

# Health, Safety & Environment Program Manual

**Effective/Reviewed 2023** 

# **Table of Content**

Health & Safety Program Introduction	<u>3</u>
Health & Safety Program Definitions	
Internal Responsibility System	<u>5</u>
General Safety Guidelines and Information	9
Emergency Procedures	4 5 9 9 9 9 9 9
Medical Emergency	<u>9</u>
General Safety Guideline	<u>9</u>
Reporting Hazards	<u>9</u>
Housekeeping	<u>9</u>
Office Safety	<u>10</u>
Personal Protective Equipment	<u>10</u>
Eye Protection	<u>10</u>
Foot Protection	<u>10</u>
Work Clothing	<u>10</u>
High Visibility Vest/Clothing	<u>11</u>
Hearing Protection	<u>11</u>
Head Protection	<u>11</u>
Respiratory Protection (See Program under the Written Policy Section)	<u>11</u>
Hand Protection	<u>11</u>
Hand/Power Tool Safety	<u>11</u>
Compressed Air & Gas Safety	<u>12</u>
Compressed Air	<u>12</u>
Compressed Gas Cylinders	<u>12</u>
Manual Material Handling	<u>12</u>
Portable Ladder Safety Rules	<u>12</u>
Forklift Safety Rules	<u>13</u>
Fire Prevention and Flammable Liquids Safety Rules	<u>14</u>
Occupational Health	<u>15</u>
First Aid	<u>15</u>
Heat Stress	<u>15</u>
Environment Safety	<u>15</u>
Spill Response (See Program under the Written Policy Section)	<u>15</u>
Pollution Prevention/Waste Minimization	<u>15</u>
Hazardous Waste	<u>15</u>
Non-hazardous Waste	<u>15</u>
Written Programs	<u>17</u>
Active Shooter Emergency Response Plan – USP228	<u>19</u>
Contractor Safety Program – USP203	<u>22</u>
Emergency Response Plan – USP211	<u>28</u>
Fall Protection – USP216	<u>32</u>
Hazard Communication – USP205	<u>38</u>
Lock Out/Tag Out Policy – USP220	<u>43</u>
Hot Work Policy – USP230	<u>48</u>
Respiratory Program – USP231	<u>52</u>
Spill Prevention, Control, and Countermeasure Plan (SPCC) – USP214	<u>65</u>
Confined Space Program – USP202	<u>71</u>
Worker's Rights – USP201	<u>80</u>

#### A subsidiary of Federal Signal Corporation

## 1. Health & Safety Program Introduction

#### Purpose

The purpose of the manual is to educate employees on the Company's health & safety policies, procedures and practices, and to ensure compliance with applicable Occupational Health and Safety laws and regulations. All employees must familiarize themselves with the contents of this manual. Changes may be made and/or additional policies may be added as the need is identified by the Company and/or the Joint Health & Safety Committee (JHSC), Safety Representatives ("Safety Reps") or as required by legislation. The content is to be reviewed at least annually by the JHSC or Safety Reps and must be approved by Human Resources, and then communicated to all employees as revisions or additions occur.

The Company will create policies and procedures to support our Health, Safety & Environment program.

This manual will provide guidance that:

- Defines rights and responsibilities of the Employer, Health & Safety Reps/JHSC, Managers, Workers, Contractors, and Visitors within the framework of Occupational Safety and Health legislation;
- Will outline policies, procedures and practices that may be implemented to ensure compliance with applicable legislation.

#### Scope

The policies and procedures contained in this manual are applicable to <u>all</u>employees of the Company, its contractors, suppliers, customers and visitors.

#### Understanding the difference between a Policy, a Procedure and a Practice

**Health & Safety Policy**: The formal guidance needed to coordinate and execute health and safety activity throughout the workplace. When effectively deployed, policies help focus attention and resources on high priority issues, aligning and merging efforts to achieve the company's safety conscious culture. Policy provides the operational framework within which the institution functions.

If a **policy** is "what" the institution does operationally, then a **procedure and practice** is "how" the Company intends to carry out and implement the company policy. Procedures and practices can be formal or informal, specific to a department or applicable across the entire organization.

**Safe Work Procedure (SWP):** A series of specific steps that guide a worker through a task from start to finish in a chronological order. Safe work procedures are designed to reduce the risk of injury or property damage, by identifying hazards and implementing controls.

#### **Health & Safety Program Compliance**

Anyone found to be in non-compliance with the Company's Health & Safety policies, procedures and practices will be subject to disciplinary action, up to and including termination of employment depending on the severity of the occurrence.

In the event of a Contractor being found in non-compliance, the Company will take corrective action up to and including severing the contractual relationship.

Any visitor found to be in non-compliance will also be subject to corrective action up to and including removal from the Company premises.

