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| BurnerCom  Safety, Health and Environmental Manual |

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# Section One: Policies and Procedures

## Acknowledgement Form

I, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_(Print Name)

Of, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (Name of Company)

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

(Work Location)

I hereby acknowledge that I have received a copy of the BurnerComSafety Manual Handbook.

I understand that it is my responsibility to read and understand the policy and procedures contained in the handbook.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (Recipient’s Signature) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_(Date)

I have explained or answered any questions or concern that contractor or employee had after reviewing the Safety Manual Handbook.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_(Supervisor’s Signature) \_\_\_\_\_\_\_\_\_\_\_\_\_\_ (Date)

Please forward this form to the EHS Department

## Access to Medical Records

1. **Purpose**

The purpose of this policy is to provide employees and their designated representatives a right of access to their personal medical records and relevant exposure records.

1. **Employee Notification**

All employees shall be informed of their right to access medical and exposure records, the existence, location and availability of employee exposure and medical records maintained by or for the Company and the person responsible for maintaining and providing access to these.

* Initial notification should be covered in the new employee orientation. A copy of the bulletin board notification and/or copy of this standard can be used and should be documented.
* Annual notification can be made by posting a notice where the employees gather outlining the program.
* A copy (can be from OSHA website) of CFR 1910.1020 shall be maintained at each location and it shall be made available to employees for review.

1. **Access**

* The employee may access his/her records by making a request to the Human Resources Manager.
* A written request must be provided to the Human Resources representative to initiate access to these records.
* Employees, previous employees and designated representatives have the right to review and/or copy relevant Company exposure and medical records. There shall be no cost for this service.
* OSHA has the right to review and/or copy relevant exposure and medical records provided an access order is presented. The Access Order must be posted with a cover letter on an employee bulletin board and the affected employees must be informed.
* Access to an employee record shall be provided by the Company within 15 working days from receipt of the request. If the records cannot be provided within 15 working days, the employee or designated representative requesting the record shall be informed with the reason(s) for the delay and the earliest date when the record(s) can be made available.

1. **Transfer of Records**

Whenever an employer is ceasing to do business, the employer shall transfer all records subject to this section to the successor employer. The successor employer shall receive and maintain these records. Whenever an employer is ceasing to do business and there is no successor employer to receive and maintain the records subject to this standard, the employer shall notify affected current employees of their rights of access to records at least three (3) months prior to the cessation of the employer's business.

1. **Recordkeeping**

The Human Resources Manager is responsible for maintaining and providing access to employees’ medical records. These records are kept separately from other employee records.

Employee exposure and medical records shall be maintained by the Company for the duration of employment plus at least thirty (30) years. The medical records of employees who have worked for less than (1) year for the employer need not be retained beyond the term of employment if they are provided to the employee upon the termination of employment.

These records shall include the following:

* Exposure Records
  + Environmental (workplace) monitoring or measuring of a toxic substance or harmful physical agent, including personal, area, grab, wipe, or other form of sampling, as well as related collection and analytical methodologies, calculations, and other background data relevant to interpretation of the results obtained.
  + Biological monitoring results which directly assess the absorption of a toxic substance or harmful physical agent by body systems (e.g., the level of a chemical in the blood, urine, breath, hair, fingernails, etc.) but not including results which assess the biological effect of a substance or agent or which assess an employee's use of alcohol or drugs.
  + Material safety data sheets indicating that the material may pose a hazard to human health. Material Safety Data Sheets. In the absence of an MSDA, a chemical inventory or any other record which reveals where and when used and the identity (e.g., chemical, common, or trade name) of a toxic substance or harmful physical agent.
* Medical Records - a record a record concerning the health status of an employee which is made or maintained by a physician, nurse, or other health care personnel, or technician, including:
  + Medical and employment questionnaires or histories (including job description and occupational exposures).
  + The results of medical examinations (pre-employment, pre-assignment, periodic, or episodic) and laboratory tests (including chest and other X-ray examinations taken for the purpose of establishing a base-line or detecting occupational illnesses and all biological monitoring not defined as an "employee exposure record").
  + Medical opinions, diagnoses, progress notes, recommendations, first aid records, Descriptions of treatments and prescriptions, and employee medical complaints.
* Analyses Using Exposure and/or Medical Records - a compilation of data or study based on information collected from individual employee exposure or medical records.

## Alcohol and Drug Policy

The purpose of this policy is to ensure a safe and productive work environment and to safeguard property of the company and its personnel.

BurnerCom strictly prohibits the use, sale, transfer, or possession of alcohol, drugs, drug paraphernalia or controlled substances on any premises of the Company or worksites. Company vehicles, as well as private vehicles parked on the Company’s premises or worksites, including parking lots, are locations included within this prohibition.

Additionally, the Company strictly prohibits the presence of any person with any detectable amount of alcohol, drugs, or controlled substances present in his or her body on Company property. Any employee found in violation of this policy is subject to disciplinary action, including immediate discharge. Depending on the circumstances, other action, including notification of appropriate law enforcement agencies, may be taken against any employee who violates this policy.

Any non-employee, including visitors, contractors, employees of contractors, consultants, etc., found in violation of the Company’s policy for a drug and alcohol free work environment, or suspected of having alcohol, drugs, or controlled substances present in his or her body, may be refused entry onto, or removed from, premises, or worksites, and denied future access. Furthermore, depending on the circumstances, other action, including notification of appropriate law enforcement agencies, may be taken against any violator of the Company’s policy.

The Company will require all applicants for employment to submit to a urinalysis and/or blood test for drugs and/or alcohol as a precondition for employment. The Company may also require any employee to submit to urinalysis and/or blood test for drugs and/or alcohol in the following circumstances:

* Following an accident occurring within the course and scope of employment;
* Whenever there is reasonable suspicion to believe that an employee is using drugs or alcohol in violation of the Company’s policy;
* As part of periodic physical examinations; and,
* On a random selection basis and any other time deemed appropriate by the management of the Company, without prior announcement.

Failure to submit to the drug and/or alcohol test noted above will result in disciplinary action, up to and including termination.

## Environmental, Health & Safety Policy

BurnerComvalues the safety of people and the protection of the environment while conducting its business operations. With this in mind, accident prevention in all areas of our company’s business is of utmost importance. BurnerCom recognizes its responsibility to provide a safe and healthful workplace. In turn, each employee of the company has a personal responsibility to conduct his or her job in a safe and environmentally sound manner. It is also the duty of each employee to report any perceived hazard, unsafe practice or conditions to his or her immediate supervisor. No employee is required to work at a job they know is not safe or healthful.

To provide and maintain safe working conditions for the safety of its employees, contractors and for the public BurnerCom Environmental, Health and Safety policy is:

1. To comply with all applicable safety and health laws, regulations, practices, or procedures as set forth by governmental authorities and industry standards.
2. To require environmental, health and safety management participation at all levels of the Company.
3. To plan and carry out all phases of operations as part of our continuous improvement process and in a manner that will effectively reduce or eliminate the possibility of accidents that could injure personnel or harm the environment.
4. To conduct frequent inspections of job sites, materials, and equipment to find and eliminate unsafe working conditions or practices and to control health hazards. Inspections shall be made by a competent person.
5. To develop reasonable safety rules and practices and to effectively communicate these rules and practices and provide appropriate training to all employees. Each employee must be instructed in the recognition and avoidance of unsafe conditions and the regulations applicable to his work environment to control or eliminate any hazards or other exposure to illness or injury.
6. To provide leadership in safety and accident prevention by continuously improving safety performance and adhering to company and industry best and safe practices.
7. Ensure that only qualified employees by training or experience shall operate equipment and machinery.

## New Employee/Contractor Orientation

1. **Purpose**

To prevent occupational illness and injury by orienting new or contract employees to hazards present in the workplace and the necessary safety precautions.

1. **Responsibility**

The supervisor of a new hire is responsible for ensuring the new/contract employee completes the program.

1. **General**

* All newly hired personnel will be required to complete the New Employee or Contract Employee Safety Orientation as soon as possible after being hired.
* Ongoing training is provided according to the training matrix.
* Each new/contract employee, regardless of prior experience, shall have their job outlined and explained by the supervisor, or designated employee.
* Supervisors shall be responsible for the safety of their subordinates and the safe operation of equipment during normal operations and possible emergencies.
* Observation of the new employee’s work performance should be maintained until the applicable supervisor is satisfied that he or she can perform the duties and requirements in a safe and effective manner.
* The supervisor retains a completed copy of Appendix A and sends the originals to the Environmental, Health and Safety Department at the corporate office.
* All employees’ shall be trained in Stop Work Authority and shall be tested that they understand the Policy. This training shall be documented and kept in the employee’s personnel file.

Link to [NewEmployeeContractorOrientationForm](#NewEmployeeContractorOrientationForm) Appendix A

## Contractors

1. **Purpose**

To minimize injuries to Contractor personnel, property loss and equipment damage while working on behalf of company.

1. **General**

The company sets the minimum acceptable Contractor safety requirements in contractual documentation and in job specific hazard assessments. Visitors, contractors and subcontractors shall be informed of the facility emergency response procedures before they begin work or tour the facility.

Contractors are required to have an ongoing safety program. The program shall include at a minimum:

* Record keeping: Statistical data and analysis of accidents.
* Investigation of accidents: Policy of investigating accidents and implementing corrective measures.
* Training: An established training program which provides for the initial and continuing development of personnel in accordance with Company, OSHA, EPA and other regulatory requirements. Their workers will be trained to do their task(s) as would a regular employee. This training will be documented on the Safety Training Matrix.
* Job Planning: Appropriate procedures for the job(s) to be conducted.
* Safety Meetings: Regular safety meetings are conducted on the job.
* Appropriate regulatory required programs, records and licenses (e.g., code certified welders).

1. **Evaluation**

Prior to awarding the work, BurnerCom may compare the Contractor’s Safety Program and performance with that of other companies performing similar work. As the job progresses, the Company may:

* Periodically review the Contractor’s safety performance.
* Periodically review the visibility and execution of the Contractor’s Safety Program.
* Provide guidance as appropriate.
* Conduct post-job safety performance review using the Contractor Post Job evaluation form in Appendix B.

1. **Contractor Requirements**

* Contractor will require their personnel to know and follow Company safety procedures.
* Contractors must track all man-hours and incidents associated with their activities on Company facilities.
* Contractor personnel will report to the Company Person-in-Charge immediately upon arrival at the location for the first time. They will be briefed on emergency procedures and safety, including personal protective equipment requirements.

1. **Work Procedures**

* Contractor personnel will be invited to attend regularly scheduled safety meetings, as appropriate. Contract personnel will attend any pre-job safety meetings or Job Safety Analysis concerning their work when requested.
* Contractor is responsible for its employees and the safe conduct of its work.
* Contractor shall cease operations and secure the work site at any time the contractor believes it unsafe to precede with the work [Stop Work].
* Contractor shall at all times conduct its work in a safe manner and with equipment meeting acceptable industry standards.
* Smoking is limited to designated smoking areas.
* Contractor personnel shall comply with informational (warning) signs relating to safety that are posted throughout Company facilities.
* Contractor is responsible for furnishing personnel who have been trained and are qualified to work in the geographical work area. Contractor is also responsible for assuring that each worker is familiar with and has read this program.

1. **Personal Protective Equipment**

* Personal protective equipment will be furnished by Contractor for Contractor personnel.
* Hearing protection will be worn by all personnel while in designated high noise areas.
* As a minimum, contractor personnel and visitors will wear safety glasses with side shields when they are in work locations where the potential for eye injury exists.
* Contractor personnel shall wear hard hats while outside offices unless an area has been specifically designated otherwise (e.g., welding shop.)
* Safety-toe foot wear meeting ANSI requirements will be worn by all contractor personnel while in the work area.
* Contract personnel shall be fully and appropriately clothed for the job and the weather.
* Gloves shall be worn when appropriate and as required by a workplace hazard assessment.
* Jewelry will not be worn in work areas.
* Fall protection devices will be worn when the potential fall distance exceeds six feet. The device shall be a Class III full body harness that meets ANSI requirements. The harness shall be equipped with a one piece shock absorbing lanyard with double locking snaps on each end.
* Retracting life lines that reduce free fall to two feet or less may also be used.
* In circumstances where respiratory protection may be required (e.g., paint and blast), respiratory protection shall be worn and properly maintained by contractor.

1. **Substance Abuse/Contraband Control**

All Contractor personnel are subject to the Company Substance Abuse / Contraband Control program while on Company premises. Any individual found in violation of the Company policy will be subject to removal from the premises. Violation of the policy by Contractor employees may also cause contract cancellation.

Link to[ContractorPostJobEvaluationForm](#ContractorPostJobEvaluationForm)Appendix B

## Visitors

1. **Purpose**

The purpose of this procedure is to ensure visitor safety on Companyproperty.

1. **Responsibility**

The safety of visitors on Company facilities or property is the responsibility of the facility supervisor. The individual(s) bringing visitors to these locations must coordinate their activities with the operating supervisor(s) prior to the trip.

1. **General**

Visitor safety briefings should include:

* Smoking Policy.
* Facility alarms and emergency evacuation procedures.
* Hazardous conditions and substances that may be encountered.
* Personal protective clothing and equipment requirements.
* Reporting of injuries/accidents policy.
* Visitors may not tour work locations unescorted unless prior approval has been obtained.

1. **Personal Protective Equipment**

As a minimum, visitors must wear hardhats, safety toe footwear and safety glasses in work areas.

## Safety Meetings

1. **Purpose**

To promote safe working conditions through regularly scheduled and effective management-employee safety meetings.

1. **Responsibilities**

The Site Manager shall:

* Coordinate the safety meeting and require all employees to attend.
* Maintain attendance check in sheets.
* Follow up on any corrective items or suggestions that come up in the meeting.

Safety Department shall:

* Provide materials for safety meetings.
* Present or provide others to present safety meetings as requested.
* Assist the Site Manager in completing corrective actions as appropriate.

1. **Pre Job Safety Meetings**

Supervisors shall lead meetings to discuss specific hazards as required before work that requires safety consideration starts.

Link to [SafetyMeetingsAttendanceForm](#SafetyMeetingsAttendanceForm) Appendix C

## Incident Investigation, Reporting and Recordkeeping

1. **Purpose**

The purpose of this procedure is to provide a systematic approach to investigating and reporting incidents involving personal injury or property damage.

1. **Reporting Procedure**

An incident report shall be completed for all incidents including first aid, medical treatment, lost time, fatalities, near miss, fire and explosion, vehicle accident, theft, and equipment damage. Individual responsibilities for reporting and investigation shall be pre-determined and assigned prior to incidents.

Written incident reports shall be prepared and include an incident report form and a detailed narrative statement concerning the events. The format of the narrative report may include an introduction, methodology, summary of the incident, investigation board member names, narrative of the event, findings and recommendations. Photographs, witness statements, drawings, etc. should be included.

Incidents involving a fatality or the hospitalization of three or more people must be verbally reported to OSHA within 8 hours of their discovery. Incidents must also be reported to the owner client and immediate supervisor as soon as possible or in a timely manner (within 24 hours of incident). A copy of the incident report shall be forwarded to the EHS department within 24 hours.

1. **Investigation Procedure**

While all incidents shall be investigated, the extent of such investigation shall reflect the seriousness of the incident utilizing a root cause analysis process or other similar method. All major incidents that cause or have the potential to cause fatalities, hospitalizations, and significant property damage shall undergo a root cause analysis. Investigations should begin immediately following the incident.

The following guidelines shall be used for all investigations:

* Proper equipment such as pens/paper, tape measures, rulers, cameras, audio recorder, PPE, marking devices, equipment manuals, etc. shall be provided to assist in conducting the investigation.
* Witness interviews and statements shall be collected as soon as possible following an incident.
* Witness interviews shall be conducted by trained interviewers in a private location. Interviews shall be conducted as a fact finding and not a fault finding mission. Only open-ended questions should be asked. The investigation may require follow-up witness interviews.
* Inspect the site immediately following the incident to identify any evidence. This may include a listing of people, equipment, and materials involved and a recording of environmental factors such as weather, illumination, temperature, noise, ventilation, and physical factors such as fatigue, age, and medical conditions.
* Evidence such as people, positions of equipment, parts, and papers shall be preserved, secured, and collected through notes, photographs, witness statements, flagging, and impoundment of documents and equipment.
* After all facts are gathered and analyzed causative and contributing factors of the incident should be identified.

1. **Corrective Actions**

Incident investigations shall result in corrective actions. Recommendations for corrective actions should be based on factors that have contributed to or have caused the incident. The incident report and changes to process shall be communicated to all employees.

1. **Training**

Personnel who conduct or participate in incident investigations shall be trained in their roles and responsibilities for incident response, incident awareness and incident investigation techniques. Training shall be provided initially and annually thereafter.

1. **Recordkeeping**

Records shall be retained for fatalities, injuries, and illnesses that is work-related, a new case and meets one or more of the general recording criteria.

Each recordable injury or illness shall be entered on an OSHA 300 Log and 301 Incident Report, or other equivalent form, within seven (7) calendar days of receiving information that a recordable injury or illness has occurred.

The 300 log shall be signed by a company executive to certify that the log has been examined and that summary is correct and complete to the best of their knowledge.

A copy of the annual summary must be posted in each establishment in a conspicuous place or places where notices to employees are customarily posted. Ensure that the posted annual summary is not altered, defaced or covered by other material.

The annual summary must be posted no later than February 1st of the year following the year covered by the records and the posting kept in place until April 30th.

The OSHA 300 Log, the privacy case list (if one exists), the annual summary, and the OSHA 301 Incident Report forms must be retained for five (5) years following the end of the calendar year that these records cover.

## Stop Work Authority

1. **Purpose**

The purpose of this procedure is to establish authority and guidelines to stop work when employees believe that a situation exists that place them, their coworker(s), contracted personnel, or the public at risk or in danger.

1. **Responsibility**

The Supervisor Shall:

* Ensure no actions are taken as reprisal or retribution against individuals who raise safety concerns or stop an activity they believe is unsafe.
* Create a culture where Stop Work Authority is exercised freely.
* Resolve any issues that have resulted in an individual stopping an activity and provide feedback.

The Employee Shall:

* Initiate a Stop Work Intervention when warranted.
* Have the authority and obligation to stop any task or operation where concerns or questions regarding the control of HSE risk exist.
* Report to the supervisor in charge any activity or condition the employee believes is unsafe or for which they have initiated a Stop Work.

1. **Procedure**

When an unsafe condition is identified the Stop Work Intervention will be initiated, coordinated through the supervisor, and initiated in a positive manner.

* Stop work if an activity or condition is believed to be unsafe, could adversely affect the safe operation or cause damage to the facility, or to clarify work instructions or to propose additional controls.
* Notify supervision/management and affected personnel when you stop work or decline to perform an activity.
* Resolve any issues that have resulted in an employee stopping work or an activity. It is the desired outcome of any Stop Work Intervention that the identified safety concern(s) have been addressed to the satisfaction of all involved persons prior to the resumption of work. Most issues can be adequately resolved in a timely manner at the job site, occasionally additional investigation and corrective actions may be required to identify and address root causes.
* Once all issues have been resolved the work or stopped activity may resume. No work will resume until all stop work issues and concerns have been adequately addressed.

All Stop Work Interventions shall be documented for lessons learned and corrective measures to be put into place.

Stop Work reports shall be reviewed by supervision in order to measure participation, determine quality of interventions and follow-up, trend common issues, identify opportunities for improvement, and facilitate sharing of learning’s.

1. **Training**

Employees shall receive Stop Work Authority training before initial assignment. The training shall be documented including the employee name, the dates of training and subject.

# Section Two: Safety Requirements

## Asbestos Awareness

1. **Purpose**

To reduce prolonged exposure to asbestos fibers that has been proven to cause debilitating respiratory diseases such as asbestosis, lung cancer, mesothelioma and cancer of the stomach and colon.

1. **Exposure**

Asbestos can be found in materials used in the manufacture of heat-resistant clothing, automotive brake and clutch linings, and a variety of building materials including insulation, soundproofing, floor tiles, roofing felts, ceiling tiles, asbestos-cement pipe and sheet, and fire-resistant drywall.

Asbestos is also present in pipe and boiler insulation materials, pipeline wrap and in sprayed-on materials located on beams, in crawlspaces, and between walls.

1. **Signs and Labels**

Areas that contain Asbestos Containing Material (ACM) and/or Presumed Asbestos Containing Material (PACM) shall be appropriately marked with signs and labels. Signs shall be posted at the entrance of mechanical rooms/boiler rooms/etc. which contain the ACM/PACM. The sign must identify the material present, its location, and the appropriate work practices to ensure that ACM is not disturbed. These signs must be comprehensible to those employees who may encounter them (such as, in foreign language, pictographs, graphics, or awareness training etc.). Some examples are:

**DANGER**

**PIPE INSULATION WITHIN THIS ROOM CONTAINS ASBESTOS FIBERS**

**AVOID BREATHING DUST**

**CANCER AND LUNG DISEASE HAZARD**

**SEE MAINTENANCE SUPERVISOR FOR APPROPRIATE WORK PRACTICES**

1. **Multi-Contractor Worksites**

Facilities with ACM have particular responsibilities for notifying the following of it’s presence of at the work site:

* Prospective contractors applying or bidding for work if their employees could be working in or adjacent to areas containing the ACM.
* Employees who could be working in or adjacent to areas containing the ACM.
* All other employers with employees who could be working in or adjacent to areas containing the ACM.

Any employer performing work which requires the establishment of a regulated area must inform all other employers on the worksite of the nature of the work, the requirements pertaining to the regulated area, and the measures employed to assure other employees are not exposed to asbestos.

If employees working immediately adjacent to a Class I asbestos job are exposed to asbestos due to the inadequate containment of such a job, their employer shall either remove the employees from the area until the enclosure breach is repaired or perform an initial exposure assessment.

The employer of employees working adjacent to a regulated area shall:

* Take steps daily to ascertain the integrity of the enclosure or other control methods that are being used by the asbestos employer to assure that asbestos fibers do not migrate into the work area.
* Comply with applicable protective requirements to protect their employees.

1. **Training**

Asbestos Awareness training is provided and documented for any employee(s) whose work activities may expose them to asbestos containing material (ACM) or presumed asbestos containing material (PACM) but do not disturb the ACM or PACM during their work activities.

## Assured Equipment Grounding

1. **Purpose**

Provide specific requirements for proper equipment groundingcovering all cord sets, receptacles which are not part of the building or structure & equipment connected by cord & plug which are available for use or used by employees. Ground-fault protection for personnel shall be provided on this equipment by using either ground-fault circuit interrupters or an assured equipment grounding conductor inspection program.

1. **General**

* Ground-fault protection for personnel shall be provided on this equipment by using either ground-fault circuit interrupters or an assured equipment grounding conductor inspection program.
* Supervisors are designated as the competent person responsible for implementing and enforcing the requirements of this program.

1. **Ground-fault circuit interrupters (GFCI)**

* Ground-fault protection will be provided for personnel on construction sites on all 120-volt single phase, 15 and 20 ampere receptacle outlets, which are not a part of the permanent wiring and which are in use by employees.
* Ground fault circuit interrupters will be used when an outlet is near a water source, or when damp or wet conditions exist and portable electrical equipment is being used.
* GFCIs shall be tested periodically to ensure their operability.

1. **Assured Equipment Grounding Conductor Inspection Program**

* Each cord set, attachment cap, plug and receptacle of cord sets, and any equipment connected by cord and plug, except those that are fixed and not exposed to damage, shall be visually inspected before each day's use for external defects and for indication of possible internal damage. Equipment found damaged or defective may not be used until repaired.
* The following tests shall be performed on all cord and plug equipment used in a portable fashion or like equipment that is moved from site to site.
* Double insulated tools, equipment used in connection with ground fault circuit interrupters, or equipment used in a building permanent wiring system are not subject to these testing requirements.

1. **Testing for Continuity**

All tests, other than the visual inspections and periodic testing of the GFCI button, shall be documented and kept on file at the applicable field or plant location. All required tests shall be performed by the user or person responsible for maintaining the equipment:

* Before first use;
* Before equipment is returned to service following repairs;
* Before equipment is used after any incident which can be reasonably suspected to have caused damage (for example, when a cord set is run over);
* At intervals not exceeding three (3) months.
* Tests performed under the Assured Equipment Grounding Conductor Inspection Program must be documented. Test documentation shall identify each item of equipment tested and indicate the last date it was tested.
* Equipment found to be defective may not be used until repaired.

## Bloodborne Pathogens

1. **Purpose**

To comply with the OSHA Bloodborne Pathogens Standard, Title 29 CFR 1910.1030 through the use of a written exposure control plan, appropriate employee training, personal protective equipment, record keeping, labeling and vaccination, and tracking procedures. This plan applies to all occupational exposures to blood or other potentially infectious materials which may occur while rendering first aid or medical services.

1. **Right of Access**

This plan is available upon request to employees, their designated representatives and to government agencies where required by law. A copy of the plan will be available at each reporting location where covered employees work, and to all First Responders at the time of their training.

1. **Methods of Compliance**

* Universal precautions shall be observed to reduce exposure by treating all human blood as if it is known to be infectious for HIV, HBV or other bloodborne pathogens. Employees are to use this approach when handling any blood or materials contaminated with blood. All employees face the same risk from bloodborne pathogens. Employees giving first aid or cleaning up bloodborne pathogens may have a higher risk. Housekeeping personnel may also have a higher risk in coming into contact with bloodborne pathogens.
* Exposure determination will be made without regard to the use of personal protective equipment.
* Engineering and work practice controls will be used to minimize employee exposure.
  + Hand washing facilities are readily available to all employees. In the event hand washing facilities are not available, antiseptic towelettes will be provided at no cost to the employees.
* Personal protective equipment will be used when employee exposure exist, after the implementation of engineering controls.
* Engineering controls are reviewed annually to insure their effectiveness.
* Employees with occupational exposure, regardless of whether the employee was using PPE, will observe the following control measures:
  + Employees must wash their hands or other skin with soap and water, or flush mucous membranes with water, as soon as possible following an exposure incident (such as a splash of blood to the eyes or an accidental needle stick).
  + Employees wash their hands and other skin surfaces with soap and water immediately or as soon as feasible after removing gloves or other personal protective equipment.
  + In the event that employees do not have access to washing facilities, they must wash their hands with an appropriate antiseptic hand cleanser and clean cloth or paper towels and wash with soap and water as soon as possible.
* Materials such as bandages etc. that become contaminated with blood to the extent they are regulated waste shall be placed in a leak proof biohazard bags.
  + Employees must handle contaminated needles and other sharps in the manner prescribed in their training programs in compliance with OSHA regulations.

1. **Personal Protective Equipment**

* Appropriate Personal Protective Equipment (PPE) will be provided for employee use at no cost to the employee.
* PPE shall be used unless the employer shows that employees temporarily declined to use PPE under rare circumstances.
* When rendering first aid, the employee is required to use PPE whenever the potential exist for blood to contact skin surfaces or mucous membranes.
* Contaminated PPE will be removed immediately or as soon as feasible and placed in an appropriately labeled container. The cleaning, laundering, repairing, replacement, and disposal of PPE will be provided at no cost to the employee.
* Gloves will be worn when handling or touching contaminated items or when it can be reasonably expected that the employee may have hand contact with blood or other potentially infectious materials.

