PEM

"Training Module Receipt"

Note to PEM employees: By signing below, I acknowledge that I have received training on the following safety module(s).

Training Modules:

(#1) Lockout/Tagout
(#2) Hazard Communication
(#3) Fall Protection
(#4) Ladder
(#5) Personal Protection
(#6) General Items
(#7) Electrical
(#8) First Aid
(#9) Scaffold
(#10) Lifting and Rigging
(#11) Welding
(#12) Trenching and Excavations
(#13) Fire Protection
(#14) Signs and Barricades
(#15) Respirator Training
(#16) Hearing Protection
(#17) Bloodborne Pathogens

Self Training ☐YES ☐NO
If no please give instructor's name: _____

Employee Signature	Date:

Important! This "receipt" is to be completed and returned to the PEM corporate office. If you have any questions you may call:

Name:	Phone:
(PEM) contact: TERRY O'REAR	888-715-3914

Fax#: 1-864-375-0092
OR
Mail to: Power Equipment Maintenance, Inc.
110 Prosperity Blvd.
Piedmont, South Carolina 29673

Lockout/Tagout Training Module
(Training Module #1)

Reference: OSHA Safety and Health Regulations (OSHA 1910.147)

Purpose:
The purpose of this training is to minimize potential hazards and injuries from the *unexpected* energization or "start up" of machines or equipment, or the release of stored energy. Failure to follow lockout/tagout procedures in necessary situations violates OSHA regulations and more importantly, *could result in a serious injury or fatality*. PEM fully supports this OSHA mandated program to help insure the safety of PEM employees and to insure compliance with state and/or federal regulations. If a PEM supervisor observes or learns of a trained employee not utilizing these procedures where applicable, the employee is subject to disciplinary action.

Objectives:
(1) To establish a means of positive control to prevent the accidental starting or activating of machinery or systems while they are being repaired, cleaned and/or serviced.
(2) To establish a safe, positive means of shutting down machinery or equipment and systems.
(3) To prohibit unauthorized personnel or remote control systems from starting machinery or equipment while it is being serviced.
(4) To provide a secondary control system (Tagout) when it is impossible to positively lockout the machinery or equipment.
(5) To establish responsibility for implementing and controlling Lockout/ Tagout procedures.
(6) To ensure that only approved locks, standardized tags and fastening devices provided by PEM will be utilized in the Lockout/Tagout procedures. Note: PEM is sometimes involved in work on large systems where multiple contractors are performing work at the same time. In such cases it is common for the customer to provide a designated lockout/tagout "coordinator" and the "block tagout" system may be used involving the use of "boundaries." In such cases, it is important that there is effective communication with the designated coordinator.

Areas of Responsibility:
(1) The project supervisor will be responsible for implementing the Lockout/Tagout program.
(2) The supervisor is responsible for enforcing the program and insuring compliance with the procedures.
(3) The supervisor is responsible for monitoring the compliance of this procedure and will conduct the annual inspection certification of authorized employees.

(4) *"Authorized employees"* are responsible for following established Lockout/Tagout procedures (see Attachment A).
(5) *"Affected employees"* (all other employees at the jobsite) are responsible for insuring they do not attempt to restart or re-energize machines or equipment which are Locked Out or Tagged Out.

Procedures

Preparation for Lockout or Tagout:
Employees who are required to utilize the Lockout/Tagout procedure must be knowledgeable of the different energy sources and the proper sequence of shutting off or disconnecting energy means.
Energy sources include:
(1) Electrical; including stored electrical energy as in capacitors
(2) Hydraulic (pressurized fluid) or pneumatic (pressurized air)
(3) Fluids and gases
(4) Mechanical (rotating machine components; elevated components)
(5) Thermal (heat)
(6) Chemical

More than one energy source can be utilized on some equipment and the proper procedure must be followed in order to identify all energy sources and Lockout/ Tagout accordingly.

Note: The OSHA standard allows for the use of "Tagout" only (i.e. without Lockout) only in very restricted circumstances. At PEM it is our goal to always use full Lockout/Tagout. Any exceptions must be specifically approved by the PEM supervisor and must meet the requirements set forth in OSHA 1910.147.

Electrical:

(1) Shut off power at machine. Shut off power at the energy isolating device: this may be a disconnect switch or a manually operated circuit breaker. Keep in mind that push buttons, selector switches, safety interlocks, and other control circuit type devices are not energy isolating devices.
(2) The energy-isolating device must be Locked or Tagged.
(3) Activate start button *to verify* that power is locked out; *this step is extremely important*.
(4) All controls must be returned to their safest position.
(5) If a machine or equipment contains capacitors, they must be drained of stored energy. Control circuits must be de-energized.

Note: If the electrical energy is disconnected by simply unplugging the power cord, the cord must be kept under the control of the authorized employee, or the plug end of the cord must be Locked Out or Tagged Out. A Lockout device is always preferred.

Hydraulic/Pneumatic:

(1) Shut off all energy sources (pumps and compressors). If the pumps and compressors supply energy to more than one piece of equipment, Lockout or Tagout the valve supplying energy to this equipment.
(2) Stored pressure from hydraulic/pneumatic lines shall be drained/bled when release of stored energy could cause injury to employees. Also, any drained fluids must be disposed of in a proper manner.
(3) Make sure controls are returned to the safest position (off, stop, standby, inch, jog, etc.).

Fluids and Gases:

(1) Identify the type of fluid or gas and use the proper personal protection equipment for the hazard to which you could be exposed.
(2) Close valves to prevent flow, Lockout/Tagout.
(3) Determine the isolating device, close, and Lockout or Tagout.
(4) Drain and bleed lines to zero energy state. (Double Blank & Bleed)
(5) Note: Some systems may have electrically controlled valves; if so, they must be shut off, Locked or Tagged Out.
(6) Check for zero energy state at the equipment.

Mechanical Energy (rotating components, elevated components subject to dropping, energy in springs, etc.):

(1) Block out or use die ram safety chain.
(2) Lockout or Tagout safety devices.
(3) Shut off, Lockout or Tagout electrical system.
(4) Check for zero energy state.
(5) Return controls to safest position.

Thermal; Chemical:

(1) Allow adequate cooling; use appropriate personal protective equipment.
(2) Drain, neutralize, or effectively lock out any hazardous chemical energy source.