#### Communication

Employees will receive a copy of this manual upon the start of their employment with the company. Requests for additional copies of this manual may be made to Human Resources. Copies will be maintained and can be accessed on the internal employee communication website.

## 2. Health & Safety Program Definitions

**The "Company" a.k.a. Joe Johnson Equipment:** may be represented as "JJE LLC", "JJE USA, "the Employer" or "the Company" at various times throughout this policy manual.

**Employee:** refers to all employees of **Joe Johnson Equipment LLC** and may be represented as "the employee", "employees", "staff", "team member", "the worker" or specified position within the Company at various times throughout this policy manual.

**Employer:** A person who employs one or more Workers or who hires the services of a contractor or subcontractor to perform work or supply services to the Company

**Owner:** Includes a trustee, receiver, mortgagee in possession, tenant, lessee, or occupier of any lands or premises used or to be used as a workplace; **the Company, if the property is owned by JJE LLC, the property owner if JJE LLC leases the property** 

**Manager:** A person who administers and/or supervises the affairs of a business, office, or organization or anyone who directs the work of another

Worker: A person who performs work or supplies services for monetary compensation

Company Representative: The Manager or Worker of the Company

**Contractor or Contract Worker:** Worker(s) who represents a business to provide a service to the Company, a contractor may have direct Workers or Sub-contractors who work under their supervision

Visitor: A person who enters the Company's premises for the purpose of meeting with a Company Representative

**Competent Person:** A person who is adequately qualified because of knowledge, training and experience to organize the work and its performance and to coach another worker

**The Act:** The Act represents all safety and health legislation and regulations for the state in which the Company employees work. Although the Act does not provide methods or process for compliance, it does clearly require the establishment of certain procedures by the workplace parties. The Act does provide legislated procedures for a worker's right to refuse dangerous work, and for the investigation of prescribed accidents and workplace injuries.

## 3. Internal Responsibility System

The Internal Responsibility System (IRS) is intended to ensure that every person or party at the workplace shares the responsibility for the development and implementation of the Health & Safety Program. Legislation clearly defines the responsibility of the Employer, Supplier, Manager, and Worker at a workplace, as well as JHSC or Safety Representatives.

Employer: Under OSHA law (OSHA Sec. 5):

#### (a) Each Employer:

- (1) shall furnish to each of his employees' employment and a place of employment which are free from recognized hazards that are causing or are likely to cause death or serious physical harm to his employees.
- (2) shall comply with occupational safety and health standards promulgated under this Act.
- (b) Each employee shall comply with occupational safety and health standards and all rules, regulations, and orders issued pursuant to this Act which are applicable to his own actions and conduct.

#### The following is summary of key employer responsibilities:

- Facilities are maintained in good, safe, operating condition.
- Provide a workplace free from serious recognized hazards and comply with standards, rules and regulations issued under OSHA legislation.
- Examine workplace conditions to make sure they conform to applicable OSHA standards.
- Make sure employees have and use safe tools and equipment and properly maintain this equipment.
- Use color codes, posters, labels or signs to warn employees of potential hazards.
- Establish or update operating procedures and communicate them so that employees follow safety and health requirements.
- Employers must provide safety training in a language and vocabulary workers can understand.
- Employers with hazardous chemicals in the workplace must develop and implement a written hazard communication program and train employees on the hazards they are exposed to and proper precautions (and a copy of safety data sheets must be readily available).
- Provide medical examinations and training when required by OSHA standards.
- Post, at a prominent location within the workplace, the OSHA poster (or the state-plan equivalent) informing employees of their rights and responsibilities.
- Report to the nearest OSHA office all work-related fatalities within 8 hours, and all work-related inpatient hospitalizations, all amputations and all losses of an eye within 24 hours. Call our toll-free number: **1-800-321-OSHA (6742); TTY 1-877-889-5627.**
- Keep records of work-related injuries and illnesses.
- Provide employees, former employees and their representatives access to the Log of Work-Related Injuries and Illnesses (OSHA Form 300). On February 1, and for three months, covered employers must post the summary of the OSHA log of injuries and illnesses (OSHA Form 300A).
- Provide access to employee medical records and exposure records to employees or their authorized representatives.
- Provide to the OSHA compliance officer the names of authorized employee representatives who may be asked to accompany the compliance officer during an inspection.
- Not discriminate against employees who exercise their rights under the Act.
- Post OSHA citations at or near the work area involved. Each citation must remain posted until the violation has been corrected, or for three working days, whichever is longer. Post abatement verification documents or tags.
- Correct cited violations by the deadline set in the OSHA citation and submit required abatement verification documentation.

