Contractor Safety Program Manual

For Stowers Institute for Medical Research
1000 E. 50th Street
Kansas City, Missouri 64110
## Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>1</td>
</tr>
<tr>
<td>Purpose and Scope</td>
<td>1</td>
</tr>
<tr>
<td>Responsibilities</td>
<td>1</td>
</tr>
<tr>
<td>Stowers Institute</td>
<td>1</td>
</tr>
<tr>
<td>Contractors</td>
<td>1</td>
</tr>
<tr>
<td>Hours of Operation</td>
<td>2</td>
</tr>
<tr>
<td>Parking and Vehicle Traffic</td>
<td>2</td>
</tr>
<tr>
<td>Building Access</td>
<td>3</td>
</tr>
<tr>
<td>Reports of Theft</td>
<td>3</td>
</tr>
<tr>
<td>Prohibited Items</td>
<td>4</td>
</tr>
<tr>
<td>Prohibited Activities</td>
<td>4</td>
</tr>
<tr>
<td>OSHA Regulations</td>
<td>4</td>
</tr>
<tr>
<td>Training</td>
<td>5</td>
</tr>
<tr>
<td>Safety Meetings</td>
<td>5</td>
</tr>
<tr>
<td>Safety Inspections and Auditing</td>
<td>6</td>
</tr>
<tr>
<td>General Site Safety Rules and Regulations</td>
<td>6</td>
</tr>
<tr>
<td>Clean Work Area</td>
<td>7</td>
</tr>
<tr>
<td>Welding, Cutting, Burning and Hot Work Permits</td>
<td>7</td>
</tr>
<tr>
<td>Fire Alarm Detectors</td>
<td>8</td>
</tr>
<tr>
<td>Combustion Engines</td>
<td>8</td>
</tr>
<tr>
<td>Industrial Vehicles</td>
<td>8</td>
</tr>
<tr>
<td>Power-Actuated Tools</td>
<td>9</td>
</tr>
<tr>
<td>Confined Space Entries</td>
<td>9</td>
</tr>
<tr>
<td>Permits</td>
<td>9</td>
</tr>
<tr>
<td>Monitoring Confined Space</td>
<td>9</td>
</tr>
<tr>
<td>Excavations and Trenches</td>
<td>10</td>
</tr>
<tr>
<td>Floor, Roof, and Wall Openings</td>
<td>10</td>
</tr>
<tr>
<td>Overhead Work</td>
<td>11</td>
</tr>
<tr>
<td>Scaffolds</td>
<td>11</td>
</tr>
<tr>
<td>Ladders</td>
<td>12</td>
</tr>
</tbody>
</table>
Introduction

Welcome to the Stowers Institute for Medical Research (SI). For your safety and security, please observe the following procedures while on SI property.

Purpose and Scope

The Contractor Safety Program (CSP) establishes policies and procedures applicable to all contractors, contractors’ employees, and contractor’s agents/representatives, and sub-contractors (collectively referred to as Contractor(s) in the remainder of the document) regarding safety, health, and environmental responsibilities on SI premises, and for work performed for SI. The purpose of the CSP is to ensure that work performed by contractors is performed in a safe and secure manner. The CSP applies to facilities and property owned, leased, or occupied by SI.

It is the responsibility of the Contractor to adhere to all applicable federal, state, and local safety, health, and environmental regulations and comply with policies and procedure set forth in this manual. This manual does not replace existing site procedures or operational specifications. Approved site-specific procedures must be followed where applicable. This manual does not relieve Contractors of their responsibility for safety, health, and environmental compliance under law, code, ordinance, or statute.

Responsibilities

Providing a safe work environment for Contractors is the responsibility of both SI and the Contractor. The following sections list specific responsibilities of each organization.

Stowers Institute

- Ensures that work areas under SI control are maintained safe and free of hazards
- Ensures that contracts for bids contain appropriate information concerning the SI CSP including contractor requirements
- Provides access to Material Safety Data Sheets (MSDSs) to contractors upon request
- May audit / inspect Contractor activity at their work location
- Provides Contractors with SI Contractor Safety Program Manual

Contractors

- Ensure that work areas under their control are maintained safe and free of hazards
- Ensure that all equipment brought onto SI property is in safe working order, that all safety features are in good working order, and that the equipment is maintained in this condition
- Maintain the work-site in a neat and safe condition
- Conduct periodic safety inspections of all assigned areas
• Identify and correct hazards
• Provide required personal protective equipment (PPE)
• Ensure proper training for assigned tasks
• Coordinate with SI Environmental, Health and Safety (EH&S) Office for safety-related issues
• Notify the SI EH&S Office (4434) of any accident that resulted or could have resulted in an injury or property damage and assist SI EH&S in any resulting investigation
• Maintain the required insurance coverage
• Establish and maintain an effective Environmental, Health and Safety Program in accordance with all applicable federal, state and local regulations

**Hours of Operation**

The normal hours of operation at SI are from 8:00 a.m. to 5:00 p.m., Monday through Friday. All non-routine work must be performed during normal hours of operation unless other arrangements have been made in advance with the Head of Plant Engineering and Maintenance and the Security Office.

**Parking and Vehicle Traffic**

Upon arrival at SI, enter the parking garage from the entrance on 50th Street. Park in spaces designed for visitors. Report to the Security Desk located in the lobby of the Science Building.

Parking is prohibited in the following areas:

• Reserved parking spaces
• Driving lanes
• Fire lanes (marked with yellow painted curbs)
• Sidewalks
• Grass and dirt areas
• Handicapped parking spaces
• Any area marked with a “No Parking” sign
• Adjacent to the trash dumpsters
• Dock areas

Precautions should be taken to protect your vehicle. Lock the vehicle doors and secure personal items. SI is not responsible for lost or stolen items.
Observe all traffic signs. The maximum speed limit on SI property is 10 mph. Do not cross permanent or temporary barriers.

**Building Access**

All contractors are required to wear SI security identification badges at all times while inside SI buildings. The Security Office will issue badges on your initial arrival on the site. To obtain a security identification badge, enter Building Three through the main lobby entrance off of 50th Street. Proceed to the reception desk and ask the security officer to contact your SI contact person. If you will be working for an extended time on SI property, a badge may be issued for the duration of the project.

Identification badges must be properly displayed and visible from below the neck and above the waist at all times while inside SI buildings. Do not allow another person behind you to enter a building without a valid SI identification badge. If a badge is lost, immediately notify the SI Security Office at 816-926-4144 or your SI contact.

Some categories of security badges will open specific locked doors equipped with badge readers. These badges will allow you to enter SI buildings and to move throughout the building without an escort. This access badge will not allow you to access to restricted areas unless it is programmed to do so. If your security badge does not unlock the door into an area, you should consider that area off limits. Do not attempt to enter the area without permission from the Security Office. Admittance to these limited access areas requires prior approval of one or more of the following: SI Security Office, EH&S Office, Principal Investigator (PI), or the manager in charge of that area. Notify your SI contact if you require access to locked areas.