Release From Lockout/Tagout:

(1) Inspection - make certain the work is completed and inventory the tools and equipment used. Tools or component parts left in the wrong places could be thrown out or could damage equipment.
(2) Clean up - remove all towels, rags, work aids, etc.
(3) Replace all guards. Sometimes a particular guard may have to be left off until the start sequence is over due to possible adjustments, however, all other guards should be put back into place.
(4) Check controls - all controls should be in their safest position.
(5) The work area shall be checked to insure that all employees have been safely positioned or removed and notified that the Lockout/Tagout devices are being removed.
(6) Remove Locks/Tags - remove only your Lock or Tag.

Procedure Involving More Than One Person:

When servicing and/or maintenance is performed by more than one person, each "authorized employee" shall place his/her own Lock/Tag on the energy-isolating source. This shall be done by utilizing a *multiple lock scissors clamp* if the equipment is capable of being Locked Out. If the equipment cannot be Locked Out then each "authorized employee" must place his or her Tag on the equipment. A Lockout device is always preferred.

Procedures for Removal Of an "Authorized Employee's" Lock/Tag by PEM Supervisor:

(1) The PEM project supervisor will physically check to insure that the "authorized employee" who applied the device is not at the project site.
(2) The supervisor will attempt to contact the "authorized employee" by phone or other means. Advise the employee's fellow workers.
(3) Insure that the "authorized employee" has this knowledge before he or she resumes work at the facility.

Procedures for Shift or Personnel Changes:

(1) It is the responsibility of the "authorized employee" to advise the PEM supervisor; this supervisor will contact the PEM supervisor of the following shift to explain the purpose of the Lockout/Tagout.
(2) If the originator of the Lockout/Tagout is reassigned, the PEM supervisor must make sure that the machine remains Locked Out until repairs on it are completed.

(3) The PEM supervisor must coordinate removal of the lockout device by the departing "authorized employee" and installation by the newly assigned "authorized employee." If a device of an employee from a different shift is found on the machine, it is not to be removed without:
   (a) Contacting the supervisor of the originator employee to get the status of the repair.
   (b) Follow the previous section on procedures for removal of an "authorized employee's" Lock/Tag by the PEM supervisor.

Procedures for Other Contractors:
The PEM supervisor will advise other contractors on the site that PEM enforce the use of Lockout/Tagout procedures. They will also be notified that any attempt to restart or re-energize machines or equipment that are Locked Out or Tagged Out by PEM personnel is prohibited.

The PEM supervisor will obtain information from other contractors about their Lockout/Tagout procedures and will provide this information to affected PEM employees.

Other contractors at the project site will be requested to sign a certification form (see Attachment B). If any contractor has previously signed a certification that is on file, there is no need to request that this contractor sign a new certification.

Training and Communication:
Each "authorized" employee utilizing the Lockout/Tagout procedure will be trained in the recognition of applicable hazardous energy sources, the type/magnitude of the energy available in the work place, and the methods and means necessary for energy isolation and control. The PEM supervisor will provide this training as applicable; see Attachment C-1.

Each "affected" employee (all employees other than "authorized employees" utilizing the Lockout/Tagout procedure) shall be instructed in the purpose and use of the Lockout/Tagout procedure. This will include the prohibition against any attempt to restart or re-energize machines or equipment that are Locked Out or Tagged Out. The PEM supervisor will provide this training as applicable; see Attachment C-2.

Procedures for Periodic Inspection:
Each PEM supervisor will conduct a "periodic inspection" at least annually on our energy control procedures. The inspection will include a review between the supervisor and each "authorized employee" of that employee's responsibilities under the energy control (Lockout/ Tagout) procedures. The inspection will also consist of physically inspecting the "authorized employee" performing work under under the procedures.

The supervisor shall certify in writing that the inspection has been performed. The written certification (see Attachment D) shall be retained in each individual's personnel file.

List Of Authorized Personnel (Updating):
The supervisor must keep Attachment A updated as personnel are assigned and reassigned.

Attachment A

List Of Authorized Personnel For Lockout / Tagout Procedures

Name:	Job #

Attachment B

I certify that Power Equipment Maintenance, Inc. and _____ (name of other construction firm) have informed each other of our respective Lockout/Tagout procedures.

PEM supervisor:	Date:

Supervisor representing other contractor:	Date:

Attachment C-1

Certification of Training (Authorized Personnel)

I certify that I received training as an "authorized employee" under the PEM Lockout/Tagout Program. I further certify that I understand the procedures and will abide by those procedures.

"authorized" employee's signature & date:	
"authorized" employee's name (printed):	
PEM supervisor's signature & date:	

Attachment C-2

Certification of Training (Affected Personnel)

I certify that I received training as an "affected employee" under the PEM Lockout/Tagout Program. I further certify and understand that I am prohibited from attempting to restart or re-energize machines or equipment which are Locked Out or Tagged Out.

"affected" employee's signature & date:	
"affected" employee's name (printed):	
PEM supervisor's signature & date:	

Attachment D

Lockout/Tagout Inspection Certification

I certify that _____ (name of "authorized") employee was "inspected" while utilizing Lockout/Tagout procedures. The inspection was performed while working on the following equipment:

	Signature:	Date:
"Authorized" employee:		
Inspector:		

Hazard Communication Training Module
(Training Module #2)

Reference: OSHA Safety and Health Regulations (OSHA 1926.59/1910.1200)
Note: Key ***definitions*** are provided at the end of this training module.

Purpose:

The purpose of the Hazard Communication standard is to insure that employees:
(1) Understand that some products used in the workplace can present a physical hazard and/or a health hazard.
(2) Understand how to protect themselves from harm.

Chemical exposure can occur through:
(1) inhalation (breathing)
(2) ingestion (eating)
(3) absorption (through the skin)
(4) injection (puncture wounds)

The following terms/phrases are associated with *physical* hazards:
(1) Flammable
(2) Combustible
(3) Compressed gas
(4) Explosive
(5) Oxidizer
(6) Pyrophoric
(7) Organic peroxide
(8) Reactive

The following terms/phrases are associated with *health* hazards:
(1) Acute or chronic effects
(2) Carcinogen Toxic or highly toxic
(3) Reproductive toxin
(4) Corrosive
(5) Irritant
(6) Sensitizer
(7) Hepatotoxin (affecting the liver)
(8) Nephrotoxin (affecting the kidneys)
(9) Neurotoxins (affecting the nervous system)
(10) Agents which act on the hematopoietic system

The word "FACTOR" can help you remember hazardous chemicals:
F – flammable
A – and
C – corrosive
T – toxic
O – or
R – reactive

Exceptions to the standard; unusual circumstances:
Exceptions to the standard include "consumer products" as long as they are not used to any greater extent in the workplace than used in a home setting. Examples could include "Windex" and "White-Out". Other specific exemptions include hazardous waste, tobacco products, wood, food, drugs, and cosmetics.