A subsidiary of Federal Signal Corporation

- Review, at least annually, Health & Safety Policies and establish the programs and procedures to implement those policies in the workplace.
- Assertion that all levels of management are held accountable for their health and safety responsibilities in the same way they are accountable for any other management functions.
- Ensure that equipment, materials and protective devices as prescribed are provided and are maintained in good condition and are used in accordance with Legislation and Company policies.
- Co-operate with the designated Health and Safety Committee/ Representatives who are qualified to perform these duties.
- Post a copy of Legislation and any workplace inspection documentation.

#### Joint Health & Safety Committee or Safety Representative:

This is a multi-tiered, management/employee balanced safety and health committee established to oversee the development, implementation, and maintenance of the Safety and Health Program, by:

- Meeting monthly and they shall keep minutes of their proceedings and make them available to a Department of Labour Inspector, upon request.
- Maintaining dedication and commitment to establishing a healthy and safe workplace, and to the integration of health and safety with all company activities.
- Identify gaps and trends in the health and safety program.
- Making recommendations to the Senior Leadership team in order to assist in their responsibilities for seeing that all policies and procedures are being followed and all reasonable precautions are taken to prevent illness and injury.
- Working with Human Resources/Leadership in the development and revision of policies, procedures and practices
- Receiving notification by the Company regarding any workplace testing to be conducted, and to be present at the commencement of any testing.
- Discussing safety concerns with employees and listen to theirs.
- Performing regular inspections and resolving problems that may risk employee safety.

#### Managers:

- Establish safe work procedures and provide task specific instruction and observation. Make sure any employee performing a job for the first time is properly trained, knows and understands the safe work method, and is observed until the employee is comfortable with the job.
- Promote awareness and enforce compliance with legislation as specified in all relevant acts, codes, regulations, standards, and guidelines as well as Company Policies and Procedures.
- Provide and maintain equipment and protective devices, provide required personal protective equipment and clothing and ensure proper use.
- Conduct employee observations to ensure they are working safely and are using the appropriate PPE.
- Prevent incidents through the identification and elimination of root causes, cconduct regular inspections and advise workers of any known actual or potential hazards.
- Ensure that events/incidents are immediately reported and investigated to determine the root cause; those corrective actions are developed and implemented and followed-up to assure actions were adequate. Complete accurate and timely investigation reports.
- Cooperate and respond to the hazards and concerns of workers and the JHSC/Branch Health & Safety Representatives.
- Take all reasonable precautions to protect workers and understand and accept accountability for preventing incidents (injuries, occupational illnesses, etc.).
- Encourage and support employee continuous improvement suggestions and ideas.
- Participate in ongoing safety education and refresher courses for managers (e.g., Hazard Communication, incident investigation, etc.).

Accountability – The safety performance of the manager and the workers under their supervision will form a part of the Manager's performance review.

A subsidiary of Federal Signal Corporation

#### **Employee:**

As an employee, OSHA legislation entitles you to a safe workplace. You have the right to speak up about hazards **without fear of retaliation**. According to OSHA 1960.10 employees shall:

- (a) Comply with the standards, rules, regulations, and orders issued by his/her agency in accordance with section 19 of the Act, Executive Order 12196, and this part which are applicable to his/her own actions and conduct.
- (b) Use safety equipment, personal protective equipment, and other devices and procedures provided or directed by the agency and necessary for their protection.
- (c) Have the right to report unsafe and unhealthful working conditions to appropriate officials.
- (d) Be authorized official time to participate in the activities provided for in section 19 of the Act

#### Other Employee Responsibilities:

- Receive workplace safety and health training in a language you understand and participate in job specific safety training.
- Report any hazards or concerns, workplace incidents and illnesses (injuries, near-misses, etc.), unsafe conditions, or unsafe acts immediately to your manager.
- Immediately report allegations of **significant** adverse reactions to your health or the environment caused by a chemical substance or mixture to your manager.
- Be aware of the hazards of your job, and how to protect yourself and fellow employees against them.
- Work and act in a manner to protect yourself and the health and safety of others.
- Receive and use required safety equipment, such as clothing, gloves or a harness and lifeline for falls, be protected from toxic chemicals.
- Conduct pre-use inspections of equipment and protective devices, work on machines that are safe.
- Help achieve and maintain an environment that promotes the safety and health of our employees and the environment.
- Maintain a clean and orderly workplace.
- Promote awareness and submit ideas for continuous improvement.

#### Accountability – The safety performance of the worker will form a part of the worker's performance review.

#### Contractor:

- Report to front reception to sign in upon arrival and to sign out upon departure.
- Work in a safe manner and comply with legislation as specified in all relevant acts, codes, regulations, standards, and guidelines as well as Company Policies and Procedures.
- Obey all signs posted on the Company premises.
- Wear personal protective equipment and clothing in specified areas and as required by the task being performed.
- Immediately report any hazards to the Company's Project Manager or Designate and follow Hazard Reporting procedures as instructed.
- Immediately report injuries, illnesses, near misses, or property damage to the Company's Project Manager or Designate and to follow reporting procedures as instructed.
- Co-operate with Company personnel in all matters of health & safety.

