REMEDIAL ACTION HEALTH AND SAFETY PLAN PHASE 1
FACILITY SITE WORK CONSTRUCTION
HUDSON RIVER PCBs SUPERFUND SITE

Prepared For:

GENERAL ELECTRIC

319 Great Oaks Office Boulevard
Albany, NY 12203

Prepared By:

PARSONS
GE Company – Parsons Project Office
381 Broadway, Bldg 40-2
Fort Edward, NY 12828
Phone: 518 746-5311
Fax 518 746-5307

MARCH 2007

CONTRACTOR HEALTH AND SAFETY PLAN (HASP)

Prepared For:

General Electric Company

Hudson River Sediment Project
381 Broadway, Building 40-2
Fort Edward, NY 12828

Prepared By:

Sevenson Environmental Services, Inc.

2749 Lockport Road
Niagara Falls, NY 14305

REVIEWED AND APPROVED BY:

Program Manager:	Michael Crystal, VP Operations	2/19/07 Date
Safety Director:	Paul Hitcho, Ph.D. CIH VP Directior of H&S	2/19/07 Date
Project Manager:	Jerry Castiglione	2/19/07 Date
Project Superintendent:	Jim Atkins	2/19/07 Date

February 19, 2007

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This Contractor Health & Safety Plan (HASP) must be maintained by the Sevenson's Project Manager in order to be effective. Any reference to employer in the plan is to Sevenson Environmental Services, Inc.

1.0 RESPONSIBILITY/IDENTIFICATION OF KEY LINE PERSONNEL

Contractor/Employer:	Sevenson Environmental Services, Inc.	
Address:	2749 Lockport Road, Niagara Falls, NY 14305	
Telephone:	716-284-0431	Email: MDCrystal@sevenson.com
Company Executive responsible for project:		Contact No.
Michael Crystal		716-284-0431 or 716-998-8410
Manager/Superintendent:		Contact No.
Jerry Castiglione		716-284-0431
Director of Health and Safety:		Contact No.
Paul Hitcho Ph.D., CIH		716-284-0431
Superintendent or forepersons:		Contact No.
Jim Atkins		716-609-1422

Client Project Management POC:	Contact No.
Michael Crystal	716-284-0431 or 716-998-8410

These personnel have the authority and responsibility for implementing the provisions of this program for:

Project Site Location	On-site Contact No.
Processing Site Facility Ft. Edward, NY 12828	TBD

All managers and supervisors are responsible for implementing and maintaining the Contractor HASP in their work areas and for answering worker questions about the Contractor HASP. A copy of this Contractor HASP is available from each manager and supervisor.

2.0 STATEMENT OF CONTRACTOR'S SAFETY AND HEALTH POLICY

Sevenson's management is committed to the safety of each and every employee. There is no place at Sevenson for an employee who will not work safely or who will endanger the safety of his fellow workers. It is essential that all Managers and Supervisors insist on the maximum safety performance and awareness of all employees under their direction by enthusiastically and consistently administering all safety rules and regulations. It is Sevenson's policy to take the necessary actions in engineering, planning, designing, assigning and supervising work operations, to create a safe work-site. Sevenson will:

- Maintain safe and healthful working conditions.

- Provide and assure the use of all necessary personnel protection equipment to ensure the safety and health of site employees and the public at large.
- Require that site work be planned to provide a range of protection based on the degree of hazards encountered under actual working conditions.
- Provide site workers with the information and training required to make them fully aware of known and suspected hazards that may be encountered, and of the appropriate methods for protecting themselves, their co-workers, and the public at large.

3. 0 IDENTIFICATION OF COMPETENT/QUALIFIED PERSONS

Name	Job Title	CSP, CHST, OSHA 30-hr Construction Safety certification	CPR/FA certification expires	6-hr Defensive Driving course	Competent Person training (i.e. confined space, scaffold, excavation, etc)
Jerry Castiglione	Project Manager	30-hr OSHA Construction	NA		
Jim Atkins	Superintendent	30-hr OSHA Construction	NA		Scaffold Confined Space Excavation/Trenching Critical Lifts Rigging
Scott Allaire	Site Safety Officer	CHST (to obtain prior to Sept 2007) 30-hr OSHA Construction			Confined Space Critical Lifts Rigging Respirator Protection Air Monitoring

- 30-hour OSHA Construction Safety certification – required for site supervisory personnel and SSRs.
- One Day (6-hours) Hands-on Defensive driving certification – required for personnel operating a registered vehicle on public roads in support of the project. Truck Drivers delivering locally supplied materials (i.e., fill, stone, concrete, asphalt) to the site with a GVWR of 26,000 lbs or more shall complete a Defensive Driver - Professional Truck Driving course (DDC-PTD).
- Respirator Clearance – required for all personnel that may need to wear a half facepiece, full facepiece or supplied air respirator, or self-contained breathing apparatus (SCBA).
- Excavation Competent Person certificate – required for daily inspections of excavations greater than 4 feet in depth, the adjacent areas, and protective systems for evidence of a situation that could result in possible cave-ins, indications of failure of

protective systems, hazardous atmospheres, or other hazardous conditions. An inspection shall be conducted by the competent person prior to the start of work and as needed throughout the shift. Inspections shall also be made after every rainstorm or other hazard increasing occurrence. These inspections are only required when employee exposure can be reasonably anticipated.