1. **Housekeeping**

Decontamination will be accomplished by utilizing the following materials:

* 10% (minimum) solution of chlorine bleach
* [Lysol or other EPA-registered disinfectants](http://ace.orst.edu/info/nain/lists.htm)
* All contaminated work surfaces, tools, objects, etc. will be decontaminated immediately or as soon as feasible after any spill of blood or other potentially infectious materials. The bleach solution or disinfectant must be left in contact with contaminated work surfaces, tools, objects, or potentially infectious materials for at least 10 minutes before cleaning.
* Equipment that may become contaminated with blood or other potentially infectious materials will be examined and decontaminated before servicing or use.
* Broken glassware will not be picked up directly with the hands. Sweep or brush material into a dustpan.
* Known or suspected contaminated sharps shall be discarded immediately or as soon as feasible in containers that are closeable, puncture-resistant, leak-proof on sides and bottom, and marked with an appropriate biohazard label. If sharps container is not pre-labeled, biohazard labels are available through EHS.
* When containers of contaminated sharps are being moved from the area of use or discovery, the containers shall be closed immediately before removal or replacement to prevent spillage or protrusion of contents during handling, storage, transport, or shipping.
* Reusable containers shall not be opened, emptied, or cleaned manually or in any other manner that would expose employees to the risk of percutaneous injury.

1. **Regulated Waste**

* Contaminated items such as bandages, dressings, needles, broken glass contaminated with blood, etc., are considered regulated waste and must be disposed of in appropriate containers.
  + Waste must be placed in biohazard bags.
  + If necessary, the biohazard bag shall be placed in containers which are closable, puncture resistant, leak proof and labeled as biohazard.
* Regulated waste should be sent to a medical facility along with the injured person if medical treatment is necessary. Otherwise, a local medical emergency agency should be contacted for disposal.

1. **Hepatitis B Vaccination, Post “Exposure Incident” Evaluation and Follow-Up**

Hepatitis B vaccine is available to all employees who have rendered first aid in any situation involving the presence of blood, whether they were wearing PPE or not. In addition, post exposure evaluation and follow-up will be available to an employee after an "Exposure Incident". These services will be provided at no cost to the employee and at a reasonable time and place.

1. **Hepatitis B Vaccination**

* The vaccination series will be offered to all unvaccinated first aid providers who have rendered assistance in any situation involving the presence of blood regardless of whether or not an "Exposure Incident" occurred. The vaccination series is to be made available at no cost as soon as possible, but no later than 24 hours after incident occurred and reported.
* Employees declining the vaccination are required to sign the statement in exhibit "A". The signed statement will be forwarded to the Safety Manager and filed in the employee's medical folder.
* In the event that a booster dose of Hepatitis B vaccine is recommended at a future date by the U.S Public Health Service, the booster will be made available as with the original vaccination.

1. **Post "Exposure Incident" Evaluation and Follow-up**

* Employees are required to report all "Exposure Incidents" to their immediate supervisor.
* The immediate supervisor will investigate each "Exposure Incident" and document the following information:
  + Exposed employee's name and social security number.
  + Date and time of exposure.
  + Job duty performed at the time of exposure.
  + Details of exposure including amount and type of fluid or material the employee was exposed to and severity of exposure (i.e. depth of injury and whether fluid was injected).
  + Description of the source of exposure including, if known, whether the source material contained HIV or HBV.
  + Details about counseling, post exposure management and follow-up
* The documented information will be submitted to the Safety Manager and filed with the employee's medical records.
* The exposed employee's blood will be collected as soon as feasible and tested for HIV and HBV as soon as consent is obtained.
  + If consent for testing is not obtained immediately, the blood shall be stored for 90 days.
  + The employee may request to have their blood tested within that 90 day period.
  + If the baseline tests are seronegative, the employee shall be retested at 6 weeks, 12 weeks, and 6 months after exposure.
  + The results of these tests are available only to the health care provider and the individual tested.

1. **Training**

Training will be conducted at time of hire, annually and when changes or procedures are modified that will affect the employee's occupational exposure. All employees with occupational exposure shall participate in the training program.

Training will contain the following elements:

* A copy of the OSHA Blood borne Pathogen standard shall be issued.
* A general explanation of the epidemiology and symptoms of blood borne diseases.
* A discussion of the modes of transmission of blood borne diseases.
* A discussion of this plan and the means by which an employee can obtain a copy.
* Recognition of tasks that may involve exposure to blood or other potentially infectious body fluids and materials.
* An explanation of the methods, work practices and protective equipment that will prevent or reduce exposure.
* An explanation of proper handling and disposal of personal protective equipment.
* Information on Hepatitis B vaccine.
* The basis upon which personal protective equipment is selected.
* Information on appropriate action to take and persons to contact in an emergency involving blood or other potentially infectious body fluids and materials.
* An explanation of the procedure to follow if an exposure incident occurs, including the method of reporting the incident, and the medical follow-up that will be made.
* Information on the post exposure evaluation and follow-up is required to be provided to the employee(s) following an exposure incident.
* An explanation of signs, labels, or color-coding required by OSHA’s Standard.
* An opportunity for interactive questions and answers with the person conducting the training session.

1. **Training Records**

* Training records will include the names of the employees attending, training date, contents or summary of training session and the name of the person conducting the training.
* Training records will be maintained for a minimum of 3 years following the date on which training occurred.

1. **Medical Records**

* Human resources will maintain an accurate record for each employee with a documented occupational exposure.
  + Human resources will maintain the confidentiality of all medical records.
  + Information will not be disclosed without the employee's written consent.
* Medical information maintained by Human Resources will include:
  + A list of first aid incidents involving occupational exposure.
  + Completed Hepatitis B vaccine Declination form.
  + Supervisor's report of any "Exposure Incident".
  + Name and social security number of the employee.
  + A copy of the employee's Hepatitis B vaccination status including dates as provided by Physician.
  + A copy of all results of examinations, medical testing follow-up procedures.
  + The employer's copy of the physician's written opinion.
  + A copy of the information provided to the physician as outlined under follow-up care.
* In accordance with CFR 1910.20, medical records for employees covered by this Plan will be maintained for the duration of employment plus 30 years.
  + Employee medical records required by this section shall be provided upon request for examination and copying to the subject employee, to anyone having written consent of the subject employee, to the Director, and to the Assistant Secretary in accordance with 29 CFR 1910.1020.

Transfer of records will be done in accordance with 29 CFR 1910.1020(h).

Link to [HepatitisBVaccineDeclination](#HepatitisBVaccineDeclination) Appendix D

## Confined Space Entry

1. **Purpose**

This procedure has been established this to minimize the risk of exposure to employees who may enter into or work near confined spaces. These procedures establish requirements to ensure that personnel are aware of related hazards and responsibilities.

1. **Classification of Confined Spaces**

Confined spaces are categorized as either permit-required or non-permit required.

* **Permit Required Confined** Spaces - A permit-required confined spaceis any confined space that has one or more of the following characteristics:
  + Contains or has a potential to contain a hazardous atmosphere.
  + Contains a material that has the potential for engulfing an entrant.
  + Has an internal configuration such that an entrant could be trapped or asphyxia by inwardly converging walls or by a floor which slopes downward and tapers to a smaller cross section.
  + Contains any other recognized serious safety or health hazard.
* **Non-Permit Required Confined Spaces** -A Non-permit Required Confined Space is a confined space that does not contain or have the potential to contain any hazard capable of causing death or serious physical harm.

1. **Roles and Responsibilities for Confined Space Entry**

**Site Managers/Supervisor Shall:**

* Provide resources and oversight necessary to enable compliance with the requirements of this program.
* Be directly responsible for ensuring the safety of their employees in confined spaces.
* Ensure that employees engaged in confined space entry operations receive the appropriate level of training prior to starting entry operations.
* Evaluate confined spaces within the facility, work sites, and project sites to ensure that the proper precautions are taken for safety, including clearly marking confined spaces.

**The EHS Representative will:**

* Assist Site Managers and Supervisors to achieve compliance with this program;
* Assist with identification and labeling of confined spaces;
* Audit the program effectiveness at least annually; and
* Review and update procedures at least annually and more frequently, as needed.

**Entry Supervisor shall:**

* Be available at the general workplace and on-call to the Attendant at all times while work is being performed in the confined space
* Know the hazards that may be faced during entry, including information on the mode, signs or symptoms, and consequences of the exposure and 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.
* Terminate the entry and cancel the permit as required.
* Verify that rescue services are available and that the means for summoning them are operable as appropriate.
* Remove unauthorized individuals who enter or who attempt to enter the permit space during entry operations.
* Determine 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 the acceptable entry conditions are maintained.
* Complete training for Authorized Employees under the Lockout/Tagout procedure in order to understand lockout/tagout concepts applied to confined space entry.
* Learn functions, use, and limitations of any monitoring instrumentation that will be used for entry.

**Authorized Entrants must:**

* Know the hazards that may be faced during entry, including information on the mode, signs, symptoms, and consequences of the exposure.
* Communicate with Attendant, as necessary, to enable Attendant to monitor Entrant status and to enable the Attendant to alert Entrants of the need to evacuate the space.
* Exit from the confined space as quickly as possible whenever:
* An order to evacuate is given by the Attendant or the Entry Supervisor.
* Entrant recognizes any warning sign or symptom of exposure to a dangerous situation.
* Entrant detects a prohibited condition.
* An evacuation alarm is activated.
* Authorized Entrants shall alert the Attendant whenever:
* Entrant recognizes any warning sign or symptom of exposure to a dangerous situation;
* Entrant detects a prohibited condition.
* There shall not be more than one authorized person in any confined space. This will apply to all contract or third party workers.

**Attendants shall:**

* Know the hazards that may be faced during entry, including information on the mode, signs, symptoms, and consequences of the exposure.
* Be aware of possible behavioral effects of hazard exposure in Entrants.
* Continuously maintain an accurate count of Entrants.
* Remain outside the permit space during entry operations until relieved by another Attendant.
* Monitor activities inside and outside the space, including weather conditions, to determine if it is safe for Entrants to remain in the space.
* Provide pedestrian, vehicle, or other barriers as necessary to protect entrants from external hazards.
* Perform no duties that might interfere with the primary duty to monitor and protect Entrants.
* Order Entrants to evacuate the permit space immediately under any of the following conditions:
  + If Attendant detects a prohibited condition.
  + If Attendant detects a situation outside the space that could endanger Entrants.
  + If Attendant cannot effectively and safely perform all their duties.
  + Take the following actions when unauthorized entrants enter the confined space:
  + Warn unauthorized persons that they must stay away from the permit space.
  + Advise unauthorized persons that they must exit immediately if they have entered the confined space.
  + Inform Entrants and the Entry Supervisor if unauthorized persons have entered the permit space.
* Maintain understandable communication (by employer-specified means) with entrants to ensure their safety; communication must take into account possible language barriers.
* Immediately summon rescue and other emergency services as soon as the Attendant determines that Entrants may need assistance to escape from permit space hazards.
* NEVER enter any confined space for any reason, or to rescue an Entrant (only non-entry rescues are permitted, as applicable).
* The attendant shall only monitor one confined space at a time. If another confined space is entered, a separate attendant shall be required.

1. **Training Requirements**

Training shall be provided so that all employees whose work is regulated by this section acquire the understanding, knowledge, and skills necessary for the safe performance of the duties assigned.

Training will be provided:

* Before the employee is first assigned confined space entry duties.
* Prior to a change in confined space procedures.
* Whenever a Supervisor believes either that there are deviations from the entry procedures or a new hazard is presented.
* When there are inadequacies in the employee's knowledge or use of these procedures.

As a minimum, training includes all OSHA-required elements in 1910.146, and the elements of this procedure. Testing of employees will occur through written and practical (demonstration) tests in order to evaluate the employee’s competency, and to determine the need for retraining. Retraining will be performed as necessary. This training shall be documented and retained in the employee’s personnel file.

1. **Training Records**

This training shall be documented and retained in the employee’s personnel files. The certification shall include the employees name, trainer signature and date of training. Copies of certification shall be made available to employees and their authorized representative.

1. **Rescue Training**

The local Fire Department rescue team has been designated as the outside rescue service for confined spaces. We have conferred with the Fire Department and informed them of possible situations that may require their services. They have been given the opportunity to visit the facility to look at possible rescue scenarios. They have been given an opportunity to examine the entry site, practice rescues, and decline as appropriate. The Fire Department will be onsite for any IDLH conditions while work is being performed.

1. **Entry Permit System**

**No one may enter a confined space until a confined space Entry Permit has been prepared and reviewed by the Entry Supervisor and the EHS department.**

A permit shall not be authorized until all conditions of the Entry Permit have been met. The completed permit shall be available at the time of entry to all Authorized Entrants, by posting at the entry portal or by any other equally effective means, so the Entrants can confirm that pre-entry preparations have been completed.

The duration of the permit may not exceed the time required to complete the assigned tasks or job as identified on the permit. The Entry Supervisor shall terminate entry and cancel the entry permit:

* When entry operations covered by the entry permit have been completed;
* At the end of each shift;
* When a condition that is not allowed under the entry permit arises in or near the permit space; or
* By the appearance of a new hazard (such as lightning in the area.)

Upon completion of work in a confined space:

* The entry permit will be canceled.
* The confined space will be mechanically sealed in such a way that no personnel can enter.
* If the confined space cannot be mechanically sealed then barricades must be erected around all openings with signage that indicates that entry is not allowed.

Each canceled Entry Permit will be retained by the site supervisor for at least one (1) year to facilitate the regulatory review of the permit-required confined space program. Any problems encountered during an entry operation shall be noted on the pertinent permit so that appropriate revisions to the permit-required confined space program can be made.

1. **Multiple Employer Entry Procedures**

When employees from another employer arrange to perform work that involves permit space entry, the host employer shall:

* Inform the contractor that the workplace contains permit spaces and that permit space entry is allowed only through compliance with a permit space program meeting the requirements of this section.
* Apprise the contractor of the elements, including the hazards identified and the host employer’s experience with the space, that make the space in question a permit space.
* Apprise the contractor of any precautions or procedures that the host employer has implemented for the protection of employees in or near permit spaces where contractor personnel will be working.
* Coordinate entry operations with the contractor, when both host employer personnel and contractor personnel will be working in or near permit spaces.
* Debrief the contractor at the conclusion of the entry operations regarding the permit space program followed and regarding any hazards confronted or created in permit spaces during entry operations.

In addition to complying with the permit space requirements that apply to all employers, each contractor who is retained to perform permit space entry operations shall:

* Obtain any available information regarding permit space hazards and entry operations from the host employer.
* Coordinate entry operations with the host employer, when both the host employer’s personnel and contractor personnel will be working in or near permit spaces.
* Inform the host employer of the permit space program that the contractor will follow and of any hazards confronted or created in permit spaces, either through a debriefing or during the entry operation.

1. **Atmospheric Hazards and Testing**

A hazardous atmosphere is one which may expose employees to the risk of death, incapacitation, and impairment of ability to self-rescue (i.e., to escape unaided from the workspace), injury, or acute illness from one or more of the following:

* Flammable gas, vapors, or mists in excess of 10% of the LEL.
* Atmospheric oxygen concentration below 19.5% or above 23.5%.
* Atmospheric concentration of a toxic or hazardous substance which could result in a dose in excess of its Permissible Exposure Limit.
* Any other atmospheric condition that is immediately dangerous to life or health. Both natural and man-made processes create atmospheric hazards in confined spaces such as rusting, painting, welding and cleaning.

1. **Order Of Testing**

Before any employee enters the space, the internal atmosphere must be tested using a calibrated direct-reading instrument. Testing will be performed by a technically qualified person who has received training to effectively evaluate hazards and exposures. Entrants or their representatives are given the opportunity to participate in and review calibrated air monitoring before entry. Atmospheric testing must be done in this order:

* Oxygen content.
* Flammable gases and vapors.
* Potential toxic air contaminants.

1. **Continuous Monitoring**

As long as anyone is in the space, it must be tested frequently or monitored continuously to ensure that no new hazards are created. Employees and their representatives may request that a space be re-evaluated at anytime.

NOTE: After a long break, and before going back into a space, the atmosphere must be tested again.

1. **Unacceptable Entry Condition**

Employee Exposure Unacceptable Entry Conditions

Oxygen content above 19.5% or below 23.5%.

Flammable gas, vapors, or mist in excess of 10% of the LEL

Potential toxic air contaminants exposure in excess of its PEL

Supervisor can only allow workers inside the space under the following conditions. If conditions in the space exceed these conditions, all Entrants must be evacuated from the space immediately.

1. **Controlling Atmospheric Hazards**

Control methods must be documented on the Entry Permit, which must be reviewed by the Entry Supervisor.

The ways to control atmospheric hazards are:

* **Ventilation**

Ventilation replaces contaminated air with clean, breathable air. Two types of ventilation are natural or forced (mechanical).

* **Natural Ventilation**

Natural ventilation is often not adequate to achieve acceptable entry conditions, and therefore is usually combined with mechanical ventilation.

* **Mechanical Ventilation**

Mechanical ventilation (fans) supply air to the space or exhaust it from the space.

1. **Selection of Ventilation Devices:**

The Entry Supervisor must consider:

* Volume of air needed
* Type of atmosphere
* Power requirements and availability
* Source of clean air
* Length of time ventilation is needed
* Type of work to be done

1. **Use of Electrical Equipment**

If a confined space presents an electrocution hazard:

* Use grounded or double insulated tools.
* Make certain that all electrical equipment is in good repair.
* When dangerous air contamination is attributable to flammable or explosive substances, lighting and electrical equipment must be Class 1, Division 1 rated per the National Electrical Code and no ignition sources may be introduced into the area.

1. **Program Evaluation**

An annual review of this CSE procedure and its implementation will be directed by the Environmental, Safety and Health Department in order to ensure that the program meets OSHA and our requirements. This will include a review of all completed confined space Entry Permits. Each cancelled entry permit shall be kept on file in the issuing department for at least one (1) year to facilitate the review of the permit-required confined space program.

The following circumstances shall warrant a review of the program prior to the annual requirement:

* Unauthorized entry of a permit space,
* Detection of a permit space hazard not covered by the permit or detection of a condition prohibition by the Entry Permit,
* The occurrence of an injury or near-miss during entry,
* A change in the use or configuration of a permit space,
* Employee complaints about the effectiveness of the program,
* Any other circumstance the Environmental, Safety and Health Department feels should warrant review of the program.

Our employees are encouraged to provide input to this procedure, in order to help improve CSE operations. All comments and feedback should be directed to a Supervisor or the Environmental, Safety and Health Department.

## Compressed Gas Cylinders

1. **Purpose**

To provide guidelines in the safe handling, storage and use of compressed gas cylinders.

1. **Labeling**

The contents of any compressed gas cylinder should be clearly identified so that the contents are easily, quickly, and completely determined. A durable label shall be provided that cannot be removed from the compressed gas cylinder.

No compressed gas cylinder should be accepted for use that does not identify its contents legibly by name.

If the labeling on the gas cylinder becomes unclear or defaced so that the contents cannot be identified, the cylinder should be marked "contents unknown" and the manufacturer contacted regarding appropriate procedures.

1. **Use and Handling of Cylinders**

Only tools provided by the supplier should be used to open and close cylinder valves.

If cylinders cap cannot be removed by hand, tag cylinder “Do Not Use” and move to the cylinder storage area for return to vendor.

Open cylinder valves SLOWLY. Do not use a wrench to open or close a hand wheel type cylinder valve. If it cannot be operated by hand the cylinder shall be tagged "Do Not Use" and returned to the designated storage area for return to vendor.

Attach the regulator securely before opening the valve wide. Always use a cylinder wrench or another tightly fitting wrench to tighten the regulator nut and hose connections.

Before the regulator is removed from a cylinder, close the cylinder valve and release all gas from the regulator.

Leaking cylinders should be moved to an isolated, well ventilated area, away from ignition sources. Soapy water should be used to detect leaks. If the leak is at the junction of the cylinder valve and cylinder, do not try to repair it. Contact the supplier and ask for response instructions.

Cylinders should be marked as "MT" and dated when empty. Never mix gases in a cylinder and only professionals should refill cylinders. Empty cylinders must be handled as carefully as full cylinders.

1. **Storage**

Cylinders must be secured at all times in such a way as to avoid them being knocked over or damaged, must be stored in a vertical position, not stored in public hallways, and segregated based upon contents.

20 feet should be maintained between oxidizers and flammables or firewalls erected at least 5 feet high and with a fire rating of 30 minutes. Never store cylinders hear highly flammable substances such as oil, gasoline, waste, etc. Smoking, open flames and similar sources or ignition should not be permitted in filling or storage areas.

Cylinders must be protected from damage, corrosion, sunlight, kept away from heat sources and capped when not in use.

Inside of buildings, cylinders shall be stored in a well-protected, well-ventilated, dry location. Cylinders shall not be kept in unventilated enclosures such as lockers and cupboards.

Storage areas for full and empty cylinders must be designated and labeled. Cylinders should be stored in definitely assigned places away from elevators, stairs, or gangways.

1. **Transporting**

Cylinders must be transported in a vertical secured position using a cylinder basket or cart, and must not be rolled.

Regulators should be removed and cylinders capped before movement.

Cylinders should not be dropped or permitted to strike violently and protective caps are not used to lift cylinders.

Cylinders should not be transported with the regulator attached to the cylinder.

Always use a cylinder cart to move compressed gas cylinders. Refrain from sliding, dragging or rolling cylinders on edge.

1. **Inspection**

Visual and other inspections shall be conducted to determine that compressed gas cylinders are in a safe condition.

Cylinders must be equipped with the correct regulators. Regulators and cylinder valves should be inspected for grease, oil, dirt and solvents.

Hoses and connections should be inspected regularly for damage. Hoses should be stored in cool areas and protected from damage.

1. **Training**

Employees must be trained on the proper use, handling and storage of compressed gas cylinders.

## Cranes

1. **Purpose**

The purpose of this policy is to provide safety measures for use during crane operations.

1. **General Requirements / Assembly / Disassembly**

* Only persons qualified by training or experience will be allowed to operate equipment or machinery.
* All manufacturer procedures applicable to the operational functions of equipment, including its use with attachments, must be complied with.
* The manufacturer's procedures and prohibitions shall be complied with when assembling and disassembling equipment. The assembly/disassembly of equipment must be directed by a competent and qualified person.
* The manufacturer must approve all modifications or additions that may affect the capacity or safe operation of the equipment in writing. A registered professional engineer must be qualified with respect to the equipment involved, and must ensure the original safety factor of the equipment is not reduced.
* Each member of the assembly / disassembly crew must have a clear understanding of their part in the process prior to any assembly or disassembly tasks commence. These specific directions must come from the competent/qualified person. Each crew member must be informed of the specific hazards of the assembly / disassembly process. This information must also come directly from the competent/qualified person.
* All areas in the assembly / disassembly area that are restricted must be marked in a clearly visible fashion and all crew members must be shown these areas and instructed that they are never to enter these areas with specific instructions from the competent/qualified person.
* A post assembly inspection must be completed by a competent/qualified person prior to the commencement of operation of the mobile crane.
* During the assembly and disassembly process rated capacity limits shall not be exceeded for equipment components to include lifting lugs, rigging, accessory equipment and any other piece of the mobile equipment.
* Rated capacity limits for loads on the assembled equipment is not to be exceeded.

1. **Addressing Specific Hazards**

* The A/D Director that is in charge and or supervising the assembly or the disassembly operation must address each of the specific hazards that are associated with this process.
  + Site and Ground Bearing Conditions: these conditions must be found to be adequate for the assembly or disassembly of the equipment. Cranes can not be used unless ground conditions are adequate for lifting operations. Ground conditions must be dry and firm and graded in such a manner that they fall within the manufacturers specifications.
  + Blocking Material: blocking must be sufficient with regards to its size, condition, amount and the method of stacking that is used.
  + Proper Location of Blocking: blocking must be appropriately place when used to support lattice booms or any components of the crane or lattice booms. The structural integrity of the lattice boom must be protected and proper blocking is necessary to prevent dangerous movement or a catastrophic collapse.
  + Verifying Assist Crane Loads: when an assist crane is used, the loads that will lifted by the assist crane will be verified at each phase in accordance with 1926.1417(o)(3).
  + Boom and Jib Pick Points: The rigging points of attachment to the boom must be suitable and not cause structural damage and they must enable safe handling of these components.
  + Center of Gravity: must be identified. When there is insufficient data and information to adequately find the center of gravity, methods and measures must be used to prevent the unintended dangerous movement.
  + Stability Upon Pin Removal: boom sections and components must be supported or rigged so that they remain stable upon removal of the pins.
  + Snagging: all measures must be taken to ensure no snagging of the suspension ropes and pendants on the boom or jib connection pins.
  + Stuck by Counterweights: the counterweights must be secured to ensure no unintentional movement and proper care must be used when hoisting counterweights.
  + Boom Hoist Brake Failure: the boom brake must be tested prior to each time that reliance is placed on that system.
  + Loss of Backward Stability: must be ensured before swinging the upperworks, travel and when removing or attaching equipment and or components.
  + Wind Speed and Weather: the affect of wind speed and hazardous weather must be taken into account.

1. **Safe Work Operations**

* All lifts shall be preplanned to determine items such as condition of rigging equipment, load orientation, swing path, load placement, designated signal man (if necessary) etc.
* A pre-operation hazard assessment will be performed to identify the work zone and determine if any part of the equipment could reach closer than 20 feet to a power line. If it is determined that any part of the equipment, load line or load could get closer than 20 feet to a power line then at least one of the following measures must be taken:
  + Ensure the power lines have been deenergized and visibly grounded.
  + Ensure no part of the equipment, load line or load gets closer than 20 feet to the power line.
  + Adhere to the line's voltage and minimum approach distance permitted in Table A*.*
* All rated load capacities, recommended operating speeds, special hazard warnings or instructions and operator’s manual must be available and in the cab of the crane at all times.
* The crane operator has the authority to stop and refuse to handle loads whenever there is a safety concern until a qualified person has determined that safety has been assured.
* A signal person must be provided for the following situations:
  + The point of operation is not in full view of the operator.
  + The view is obstructed when the equipment is traveling.
  + The operator or the person handling the load determines it is necessary due to site specific concerns.
* The competent person on site will ensure that the flooring on which equipment may be placed is substantial enough to safely hold the weight of the load per the manufacturer's specifications. If the strength of the floor is unknown and / or cannot be determined, a professional engineer will determine the pounds per square foot required and, if necessary, the appropriate shoring to be installed to sustain the weight. Cranes will not be used unless grounding conditions can support the equipment and all supporting material and all conditions meets manufactures requirements.
* Do not allow personnel get on or off the crane while it is in motion, or to ride the hook block, bucket or grapple. Mobile cranes are intended to lift objects and not people.
* Care must be taken to ensure that areas within the swing radius of the rear of the rotating superstructure of the crane are barricaded to prevent a person from being struck or crushed.
* An accessible fire extinguisher of “5-ABC” rating or higher, shall be available at all operator stations or cabs.
* All personnel shall stand clear while loads are lifted and lowered. No person shall be allowed under a suspended load or allow a load to be suspended over their head.
* All safety devices must be in proper working order before operation begins. If any of the devices are not in proper working order the equipment must be taken out of service and operations must not resume until the device is working properly again. Safety devices may include, but are not limited to, crane level indicator, boom stops, jib stops, foot pedal brake locks, swing locks, horn and anti two-blocking device.

1. **Inspections and Maintenance**

Inspections as described below shall be performed on all mobile cranes. Deficiencies found during an inspection shall be documented and corrected before use. Cranes with identified hazards shall be tagged “Out of Service”. All inspections shall be conducted by a competent designated person.