#### Visitor:

- Report to front reception to sign in upon arrival and to sign out upon departure .
- Conduct themselves in a safe manner and comply with legislation as specified in all relevant acts, codes, regulations, standards, and guidelines as well as Company Policies and Procedures.
- Be accompanied by or be accounted for by a Company Representative at all times.
- Obey all signs posted on the Company premises.
- Wear personal protective equipment in specified areas.
- Immediately report hazards identified to a Company Representative and follow Hazard Reporting procedures as instructed.

A subsidiary of Federal Signal Corporation

- Immediately report injuries, illnesses, near misses, or property damage to a Company Representative and to follow reporting procedures as instructed.
- Co-operate with Company personnel in all matters of health & safety.
- Participate in a Familiarization Tour when requested to do so.

## **General Safety Guidelines and Information**

## **Emergency Procedures**

For detailed information, please refer to the Emergency Action Plan, which can be found on the Company's intranet and as a stand-alone document located at the emergency exit(s) of your facility.

#### Medical Emergency

In the event of an emergency, call 911 and communicate the type of emergency to the operator. Stay on the phone until the operator hangs up.

DO NOT MOVE an injured person, unless they are in immediate danger. Ensure that the injured person is out of harm's way. Administer First Aid/CPR, if you are trained to do so. Evacuate the area of any non-essential personnel and remain on the scene until relieved by more qualified person(s).

## **General Safety Guidelines**

- 1. "Horseplay" is a cause of many injuries. This term refers to pranks or jokes usually involving physical rough-housing and is prohibited as can lead to injury.
- 2. Be aware of your surroundings while in the workplace especially in high-risk safety environments.
- 3. The use or possession of any alcohol and/or non-prescription drug is prohibited in the workplace.
- 4. All machinery/work areas must be kept clean and clear of clutter. Damaged or defective equipment should be promptly reported to management.
- 5. Keep all guards in place on all equipment and machinery.
- 6. Keep out of the areas that are barricaded or marked restricted.
- 7. Check all tools and equipment before using them. Inspect for defects and report any to management.
- 8. Do not use compressed air or gases to blow dust or other materials off your clothing.
- 9. Only use company-supplied air nozzles.
- 10. When lifting, always be sure to use proper lifting techniques. When possible, utilize lifting equipment or obtain help to lift heavy or oversized items.
- 11. Only operate equipment that you have been trained on. If you are not sure of the operating procedures for a piece of equipment that you are required to run, it is your responsibility to inform management.
- 12. All mobile equipment operators (cranes, forklifts etc.) must be trained by a competent individual in order to operate the equipment.

#### **Reporting Hazards**

Once a hazard is recognized, it must be reported. Reporting hazards is one of the most important ways employees can help ensure a safe workplace. Often an employee can spot problems sooner than anyone else can because he/she is very familiar with workplace conditions. Once a problem has been identified, take action (if you can) to eliminate the hazard and report the action taken to management.

#### Housekeeping

The foundation for a safe and healthy workplace is good housekeeping. Each employee is responsible for keeping his/her immediate work area well organized and the floors free of debris, litter and clutter.

A subsidiary of Federal Signal Corporation

- Return all tools and equipment to their proper storage place after use.
- Keep materials and equipment out of aisles.
- Clean up all spills immediately.
- Pick up all trash from the floor.
- Place trash and scrap in the proper containers. Metal scrap containers are for metal scrap only. Never place any other material in these containers.
- Exits must always be kept clear.

#### **Office Safety**

Serious injuries can occur in office areas as well as production areas. All employees, including office personnel must be conscious of their personal safety and the safety of others.

- 1. Stay on the right side of aisles when walking in hallways, particularly when turning corners.
- 2. Good housekeeping is essential. Wipe up spills. Pick up pencils, pens, or other objects that have fallen on the floor.
- 3. Defective floor mats, rugs, or flooring should be reported to management.
- 4. Do not leave file cabinet drawers open and unattended. Close them when done.
- 5. Filing cabinets are prone to tip over if more than one upper drawer is opened at a time. Use caution when opening top drawers of filing cabinets.
- 6. Heavy objects should not be stored on top of filing cabinets.
- 7. Sharp blades, thumbtacks, pushpins, and other sharp objects should not be stored loose in drawers.
- 8. Do not use office machines that you are unfamiliar with. Ask for instructions before using.
- 9. Keep telephone and extension cords off the floor where they may be a trip hazard.
- 10. Power must be turned off before adjusting any machine.
- 11. Use proper lifting techniques for heavy objects.