- Scaffold Competent Person certificate – required for personnel to inspect scaffolds and scaffold components for visible defects before each work shift, and after any occurrence which could affect a scaffold's structural integrity. Personnel shall also determine whether it is feasible or would pose a greater hazard to provide, and have employees use a safe means of access. This determination shall be based on site conditions and the type of scaffold being erected or dismantled.
- CPR/First Aid certification – required in the absence of an infirmary, clinic, hospital, or physician, that is reasonably accessible in terms of time and distance to the worksite, which is available for the treatment of injured employees, a person who has a valid certificate in first-aid training from the U.S. Bureau of Mines, the American Red Cross, or equivalent training that can be verified by documentary evidence, shall be available at the worksite to render first aid.
- Confined Space Entry (Supervisor) certificate – the employer shall ensure that each entry supervisor knows the hazards that may be faced during entry, including information on the mode, signs or symptoms, and consequences of the exposure. Verifies, by checking that the appropriate entries have been made on the permit, that all tests specified by the permit have been conducted and that all procedures and equipment specified by the permit are in place before endorsing the permit and allowing entry to begin. Terminates the entry and cancels the permit as necessary. Verifies that rescue services are available and that the means for summoning them are operable. Removes unauthorized individuals who enter or who attempt to enter the permit space during entry operations. Determines, whenever responsibility for a permit space entry operation is transferred and at intervals dictated by the hazards and operations performed within the space that entry operations remain consistent with terms of the entry permit and that acceptable entry conditions are maintained.
- Critical Lift – required for individuals responsible for the oversight/supervision of any hoisting activities that require a Critical Lift Plan be completed.

4.0 SCOPE OF WORK EVALUATION

Construction of the Processing Facility will consist of activities for the supply and installation of processing equipment including supply, construction, and installation of foundations, equipment pads, enclosures, containment structures, piping, mechanical, electrical, instrumentation, and start-up commissioning.

Process facility equipment construction will involve the construction of the coarse material separation area; installation of the trommel screen, tanks, and pumps; installation of hydrocyclones, screens, tanks, and associated pumps; installation of piping, electrical systems,

controls, and related accessories; construction of the process tank area; construction of foundations, containment slabs, and curbing; installation of the filter press system and polymer system; construction of the process water treatment area; and construction of the treatment building.

5.0 HAZARD/RISK/EXPOSURE ASSESSMENT

- Mobilization
- Rock Excavation
- Building, Tank and Equipment Foundations
- Size Separation Systems
- Filter Press Building
- Installing Filter Press System Equipment
- Installation of Air Handling Equipment
- Installation of Electrical and Instrumentation
- Startup and Commissioning

Major hazards or risks and exposures associated with the scope of work evaluation are listed below. For each major activity listed, an Activity Hazards Analysis (AHA) will be developed and approved prior to construction and included in Appendix A.

Mobilization – This task will involve working around mobile equipment. Hazards include setting office trailers, exposures to biological hazards, overhead utilities, utility hookups, and delivery of equipment and materials.

Building, tank and equipment foundations – This task will expose personnel to slips, trips, and falls as well as struck by, excavation hazards, moving equipment, rock excavation, cuts, overhead utilities, wet concrete, electrical tools, vibration, noise, lifting, and uneven surfaces.

Rock excavation - This task will expose personnel to noise, moving equipment, flying rock, and underground/overhead utilities.

Installation of project equipment – This task will expose personnel to slips, trips, fall from elevations, rigging and hoisting, overhead hazards, struck by, pinch points, welding and cutting, fusion welding, hand tools, noise, moving equipment, and traffic.

Filter Press building - This task will exposure workers to slips, trips, falls from elevation, man lifts, rigging and hoisting, overhead hazards, sharp edges, struck by, pinch points, noise, hand tools, ladders, moving equipment, traffic, and uneven terrain.

Start up and commissioning – This task will expose workers to energized equipment, pressurized equipment, heavy equipment, conveyor equipment, pinch points, noise, wet surfaces, polymers, and traffic.

6.0 CONTROL MEASURES/ACTIVITY HAZARD ANALYSIS

An Activity Hazard Analysis (AHA) for each major activity listed in Section 5.0 will be provided in Appendix A.