A competent person must conduct a visual inspection for apparent deficiencies of equipment prior to each shift each day. Daily inspection items shall include, but not limited to:

* Control mechanisms for proper use and function.
* Control mechanisms for excessive wear and contamination by lubricants or foreign matter.
* All safety devices for proper function.
* Deterioration or leakage in air or hydraulic systems.
* Crane hooks and latches for deformation or cracks.
* Rope reeving for noncompliance with manufacturer's recommendations.
* Electrical apparatus for malfunction, sign of excessive wear, dirt or moisture accumulation.

Equipment must be inspected monthly and annually and shall be documented by a competent person. Documentation must include the date and results of the inspection, unit identification, name and signature of the inspector, and corrective actions taken. Documentation must be retained for a period of at least 3 months. Documented monthly and annual inspections shall include, but are not limited to:

* Deformed, cracked or corroded members in the crane structure or boom.
* Loose bolts or rivets.
* Excessively worn or damaged tires.
* Cracked or worn sheaves or drums.
* Worn, cracked, or distorted parts such as pins, bearings, shafts, gears, rollers and locking devices.
* Excessive wear on brake and clutch.
* Load, boom angle, and other indicators over their full range for accuracy.
* Gasoline, diesel, electric or other power plants for improper performance or noncompliance with safety requirements.
* Excessive wear of chain-drive sprockets and excessive chain stretch.
* Travel steering, braking, and locking devices for malfunction.

1. **Critical Lifts**

Criticallifts are those that are non-routine, greater than 80% rated capacity of the lifting equipment, unknown or difficult to estimate weight, a dynamic lift, up-ending an object, require special rigging, are required to be performed without line of sight, involve lifting an object of substantial value or one-of-a-kind items, and/or designated by a manager as a critical lift. All critical lifting operations require a lift plan. The lift plan must include a drawing showing:

* The position of the load.
* The weight of the load.
* The position of the crane at the pick up location and the position of the crane at the set down location.
* The distance from the center of the crane to the center of the load at the pick up and set down locations must be measured and recorded.
* The height of the load is to be recorded on the drawing.
* The length of rigging and the SWL is to be recorded on the drawing.
* The hook height of the crane at the pick up and set down radius is to be recorded.

The percentage of the cranes capacity at the pick up and set down locations must be calculated by dividing the weight of the load by the crane’s capacity. Lifts greater than 75% of the crane’s load chart require a manager’s approval.

A foreman is required to be present during all critical lifting operations. The crane operator and the signal man must be in radio communications if outside of each other’s line of sight. If communication between the signal person and crane operator is broken, all crane operation must cease immediately. The communication devices must be tested on-site, and before work is to commence. During lifting operations, only the designated signal person will give directions to the crane operator except in an emergency, where anyone has the right to signal the cease of lift operations by activating the “halt operations” signal. If hand signals are used between the signal person and the crane operator, they must follow the Standard Method in Appendix A of Subpart CC as denoted in 29 CFR.

Each signal person must have the following qualifications:

* Must understand the Standard Method for hand signals and know and understand the different types of hand signals.
* Must demonstrate competency in hand signaling to the site foreman before any lift operations.
* Must demonstrate that they have the necessary qualifications either by producing a certificate of qualification from a certified training facility or by passing our company written and practical test.
* Must have a basic understanding of the type of crane being used, its load limitations, load stopping, boom deflection and load swinging. This understanding must be demonstrated to the crane operator and the site supervisor before the lifting operations commence.

A JSA must be prepared for every crane lift operation whether critical or routine. The JSA must list the position of the signal-man and riggers during lifting operations and all rigging to be used on the lift. A JSA / Lift Plan review is required before the lift. Participation is mandatory by the operator, foreman, riggers, and any contract personnel that will be required to participate in the lift. A copy of the critical lift form, and lift plan shall be attached to the JSA and posted at the lift site for reference.

1. **Training**

All Crane operators must be trained in accordance with the manufacturer’s operating and maintenance manual, the user’s work instructions, and the requirements listed in this policy before operating. Retraining, Certification, vision and medical condition evaluations for all Company employed Crane Operators shall be required every 4 years.

Training shall incorporate the use of portable fire extinguishers. The HSE Manager will maintain a written record of all training conducted by qualified 3rd Party vendors including employees trained as well as the name and signature of the person conducting the training.

## Disciplinary Program

1. **Purpose**

This policy provides guidelines to follow in addressing unacceptable HS&E behavior.

1. **Scope**

This policy applies to all employees. Discipline shall be dispensed fairly, consistently, and equally to all employees including supervisory and management personnel. Periodic safety inspections of the workplace and equipment will be undertaken to ensure that all personnel, including supervisory positions, are demonstrating the required commitment to safety.

Violation of safety rules will be grounds for disciplinary action up to and including termination. Safety violations include but are not limited to the following:

* Not following verbal or written safety procedures, guidelines and rules.
* Horse play.
* Failure to wear selected PPE.
* Abuse of selected PPE

1. **Procedure**

It is the responsibility of supervisory and management personnel to enforce the disciplinary policy. All warnings, disciplinary actions, and/or counseling shall be adequately documented and retained in the employee’s personal file for one year following the infraction.

Depending on the nature and seriousness of the employee’s actions, corrective action may begin at any step of the disciplinary process. The immediate supervisor of the employee will meet with the employee and inform him or her of the specific safety violation and the corrective action to be taken. If there is training related to the safety violation that would be beneficial to the employee to receive, training may be a remedial action.

Types of disciplinary action include but are not limited to the following:

* Verbal Warning
* Written Warning
* Final Written Warning
* Suspension
* Demotion
* Termination of Employment

## Electrical Safety

1. **Purpose**

This section provides information and requirements for basic electrical safety. Work operations shall be conducted in a manner which, at a minimum, complies with applicable health and safety laws and regulations, including OSHA 29 CFR 1910.301-.399, Subpart S Electrical, and National Fire Protection Agency (NFPA) 70E *“Standard for Electrical Safety in the Workplace*”*.*

1. **Safe Work Practices**

Safety-related work practices will be employed to prevent electric shock or other injuries resulting from either direct or indirect electrical contacts, when work is performed near or on equipment or circuits which are or may be energized. The specific safety-related work practices will be consistent with the nature and extent of the associated electrical hazards and as follows:

* Non-qualified personnel are prohibited from working on or near exposed energized electrical circuits or systems. Non-qualified personnel will be trained in the recognition and avoidance of electrical hazards in the work area.
* Any exposed electrical systems will be de-energized and lockout/tagout procedures adhered to before unqualified personnel are allowed access to the work areas. The circuits energizing the parts shall be locked out, tagged out or both. Conductors and parts of electrical equipment that have been deenergized but not been locked or tagged out shall be treated as live parts.
* Only qualified persons may work on electric circuit parts or equipment that has not been deenergized. Such persons shall be made familiar with the use of special precautionary techniques, PPE, Insulating & shielding materials and insulated tools.
* If work is to be performed near overhead lines, the lines will be de-energized and grounded, or other protective measures such as insulating shielding will be provided before work is started.
* Vehicles or equipment working near overhead lines will be required to maintain a safe working distance of at least 10 feet. If the voltage is higher than 50 kV, the clearance will be increased 4 inches for every 10 kV over that voltage.
* Employees may not enter spaces containing exposed energized parts or work on energized parts unless illumination is provided that enables the employee to perform the work safely. Employees may not reach blindly into areas which may contain energized parts.
* When an employee works in a confined or enclosed space (such as a manhole or vault) that contains exposed energized parts the employee will use, protective shields, protective barriers, or insulating materials as necessary to avoid inadvertent contact with these parts. Doors, hinged panels, and the like will be secured to prevent their swinging into an employee and causing the employee to contact exposed energized parts.
* Conductive materials and equipment such as long dimensional conductor objects will be handled in a manner to prevent them from contacting exposed energized conductors or circuit parts, or will be shielded to prevent conduction of electrical energy. Conductive articles of jewelry and clothing (such as watch bands, bracelets, rings, key chains, necklaces, metalized aprons, cloth with conductive thread, or metal headgear) may not be worn if they might contact exposed energized parts while performing work.
* Portable ladders will have nonconductive side rails if they are used where the employee or the ladder could contact exposed energized parts. The employee will ensure that the placement of any ladder will allow a safe working distance from any energized parts or equipment.
* Synthetic clothing such as nylon or polyester should not be worn. Clothing worn while working on electrical systems should meet the risk requirements of the system being worked on and at a minimum be flame-resistant (cotton).

1. **Approach Distances**

When an unqualified person is working in an elevated position near overhead lines, the location shall be such that the person and the longest conductive object he or she may contact cannot come closer to any unguarded, energized overhead line than the following distances:

* 10 ft. for voltages to ground 50 kV or below.
* 10 ft. for voltages to ground over 50 kV. Add 4 inches of distance for every 10 kV over 50 kV.

When an unqualified person is working on the ground in the vicinity of overhead lines, the person may not bring any conductive object closer to unguarded, energized overhead lines than:

* 10 ft. for voltages to ground 50 kV or below.
* 10 ft. for voltages to ground over 50 kV. Add 4 inches of distance for every 10 kV over 50 kV.

When a qualified person is working in the vicinity of overhead lines, whether in an elevated position or on the ground, the person may not approach or take any conductive object without an approved insulating handle closer to exposed energized parts unless:

* The person is insulated from the energized part (gloves, with sleeves if necessary, rated for the voltage involved are considered to be insulation of the person from the energized part on which work is performed); or
* The energized part is insulated both from all other conductive objects at a different potential and from the person; or
* The person is insulated from all conductive objects at a potential different from that of the energized part.

|  |  |
| --- | --- |
| **Approach Distances for Qualified Employees – Alternating Current** | |
| **Voltage Range (Phase to Phase)** | **Minimum Approach Distance** |
| 300V and less | Avoid contact |
| Over 300V, not over 750V | 1 ft 0 in (30.5 cm) |
| Over 750V, not over 2 kV | 1 ft 6 in (46 cm) |
| Over 2 kV, not over 15 kV | 2 ft 0 in (61 cm) |
| Over 15 kV, not over 37 kV | 3 ft 0 in (91cm) |
| Over 37 kV, not over 87.5 kV | 3 ft 6 in (107 cm) |
| Over 87.5 kV, not over 121 kV | 4 ft 0 in (122 cm) |
| Over 121 kV, not over 140 kV | 4 ft, 6 in (137 cm) |

1. **Ground-fault circuit interrupters (GFCI)**

* Ground-fault protection will be provided for personnel on construction sites on all 120-volt single phase, 15 and 20 ampere receptacle outlets, which are not a part of the permanent wiring and which are in use by employees.
* Ground fault circuit interrupters will be used when an outlet is near a water source, or when damp or wet conditions exist and portable electrical equipment is being used.
* GFCIs shall be tested periodically to ensure their operability.

1. **Training**

The degree of training provided will be determined by the employee's respective job assignments.

Qualified employees who are allowed to work within the Limited Approach Boundary shall, at a minimum, be trained in and familiar with the skills and techniques necessary to:

* Distinguish exposed energized electrical conductors and circuit parts from other parts of electric equipment.
* To determine the nominal voltage of exposed energized electrical conductors and circuit parts.
* The approach distances and the corresponding voltages to which they will be exposed.
* The decision making process necessary to determine the degree and extent of the hazard and the personal protective equipment and job planning necessary to perform the task safely.

All other employees who may face a risk of injury due to electric shock or other electrical hazards will also be trained in and familiar with the safety related work practices and approach distances that pertain to their respective job assignments. Employees shall be trained to identify and understand the relationship between electrical hazards and possible injury.

Documentation shall be made when the employee demonstrates proficiency, be maintained for the duration of the employee's employment, and contain each employee's name and date of training.

## Emergency Action Plan

1. **Purpose**

The EAP (Emergency Action Plan) communicates to employees, policies and procedures to follow in the event of an emergency. This written plan is available, upon request, to employees, their designated representatives, and any OSHA officials who request to see it.

1. **Reporting Emergencies**

All fires and emergency situations will be reported immediately to the Fire Warden or supervisor in charge.

The supervisor will assess the situation and notify 911 if the situation is such that emergency response is needed. The supervisor will also determine if an evacuation is necessary and the evacuation will be initiated.

In the event of a fire and or emergency, the alarm system shall be distinct and recognizable as a signal to evacuate the work area or perform actions designated under the emergency action plan. For those employer locations with 10 or fewer employees in a worksite, supervisor shall alert employees by verbal announcement and provide them with instructions.

1. **Evacuation**

Emergency evacuation escape route plans are posted throughout the workplace. In the event of a fire or an emergency, instructions for evacuation are given by the supervisor. All employees shall immediately exit the building(s) at the nearest exits as shown in the escape route plans, and shall meet as soon as possible at the evacuation floor. Employees with offices shall close the doors (unlocked) as they exit the area.

Mobility impaired employees and their assigned assistants will gather at a designated area within the building to ensure safe evacuation.

In the event that evacuation of the premises is necessary, some items may need to be secured to prevent further detriment to the facility and personnel on hand. The Fire Warden or supervisor in charge is the only authorized personal to remain behind to secure the premises.

Once everyone has reached the evacuation floor, a head count shall be conducted by the supervisor. Any employees not accounted for shall be reported to the Emergency Action Plan coordinator.

1. **Fires**

Under no circumstances shall an employee attempt to fight a fire that has passed the incipient stage (that which can be put out with a fire extinguisher), nor shall any employee attempt to enter a burning building to conduct search and rescue.

If the fire is small, you have been instructed in the use of a fire extinguisher and it is safe to do so, you may but are not required to attempt to use a fire extinguisher to put out the fire. Do not attempt to extinguish the fire if hazardous or toxic materials are involved, the fire is very smoky, or if the fire is spreading rapidly.

1. **Medical Emergencies**

No employees are assigned to perform medical or rescue duties during emergency evacuation situations. Employees trained in First Aid and CPR may, but are not required to, attempt medical care.

1. **Site Specific Emergency Action Plan**

Prior to the start of site operations or if daily operations dictate, the Site Superintendent shall notify all personnel working on the site any site-specific information regarding evacuations, muster points, communication, and other site-specific emergency procedures.

Employees shall participate in onsite safety meetings to become familiar with site specific emergency procedures and follow those procedures during an emergency.

1. **Training**

All employees shall receive instruction on this Emergency Action Plan as part of New Employee Orientation upon hire. Additional training shall be provided:

* + when there are any changes to the plan and/or facility;
  + when an employee’s responsibilities change; and
  + annually as refresher training.

Items to be reviewed during the training include:

* proper housekeeping;
* fire prevention practices;
* fire extinguisher locations, usage, and limitations;
* threats, hazards, and protective actions;
* means of reporting fires and other emergencies;
* names of Emergency Action Plan Coordinator;
* individual responsibilities;
* escape routes and procedures;
* procedures for accounting for employees and visitors;
* closing doors;
* severe weather procedures; and
* Emergency Action Plan availability.

1. **Fire/Evacuation Drills**

Fire/Evacuation drills shall be conducted at least annually, and shall be conducted in coordination with local police and fire departments. Additional drills shall be conducted if physical properties of the business change, processes change, or as otherwise deemed necessary.

1. **Emergency Contact**

For further assistance or to receive more information about the emergency evacuation procedures or your specific duties contact the Fire Warden or supervisor in charge.

## Fall Protection

1. **Purpose**

The purpose of this procedure is to establish policies to prevent falls.

1. **Responsibilities**

The safety director is the qualified person responsible for preparing the fall protection plan for the company’s property and reviewing this program. The safety director, as the qualified person, will prepare all fall protection plans at specified worksites off of the company’s property.

The Supervisor shall:

* Assure that 100% fall protection is used whenever employees or contractors must work more than 6 feet above the main working level in an area that is not provided with guardrails.
* Periodically inspect and document fall prevention and fall protection equipment.
* In the event of a fall, every effort will be made to promptly rescue the worker. Workers will use the buddy system so that there is always another worker available for rescue.

1. **General**

* 100% fall protection is required when workers are higher than 6 feet above the main working level in an area without guardrails. This includes work near and around excavations.
* No fall protection equipment will be purchased or used that does not meet the standards set by ANZI, ASTM, and OSHA.
* Controlled access areas are not permitted, a safety harness or guardrails must be used.
* All accidents, serious incidents, and near misses will be investigated, implementing changes to the fall protection plan as necessary.

1. **Procedure**

Fall arresting equipment shall be used when personnel are working in exposed areas where they might be subject to the force of a fall. A fall arresting system includes:

* Full body harness. Full body harnesses shall be used instead of safety belts.
* Lanyard.
* Fall brake.
* Tie off point (anchor).

**Lanyards**

Lanyards must be specifically designed for service as a lanyard. The minimum strength for a conventional lanyard is 5000 lbs.; the minimum strength of a self retracting lanyard is 3000 lbs.

**Snap hooks**

Double locking snap hooks must be used to connect the harnesses, fall brakes, and tie off points using double locking snap hooks.

**Fall Brakes and Self-Retracting Lanyard**

Fall brakes or self-retracting lanyards must be used with fall arresting systems.

**Tie Off Points**

* Tie off points must be capable of supporting 5000 lbs.
* Tie off points must be positioned as directly above and behind the worker if possible.
* Tie off points must incorporate a D-ring so that the lanyard can be connected.
* Do not connect to tie off points by attaching lanyards back onto themselves. When using man lifts, check the manufacturer’s operators manual for correct tie off points. Workers must stay on the floor of the man lift. They are not to climb the side rails.

1. **Inspection and Maintenance**

The job supervisor shall periodically inspect all components of fall arresting systems. All components of a fall arresting system must be inspected by the user before use.

Potential problems include but are not limited to:

* Damaged webbing.
* Chemical contamination.
* Broken stitching.
* Corrosion.
* Missing components.
* Damaged or defective equipment must be removed from service and replaced.

1. **Training**

All workers who might be exposed to fall hazards must be trained in the use of fall protection, how to recognize fall hazards and how to minimize these hazards. Any time there is a change in the conditions, deficiencies in the use of fall protection, or change in the equipment, workers will be retrained in the safe use of the fall protection system. Training will be documented in the Safety Training Matrix. A certification will be completed for each worker trained; this will include the date trained and the signature of the trainer.

1. **Personal Floatation Protection**

* All personnel who are suspended over the water or working on the water, such as a barge tender or dock where the danger of falling into the water exists, shall wear a U. S. Coast Guard approved work vest.
* When in use, the work vest shall be properly donned and securely fastened.

## Fatigue Management

1. **Purpose**

The purpose of this procedure is to provide guidelines to prevent and minimize fatigue in the workplace.

1. **Responsibility**

The Supervisor Shall:

* Know and recognize the signs and symptoms of fatigue.
* Ensure that fatigue management is considered in work planning and scheduling.
* Arrange alternate duties where possible and provide a rest area for persons impaired by fatigue.

The Employee Shall:

* Arrive to work fit for duty.
* Report signs and symptoms of fatigue to supervision.
* Refrain from chronically using over-the-counter, prescription drugs, and any other product which may affect the ability to perform work safely.

1. **Evaluation**

* Work tasks shall be periodically analyzed, evaluated and improved to control fatigue.
* The evaluation should include all factors of fatigue such as work schedules, job demands, sleep patterns, environmental conditions and personal issues.
* Once all factors of fatigue are identified, control measures shall be implemented to minimize or eliminate them.
* To help determine the best control measures, employees should be consulted when possible.

1. **Signs and Symptoms**

Any employee experiencing or observing the following signs and symptoms of fatigue should report to the on-site supervisor.

* A drowsy relaxed feeling
* Short temper
* Blurred vision
* Difficulty keeping your eyes open
* Head nodding
* Excessive yawning
* Headaches
* Muscle aches
* Breathing and digestive problems
* Distraction
* Nervousness
* Poor judgment
* Slow motor skills

1. **Work Hour Limitation**

* The company shall set work hour limitations and job rotation schedules to control fatigue, allow for sufficient sleep, and increase mental fitness to control employee turnover and absenteeism.
* No employee should work more than 12 hours per day and/or 24 days continuous.
* The following schedule shall be used as a guideline for periodic rest breaks:
  + 15 minutes each 2.5 hours
  + 30 minutes after 5 hours
  + 30 minutes after 10 hours

1. **Equipment**

* Ergonomic equipment will be used to improve workstation conditions such as anti-fatigue mats for standing, lift assist devices for repetitive lifting, proper lighting and control of temperature, and other ergonomic devices as deemed appropriate.
* Chairs will be provided for workers to sit periodically.

1. **Training**

Initial and annual Fatigue Awareness training shall be provided and documented. Training will include the following topics:

* How to recognize fatigue.
* How to control fatigue through appropriate work and personal habits.
* Reporting of fatigue to supervision.

## Fire Prevention

1. **Purpose**

To prevent injuries to personnel and property loss associated with fire.

1. **Prevention**

* Any fire, no matter how small, must be reported immediately to the supervisor. The formal report should include all known or reasonably surmised details as an additional report may be required by governmental agencies.
* Good housekeeping and equipment maintenance shall be practiced to keep fire hazards at a minimum.
* Smoking will be confined to areas specifically designated by management.
* Matches and cigarette lighters should not be carried into any area that may have an explosive atmosphere. In operating areas with non-explosive atmospheres, only safety matches and approved double-action cigarette lighters may be carried.
* Because paint, insect sprays, aerosol sprays and most paint removers are usually flammable, they should not be used near open flames or other sources of ignition. Read labels on the containers.
* Flammable liquids shall be kept in flame proof storage cabinets.
* A fire watch will be present with a CO2 or ABC-type of dry chemical fire extinguisher during welding and cutting operations if required in the Hot Work Permit.

1. **Fire Fighting Equipment**

* Fire fighting and all other safety equipment should only be used for their specific purpose.
* All fire protection equipment shall be located in designated areas clearly identified with appropriate markings. This equipment should be located near likely fire hazards and shall be accessible to personnel.
* Partially used fire extinguishers shall be discharged of pressure and recharged or replaced immediately.
* Extinguishers removed to be recharged shall be replaced with spare extinguishers.
* Fire extinguishers should be kept filled and maintained according to manufacturer's instructions to ensure operation at top efficiency the instant they are used. An empty, used or defective fire extinguisher shall not be re-hung until it has been serviced or repaired.
* Instruction labels on fire extinguishers should be protected.

1. **Inspection and Maintenance**

Inspection and maintenance of all fire equipment shall be performed in accordance with applicable regulatory and our requirements. Records of inspection and maintenance should be maintained. The following general guidelines should be observed:

* All portable extinguishers shall be inspected monthly to ensure that they are in their designated places, that they have not been tampered with, and to detect any obvious physical damage, corrosion or other impairments. In addition, all portable extinguishers shall be inspected annually for maintenance.
* Each extinguisher shall have a durable tag securely attached to show the  
  maintenance and recharge date.
* Records of inspections and tests shall be maintained.

1. **Drills and Training**

* Fire drills should be held at regular intervals to familiarize personnel with the location and operation of fire extinguishing equipment.
* All employees shall be instructed in the proper use of available firefighting equipment and hazards involved in incipient stage fire fighting prior to initial assignment and at least annually thereafter.
* If an area requires special precautions against fire, employees at that location shall be instructed in those precautions.

## First Aid

1. **Purpose**

The purpose of this policy is to provide provisions for first aid and/or medical services to employees and contractors when needed.

1. **Responsibilities**

The Site Manager shall:

* Ensure that there is at least one First Aid trained person(s) who has a valid certificate in first aid training, the American Red Cross or equivalent to render emergency first aid.
* Ensure that adequate First Aid supplies are provided. The First Aid kits shall be easily accessible when required.
* Ensure provisions are made prior to commencement of a project for prompt medical attention in case of serious injury.

The Environmental, Safety, and Health Department shall:

* Develop and update Evacuation and Emergency Plans.

1. **Emergencies and Injuries That Require Treatment Offsite**

For emergencies that require an ambulance to transport the injured worker to the hospital, call 911. In areas where 911 is not available, the numbers of physicians, hospitals, or ambulances shall be conspicuously posted. For non-emergency injuries, the injured worker will be transported to the proper medical provider by the Safety Coordinator or the worker’s supervisor.

1. **Training**

While it is not mandatory, it is recommended that every employee attend a First Aid course. Will periodically conduct First Aid courses and employees will be offered the opportunity to participate in the training.

1. **First Aid Kits**

First aid kits shall consist of appropriate items which will be adequate for the environment in which they are used. The contents of the first aid kit shall be checked at least weekly and the expended items replaced. The first aid kit shall be easily accessible when required.

A weather proof first aid kit shall be maintained containing at a minimum the following items:

* Gauze roller bandages, 1 inch and 2 inch.
* Gauze compress bandages, 4 inch.
* Adhesive bandages, 1 inch.
* Triangular bandage, 40 inch.
* Ammonia inhalants and ampoules.
* Antiseptic applicators or swabs.
* Burn dressing.
* Eye dressing.
* Wire or thin board splints.
* Forceps and tourniquet.

1. **Eyewash and Drenching**

Eyewash stations will be maintained so that employee’s have immediate access to flush material from their eyes. Where corrosive materials are used, water will be available to flush the worker if they get splashed or drenched in the corrosive material.

## Gas Hazards

1. **Purpose**

The purpose of this policy is to establish guidelines for working safety near gas hazards.

1. **Policy**

Each employee shall use a portable gas detector as required in all high gas hazard areas. The gas monitor must be calibrated per manufacturer’s recommendations and contain a current calibration sticker on the monitor providing the date of calibration.

Bump test are required to be complete at the beginning of each day the monitor is in use per the requesting owner client and manufacturer’s guidelines to ensure the monitor is functioning correctly.

Employees will be made aware of the owner’s contingency plan provisions including evacuation routes and alarms. Employees shall participate in emergency evacuation drills and practice rescue procedures.

1. **Training**

Gas Hazard Awareness training is required for any employee(s) whose work activities may expose them to hazardous gas. Training shall be provided before the initial assignment and annually thereafter. Training shall be documented and available for review.

Gas Hazard Awareness training shall include at a minimum:

* Locations of alarm stations.
* Gas Monitoring Equipment- Portable and Fixed Detection.
* Gas Alarms
* Gas Hazards- Characteristics of gases, to include oxygen deficiency, oxygen or nitrogen enrichment, carbon monoxide and hydrogen sulfide at a minimum. Hazard training must also include any plant or department specific gases of concern. Training must include signs and symptoms of overexposure.
* Personnel Rescue Procedures.
* Use and care of Self-Contained Breathing Apparatus (SCBA)- includes donning and emergency procedures (if applicable).
* Evacuation Procedures.
* Staging Areas – Primary and Secondary.

## Hand and Power Tools

1. **Purpose**

To establish guidelines for the safe use of hand and power tools. All hand and power tools, whether furnished by the employer or the employee, shall be maintained in a safe condition.

1. **Responsibility**

* Supervisor will periodically inspect hand tools in their work area.
* Employees are responsible for ensuring tools are maintained in a reliable and safe condition and properly stored and that proper PPE is used.

1. **General**

* Small tools shall be kept in an orderly fashion on the tool bench or in the tool chest.
* Crowbars, chain tongs, pipe cutters, and similar tools shall be placed in racks.
* All tools and equipment shall be inspected before use. Defective and unsafe tools or

equipment shall be set aside and promptly reported to the supervisor.

* Chisels, sledge hammers, and other impact tools shall be kept free of mushrooming by

filing/grinding.