Security badges must be returned to the Security Desk at the end of each working day if the badge is issued daily. If the badge is issued for an extended period of time, it must be returned at the end of the project.

**Reports of Theft**

Should any items belonging to you or your company appear to be missing from your job site, contact the SI Security Office immediately at 926-4144 to file a report.

Should you require special security checks to be done on a job site, contact the Security Office to make the arrangements.
Prohibited Items

Alcoholic beverages, illegal drugs, firearms and ammunition, and other dangerous items are not permitted on SI property. Violations of this policy will be addressed immediately with the management of your company.

Cameras and tape recorders are permitted on-site only for business reasons, and require a permit to be issued in advance. Notify the Security Office at 926-4144 if you have a business need to bring a camera or tape recorder into the workplace, and the Security Office will take the necessary steps to obtain a permit.

Do not bring data processing resources such as personal computer software or hardware onto SI property unless approved in advance by Stowers Institute IT Management.

Prohibited Activities

The following activities are prohibited:

- Soliciting or distribution of materials on SI property is not allowed. Contact a SI manager for questions or concerns.
- Smoking is not permitted on SI property.
- Eating, drinking, gum chewing, and applying cosmetics are not permitted within laboratories or other areas where chemicals are used and within chemical storage areas.
- SI property is not to be removed from the premises without management approval. If approval is granted, property passes may be required. Contact the Security Office (4144) for further instructions.
- Inappropriate conduct will not be tolerated while on SI property. Such conduct includes, but is not limited to, being under the influence of or affected by alcohol, illegal drugs or any other controlled substance, improper dress, improper or offensive language, harassment of any type, threats, or violent behavior. As a contractor, it is inappropriate for you to be in an unauthorized area.
- Permission must be received before handling any SI document, file folder, or computer disk. Do not access any computer, or document management system, unless you have obtained prior approval from the manager of that specific area. Do not open SI file cabinets, desk drawers, or other document storage containers unless the person responsible for that area is present and has given permission.

OSHA Regulations

The Contractor must know and understand its responsibility for compliance with OSHA regulations and should have a copy of the OSHA standards applicable to the work to be carried out. Preventing accidents is the primary reason Contractors must comply with the following OSHA standards:
• 29 CFR Part 1926—This portion of the OSHA standard is applicable specifically to construction work.
• 29 CFR Part 1910—This portion of the OSHA standard is applicable to general industries.

The Contractor must know, understand, and comply with the federal Occupational Safety and Health Act as it pertains to its work responsibility. The OSHA General Duty Clause states that each employer “shall furnish to each of his/her employees employment and a place of employment which are free from recognized hazards that are causing or are likely to cause death or serious physical harm to his/her employees.” Should the OSHA regulations not address a specific procedure or hazard, the Contractor is responsible for his or her employee’s general safety. A Contractor’s failure to accept this responsibility is a violation of OSHA regulations.

OSHA requires posting the “Safety and Health Protection on the Job” poster in a prominent location. The poster briefly states the intent and coverage of OSHA. Failure to post this document is a violation of OSHA regulations. The SI EH&S Office should be contacted at extension 4434 to ensure that a place is provided for this to be posted.

The Contractor must maintain the required OSHA Form 300, Log of Work Related Injuries and Illness, and OSHA Form 300A, Summary of Work Related Injuries and Illnesses. Fatality cases and accidents in which three or more people are injured in one incident must be reported by the Contractor to OSHA within 8 hours of the occurrence as required by law.

Training

The Contractor is required to provide safety training and instruction activities to ensure that its employees are trained in hazard recognition and are informed of their responsibilities in carrying out their assignments in an efficient and accident-free manner. The provisions in this section will also help employees comply with specific OSHA, state and local safety requirements, as well as the requirements of this safety manual.

It is the Contractor’s responsibility to provide training in a language that his or her employees can understand. The Contractor’s supervisor must instruct employees on the safest way to perform each task of the work assignment prior to starting work.

Safety Meetings

The Contractor must hold regularly scheduled safety meetings and require mandatory attendance by employees. Accident prevention must be included on the agenda, and the meeting records must state the specific topics discussed.

All contractor supervisors must hold safety and environmental training meetings in their work area with their entire crew and review specific procedures pertinent to the crew’s activity. These meetings provide an opportunity to point out hazardous conditions or unsafe work practices and discuss safety and environmental rules and regulations, safe working procedures, analysis of accidents, and potential hazards. Records of safety meetings are required, including attendees and subjects covered. If requested by SI, contractors will provide copies of safety
meeting records. Lack of recording or improper distribution indicates non-compliance with contract requirements.

**Safety Inspections and Auditing**

If requested by SI, the Contractor will establish an inspection and audit program to help eliminate unsafe practices by its employees, establish a hazard-free workplace, and protect the environment. The program will be in writing, including the scope of the inspection and audit, frequency, responsibility, record keeping, and corrective action.

Control of workplace safety is achieved only when each Contractor fulfills his or her contractual and statutory responsibilities and when steps are taken to maintain safe work practices. Contractors are responsible for conducting continuous monitoring of their operations to ensure that they are aware of the probable sources of potential injury, illness, or loss due to unsafe acts or conditions.

The Contractor must continually monitor and audit the performance of subcontractors and their supervisors. Subcontractors must notify the Contractor if unsafe practices are observed. Contractors must appropriately plan the procedures to be followed for each operation. Personnel chosen to perform a planned operation must be trained in all aspects of the procedure, including emergency actions to be taken in the event of a mishap.

In addition to inspections conducted by the Contractor, SI representatives such as insurers or the EH&S Office may conduct inspections and audits. Contract activities also are subject to periodic inspection by OSHA compliance officers. If an OSHA compliance officer visits a SI site, he or she must be escorted to the SI representative. The appropriate Contractors will then be notified so that an opening conference may be conducted. If the inspection is to occur on SI property, SI will organize the inspection in accordance with OSHA regulations. Contractors must forward copies of inspection reports and citations received by the contractor from OSHA to SI. The Contractor must post citations as required by OSHA.

The Contractor must notify SI in writing of the existence of hazardous conditions, property, or equipment in a work area that is not under the contractor’s control. It is the Contractor’s responsibility to take necessary precautions against injury until the conditions are corrected by those responsible.

The Contractor’s equipment must be used, inspected, and maintained as directed by manufacturer’s instructions, and applicable federal and state safety, health, and environmental regulations.