7.0 CONTRACTOR PERIODIC SAFETY INSPECTIONS/AUDITS

Periodic inspections to identify and evaluate on-going workplace hazards shall be performed by the following competent persons or observers in the following areas of our workplace:

Competent Person/Observer	**Area of Expertise/Responsibility**
Paul Hitcho Ph.D., CIH	Industrial Hygiene, Program Administration
Paul Jung	Industrial Hygiene, Occupational Safety, Fall Protection
Mark Nicklas	Industrial Hygiene, Occupational Safety, Fall Protection
Jim Atkins	Excavations, Scaffolding, Manlifts, Hazardous energy, confined space, Critical lifts, Material handling, Fall Protection
Scott Allaire	Excavations, Scaffolding, Manlifts, Hazardous energy, confined space, Respiratory protection, Fall Protection
Site Safety Representative(s)	Excavations, Scaffolding, Manlifts, Hazardous energy, confined space, Respiratory protection, Fall Protection

Periodic inspections are performed according to the following schedule:

- Weekly
- When we initially established our Contractor HASP;
- When new substances, processes, procedures or equipment which present potential new hazards are introduced into our workplace;
- When new, previously unidentified hazards are recognized;
- When occupational injuries and illnesses occur;
- When we hire and/or reassign permanent or intermittent workers to processes, operations, or tasks for which a hazard evaluation has not been previously conducted; and
- Whenever workplace conditions warrant an inspection.

Periodic inspections consist of identification and evaluation of workplace hazards.

8.0 CONTRACTOR RISK MITIGATION TWO-WEEK LOOK-AHEAD PLANNING SUBMISSION

The Risk Mitigation Two-Week Look-Ahead Form in Appendix B is used to plan risk mitigation strategies at weekly progress meetings.

9.0 COMPLIANCE REQUIREMENTS POLICY

Management is responsible for ensuring that all safety and health policies and procedures are clearly communicated and understood by all employees. Managers and supervisors are expected to enforce the rules fairly and uniformly.

All employees are responsible for using safe work practices, for following all directives, policies and procedures, and for assisting in maintaining a safe work environment.

Our system of ensuring that all workers comply with the rules and maintain a safe work environment includes:

- Informing workers of the provisions of our Contractor HASP and the RA HASP;
- Evaluating the safety performance of all workers;
- Recognizing employees who perform safe and healthful work practices;
- Providing training to workers whose safety performance is deficient;
- Disciplining workers for failure to comply with safe and healthful work practices.

10.0 WRITTEN PROGRESSIVE DISCIPLINARY PROGRAM

To perform all work in a safe and healthful manner is a primary goal of Sevenson. Therefore, a system of disciplinary actions has been developed to help attain this goal.

Discipline

It is understood that at times it is difficult for an employee to completely understand and comply with all safety rules and regulations. Therefore, a policy of training, retraining, verbal and written warnings, and finally disciplinary action including suspension and termination from the company has been placed into effect.

All operating employees receive safety and health training. It is the responsibility of both the Supervisor and the Site Safety and Health Officer to reinforce this training by example and by correcting the employee when he\she is in violation of a particular rule. Usually this informal reinforcement enables the employee to understand the rule and thus gain his\her cooperation and compliance. However, there are instances when a more formal procedure becomes warranted. In these cases a formal verbal warning will be issued. The next step is a written warning that is placed in the employee's personnel file. If the inappropriate behavior persists, then either a

suspension without pay or termination from the company will occur. In the case of a major violation of safety procedures an employee will be immediately removed from the job.

11.0 HAZARD CORRECTION POLICY

Unsafe or unhealthy work conditions; practices or procedures shall be corrected in a timely manner based on the severity of the hazards. Hazards shall be corrected according to the following procedures:

- When observed or discovered;
- When an imminent hazard exists which cannot be immediately abated without endangering employees or property, we will remove all exposed workers from the area except those necessary to correct the existing condition. Workers necessary to correct the hazardous condition shall be provided with the necessary protection; and
- All such actions taken and dates they are completed shall be documented on the appropriate forms.

12.0 TRAINING AND INSTRUCTION POLICY

All workers, including managers and supervisors, shall have training and instruction on general and job-specific safety and health practices. Training and instruction shall be provided as follows:

- When the Contractor HASP is first established;
- To all new workers;
- To all workers given new job assignments for which training has not previously provided;
- Whenever new substances, processes, procedures or equipment are introduced to the workplace and represent a new hazard;
- Whenever the employer is made aware of a new or previously unrecognized hazard;
- To supervisors to familiarize them with the safety and health hazards to which workers under their immediate direction and control may be exposed; and
- To all workers with respect to hazards specific to each employee's job assignment.

Workplace safety and health practices for all locations include, but are not limited to, the following:

- Explanation of the employer's Contractor HASP, the RA HASP, emergency action plan and fire prevention plan, and measures for reporting any unsafe conditions, work practices, injuries and when additional instruction is needed.
- Use of appropriate clothing, including gloves, footwear, and personal protective equipment.