* Hand or power tools shall be used only in the manner for the work for which they were designed.
* The handle of all sledges, hammers, mauls, axes, picks, and similar tools shall be securely wedged into the head.
* Files shall not be used without handles.
* Wooden handles shall not be painted. Cracked or split handles shall not be taped. Cracked or split handles shall be replaced.
* Use Proper PPE such as safety glasses, hearing protection, respiratory masks, gloves or other types of equipment necessary.
* Any tool which is not in compliance with any applicable requirement of this part is prohibited and shall be identified as unsafe by tagging or locking the controls to render them inoperable.
* Extensions, or "cheaters", shall not be used until efforts to break the connection with the largest wrench available have failed.
* If a cheater must be used, place it on the largest wrench available.
* Never use a cheater on a "crescent-type" wrench.
* Extension shall not be longer than 1 1/2 times the handle length.

1. **Power Tools**

* Guards must be in place at all times and they shall not be modified.
* Electric tools showing worn, deteriorated or inadequate insulation, etc. shall be tagged

"DO NOT USE" and remove from service.

* Persons using air-operated tools shall make certain the air supply pressure cannot exceed the working pressure of the tool.
* All electric tools shall be grounded by means of a third wire or be a U/L listed double

insulated tool.

* Electric tools shall not be used on tanks, lines, etc., unless the tanks or lines are gas free.
* Where there is danger of explosion or fire, only air-operated power tools shall be used.
* Safety washers shall be used on all abrasive wheels.
* Non-portable abrasive wheels shall have a protective shield and a tool rest adjusted to

maintain a clearance no greater than 1/8".

* When operating a non-portable grinder, the operator shall wear goggles or safety shield

and stand to one side of the plane of rotation.

* Grinding wheels shall not be mounted on a grinder whose spindle speed is greater than

the wheels rated speed (RPM).

* The connections shall be pinned or a lanyard used on air hoses with “Chicago” type

fittings.

* Compressed air shall not be used to blow dust off of clothing. When compressed air is to

be used for cleaning purposed, it must be less than 30psi and safety glassed and a face shield must be used.

## Hazard Communication

1. **Purpose**

The purpose of this program is to ensure that workers have access to information on the hazards associated with the exposure of hazardous chemicals present in the workplace.

1. **Scope**

This program applies to all work locations in the company where employees could be exposed to hazardous chemicals under normal working conditions or during an emergency situation. This program has been developed to comply with the Hazard Communication Standard 29 CFR 1910.1200.

1. **Responsibility**

All Employees shall:

* Follow all safe work practices and precautions pertaining to chemical handling and usage as required by the guidelines of the program.
* Participate in all required training.

The Safety Coordinator shall:

* Implement and administer the hazard communication program.
* Periodically review the effectiveness of the written hazard communication program and update it as necessary.
* Monitor the work place to determine employee exposure and safe use of hazardous chemicals.
* Maintain a list of all hazardous chemicals in the workplace and a master file of SDSs.
* Ensure that all containers are clearly and properly labeled.
* Ensure that training of the Hazard Communication program is provided to workers upon hire, annually, and as needed.
* Identify hazardous chemicals used in non-routine tasks and assess their risks.
* Ensure that contractors who are performing work on company property are informed about hazardous chemicals they may be exposed to.

1. **General Information**

A list of hazardous chemicals, SDSs, and a written hazard communication program will be developed, implemented & maintained at each work location. Copies of the written hazard communication program are available in the main office for review upon request.

1. **Labeling**

All hazardous chemical containers shall be labeled by the manufacturer or importer according to the Hazard Communication Standard and Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

The Receiving Department will verify that labels on all incoming hazardous chemical containers include:

* Product Identifier: How the hazardous chemical is identified such as batch number.
* Pictogram(s): Graphic symbols used to communicate specific information about the hazards of a chemical.
* Hazard Statement(s): Describes the nature of the hazard(s) of a chemical.
* Signal Word: indicates the relative level of severity of the hazard.
* Precautionary Statement(s): Recommended measures to minimize or prevent adverse effects.
* The name, address, and telephone number of the chemical manufacturer, importer or other responsible party.

The Safety Coordinator will ensure that all secondary containers are labeled with the original supplier’s label or with an alternative workplace label to include:

* Product Identifier
* Pictogram(s)
* Hazard Statement(s)
* Signal Word
* Precautionary Statement(s)

Example: Label

**HS85**

Batch number: 85L6543



**Warning**

Harmful if swallowed

Wash hands and face thoroughly after handling. Do not eat, drink or smoke when using this product. Dispose of contents/container in accordance with local, state and federal regulations.

**First aid:**

If swallowed: Call a doctor if you feel unwell. Rinse mouth.

GHS Example Company, 123 Global Circle, Anyville, NY 130XX Telephone (888) 888-8888

**HCS Pictograms and Hazards**

|  |  |  |
| --- | --- | --- |
| Health Hazard  Health Pictogram   * Carcinogen * Mutagenicity * Reproductive Toxicity * Respiratory Sensitizer * Target Organ Toxicity * Aspiration Toxicity | Flame  Health Pictogram   * Flammables * Pyrophorics * Self-Heating * Emits Flammable Gas * Self-Reactives * Organic Peroxides | Exclamation Mark  Health Pictogram   * Irritant (skin and eye) * Skin Sensitizer * Acute Toxicity * Narcotic Effects * Respiratory Tract Irritant * Hazardous to Ozone Layer (Non-Mandatory) |
| Gas Cylinder  Health Pictogram   * Gases Under Pressure | Corrosion  Health Pictogram   * Skin Corrosion/Burns * Eye Damage * Corrosive to Metals | Exploding Bomb  Health Pictogram   * Explosives * Self-Reactives * Organic Peroxides |
| Fire Over Circle  Health Pictogram   * Oxidizer | Environment (Non-Mandatory)  Health Pictogram   * Aquatic Toxicity | Skull and Crossbones  Health Pictogram   * Acute Toxicity (fatal or toxic) |

As of June 1, 2015, the Hazard Communication Standard (HCS) will require pictograms on labels to alert users of the chemical hazards to which they may be exposed. Each pictogram consists of a symbol on a white background framed within a red border and represents a distinct hazard(s). The pictogram on the label is determined by the chemical hazard classification.

Secondary containers that are intended for the immediate use of the employee who performs the transfer do not require a label.

Employer or employees shall not remove or deface labels on incoming containers of hazardous chemicals.

Workplace labels or other forms of warning shall be legible, in English and prominently displayed on the container or readily available in the work area throughout each work shift. If employees speak languages other than English, the information in the other language(s) should be included.

Where an area may have a hazardous chemical in the atmosphere (e.g., where extensive welding occurs), the entire area should be labeled with a warning placard.

Pipes that contain hazardous chemicals should be labeled in accordance with ANSI/ASME.

1. **Safety Data Sheets (SDS)**

Chemical manufacturers are responsible for developing SDSs. An SDS will be obtained for each chemical used and/ or purchased.

The Purchasing Agent will obtain SDSs and secondary labels from the manufacturer for hazardous chemicals used or stored in the workplace. Hazardous chemicals will be held in the receiving area until receipt of the SDS for the product.

Copies of SDSs for all hazardous substances to which employees may be exposed will be kept in the SDS books located at posted Hazard Communication Stations.

Copies of all SDSs will be available to all employees at all times at those locations. If an SDS is not available, contact shipping/receiving immediately and an SDS will be obtained and distributed as necessary.

SDSs for new products or updated SDSs for existing products will be obtained by the Purchasing Agent and forwarded to the Safety Coordinator. When a new or revised SDS is received, the Safety Coordinator will remove the old SDS from the master file and all Hazard Communication Stations and replace it with the new one.

1. **Chemical Inventory List**

A list of hazardous chemicals in the workplace shall be compiled, maintained, updated, and attached to the Hazard Communication program.

The chemical inventory list must include the name of each chemical and the work area(s) in which each chemical is used. The name of each chemical must match the product identifier that is referenced on the appropriate SDS.

Further information on each listed chemical can be obtained from the appropriate SDSs.

The Safety Coordinator will review and update chemical inventory list annually and whenever a new chemical is introduced to the workplace.

1. **Non Routine Tasks**

Prior to the start of a hazardous non-routine task, the direct Supervisor of the work to be performed will gather all information concerning any hazardous chemicals involved with the task.

The Supervisor will then inform the affected worker(s) of the hazardous chemicals they may encounter to include:

* Specific chemical hazards.
* Protective measures the worker should use.
* Emergency and spill procedures.
* Methods to detect the release or presence of chemicals.
* Steps the company is taking to reduce the hazards, such as ventilation, respirators, and the presence of another worker.
* The identity, hazards, and precautionary measures associated with the chemicals that are transferred through unlabeled pipes in areas where work activities are to be performed.

1. **Coordination with Other Employers and Contractors**

Prior to beginning work at a multi-employer worksite, the Safety Coordinator will inform other employers and contractors with information about hazardous chemicals that their workers may be exposed to by this company’s operations.

The Safety Coordinator will provide other employers and contractors with:

* A copy of SDSs and information on precautionary measures to protect workers exposed to hazardous chemicals generated by this company’s operations.
* Information on the hazard labels used by the company.

Where employees must travel between work places during a work shift (multi job sites), the written program may be kept at a primary job site. If there is no primary, then the program should be sent with employees.

The Safety Coordinator will obtain information about hazardous chemicals used by other employers and contractors to which our workers may be exposed.

1. **Employee Training Information**

Prior to starting work or introducing new chemical hazards into the work area, each employee will receive information and training on the following:

* Requirements of the Hazard Communication Standard 29 CFR 1910.1200.
* Operations in the work area where hazardous chemicals are present and their physical and health effects.
* Measures employees can take to protect themselves from hazards, such as appropriate controls, work practices, emergency and spill cleanup procedures, and personal protective equipment to be used.
* Location and availability of the written hazard communication program, listing of hazardous chemicals present, and SDSs.
* Methods and observation techniques used to determine the presence of release of hazardous chemicals in the work area.
* How to read labels received on shipped containers.
* Workplace labeling system.
* How to read and interpret SDSs to obtain and use appropriate hazard information.

## Hazard Identification & Risk Assessment

1. **Purpose**

The purpose of the Hazard Identification and Risk Assessment Procedure is to provide a systematic and objective approach to assessing hazards and minimizing risk associated with those hazards.

1. **Responsibility**

Managers and supervisors are responsible for ensuring that:

* Hazards are identified and assessed in consultation with employees.
* Control measures are implemented where appropriate based on the hierarchy of control.
* Records are maintained of all risk assessments.

Employees are responsible for providing input to risk identification and assessment and following risk control procedures.

1. **Hazard Identification**

Hazard Identification is the process of identifying all situations or events that may expose people to injury, illness, disease or death or may cause damage or loss of equipment and property, or damage to the environment.

The hazard identification process shall be used for routine and non-routine activities as well as new processes, changes in operation, products or services as applicable.

Employees and sub-contractors shall be continually involved in the identification of hazards. Unidentified hazards are to be reported immediately and assessed for risk.

Hazards can be identified through the following methods:

* Internal Audits
* Employee reporting
* Incident and near miss report forms
* Material Safety Data Sheets
* JSA’s
* Manufacturer Recommendations
* Permits to Work

1. **Risk Assessment**

Each hazard that is identified shall be assigned a priority ranking to determine how likely it is that someone could be harmed by the hazard and what the consequence of the resulting injury or illness could be. Each identified hazard shall be recorded on the Hazard Assessment Checklist.

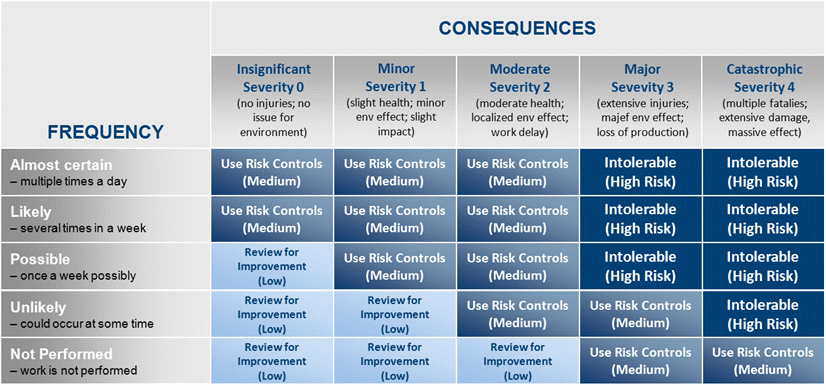
When determining how likely it is that a person could be exposed to a hazard or hazardous event, consideration shall be given to these “exposure factors”:

* Whether there are any other risk factors that increase the likelihood of exposure?
* How often the person is exposed (frequency)?
* For how long is the person exposed (duration)?
* How many people are exposed?
* The likely dose to which the person is exposed?
* Any recommended exposure levels required by standards or codes.

When assessing the risk associated with any hazard, it is necessary to ask the following questions:

* Who is exposed to the hazard?
* How often are people near the hazard?
* Has this hazard already caused any problems?
* How easily could someone be hurt?
* How common is it for the hazard to cause problems in other workplaces?
* Which factors relating to the hazard need to be taken into account, according to health and safety procedures?
* Which factors or specific aspects of the work are increasing the likelihood of injury or illness?

Following risk assessment steps each risk assessed becomes classified as low, medium or high in accordance with the Risk Assessment Matrix shown below.

****

1. **Risk Control**

Risks shall be mitigated using the following controls in the order as listed:

* Eliminate the hazard: remove it from the workplace
* Substitute the hazard: substitute a substance, method or material to reduce the risk or the hazard
* Isolate or enclose the hazard: separate the hazard from the workplace.
* Lock out procedures on faulty equipment.
* Appropriate guarding for machinery.
* Use engineering solutions: modify existing machinery or purchase different machinery.
* Administrative Procedures: develop work methods to reduce the conditions of risk
* (Written Safe Operating Procedures )
* Job rotation to restrict hours worked on difficult jobs.
* Employer and Employees trained in the correct operating procedures.
* Use Personal Protective Equipment (PPE) and training where the hazard cannot be removed or reduced by any other means.

Each measure must have a designated person and date assigned for the implementation of controls using the Hazard Assessment Corrective Action form.

1. **Training**

Managers, supervisors, and employees shall receive training in hazard and risk management procedures prior to performing work. Training shall include the following:

* Proper procedures for performing job.
* Proper use and care of any PPE which may be required to perform work.
* While performing work periodic review of the hazard assessment and
* Any other training that maybe required while performing work.

|  |  |  |  |
| --- | --- | --- | --- |
| **Hazard Assessment Checklist** | | | |
| **Assessment Location: Date & Time:** | | | |
| **Conducted By:** Name Position  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_    \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | | | |
| Item # | Status Priority | Identified Hazards | Specific Location of Hazard |
| 1 |  |  |  |
| 2 |  |  |  |
| 3 |  |  |  |
| 4 |  |  |  |
| 5 |  |  |  |
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| 14 |  |  |  |
| 15 |  |  |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Hazard Assessment Corrective Action** | | | | | |
| **Assessment Location: Time/Date:** | | | | | |
| **Department/Areas Covered:** | | | | | |
| **Assessment Team:** | | | | | |
| Item # | Priority | Recommended Action | Action Taken/Date/Time | By Whom |  |
|  |  |  |  |  |  |
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| **Action Items Sent To :** | | | **Information:** | | |
| **Safety Coordinators Signature:** | | | **Date:** | | |

## Heat Illness Prevention

1. **Purpose**

To ensure that employees are protected and precautions are taken from the hazards associated with heat-related injuries and illnesses.

1. **Responsibility**

Supervisors shall take into consideration personal factors that contribute to heat related illness before assigning a task where there is the possibility of a heat-related illness occurring. Personal factors that can contribute to heat related illness are age, weight/fitness, drug/alcohol use, prior heat-related illness, etc.

Supervisors must receive training in the prevention of heat related illnesses prior to supervising employees working in heat.

1. **Prevention**

Adequate shade, water, and rest periods shall be provided to protect the employee against environmental factors such as temperature, humidity, radiant heat sources and air circulation. Employees shall have access to potable drinking water. Where it is not plumbed or otherwise continuously supplied, it shall be provided in sufficient quantity throughout the work shift. The following guidelines shall be followed:

* Drink plenty of water throughout the work shift. Do not wait until you are thirsty to hydrate.
* Avoid liquids that contain alcohol, caffeine, or large amounts of sugar.
* Pace yourself and take regular breaks in shaded areas.

Physical factors that contribute to heat related illness should be taken into consideration before performing a task. The most common physical factors that can contribute to heat related illness are type of work, level of physical activity and duration, and clothing color, weight and breathability.

* Schedule the most physically demanding activities during the morning or evening hours.
* Wear lightweight, light-colored, loose fitting clothing and a wide-brimmed vented hat or use an umbrella.
* Clothing should be of loosely woven fibers such as cotton and linen as they are cooler than knits and synthetic fabrics.
* Employees who are returning to work from a prolonged absence or recent illness, recently moved from a cool to hot climate, or are working during the beginning stages of a heat wave shall allow time for their bodies to adjust to the change.

1. **Recommended Work Regimen**

The ACGIH recommends the following Work-Rest Regimens for work in hot (outdoor) environments.

|  |  |  |  |
| --- | --- | --- | --- |
| **Work Load** | | | |
| **Work-Rest Regimen** | **Light** | **Moderate** | **Heavy** |
| Continuous Work | 86 °F | 80 °F | 77 °F |
| 75% Work  25% Rest, each hour | 87°F | 82°F | 78°F |
| 50% Work  50% Rest, each hour | 89°F | 85°F | 82°F |
| 25% Work  75% Rest, each hour | 90°F | 88°F | 86°F |

These TLV's are based on the assumption that nearly all acclimatized, fully clothed workers with adequate water and salt intake should be able to function effectively under the given working conditions without exceeding a deep body temperature of 38°C (100.4° F). They are also based on the assumption that the Wet Bulb Globe Temperature Index (WBGT) of the resting place is the same or very close to that of the workplace.

1. **Signs and Symptoms**

Heat illness can affect a person’s awareness of their own symptoms. Work in coordination with other employees to monitor each other’s condition.

Employees suffering from heat illness or believing a preventative recovery period is needed shall be provided access to an area with shade that is either open to the air or provided with ventilation or cooling. Such access to shade shall be permitted at all times.

|  |  |  |
| --- | --- | --- |
| **Illness** | **Symptom** | **Treatment** |
| **Heat Stroke** -caused by a rapid rise in the body’s temperature and the body is unable to cool down. Can cause death or permanent disability. | Extremely high body temperature  Red, Hot, Dry Skin  Rapid Strong Pulse  Throbbing Headache  Dizziness  Nausea  Confusion  Unconsciousness | Call for immediate medical assistance.  Move the victim to a shady area.  Cool the victim down any way you can.  Do not give the victim fluids to drink. |
| **Heat Exhaustion** - caused by excessive loss of the water and salt contained in sweat. | Heavy Sweating  Paleness  Muscle Cramps  Tiredness / Weakness  Dizziness  Headache  Nausea / Vomiting  Fainting | Help the victim to cool off.  Remove unnecessary clothing.  Seek medical attention of the symptoms worsen of continue for more than an hour. |
| **Heat Cramps** - caused by excessive loss of the water and salt contained in sweat. Could be a symptom of Heat Exhaustion. | Muscle pains or spasms, usually in the abdomen, arms, or legs. | Sit in a cool place.  Drink water or sports beverage.  Do not return to strenuous activity for a few hours. This could lead to heat exhaustion.  Seek medical attention if they do not subside within an hour. |

1. **Training**

Supervisors and employees shall be trained in the heat illness procedures to prevent heat illness and procedures to follow when an employee exhibits symptoms consistent with possible heat illness, including emergency response procedures.

## Hexavalent Chromium

1. **Purpose**

The purpose of this program is to establish guidelines for employees and contractors when performing work activities where hexavalent chromium may be present.

1. **Responsibility**

Senior management will provide the resources, guidance, equipment, and enforcement necessary to protect personnel from exposure to hexavalent chromium and ensure compliance with this policy.

All personnel will:

* Know and understand the hazards of hexavalent chromium exposure
* Comply with all elements of this program to prevent hexavalent chromium exposure
* Use engineering and work practice controls in place to prevent hexavalent chromium. Use appropriate PPE as directed
* Attend scheduled hexavalent chromium training as directed by the Environmental, Health and Safety Department.

Environmental, Health and Safety (EHS) Department will assist supervisors, managers, and other employees to implement and maintain the elements of this policy. EHS personnel will ensure that employees receive training for hexavalent chromium.

1. **Physical and Chemical Characteristics of Chromium (VI)**

* The metal, chromium (Cr), is a steel-gray solid with a high melting point and an atomic weight of 51.996 g/mol.  Chromium has oxidation states ranging from chromium (-II) to chromium (+VI).
* Chromium forms a large number of compounds, in both the chromium (III) and the chromium (VI) forms.  Chromium compounds are stable in the trivalent state, with the hexavalent form being the second most stable state.
* The chromium (III) compounds are sparingly soluble in water and may be found in water bodies as soluble chromium (III) complexes, while the chromium (VI) compounds are readily soluble in water.

1. **Health Effects of Hexavalent Chromium**

* Chromium (VI) is much more toxic than chromium (III), for both acute and chronic exposures.
* The respiratory tract is the major target organ for chromium (VI) following inhalation exposure in humans.  Shortness of breath, coughing, and wheezing were reported in cases where an individual inhaled very high concentrations of chromium trioxide.
* Other effects noted from acute inhalation exposure to very high concentrations of chromium (VI) include gastrointestinal and neurological effects, while dermal exposure causes skin burns in humans.
* Ingestion of high amounts of chromium (VI) causes gastrointestinal effects in humans and animals, including abdominal pain, vomiting, and hemorrhage.

1. **Regulatory Limits for Chromium (VI)**

No employee shall be exposed in excess of the PEL of 5 micrograms per cubic meter of air as an 8-hour TWA. OSHA Permissible Exposure Limit (PEL)

8-hour Time-Weighted Average .............................. 5 µg/m3

Action Level ……………………………………………2.5 µg/m3.

1. **Regulated Areas**

A regulated area shall be established wherever the airborne concentration of chromium (Vl) exceeds or can reasonably be expected to exceed the PEL. Access to regulated areas shall be limited to authorized persons and marked with warning signs to alert employees.

1. **Exposure Monitoring**

Personnel exposure to chromium (VI) above the Action Level is evaluated to determine how to eliminate or provide proper engineering/administrative controls or PPE. The following measures are in place to monitor employee chromium (VI) exposure:

a. Initial monitoring - of workplaces and work operations

b. Periodic monitoring and monitoring frequency

* at or above the action level – every six months.
* above the TWA - every six months.
* above the PEL – every three months.

c. Additional monitoring

* when a change in the production process, raw materials, equipment, personnel, work practices, or control methods which may result in new or additional exposure to chromium (VI).

d. Employee notification of monitoring results - within 15 working days of receipt of results the employer shall notify in writing or post results.

1. **Methods of Compliance**

The source of exposure is reduced to the lowest feasible level using the hierarchy of controls including engineering, work practice controls, personal protective equipment and enforcement of this procedure to minimize employee exposure if the exposure level is above the permissible limit for more than 30 days per year. Wherever feasible engineering and work practice controls are not sufficient to reduce employee exposure to or below the PELs, why such types of controls are not feasible to reduce employee exposures shall be documented. The documentation will include an explanation of types of engineering and/or work practice controls that will help reduce employee exposure to chromium (VI) even partially, and type(s) of respiratory protection to protect employees from the balance of the exposure.

1. **Respiratory Protection for Hexavalent Chromium**

Respirators shall be provided in accordance with 1910.134. The following guidelines shall be used for respiratory protection:

|  |  |
| --- | --- |
| **Employee Exposure** | **Respiratory Protection Needed** |
| 0 to 2.5 µg/m3 | No Respirator required |
| 2.5 µg/m3 to 5 µg/m3 | Under the PEL – No Respirator required |
| 5 µg/m3 to 50 µg/m3 | Half-mask air purifying respirator (APR) with P100 filters. |
| 50 µg/m3 to 125 µg/m3 | Full-face air purifying respirator (APR) with HEPA filters |
| 125 µg/m3 to 250 µg/m3 | Full-face air purifying respirator (APR) with P100 filters, PAPR half mask with HEPA filters, or supplied air half mask |
| 250 µg/m3 to 5,000 µg/m3 | PAPR full facepiece or hood with HEPA filters, or  supplied air full facepiece or hood. |
| > 5,000 µg/m3 | self-contained breathing apparatus (SCBA) |

When air-purifying respirators are used, the employees will replace the air-purifying element (cartridge) at the expiration of service life, or at the beginning of each shift in which they will be used, whichever comes first. Respiratory protection is required during:

* Periods necessary to install or implement feasible engineering and work practice controls;
* Work operations, such as maintenance and repair activities, for which engineering and work practice controls are not feasible;
* Work operations for which an employer has implemented all feasible engineering and work practice controls and such controls are not sufficient to reduce exposures to or below the PEL;
* Work operations where employees are exposed above the PEL for fewer than 30 days per year, and the employer has elected not to implement engineering and work practice controls to achieve the PEL; or
* Emergencies.

1. **Protective Clothing and Equipment**

PPE shall be provided when there is a hazard from skin or eye contact. The selection of PPE will be at no cost to employees and will be based upon the working conditions, amount and duration of exposure, and other environmental factors. Selection of PPE for protection from chromium (VI) will be conducted by the Environmental, Safety and Health Department or on-site safety professional.

1. **Removal and Storage**

* Remove all protective clothing and equipment contaminated with chromium (VI) at the end of the work shift or at the completion of their tasks involving chromium (VI) exposure, whichever comes first.
* No employee shall remove chromium (VI) contaminated protective clothing or equipment from the workplace, except for those employees whose job it is to launder, clean, maintain, or dispose of such clothing or equipment.
* When contaminated protective clothing or equipment is removed for laundering, cleaning, maintenance, or disposal, the employer shall ensure that it is stored and transported in sealed, impermeable bags or other closed, impermeable containers.
* Bags or containers of contaminated protective clothing or equipment that are removed from change rooms for laundering, cleaning, maintenance, or disposal shall be labeled in accordance with the requirements of the Hazard Communication Standard, 29 CFR 1910.1200.

1. **Cleaning and Replacement**

* Clean, launder, repair and replace all protective clothing and equipment to maintain its effectiveness.
* Removal of chromium (VI) from protective clothing and equipment by blowing, shaking, or any other means that disperses chromium (VI) into the air or onto an employee's body is prohibited.
* Any person who launders or cleans protective clothing or equipment contaminated with chromium (VI) shall be informed of the potentially harmful effects of exposure to chromium (VI).

1. **Hygiene Areas and Practices**

* Where protective clothing and equipment is required, change rooms shall be provided.
* Change rooms are equipped with separate storage facilities for protective clothing and equipment and for street clothes, and that these facilities prevent cross-contamination.
* Where skin contact with chromium (VI) may occur washing facilities are provided.
* Employees who have skin contact with chromium (VI) shall wash their hands and faces at the end of the work shift and prior to eating, drinking, smoking, chewing tobacco or gum, applying cosmetics, or using the toilet.
* Ensure that employees do not enter eating and drinking areas with protective work clothing or equipment unless surface chromium (VI) has been removed from the clothing and equipment by methods that do not disperse chromium (VI) into the air or onto an employee's body.

