment, that employee may be escorted (i.e. driven) to a hospital for assistance. The nearest accessible hospital is St. Joseph's Hospital Health Center located at 301 Prospect Avenue, Syracuse New York 13203. Directions from the project site (612 State Fair Blvd., Geddes, New York) to St. Joseph's Hospital Health Center are as follows:

- Drive Southeast from Project Site Trailers, leaving via the entrance to the Orange Parking Lot.
- Follow signs for I-690 E and merge onto I-690 E
- Take exit 12 for W. Genesee St.
- Turn left onto W Genesee St.

- Continue onto James St.
- Continue straight to stay on James St.
- Turn left onto N Townsend St.
- Take the 3rd left onto Union Ave.
- Arrive at St. Joseph's Hospital Health Center




# 13.0 LOGS, REPORTS, AND RECORDKEEPING

## 13.1 TYPES OF DOCUMENTATION

Health and safety-related documents will be maintained by the site safety manager throughout the duration of project activities. These documents include, but are not limited to:

- This SSHP.
- The GSP
- Site safety inspections.
- Vehicle and heavy equipment inspections.
- Safety equipment inspections.
- Visitor sign-in logs and SSHP acknowledgements.
- Tailgate safety meeting records.

- Employee training and medical clearance (non-confidential) records.
- Instrument calibration records.
- Air monitoring records and documentation of employee exposures.
- Accident or incident reports.
- MSDS/SDS for chemical products used on site and Chemical Inventory.

## 13.2 POSTINGS AND SIGNS

Warning signs will be utilized to warn personnel of work zones, special hazards, and PPE requirements. These notices will be posted in English and, as appropriate, in any other language necessary for all workers and visitors to clearly understand.

## 13.3 RECORDS MANAGEMENT

All safety-related records generated for project will be reviewed for completeness and accuracy by the site safety manager.

All on-site personnel will be required to provide documentation of their training and medical monitoring to the site safety manager before they begin to work at the site. Documentation must include, as appropriate to the individual's responsibilities:

- 40-hour HAZWOPER training.
- Most recent 8-hour refresher for hazardous waste.
- Most recent medical examination clearance, including clearance to wear respiratory protection (If Necessary).
- Most recent respirator fit test (If Necessary).
- CPR/first aid training.

The Gilbane site safety manager also must provide documentation of the following, as appropriate:

- 8-hour HAZWOPER supervisory course.
- 30-hour OSHA Construction Safety training.

The trade contractor Site Supervisors must provide documentation of the following as appropriate:

- 8-hour HAZWOPER supervisory course.
- Relevant Competent Person training.

These records will be tracked by the trade contractor and may be audited by the site safety manager.

Permanent medical records are maintained in confidential files by the respective contract physicians and/or medical clinics. The examining physician must supply the employing company with a medical status document certifying that the individual examined is physically capable of performing his/her individual work tasks and of wearing respiratory protective devices (as appropriate). These certifications are maintained in confidence at the company's offices. Medical records for each employee will be preserved and maintained for at least the duration of employment plus thirty years.

Each employee exposure record will be preserved and maintained for at least thirty years, and must contain the collection methodology (sampling plan), a description of the analytical and mathematical methods used, and a summary of other background data relevant to interpretation of the results, including a correlation of the employee name and job classification with the calculated or monitored exposure levels (this may be accomplished by a daily sign-in log).

## 14.0 REFERENCES

O'Brien & Gere. 2014. *Revised Remedial Investigation Report, Wastebeds 1-8, Geddes, New York*. May 2014.

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*100% Design Report, Wastebeds 1 through 8, Geddes, New York.* O'Brien & Gere Engineers, Inc., Syracuse, New York.

O'Brien & Gere. 2011a. *Cover System Pilot Study Work Plan.* August 2011.

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