- Information about chemical hazards to which employees could be exposed and other hazard communication program information.
- Availability of toilet, hand-washing, and drinking water facilities.
- Provisions for medical services and first aid including emergency procedures.

In addition, we provide specific instructions to all workers regarding hazards unique to their job assignment, to the extent that such information was not already covered in other training.

13.0 PROJECT SITE EMPLOYEES ORIENTATION PROGRAM SUBJECTS

As a condition of working on a remediation project involving the potential for exposure to hazardous substances and health hazards, our workers will receive information about the following subjects:

- Names of personnel responsible for site safety and health
- Reporting emergencies, incidents and unsafe conditions
- Emergency/evacuation plans
- Safety, health and other hazards at the site
- Review of all activities on site and related Activity Hazard Analyses (AHAs)
- Proper use of personal protective equipment
- Work practices by which a worker can minimize risk from hazards
- Safe use of engineering controls and equipment on site
- Acute effects of compounds at the site
- Decontamination procedures

In addition to the above-mentioned information, we also orient our employees on: Client and/or Construction Manager (CM) safety requirements

- The employer's code of safe practices – good housekeeping
- Road and highway safety practices – flagging, traffic control
- Heavy equipment operation – cranes, excavators, articulating dump trucks, etc
- Driver safety - defensive driving, operation of pick-up trucks and ATVs
- Ladder safety
- Fire prevention
- Cleaning, repairing, servicing and adjusting equipment and machinery
- Proper use of powered tools
- Guarding of belts and pulleys, gears and sprockets, and conveyor nip points
- Machine, machine parts, and prime movers guarding

- Lockout/tagout procedures
- Materials handling.
- Chainsaw and other power tool operation.
- Unsafe weather conditions – lightning, high winds
- Mobilization/demobilization – yard operations, running lines, etc.
- Landing and loading areas - release of rigging, landing layout, moving vehicles and equipment, truck locating, loading and shipping
- Use of elevated platforms – condors, aerial lifts and scissor lifts
- Ergonomic hazards - proper lifting techniques
- Personal protective equipment
- Hazardous chemical exposures
- Hazard communication
- Scaffolds - safe use and erection/dismantling
- Physical hazards - heat and cold stress, noise, and ionizing and non-ionizing radiation
- Biological hazards – poisonous plants/vegetation, animals, bloodborne pathogens, etc.
- Cranes
- Noise exposure
- Confined spaces

14.0 EMPLOYEE COMMUNICATION SYSTEM AND POLICY

We recognize that open, two-way communication between management and staff on health and safety issues is essential to an injury-free, productive workplace. The following system of communication is designed to facilitate a continuous flow of safety and health information between management and staff in a form that is readily understandable and consists of one or more of the following checked items:

- New worker orientation including a discussion of safety and health policies and procedures.
- Review of our Contractor HASP and the RA HASP.
- Workplace safety and health training programs.
- Regular weekly and daily safety meetings.
- Effective communication of safety and health concerns between workers and supervisors, including translation where appropriate.
- Posted or distributed safety information.
- A system for workers to anonymously inform management about workplace hazards.

- A labor/management safety and health committee that meets regularly, prepares written records of the safety and health committees meetings, reviews results of the periodic scheduled inspections, reviews investigations of accidents and exposures and makes suggestions to management for the prevention of future incidents, reviews investigations of alleged hazardous conditions, and submits recommendations to assist in the evaluation of employee safety suggestion.
- A Safe Plan of Action will be completed prior to each day's activities. These safe plans of action are to be completed by health and safety personnel, operation supervision, and workers performing the task. It is the duty of the operations supervisor to initiate a safe plan of action prior to the commencement of the work task.
- Safety Observation Reports will be utilized to help identify safety problems, issues, and concerns. A Safety Observation Report can be completed by any one involved in the project. Safety Observation Reports will be tracked and controlled to ensure that management personnel have reviewed, discussed, and if necessary, take corrective action.

15.0 RECORDKEEPING POLICY

We have taken the following steps to document implementation of our Contractor HASP:

- Records of hazard assessment inspections, including the persons conducting the inspection, the unsafe conditions and work practices that have been identified and the action taken to correct the identified unsafe conditions and work practices, are recorded on a hazard assessment and correction form
- Documentation of safety and health training for each worker, including the worker's name or other identifier, training dates, types of training, and training providers are recorded on a worker training and instruction form.
- Other records are retained as required by contract specifications or by local, state or federal (OSHA regulations). Where regulations do not specify the length of records retention, a period of three years after project completion will be used.

16.0 INCIDENT/NEAR-MISS INCIDENT INVESTIGATIONS POLICY

Procedures for investigating workplace incidents and near-miss incidents include:

- Responding to the incident scene as soon as possible;
- Reporting incidents and near-miss incidents immediately to the appropriate Parsons point-of-contact
- Interviewing injured workers and witnesses;
- Examining the workplace for factors associated with the incident/near-miss incident;
- Determining the cause of the incident/near-miss incident;
- Taking corrective action to prevent the incident/near-miss incident from reoccurring;

- Recording the findings and corrective actions taken; and
- Post-accident substance abuse testing.