## **Personal Protective Equipment**

#### **Eye Protection**

- All employees, visitors, and contractors must wear ANSI-approved safety glasses with side shields when entering all shop/warehouse/yard areas.
- Employees working with chemicals with a potential for splash or spray must wear a protective face shield and safety glasses or goggles.
- Operators using saws, grinders, or similar type equipment must wear a protective face shield and safety glasses or goggles.

#### Foot Protection

• Employees are required to wear ANSI-approved protective-toed safety shoes in the shop/warehouse/yard areas and in any other specified areas.

#### Work Clothing

- Personal protective apparel such as aprons, arm guards, and the correct gloves must be worn per individual department rules.
- When working on or operating equipment, do not wear loose fitting clothing, bracelets, dangling jewelry, and/or hair longer than shoulder length (unless tied back or worn under a hat) that may get entangled in equipment.

A subsidiary of Federal Signal Corporation

#### High Visibility Vest/Clothing

- **Employees**: The use of PPE is a **mandatory** requirement under governing safety legislations in all our states that we have a location and do business in. The use of PPE is required for all employees who enter a shop/warehouse/yard area. This includes all managers, office, and sales employees regardless of how long the person will be in the area.
- **Contractors:** Any contractor that is hired to do work in any of our locations must follow our Contractor Program which includes the use of PPE while in areas that require PPE or while performing work that requires PPE. It is the responsibility of the employee who hired the contractor to ensure that they, and all their workers who attend our job site comply to our PPE policy.
- **Customers:** Customers must also follow our PPE policy and wear the appropriate PPE in any of the areas that we have deemed it to be required. Each facility should keep an inventory of required PPE for visitors on site and available.

Note: PPE is not used as a substitute for safe work practices, machine guards, or other controls designed by equipment manufacturers or other engineering sources. PPE is to be used in conjunction with these controls to increase employee protection.

#### **Hearing Protection**

• Hearing protection must be worn where required. Personal listening devices are not hearing protection.

#### **Head Protection**

• Head protection must be worn where required.

#### Respiratory Protection (See Respiratory Protection Program under the Written Policy Section)

When a work process generates air contaminants, it is preferable to control them by using a less toxic material or controlling the contaminants using engineering controls. When this is not feasible, respiratory protection may be necessary. Refer to the JJE USA Respiratory Protection Program for details. Prior to using a respirator, all employees must:

- Be trained in the use and limitations of the respirator.
- Be fit-tested to ensure proper fit of the respirator.
- Have medical clearance to use respirator.

#### **Hand Protection**

Some jobs require the use of gloves. The type of glove will depend on the task being done. (See management for specific requirements.)

## Hand/Power Tool Safety

Hand tools can make jobs safer, easier, and more efficient. However, if used improperly, hand tools can cause serious injuries. Always use hand tools as they are intended to be used and maintain them properly.

- 1. Inspect your tools daily to ensure they are in proper working condition. Damaged or defective tools must be tagged-out and reported to management immediately.
- 2. Power saws, grinders, and other power tools must always have the proper guards in place.
- 3. Portable electric equipment and tools must be grounded unless they are "double insulated".
- 4. Cords and hoses must be kept out of aisles and off stairs and ladders.
- 5. Electric cords must be unplugged, and the airline must be deactivated before adjusting or loading electric or pneumatic tools (i.e. air wrenches, grinders, staplers, drills, etc.).

## **Compressed Air & Gas Safety**

#### **Compressed Air**

- 1. Compressed air used for cleaning shall not exceed 30 psi of pressure.
- 2. Compressed air MUST NOT be used to dust off clothing or any part of the body or be directed at any person. Compressed air or foreign bodies may enter the body and cause severe injuries or death.
- 3. Use only hoses and couplings designed to handle compressed air and inspect them before each use.

#### **Compressed Gas Cylinders**

- 1. Keep cylinders out of contact with grease, acids, salt, heat, and flame. Do not handle cylinders or apparatus with greasy hands or gloves. Never use white lead, oil, grease, or pipe compound on welding equipment joints. Oil or grease in the presence of oxygen under pressure can cause an explosion.
- 2. Do not handle cylinders roughly. They must be properly fastened before using or moving them on a vehicle or handcart. All cylinders, full or empty, must be secured when standing vertically while in use and/or in storage.
- 3. While in storage or being transported, cylinders should have the valves shut off and the supplied protective covers in place.
- 4. Never use a cylinder without a suitable reducing valve and regulators.
- 5. Never interchange oxygen regulators, hoses, or other appliances with similar equipment for other compressed gases.
- 6. Always crack the value of an oxygen cylinder before connecting the equipment to purge the opening of any foreign material.
- Protect cylinders from accumulation of ice or snow. If necessary, use warm water to melt ice from acetylene cylinders. Oxygen and acetylene (or other fuel gas) cylinders must be separated by at least 20 feet or by a non-combustible barrier at least 5 feet high, having a fire resistance rating of at least one-half hour.
- 8. Arc welding electrode or ground leads shall not be hung over compressed gas cylinders.