1. **Housekeeping**

* All surfaces shall be maintained as free as practicable of accumulations of chromium (VI).
* All spills and releases of chromium (VI) containing material shall be cleaned up promptly.
* Surfaces contaminated with chromium (VI) are cleaned using a HEPA-filter vacuum to minimize the likelihood of exposure.
* Dry shoveling, dry sweeping, and dry brushing may be used only where HEPA-filtered vacuuming or other methods that minimize the likelihood of exposure to chromium (VI) have been tried and found not to be effective.
* Compressed air shall not be used to remove chromium (VI) from any surface.
* Waste, scrap, debris, and any other materials contaminated with chromium (VI) and consigned for disposal are collected and disposed in sealed, impermeable bags or other closed, impermeable containers.
* Ensure that all necessary hazardous waste disposal permits and licenses are in place before any waste is disposed.
* Bags or containers of waste, scrap, debris, and any other materials contaminated with chromium (VI) that are consigned for disposal are labeled in accordance with the requirements of the Hazard Communication Standard, 29 CFR 1910.1200.

1. **Medical Surveillance**

A chromium (VI) medical examination shall be provided to affected personnel by or under the supervision of a physician or other licensed health care professional. Medical evaluations will be provided at no cost to employees. The employer shall obtain and provide employee with written copy of physician’s opinion within 30 days of examination. Medical examinations shall include the following elements:

* Detailed medical and occupational history
* Complete physical examination of the skin and respiratory tract
* Additional tests as necessary

Medical evaluations shall be conducted:

* Annually
* For employees who are or may be exposed to chromium (VI) at or above the action level 30 or more days per year
* Within 30 days after initial assignment, unless the employee has received a chromium (VI) related medical examination within the last twelve months;
* Within 30 days after a PLHCP's written medical opinion recommends an additional examination
* Whenever an employee shows signs or symptoms of the adverse health effects associated with chromium (VI) exposure
* Within 30 days after exposure during an emergency which results in an uncontrolled release of chromium (VI); or
* At the termination of employment or termination of exposure.

1. **Employee Information and Training**

Each employee shall demonstrate knowledge of at least the following:

* Chromium (Vl) hazards
* Chromium (Vl) Policy
* Medical surveillance
* Control Methods

1. **Communication of Hexavalent Chromium**

Signs, labels, and verbal (briefings, training) shall be used to communicate chromium (VI) hazards to employees. A copy of 29 CFR 1910.1026 shall be readily available without cost to all affected employees. Markers will be installed (e.g., signs, labels, barriers) to alert personnel of the boundaries of the chrome (VI) regulated area(s).

1. **Document Management**

Records shall be maintained for employee exposure, medical surveillance, air monitoring data, historical monitoring data, objective data, exposure levels and respiratory devices to be worn and training records. Exposure records are kept for 30 years after employee termination or after the completion of the job or project.

Exposure and medical monitoring records are made available to the affected employees or their representatives and OSHA upon their request. Any transfer of the records will require written approval of the Environmental, Safety and Health Department.

## Hydrogen Sulfide (H2S)

1. **Purpose**

To establish hydrogen sulfide safety requirements for facilities where H2S gas is present or potentially present.

1. **Responsibilities**

The Field Foreman shall:

* Review the Hydrogen Sulfide Policy with affected personnel.

The Environmental, Safety, and Health Department shall:

* Coordinate the overall Hydrogen Sulfide Program.
* Assist in the development of a site-specific contingency plan.
* Provide Hydrogen Sulfide Safety training and training materials.

1. **General**

* Exposure to H2S can occur in job functions such as drilling operations, recycled drilling mud, water from sour crude wells, blowouts, tank gauging, field maintenance and tank batteries and wells, etc.
* Each operating location with hydrogen sulfide (H2S) concentrations above 10 ppm in atmosphere or 100 ppm when measured level with the thief hatch of tanks shall have a written (H2S) safety program to govern activities that may expose personnel to H2S.
* H2S concentrations shall be measured level with the thief hatch opening on all manually-gauged sour crude and condensate tanks.
* Each operating location that is considered sour, as described above, shall comply with all aspects of governmental regulations regarding operations where H2S may be present.
* No person shall enter an area where H2S concentrations are known or suspected to be ten (10) parts per million (ppm) by volume in air at the employees breathing zone without wearing a self-contained breathing apparatus.
* All contract personnel shall be required to comply with the H2S safety requirements in this safety program.

1. **Health Effects**

H2S poisoning results in affecting the nerve centers in the brain which control breathing causing paralysis of that system; the lungs stop working and the person is asphyxiated.

1. **Training**

Safety training shall be provided for all personnel who may be required to work in a known or suspected H2S environment. This training must be given prior to working in an H2S environment. The following areas must be covered in the training program:

* Hazards and characteristics of H2S and sulfur dioxide (SO2) gases.
* Toxicity and properties of H2S and SO2.
* Use of H2S detection devices.
* Use and limitations of respiratory protection equipment.
* Symptoms of exposure.
* First aid procedures and equipment.
* Use of the buddy system and emergency rescue procedures.
* H2S alarms and contingency plans.
* Our policy and procedures and H2S locations.
* All personnel who work in or may be required to work in an H2S area shall complete a refresher course in H2S safety annually.
* All training shall be documented.
* Contractors shall document and provide verification of such training of their employees upon request.

1. **Respiratory Protection**

* Only positive pressure self-contained breathing apparatus (SCBA) or positive pressure airline units will be used in any known or suspected H2S environment of 10 ppm or greater in the breathing area.
* 5.1.2 The use of canister type gas masks for protection against H2S is prohibited.
* 5.1.3 All SCBA and supplied air face pieces shall be fitted with a nose cup where temperatures may drop below 32 degree F. and operated in the positive pressure mode.

1. **Signs**

* All field locations, production facilities, and platforms that present potential H2S exposures shall be so designated at their access points with danger signs that warn personnel of potential H2S exposures.
* Fields with limited public road access may use one H2S sign at each given access point to a group of well locations rather than placing a sign at each location. However, all tank battery access roads must have a sign in place.
* Sign wording should be: Danger: Poison Gas. Signs already in-place that convey the same meaning does not have to be replaced with signs that have this exact wording.

1. **Specific Work Procedures**

* No tank, line, valve, flange, etc. which may create a H2S concentration of 10 ppm or greater in the employees breathing zone shall be opened to the atmosphere unless proper respiratory protection is worn by personnel performing the job.
* When possible, the equipment should be depressured, isolated and purged/cleaned before opening.
* After opening equipment to atmosphere, the potential H2S source area shall be sampled to determine the H2S level.
* Respiratory protection must be worn when opening the equipment to atmosphere and during testing.
* If concentrations exceed 10 ppm in the breathing zone, respiratory protection must be worn for the duration of the job or until the H2S level drops below 10 ppm in breathing zone.
* Personal monitoring equipment shall be used by personnel working without respiratory equipment where during the course of their work there is a reasonable possibility that the H2S levels may rise above 10 ppm in the breathing zone, i.e. catwalks at sour tanks, header buildings or water stations.
* Personal monitoring devices must be set to alarm at 10 ppm so the employee is alerted to vacate the area to get respiratory equipment.
* If the area is equipped with a fixed detection system then personal monitoring devices are not required.
* Monitoring devices and fixed detection systems shall be calibrated prior to use in accordance with the manufacturers specifications.
* A standby person is required when an employee may be exposed to 300 ppm H2S in their breathing zone during the course of his/her work. This may include additional riders with pumper personnel.
* The standby person must be equipped with an SCBA.
* Has ruled that the breathing zone shall be considered being level with the thief hatch for tank gauging operations.
* Relief valves venting dangerous concentrations of (> 300 ppm) H2S vapors must be vented to flare or where personnel will not be exposed.
* Personnel shall not leave wells being blown down unattended.
* All employees must be aware of the company's emergency plan and they must be aware of any site specific emergency or contingency plan.

1. **Emergencies**

* Personnel responsibilities during an H2S alarm or emergency shall be established in writing by each operating location. These responsibilities shall include personnel accounting, securing the area, isolating the leak, etc.
* Personnel will not respond to an H2S alarm/leak alone. The buddy system must always be used in response to alarm situations.
* All personnel shall be trained in their responsibilities regarding H2S alarms or emergencies.
  + Training shall be documented.
  + This training may coincide with annual H2S training.
* Contractors and visitors shall be informed of their responsibilities during an H2S alarms before they begin work on any potential H2S location. Generally, their responsibilities shall be to evaluate the area and report to a safe briefing area.
* Safe briefing areas shall be established for all manned H2S locations. Safe briefing areas shall be designated by conspicuous signs.
* The supervisor in charge or the ranking employee on-site has the authority to decide whether an H2S leak is to be ignited. However, some state law enforcement agencies may have jurisdiction whether to ignite an H2S leak.

1. **H2S Detection Equipment**

* Fixed H2S detection systems shall be considered for areas that may experience H2S leaks where personnel are present on a daily basis.
* The system shall activate distinctive audible and visual alarms. Sensors shall be set to annunciate at 10 ppm for a low alarm and a maximum of 20 ppm for a high alarm.
* The system shall be calibrated at least every 90 days or sooner if required by regulation.
* All H2S alarms shall be treated as an actual gas release.
* H2S alarms shall be distinctive from all other alarms and shall be consistent throughout the facility.
* Hand held detection instruments shall be utilized for spot checking areas.
* All electronic hand held instruments shall be calibrated before use.
* All calibrations shall be documented and retained on file.

1. **First Aid Treatment**

* Activate the Emergency Response Plan.
* Always don an SCBA before entering a potential H2S area, then remove victim to a safe area and begin artificial resuscitation.
* Request mechanical resuscitator (continue mouth to mouth resuscitation until it arrives).
* Resuscitators shall be made available to employees working at all H2S locations with employees trained in their proper use.
* Resuscitator training can occur during the CPR training.
* Initiate CPR if circulation has stopped.
* Treat for shock (keep the victim warm).
* Ensure personnel overcome by H2S are examined by a physician.

1. **H2S Characteristics**

* H2S is colorless.
* H2S is heavier than air and will accumulate in low areas.
* H2S has a strong "rotten egg" smell but also H2S will quickly deaden your sense of smell.
* H2S is extremely flammable. If H2S catches on fire it will produce toxic by-products such as SO2.
* H2S will dissolve in water.
* H2S is extremely toxic. A single breath of H2S concentrations of 1000 ppm or higher can cause death.

## Job Competency

1. **Purpose**

The purpose of this procedure is to ensure that all employees and new hires are competent to perform a given job.

1. **Procedure**

An organizational chart and job descriptions listing minimum qualifications for each job have been established.

Competence to perform a job shall be assessed upon hire and periodically using any of the following sources that apply:

* Licensure
* School records
* Work history
* Reference checks
* Practical tests
* Skills checklist
* Personal interview by the hiring manager to determine that the new hire has the qualifications to meet the minimum job requirements.

A new hire Initial Competency Assessmentwill be completed for each new hire. The same process is used for employees who transfer to new jobs.

An ongoing evaluation of role competencies will be conducted on all existing employees. Periodic evaluations will look at areas such as job efficiency, proper application of knowledge, punctuality, and ability to work well with others.

1. **Job Specific Training**

All new employees and transferred employees will be given job specific training as outlined by management for that particular job.

A competent person (Supervisor, Lead Hand, etc) must verify that an employee is competent to perform their roles and responsibilities before being allowed to work independently.

## Jobsite Security

1. **Purpose**

The purpose of this procedure is to aid in the prevention of jobsite security related incidents, minimize the risks for injury or illness to employees, and to prevent damage or loss of property.

1. **Security Assessment**

Prior to starting a job, a security assessment must be completed to evaluate the risk of jobsite security incidents. The assessment shall be reviewed and updated as projects, tasks, locations, or personnel change.

Threats to jobsite security can include:

* Injury or illness
* Theft
* Vandalism or destruction of property
* Arson
* Trespassers
* Cyber-attacks
* Collision of vehicles or vehicles striking property or equipment
* Person struck by vehicle
* Accidental or intentional release of hazardous or non-hazardous materials
* Natural disasters

1. **Mitigation of Threats and Hazards**

If threats have been identified in the security assessment, measurements should be taken to minimize jobsite security incidents. These measurements can include but are not limited to:

* Storing and locking all tools, equipment, and jobsite materials. Tools and equipment shall not be left unattended. If tools or equipment cannot be secured, they shall be removed before employees leave the jobsite.
* Machinery should be secured to prevent unauthorized movement.
* Securing hazardous or non-hazardous chemicals and fuels.
* Access controls such as physical barriers, fencing, gates, and locks.
* Providing and requiring I.D. badges for personnel working on jobsite locations.
* Audio or video recording
* Lighting
* Warning signs posted to restrict public access and unauthorized crewmembers.
* Preparation and plan for natural disasters or severe weather.
* Phone numbers for emergency services.
* Ensuring emergency action plans and drills for events are posted and all employees have received training on potential events.

All local, state, and federal safety laws must be adhered to at all times when constructing or implementing security mitigation measures.

1. **Jobsite Security Incidents**

**Employee Duties:**

* All employees shall take immediate action if imminent danger exists to preserve life or property, by stopping work at the site, and if appropriate, calling 911.
* All employees shall immediately notify their supervisor of suspicious activity or a suspected threat. All security incidents shall be reported to company supervisors or management.
* Employees should make reasonable attempts to note the events of the incident including time, date, what happened, who was involved, and tools or equipment impacted by the event.
* Employees shall give written statements and evidence to company supervisors to assist with the incident investigation.

**Management Duties:**

* A competent employee (manager, supervisor, etc) shall conduct an incident investigation after a jobsite security incident.
* Supervisors should reasonably attempt to preserve evidence and restrict access to the jobsite to ensure scene management until all appropiate parties have been notified and the incident investigation data has been gathered.
* The security assessment shall be updated given the changing external conditions and discoveries of the incident investigation. The assessment must take into account corrective actions in the incident investigation to prevent a reoccurrence of the security event.
* Local law enforcement shall be notified at the discretion of company management.
* If an incident occurs on a Client location, the Client shall be notified and included on the incident investigation results.

1. **Jobsite Security Training**

All new employees and transferred employees will be given jobsite security training as outlined by management for that particular job or jobsite. Training shall notify employees:

* Of the known hazards at the jobsite.
* Procedures to identify potential security hazards.
* How to mitigate or avoid security incidents.
* Communicating discovered hazards to supervisors and others at the jobsite.
* Jobsite emergency action plans.
* Actions that need to be taken in the event of a jobsite security incident.

Training shall be provided by a competent person familiar with the jobsite hazards and potential risks. All training shall have written documentation with the instructor name, participant names, date, training topic, and evidence of participant understanding and knowledge.

## Lead Awareness

1. **Purpose**

This procedure is to establish guidelines for employees and contractors who may be exposed to Lead during work activities. This procedure shall be reviewed and updated annually.

1. **Responsibility**

The Supervisor shall:

* Develop standard operating procedures to comply with this program.
* Identify potential exposure to lead before work begins.
* Establish air monitoring where lead is present.
* Establish a medical surveillance program when necessary.

The Employee shall:

* Comply with procedures established to minimize potential lead exposure.
* Abide by all signs/labels/assessment reports indicating the presence of lead containing materials.
* Follow appropriate work practices to ensure that lead containing materials are not disturbed.

1. **General**

Possible locations of lead containing materials are leaded paints, leaded solders, pipes, batteries, circuit boards, cathode ray tubes, leaded glass, and demolition/salvage materials.

Common symptoms of acute lead poisoning are loss of appetite, nausea, vomiting, stomach cramps, constipation, difficulty in sleeping, fatigue, moodiness, headache, joint or muscle aches, and anemia. Long term (chronic) overexposure to lead may result in severe damage to the blood-forming, nervous, urinary, and reproductive systems.

1. **Air Monitoring**

**Initial Monitoring**

No employee shall be exposed to lead at concentrations greater than fifty micrograms per cubic meter of air averaged over an 8-hour period.

A representative sample of employees who it is believed are exposed to the greatest airborne concentrations of lead shall be monitored. Exposure monitoring shall be conducted immediately at the start of the operation which may involve lead exposure.

**Frequency of Monitoring**

If the initial determination or subsequent air monitoring reveals employee exposure to be at or above the action level but below the permissible exposure limit, the air monitoring shall be repeated in accordance with this paragraph at least every 6 months. Air monitoring shall continue at the required frequency until at least two consecutive measurements, taken at least 7 days apart, are below the action level at which time the air monitoring may be discontinued for that employee.

Affected employees shall be notified of the results of any monitoring performed within 15 working days, either individually in writing or by posting the results in an appropriate location that is accessible to affected employees. Whenever the results indicate that the representative employee exposure, without regard to respirators, exceeds the permissible exposure limit, in the written notice shall be included a statement that the permissible exposure limit was exceeded and a description of the corrective action taken or to be taken to reduce exposure to or below the permissible exposure limit.

**Additional Monitoring**

Whenever there has been a production, process, control or personnel change which may result in new or additional exposure to lead, or whenever the employer has any reason to suspect a change which may result in new or additional exposures to lead, additional monitoring shall be conducted.

1. **Engineering and Work Practice Controls**

When the initial determination shows that the possibility of employee lead exposure exists at or above the action level the following shall be adhered to:

* Engineering controls and work practices shall be implemented. These include, but are not limited to, increased ventilation, enclosures or removing work to another location.
* Respirators shall be used during the time period necessary to install or implement engineering or work practice controls, whenever engineering and work practice controls are not sufficient to reduce exposure to or below the permissible exposure limit and in emergencies.
* Gloves, hats, vented goggles, shoes or disposable shoe covers shall be provided to employees at no cost. Protective clothing shall be cleaned and laundered at least weekly. Clothing shall also be properly disposed and repaired or replaced as necessary.
* Lunch room, hygiene, shower, and changing facilities must be provided when exposures are above the PEL.
* Warning signs should be posted in the work area where the PEL is exceeded. The signs shall read: WARNING, HAZARD, LEAD WORK AREA, NO SMOKING, EATING OR DRINKING.
* Employees' hands and faces should be washed if lead containing materials are contacted.

1. **Medical Surveillance**

A medical surveillance program must be established whenever personnel have the potential for exposure to airborne concentrations of lead in at or above the action level for more than 30 days. The following guidelines shall be followed for medical surveillance:

* All medical examinations and procedures will be performed by or under the supervision of a licensed physician and are to be provided without cost to personnel at a reasonable time and place.
* The blood sampling & monitoring shall be conducted every 6 months until two consecutive blood samples & analysis are acceptable.
* The sampling & monitoring should be performed at least monthly during the removal period. Any employee with elevated blood levels should be temporarily removed.
* Employees should be notified in writing within five days when lead levels are not acceptable. The standard requires temporary medical removal with Medical Removal Protection benefits.

1. **Multi-Contractor Worksites**

If employees working immediately adjacent to a lead abatement activity are exposed to lead due to the inadequate containment of such job, they shall be removed from the area until the enclosure breach is repaired or perform an initial exposure assessment.

1. **Training**

Lead safety awareness training shall be provided initially and annually to personnel who have the potential for exposure at or above the action level. Employees will be informed of:

* Appendices A & B of the regulation.
* The specific nature of the operations which could result in exposure to lead above the action level
* The purpose, proper selection, fitting, use and limitation of respirators, engineering controls.
* The purpose and description of the medical surveillance program and the medical removal program.

Lead safety awareness training shall be documented to include the date of training, employee name and name of trainer.

Re-training shall be conducted whenever a periodic inspection reveals, or whenever there is reason to believe, that there are deviations from or inadequacies in the employee's knowledge of known hazards, or use of equipment or procedures.

## Lead Abatement

1. **Purpose**

This procedure is to establish guidelines for employees and contractors who may be exposed to Lead during work activities. This procedure shall be reviewed and updated annually.

1. **Responsibility**

The Supervisor shall:

* Develop standard operating procedures to comply with this program.
* Identify potential exposure to lead before work begins.
* Establish air monitoring where lead is present.
* Establish a medical surveillance program when necessary.

The Employee shall:

* Comply with procedures established to minimize potential lead exposure.
* Abide by all signs/labels/assessment reports indicating the presence of lead containing materials.
* Follow appropriate work practices to ensure that lead containing materials are not disturbed.

1. **General**

* The Company’s site specific compliance program will address the means of engineering & work practice controls, air monitoring and a description of each operation in which lead is emitted. The written program will be reviewed and/or updated annually.
* Possible locations of lead containing materials are leaded paints, leaded solders, pipes, batteries, circuit boards, cathode ray tubes, leaded glass, and demolition/salvage materials.
* Common symptoms of acute lead poisoning are loss of appetite, nausea, vomiting, stomach cramps, constipation, difficulty in sleeping, fatigue, moodiness, headache, joint or muscle aches, and anemia. Long term (chronic) overexposure to lead may result in severe damage to the blood-forming, nervous, urinary, and reproductive systems.

1. **Initial Monitoring**

* No employee shall be exposed to lead at concentrations greater than fifty micrograms per cubic meter of air averaged over an 8-hour period.
* A representative sample of employees who it is believed are exposed to the greatest airborne concentrations of lead shall be monitored.
* Exposure monitoring shall be conducted immediately at the start of the operation which may involve lead exposure.
* Full shift personal samples shall be representative of the employees regular, daily exposure to lead.

1. **Frequency of Monitoring**

* If the initial determination or subsequent air monitoring reveals employee exposure to be at or above the action level but below the permissible exposure limit, the air monitoring shall be repeated in accordance with this paragraph at least every 6 months.
* Air monitoring shall continue at the required frequency until at least two consecutive measurements, taken at least 7 days apart, are below the action level at which time the air monitoring may be discontinued for that employee.
* Affected employees shall be notified of the results of any monitoring performed within 15 working days, either individually in writing or by posting the results in an appropriate location that is accessible to affected employees.
* Whenever the results indicate that the representative employee exposure, without regard to respirators, exceeds the permissible exposure limit, in the written notice shall be included a statement that the permissible exposure limit was exceeded and a description of the corrective action taken or to be taken to reduce exposure to or below the permissible exposure limit.

1. **Additional Monitoring**

Whenever there has been a production, process, control or personnel change which may result in new or additional exposure to lead, or whenever the employer has any reason to suspect a change which may result in new or additional exposures to lead, additional monitoring shall be conducted.

1. **Engineering and Work Practice Controls**

When the initial determination shows that the possibility of employee lead exposure exists at or above the action level the following shall be adhered to:

* Engineering controls and work practices shall be implemented. These include, but are not limited to, increased ventilation, enclosures or removing work to another location.
* Respirators shall be used during the time period necessary to install or implement engineering or work practice controls, whenever engineering and work practice controls are not sufficient to reduce exposure to or below the permissible exposure limit and in emergencies.
* Gloves, hats, vented goggles, shoes or disposable shoe covers shall be provided to employees at no cost. Protective clothing shall be cleaned and laundered at least weekly. Clothing shall also be properly disposed and repaired or replaced as necessary.
* Lunch room, hygiene, shower, and changing facilities must be provided when exposures are above the PEL.
* Warning signs should be posted in the work area where the PEL is exceeded. The signs shall read: WARNING, HAZARD, LEAD WORK AREA, NO SMOKING, EATING OR DRINKING.
* Employees' hands and faces should be washed if lead containing materials are contacted.

1. **Medical Surveillance**

A medical surveillance program must be established whenever personnel have the potential for exposure to airborne concentrations of lead in at or above the action level for more than 30 days. The following guidelines shall be followed for medical surveillance:

* All medical examinations and procedures will be performed by or under the supervision of a licensed physician and are to be provided without cost to personnel at a reasonable time and place.
* The blood sampling & monitoring shall be conducted every 6 months until two consecutive blood samples & analysis are acceptable.
* The sampling & monitoring should be performed at least monthly during the removal period. Any employee with elevated blood levels should be temporarily removed.
* Employees should be notified in writing within five days when lead levels are not acceptable. The standard requires temporary medical removal with Medical Removal Protection benefits.

1. **Multi-Contractor Worksites**

If employees working immediately adjacent to a lead abatement activity are exposed to lead due to the inadequate containment of such job, they shall be removed from the area until the enclosure breach is repaired or perform an initial exposure assessment.

1. **Training**

Lead safety awareness training shall be provided initially and annually to personnel who have the potential for exposure at or above the action level. Employees will be informed of:

* Appendices A & B of the regulation.
* The specific nature of the operations which could result in exposure to lead above the action level
* The purpose, proper selection, fitting, use and limitation of respirators, engineering controls.
* The purpose and description of the medical surveillance program and the medical removal program.

Lead safety awareness training shall be documented to include the date of training, employee name and name of trainer.

Re-training shall be conducted whenever a periodic inspection reveals, or whenever there is reason to believe, that there are deviations from or inadequacies in the employee's knowledge of known hazards, or use of equipment or procedures.

## Lockout/Tagout

1. **Purpose**

To protect personnel from unexpected energization of equipment or the release of stored energy during maintenance or service. Failure to comply with proper Lockout/Tagout procedures is grounds for disciplinary action.

1. **Responsibility**

The Facility Supervisor shall:

* Ensure equipment specific Lockout/Tagout procedures are documented.
* Ensure only Authorized Persons perform Lockout/Tagout.
* Furnish all locks, tags, and hardware (except as provided by contractor).
* Verify that Authorized Employees ensure equipment and machinery are isolated and de-energized prior to commencement of work.
* Verify that contractor has instructed contractor Authorized Persons and Affected Persons on this procedure and that all other contract personnel have been briefed on this procedure or a compatible generic procedure.

Authorized Person shall:

* Employees or contractors who have been designated and trained to recognize, isolate, and control hazardous energy sources.
* Ensure the Lockout/Tagout is effective.
* Notify all affected employees upon application or removal of Lockout/Tagout. Notification shall be before application and before removal.

Affected Persons shall:

* Employees or contractors who are directly involved in the work that have been trained in the purpose and use of Lockout/Tagout procedures.
* Respect locks and tags.

The Safety Department shall:

* Audit the program effectiveness.
* Support field operations in developing equipment specific energy isolation procedures.

1. **Energy Sources**

Effective Lockout/Tagout procedures require that equipment be isolated from energy sources. Energy takes two basic forms.

Kinetic Energy

* Energy associated with motion that is usually easily observable.
* Seldom associated with Lockout/Tagout accidents.

Potential Energy

* Stored Energy which is often difficult to observe.
* Can include any source of electricity, gravity, compressed gas, pressurized liquid, magnetism, springs, reactive chemicals, and heat/cold, mechanical, hydraulic, pneumatic or other energy.

1. **Lockout/Tagout Equipment**

* If an energy source can be locked out, this method will be utilized. A Lockout Device utilizes a lock, either key or combination, to hold an energy isolating device in a safe position.
* If an energy source cannot be locked out, a tagout system will be utilized. A Tagout Device is a warning tag (weather and chemical resistant) standardized in size, color, with wording warning of hazardous energy such as: (Do Not Start) (Do Not Open) (Do Not Close) (Do Not Energize) (Do Not Operate).
* Lockout or tagout will be performed only by the authorized employees who are performing the servicing or maintenance.
* Lockout/Tagout devices will be clearly marked to indicate the identity of the employee applying the device.
* Any unauthorized removal of warning tags or lockout devices will be grounds for immediate termination of employment.

1. **Lockout/Tagout Steps**

**Preparation for Shutdown**

Before an authorized or affected employee turns off a machine or equipment, the authorized employee will have knowledge of the type and magnitude of the energy, the hazards of the energy to be controlled, and the method or means to control the energy.