**General Site Safety Rules and Regulations**

Contractors are required to comply with all applicable federal, state, and municipal safety and environmental regulations while on SI property. In any instance where SI procedures or guidelines conflict with federal, state or local law (having jurisdiction), the applicable law will take precedence. The following is a partial list of applicable regulations and standards:
- Occupational Safety and Health Standards, 29 CFR 1910
- Safety and Health Regulations for Construction, 29 CFR 1926
- The Resource Conservation and Recovery Act, 40 CFR 260
- Hazardous Materials Regulations, 49 CFR Subchapter C
- Uniform Building Code (as adopted)
- Uniform Fire Code (as adopted)
- NEC, National Electrical Code (as adopted)

**Clean Work Area**

Leave work areas in a condition that does not pose any safety hazard to SI members, students, trainees, visitors, or other Contractor employees. Keep all work areas clean and free of combustible or flammable materials or tripping hazards. All hallways are to have unobstructed passage, unless the area is barricaded for safety reasons.

**Welding, Cutting, Burning and Hot Work Permits**

Site-specific procedures that meet OSHA standards must be followed for welding, cutting, and burning. Welding, cutting, or spark-producing work is prohibited until a burn permit is issued by the Head of Plant Engineering and Maintenance. Each welding, cutting, or spark-producing operation requires a fire watch. A fire watch consists of a properly trained person standing by with suitable fire extinguishing equipment, provided by the Contractor. The fire extinguishing equipment must be of a size and type that will extinguish a fire that may ignite on materials being welded or cut, or materials immediately adjacent to welding and cutting operations, as required by 29 CFR 1926.352, 29 CFR 1910.252, and NFPA 51B, 1962. The fire watch person must remain in the area for a minimum of 30 minutes after the hot work is completed to ensure the site is cold.

It is also necessary to obtain a burn permit before using hydrocarbon fuel-powered equipment, and for any work that produces slag, excessive heat, or involves the use of gas, diesel, or propane engines. Do not begin working until the area is inspected and a burning permit has been issued. Requests for burning permits must be made at least 1 hour in advance to minimize any work delays. Keep the permit at the work area during the performance of the work. If the operation is moved into another area, do not resume hot work until the new area has been inspected and another permit issued.

It is the Contractor’s responsibility to keep a fire extinguisher (10 pound minimum) as close to the operation as possible. The Contractor is responsible for taking appropriate action to prevent fire, to extinguish incipient fires, and to summon assistance when needed. One should not attempt to put out an incipient fire if he/she has not been properly trained to use a fire extinguisher or if he/she does not feel it can be done safely. To report a fire, activate the nearest red fire pull station located at all exits from the building and at the entrances to all stairwells. Report small fires that have been extinguished to the Security Office at 926-4144.
After hot work is completed, inspect the area and remain in the area for a minimum of 30 minutes to ensure that no smoldering or previously unnoticed fire exists. Contact the Plant Engineering and Maintenance Office at ext. 4141 after it has been determined that the area is safe and that the fire watch period is being terminated.

Do not perform hot work directly adjacent to or above working SI personnel. The SI project coordinator shall arrange to have the area cleared or the contract work scheduled for off-hours. It is the Contractor’s responsibility to provide non-combustible or flameproof shields or screens to protect nearby SI employees from direct welding rays or arcs from torches.

The Contractor is responsible for seeing that a fire watch is maintained and all adjacent combustible materials are protected or removed during the work.

**Fire Alarm Detectors**

The SI buildings are equipped with an automatic fire alarm system. Smoke detectors and heat sensors are located throughout these buildings and can be inadvertently activated by activities that produce smoke, airborne dust, or excessive heat. If these types of activities are planned in SI buildings, contact SI Plant Engineering & Maintenance (4141) to deactivate the detectors.

**Combustion Engines**

Do not operate gasoline, diesel, or propane gas engines in SI owned or leased buildings at any time unless specifically approved by the Head of Plant Engineering and Maintenance, and the EH&S Office (4434) (each exception must be approved).

Perform fueling operations and any maintenance of fuel systems outside of the SI buildings. At the time of fuel oil delivery to the storage tanks, check the filling station valves to ensure that they are indeed closed before any connections are made. Keep all combustion engine vehicles or any LP gas cylinders outside at all times when they are not in use.

The use of equipment with combustion engines and/or processes is discouraged because of the problems involved with safe handling of fuels and the toxic nature of engine exhaust. If at all possible, use other types of equipment. If it is not possible to use alternative equipment, permission may be given with restrictions.

All truck drivers delivering materials to the SI must shut off their engine while the vehicle is stationary. The products of combustion may be drawn into the building air intake and in turn may affect scientific studies within SI.

**Industrial Vehicles**

Industrial vehicles, such as forklifts and lift platforms, shall be operated only by authorized operators who are trained in the safe operation of such equipment. The Contractor must provide training records to the EH&S Office or the Head of Plant Engineering and Maintenance, upon request. The use of powered vehicles shall meet the requirements of applicable OSHA standards.
It is the Contractor’s responsibility to ensure that every industrial vehicle, except those guided by a walking operator, is equipped with a warning device (horn, gong, or other audible device) that can be heard clearly above the normal industrial noise in the work place.

**Power-Actuated Tools**

Explosive-activated fastening tools shall meet the design requirements in “American National Standards Institute (ANSI), Safety Requirements for Explosive Activated Fastening Tool.” A tool that does not meet these standards cannot be used.

Do not leave a power-actuated tool unattended in a place where it could be available to unauthorized persons.

**Confined Space Entries**

A confined space is a space that has a limited means of egress and is subject to the accumulation of toxic or flammable contaminants, or a space that has an oxygen deficient atmosphere. Confined or enclosed spaces include, but are not limited to, storage tanks, process vessels, bins, boilers, ventilation or exhaust ducts, sewers, underground utility vaults, tunnels, pipelines, and open top spaces more than 4 feet deep such as pits, tubs, vaults, and vessels. See 29 CFR 1926.21 and 29 CFR 1910.143.

Before entering a “confined space”, the Contractor must notify the EH&S Office of intent to enter this space. The Contractor must have a confined space entry procedure on file with the EH&S Office that meets or exceeds the criteria outlined in the OSHA regulations. Both the person entering the confined space and the attendant shall have proof of training and be CPR certified.

SI staff are forbidden from entering confined spaces as defined by OSHA. Only a qualified Contractor may enter a confined space.

**Permits**

Confined spaces will be evaluated by EH&S to determine the need for an entry permit. Entry into a confined space is not allowed unless a Confined Space Permit and applicable work permits have been issued. The contractor must request a Confined Space Permit at least three days prior to the entry date and specify the plan and purpose for entry. Personnel, equipment, and supplies needed for entry must be present at the confined space before beginning work. The Contractor must abide by the provisions and restrictions of the permit.