## **Manual Material Handling**

Most back injuries result from improper lifting. According to the principles of biomechanics, the worst lifting situations occur when the body is extended over the load; the lower back becomes a fulcrum supporting the weight of the body, plus the weight of the load. Twisting in this position invites injury. Keep your back upright to shift weight onto the more powerful leg muscles and reduce the lever effect.

The Company restricts individual lifting to less than or equal to 50 pounds. When lifting more than 50 pounds, a lifting device is required or two or more people. Regardless of the lifting restrictions, if the load is too heavy, too large, or unstable, get help. Use hoists or lift trucks when possible.

## Portable Ladder Safety Rules

- 1. For overhead work, use the proper type of ladder. Never use makeshift ladders or stand on equipment.
- 2. Ladders are for climbing. They are not to be used for levering, bracing, scaffolding, or any other purpose that might weaken the structure or create an unsafe condition.
- 3. Straight ladders should be equipped with safety shoes and be properly tied-off at the top and blocked at the bottom where possible.

A subsidiary of Federal Signal Corporation

- 4. Straight ladders will be placed at the proper angle. Place the ladder so the base is out one-fourth the vertical distance against which the ladder is leaning. The top of a ladder that is being used to access an elevated work area must extend at least 3 feet beyond the supporting object.
- 5. Always face the ladder when ascending and descending, and always maintain 3 points of contact with the ladder. Never carry objects in your hands while climbing a ladder. Use a rope or other methods to raise and lower tools and materials from heights.
- 6. Do not overreach outside the side rails of a ladder. Keep your waist inside the side rails of a ladder.
- 7. Do not splice ladders to make them longer.

## **Forklift Safety Rules**

The main responsibility for safe operation of any mobile equipment lies with the operator. Pedestrians must be aware of vehicular traffic in their area, however, and be appropriately cautious around mobile equipment.

- 1. Only authorized employees who have been trained may operate mobile equipment.
- 2. It is the duty of the truck operator at the beginning of each shift to conduct a vehicle pre-use inspection.
- 3. The inside speed limit is 5 mph, which is a fast walk. Use extra care in congested areas, when making turns, or on rough floors or pavement. Face the direction that you are traveling. Never back up without looking to see that it is clear to do so.
- 4. When traveling, keep the forks as low as possible.
- 5. If workers or pedestrians block line of travel, slow down or stop if necessary and sound the horn.
- 6. Be sure that your truck is properly and carefully loaded. DO NOT attempt to handle loads beyond the rated capacity of the truck.
- 7. Do not allow any person to ride the forks, platform, or load.
- 8. Do not allow any person to walk under raised forks.
- 9. Park the vehicle in a safe place when not in use. Do not obstruct crossings, passageways, fire extinguishers or roadways.
- 10. When an industrial vehicle is left unattended, the load engaging means shall be lowered, the controls neutralized, the power turned off, and brakes set. The operator may leave the load elevated when restocking part locations. The other requirements still apply.
- 11. Stunt driving, racing, and horseplay with vehicles will not be permitted.
- 12. Always wait until vehicle is completely stopped and the emergency parking brake is set before dismounting.
- 13. Sound the horn at all blind corners, when passing through doorways, when passing other vehicles, pedestrians or workers, or whenever there is a stop sign or sign indicating horn use. Never use horn to startle people.
- 14. Obey all traffic signs.
- 15. When loading or unloading trucks and trailers, check that the truck brakes are set and properly place wheel chocks to prevent movement or automatic dock lock is engaged.
- 16. Report all incidents, whether they involve personal injury, equipment, material damage, collision, or material upsets, to your manager immediately.
- 17. When floors are slippery with oil, grease, or water, clean up the area, if possible, or reduce your speed and notify your manager immediately.
- 18. When lifting personnel on a fork truck, an approved safety platform firmly secured to the lifting carriage must be used.

- 19. When ascending or descending grades, the loaded fork shall be driven with the load upgrade.
- 20. Portable Liquid Propane (LP) tanks may be stored only in racks provided for this purpose. Do not store cylinders on the ground.
- 21. Seat belts are mandatory and must be properly worn at all times.