**Machine or Equipment Shutdown**

The machine or equipment will be turned off or shut down using the procedures established for the machine or equipment. An orderly shutdown will be utilized to avoid any additional or increased hazard(s) to employees as a result of the equipment stoppage.

**Machine or Equipment Isolation**

All energy isolating devices that are needed to control the energy to the machine or equipment will be physically located and operated in such a manner as to isolate the machine or equipment from the energy source(s).

**Lockout or Tagout Device Application**

* Lockout or tagout devices will be affixed to each energy isolating device by authorized employees.
* Lockout devices, where used, will be affixed in a manner to that will hold the energy isolating devices in a "safe" or "off" position.
* Tagout devices, where used, will be affixed in such a manner as will clearly indicate that the operation or movement of energy isolating devices from the "safe" or "off" position is prohibited.
* Where tagout devices are used with energy isolating devices designed with the capability of being locked, the tag attachment will be fastened at the same point at which the lock would have been attached.
* Where a tag cannot be affixed directly to the energy isolating device, the tag will be located as close as safely possible to the device, in a position that will be immediately obvious to anyone attempting to operate the device.

**Stored Energy**

* Following the application of logout or tagout devices to energy isolating devices, all potentially hazardous stored or residual energy will be relieved, disconnected, restrained, and otherwise rendered safe.
* If there is a possibility of reaccumulation of stored energy to a hazardous level, verification of isolation will be continued until the servicing or maintenance is completed, or until the possibility of such accumulation no longer exists.

**Verification of Isolation**

* Prior to starting work on machines or equipment that have been locked out or tagged out; the authorized employee will verify that isolation and deenergization of the machine or equipment have been accomplished.
* Before lockout or tagout devices are removed and energy is restored to the machine or equipment, procedures will be followed and actions taken by the authorized employee(s) to ensure the following:
* The work area will be inspected to ensure that nonessential items have been removed and to ensure that machine or equipment components are operationally intact.
* The work area will be checked to ensure that all employees have been safely positioned or removed.
* After lockout or tagout devices have been removed and before a machine or equipment is started, affected employees will be notified that the lockout or tagout device(s) have been removed.

1. **Temporary Removal of LOTO Devices**

In situations where lockout or tagout devices must be temporarily removed and the machine or equipment energized to test or position, the following procedures will be followed:

* Clear the machine or equipment of tools and materials.
* Remove employees from the machine or equipment area.
* Remove the lockout or tagout devices as specified.
* Energize and proceed with testing or positioning.
* Deenergize all systems and reapply energy control measures to continue the servicing and/or maintenance.
* This procedure will be documented and performed by the authorized personnel.

1. **Multi Group Workers**

When servicing and/or maintenance is performed by a crew, craft, department, or other group, they will utilize a procedure which affords the employees a level of protection equivalent to that provided by the implementation of a personal lockout or tagout device. Group lockout or tagout devices will be used with the following specific requirements:

* Primary responsibility is vested in the authorized employeefor a set number of employees working under the protection of a group lockout or tagout device (such as an operations lock).
* The authorized employee will ascertain the exposure status of individual group members with regard to the lockout or tagout of the machine or equipment.
* Each authorized employee will affix a personal lockout or tagout device to the group lockout device, group lockbox, or comparable mechanism when he or she begins work, and will remove those devices when he or she stops working on the machine or equipment being serviced or maintained.
* When more than one crew, craft, department, etc. is involved, the authorized employee is assigned responsibility to coordinate affected work forces and ensure continuity of protection.

1. **Shift or Personnel Changes**

Safe Work Permit procedures will be followed to ensure continuity of the Lockout/Tagout procedure. Documentation will be maintained as to personnel, equipment, and particular Lockout/Tagout procedures involved in a specific ongoing operation.

* If an Authorized Person is relieved by another Authorized Person for any reason, the oncoming person shall attach their lock before commencing work. The outgoing person shall not remove their lock until the replacement lock is attached.
* Authorized Persons will thoroughly brief their relief on status of Lockout/Tagout work.
* Where an Authorized Person does not have replacement relief on shift change, the

Authorized Person will be contacted prior to removing a lock or tag placed on an isolation device to control an energy source.

1. **Periodic Inspection**

A documented, annual inspection shall be performed by the HSE Department on energy control procedures for the purpose of:

* Identifying and correcting program deficiencies.
* Reviewing responsibilities directly with Authorized Persons and Affected Persons.
* Discussing limitations of tagout procedures with Affected Employees.
* Documenting and certifying that the inspection was performed by recording the equipment description, names of employees and inspector, and date.

1. **Training**

Training will be provided to ensure that the purpose and function of the energy control program are understood by employees and that the knowledge and skills required for the safe application, usage, and removal of the energy controls are acquired by employees. The training will include the following:

* Recognition of applicable hazardous energy sources, the type and magnitude of the energy available in the workplace, and the methods and means necessary for energy isolation and control.
* When tagout systems are used including the limitation of a tag. Tags are warning devices and do not provide physical restraint. A tag is never to be ignored or defeated in any way.
* Each authorized employee will be instructed in the purpose and use of the energy control procedure.
* All other employees whose work operations are or may be in an area where energy control procedures may be utilized, will be instructed about the procedure, and about the prohibition relating to attempts to restart or reenergize machines or equipment which are locked out or tagged out.

Retraining will be provided for all authorized and affected employees whenever there is a change in their job assignments, a change in machines, equipment, or processes that present a new hazard, or when there is a change in the energy control procedures.

Additional retraining will also be conducted whenever a periodic inspection reveals, or whenever there is reason to believe that there are deviations from or inadequacies in the employee's knowledge or use of the energy control procedures.

Employee training and/or retraining will be certified and kept up to date. The documentation will contain each employee's name, dates of training, and who conducted the training.

## Manual Lifting

1. **Purpose**

This procedure is to establish safe guidelines for employees and contractors to prevent injury while handling materials.

1. **Responsibility**

The Supervisor Shall:

* Periodically evaluate work areas and employees' work techniques to assess the potential for and prevention of injuries. New operations should be evaluated to engineer out hazards before work processes are implemented.
* Enforce the use of provided manual lifting equipment by employees.

1. **Inspection and Preparation**

Before manual lifting is performed, a hazard assessment must be completed. The assessment must consider size, bulk, and weight of the object(s), if mechanical lifting equipment is required, if two-man lift is required, whether vision is obscured while carrying and the walking surface and path where the object is to be carried.

* Study the object to be lifted and moved.
* Check for jagged or sharp edges, slippery surfaces and weak or damaged containers.
* Read all labels for special handling procedures.
* Estimate the weight of the object by “hefting” it slightly and determine if it is appropriate for one person to lift the object.
* Inspect the route to be used for transporting and clear the path of any obstructions and tripping hazards.

1. **Technique**

The following safe lifting techniques should be used when lifting or moving materials, especially heavy and/or bulky objects.

* Feet should be parted, with one foot beside the object to be lifted and one behind.
* Use the sit-down position and keep the back straight, but remember that straight does not mean vertical.
* Tuck in the chin so the neck and head continue the straight back line.
* Extend the fingers and the hand around the object to be lifted using the full palm.
* Draw the load close, with arms and elbows tucked into the sides of the body.
* The body should be positioned so that its weight is centered over the feet.
* If the object is too heavy to be handled by one person, get help. When two or more employees are handling the same object, one employee should be designated to call signals. All the workers on the lift should know who this is and should warn him/her if any one of the crew is about to relax his grip.

Manual lifting equipment such as dollies, hand trucks, lift-assist devices, jacks, carts, hoists shall be provided for employees. Where the use of lifting equipment is impractical or not possible, two man lifts shall be used.

1. **Injuries**

Musculoskeletal injuries caused by improper lifting must be investigated and documented following the Incident Investigation Procedures. Incorporation of investigation findings into work procedures must be accomplished to prevent future injuries. Injuries must be recorded and reported as required by 29 CFR Part 1904.

1. **Training**

Employees shall be trained in safe work practices and safe lifting techniques. Training shall include general principles of ergonomics, recognition of hazards and injuries, procedures for reporting hazardous conditions, and methods and procedures for early reporting of injuries. Additionally, job specific training shall be given on safe lifting and work practices, hazards, and controls.

## Noise Exposure

1. **Purpose**

The purpose of this procedure is to protect the hearing of employees from damage caused by exposure to occupational noise.

1. **Responsibility**

The Person-in-Charge shall:

* Strictly enforce the use of hearing protection.
* Post warning signs in high noise areas.

Safety Department shall:

* Schedule personnel employed in high noise areas for annual audiograms.
* Conduct sound level surveys and noise dosimetry in potential high noise areas and maintain documentation.
* Provide training materials.
* Maintain the audiometric records.

1. **Procedure**

A continuing effective hearing conservation program shall be administered when employees are exposed to sound levels greater than 85 dbA on an 8 hour time-weighted average basis. When information indicates that employee exposure may equal/exceed the 8 hr time-weighted average of 85 decibels, a monitoring program shall be implemented to identify employees to be included in the hearing conservation program.

All employees whose exposure equals or exceeds an eight hour time weighted average of 85 decibels will receive a baseline audiogram. This test will be conducted within six months of the employee’s first exposure at or above the action level. Before testing, the employee must have at least 14 hours without exposure to workplace noise. Hearing protection may be used to meet this requirement.

All employees exposed at or above an 8 hour time weighted average of 85 decibels shall receive an annual audiogram. This audiogram will be compared to the baseline test to determine if the employee has had a standard threshold shift. If a threshold shift has occurred, the employee shall be notified, in writing, of the results within 21 days of the determination. Also, in the event of an employee threshold shift, the hearing protection being used shall be reviewed and modified if necessary and a medical evaluation may be required. All test and exposure records shall be maintained as required by state and federal regulations.

1. **Hearing Protection**

* Hearing protector attenuation shall be evaluated for the specific noise environments in which the protector will be used.
* Appropriate hearing protection is provided at no cost to the employee and MUST be worn by all personnel in areas where signs are posted warning of excessive noise levels.
* Hearing protection should also be worn in un-posted areas where temporary excessive noise may exist.
* Radios and headsets are not allowed on the work site unless being used for work related communications.
* In the event that ear plugs cannot be worn by an employee for medical reasons, a written excuse, signed by a medical doctor must be furnished. Another type of hearing protection will be provided.
* Hearing protection shall be required at locations where personnel are exposed to noise at or above 85 dB averaged over an eight hour work period. These locations will be identified by the safety department and employees working in these areas are required to wear the appropriate hearing protection.
* Employees shall be given the opportunity to select their hearing protectors from a variety of suitable hearing protectors provided by the employer.
* Hearing protection is provided to employees at no cost.

1. **Training**

A training program shall be provided initially for all employees who are exposed to a noise action level or work in high noise areas. The training shall be repeated annually for each employee.

Re-training shall be provided consistent to changes in PPE and work processes to include the proper techniques of wearing hearing protection.

## Pandemic Preparedness

1. **Purpose**

The purpose of the pandemic preparedness plan is to minimize any negative impacts to company operations attributed to loss of staff through illness.

1. **Objective**

The principal objective of the pandemic preparedness plan is to develop, test and document a well-structured plan which will help the company recover as quickly and effectively as possible from a disease outbreak which could reduce available staff needed to support the firm’s business operations and information systems.

1. **Response Plan Coordinator**

The safety manager has been appointed as the pandemic response plan coordinator.

It is the duty of the Coordinator to:

* Monitor issues and information related to pandemics to keep the written plan up to date.
* Conduct employee training on preventing illness and the pandemic preparedness plan.
* Communicate with public health agencies, emergency responders and others regarding our plan, and understand their capabilities should an outbreak occur.
* Keep employees informed of developments as they occur, including those employees who remain at home.
* Maintain a list of employee home e-mail addresses and telephone numbers.
* Provide employees with telephone numbers to call to receive recorded messages and update pages on the website for employees.
* Attend external training/seminars about pandemic influenza outbreaks in order to remain current about the pandemic threat in our community.
* Maintain a list of contacts in the health profession to provide consultation and advice regarding this plan and its implementation.
* Maintain a list of duties and positions for which individual employees are cross-trained within the bank. Should staffing levels drop due to an outbreak, supervisors can use this list to fill in positions where needed.
* Maintain a list of duties that employees can perform from home, as well as any equipment (such as computers) that may be necessary to perform those duties. Supervisors can then draw on this list to have those duties performed by employees from home should it become necessary.
* The Coordinator and the Information Technology Director will ensure that the agency has sufficient IT infrastructures to support employee telecommuting and remote access to agency services.

The Coordinator and the Human Resource Director will establish the following policies and procedures:

* Flexible work hours, including staggered work hours and telecommuting.
* Restrict employee travel to affected areas.
* Guidance for employees returning to the United States from affected areas.
* Special procedures/accommodations for employees and customers with special needs or disabilities.
* Encourage employees to stay at home when they are ill or having to care for ill family members without fear of reprisal.

1. **Pandemic Response Team (PRT)**

The Pandemic Response Team is designated to assist the pandemic response plan coordinator. The PRT shall consist of at least one person from each department. It is the duty of the PRT to:

* Identify and communicate to the Coordinator which employees, vendors, suppliers and systems are essential to maintaining operations at their locations.
* Identify and communicate to the Coordinator the names of possible ancillary employees who could perform certain job duties in the case of a pandemic (e.g. consultants, temporary work services, retired employees).
* Develop and communicate to the Coordinator an emergency communications plan for their departments/locations, including identification of key personnel, vendors, and customers.
* Develop and submit a business continuity plan to continue operations at their locations with the least possible number of staff to be used in the event a large percentage of absenteeism should occur.
* Ensure that all employees in their departments are adequately trained on emergency procedures in the case of a pandemic and in the prevention of illness.
* Encourage all employees to be vaccinated annually for influenza. Time off of work shall be granted to obtain the vaccine(s).
* Assist the Coordinator in the implementation of this plan, if necessary, at their locations.
* Encourage all employees to use hand sanitizer and to wash hands consistently.
* Provide hand washing facilities, hand sanitizers, tissues, no touch trash cans, hand soap and disposable towels to employees.

1. **Pandemic Response Procedure**

Key issues that would lead to activation of the pandemic plan are:

* Escalating loss of staff due to illness.
* Inability to adequately handle business operations.

When a pandemic outbreak begins affecting company employees and business operations, the Pandemic Response Team (PRT) must be activated. The PRT will then decide the extent to which the pandemic plan must be invoked.

* The Coordinator, with the assistance of team members, will monitor staffing levels at all locations and assist supervisors in finding ways to maintain critical operations in light of any staffing shortage.
* The Coordinator is to implement the employee contact plan to ensure that all employees are kept informed of developments as they occur, including employees who remain at home.
* The PRT shall track the status of employees and business functions.
* Should an office be closed, notices shall be posted prominently at the location informing customers of the situation and telling them where and how they can transact business.
* Telephone and other lines of communication must be routed to a location where they will be staffed by employees so customers’ attempts to reach us do not go unanswered.
* Employees with job duties that can be accomplished by telecommuting will be encouraged to work from home unless they have been cross-trained to work in place of an employee who is ill.
* The emergency sick leave policy shall be implemented. Supervisors will be instructed to send and keep employees home if they exhibit symptoms of the illness, working from home if practical.
* Team members will contact their key contacts of customers and suppliers to determine the impact of the outbreak on their operations and its effects on our ability to perform our daily functions, and they will communicate the results to the Coordinator. The Coordinator will see to it that we obtain extra quantities of any necessary supplies that may be threatened due to the outbreak. Customers and suppliers will be notified once operations resume.
* Clean and disinfect all work surfaces that have frequent hand contact such as desktops, keyboards, lunch tables doorknobs, faucets and handrails routinely and when visibly soiled.
* Large or crowded gatherings of personnel shall be limited when possible if an outbreak or increased level of disease is in progress.
* Social distancing and increasing the space between employee work areas shall also be practiced when necessary.

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1. **Pandemic Plan Testing**

An annual test of the pandemic plan shall be conducted annually through table top exercises. The review team consists of members of the pandemic response team, human resources and emergency response. The team shall review and discuss the following during the table top exercise:

* Healthcare and preventive measures that are in place and those that may need to be added.
* Impacts on company facilities and key business functions. Who currently supports them and who can back them up if they are unavailable?
* Discuss efforts to provide cross-training to employees who may be designated as backups.
* Discuss succession planning to minimize any leadership gaps.
* Discuss communications activities, both internal and external, that ensure employees have all relevant information about the pandemic and key external organizations know how the company is responding.
* Identify where additional support, training, resources and funding are needed; secure these resources.
* Update plan documentation as needed.
* Schedule follow-up tests.

1. **Corrective Actions**

Lessons learned following a pandemic event shall be documented and communicated to all employees. Lessons learned shall result in the development and tracking of corrective actions and shall include a review of all similar operations. Recommendations for corrective actions should be based on factors that have contributed to the pandemic event.

Corrective actions associated with lessons learned should be evaluated for impact and budgetary concerns, prioritized, and tracked to completion. Implementation of detailed corrective action may require multiple milestones. After final completion of any actions, the appropriate organization should verify that the original problems were appropriately addressed.

1. **Training**

Training shall be provided annually to all employees on the pandemic preparedness plan and illness and health issues. All training material will be translated to non-English speaking employees or employees with disabilities so that the content is understood. Training shall consist of the following:

* Illness prevention
* Initial disease symptoms
* Preventing the spread of the disease
* When it’s appropriate to return to work after illness
* Disease containment plans and expectations

## Personal Protective Equipment and Clothing

1. **Purpose**

The following guidelines for the proper utilization of Personal Protective Equipment (PPE). All employees, contractors and visitors shall adhere to the PPE policy.

1. **Responsibility**

The supervisor shall:

* Ensure proper utilization of PPE for the specific job.
* Train employees in the proper use and care of required PPE.

The employee shall:

* Adhere to the PPE policy at all times.

1. **General**

Before the start of each job a hazard assessment shall be performed to determine if hazards are present or are likely to be present, and which necessitates the use of PPE. The hazard assessment shall be documented with certifier’s name, signature and date.

When hazards are present, PPE will be selected for each affected employee. Selection and reasons for selection should be given to the employee. Selected PPE must be fitted to each affected employee.

All PPE must be provided used and maintained in a sanitary and reliable condition. The equipment should be properly cleaned, inspected after use, and stored in clearly marked and properly designated areas. It is the employer’s responsibility to ensure that employee owned equipment is adequate, properly used and maintained.

Any equipment that no longer provides adequate protection should be repaired or replaced immediately. Defective or damaged equipment shall not be used.

1. **Training**

Each employee who may need to wear PPE shall be trained on the following:

* When PPE is necessary.
* What PPE is necessary.
* How to properly don, doff, adjust & wear PPE.
* The limitations of PPE.
* The proper care, maintenance, useful life & disposal of PPE.

Re-training is required when:

* When the workplace changes, making the earlier training obsolete.
* The type of PPE changes.
* When the employee demonstrates lack of use, improper use, or insufficient skill or understanding.

All PPE training shall be documented and certified to include the employee name, the dates of training and the certification subject.

1. **Hand and Arm Protection**

Wearing gloves prevents many minor injuries resulting from rough materials or irritating substances. Wear gloves whenever possible. Leather or leather-palm gloves should be worn when wire rope is being handled. Cloth gloves afford adequate protection when pipe is handled.

* Appropriate gloves MUST be worn when acids, caustic soda and soda ash are handled.
* Appropriate gloves are also necessary in certain situations that involve electrical work.
* Insulated or heat-resistant gloves MUST be worn when regular work gloves cannot adequately protect against burns.
* Standard welding gloves are to be worn while performing all types of hot work.

1. **Foot Protection**

Foot Protection is required for employees who are exposed to falling, rolling, crushing or penetrating objects. Foot protection worn by employees shall conform to ASTM F2412, ASTM F2413, 29 CFR 1910.136 and 29 CFR 1926.96.

Protective footwear shall be replaced when damage could affect its ability to provide protection. Foot protection shall be inspected regularly for:

* Cracks in the soles.
* Breaks in the leather.
* Exposed toecaps.

1. **Head and Face Protection**

Head protection is required for employees and visitors in areas where there is a potential for injury to the head from impact, flying or falling objects (e.g., working below other workers who are using tools and materials which could fall through grates), or electrical shock and burns. Head protections shall conform to ANSI Z89.1, 29 CFR 1910.135 and 29 CFR 1926.100.

Head protection should be inspected, cleaned, and maintained at regular intervals or as directed by manufacturer instructions. Examine the shell for cracks, brittleness, discoloration or chalky appearance. The suspension should be examined for cracks, breaks, or frayed straps.

Drilling holes in the shell of a hard hat for ventilation is forbidden. Doing so eliminates the electrical insulation protection and the degree of impact resistance. Covering hardhats with stickers, emblems, decals or paint is prohibited.

Hair long enough to constitute a hazard while a person is working near moving machinery or rotating tools and equipment MUST be secured by a net or tied back. Hair styles that make it impossible for a person to properly wear a safety hat are not permitted. Beards that constitute a hazard, while a person is near moving machinery or rotating tools, are not permitted.

1. **Fire Retardant Clothing (FRC)**

Fire Retardant Clothing (FRC) is required for employees and contractors who are at risk of exposure to flash fire hazards. Employees shall be instructed in the use, care, and maintenance of their FRC. FRC shall be worn according to manufacturer’s instructions.

* Flame-resistant garment collars shall be worn closed.
* Sleeves and cuffs shall be worn down and secured.
* Other personal protective equipment (PPE) shall be worn if determined as necessary from a review of the potential hazards to which workers are exposed from the hazard assessment.
* Employees are not permitted to wear non–flame-resistant clothing over flame-resistant garments.
* FRC shall be inspected after each cleaning and replaced or repaired according to manufacturer’s instructions.
* FRC shall be laundered before first use and regularly thereafter to prevent build up of contaminants.
* FRC shall be stored in a well vented area away from direct sunlight.

1. **Protective Clothing**

* Clothing suited to the work, weather and environment in which the employee works MUST be worn.
* Highly flammable fabrics such as nylon, rayon, dacron, etc. are not recommended.
* Long sleeve shirts are required for persons engaged in grinding, welding, or cutting processes where the possibilities of burns exist. Shirt sleeves must be rolled down and buttoned while conducting these operations.
* Any person engaged in, or around, welding, cutting, or grinding operations shall not be allowed to tuck pant legs into safety footwear because of the burn hazard presented if hot slag enters the footwear.
* Oil soaked, greasy, excessively loose fitting, or ragged clothing shall not be worn.
* A person working around moving machinery MUST NOT wear neckties or neck chains, gauntlet gloves or gloves that fastens around the wrist, or baggy, loose or ragged clothing. NEVER tie or otherwise attach a rag or handkerchief to your person in such a manner that it cannot be removed with one quick, easy pull.
* If clothing becomes saturated with oil, fuel or chemicals, the employee should immediately wash the exposed skin area with soap and water and change clothes to prevent skin irritation. The employee MUST avoid all sources of fire, including cigarettes, pipes or cigars, before changing clothes and washing the affected skin with soap and water. The Supervisor should be consulted if a skin rash develops.
* Disposable clothing is made available for special work situations.

1. **Other Protective Equipment**

Chemical goggles, full-face shield, protective gloves and an acid-proof apron should be worn for handling chemicals that may be harmful to the skin or eyes when exposure to spillage is possible.

Certain materials, such as acids and caustic soda, REQUIRE additional protection, such as rubber apron and gloves.

## Process Safety Management (PSM)

1. **Purpose**

The purpose of this program is to prevent or minimize the consequences of catastrophic releases of toxic, reactive, flammable, or explosive chemicals that may result in toxic, fire or explosion hazards.

This company will participate in PSM as a Contract Employer at client locations.

1. **Responsibility**

Contract Employer Shall:

* Ensure that contract employees abide by host employers safe work practices during operations such as lockout/tagout, confined space entry, opening process equipment or piping and controls over entrance to facility.
* Ensure that contract employees do not perform hot work until a hot work permit is obtained from host employer. The permit shall document that the fire prevention and protection requirements in have been implemented prior to beginning the hot work operations.
* Respect the confidentiality of trade secret information when the process safety information is released to them.
* Advise the host employer of any unique hazards presented by the contract employer's work, or of any hazards found by the contract employer's work.
  + MSDS' will be forwarded to the host employer before the job begins. A copy of the MSDS' will be kept on site.
  + Signs and barricades will be used when potential hazards exist to employees, other contract employees and client employees.

Host Employer Shall:

* Inform Contract Employerof the known potential fire, explosion, or toxic release hazards related to the work area and processes of the Host Employer.
* Explain the applicable provisions of the emergency action plan to Contract Employer.
* Provide the Contract Employer with copies of local safety programs, safety and emergency procedures and a copy of the PSM program.

1. **Incident Reporting**

Employees must immediately report all accidents, injuries and near misses to their immediate supervisor. An incident investigation must be initiated within 48 hours. Resolutions and corrective actions must be documented and maintained for 5 years.

1. **Training**

Prior to the start of any work at a facility covered under the PSM standard, each contract employee shall be properly trained in the skills and safe work practices required to perform his or her job.

The contract employee must also receive any site specific training required by host employer. Each contract employee shall be instructed in the known potential fire, explosion or toxic release hazards related to his/her job and the process and the applicable provisions of the emergency action plan.

All training shall be documented and maintained to include the identity of the contract employee, the date of training & the means used to verify that the employee understood the training.

## Respiratory Protection

1. **Purpose**

The purpose of this program is to protect worker health by providing guidelines for the proper use of respiratory protection in hazardous work environments. All training, medical evaluations, and respirators will be provided at no cost to the workers.

1. **Responsibility**

* The Director of the Safety Department is responsible for administering and maintaining the respiratory protection program.
* Supervisory personnel shall monitor and ensure that all employees abide by the respiratory protection program. Specifically, local supervisory personnel will ensure that the:
  + Correct respirators are being used.
  + Respirator users have been properly trained.
  + Respirators are being worn properly.
  + Respirators are in good working condition. That the respirator has not been modified by the worker that will prevent a seal from occurring and that the worker is clean shaven.
  + Respirators are repaired when necessary.
  + Workers do not remove their respirator while in work area. They must leave it to wash, change filters, or if the respirator quits working properly.
  + Respirators are regularly cleaned and disinfected.

1. **IDLH Atmospheres**

Under no conditions are any employees to enter an area or vessel where the atmosphere is IDLH (immediately dangerous to life and health.)

1. **Respirator Selection**

Respiratory equipment will be provided to all employees that may be exposed to harmful vapors and oxygen deficient atmospheres. Respirators shall be used when engineering control measures are not feasible and during emergency situations. Respirators will be selected based on the hazards present. Respirators must be one of the following types approved by the National Institute of Occupational Safety and Health (NIOSH):

* Dust respirators - used to protect from nuisance and toxic dusts. Not to be used for vapors, mists or fumes unless specified by the manufacturer or supplier.
* Chemical cartridge respirators - used to protect from mists or vapors, such as paint spray. Not to be used for dusts or fumes unless specified by the manufacturer or supplier.
* Blower masks - not to be used in environments considered immediately dangerous to life or in confined spaces.
* Canister gas masks - used for specific gases based on canister type. Not to be used for dusts, mists or vapors unless specifically approved by the manufacturer or supplier.
* Supplied air breathing airline apparatus - used in almost all hazardous situations. Not to be used in environments considered immediately dangerous to life. An escape bottle must also be included when used in a confined space.
* Self-contained Breathing Apparatus (SCBA) - For use in high concentrations of toxic gases, in oxygen-deficient atmospheres or in any environment considered immediately hazardous to life.