Wood "treated" with hazardous chemicals is *included* in the standard if such wood is sawed or sanded. Certain "articles" may contain a hazardous substance but, under normal circumstances, they do not expose employees. Examples would be mercury in a thermometer and hazardous gas in a fluorescent light bulb.

Welding rods or solder that produce a hazardous by product (smoke, fumes) are *included* in the standard. Ordinary "bricks" are *included* if they are sawed since the dust contains crystalline silica, which can be harmful if breathed.

The PEM Written Hazard Communication Program:
Our written hazard communication program has been prepared to comply with the OSHA standards noted above. The standard requires employers to make employees aware of the hazardous chemicals to which they are exposed during employment. Employees are required to follow the established safety and health guidelines when working with hazardous chemicals.

Our written hazard communication program is divided into eight sections:
I. Emergency Telephone Numbers
II. Material Safety Data Sheets
III. Labeling
IV. NFPA 704 Placard System
V. Employee Training
VI. Spill Containment/Clean Up
VII. Subcontractors and Their Employees
VIII. Safety, Health & Environmental Contractor Guidelines
IX. Construction Projects

Selected material from our hazard communication program is included in the following training material for training/reference purposes.

Binder for Material Safety Data Sheets (MSDSs):
At each PEM work site the material safety data sheets are contained in a ring binder conspicuously labeled "*Material Safety Data Sheets*." The binder is kept in a prominent

location at the work site office or in the PEM supervisor's vehicle as applicable. A copy is also maintained in a prominent location in our corporate office.

In accordance with the OSHA Hazard Communication Standard, 29 C.F.R. 1910.1200, any chemical that fits at least one of the following definitions is considered a hazardous chemical.

(1) Carcinogen
(2) Toxic or highly toxic
(3) Reproductive toxins
(4) Irritants
(5) Corrosives
(6) Sensitizers
(7) Hepatoxins
(8) Nephrotoxins
(9) Neurotoxins
(10) Agents affecting the hematopoietic system
(11) Agents which damage the lungs, skin, eyes, or mucous membranes

Emergency Telephone Numbers

PEM Site Management:	
Home phone:	
Mobile phone:	
PEM Safety Director/Emergency Coordinator:	Terry O'Rear
Mobile phone:	864-314-0665
PEM Alternate Safety Director/Emergency Coordinator:	Troy Burrows
Mobile phone;	864-630-9215

For all emergency calls (fire, police, sheriff, medical emergency), use 911 service where available. If not available, emergency numbers will be posted.

Carolinas Poison Center 1-800-848-6946

Chemtrec 1-800-424-9300

Material Safety Data Sheets

Information on Material Safety Data Sheets:
Chemical manufacturers and importers must develop a Material Safety Data Sheet (MSDS) for each hazardous chemical they produce or import. The MSDS contains information about the chemical, including health and safety data as well as emergency information.

Receipt of Material Safety Data Sheets by PEM:
It is the responsibility of Terry O'Rear to retain all MSDSs received by PEM. If an MSDS is not received by PEM with the initial shipment of a chemical, the buyer shall request an MSDS from the chemical supplier using Attachment B or similar document. If any PEM employee receives an MSDS, immediately forward it to our main office, attn: Terry O'Rear. The MSDSs will be retained in a ring binder entitled "Material Safety Data Sheets"; copies of the binder will be maintained in our main office as well as each work site or supervisor's vehicle as applicable.

Updating Material Safety Data Sheets:
If PEM receives a new MSDS, or if we receive new and significant health information with respect to a chemical, Terry O'Rear shall be responsible for updating the current MSDSs with respect to the chemical. All copies of the ring binders are to be updated.

Reviewing Material Safety Data Sheets:
Any PEM employee has the right to review the MSDS for any hazardous chemical with which he or she works. PEM *encourages* employees to utilize this resource to gain familiarity with specific hazards and safeguards. At each given job site, the PEM supervisor will review key sections of applicable MSDSs with employees assigned to that work site.

Labeling

Required Labeling on Containers of Hazardous Chemicals:
The Standard requires that chemical manufacturers, importers and distributors properly label all hazardous chemicals. The label must identify the appropriate hazard warnings and the name and address of the manufacturer or other responsible party.

Review of Labeling upon Receipt:
PEM will verify that chemicals are properly labeled at the time they are received from the manufacturer or distributor. The work site supervisor will do this. If a container of hazardous chemicals is not labeled, Terry O'Rear will send a letter to the supplier of the chemical requesting the appropriate label. Each work site supervisor will also be reviewing chemical containers in the workplace to verify that they are labeled. *If any employee discovers a container of a hazardous chemical not properly labeled, immediately notify your supervisor.*

Dispensing from the original container:
If a hazardous chemical is transferred from its original container and placed in an unlabeled container, the new container must be properly labeled. OSHA does allow such a container to remain unlabeled *if the hazardous chemical is intended only for the immediate use of the employee performing the transfer.*

Review and Update Label Information:
If PEM receives updated labeling information on a hazardous chemical, Terry O'Rear shall immediately refer the information to those supervisor(s) working with the hazardous chemical in question. The updated information shall then be placed on any and all containers of the hazardous chemical at the work site.

NFPA 704 Placard System

PEM will use labels consistent with National Fire Protection Agency (NFPA) four (4) diamond labeling system of colors and numbers within a diamond shaped label. A different color represents each of the four (4) categories, which are explained below. *All PEM employees need to understand the basics of this system.*

(1) BLUE: Blue indicates **health hazard** and is always the left diamond. The health category indicates the potential hazard from contact with the eyes or skin, or entrance into the body via skin absorption, inhalation, or ingestion. The numeric assigned is based on the highest danger potential.

Numeric code guide:

4 Extreme: Highly toxic - may be fatal on short-term exposure. Special protective equipment is required.
3 Serious: Toxic - avoid inhalation or skin contact.
2 Moderate: Moderate toxic - may be harmful if inhaled absorbed.
1 Slight: Slightly toxic - may cause slight irritation.
0 Minimal: All chemicals have some degree of toxicity.

(2) RED: Red indicates **flammability** and is always the top diamond. The flammability category is based on the material's flash point with a lower flash point representing a higher hazard. The numeric code assigned is based on highest flammability, e.g., gasoline with a flash point of below 72 degrees F would have a numeric code of 4, while water which does not burn has a numeric code of 0.