## **Fire Prevention and Flammable Liquids Safety Rules**

- 1. Only use a fire extinguisher if you have been trained and based upon your level of confidence and training.
- 2. Fire extinguishers have a rating prominently displayed on them that identify what class of extinguisher they are. The ratings are as follows:
  - Class A used for normal combustible materials such as paper or wood.
  - Class B used for flammable liquids.
  - Class C used for electrical fires.
  - Class D used for flammable metals, such as sodium, magnesium, and aluminum.
- 3. Fire extinguishers can be of more than one Class, with Class ABC being a commonly available extinguisher. Class ABC extinguishers can be used on paper or wood, flammable liquids, or electrical fires.
- 4. Become familiar with the location, operation, and use of fire extinguishers in your area.
- 5. Firefighting equipment and fire aisles must always be kept clear and ready for use. Never block sprinkler heads with stored material.
- 6. Only approved solvents should be used for cleaning and degreasing.
- 7. Use as little solvent or flammable liquid as necessary to do the job. Keep solvents in a labeled safety container and do not use around sparks or open flame.
- 8. Flammable liquid containers must be closed while not in use.
- 9. Do not attempt any work involving a source of ignition near a pit, sewer, drain, manhole, or enclosed space where flammable gases may be present. Wait until the area has been declared safe for hot work. (See your manager.)
- 10. Good housekeeping is our best protection against fires. Do your part by disposing of all scrap, wiping rags, paper, rubbish, etc., in proper containers.
- 11. Make sure all electrical equipment is in good condition. Such things as worn or frayed extension cords, defective plugs and outlets, and overloaded fuses and circuits are all fire hazards.
- 12. Flammable liquids must be stored and used in appropriate containers (i.e. FM approved).
- 13. When flammable liquids are not being used, they should be stored in flammable liquid storage cabinets or designated areas.
- 14. Use appropriate bonding and grounding when transferring flammable liquids to another container.

## **Occupational Health**

#### First Aid

The Company has First Aid kits accessible to all employees located throughout all locations and in Company owned vehicles and each facility should have certified First Aiders on site.

#### **Heat Stress**

Heat stress can affect anyone. Environmental conditions which include high temperatures, high humidity, air movement, and personal variables such as work rate, general health, and conditioning can affect your body's ability to deal with high heat. Be aware of your environment; know which factors increase risk. Drink plenty of water all day before you feel thirsty. Wear appropriate clothing, loose, lightweight. Eat light regular meals. Know your special risk such as age, recent illnesses, high blood pressure, heart disease, allergy medication, or diabetes.

Pay attention to warning signs such as not feeling well, weakness, inattention, dizziness, excessive headaches, or nausea that can be preliminary stages of heat stress. Recognize symptoms and seek appropriate care. Unrecognized and untreated signs can lead to more serious health problems.

## **Environment Safety**

#### Spill Response (See Spill Response Program under the Written Policy Section)

The Company has a written policy with regards to a spill of hazardous or unknown materials that occur in the workplace.

#### **Pollution Prevention/Waste Minimization**

Numerous pollution prevention and waste minimization activities take place at JJE USA. These activities can include, but are not limited to, the following:

- Cardboard recycling/reuse
- Paper recycling: office paper, computer paper, inner leaf paper, etc.
- Pallet recycling/reuse
- Scrap metal reclamation

Ask your manager to explain the pollution and recycling activities that occur in your work area.

#### Hazardous Waste

A hazardous waste is a material that is to be disposed of, and that is listed by the TCEQ as a hazardous waste, or a chemical having one or more of the following characteristics: ignitability, corrosivity, reactivity, or toxicity. Some questions you might ask yourself include:

- Do I generate hazardous waste in my work area?
- Do I know the proper procedures for handling any hazardous waste I generate?

All employees who work with hazardous waste must be trained. If your job generates a hazardous waste or you must move or generate paperwork for hazardous wastes, you must be trained to do so.

#### Non-hazardous Waste

Some wastes generated have been evaluated to be non-hazardous but are managed in drums. These include used oil, oily rags, and pads from leaking machinery. Do you generate one of these wastes? Do you know the proper procedures for handling these wastes? If you are unsure, confirm with your manager.

Industrial wastes could be any materials that are not hazardous waste or non-hazardous drummed waste. JJE USA disposes of its industrial wastes in a landfill. We should consider options for reusing or recycling materials before throwing any material in the trash. Some questions to consider include:

- Can I/Should I throw this in the trash?
- Can it be reused or recycled?
- Can another department use this?

## Written Programs

#### Active Shooter Emergency Response Plan – USP228

Joe Johnson Equipment LLC (**"Company**") is committed to the safety and health of its employees. We refuse to tolerate violence in the workplace and will make every effort to prevent workplace violence. This Policy is an extension of our Workplace Violence Policy and is designed as an emergency response plan in the event of an **"Active Shooter"** (defined below) occurrence.

#### <u>Contractor Safety Program – USP203</u>

To ensure all Contractors are aware of their role in the Internal Responsibility System and understand and accept their health and safety responsibilities to maintain a safe environment for all employees and Workers while working for the "Company" (Joe Johnson Equipment LLC/JJE USA) and on the Company premises.

#### Emergency Response Plan – USP211

This plan identifies the procedures necessary to ensure the safety of our employees and visitors during an emergency such as severe weather.