**Monitoring Confined Space**

The atmosphere within confined space may need to be continuously monitored with direct-reading instruments equipped with hazard alarms. The Contractor is responsible for providing this equipment and being qualified to use it. The Contractor is responsible for the safety and health of its employees and must not allow them to enter a confined space that is unsafe, or enter without a permit.
The Contractor must ensure that employees, visitors, vendors, consultants, or other persons under its direction or providing assistance to them are thoroughly trained and understand these requirements before they are allowed to enter a confined space.

**Excavations and Trenches**

Site-specific procedures for excavation and trenches must be followed in accordance with OSHA regulations (Subpart B, 29 CFR 1926.650-652). Underground utilities must be located, marked and protected in advance of excavation and provisions made for their protection. The supporting system for excavation and trenches must be designed after careful consideration of the depth of the cut; anticipated changes in the soil due to air, sun, and water; ground movement caused by vehicle vibration or blasting; and earth pressures (not only the angle of repose).

Excavations and trenches over 4 feet deep must be sloped, shored, benched, braced, or supported to meet the applicable OSHA standards. When soil conditions are unstable, excavations less than 4 feet must be sloped, shored, or supported. Trenches more than 4 feet deep shall have ladders or steps located in such a way that no more than 25 feet of travel lies between means of access. OSHA standards permit the use of a trench box as long as the protection it provides is equal to or greater than the protection provided by the appropriate shoring system.

For excavations where Contractor employees may be required to enter, excavated and other material must be effectively stored and retained 6 feet or more from the edge of the excavation. OSHA standards require using diversion dikes and ditches or other suitable means to prevent surface water from entering an excavation, and to provide adequate drainage of the area adjacent to the excavation. Water causes erosion and softening and must not be allowed to accumulate. All trenches and excavations must be adequately guarded to prevent unauthorized personnel from accidentally walking into the trench or excavation. This protection could be through the use of guardrails or barrier fencing materials and warning signs.

Excavations and shoring systems must be inspected daily by a competent person. Inspections are required after a rainstorm or change in conditions that could increase the possibility of a cave-in, slide, or water accumulation. If dangerous ground movements such as tension cracking are apparent, stop work in the excavation until the problem has been corrected. If, at any time, there is evidence of a possible cave-in or slide, all work must cease until necessary safeguards are taken.

Before carrying out any excavation work, determine the existence and location of buried services. To obtain this information, contact the Head of Plant Engineering and Maintenance, and call the state “dig-safe” hot line (800) 344-7483.

**Floor, Roof, and Wall Openings**

Conditions must be controlled where there is a danger of employees or materials falling through the floor, roof, or wall openings, or from floor or roof perimeters. Remove guarding and covers only after other means of fall protection are in place. Employees installing or removing guarding and covers must be protected by alternative fall protection throughout the process. The
Contractor who is responsible for the removal of guarding and covers is also responsible for their replacement.

Perimeter, floor, roof, and wall opening protection must be maintained throughout all phases of the work. Employees, regardless of position, craft, or job assignment, are not allowed in an area that could expose them to a fall unless fall protection procedures are followed.

Floor opening covers must be capable of supporting the maximum intended load and installed to prevent accidental displacement. Floor opening must be protected by a cover and standard railing. The covers must be clearly marked and anchored. Install standard guarding at wall openings from which there is a drop of more than 3 feet.

Guard or have a railing at every open-sided floor on all open sides 4 feet or more above the adjacent area floor or ground, except where there is an entrance to a ramp, stairway, or fixed ladder. The railing must have a standard toe board wherever persons can pass beneath the open sides or there is machinery or equipment that can be damaged by material falling from above.

**Overhead Work**

No work shall be performed above SI members, students, trainees, contractors, or visitors. Rope off areas affected by overhead work and mark them to prohibit traffic below the work area.

**Scaffolds**

Scaffolds must be designed, built, inspected, and tagged by trained, competent persons in accordance with the latest OSHA requirements (29 CFR 1910.28 and 29 CFR 1926.451). Carefully plan each application to ensure that scaffolds are used where required and that scaffolds conform to the applicable scaffold erection requirements. Lean-to scaffolds and make-shift platforms are prohibited.

Do not use scaffolds for storing materials except for those being used while on the scaffold. Place material over cross members. Do not allow tools, material, or debris to accumulate on scaffolds. Adequately design scaffolds to carry, without failure, 4 times the maximum intended load in addition to the weight of the scaffold. Never overload a scaffold.

Scaffold or staging more than 10 feet above the ground or floor, suspended from an overhead support, or erected with stationary supports, must have standard guardrails and toeboards properly attached. Guardrails shall be 2x4 inches, or the equivalent, a minimum of 36 inches and a maximum of 42 inches high, with a mid-rail, when required. Supports shall be at intervals not to exceed 8 feet. Toe boards shall be a minimum of 4 inches in height. Scaffolds with any dimension of less than 45 inches must be equipped with outriggers and standard guard rails when the working platform is at a height of four feet or higher.

Ensure that the footing or anchorage for scaffolds is level, sound, rigid, and capable of carrying the intended maximum load without settling or displacement. Do not use any unstable objects such as concrete blocks, barrels, boxes, or loose material to support scaffolds or planks. Wire, synthetic, or fiber rope used with scaffolds must be capable of supporting at least 6 times the rated load and should be inspected before each use.
Mobile scaffolds must be equipped with outriggers and lock casters. Guard mobile scaffolds with standard railing, regardless of height. Mobile scaffolds must not be constructed or used where there is a change of elevation in the floor level. Moving a mobile scaffold with personnel on it must be performed in accordance with the latest OSHA requirements.

**Ladders**

The use and maintenance of “portable” and “fixed” ladders must comply with all applicable OSHA standards, ANSI and manufacturers specifications, and job procedures. Fiberglass ladders are recommended. Do not use ladders with broken or missing rungs, broken or split side rails, or damaged components. Damaged ladders must be immediately removed from the work area or destroyed. Work in overhead areas must be roped off to prohibit traffic below the work area. Warning signs must be posted when doing overhead work in traffic areas. It is the responsibility of the Contractor to ensure that ladder use complies with all applicable regulations and safe work practices.

Ladders, scaffolds, or other approved equipment must be used where necessary. OSHA requirements for portable and fixed ladders must be applied and followed for each application. The applicable OSHA standards include 29 CFR 1910.25, 29 CFR 1910.26, 29 CFR 1910.27, and 29 CFR 1926.1050. Following are specific requirements for the use of ladders at SI:

- Do not use materials or stock instead of a ladder or scaffolding.
- Use a ladder of adequate height for the intended use.
- Do not use the top two steps of a ladder as steps. Standing on the top steps of ladders is prohibited.
- All portable ladders (except stepladders) must be equipped with non-skid bases or secured to prevent slipping.
- Ladders must be in good condition and of fiberglass construction (wood may also be acceptable). All ladders must be OSHA type 1 or 1A rated (depending on weight limitations).
- Do not place a ladder in front of a door unless the door is locked or guarded.
- Do not use ladders for jobs that require heavy tools, for jobs of long duration, or in place of scaffolding or platforms.
- Secure ladders used for access to platforms or scaffolds at the top and bottom in order to prevent displacement.
- Do not use ladders on top of platforms or scaffolds.
- When ladders are used for electrical work, only use non-conducting types.
**Fall Protection**

Fall protection is required for work performed at certain heights in accordance with OSHA regulations. Fall protection consists of a full body harness, two shock absorbent lanyards, or self-retracting lifeline meeting OSHA standards. Safety belts and regular lanyards are prohibited. Appropriate work platforms with standard guardrails or the use of interior and exterior safety nets that remove fall exposures are possible substitutes.