1. **Medical Evaluation**

Employees who are either required to wear respirators, or who choose to wear a half face piece APR voluntarily, must pass a medical exam provided before being permitted to wear a respirator on the job. Employees are not permitted to wear respirators until a physician has determined that they are medically able to do so. Any employee refusing the medical evaluation will not be allowed to work in an area requiring respirator use.

A licensed physician will provide the medical evaluations. Medical evaluation procedures are as follows:

* The medical evaluation will be conducted using the questionnaire provided in Appendix C of the OSHA Respiratory Protection Standard 1910.134. The Program Administrator will provide a copy of this questionnaire to all employees requiring medical evaluations (See HSE Department for a copy of Appendix C of the OSHA Respiratory Protection Standard. Appendix C is the OSHA Respirator Medical Evaluation Questionnaire). A Spanish version is available.
* To the extent feasible, assistance will be provided to employees who are unable to read the questionnaire. When this is not possible, the employee will be sent directly to the physician for medical evaluation.
* All affected employees will be given a copy of the medical questionnaire to complete, along with a stamped and addressed envelope for mailing the questionnaire to the physician. Employees will be permitted to complete the questionnaire on company time.
* Follow-up medical exams will be granted to employees as required by the Standard, and/or as deemed necessary by the evaluating physician.
* All employees will be granted the opportunity to speak with the physician about their medical evaluation, if they so request.
* Positive pressure air purifying respirators will be provided to employees as required by medical necessity.

After an employee has received clearance to wear his or her respirator, additional medical evaluations will be provided under the following circumstances:

* The employee reports signs and/or symptoms related to their ability to use the respirator, such as shortness of breath, dizziness, chest pains or wheezing.
* The evaluating physician or supervisor informs the Program Administrator that the employee needs to be reevaluated.
* Information found during the implementation of this program, including observations made during the fit testing and program evaluation, indicates a need for reevaluation.
* A change occurs in workplace conditions that may result in an increased physiological burden on the employee.
* The medical records will be kept in a locked cabinet and made available as permitted under 49 CFR 1910.1020 or under the Health Information and Privacy Requirements under Law.

1. **Respirator Fit**

* Qualitative fitting test shall be used to determine the ability of each individual respirator wearer to obtain a satisfactory fit with a respirator. The qualitative fit testing method is outlined in 29 CFR 1910.134 Appendix A. This protocol shall be strictly adhered to when performing qualitative fit testing.
* A fit test must be performed on all respirators that incorporate a face seal, regardless of whether they are positive or negative pressure respirators.
* The results of respirator-fitting tests shall be used to select specific types, makes, and models of respirators for use by individual respirator wearers.
* A respirator-fit test shall be carried out for each respirator wearer at least annually.
* The respirator-fit test shall be documented using a standardized form.

Fit testing shall not be performed until the respirator wearer has passed a respirator user medical evaluation.

1. **Assuring and Maintaining Face Seal Integrity**

Each respirator wearer is required to perform a user seal check prior to entering a harmful atmosphere. Either the positive and negative pressure checks listed below or the respirator manufacturers recommended user seal check method shall be used.

* Positive Pressure Check
* Close off the exhalation valve and exhale gently into the face piece.
* The face fit is considered satisfactory if a slight positive pressure can be built up inside the face piece without any evidence of outward leakage of air at the seal.
* For most respirators, this method of leak testing requires the wearer to first remove the exhalation valve cover before closing off the exhalation valve and then carefully replacing it after the test.
* Negative Pressure Check
  + Close off the inlet opening of the canister or cartridge(s) by covering with the palm of the hand(s) or by replacing the filter seal(s), inhale gently so that the face piece collapses slightly, and hold the breath for ten seconds.
* The design of the inlet opening of some cartridges cannot be effectively covered with the palm of the hand. The test can be performed by covering the inlet opening of the cartridge with a thin latex or nitrile glove.
* If the face piece remains in its slightly collapsed condition and no inward leakage of air is detected, the tightness of the respirator is considered satisfactory.

Respirator wearers shall not be permitted to use any equipment that interferes with the integrity of the seal.

* Head covers which pass between the sealing surface of a respirator face piece and the wearer's face shall not be used.
* The wearing of a spectacle, a goggle, a face shield, a welding helmet, or other eye or face protective device which interferes with the seal of a respirator to the wearer shall not be allowed.
* If an employee routinely wears respiratory protection and they require corrective lenses, visual correction will be supplied, at no cost to the employee, that is compatible with the respirator.
* Wearing contact lenses with a respirator is not recommended.

Scars, hollow temples, excessively protruding cheekbones, deep creases in facial skin, the absence of teeth or dentures, unusual facial configurations, or other problems prevent the seal of a respirator face piece to a wearer's face, the person shall not be permitted to wear the respirator. Respirator wearers that use respirators incorporating a tight-fitting face piece shall not be permitted to have facial hair in contact with the sealing surface.

1. **Maintenance, Inspection and Cleaning**

* Respirators must be regularly cleaned, disinfected and properly stored after each use.
* Respirator maintenance shall be performed as specified by the manufacturer.
* Connections on the air lines which supply breathing air to respiratory equipment must be inspected frequently and maintained to ensure their integrity.
* Replacement or repairs shall be done only by qualified personnel with parts designed for the respirators. No attempt shall be made to replace components or to make adjustments or repairs beyond the manufacturers recommendations.
* Respirators shall be inspected before and after each use.
* If any damage or defect is discovered, the respirator shall be removed from service immediately. The damaged or defective respirator shall be tagged out of service, and repaired or disposed of. Respirators that are disposed of should be rendered completely inoperable before they are discarded.
* Respirators issued for the exclusive use of an employee shall be cleaned and sanitized after each use.

1. **Storage**

Respirators shall be stored in a manner that will protect against dust, sunlight, excessive heat, extreme cold, excessive moisture, damaging chemicals, and physical damage.

1. **Program Evaluation**

At least annually the Safety Department will document an evaluation of the effectiveness of the respirator program. This shall be done by asking employees about fit, selection, use, and maintenance.

1. **Training**

Employees will be instructed in the use of respiratory protection before its actual use and annually thereafter. The training program will address fit, use, limitations, emergency situations, wearing, fit checks, maintenance & storage, medical signs & symptoms of effective use and general requirements of the OSHA standard. Periodic refresher training should be held as appropriate.

## Rigging Material Handling

1. **Purpose**

To provide standardized procedures for safe crane operations.

1. **Responsibilities**

* The supervisor shall ensure that chains and slings are maintained and stored in a safe condition and immediately removed from service as required.
* Employees ensure chains and slings are properly used and stored, and that rigging equipment is used as intended.

1. **General Safety Requirements**

* Stay away from elevated loads when there is tension on the load line and when there

is no tension on the load line except for the minimum time necessary to hook/unhook the load. No Employee will be allowed under a suspended load and shall be kept clear of loads about to be lifted.

* Stop a load from being lifted when it is unsafe.
* Stay in sight of the signal person. No movement shall be made without each acknowledging the other.
* Ensure safety latches are closed, shackle pins are screwed all the way in, and hooks

without latches are secured.

* Ensure all slings, shackles, spreader bars, etc. are in good condition and appropriate

for the load being handled.

* Ensure sling angles are not less than 30 degrees from the horizontal.
* Wear leather or other hard surface gloves when handling wire rope.
* Tag lines shall be used to control loads unless their use creates an unsafe condition.
* The hoist rope shall not be wrapped around the load.
* The load shall be secured and balanced before being lifted.
* Multiple part lines shall not be twisted while lifting/lowering.
* The hook shall be located over the lift center of gravity to prevent side loading and crane damage.
* Shackles shall be used with all pad eyes.
* When not in use, rigging equipment shall be stored away from the immediate work area so that they do not present a hazard to workers.
* Rigging equipment shall not be loaded in excess of its recommended safe working load.

1. **Chains and Slings**

* Chains and slings shall be stored so they are not subject to damage, corrosion, or

chemical exposure.

* The rated capacity of a chain or sling shall never be exceeded. Depending upon the angle of the sling, the tension experienced by the chain or sling may greatly exceed the weight of the load. The capacity of each sling varies on the method to secure the sling to the load. The Basket method for lifting has the highest capacity.
* Improvised chains, slings and end attachments shall not be used for rigging.
* All slings shall be tagged with the manufacturer's name and maximum rated capacity.
* Wire rope and slings should be inspected prior to use, and periodically for wear and

corrosion.

* Slings shall be protected from sharp edges with padding.
* Wire rope slings shall not be made in the field. Only certified manufactured wire rope

slings shall be used.

* Slings with hooks shall have a safety latch or shall be secured when safety latches are

missing.

* Wire rope or slings should be immediately discarded whenever they have been shock

loaded.

* Slings that have been exposed to temperatures in excess of 200 degrees F shall be

removed from service.

1. **Synthetic Web Slings**

* Each sling should be marked or color coded to indicate its rated capacity.
* Nylon slings should have a uniform thickness and width.
* Fittings should have a minimum breaking strength equal to that of the sling and should be free of sharp edges.
* Stitching should be the only method used to attach end fittings to the webbing or to form

eyes.

* Many slings have a colored warning core. If this can be seen, the sling must be removed

from service.

* Do not drag slings on the ground, this causes excessive wear and reduces the

capacity and life of the sling.

1. **Inspection**

Rigging equipment for material handling shall be inspected prior to use and on each shift and as necessary during its use to ensure that it is safe. Chains and slings shall periodically receive a documented, in-depth inspection by a competent person. This shall be performed at the following intervals:

* Chains - every 12 months.
* Wire Rope Slings - every 6 months.
* Web Slings - every 12 months.

It may be necessary to perform an in-depth inspection at more frequent intervals. The frequency of additional in-depth inspections shall be determined by:

* Frequency of use.
* Severity of service conditions.
* Nature of lifts.
* Experience gained on service-life of slings used in similar circumstances.

The inspection documentation should include:

* Serial number.
* Name of the manufacturer.
* Rated capacity.
* Type
* Grade of material
* Inspector name
* Date of inspection
* Nominal length
* Measured length
* Inspection results
* Chains and slings shall be visually inspected before each use.
* Damaged or defective chains and slings shall be immediately removed from service and

tagged: Danger-“ DO NOT USE”.

1. **Training**

Only those employees who have completed rigger training can attach or detach lifting equipment to loads. Training should incorporate familiarization with rigging, hardware, slings and safety issues associated with rigging, lifting loads and lift planning. Training should include classroom, hands-on training and exams. Hands-on training should include proper inspection, use, selection and maintenance of loose gear.

## Scaffolds

1. **Purpose**

The purpose of this section is to establish corporate policy and procedures in the selection of materials, erection, inspection, use and dismantling of scaffolding.

1. **Scope**

The scope of this program shall include, but is not limited to, Selection of materials, Methods of erection and dismantling, safe practices in the use and inspection, Personal protective equipment for fall protection, safeguarding of equipment, as well as protective measures to be used by employees working on and around all elevated work areas in the interest of personal, corporate and public safety.

1. **General Requirements**

In the use of patent scaffolding consult the manufacturer’s suggested methods of inspection, erection, and maintenance of the equipment. Care should be taken to enforce all special considerations.

* The footing or anchorage of scaffolding shall be sound, rigid and capable of carrying the maximum load intended without settling or displacement. Unstable objects such as barrels, boxes, loose bricks, or concrete blocks shall be used to support scaffolds or planks.
* No scaffolding shall be erected, moved, dismantled or altered except under the supervision of competent persons or as requested for corrective reasons by the Project Safety Representative.
* Guardrails and toe boards shall be installed on all open sides and ends of platforms 6 feet above the ground or floor, or lower at client request, except needle beam scaffolds and floats. Scaffolds 4 ft. to 10 ft. in height having a minimum horizontal dimension in either direction of less than 45 inches shall have standard guardrails installed on all open sides and ends of the platform.
* Guardrails must be 2x4 inches, or the equivalent, approximately 42 inches high, with a mid-rail, when required. Supports must be at intervals not to exceed 8 ft. Toe boards shall be a minimum of 4 inches in height. Guardrails are intended to support 200 lb. without failure.
* Where persons are required to work or pass under scaffolds, scaffolds must be provided with screen or equivalent between toe board and the guardrail, extending along the entire opening consisting of No. 18 U.S. standard wire 1/2-inch mesh or the equivalent.
* Where employees are required to pass or work near scaffolds where welding, cutting or spark producing activity such as grinding or arc gouging activities are being performed a fire blanket material shall cover the floor and all openings up to the guardrail, or equal height of the work being performed to contain the sparks and hot materials. A fire extinguisher shall be present at the work area sign shall be posted warning employees that work is being performed overhead.
* Scaffolds and their components must be capable of supporting without failure at least four times the intended load.
* Any scaffold including accessories such as braces, brackets, trusses, screw legs, ladders, etc., damaged or weakened from any cause must be immediately repaired or replaced.
* All load carrying timber members of scaffold framing be a minimum of 1,500 fiber stress grade construction grade lumber.

1. **Scaffold Inspection Tagging**

Scaffold systems shall be inspected prior to use and periodically by a Competent Person. A scaffold tag shall display date of erection, inspector, erector, and rating in pounds per square foot. All scaffolds should be tagged in a highly visible spot. Any scaffold without a tag shall be considered unsafe and is not to be used.

“RED TAG” – Scaffolds that are not safe for use are to be tagged at a visible location with a RED “UNSAFE FOR USE” TAG.

Also, scaffolds being erected shall be re tagged “Do not use”

“YELLOW TAG” – In the event a scaffold or platform cannot be erected in accordance with the applicable codes, i.e., handrails or equivalent fall protection, a YELLOW tag is utilized, this YELLOW tag will have a warning message, “Safety Harness shall be worn, 100% tie off”. Any employee working on a yellow scaffold who is not using safety harness are subject to disciplinary action.

“GREEN TAG” – A complete scaffold, one that meets all OSHA/client guidelines, shall have a Green tag attached to scaffold where it is visible gaining access to the scaffold. Even is a scaffold has a green tag, it must be inspected before use.

Alteration or modifications that must be made to a Green tagged scaffold are to be re-inspected and re-tagged by the foreman who is responsible for the modification. A new tag is to be placed on the scaffold or platform.

“DUTY RATING” – All scaffolding work platforms (work decks) shall have duty ratings as required by OSHA

* + “HEAVY DUTY RATING” – Supports 75 pounds per square foot
  + “MIDIUM DUTY” – Supports 50 pounds per square foot
  + “LIGHT DUTY” – Support 25 pounds per square foot

NOTE – All scaffolds and their components shall be capable of supporting four (4) times their maximum intended load.

1. **Training**

Employees who work on scaffolds shall be trained by a qualified person. Training shall provide employees with the knowledge to determine the hazards associated with scaffolds-ie fall potential, tag recognition, load limits on scaffolds, working near electricity and potential for fall objects.

Employees shall be instructed to never modify a scaffold without the authorization from the competent person and that disciplinary will be taken in unauthorized modifications are made. All training will be documented and kept on file.

Retraining will be required where changes at the worksite present a hazard about which an employee has not been previously trained; or where changes in the types of scaffolds, fall protection, falling object protection, or other equipment present a hazard about which an employee has not been previously trained; or where inadequacies in an affected employee's work involving scaffolds indicate that the employee has not retained the requisite proficiency.

## Short Service Employee (SSE)

1. **Purpose**

The purpose of this policy is to ensure that employees with less than six months’ experience or who have significantly changed their job responsibilities are identified, adequately supervised, trained and managed to prevent injury, property damage, and environmental harm.

1. **Responsibility**

The Supervisor shall:

* Verify that the SSE has completed all required training.
* Ensure the SSE receives SSE identification and is assigned to an experienced mentor.
* Ensure that the customer is notified before an SSE is sent to any of their locations.

The Mentor shall:

* Ensure job specific requirements are clearly defined and that the SSE understands the scope of work being performed.
* Review with the SSE known hazards of the work being performed and advise them on safe work practices to follow.
* Lead by example while demonstrating a positive safety environment.
* Be available and assessable to answer questions from the SSE at all times.

The SSE shall:

* Obtain assistance and guidance from their mentor when uncertain about any part of a job or task.
* Adhere to all policies and procedures taught or shown to them.
* Work in a safe and environmentally sound manner.

1. **SSE Identification**

* SSE’s will be identified with an orange hard hat.
* It is the responsibility of the SSE and their mentor to enforce this policy and to notify the HSE department when more identifiers are necessary.
* The method used to identify SSEs shall be communicated to the on-site supervisor.

1. **Management of SSE’s**

* Prior to the start of a job, the on-site supervisor must be notified of SSE personnel.
* A single person crew cannot be an SSE.
* Crew sizes of less than five shall have no more than one SSE.
* The SSE will be assigned SSE identification and attend a site-specific safety orientation prior to the start of work.
* The SSE will be assigned to an experienced mentor who will coach, observe, teach job skills and demonstrate safety leadership during the first six months of the job.
* A mentor can only be assigned one SSE per crew and the mentor must be onsite to monitor the SSE.
* The on-site supervisor will monitor the progress of all SSE’s.
* All Contractors will be managed in alignment with this process.

1. **SSE Performance**

* A performance evaluation shall be conducted by the mentor in conjunction with the supervisor, and safety coordinator to determine if the employee can be removed from the SSE program.
* The performance evaluation will be documented using the SSE Performance Evaluation Form in Appendix
* SSE’s performing at their expected level will have their Short Service designation removed after 6 months of continuous service.
* SSE’s with any infractions will remain in the SSE program for an extended time to be determined by the mentor.
* Any safety related incident will require the SSE to re-attend New Hire Training. Based on the severity of the safety incident, the SSE may be rendered Un-Fit for Duty.
* Upon completion of the SSE program, the proper color hard hat is issued to employee.

**SSE Performance Evaluation**

|  |  |  |
| --- | --- | --- |
| **First Name:** | **Last Name:** | **Title:** |
| **Mentor:** | **Reporting Period: From To** | |

**Duties**

|  |  |  |  |
| --- | --- | --- | --- |
| **Duty:** | | **% of Job:** | **Essential Function: Yes No** |
|  | Exhibits understanding and mastery; needs minimal supervision. Exercises good judgment in dealing with non-routine work situations | | |
|  | Performance is highly competent; working toward mastery. Needs direction only in non-routine work situations. | | |
|  | Competent performance. Needs occasional supervision on some routine aspects of this job function. | | |
|  | Needs improvement. Requires continuing supervision to complete routine tasks in this job function. | | |
|  | Unsatisfactory performance. (Narrative comment required - give examples.) | | |
| Narrative Comments: | | | |
| **Duty:** | | **% of Job:** | **Essential Function: Yes No** |
|  | Exhibits understanding and mastery; needs minimal supervision. Exercises good judgment in dealing with non-routine work situations | | |
|  | Performance is highly competent; working toward mastery. Needs direction only in non-routine work situations. | | |
|  | Competent performance. Needs occasional supervision on some routine aspects of this job function. | | |
|  | Needs improvement. Requires continuing supervision to complete routine tasks in this job function. | | |
|  | Unsatisfactory performance. (Narrative comment required - give examples.) | | |
| Narrative Comments: | | | |

**Behavioral Factors**

|  |  |
| --- | --- |
| **Attendance. Consider absences, times arriving late, length of lunch/breaks, and use of leave time.** | |
|  | Arrives on time and begins work promptly. Pre-arranges time-off with appropriate notice; does not extend breaks or lunches. |
|  | Occasionally absent, late or leaves early without appropriate notice. |
|  | Problems with attendance, punctuality or misuse of leave time. (Narrative comment required - give examples.) |
| Narrative Comments: | |
| **Dependability. Consider degree of supervision required, and ability to follow instructions and complete tasks.** | |
|  | Anticipates and prioritizes work, clarifying directions and timelines. Tracks and completes tasks in a timely manner, without reminder. |
|  | Tracks and completes assigned work independently after initial instruction and feedback. |
|  | Requires only occasional supervision to adhere to goals and timelines. |
|  | Needs frequent supervision or reorientation on job goals, timelines or procedures. |
|  | Needs constant supervision in order to produce adequate work. (Narrative comment required - give examples.) |
| Narrative Comments: | |
| **Customer Service. Consider attitude, helpfulness, knowledge, and communication skills towards the company and customers.** | |
|  | Represents the company well, consistently giving courteous, knowledgeable and thorough service. Communicates clearly and appropriately. |
|  | Positive and supportive of company mission. Gives accurate information. Exhibits patience with customers. |
|  | Does not convey a positive image of the company. May be impersonal or unprofessional in dealings with the public. |
|  | May give confusing or inaccurate information. (Narrative comment required - give examples.) |
| Narrative Comments: | |
| **Productivity. Consider quality (accuracy/appearance) and quantity of work and use of work time.** | |
|  | Extraordinary volume of work completed with exceptional quality. Looks for ways to improve productivity of position. |
|  | Organized and in control of tasks. Consistently completes a high volume of work in a timely and accurate manner. |
|  | Knows status of tasks. Makes efficient use of time. |
|  | Sometimes loses track of process or tasks. Needs to improve quantity and/or quality of work. |
|  | Work is of unacceptable quality and/or quantity and much must be redone. Requires continuous help in completing assignments. (Narrative comment required - give examples.) |
| Narrative Comments: | |
| **Safety. Consider employee’s awareness of and efforts to maintain a healthy and safe working environment.** | |
|  | Actively promotes safety in the workplace. Works in compliance with federal, state, and company safety rules. Makes full use of safeguards, and does not use defective tools or equipment. Identifies and helps prevent potential work hazards and advises co-workers and the public of unsafe conditions or behavior. Reports unsafe conditions to supervisor and/or appropriate personnel. |
|  | Based on training received, completes work in accordance with federal, state, and university safety rules. Maintains proper care of tools and equipment. Reports work hazards and/or unsafe conditions to supervisor and/or appropriate personnel. |
|  | Works or displays behavior that is not in compliance with federal, state, or company safety rules. Does not make full use of safeguards and/or uses defective tools or equipment. Fails to identify known or suspected work hazards and/or fails to report unsafe conditions or behavior to supervisor and/or appropriate personnel. (Narrative comment required – give examples.) |
| Narrative Comments: | |

**Employee Development**

|  |
| --- |
| Identify and evaluate the results of employee development experiences during the last appraisal period. |
| Identify development goals for employee and how they will be achieved during the next evaluation period. |

**Should employee be removed from SSE program \_\_ YES \_\_ NO**

**If No, How much additional time on SSE Program \_\_ 1 MONTH \_\_ 3 MONTHS \_\_ 6 MONTHS**

**Employee Response**

Employee’s signature confirms only that the Mentor has discussed and given a copy of the evaluation to the employee. The employee’s signature does not indicate agreement or disagreement with the contents of this evaluation. This response will be attached to the appraisal in the official personnel file.

|  |  |  |  |
| --- | --- | --- | --- |
| Employee Signature: | Date: | Mentor Signature: | Date: |
| Supervisor Signature: | Date: | HSE Manager Signature: | Date: |

**SSE Completion Record**

|  |  |  |
| --- | --- | --- |
| **SSE First Name:** | **SSE Last Name:** | **SSE Title:** |
| **Mentor:** | **Reporting Period: From To** | |

**Acknowledgement of Successful SSE Program Completion**

Employee Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

The employee has acquired and demonstrated a good working knowledge of Company Name Here HSE policies/procedures, has adhered to all HSE policies, and has completed six calendar months of service without a recordable incident.

The employee has successfully completed the Company’s SSE Program.

Supervisor’s Name (print):

Supervisor’s Signature:

Employee’s Name (print):

Employee’s Signature:

Original: Employee File

Copy: HSE File

## Silica Exposure Control

1. **Purpose**

The purpose of this procedure is to establish guidelines to protect affected personal from exposure to silica dust. The written exposure control plan shall be available for examination and copying by each employee.

1. **Responsibility**

The Supervisor shall:

* Inform affected personnel of the hazards of working with silica-containing materials or working in an environment known to contain airborne concentrations of silica.
* Provide instruction on the precautions specified in the job-specific plan covering hazards at the job location.
* Ensure the risk to workers is minimized and adequately controlled.

The Employee shall:

* Know the hazards of silica dust exposure.
* Use appropriate PPE and follow all work procedures as directed by the Supervisor.

1. **Health Effects**

Exposure to silica has been shown to cause silicosis, lung cancer, pulmonary tuberculosis, bronchitis and other airway diseases.

Silicosis is a disease caused by fine particles that are deposited in the lungs causing thickening and scaring of the lung tissue. The scar tissue restricts the lungs’ ability to extract oxygen from the air. The damage is permanent and the extent depends on the concentrations of silica dust and the duration of exposure. Initially, workers with silicosis may have no symptoms.

As the disease progresses, a worker may experience:

* Shortness of breath
* Severe cough
* Weakness
* Death

1. **Exposure Assessment**

* An exposure assessment will be conducted using personal air monitoring to determine the employees’ exposures for the job being performed.
* Personal air monitoring shall be conducted where the potential for exposure to respirable crystalline silica is expected to be at or above the action level (8-hour TWA of 25μg/m³), to ensure employee exposure does not exceed the PEL for silica.
* Full shift personal samples shall be representative of the employee’s regular, daily exposure to silica.
* Air monitoring will be repeated every 3 months or when changes occur which could potentially increase silica exposure.

1. **Medical Surveillance**

* A medical surveillance will be made available for employees who are exposed to the action level of 8-hour TWA of 25μg/m³ of respirable crystalline silica for more than 30 days per year or who use respirators for more than 30 days per year.
* A baseline medical assessment will be available to exposed employees within 30 days of initial assignment unless they have previously received a suitable medical examination in the past three years.

1. **Work Procedures**

* Activities such as sawing, drilling, jackhammering, grinding, cutting or similar activities on material that contains Crystalline Silica, can lead to the exposure to respirable crystalline silica. Some materials that contain Crystalline Silica include cement, concrete, brick, stone, sand, asphalt, pipe, etc.
* All affected employees will undergo medical surveillance prior to beginning any work in a silica environment.
* A tool-box safety meeting will be conducted to ensure all affected employees understand the safety requirements of the job and the hazards of silica exposure.
* The supervisor will issue the appropriate personal protective equipment and clothing.
* When an employee leaves the work area for a break, they will be vacuumed off using a HEPA filtered vacuum and all PPE and clothing will be placed in a designated storage area.
* At the end of a work shift, the employee is must shower, clean their PPE, and place contaminated clothing in designated area.