Numeric code guide:

4 Extreme: Extremely flammable gas or liquid - Flashpoint below 73 degrees F.
3 Serious: Flammable - Flash Point 73 degrees F-100 degrees F.
2 Moderate: Combustible - Requires moderate heating to ignite.
1 Slight: Slightly combustible - requires strong heating to ignite.
0 Minimal: All chemicals having some degree of flammability.

(3) YELLOW: Yellow indicates **reactivity** (stability) of a material and is always the right side diamond. The reactivity category is based on the stability of the material or the result from contact with another material. The numeric code indicates the level of material stability with the highest code assigned to the most reactive materials.

Numeric code guide:

4 Extreme: Explosive at room temperature.
3 Serious: May explode if shocked, heated under confinement, or mixed with water.
2 Moderate: Unstable, may react with water.
1 Slight: May react if heated or mixed with water.
0 Minimal: Normally stable - does not react with water.

(4) WHITE: White indicates special information and is always the bottom diamond including specific hazard information, e.g., use no water, and **protective equipment** code indicating the protective equipment required in handling this material.

Protective equipment guide:

A. Safety glasses.
B. Safety glasses, gloves.
C. Safety glasses, gloves, protective apron.
D. Face shield, gloves, and protective apron.
E. Safety glasses, gloves, dust respirator.
F. Safety glasses, gloves, protective apron, dust respirator.
G. Safety glasses, gloves, vapor respirator
H. Safety goggles, gloves, vapor respirator.
I. Safety glasses, gloves, dust & vapor respirator.
J. Safety goggles, gloves, protective apron, and dust & vapor respirator.
K. Self-Contained Breathing Apparatus (SCBA), gloves, full suit, boots.

Performance of Non-Routine Tasks: If an employee is asked to perform a non-routine task, the supervisor will provide specific hazard information and training before initiation of the task.

Introduction of New Chemicals in the Workplace: If a new chemical requiring additional training is introduced into the workplace, the PEM supervisor will provide the necessary training.

Glossary of Terms

Hazardous Chemical - A chemical that is either a ***physical*** hazard or a ***health*** hazard.
Physical Hazard - chemical for which there is evidence that it is:
Combustible - any material which can burn
Combustible Liquid - liquids with a flash point at or above 100 degrees Fahrenheit
Compressed Gas - is one which at all normal atmospheric temperatures inside its container, exists solely in the gaseous state under pressure
Explosive - any chemical used primarily for explosion
Flammable - a combustible material that ignites very easily, burns intensely, or has a rapid rate of flamespread
Flammable Liquid - flammable liquid means any liquid having a flash point below 100 degrees Fahrenheit
Organic Peroxide - chemicals that are a derivative from Hydrogen Peroxide, which burns the skin
Oxidizer - chemical that initiates or promotes fire in other materials
Pyrophoric - chemical that will ignite spontaneously in air at temperatures below 130 degrees Fahrenheit
Unstable (reactive) - chemicals that may react under conditions of shock, pressure, or temperature
Water Reactive - chemicals that react with water, some release a gas that is hazardous
Health Hazard - a chemical for which there is some evidence that acute or chronic health effects may occur in exposed employees.
These include chemicals that are:
Carcinogens - chemicals that may cause cancer
Toxic/Highly Toxic Agents - chemicals that may be poisonous if taken into the body
Reproductive Toxins - chemicals that may affect reproductive capabilities (Mutagens; Teratogens)
Irritants - chemicals that may cause reversible inflammatory effects
Corrosives - chemicals that may cause severe damage to the skin or other living tissue
Sensitizers - chemicals that may cause allergic reactions
Hepatotoxins - chemicals that may cause liver damage
Nephrotoxins - chemicals that may cause kidney damage
Neurotoxins - chemicals that may cause nervous system damage
Hemotoxins - chemicals that may cause damage to the blood system (cardiovascular systems)
Any other chemicals that may damage the lungs, skin, eyes, or mucous membranes.

FALL PROTECTION TRAINING MODULE
(Training Module #3)

References: PEM Safety Manual
OSHA 1926.503

Purpose: Protection of employees required to work above floor/grade level.

Rules / Procedures

- Approved fall protection equipment shall be worn when working 6 feet or more above floor/grade.
- Approved fall protection consists of full body harness with double locking-shock absorbing lanyard.
- Ensure harness has been inspected and tagged per PEM's Tool & Equipment Inspection Program
- Make sure to tie off to the "D" ring in the center back of the harness and not to any buckles or straps.
- Do not use fall protection equipment for lifting purposes.
- Lanyards should not be attached to guardrail or handrail unless evaluated and determined to be safe for that purpose.
- Lanyards should be attached to a point located above "D" ring.

LADDER TRAINING MODULE
(Training Module #4)

References: PEM Safety Manual
OSHA 1926.500, 1910.21-32

Purpose: Protection of employees requested to use ladders.

Rules / Procedures

- Ensure ladder has been inspected and tagged per PEM's Tool and Equipment Inspection Program.
- Never use a defective ladder; any defective ladder should be immediately tagged with "Do Not Use" or similar language.
- Place the ladder so that is base is out ¼ the distance of the height.
- Ladders are to be tied or secured at the top.
- No extension ladder should extend its full length; it should overlap at least four rungs.
- Stepladders are not to be used in lieu of extension ladders.
- Stepladders are to be fully extended and locked in position.
- Only one employee is to work off of a stepladder.
- Do not stand or sit on the top or the top two rungs of a stepladder.
- Never place a ladder in front of a door or opening or in the way of other moving equipment unless protected by barricades or guards.
- Metal ladders shall not be used around electrical circuits. All ladders owned by PEM have Fiberglas runners; we do not buy aluminum ladders.
- When climbing or working, always face the ladder and keep center of gravity between the rails.
- When ascending/descending ladders, maintain three (3) points of contact, i.e. 2 feet and 1 hand - *OR* - 1 foot and 2 hands.

PERSONAL PROTECTION EQUIPMENT TRAINING MODULE
(Training Module #5)

References: PEM Safety Manual
OSHA 1910.134; 1910.95; 1910.13
ANSI Z 289.1

Purpose: Train employees on use and requirements for Personal Protection Equipment

Rules / Procedures

Head Protection:
- Hard hats shall be worn at all times while on the job site with the exception of offices, equipment with fully closed cabs, lunch and break periods provided no work is going on in the immediate area.
- No metal hats, bump caps, or baseball-type caps shall be permitted.
- All hard hats must be in accordance with ANSI standards.