Body harnesses, shock absorbent lanyards, and self-retracting lifelines, regardless of configuration, must be inspected monthly by the Contractor. This inspection must be documented, and a copy of the signed form provided to SI upon request.

The following procedures must be used to avoid falls:

- Use safety harnesses when working above 6 feet high on straight or extension ladders if the work involves pushing, pulling, or action that may dislodge a person from the ladder.
- Use required safety harnesses on swinging or portable scaffolds where hand rails and toe boards have not been provided (10 feet or more above the floor).
- Use required safety harnesses and lifelines on work in confined spaces where an oxygen deficiency or toxic vapors may exist.
- Secure all lifelines using locking snap hooks to stable and adequate supports separate from swinging or portable scaffolds.
- Do not secure lifelines or safety harnesses to sprinkler system or utility piping because they may not have the required support strength.
- Do not use safety belts instead of harnesses.
- Wear safety harnesses and lifelines on rooftops where there are no guardrails and the work is within 10 feet of the edge.

**Cranes, Hoists and Rigging**

The Contractor whose activities require the use of cranes are responsible for proper setup and operation. Prior to starting work, the Contractor will provide SI with documented evidence of an annual inspection in accordance with OSHA requirements for each crane, hoisting, and associated rigging equipment brought onto the site. A daily inspection of cranes must be performed by the crane operator or competent person. The person performing this inspection will document results in writing, and the documentation will be available for examination upon request.

The operator is responsible for properly setting up the crane, determining the weight of the load to be lifted, and performing a test lift. Cranes must be inspected after setup and prior to the initial lift, before each shift, and after a malfunction.

Cranes and hoisting equipment must only be operated by the following personnel:
Designated crane operators who have been licensed by an approved agency and meet the requirements of ANSI B30.5, Chapter 5.

Operators meeting the minimum DOT requirements as provided in DOT 391, *Physical Examination for Truck Drivers*. No crane operator will be allowed to operate a crane until he or she has passed the physical exam conducted by a licensed physician approved by the DOT.

Inspectors certified for crane inspection.

Test and maintenance personnel when necessary to perform testing or maintenance functions.

No one other than the above personnel may be in or on the crane during operations. Exceptions are oilers or supervisors whose duties may require their presence. Crane operating procedures must be in accordance with OSHA requirements.

Mobile cranes, lift trucks, boom trucks, bucket trucks, portable crane derricks, mobile lifts and or platforms, or similar equipment, shall not be operated within 10 feet of overhead electric power lines. Be sure that all footings are secure and follow the express written guidelines provided by the equipment manufacturer.

**Loading Dock**

Loading dock areas may be used for unloading and loading only. Materials, equipment, or tools shall not be stored on loading docks. The following procedures must be followed for safety at the loading dock:

- Shut off engine of trucks delivering materials to SI while the vehicle is stationary. Products of combustion may be drawn into the building air intake and in turn may affect scientific studies within the Institute.
- Have the rear wheels of all trucks, trailers, and vans chocked at all times when they are at loading docks.
- Set brakes and chock both wheels before unloading cargo from trailer to dock.
- Before tractor is disconnected from trailer, make sure landing gear is set at proper height and back wheels are as far back as possible to prevent trailer from tipping away from dock.
- Have at least one trailer jack in place (with column against a forward structural part of the trailer) for all short trailers that have tractors removed.
- Always use dock boards/levelers.
- After tractor is disconnected from trailer, affix trailer stabilizing jacks to each corner of the trailer closest to the tractor. Cargo can now be unloaded safely.
- After loading or unloading, move vehicles to authorized parking.
**Transporting Material and Equipment**

Use extreme care while carrying sections of pipe, conduit, and other material to ensure safety of SI personnel and property. Materials and equipment (ladders, pipe, lumber and conduit) over 6 feet long should be carried by at least two people, one on each end, or otherwise transported safely to ensure the safety of others and to avoid damage to SI property. Do not leave carts, tools, materials, and equipment in aisles or blocking access to emergency equipment or exists.

**Electrical Safety**

All electrical installations must meet requirements of both the National Electric Code (NEC) and the local city codes administration department. All equipment installed by the Contractor must be listed or certified by UL and/or another nationally recognized testing laboratory.

Perform all electrical work in a safe manner per the requirements of OSHA 29 CFR 1910.331-335. De-energize and lockout or tagout electrical circuits prior to start of installation, removal, or maintenance work. Additional safety measures and prior approval from SI personnel are required for any diagnostic, troubleshooting, or calibration work on exposed energized equipment or circuits.

Electrical tools, machinery, and equipment shall be grounded, unless they are of the double insulated type. Electrical extension cords, temporary feeders, etc., must be 3-wire, grounded units using NEMA grounded receptacles and plug cap. These cords and feeders shall be of sufficient rating to safely transmit the required power in compliance with the NEC. Tag all temporary wiring at the source to indicate work is taking place on the circuit and estimate the duration of use. Use Ground Fault Circuit Interrupts (GFCIs) ahead of all electrical extension devices when working outdoors, when working indoors in damp areas, or where their use will increase safety such as on conductive surfaces.

It is the Contractor’s responsibility to ensure that all electrical panels, control stations, etc., shall have a minimum of 36 inches clear work space in front of equipment as specified by the NEC. For more specific work space requirements regarding varying voltages all distances must comply with the standards set forth by the NEC and OSHA as provided by 29 CFR 1926.403(j)(3).

Site-specific electrical, high voltage, and hot work safety procedures must be followed when installing temporary and permanent electrical work and when using electrical power to operate equipment. The following are specific safety procedures for electrical work at SI:

- Temporary and permanent electrical work, installation, and wire capacities must conform to the NEC, applicable federal, state, and local codes.
- Only qualified electricians familiar with code requirements are allowed to perform electrical work.
• You are not permitted to work near an unprotected electrical power circuit unless you are protected against electrical shock by de-energizing the circuit and grounding it or are protected by effective insulation or other means.

• Do not operate electrical tools or equipment in wet areas or areas where potentially flammable dusts, vapors, or liquids are present, unless specifically approved for the location.