17.0 EMERGENCY ACTION PLAN

Sevenson will follow the alarm signal system established for the site for emergency and evacuation purposes and will relay this system to all visitors, employees, subcontractors and other authorized on-site personnel.

Alarm signals will be transmitted using an air horn (i.e., fog horn) and bullhorn as needed. The following signals will be used;

- Medical Emergency – 3 short, 1-second blasts followed by 3-second delay – repeated till no longer necessary.
- Alert – a 5-second blast followed by a 10-second delay – repeated till no longer necessary.
- Evacuation – Continuous blast – repeated till no longer necessary.

Site Evacuation Procedures

- In the event the work site must be evacuated the alarm signal will be given such that all affected individuals are notified of the need to exit immediately and appropriately.
- Evacuation will proceed along pre-established routes determined by the Safety and Health Manager and Site Manager. The evacuation route will be based on prevailing wind direction and the decontamination exit. Evacuation routes will be amended as determined by site activities.
- Initial and amended evacuation routes will be presented to site workers and visitors during the daily safety meetings.
- Each evacuation route will terminate in a pre-designated assembly area where workers and other on-site personnel will gather. Workers and other authorized site personnel will be assigned to an assembly area.
- Each assembly area will have an assigned emergency coordinator who will be responsible for identifying each person in the area. The coordinator will identify unaccounted for personnel who will then alert the site manager. This information will be passed on to rescue and emergency personnel.

18.0 SITE-SPECIFIC MEDICAL EMERGENCY PLAN

This section describes the emergency response plan that will be implemented by Sevenson employees to handle emergencies. The nature of the project and the activities planned for the site are such that there is little potential for an emergency, which would result in a significant release of hazardous substances, and in any way threaten the adjoining community. However, there is always the potential at any construction site for emergency situations to occur which

threaten the on-site workers. Possible examples of emergency situations during remedial activities include equipment fires or contact of equipment with overhead power lines. In all of these cases, procedures will be implemented to minimize the possibility of an emergency situation. The procedures outlined below are designed to ensure that the workforce reacts quickly and appropriately to emergency situations, thereby protecting the health and well being of the individual workers. It is expected that modifications may be necessary upon actual site set-up and conditions.

Pre Emergency Planning

During the site safety briefings held daily, all employees will be informed of the location of this plan, the procedures outlined in this plan, and the communication systems and evacuation routes to be used during an emergency.

On a continual basis, individual personnel should be constantly alert for indicators of potentially hazardous situations and for signs and symptoms in themselves and others that warn of hazardous conditions and exposures. Rapid recognition of dangerous situations can avert an emergency.

A coordination meeting with local emergency response agencies (fire, police, rescue and medical facility) will be conducted prior to work starting at the site. The site activities and potential hazards that may be encountered by responders will be reviewed during this meeting.

Personnel Responsibilities

All on-site employees have a role in mitigating an emergency incident. The Project Superintendent has primary responsibility for responding to and directing emergency response operations to correct emergency situations. This includes taking appropriate measures to ensure the safety of site personnel and the public. He is additionally responsible for ensuring that corrective measures have been implemented, appropriate authorities notified, and follow-up reports completed. The SSHO will assist and advise the Project Superintendent, and will direct any emergency medical responses.

The following is an outline of job titles and corresponding responsibilities during an emergency.

- The Site Superintendent directs emergency response activities and serves as liaison with appropriate Client and Client representative's personnel, subcontractors and tenants at the industrial park. In the event of an emergency the Project Superintendent will be the Incident Commander.
- The SSHO recommends that work be stopped if any operation threatens worker or public health or safety and advises Site Manager of emergency procedures if necessary. Provides emergency medical care on site. Notifies emergency services.