Foot Protection
- Sturdy heavy-duty shoes are required. Canvas or loafer type shoes shall not be worn.

Hand Protection:
- Gloves shall be worn when handling rough, sharp edged abrasive material or where the work subjects the hands to lacerations, punctures, burns, or bruises.
- Gloves shall not be worn around saws, lathes, drill presses, or machinery where entanglement may occur.
- When selecting gloves, remember that Kevlar provides increased cut resistance and leather provides increased puncture resistance.
- In the work environment where potential exists for injury to the hand, i.e. mashing, pinching, or catching rings and watches on equipment, structures or objects, do not wear rings or watches.

Eye and Face Protection:
- Safety glasses with side shields are required at all times once entering the work area.
- PEM will provide eye protection meeting ANSI standards.
- Full-face shield is required when working with molten materials or reactive chemicals.
- Grinding or buffing requires a face shield with safety glasses.
- Welding requires a welding hood with lens equipped with no less than the Number 10 Filter.

Respiratory Equipment:
- Employees shall not wear respiratory equipment unless they have current medical clearance and undergoes fit testing.

Hearing Protection:
- Hearing protection (earplugs) shall be used in any area where the noise level is 85 decibels or greater and in all posted/designated areas.
- If wearing a hearing aid, consult with a Safety Professional for proper hearing protection guidance.

Miscellaneous Protection:
- Working in loose, ragged or oily clothes is not permitted.
- Wearing of jewelry is discouraged. Wearing of jewelry where contact with energized parts is prohibited.

GENERAL ITEMS TRAINING MODULE
(Training Module #6)

References: PEM Safety Manual
OSHA 1910.22, 1926.25

Purpose: Familiarize employees with the General Safe Work Practices of Power Equipment Maintenance, Inc.

Rules / Procedures

- At PEM it is our intent and our policy to comply with all applicable Federal, State, and Local laws, rules, regulations, and ordinances. It is our goal to be aware of, understand, and comply with all such laws, rules, regulations, and ordinances in the conduct of our work activities.
- If you don't clearly understand a work procedure or how to operate any piece of equipment or machinery, ask your supervisor for an explanation and preferably a demonstration if possible.
- Do not operate any powered industrial trucks, i.e. forklifts, unless trained and certified. Training and certification consists of classroom training, observation while operating forklift, and issuance of certification card.
- Note and obey signs. They are provided for your safety and the safety of your fellow employees. Make sure you comply.
- Unsafe conditions are to be reported to your supervisor immediately.
- Riding on any construction equipment except by operator or maintenance personnel is prohibited.
- Stay out from under suspended load.
- The occupant and weight capacity listed on the data plate of a vehicle is not to be exceeded under any circumstances.
- Never store combustible materials adjacent to any building or other fixed structures.
- Watch for signs indicating "Danger – Confined Space". Never enter any such area without specific clearance from your supervisor.
- Watch for signs indicating "ASBESTOS". Do not disturb any building materials or structural components that are so labeled.
- "Horseplay", fighting, and possession of firearms or other dangerous weapons are strictly forbidden. Possession can constitute grounds for dismissal.
- The use, sale, or possession of illegal drugs, unauthorized prescriptions, and/or alcohol or controlled substances while on the job is strictly prohibited and will result in immediate termination.
- Do not utilize any equipment unless you have received training and authorization from your supervisor.
- Power tools are to be used only by authorized personnel; any applicable guards are to be kept in place.
- Tools are not to be altered in any way and shall be operated in accordance with manufactures specifications.
- Damaged or defective tools are to be taken out of service, tagged "Do Not Use", " Do Not Operate".
- Tools shall be inspected prior to each use for defects such as missing guards, power cord damage, broken parts and/or damaged cutting edges or grinding wheels.
- Tagged and current inspection.
- Warning signs shall be posted when working overhead. The area below such work should be effectively barricaded.
- Never disturb a warning tag, padlock, or blocking associated with a safety "lockout/tagout" procedure.
- Always use the walkways, ramps, passageways provided. Don't take shortcuts.
- In connection with water hazards, life vests are to be worn as instructed by your supervisor. Make sure you know the location of and how to use any rescue equipment such as a life ring or shepherd's crook.
- If your state driver's license is revoked, suspended, or withdrawn, you must notify your supervisor immediately.
- Wheel chocks must be used in connection with unloading of any type of truck.
- When reporting to job site, ensure familiarization with customer's emergency procedures for:
  - Fires
  - Injuries
  - Evacuations
  - Etc.
- Housekeeping
  - Keep individual/team work areas orderly, clean, and free of hazards.
  - Properly dispose of scrap and waste materials at frequent and regular intervals or at the end of each shift.
  - Immediately correct any condition that causes a hazard.
  - Keep walkways and work surfaces free of oil, grease, water, ice, and other slippery materials.
  - Keep walks, aisles, stairways, and all other passageways clear of obstructions.
  - Ensure stated equipment/material does not create unsafe conditions by obstructing safe access to operating or emergency equipment or by overloading posted floor limits.
  - Use adequate lighting to perform work safely.

ELECTRICAL TRAINING MODULE
(Training Module #7)

References: PEM Safety Manual
OSHA 1910.332/269

Purpose: Protection of employees performing electrical work

Rules / Procedures

- On circuits over 200 volts, wear rubber gloves in addition to using insulated tools.
- When working on energized electrical equipment greater than 400 volts nominal, wear fire-retardant clothing.
- When working near energized circuits, use only flashlights with exposed parts made of nonconductive material.
- When working on or near electrical equipment, use ladders with non-conductive siderails.
- When working around water or other conductive liquids, either use only portable electrical equipment and extension cords approved for these locations *or* use ground fault circuit interrupters (GFCI).
- Visually inspect test instruments/equipment and all associated test leads, cables, power cords, probes, and test leads for external damage before use.
- Verify that test metering or sensing devices are operating properly and that appropriate settings are used.
- Insure safety ground leads are not less than 2/0 flexible stranded copper rubber-covered cable or its equivalent and equipped with screw-type clamp.
- Before working on any electrical circuit or equipment, check voltage levels and the presence of all potential sources. (If possible, use a volt-meter or other contacting device of appropriate range; otherwise, use non-contacting voltage testing devices.)

FIRST AID TRAINING MODULE
(Training Module #8)

References: PEM Safety Manual

Purpose: Provide guidance for administering first aid.