• Switches must be enclosed and grounded. Panel boards must have provisions for closing and locking the main switch and fuse box compartment.

• Limit the use of extension cords as much as possible.

• Extension cords used with portable electric tools and appliances must be extra hard usage as defined in ANSI/NFPA 70 Article 400 (Table 400-4), heavy duty (no less than 12 gauge conductors for construction work) and of the three-wire grounding type conforming to the type and configuration required by OSHA standards. Acceptable types of flexible cords include hard service cord (types S, ST, SO, and STO) and junior hard service cord (types SJ, SJO, SJT, and SJTO).

• Repair electrical cords with heat shrink tape only. Do not splice damaged electrical cords.

• In areas where water or moisture is present or likely to be present, protect portable electric tools and cords by a GFCI.

• Should a circuit breaker or other protective device “trip,” ensure that a qualified electrician checks the circuit and equipment and corrects problems before resetting the breaker.

• Provide suitable means for identifying electrical equipment and circuits, especially when two or more voltages are used on the same job. Mark circuits for the voltage and the area of service they provide.

• OSHA regulations governing the operation of heavy equipment in proximity to high-voltage power lines are very specific. Wide loads over 10 feet require a specified escort. Obtain an outage approval from the SI representative before bringing heavy equipment on-site that can reach within arcing distance and will be located from 10 to 50 feet from high-voltage lines or equipment.

• Do not leave electrical boxes, switch gear, cabinets, and electrical rooms open when not directly attended. Insulate energized parts when covers have been removed or doors are ajar. Do not use cardboard, plywood, or other flammable material to cover energized circuits.

Control of Hazardous Energy (Lockout/Tagout)

Safe operating procedures must be in place for rendering inactive any electrical equipment or operating systems (stored energy systems) when equipment is down for repair, removal, replacement, or installation of new equipment. The lockout/tagout procedures must comply with OSHA regulations (29 CFR 1910.147).
Perform all work on machines or equipment within the requirements of OSHA 29 CFR 1910.147 concerning the control of hazardous energies. This standard sets the minimum requirements for work in which the unexpected energizing or start-up of the machines or equipment (or release of stored energy) could cause injury. You are required to have your written lockout procedure on file prior to work being performed at SI.

Lockout is highly preferred over tagout for all equipment at SI. Notify the Head of Plant Engineering and Maintenance, if you are unable to adequately lockout a piece of equipment and are relying on tagout alone.

**Lasers**

Do not use lasers on SI property unless specific approval is obtained from the EH&S Office.

**Utilities**

Never shut off, interrupt, disconnect, or turn on a utility (electrical, water, steam, gas, compressed air, communication hub, sewer riser, chilled water, control system/device or any other system, equipment or device) without approval from both the manager of the affected work area(s) and Plant Engineering and Maintenance.

**Posted Signs**

Always obey posted signs.

**Hazard Communication (Right-To-Know)**

It is the Contractor’s responsibility to conduct chemical “Right to Know” sessions with its employees, and to ensure that its employees are competent and trained to handle chemicals in accordance with 29 CFR 1910.1200.

If the Contractor performs work in an area where SI employees are using chemicals, the Contractor may request copies of the Material Safety Data Sheets (MSDSs) from the EH&S Office or the manager of the area where the work is occurring.

**Starting Jobs That Use Chemicals**

Before starting a job using chemicals, know the location of the nearest eyewash and safety shower, and how to evacuate the area.

If SI chemical containers must be moved so that work can be performed safely, contact the EH&S Office (4434) for instructions before attempting to relocate any SI chemicals.
**Chemical Use Approvals**

It is the Contractor’s responsibility to provide a list of products containing chemicals that it wishes to use at SI (including the MSDS sheets). The MSDSs should be given to the SI EH&S Office (4434). The SI EH&S Office will review each MSDS and either grant or deny permission to use the chemical material. Each new chemical must be reviewed and approved before being brought on-site. If a chemical is not approved, there are two options to consider. A substitute chemical may be submitted for review, or a request for exception may be submitted for “Conditional Use.” Under Conditional Use approval, the SI EH&S Office may determine stipulations restricting the use of the chemical, such as requiring that the Contractor perform work after SI’s regular work hours.

Keep in mind that the Contractor bears possible liability for the damage caused to scientific experiments from the use of non-approved chemicals.

**OSHA’s Labeling Requirements for Chemical Containers**

The Contractor must ensure that all chemical containers brought on-site are labeled according to OSHA requirements. Manufacturer’s chemical labels must include the manufacturer’s name and address, the name of the chemical, and a hazard statement. Secondary chemical containers must have the name of the chemical and hazard statement.

**Flammable Chemicals**

Use flammable chemicals with extreme caution when possible ignition sources are present. Whenever storage is required inside an SI-owned or -leased building, store flammable chemicals in an approved flammable chemical storage cabinets that you must supply. If an approved flammable chemical storage cabinet is not available, the chemicals must be removed from the building when not in use.

Never store flammable chemicals with other types of chemicals, such as oxidizing chemicals or corrosive chemicals. Chemicals must be segregated to be stored safely.

If a flammable liquid must be transferred from the manufacturer’s original container, use an approved flammable liquid safety can equipped with a flame-arrestor screen and bearing the Factory Mutual or UL-approval emblem. Clearly mark the safety can to identify the contents.

**Compressed or Bottled Gases**

The use of compressed or bottled gas requires specific handling precautions to reduce the risk of injury or property damage. Following are the procedures for the use of compressed or bottled gas:

- Permanently mark or stencil compressed or bottled gas cylinders to identify the contents.
- Individually secure compressed or bottled gases in an upright position at all times.
• Close compressed or bottled gas cylinder valves and use valve protection caps in place when the cylinders are in transit, being moved, or are temporarily stored. Close gas cylinder valves after use.

• Ensure that all compressed gas cylinder regulators are in proper working order.

• Use only a gas cylinder hand truck to move gas cylinders. Never drag or roll gas cylinders by hand.

• Ensure that compressed or bottled gas cylinders are kept at a safe distance or shielded from cutting or welding operations. Do not place cylinders where electrical circuits can be contacted.

**Ventilation**

When paints, solvents, and adhesives are used, adequate ventilation must be provided.

**Personal Protective Equipment (PPE)**

The contractor will provide the required PPE, medical clearance, and training as required by OSHA, and be responsible for the compliance of its employees. It is the contractors’ responsibility to use proper personal protective equipment (PPE), such as safety glasses, impervious gloves, hard hats, respiratory protection, and/or other protective clothing as required. OSHA requires (under the standards 29 CFR 1926 and 29 CFR 1910) that PPE be provided to employees wherever necessary. The design of the PPE shall meet or exceed OSHA guidelines.

Contractors that do not supply required PPE to employees, or whose employees fail to use said equipment will be asked to leave the area. Repeated offenses could be cause for suspension of services.