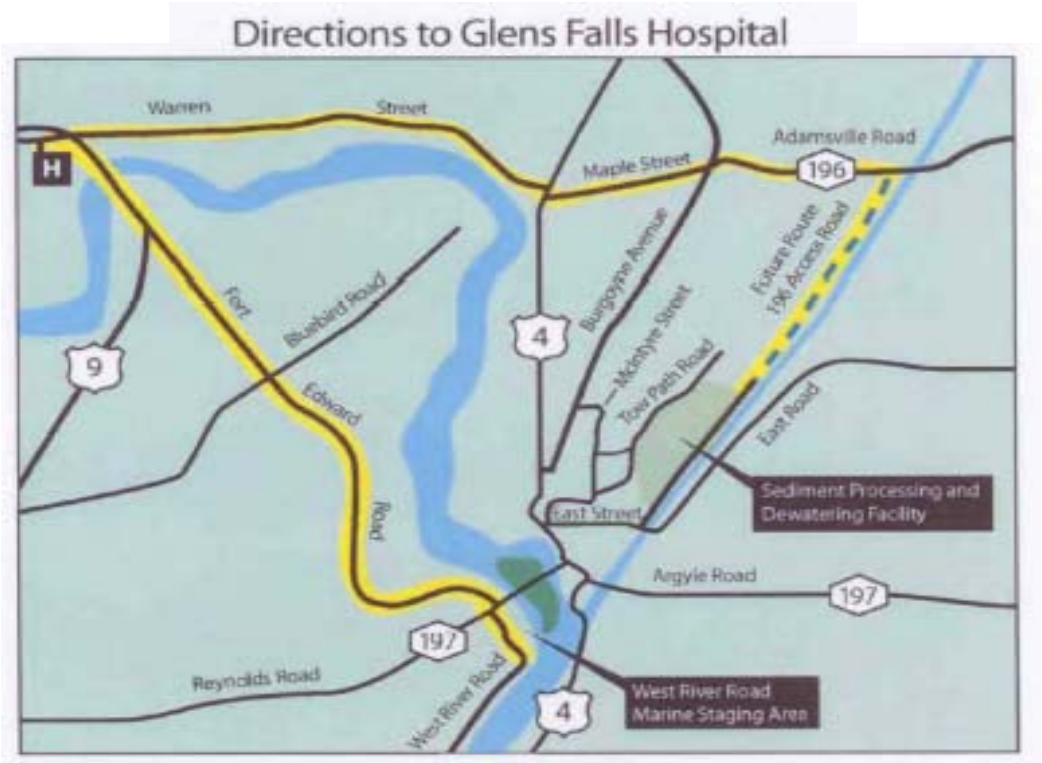
The SSHO will assume the responsibility of Incident Commander if the Project superintendent is off-site

Medical Treatment and First Aid

The SSHO will be trained in CPR and First Aid and have first aid kits for use in a medical emergency. First Aid Kits will be located in the main support area and at the work activity locations. Eyewash stations will be of the pressurized, 15-minute discharge type. On-site employees have a basic knowledge of first aid and will assist the Site Superintendent and SSHO. Community emergency services (EMS, Fire, and Police) will be notified immediately if their resources are needed on site.

If necessary, the injured or sick party will be taken to Glens Falls Hospital– Please refer to ***"Directions to Glens Falls Hospital"***, for directions to the area hospital. Route to the area hospital will be posted and easily visible at all times.

In the event of an emergency, call 911.



In the event of an emergency, medical or otherwise, the following Sevenson individuals are to be contacted:

Name	Cell Phone Number	Work Phone Number
Scott Allaire, Site Safety Officer	716-628-0339	TBD
Jerry Castiglione, Project Manager	716-998-4523	TBD
Jim Atkins, Superintendent	716-609-1422	TBD

For first aid and non-serious injuries requiring medical attention, employees will go to:

Saratoga Care / Wilton Medical Arts	3040 Route 50 Saratoga Springs, NY 12866	518-580-2296
Center for Occupational Health Glens Falls Hospital	2 Broad Street Plaza Glens Falls, NY 12801	518-926-2140

19.0 HAZARD COMMUNICATION PROGRAM

The hazard communication program is the plan by which information and training concerning hazardous materials and waste are delivered to our employees. It consists of proper labeling, material safety data sheets, and employee training.

The hazard communication program relies heavily upon the dissemination of information through the in-house hazardous waste site worker training program, the daily site safety and pre-entry safety meetings, and the written site safety and health plans. The principle objectives of these programs are to alert employees to potential hazards, to instruct them in how to recognize hazards, and how to protect themselves. Sevenson recognizes that employees involved in hazardous waste cleanups have unique exposure problems and often have poor information about the chemical hazards they may face. For this reason, the training programs adopt a broad-based approach to recognizing hazards.

Material Safety Data Sheets (MSDS) are obtained for hazardous chemicals or wastes. For products and materials Sevenson purchases for use in its shops, laboratories, water treatment systems, decontamination procedures, or waste handling activities, Sevenson will have MSDS as described in the written hazard communication program. For waste materials, the equivalent information will be obtained from various reference books, data banks, or other safety data sheets such as the CHRIS manuals. This information must be included in the site safety and health plan and discussed at the site specific training. Employees can obtain copies of this information from their supervisors or from the Health and Safety Department in accordance with the procedures outlined in the written program.

The complete written hazard communication program is a separate plan and is located in Appendix C.

The following list includes but is not limited to the anticipated MSDSs for chemicals and products used during the project.