Rules / Procedures

- Report all accidents and/or injuries, regardless of severity, to your foreman immediately for proper first aid or medical treatment.
- In consideration of potential blood borne pathogens exposure, the administration of first aid and/or CPR by any PEM employee is voluntary.
- In case of a serious accident, do not move the patient unless absolute necessary.
- Injuries requiring medical treatment will necessitate completing an accident investigation form.
- Where first aid kits are provided, ensure they are readily accessible and stored in weatherproof containers.
- After using supplies from first aid kits, replace supplies immediately. Inventory/inspect first aid kits quarterly.

SCAFFOLDING TRAINING MODULE
(Training Module #9)

References: PEM Safety Manual
OSHA 1910.28-29 and 1926.450-453

Purpose: Provide employees exposure in proper use of scaffolding.

Rules / Procedures

- No scaffold shall be erected, moved, dismantled, or altered except under the supervision of a Competent Person in compliance with all applicable safety standards. If you have any questions concerning scaffold safety, do not hesitate to ask your supervisor.
- Scaffolds and scaffold components shall be inspected for visible defects by a Competent Person before each work shift, and after any occurrence which could affect a scaffold's structural integrity.
- Scaffolds and their components shall be capable of supporting without failure at least four (4) times the maximum intended load unless exceptions otherwise apply.
- Unstable objects such as barrels, boxes, loose brick, concrete blocks, or similar material shall not be used to support scaffolds or platform units.
- Employees shall be protected from exposure to falling objects through the installation of toe boards, screens, debris nets, catch platforms, canopy structures, guardrail systems, and barricades in addition to wearing hardhats.
- Guardrail systems shall be installed on all open sides and ends of platforms more than ten (10) feet above a lower level.
- An access ladder or equivalent safe access shall be provided. Do not climb guardrails or cross bracing. Safe access is required when more than 2 feet above or below a point of access.
- Tools, materials, and debris shall not be allowed to accumulate on scaffolds or platform units so as to create any hazard.
- Do not interchange scaffold components of different manufacturers.

LIFTING & RIGGING TRAINING MODULE
(Training Module #10)

References: PEM Safety Manual
OSHA 1910.179, 1926

Purpose: General Awareness Training for employees performing Lifting and Rigging operations.

Rules / Procedures

- Ensure rigging equipment has been inspected and tagged per PEM's Tool and Equipment Inspection Program.
- Ensure crane operator possesses the knowledge/qualifications and demonstrates skills to safely perform lifts.
- Ensure crane operator is familiar with the setup, functions, capacities, inspections, and operation of crane/hoist.
- Except for emergency stop signals, ensure crane operator responds only to the designated signal person.
- Never exceed a component's rated capacity.
- Ensure riggers possess skills and knowledge to perform rigging safely.
- Obtain load weight and center of gravity, and determine attachment points.
- Ensure tag line and rigging are installed and secure.
- Only one signal person/flagger shall be designated.
- Avoid directly suspended loads over personnel and equipment.
- Verify the travel path is clear of obstructions.
- Before, during, and after using any rigging equipment, inspect it. If defective, immediately remove it from service.
- Use the following required personal protective equipment:
  - ☑ Hard Hat
  - ☑ Safety Glasses
  - ☑ Work Gloves
- Never walk under overhead-suspended loads.
- Work shall not be performed under or immediately adjacent to loads being hoisted and all loose items of equipment or material shall be secured against falling.

WELDING TRAINING MODULE
(Training Module #11)

References: PEM Safety Manual
OSHA 1910.253, 19261350, 1910.254, 1926.352, and 1910.255

Purpose: Safety Training for employees performing welding and cutting activities.

Rules / Procedures

- Prior to performing Any work involving welding, burning or cutting activities, check for or secure a current "Hot Work" permit.
- Any welding, burning or cutting activities that Do Not require a "Hot Work" permit will require approval from the PEM supervisor prior to start of such activities.
- Some "Hot Work" may require a fire watch.
- Always have suitable fire extinguishing equipment immediately available.
- Before any welding is commenced, a burning permit will be obtained, and if required by the burning permit, a fire watch maintained.
- When possible, move objects to be welded away from combustible materials. If this is not possible, take steps to confine the heat, sparks, and slag.
- Before leaving a job after burning, check to make sure that there are no sparks or objects smoldering.
- Proper personnel protective equipment must be worn; no oil or ragged clothing will be permitted. Properly fitted glasses, of the right lens shade number, shall be worn at all times.
- Good ventilation is important in controlling fumes and vapors. If you have questions or specific concerns, see you supervisor. General mechanical ventilation or local exhaust ventilation may be needed.
- Always secure cylinders in an upright position when in use and in storage to prevent them from toppling over.
- Always protect your hose and make sure connections are tight. Be on the lookout for leaks! Hoses and gauges shall be visually inspected for leaks before being placed in use.
- Never attempt to repair damaged gauges, tips, or torches. They must be returned to the tool room, supervisor, or original dispenser for proper correction. Never use oil or grease on oxygen equipment.
- Inspect electrical welding equipment before and after each use.
- Do not use cables with splices within 10 feet of the electrode holder.
- Wear welding gloves in all welding operations.
- Do not use acetylene at pressure exceeding 15 psig.
- Use a friction or stationary striker to light a torch.
- When oxygen/acetylene equipment is not in use, close cylinder valves and release all gas from hose/regulator.
- Before opening the cylinder valve, back out the regulator handle, then slowly adjust the regulator pressure.

TRENCHING & EXCAVATIONS TRAINING MODULE
(Training Module #12)

References: PEM Safety Manual

Purpose: Familiarize employees with Trenching and Excavation Rules & Procedures

Rules / Procedures

- Before doing any work, conduct a pre-job safety meeting, and communicate with all parties.
- Before performing any work within the trench or excavation deeper than 5 feet, ensure a competent person has inspected the trench.
- Ensure a competent person:
  - ☑ Makes daily inspections
  - ☑ Inspects after significant events such as rainstorms
  - ☑ Specifies use of shoring, shielding, or sloping
- To keep soil piles from falling into the trench, clear edges of excavations back to at least two (2) feet.
- Ensure underground utilities are identified and measures are taken to prevent possible damage.
- For trenches less than 5 feet deep, ensure a competent person assures no potential injury from cave-in exists.
- If an excavation is 6 feet or more deep and cannot be readily seen because of plant growth or other visual barrier, protect employees near the edge from falling by using guardrails, barricades, or covers.