**Head, Eye, and Face Protection**

Wearing an approved, non-conductive safety hat is mandatory in construction areas and designated areas at all times. Refer to ANSI Z89.1, *Safety Requirements for Industrial Head Protection*, and OSHA standards.

Designated areas require eye protection. Minimum eye protection includes approved safety glasses with side shields or monogoggles meeting the standards specified in ANSI Z87.1, *Practice for Occupational and Educational Eye and Face Protection*.

Eye protection is required to protect against flying particles, molten metal, hazardous material, gases, vapors, and light radiation. Contractors must wear appropriate eye and face protection while performing the following activities:

• Welding, burning, or cutting with torches
• Using abrasive wheels, grinders, circular saws, or files
• Chipping concrete, stone, or metal
Working with materials subject to scaling, flaking, or chipping
- Drilling
- Working under dusty conditions
- Waterproofing
- Using power-actuated or pneumatic tools
- Working with compressed air or gases
- Working with chemicals or hazardous materials
- Using chop saws, chain saws, masonry saws, or similar equipment
- Working near the operations listed above

**Respiratory Protection**

Respiratory protection devices approved by NIOSH must be worn by employees exposed to hazardous concentrations of dust, fumes, mists, gases, aerosols, or vapors as required by OSHA. The Contractor must establish a respiratory protection program in compliance with OSHA regulations 29 CFR 1926.103 and 29 CFR 1910.134, including medical surveillance; training; equipment selection; storage; maintenance, fit testing; and record keeping.

**Footwear**

The Contractor must ensure that its employees wear either sturdy shoes or boots. Sandals, open-toe shoes, and bare feet are prohibited. Additional foot protection must be worn for operating tamping equipment and when handling and carrying heavy tools or objects.

**Hand and Skin Protection**

The Contractor must ensure that its employees wear appropriate hand protection when handling objects or substances that could cut, burn, injure the hand, or be absorbed into the skin, and when exposed to harmful temperature extremes. All Contractor employees must wear fully buttoned lab coats, head coverings, and shoe covers in designated areas (available at entries to these areas). Do not enter these areas without appropriate clearance, training, and protection.

**Hearing Protection**

Approved hearing protection must be worn by contractors exposed to noise levels above 85 decibels and in designated areas. Hearing protection must attenuate noise levels to 85 decibels. The Contractor must establish a hearing conservation program as required by, and in compliance with, applicable OSHA standards as set forth in 29 CFR 1910.95 and 29 CFR 1926.52.

**PPE for Welding, Cutting, and Burning Activities**

- Wear a welding helmet with welding hood (combination hard hat). Soft caps are prohibited.
• Wear face shields or goggles that fit on hard hats along with approved safety glasses during grinding operations.

• For overhead work, wear fire-resistant hard hats and fire-retardant shoulder covers. Keep clothing free of oil, grease, and flammable material.

• Button collars and cuffs, and turn pant cuffs inside pants. Pockets must be covered with flaps and buttoned, or removed from the front of vests, shirts, and aprons.

• Wear gloves and proper infrared/ultraviolet eye protection in addition to safety glasses.

• If you are engaged in oxy-acetylene welding or cutting, wear a welding helmet or safety goggles equipped with suitable filter lenses.

• If you are engaged in electric arc welding, use shields or helmets equipped with suitable filter lenses that fit on a hard hat. Wear approved safety glasses or goggles under a combination hard hat or welding hood.

• Do not perform welding, burning, or open flame work on staging suspended by fiber or synthetic rope.

**Additional Personal Protective Equipment**

Additional PPE required under unusual circumstances, such as high temperature work or handling corrosive liquids not specifically covered in this section, must be reviewed with the SI representative and furnished by the Contractor when required.

If any contract work performed on SI premises involves working over or near water, the Contractor must ensure that all applicable provisions of OSHA regulation 29 CFR 1926.106 are met.

**Fire Prevention and Protection**

**Heaters**

Temporary heaters are prohibited unless approved by SI EH&S. The operation and maintenance of temporary heating equipment is the responsibility of the Contractor. Heaters must bear the UL label (or approved equal). Contractors must ensure that heaters are in working order and provide trained personnel to be in attendance at all times while heaters are in operation. A tip-over shut-off device must be included for space heating equipment. Do not place clothing or flammable items on or near heaters. Provide adequate ventilation when using liquid fuels in an enclosed environment, and conduct atmospheric testing as needed.

**Flammable Liquids**

The storage and use of flammable liquids is prohibited without the approval of the Head of Plant Engineering and Maintenance or EH&S. Store and handle flammable and combustible materials with regard to their fire characteristics. Materials must be clearly labeled. Store
flammable liquids outdoors in an approved manner and dispense only in approved safety containers. Remove flammable or combustible waste materials, rubbish, and debris daily.

**Combustible Materials**

Separate and store combustible materials or equipment in non-combustible containers in a proper manner. Do not store more than a one-day supply of combustible materials or containers in one location within the building. Locate supplemental fire fighting equipment in the vicinity of these containers and materials.

**Fire Protection Equipment**

Fire protection equipment must be furnished for all phases of the work as required by law. Employees who have not received documented fire extinguisher training within the past 12 months should not use fire extinguishers. Replace temporary fire fighting or fire protection equipment immediately after use, and remove when the work is complete. Sprinkler systems and fire alarm systems must be placed in service as early in the project as possible.

**Access to Work Area**

Provide access to the work area and around the perimeter. Maintain access in a serviceable condition suitable at all times for use by heavy fire fighting equipment.

**Environmental Compliance**

**Hazardous Waste**

Contractors are responsible for the safe use and disposal of chemicals and hazardous materials brought onto SI property in compliance with applicable laws and regulations and for complying with the applicable requirements for generators of hazardous waste. Contractors that generate hazardous waste on site must notify EH&S for disposal directives.

It is the responsibility of the Contractor to dispose of any hazardous waste generated during a project. Dispose of the hazardous waste that was generated on the job in compliance with all federal, state, and local regulations that may regulate the waste. Following are the minimum requirements to dispose of hazardous waste:

- Use an EPA-approved disposal vendor. Provide a disposal manifest to the EH&S Office, if requested to do so.
- Provide documentation to the EH&S Office that the waste was properly disposed (i.e., certificate from the disposal vendor), if requested to do so.
- Comply with all applicable federal, state, and local regulations.
- If a job will involve the generation of an unusual amount of waste, have disposal plans reviewed by EH&S prior to starting the work.
Do not store more than 55 gallons of hazardous waste or one quart of acutely hazardous waste as defined in 40 CFR 261 without written approval from EH&S. Waste containers must be clearly labeled as to their contents. Do not dispose of any hazardous chemical waste in company dumpsters or into the sanitary sewer.