- Gasoline
- 2-Cycle Mixed Fuel
- Diesel Fuel
- Motor Oil
- Hydraulic Oil
- Anti-freeze
- Lubricating grease
- Simple Green Degreaser
- Lubricating Oils
- Calibration Gas (air monitoring equipment)
- PVC Cleaner and adhesive glue
- Pipe joint compound
- Marking Paint
- Welding Rods
- Oxygen
- Acetylene
- Grinding wheels
- Granulated Activated Carbon
- Polymers

20.0 WRITTEN TRENCHING AND SHORING PLAN

The hazard associated with excavation is low to moderate. In general, the main hazard encountered during soil excavation is the cave in of excavation sides with possible burial or crushing of workers. Causes of cave in may include (a) absence of shoring, (b) misjudgment of stability, (c) defective shoring, and (d) undercut sides. Other potential hazards include falling during access/egress, while mounting or dismounting equipment, or stumbling into the excavation. An overhead hazard can result from material, tools, rock, and/or soil falling into the excavation. Flammable atmospheres may also be encountered in an excavation.

Sevenson will provide adequate shoring or sloping of sides of the excavation. Excavation/ trenches will be inspected by a competent person daily for changing conditions. Air monitoring for airborne contaminants will be performed in areas where contaminated soils are encountered.

Excavation, loading, and stockpiling will be performed in accordance with the Remedial Action Work Plan. Excavation/trenches, regardless of the depth or width, will be barricaded. The use of raised berms, caution signs, and caution tape will be instituted to protect both the public and other personnel on the site. The excavation area will be delineated with caution tape during operations and barricaded/secured with safety fence at the end of each workday. Adequate means of exit, such as ladders, steps, ramps, or other safe means of egress, will be provided and be within 25 feet of lateral travel.

Where personnel are required to enter excavations over 4 feet in depth, sufficient stairs, ramps, or ladders will be provided, which require no more than 25 feet of lateral travel. At least two means of exit will be provided for personnel working in excavations. Where the width of the excavation exceeds 100 feet, two or more means of exit will be provided on each side of the excavation.

A copy of Sevenson's Trenching/Shoring and Excavation Plan can be found in Appendix D.

21.0 WRITTEN RESPIRATORY PROTECTION PROGRAM

To control and or minimize the threat of occupational diseases caused by breathing air contaminated with harmful dusts, fogs, fumes, mists, gases, smokes, sprays, or vapors, the primary objective of this program will be to prevent atmospheric contamination. This will be accomplished as far as feasible by accepted engineering control measures (for example, dust suppression). When effective engineering controls are not feasible, or while they are being instituted, appropriate respiratory protection will be used. A respiratory protection program will be implemented that is compliant to the requirements of 10 CFR 20 Subpart H, "Respiratory Protection and Controls to Restrict Internal Exposure in Restricted Areas" and 29 CFR 1910.134, "Respiratory Protection." Respiratory protection equipment will be NIOSH-approved, and respirator use will conform to ANSI Z88.2.

The respiratory protection program will follow the guidance of 10 CFR 20 subpart H. Additionally, internal exposure evaluations (bioassay) may be required for each individual who participates in wearing a respirator at the site.

Respirators will be provided when such equipment is necessary to protect the health of the employee. Sevenson will:

- Provide the respirators, which are applicable and suitable for the purpose intended.
- Be responsible for maintaining a written Respiratory Protective Program in accordance with 29 CFR 1910.134. The employee will use the provided respiratory protection in accordance with instructions and training received.
- Respirators will be selected on the basis of hazards to which the worker is exposed.
- The user will be instructed and trained in the proper use of respirators and their limitations.

- Respirators will be regularly cleaned and disinfected.
- Respirators will be stored in a convenient, clean, and sanitary location.
- Respirators used routinely will be inspected during cleaning. Worn or deteriorated parts will be replaced. Respirators for emergency use, such as self-contained devices, will be thoroughly inspected at least once a month and after each use.
- Appropriate surveillance of work area conditions and degree of employee exposure or stress will be maintained.
- There will be regular inspections and evaluations to determine the continued effectiveness of the program.
- Employees will not be assigned to tasks requiring use of respirators unless it has been determined that they are physically able to perform the work and use the equipment. A physician will determine whether an individual is physically fit to wear a respirator. The physician's clearance allows the worker to don a respirator and work in conditions of high ambient temperatures. Heat stress will be closely monitored by the SSHO.

Each respirator will be individually assigned and not interchanged between workers without cleaning and sanitizing. The cartridges/filters will be changed at the first sign of breakthrough based on contaminant warning properties or if the user experiences excessive breathing resistance. The SSHO will make final determination of the frequency of respirator cartridge/filter change-out. Respirators will be cleaned and stored in an uncontaminated atmosphere after each use. Used cartridges will be disposed of with spent PPE. Self-contained breathing apparatus/supplied-air respirators will be inspected before and after use and at least once monthly.