Power Equipment Maintenance, Inc.
Training Modules

FIRE PROTECTION TRAINING MODULE
(Training Module #13)

References: PEM Safety Manual OSHA 1926.150, 151 NFPA 10A-1970

Purpose: The purpose of this training module is:
1. To establish guidelines in the event of a fire.
2. Outline steps to prevent the potential of fires.
3. Identify the classifications of fires and portable fire extinguishers for use in each classification.

1. In the event of a fire/explosion emergency, the key goal is the safe, orderly evacuation of all PEM employees. PEM employees are not to fight fires other than small, controllable fires where the use of portable fire extinguishers is appropriate.
Report all fires to your supervisor and/or plant personnel.

2. Prevention of fire hazards starts with a clean orderly work area.
   a) Use only approved solvents for cleaning and degreasing purposes. The use of flammable products for these purposes is strictly prohibited.
   b) Flammable and combustible liquids will be handed in approved, properly labeled safety containers only.
   c) Oily rags are to be placed in approved covered containers only.
   d) The use of open fires is strictly prohibited.
   e) Do not attempt any work involving an ignition source near pits, drains, manholes, trenches or any other location where flammable gases may exist or accumulate. Proper testing by a qualified person must take place prior to any hot work.
   f) Know the location of fire extinguishers in your work area and know the best evacuation route from your work area.

3. Fires are broken down into 4 (four) basic classifications:
   a) Class - A – Most common of the classes. Ordinary materials such as wood, coal, paper or fabrics. Wetting and cooling is method of extinguishment.
   b) Class – B – Flammable petroleum products or other flammable liquids where oxygen must be excluded to extinguish. Gas, oils, paints, grease, etc.
   c) Class – C – fires in or near energized electrical equipment. A non-conducting extinguishing agent must be used. Do Not use water.
   d) Class – D – Fires in combustible metals. A special powder is provided as a means to extinguish.

SIGNS AND BARRICADES TRAINING MODULE
(Training Module #14)

References: PEM Safety Manual OSHA 1926.200,202, ANSI Z35.1 – 1968, Z35.2 - 1968

Purpose: The purpose of this training module is:
1. Uses and identifying accident prevention signs and tags.
2. Uses and identifying barricades.

1. Accident prevention signs are warnings of a hazard (s), temporarily or permanently, affixed or placed at locations where a hazard (s) exist. Tags are temporary signs, usually attached to a piece of equipment, tools or parts of a temporary or permanent structure.
   a) Danger signs will be used only where an immediate hazard exist. Danger signs will have red as the predominate color w/black as the borders. A white lower panel will be used for additional sign wording. Danger signs must be erected immediately when a hazard is recognized or before work commences presenting a hazard and must be removed as soon as the hazard no longer exist.
   b) Caution signs will be used only to warn against a potential hazard (s) or caution against unsafe practices. Caution signs will have yellow as the predominate color for lettering of "caution" and lower panel for additional sign wording. Black background and border around lettering "caution" and any addition sign wording lettering. Caution signs shall be erected whenever there is a potential of a existing or planned hazard and removed as soon as the potential hazard no longer exists.
   Accident prevention tags will be used as a temporary means of warning employees of an existing hazard only, such as defective tools, equipment, material, etc. Tags are not to be used in place of, or a substitute for accident prevention signs.
2. Barricades are a means to obstruct or deter the passage of persons or vehicles. There are two types of barricades, permanent and temporary warning. Permanent hazard areas will be surrounded by permanent barricades with warning signs attached to adequately mark and identify the hazard. Warning barricades are used to call attention to a hazard but generally offer no physical protection. The use of warning (caution), danger and radiography barricading tape are the most commonly used. Barricades will be tagged identifying the hazard.
   a) Caution Tape – yellow with black lettering "caution" written on it or yellow with black diagonal stripes.
   b) Danger Tape – red with black lettering "danger" written on it.
   c) Radiography Tape – yellow and magenta

Personnel are permitted to enter a caution (yellow) barricaded area only after assessing and nderstanding the hazard. Entry into a danger (red) barricaded area is strictly prohibited. Only personnel directly involved in operations within the "red" barricaded area are permitted access. Supervisor must be notified prior to erecting. Entry into a radiography (yellow and magenta) barricaded area is prohibited. Only personnel involved in the radiography operation are permitted access.
Barricades are to be removed as soon as the hazard is eliminated. Supervisor must be notified prior to removal of "red" barricade area.

RESPIRATOR TRAINING MODULE
(Training Module #15)

References: PEM Safety Manual OSHA 1926.103, 1910.134

Purpose: The purpose of this training is:

1. Recognize purpose of respirator protection
2. Identify qualification requirements that must be met prior to using a respirator.
3. Recognize oxygen deficiency and areas with actual or potential oxygen deficiencies.
4. Identify potential sources of particulate and gaseous airborne hazards.
5. Identify potential jobs that may require the use of a respirator.
6. Recognize terms and definitions used to describe limits for airborne hazards, TLV/PEL and IDLH.
7. Purpose of fit test.
8. Identify the two major classifications of respirators.
9. Identify maintenance and care of respirators.
10. Selection of respirators for use.

- Respirator program purpose: To protect personnel from respiratory hazards caused by breathing oxygen deficient atmospheres, harmful dusts, fumes, sprays, vapors, smoke and gases. Respiratory protective equipment should be the last choice to limit airborne contaminants. The first choice should be the use of engineered controls such as ventilation, filtration devices, containment devices, etc.
- Qualification requirements must be met and maintained BEFORE respirators can be worn. These requirements are:
- Medical evaluation
- Training
- Fit test for types (s) of respirator (s) to be used.
- Oxygen deficiency is defined as an atmosphere that does not contain enough oxygen to support metabolism for an unlimited period. Normal air contains 21% oxygen. Oxygen deficient atmosphere is classified by PEM as < 19.5% oxygen. Areas where oxygen deficient atmospheres may be found are:
  Confined spaces such as tanks, vessels, vaults, sumps, excavations, pits or any area where gases that are heavier than air may settle and displace oxygen.
- Potential sources of airborne particulate hazards include sandblasting operations, grinding, welding, painting or paint stripping, chemical applications, asbestos work, gas/diesel engines (carbon monoxide) and decay or breakdown of organic material in confined spaces (can produce methane and hydrogen sulfide).
- Examples of jobs that may require the use of respirators are:
  Welding, cutting or grinding on contaminated materials, responding to spills or leaks, any potential or actual exposure to asbestos, lead, arsenic or silica and entry into any area contaminated or oxygen deficient. This list is not all inclusive.
- Concentration limits are identified and defined as:
  Threshold limit value (TLV) and Permissible Exposure Limit (PEL) are one and the same and are defined as "The airborne concentration nearly all workers may be repeatedly exposed to day after day without adverse effects (based on a 40 hour work week)." Immediately Dangerous to Life or Health (IDLH) is what it implies "Conditions that pose an Immediate Danger to life or health or that pose an Immediate Threat of exposure to contaminants which are likely to have adverse, cumulative or delayed effects on health."
- Fit testing is required before employees are allowed to use respirators to ensure that a good seal exists between the face and respirator and that the assigned protection factor for the respirator is obtained. Fit testing must be performed for each style, size, make or model to be used. Fit testing is required at least annually.