1. **Control Procedures**

* Where exposure to crystalline silica may occur, appropriate control procedures will be applied to eliminate or reduce the risk to employees from the hazards of silica dust exposure.
* Work activities will be assessed to determine if exposure to silica can be reduced through elimination or substitution by using products with less silica or using work methods that would eliminate the need for surface grinding or cutting.
* Depending on the work activities, engineering controls may be the best application for minimizing exposure to silica. The following engineering controls shall be applied as appropriate:
  + Local Exhaust Ventilation (LEV)
  + Wet Dust Suppression (WDS)
  + Restricting or isolating the work activity with barriers or full enclosures (this may be the only option where LEV or WDS is not practical or effective).
* When appropriate, the following administrative controls may be utilized:
  + Housekeeping measures
  + Work area restrictions
  + Personal hygiene
  + Employee training
  + Warning signs

1. **Personal Protective Equipment (PPE)**

* Respirators shall be provided to employees who are or will be exposed to actionable levels of respirable crystalline silica.
* Prior to working in a silica environment, each employee will be issued respiratory protective equipment applicable to their specific job assignment.
* Respirators must be selected based upon measured exposure levels and the assigned protection factor of respirators.
* All employees who wear respirators will do so in adherence with the Company respirator program.
* Employees working in a silica environment will be provided protective clothing and equipment to control silica contamination and exposure.
* All protective clothing and equipment must be stored in a designated area.
* The following PPE will be provided and worn when exposure to silica exists:
  + Gloves
  + Coverall
  + Eye protection

1. **Hygiene Practices**

* Employees will be provided with a wash area and a shower when working in a silica environment.
* Employees who work in a silica environment must shower at the end of the work shift.
* Personnel working in a silica environment must wash their hands and face before lunch or break.
* Eating, drinking, smoking, dipping, or applying cosmetics is prohibited while working in a silica environment.
* Compressed air must not be used for cleaning in a silica work environment.

1. **Housekeeping and Maintenance**

* Work areas where silica dust may accumulate must be kept clean and materials collected and kept in appropriate containers.
* When cleaning silica dust from the work area, exposure shall be reduced by using a HEPA-filtered vacuum, wet sweeping, wetting, or other appropriate techniques.
* Work clothing must be placed in closed top containers prior to washing or removal from the job site. If these are to be washed by an outside company, a letter documenting that the clothing contains Silica must be provided for the company receiving the clothing.
* Compressed air cannot be used to clean clothing or surfaces where doing so could contribute to employee exposure to respirable crystalline silica.

1. **Review**

* The written exposure control plan shall be evaluated at least once per year and as necessary.
* Situations where reevaluation may be necessary include regulatory updates, changes in equipment, and exposure incidents.
* Any changes resulting from this process must be communicated to affected employees.

1. **Recordkeeping**

Accurate records of all air monitoring data, objective data, medical surveillance, and training records shall be maintained as required by the regulation.

1. **Training**

Personnel will be trained prior to using silica-containing materials or working in an environment known to contain airborne concentrations of Silica. Refresher training will be provided as needed.

Training shall include the following:

* Hazards associated with exposure to silica dust.
* The risks of exposure to silica.
* Signs and symptoms of silica disease.
* Safe work procedures to be followed.
* Use of respirators and other personal protective equipment.
* Use of control systems and procedures.
* How to seek first aid and how to report an exposure to silica dust.

## Spill Prevention and Response

1. **Purpose**

The purpose of this plan is to provide the standard operating procedures to prevent and respond to spills of hazardous substances.

1. **Container Management**

* Chemical substances shall be stored in proper containers to minimize the potential for a spill.
* Chemicals shall be kept in closed containers and stored so they are not exposed to storm water.
* All hazardous substance containers must be accessible and spacing between containers must provide sufficient access to perform periodic inspections and respond to releases.
* Do not overfill waste drums. 4”of headspace must remain to allow for expansion.
* All hazardous substance containers must be in good condition and compatible with the materials stored within.
* Implement preventative maintenance activities to reduce the potential for release from equipment.

1. **Housekeeping**

* Keep all work areas and hazardous substance storage areas clean and in good general condition.
* Periodically inspect equipment and hazardous substance storage areas to ensure leaks or spills are not occurring.
* Provide secondary containers when storing hazardous substances in bulk quantities (>55gl).
* All chemicals that are transferred from larger to smaller containers must be transferred by use of a funnel or spigot.
* Any spills on the exterior of the container must be cleaned immediately.

1. **Spill Response Equipment**

* Spill response equipment must be maintained and located in areas where spills are likely to occur.
* Stock spill kits that are compatible with the hazardous substances stored on site.
* Spill kits should be sized to managing an anticipated release.
* Locate spill kits in areas where spills are likely to occur (loading docks, chemical storage areas, locations where hazardous substance are being transferred)

1. **Spill Response**

The following guidelines shall be used in the event of a hazardous substance release:

* Immediately notify your supervisor and coworkers in the area.
* If the spilled material is flammable or volatile, shut off flame sources and air the area out if it is safe to do so.
* Identify the substance and its hazardous properties.
* If possible, protect floor drains or outside access areas from the spill.
* If the spill is small cordon off the spill area to prevent further access and potential exposures.
* If you or a coworker was exposed to the spilled material, use emergency eye washes or showers, get to a well-ventilated area, and seek medical attention if needed.
* If the spill can’t be contained summon for help.
* In the event of a hazardous substance release spill cleanup materials are to be properly characterized to determine if it designates as a Hazardous Waste.

1. **Spill Reporting**

If a hazardous substance spill has been released to soil, surface water or drains the following notifications must be performed:

* Fire Department (any release that poses an immediate threat to human health, property or the environment).
* County Health Department
* Water/Wastewater Management
* Clean Air Agency
* National Response Center(release of oil or fuel to surface water, or a release of a chemical with an established Reportable Quantity-RQ).

1. **Training**

Employees shall be instructed on the proper response procedures for spilled materials. The training shall include materials available for use, proper waste disposal, and communication procedures.

## Waste Management

1. **Purpose**

The purpose of this written program is to serve as a guide to the proper handling, organization, and storage of waste and scrap materials to minimize the potential impact on the environment.

1. **Responsibility**

Senior management shall:

* Provide the resources, guidance, equipment, communication, and enforcement necessary to protect the environment and ensure compliance with this policy.

Supervisors shall:

* Estimate the waste that will be generated prior to work being performed so that the need for containers and waste removal can be determined.
* Coordinate with the project site or owner to ensure proper disposal of wastes or scrap materials.
* Ensure that hazardous waste in their work areas is properly identified, segregated, collected, stored and disposed.
* Ensure that no chemicals are abandoned in place due to personnel retirement, termination of employment, graduation, or other reason for departure.

All personnel shall:

* Comply with all elements of this program to prevent environmental harm and noncompliance.
* Identify, segregate, collect, and properly store or dispose of controlled wastes.
* Immediately report leaks, releases, and chemical emergencies.

Environmental, Health and Safety (EHS) Department shall:

* Assist supervisors, managers, and other employees to implement and maintain the elements of this policy.
* Oversee management and disposal of hazardous waste.
* Ensure that a waste minimization program is implemented.
* Respond to spills and releases as needed.

1. **Determining Hazardous Waste**

Each waste product must be determined as either hazardous or non-hazardous. Material Safety Data Sheets (MSDS) contain information stipulating the hazardous components of a product, unless the manufacturer is claiming proprietary status of the formula. In this case, the manufacturer must be contacted for a hazardous or non-hazardous status of the product. If the hazardous contents of the material are known, then no sampling is required.

In the event a material has been accumulated and its waste classification is not known, the substance must be identified before it can be shipped for disposal.

If a waste is non-hazardous, disposal should follow established State procedures for non-hazardous waste. Non-hazardous waste can be thrown in any receptacle EXCEPT for the receptacles that are labeled "Hazardous Waste."

Once a determination has been made that a chemical waste meets the EPA definition of hazardous waste, it is then required to comply with U.S. EPA and State hazardous waste regulations pertaining to the accumulation, storage, labeling, inspection, and disposal of hazardous waste.

If there is any question about whether a material should be classified as hazardous, the EHS Department should be contacted for guidance.

1. **Hazardous Waste Handling**

Employees shall be instructed on the proper disposal method for wastes. Before handling any known or suspected hazardous waste, employees shall refer to the MSDS if available to determine what type of personal protective equipment and special handling considerations are required for the particular material they will be handling. If the waste is known to be hazardous but no MSDS is available, protective equipment must still be utilized.

The EHS Department should be consulted for guidance relative to the appropriate equipment to be utilized. Under no circumstances shall employees handle hazardous waste without proper personal protective equipment.

1. **Hazardous Waste Storage**

Once a product has been classified as hazardous waste, special provisions for storage are required prior to removal for disposal:

* Choose a central area for waste storage and label with a sign saying "Satellite Accumulation Area". It is the responsibility of the department supervisor to ensure that waste accumulation areas under their supervision are maintained in accordance with applicable rules and regulations.
* Storage containers of hazardous waste must be properly labeled to include:
  + Hazardous waste label (with accumulation start date).
  + Characteristic label (ignitable, corrosive, toxic, reactive).
  + Special instructions for handling (if applicable).
  + The date waste(s) were first added.
* For those containers with mixtures, a breakdown of the substances by percentage or volume is required. This component is critical to proper disposal.
* Any hazardous waste container with "unknowns" must be reported to the EHS Department promptly so that characterization can be performed and the waste can be managed correctly and safely.
* Waste may only be stored in leak proof sealable containers which are compatible with the material. MSDS’s will provide this compatibility information.
* Waste must be compatible with other wastes in the same container. The exterior of the container must be free of chemical contamination.
* Store containers of incompatible waste apart from each other (i.e., keep Oxidizers away from Flammable Solvents). Also, consider safe temperature storage requirements (e.g., do not store in direct sunlight).
* DO NOT put hazardous wastes into sinks, drains, dumpster, or other trash receptacles.
* Containers shall be kept closed during accumulation, except when transferring waste to or from the container.
* Keep open flame and ignition away from chemicals, especially hazardous waste and chemical containers. No smoking rules apply.
* Do not overfill hazardous waste containers. Two inches headspace should be allowed for any expansion while waste is in storage.
* All chemical spills and/or releases must be cleaned up properly and safely. Call the EHS Department to report all spills and releases immediately.
* All hazardous waste is required to be held in the generating location for subsequent pick-up and disposal.
* The EHS department is responsible for coordinating the disposal of hazardous waste.

1. **Universal Waste Management**

Batteries - Alkaline batteries can be disposed of in the trash. Other batteries which contain hazardous metals such as mercury, lead, silver, and cadmium must be handled and disposed of by the EHS Department.

Mercury Containing Devices - Many types of equipment contain elemental mercury. Equipment must be free of mercury devices before it is recycled or discarded. Mercury containing devices must be managed and disposed of by EHS Department. Examples include:

* Heating and air conditioning thermostats.
* Tilt switches used in silent light switches.
* Pressure gauges, displacement / plunger relays.
* Flow meters.
* Sump pump float switches.
* Thermometers, monometers.

Fluorescent Light Tubes - Fluorescent light tubes may be hazardous waste. Do not dispose of fluorescent light tubes into the trash. Place the used fluorescent light tube in its original box for proper disposal. The boxes should be sealed, marked with the words "Used Lamps" and the number of tubes marked on the top of the box. Call the EHS Department to dispose of the boxes of fluorescent light tubes.

Aerosol Cans – Segregate aerosol cans by their general chemistry (call the EHS Department for assistance with classifying and labeling aerosol cans). Label the container in the manner indicated by the EHS Department (e.g., whether the aerosol cans contains chlorofluorocarbons (CFCs), flammable material, pesticides, or is an inert material). If the aerosol can does not contain CFCs, a flammable warning, or a listing of pesticides, the aerosol can is considered inert.

1. **Waste Minimization**

**Source Reduction**

The most desirable method of waste minimization is source reduction. This is any activity that reduces or eliminates the generation of chemical hazardous waste at the source. Good materials management, substitution or less hazardous materials, and good shop procedures can accomplish this. Examples include:

* Date chemical containers when received so that older ones will be used first.
* Purchase chemicals in the smallest quantities needed.
* Label all chemical containers to prevent the generation of unknowns.
* Eliminate the use of acid or base cleaning solutions altogether, and use nonhazardous solutions such as Alconox.
* Standardize materials so that left over products can be used at other locations.

**Recycling**

The second most desirable approach is recycling. When a waste material is used for another purpose, treated and reused in the same process, or reclaimed for another process, it is considered recycling. Examples include:

* Purchase compressed gas cylinders only from manufacturers who will accept empty cylinders.
* Do not contaminate used oil with solvents because this prevents the oil from being recycled.
* Re-circulate unused or excess chemicals within the department (ask the EHS Department for assistance).
* Return excess chemicals to the distributor.

1. **Training**

Employees shall be instructed on the proper disposal method for wastes. This may include general instruction on disposal of non-hazardous wastes, trash, or scrap materials. If wastes are classified as hazardous, employees shall be trained to ensure proper disposal.

## Welding, Cutting, Hot Work

1. **Purpose**

The purpose of this policy is to ensure that employees are properly trained, aware of hazards associated with hot work, and correctly informed of our policies, practices, and procedures to prevent, or if possible, eliminate these hazards.

1. **Procedure**

* All welders, cutters, and their supervisors involved in the performance of hot work operations shall be properly trained in the safe operations of any equipment required, the safe use of the process, proper PPE, and safety procedures to be followed.
* Assigned fire watchers must be trained in the use of fire extinguishing equipment and familiar with the facilities for sounding an alarm in the event of a fire.
* Where possible, all hot work operations will be performed outside of buildings or structures, clear of any foreseeable fire hazards. If the object to be welded or cut cannot readily be moved, all moveable fire hazards should be removed.
* If the object to be welded or cut cannot be moved and if all the fire hazards cannot be removed, then guards shall be used to confine the heat sparks and slag and to protect the immovable fire hazards.
* If the requirements for fire hazards and guarding as stated above and in paragraphs 1910.252(a)(1)(i) & (a)(1)(ii) cannot be fully met, welding and cutting operations will not be performed until hazardous conditions are fully resolved.
* Any welding, cutting or burning of lead base metals, zinc, cadmium, mercury, beryllium or exotic metals or paints not listed here shall have proper ventilation or respiratory protection.
* First aid equipment shall be made available at all times for employee use during welding and cutting operations. First aid kits are kept in all vehicles and are regularly inspectedto ensure that contents are kept fully stocked and that the appropriate items are available.
* Workers in charge of oxygen or fuel-gas supply equipment (including distribution piping systems and generators) will be instructed and judged competent for such work.
* Fuel gas and oxygen cylinders must be transported, moved, stored, and used in an upright position, secured to prevent tipping, and located to prevent accidental collision with the cylinders. Cylinders must be kept away from any heat or combustion sources, and at least 20 feet from any flammable gases or petroleum products. When not in use, cylinders must have their valves closed, any regulators or attachments removed, and their valve covers in place.
* Personnel assigned to operate or maintain arc welding equipment will be properly trained & qualified to operate such equipment and in safety procedures and familiar with OSHA §1910.252(a)(b) & (c) and §1910.254 requirements for arc welding and equipment handling.
* Operators of equipment shall report any equipment defect or safety hazards and discontinue use of equipment until its safety has been assured. Repairs shall be made only by qualified personnel.
* Before cutting or welding is permitted the area shall be inspected by the project manager. Precautions to be taken shall be in the form of a written permit.

1. **Fire Watch**

A fire watch shall be assigned when any of the following conditions exist:

* Locations where other than a minor fire might develop.
* Appreciable combustible material, in building construction or contents, closer than 35 feet to the point of operation.
* Appreciable combustibles are more than 35 feet away, but are easily ignited by sparks.
* Wall or floor openings within a 35-foot radius that expose combustible material in adjacent areas including concealed spaces in walls or floors.
* Combustible materials are adjacent to the opposite side of metal partitions, walls, ceilings, or roofs and are likely to be ignited by conduction or radiation.
* Fire watchers shall have fire extinguishers readily available.
* A fire watch shall be maintained at least a half an hour after the welding or cutting operation was completed.

1. **Confined Spaces**

Any hot work to be performed in confined spaces will conform to Permit-required Confined Space procedures and the following requirements:

* Adequate ventilation is a prerequisite to work in confined spaces.
* When welding or cutting is being performed in any confined spaces the gas cylinders and welding machines will kept outside of the space. Before operations are started, gas cylinders will be secured, heavy portable equipment mounted on wheels will be securely blocked to prevent accidental movement, and warning signs will be posted.
* Where a welder must enter a confined space through a manhole or other small opening, means will be provided for quickly removing him in case of emergency. When safety belts and lifelines are used for this purpose they will be so attached to the welder‘s body that his body cannot be jammed in a small exit opening. An attendant with a preplanned rescue procedure will be stationed outside to observe the welder at all times and be capable of putting rescue operations into effect.
* When arc welding is to be suspended for any substantial period of time, such as during lunch or overnight, all electrodes will be removed from the holders and the holders stored so that accidental contact cannot occur and the machine disconnected from the power source.
* In order to eliminate the possibility of gas escaping through leaks of improperly closed valves when gas welding or cutting, the torch valves will be closed and the fuel-gas and oxygen supply to the torch positively shut off at some point outside the confined area, whenever the torch is not to be used for a substantial period of time, such as during lunch hour or overnight. Where practicable, the torch and hose will also be removed from the confined space.

## Working Alone

1. **Purpose**

The purpose of this procedure is to establish guidelines to ensure the health and safety of employees while working alone. This policy applies to all fulltime, temporary and contract employees.

1. **Responsibility**

The Supervisor Shall:

* Identify all employees who are likely to work alone and maintain a log of their locations.
* Maintain contact with employees who work alone, both internally and externally.
* Take action to contact and locate employees who have failed to make contact or return at the expected time. If employee cannot be located, then contact the police.
* Ensure that all employees who work alone are made aware of this policy and provided with adequate instruction and training.
* Assess the risks associated with working alone initially and periodically to identify control measures.

The Employee Shall:

* Comply with any precautionary measures for working alone.
* Follow employer’s safety, health and environmental policies.
* Carry a cellular phone or electronic monitoring device at all times
* Inform key person on return to base.
* Report to their managers any unsafe or potentially unsafe situation using the incident reporting procedure.
* Take reasonable care for their own safety and not expose themselves to unnecessary risk.
* Attend any training provided.

1. **Control Measures**

Before an employee is assigned a task that requires them to work alone ensure that suitable precautions are put in place such as:

* Two-way radios are provided as a source of back up communication.
* Provide a list of contact and emergency numbers to employee working alone.
* Avoid having a lone work whenever possible, especially for jobs with a recognized risk.
* Evaluate safety measures at each work area such as lighting, egress, phone coverage, etc.
* Report all situations, incidents or 'near misses' where being alone increased the severity of the situation. Analyze this information and make changes to company policy where necessary.
* Establish a check-in procedure. Make sure that regular contact is kept with all employees.
* Schedule higher risk tasks to be done during normal business hours, or when another worker capable of helping in an emergency is present.

1. **Check-in Procedure**

Prior to commencing work alone the designated contact person and the affected employee shall follow check-in procedures as follows:

* The employee must sign out on the log and provide details of work location, method and frequency of contact.
* The employee is provided with contact and emergency numbers.
* The employee will contact the designated check-In contact person via the prescribed method, at the pre-determined check-in time(s).
* If the Check-in contact person is unavailable the employee shall contact the designated back-up contact person.
* If the employee encounters an unsafe situation while working alone this must be reported to the contact person immediately.
* At end of shift or completion of job the employee shall sign back in on the log.

Failure to Check-in:

* If an employee fails to check-in at their pre-determined time the contact person must make an attempt to contact the employee. If the employee can’t be reached a second attempt shall be made within 5 minutes of the first.
* If the employee still can’t be reached the contact person shall attempt to contact the employee in person. If the employee can’t be located contact the local police department.

**Lone Worker Hazard Assessment/ Check-in Log**

Date: \_\_\_\_\_\_\_\_\_ Name of employee: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Employee Contact Info: \_\_\_\_\_\_\_\_\_\_\_\_

Contact Person: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Back-up Contact Person: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Time out: \_\_\_\_ AM \_\_\_\_ PM Time in: \_\_\_\_AM \_\_\_\_ PM

Employee will Check-In: 🞎 In Person 🞎 by Telephone 🞎 Other Method

Employee will Check-In: 🞎 Every 30 minutes 🞎 Every Hour 🞎 Every 2 hours 🞎 at End of Shift

**Service** (brief description of Lone Worker Activity): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Hazard Identification** (Identify all hazards specific to lone workers activity): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Hazard Control Measures** (e.g. alternative work method, training, supervision, protective equipment):

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Workplace and Conditions**: (remote area, confined space, weather etc):

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**Process** (work with equipment, work with H2S gas etc):

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**Equipment** (manual handling, emergency shutdown controls, gas equipment etc):

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Individual** (medical condition, female, young, inexperienced, disabilities etc):

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Work Pattern** (alone all day-alone at night, isolated area etc):

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Supervision** (Identify level of supervision required) telephone contact/radio, cell phone visits by supervisor:

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Supervisor’s Name (print):

Supervisor’s Signature:

Employee’s Name (print):

Employee’s Signature:

# Section Three: Forms

## Appendix A: New Employee/Contractor Orientation Form

Employee’s Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Hire Date: \_\_\_\_\_\_\_\_\_\_\_\_

Job Title: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

All new employee’s must review all items listed below with a supervisor and must sign this form to verify their understanding. The following information was provided and or explained and understood by the person receiving it.

Employee Reviewer Initials Initials

1. Review HS&E Mission Statement \_\_\_\_\_\_\_ \_\_\_\_\_\_\_

2. General HS&E requirements including designated \_\_\_\_\_\_\_ \_\_\_\_\_\_\_

smoking areas, high noise areas, housekeeping,

jewelry, cell phones, etc. (Review

Basic Shop Rules posted in all shops)

3. Location of MSDS books, HS&E Manuals \_\_\_\_\_\_\_ \_\_\_\_\_\_\_

4. Drugs, alcohol and weapons not allowed \_\_\_\_\_\_\_ \_\_\_\_\_\_\_

5. Proper PPE \_\_\_\_\_\_\_ \_\_\_\_\_\_\_

6. Adequate “department / position specific” safety \_\_\_\_\_\_\_ \_\_\_\_\_\_\_

orientation

7. Location of any emergency equipment – fire \_\_\_\_\_\_\_ \_\_\_\_\_\_\_

extinguishers, first aid boxes, etc.

8. Safety meetings explained \_\_\_\_\_\_\_ \_\_\_\_\_\_\_

9. Explanation of how / where to receive HS&E \_\_\_\_\_\_\_ \_\_\_\_\_\_\_

information (bulletin boards, training material,

safety meetings)

10. Reporting requirements for Incidents – All injuries \_\_\_\_\_\_\_ \_\_\_\_\_\_\_

and incidents reported, who to report them to, etc.

11. Environmental awareness and waste management \_\_\_\_\_\_\_ \_\_\_\_\_\_\_

procedures

12. Identify Mentor, Safety representative & HS&E \_\_\_\_\_\_\_ \_\_\_\_\_\_\_

Committee

13. Location of hazardous chemicals \_\_\_\_\_\_\_ \_\_\_\_\_\_\_

14. Emergency preparedness, emergency exits, etc. \_\_\_\_\_\_\_ \_\_\_\_\_\_\_

15. Stop Work Authority \_\_\_\_\_\_\_ \_\_\_\_\_\_\_

Employee Signature & Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Supervisor Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Signature & Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2nd Reviewer Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Signature & Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

## Appendix B: Contractor Post Job Evaluation

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| General | | | | | | | | | | | |
| *Evaluation Date:* | | *Evaluator Name:* | | | *Evaluator Title:* | | | | | | *Phone*: |
| *Contractor Company Name:* | | | *Contractor Director/Manager:* | | | | | | | *Contractor Site Supervisor:* | |
| *Project Name:* | | | *Contract Number:* | | | | | | | *Task Evaluated:* | |
| *Have you shared this evaluation with your contractor : Yes  No* | | | | | | | | | | | |
| # | Activity Description | | | Yes | | | No | N/A | Comments | | |
| 1 | Did the contractor take steps to reduce the risks and/or mitigate the potential impacts of his/her work? (JSA, JHA, etc.) | | |  | | |  |  |  | | |
| 2 | Did the Contractor's JSA adequately identify job safety and environment hazards? | | |  | | |  |  |  | | |
| 3 | Did the Contractor's JSA process identify each job step? | | |  | | |  |  |  | | |
| 4 | Did the contractor implement a work site inspection program for safety and environmental concerns? | | |  | | |  |  |  | | |
| 5 | Was there a behavior based safety observation in place? (crews knowledgeable about process, did regular observations, etc.) | | |  | | |  |  |  | | |
| 6 | Was Stop Work Authority used properly? Was it discussed and the issues resolved? If no, explain in the comments section. | | |  | | |  |  |  | | |
| 7 | Was there participation by contractor employees and management in meetings, in discussing and resolving HSE concerns, safety talks, etc.? | | |  | | |  |  |  | | |
| 8 | Did the contractor's employees have required training certifications (excavation, Operator Qualification, crane operator, welder, etc.)? | | |  | | |  |  |  | | |
| 9 | Did the contractor assure appropriate PPE, safety and spill clean-up equipment was available, used by workers, and properly maintained? | | |  | | |  |  |  | | |
| 10 | Did the contractor implement their HSE program components at the work site? (Lock Out Tag Out, Fall Hazard, Excavation, Confined Space, Hot Work, etc.) | | |  | | |  |  |  | | |
| 11 | Did the contractor follow our HSE program components when applicable? | | |  | | |  |  |  | | |
| 12 | Did the contractor comply with Safe Work Permits? | | |  | | |  |  |  | | |
| 13 | Were safety and environmental incidents and near misses reported and investigated properly? | | |  | | |  |  |  | | |
| 14 | Did the contractor have emergency response plans in place and implemented at the work site (plans posted, emergency numbers posted, drills held, etc.)? | | |  | | |  |  |  | | |
| 15 | Were SSE's identified? | | |  | | |  |  |  | | |
| 16 | Were mentors assigned to each SSE? | | |  | | |  |  |  | | |
| 17 | Was the worksite left clean after job was completed? | | |  | | |  |  |  | | |
| 18 | Was contractor's equipment maintained and suitable to perform the work assigned (PM, pre use inspections, etc)? | | |  | | |  |  |  | | |
| 19 | Did the contractor manage the project with quality workmanship? Did they estimate costs accurately, schedule work to meet time lines, provide sufficient manpower, maintain quality control, provide a good finished product, etc.? | | |  | | |  |  |  | | |
| *General Comments:* | | | | | | | | | | | |
| Recommendation | | | | | | | | | | | |
| *Recommend for re-hire* | | | | | | *Yes* | | | | | |
| *Recommend for re-hire with established plan to improve* | | | | | | *Yes* | | | | | |
| *Recommend for re-hire only after in depth evaluation* | | | | | | *Yes* | | | | | |
| *Do not recommend for re-hire* | | | | | | *Yes* | | | | | |
| *Recommendation Comments:* | | | | | | | | | | | |

## Appendix C: Safety Meetings Attendance Form

**DATE: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**TOPIC: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

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## Appendix D: Hepatitis B Vaccine Declination

**I understand that due to my occupational exposure to blood or other potentially infectious materials, I may be at risk of acquiring Hepatitis B virus (HBV) infection. I have been given the opportunity to be vaccinated with Hepatitis B vaccine, at no charge to me; however, I decline the vaccination at this time. I understand that by declining this vaccine, I continue to be at risk of acquiring Hepatitis B, a serious disease. If in the future, I continue to have occupational exposure to blood or other potentially infectious materials and I want to be vaccinated with Hepatitis B vaccine, I can receive the vaccination series at no cost to me.**

**If I choose to have a vaccination to Hepatitis B I will contact Human Resources to arrange for the vaccination.**

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_

**NAME DATE**

## Appendix E: Job Safety Analysis (JSA)

|  |  |
| --- | --- |
| *Date:* | *Job:* |
| *Department:* | *Location:* |
| *Supervisor:* | *Participants:* |

|  |  |  |
| --- | --- | --- |
| *Basic Job Steps:* | *Potential Hazards:* | *Recommended Controls:* |
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