All employees working at the Site during remedial activities who have the potential of wearing a respirator will be fit-tested to ensure they utilize the proper size respirator. Sevenson will arrange for fit testing. The fit test is conducted according to the manufacturer's suggestions. The test will consist of a taste and odorous vapor qualitative test. As per OSHA regulations, personnel that are unable to pass a fit test will not enter a work area when respiratory protection is required. In addition, facial hair is prohibited from the respirator seal area. Any person with facial hair will not be permitted to enter a work area where respiratory protection is required, regardless of the fit test results. Documentation of the fit testing will be maintained on-site.

A complete Respiratory Protection Program is located in Appendix E of this Plan.

22.0 OTHER PROGRAMS

Lockout/Tagout

Whenever maintenance, servicing, or repairs are done to equipment, tools and machinery, there is a potential for injury from the accidental energization or movement of the equipment.

Prior to beginning any work on equipment, steps must be taken to identify the energy sources present in the equipment, and to ensure that the energy sources are neutralized.

Hazardous energy sources fall into categories such as electrical, pneumatic, hydraulic, and potential (gravity, springs, etc.). One simple control in the construction industry has been to unplug cord-connected equipment. Vehicles and other motorized equipment can be protected from accidental starting by disconnecting the battery. Other controls include the use of identifiable padlocks on disconnects, breaker switches, and valves. Stored energy has the potential for release with great kinetic force and potential for injury.

All machinery or equipment capable of movement must be de-energized or disengaged and blocked or locked out during cleaning, servicing, adjusting or setting up operations, whenever required. The lockout procedure requires that stored energy (i.e., mechanical, hydraulic, air) be released or blocked before equipment is locked out for repairs. Appropriate employees are provided with individually keyed personal safety locks. Employees are required to keep personal control of their key(s) while they have safety locks in use. Employees must check the safety of the lockout by attempting a start up after making sure no one is exposed. Where the power disconnector does not also disconnect the electrical control circuit, the appropriate electrical enclosures must be identified. The control circuit can also be disconnected and locked out.

Temporary electrical service installation will be performed by a qualified electrician. Work may only be performed on de-energized equipment. Lockout/Tagout procedures will be implemented to assure the safety of personnel during electrical work activities.

Underground electric lines will be located and clearly marked. These utilities will be protected, removed, or relocated as needed to do the work safely. The excavation work will not be allowed to endanger the underground utility or the people doing the work. Barricades, shoring, or other supports as needed, will protect utilities left in place that are exposed by the excavation.

Sevenson's Lockout/Tagout Program is located in Appendix F of this plan.

Fall Protection

To access high and low places on jobsites a variety of equipment may be used such as ladders, scaffolding, suspended platforms, aerial lifts, stairways, and climbing lines. The use of these access systems often presents fall hazards. In addition, employees may be exposed to falls while working on elevated structures, climbing onto and off of equipment, and even while walking by falling through holes or by slipping or tripping.

To protect employees when they are exposed to fall hazards, some form of fall protection must be used. The most common forms of fall protection are guardrails, personal fall arrest systems, hole covers, and safety nets. Any one, or all of these forms of fall protection may be

used on construction worksites. The current OSHA standards also require that employees receive training regarding fall protection issues, and that the training is documented. An alternate fall arrest program may be implemented in cases where none of the traditional methods of fall protection are feasible.

Sevenson's Fall Protection Plan is located in Appendix G of this plan.

Confined Space Program

A confined space is a space that is large enough and so configured that an employee can physically enter and perform assigned work, has limited or restricted means for entry or exit (for example, tanks, vessels, silos, storage bins, hoppers, vaults, and pits) and is not designed for continuous employee occupancy. Simply working in a confined space is not necessarily a hazard. However, if certain hazardous conditions exist prior to, or are created during entry, then the confined space must be treated with utmost care.

Sevenson's Confined Space Program is located in Appendix H of this plan.

Critical Lifts

As part of a crane safety program, site superintendents will develop a working knowledge of the client's requirements for operating construction cranes, derricks, or hoists on project property. In some cases a Critical Lift Plan must be completed. The Superintendent or his designee will conduct daily inspections to observe compliance with established company and client crane and rigging procedures and immediately shut down any crane operations that jeopardize the safety of any jobsite personnel.

The criteria for a critical lift can be found in the appended Critical Lift Program (Appendix I).

23.0 LIST OF APPENDICES

Appendix A – Activity Hazard Analysis

Appendix B - Forms

- Two Week Look Ahead Form
- Safety Meeting Attendance Sheet
- Safety Observation Report
- Safety Observation Report Tracking Log
- Safe Plan of Action
- Equipment Inspection Sheet
- Periodic Safety/Audit Inspection Record

- Accident Investigation Report Form

Appendix C – Hazard Communication Program

Appendix D – Trenching/Shoring Plan

Appendix E – Respiratory Protection Program

Appendix F – Lockout/Tagout Program

Appendix G – Fall Protection Program

Appendix H – Confined Space Program

Appendix I – Critical Lift Program