Contractors that meet the qualifications of a conditionally exempt small quantity generator of hazardous waste as defined in 40 CFR 261.5, must coordinate the transfer of potentially hazardous waste to EH&S for disposal. Contractors that do not meet the qualifications of a conditionally exempt small quantity generator are responsible for obtaining an EPA Identification Number and managing hazardous waste generated in accordance with applicable state and federal regulations. Contractors are subject to periodic inspections by EH&S to ensure proper management, storage, and documentation practices are being followed.

SI must approve the disposal of waste materials such as asbestos, lead paint, hazardous construction debris, or contaminated soil resulting from demolition, excavation, or maintenance activities that are not the result of hazardous materials or petroleum products brought on site by a contractor. Coordinate with the EH&S Office to ensure that these wastes are disposed of in accordance with written procedures approved by EH&S.

For more information on hazardous waste, refer to the Stowers Institute *Hazardous Waste Program Manual*. This manual can be obtained by calling the EH&S Office (4434).

**Spill Prevention and Control**

To minimize the risk of spills or releases to the environment on SI property, the Contractor must employ appropriate protective procedures such as double containment, overflow protection, employee training, and other measures as part of activities involving the use, storage, or handling of petroleum products or hazardous materials.

Containers of hazardous materials and petroleum products should be stored to prevent releases to the environment. This requires selecting locations and methods to minimize exposure to rainfall, surface water, and the ground. Enclosures, shelters, and secondary containment should be used where appropriate. Containment pans should be placed under equipment where there is the potential for a leak or discharge.

**Notification of a Spill or Release to the Environment**

SI is subject to government notification and reporting requirements when a petroleum product or hazardous material is spilled or released to the environment, including releases to the ground, surface water, sanitary sewer system, or air that are not specifically authorized by SI’s environmental permits. A spill or release of a hazardous chemical or petroleum product must be cleaned up immediately.

The Contractor must notify EH&S immediately (within ten minutes of when a release occurs) by telephone, followed by a written incident report within 24 hours that includes the following information:
Description of the spill or release event
Date and time of spill or release
Names of individuals involved
Estimated quantity and type of material spilled or released
Duration of the release
Steps taken or planned to reduce, eliminate, and prevent recurrence of the spill or release

**Discharges to Stormwater Systems**

A discharge to a storm water conveyance system refers to any discharge to a storm water drain, parking lot, ditch, loading dock, or ground that is not connected to a sanitary sewer. The following types of non-storm water discharges may be discharged to the facility's storm water systems:

- Uncontaminated groundwater
- Water from foundation drains and footing drains
- Air conditioner condensate without added chemicals
- Springs
- Uncontaminated potable water
- Waterline, sprinkler system, and fire hydrant flushing
- Discharges resulting from fire fighting

No other non-storm water discharges are permitted unless approved by EH&S. Examples of prohibited activities include:

- Discharges of hazardous materials
- Discharging of treated water systems such as reflecting pool water, cooling tower water, and water used to passivate piping

An unauthorized or non-permitted non-storm water discharge is considered a release and must be reported to EH&S and documented in accordance with the notification procedures as described above.

**Erosion Control**

Settling basins and/or straw barricading around storm sewers is required for ground breaking or any condition that could cause silt to enter a storm sewer. If a construction activity involves one or more acres, the Contractor must obtain a storm water discharge permit before starting the work.
Open Burning

Open burning of debris on SI property is prohibited.

Disposal of Waste into Sanitary Sewers

The disposal of hazardous materials, chemicals, or petroleum products into sanitary sewers is strictly prohibited.

Emergency Procedures

The following section delineates the emergency procedures that you must follow as a contractor working at the Stowers Institute for Medical Research (SI).

Fire

To report a fire, activate the nearest red fire pull station located at all exits from the building and at entrances to stairwells.

When the fire alarm sounds, exit the building immediately using the nearest exit; do not use the elevators.

Medical Emergency

To report a medical emergency, call Security at 926-4144. Stay with the victim until responders arrive on the scene.

Chemical Spill

The following procedures should be used for spills of volatile, flammable, reactive, or toxic materials.

- Remain calm. Alert personnel in the immediate vicinity of the spill. If possible, shut down spark-producing equipment, such as brush-type motors.
- Evacuate the spill area. Isolate the spill by closing all access doors.
- During normal working hours, call the SI Security Office immediately by dialing 4144. State your name, the exact location and extent of the spill, and the chemical(s) involved. Notify the officer if any injuries or illnesses have been sustained.

Security will summon the SI Chemical Spill Response Team. If the spill is outside a ventilated laboratory, it may be necessary to evacuate the building. The person(s) involved in the spill should make themselves available to assist the SI Spill Response Team in the identification of the spilled chemical(s).

If the spill occurs after hours, evacuate the area immediately. If the spill is not contained within the laboratory, alert others who may be in the building by dialing 816-213-1624 from a
safe location to access the cellular telephone for the on-duty officer. The officer will notify others of the exact location and extent of the spill, as necessary.

For additional information regarding chemical spills, see the *Chemical Hygiene Plan* and the *Hazardous Waste Program Manual*. These manuals can be obtained by contacting the EH&S Office (4434).

**Non-compliance**

Non-compliance with safety requirements specified in the contract may result in work stoppage and supervisor and/or employee removal from the premises. Willful or repeated non-compliance may result in dismissal of the Contractor and contract termination. Temporary or permanent removal from SI premises may occur if the Contractor’s manager, supervisor, or person in charge requests, allows, or condones employees to perform unsafe acts or work in or around unsafe conditions or violate environmental permits or regulations. The following safety requirement non-compliance conditions are examples of situations that are grounds for immediate and permanent removal of a contractor’s manager, supervisor, or employee from SI's premises if one of these employees:

- Violates established safety rules, regulations, or procedures that endanger themselves or others.
- Violates established environmental rules, regulations, or procedures that endanger the environment.
- Openly exhibits disregard, defiance, or disrespect for the safety program.
- Knowingly falsifies documents or testimony involving an incident investigation.

**Useful Telephone and Numbers**

<table>
<thead>
<tr>
<th>Department</th>
<th>Name</th>
<th>Phone</th>
<th>Residence Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plant Engineering and Maintenance</td>
<td>Dan Burkholder</td>
<td>816-926-4469</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td></td>
<td>816-517-5162 (Cell)</td>
<td></td>
</tr>
<tr>
<td>Environmental, Health, &amp; Safety</td>
<td>Tonyea Inglis</td>
<td>816-926-4434</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td></td>
<td>816-213-4932 (Cell)</td>
<td></td>
</tr>
<tr>
<td>Security Office</td>
<td>On-Duty Staff</td>
<td>816-926-4144</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td></td>
<td>816-213-1624 (Cell)</td>
<td></td>
</tr>
</tbody>
</table>