- The two major classifications for respirators are:
  Air-Purifying – These respirators filter the air. They are not designed to be used in oxygen deficient or IDLH atmospheres.
  Air-Supplying - These respirators are supplied with fresh air through a hose with a continuous flow which results in positive pressure. Air-line respirators are not to be used in oxygen deficient or IDLH atmospheres. The self contained breathing apparatus (SCBA) has it's own air supply and may be used in oxygen deficient and IDLH atmospheres.
- Maintenance and care of respirators is critical. Respirators should be inspected before each use and in cases where the respirator is reuseable, after each use and during cleaning (disinfecting). SCBA's shall be thoroughly inspected once a month. Storage of respirators will be in a clean and sanitary location. Inspection and disposition records must be maintained.
- Selection of the type of respirator used will be based on the hazards to which the employee is or could be exposed.

NO PEM EMPLOYEE WILL BE REQUIRED TO WEAR A RESPIRATOR UNTIL HE/SHE HAS SUCCESSFULLY COMPLETED A HEALTH EVALUATION AND COMPLETED FIT TESTING AND RESPIRATOR USE TRAINING

Hearing Protection Training
(Training Module #16)

Reference: PEM Safety Manual, OSHA 1910.95(k), PEM Training Module #5

Purpose:

1. Establish Hearing Conservation Guidelines.
2. Identify Hearing Protection Devices, their uses and maintenance.
3. Identify sources that can cause hearing loss.

Rules/Procedures:

- Employees are responsible for wearing hearing protection in high noise exposure areas or when using machinery or equipment that produces high pitched or loud (85dBA or higher) noises when used. Employees will use approved hearing protection in any location designated "Hearing Protection Required In This Area".
- There are two types of hearing protection :
  Insert type earplugs and earmuffs.

  Insert Earplugs: are designed to provide an air-tight seal with the ear canal and are available in three designs.

  1. **Premolded** – They are made of pliable material in single and triple flange styles. They are designed to be used multiple times but should be replaced periodically and need to be maintained by the user (cleaned). Premolded come in various sizes.
  2. **Formable** – These come in one size and are made of material designed to be compressed and when inserted into the ear canal they expand to form a seal. These devices are known as "throw-aways" but may be used multiple times with proper care. They come as individual devises or connected together with a cord.
  3. **Custom Molded** – To secure this type device the employee would need to see an audiologist for fitting. These type earplugs are necessary for a small percentage of employees who can not use premolded or formable earplugs.

  Again, proper maintenance of all three designs is a must. Wash periodically with soapy water, rinse, and dry. Inspect daily for wear and tear. If a tight seal is not formed, replace them.

  Earmuffs – These devices are worn around the ear and their effectiveness depends on an air tight seal between the ear cushion and the head. Earmuff effectiveness can be compromised by the use of other PPE such as goggles, safety glasses and respirators. Earmuff maintenance is basically the same as earplugs, wash with soapy water, rinse in clean water and dry. Earmuffs, when not in use, should be stored in open air (free of dust) to insure that moisture in ear cups is allowed to evaporate.

  In all cases, Hearing Protection selected shall have a Noise Reduction Rating (NRR) high enough to reduce the noise at the eardrum to 80 dBA or lower.

  In some high noise situations, it may be necessary to use both ear plugs and earmuffs.

Hearing loss is natural with aging. Hearing loss is drastically accelerated when working around the following conditions without using hearing protection devices.

- Noise from machinery
- Noise from lawn mowers and chain saws
- Noise from hand tools, i.e. grinders, sanders, skill saws, chop saws, etc.
- Episodic noise such as firing a rifle or hand gun, setting off fireworks or any other sudden, loud noise.
- Head injuries or trauma
- And yes – Listening to loud music.

Bloodborne Pathogens
(Training Module #17)

References: PEM Safety Manual Section H; OSHA CFR 1910.1030

Purpose:
Awareness Training on the Possible Health Effects of Bloodborne Pathogens

What Are Bloodborne Pathogens:
- Micro-organisms present in human blood, certain bodily fluids or other potentially infectious material that can cause disease.

Bloodborne Pathogens Routes of Entry:
- Eyes
- Mouth
- Mucous membrane
- Non-intact skin
- Sticks to the skin or mucous membrane

Potential Health Effects of Exposure:
- HIV – Human immunodeficiency virus
- HBV – Hepatitis B virus
- HCV – Hepatitis C virus , and
- Other bloodborne pathogen disease

Potential Exposure Events:
- Slips, trips and falls resulting in lacerations
- Sharp objects that can lacerate the skin (saw blades, knives, screw drivers, chisels, screws, nails, sheet metal, etc.)
- CPR and/or First Aid activities

Universal Precautions:
The treating of all human blood, certain human bodily fluids and other potentially hazardous materials as if they are know to be infectious for HIV, HBV, HCV or other blood borne pathogens.

Certain PPE coupled with Universal Precautions greatly reduces the potential for exposure and infection from bloodborne pathogens. Some examples of PPE are:
- Gloves
- Masks
- Safety Glasses and or Face Shields
- Gowns/Aprons

Employees must wash their hands and any other effected skin with soap and water ASAP after contact and flush any mucous membranes with water ASAP after contact with potentially infectious sources.

Post Exposure Procedures/Response:
- Any PEM employee exposed to "other" source blood has the option to receive the Hepatitis B vaccine free of charge. After possible exposure to bloodborne pathogens, refusing the vaccine will require the employee to sign a declination form. (Employee may request the vaccine at a future date after initially refusing)
- A confidential medical evaluation will be set up for the exposed employee which will:
  1. Document how the exposure occurred
  2. Identify and test source individual if possible
  3. Test the exposed employee's blood – with consent
  4. Medical records will be made available to the employee upon request.