#### Fall Protection – USP216

This program has been developed to ensure that employees who must work from heights are adequately trained and protected from fall hazards. This program has been developed through a process of fall hazard identification, assessment, prioritization, implementation of engineering controls, training, and procedures.

#### Hazard Communication – USP205

This program ensures that employees have the information necessary to understand the hazards of a material, protect themselves from the hazards, and use the material in a safe manner. Safety Data Sheets (SDS) and container labels can be used to determine the hazards of the materials that you use. The company maintains it's SDS's online at:

MyJJE  $\rightarrow$  SDS Online

- http://ccohsid.ccohs.ca/canmanage/login.html

Username: jjesafety Password: jjei123!

#### Lock Out/Tag Out Policy – USP220

The purpose of this procedure is to establish the standards required for the lockout/tagout (LOTO) of hazardous energy isolating devices.

#### Hot Work Policy – USP230

Whenever activities such as welding, cutting, or other maintenance or production work occur near combustible materials, specific precautions must be taken. This program ensures that all welding and cutting is conducted in a safe manner and that area specific hazards (such as flammable materials) are recognized before the work begins so that appropriate action can be taken to ensure that the work does not create a hazardous situation.

#### **Respiratory Program – USP231**

This program ensures that employees who are exposed to excessive levels of air contaminants such as dusts, mists, or gases are properly trained in the hazards of these contaminants, the use and limitations of proper respiratory protection, and are medically approved to use the equipment.

#### Spill Prevention, Control, and Countermeasure Plan (SPCC) – USP214

This is an Environmental Protection Agency (EPA) program that requires JJE USA to develop plans for emergency response in the event of a chemical release. Our S.P.C.C. plan ensures that controls and procedures are in place to minimize hazards to people and the environment from fires, explosions, and releases of toxic and hazardous substances through the air, soil, surface waters, and groundwater. The plan contains preventative actions and emergency response procedures to be implemented by emergency response team members and other JJE USA personnel in the event of an emergency.

#### Confined Space – USP202

To set forth as a means of protecting the health and significantly reduce accidental injury or death associated with entering, working in, and exiting from confined spaces.

#### Worker's Rights, Right to Refuse - USP201

To balance the employer's general right to direct the work force and control the production process in the workplace, Legislation gives three basic rights to Workers – the right to participate, the right to know and the right to refuse.

## **Participate in Safety!**

Employees are strongly encouraged to speak up if they have concerns or recommendation as to safety in the workplace. It is everyone's responsibility to ensure a safe environment at work. If you have a concern, idea or recommendation you can inform your manager, your HR department, your safety representative or a member of the leadership team.

## Policy & Procedure: USP228 Subject: Active Shooter Emergency Response Policy

#### PURPOSE

Joe Johnson Equipment LLC ("**Company**") is committed to the safety and health of its employees. We refuse to tolerate violence in the workplace and will make every effort to prevent workplace violence. This Policy is an extension of our Workplace Violence Policy and is designed as an emergency response plan in the event of an "**Active Shooter**" (defined below) occurrence.

#### POLICY

It is the Policy of the Company to provide an active shooter emergency response plan to: (a) alert employees and authorities that an active shooter appears to be actively engaged in killing or attempting to kill people on our premises; and (b) maximize employee survival.

In most cases, active shooters use firearm(s) and there is no pattern or method to their selection of victims. In some cases, an Active Shooter may use other weapons, including improvised explosive devices designed to kill or injure a large number of people and to impede police and other emergency responders. Improvised explosive devices may detonate immediately, have delayed fuses or detonate on contact. Active Shooter situations are unpredictable and evolve quickly. Active shooters usually will continue to move throughout a building or area until stopped by law enforcement, suicide, or other intervention. Typically, the deployment of law enforcement is required to stop the shooting and to prevent further harm to victims.

#### DEFINITIONS

"Active Shooter" – is a person or persons actively engaged in killing or attempting to kill people in a confined space or other populated area.

#### **ROLES AND RESPONSIBILITIES**

The following responsibilities apply:

#### Company will:

- Will establish emergency procedures and develop a policy to implement those procedures.
- Will ensure that all staff are trained in the emergency procedures of this policy
- Shall monitor the effectiveness of this policy and training material and implement recommended changes

#### PROCEDURE Active Shooter Situation

**Employee Response**: In an Active Shooter Situation using the following are recommended actions in order by the United States Department of Homeland Security:

- 1. **<u>Run to Safety</u>**: If there is an accessible escape path, attempt to evacuate the premises.
  - Have your escape plan and route in mind;
  - Leave all of your belongings behind;
  - If possible, help others escape;
  - Evacuate regardless of whether others agree to follow:
  - Warn or prevent others not to enter an area where the active shooter may be;
  - Do not attempt to move wounded people if it will endanger you;
  - Keep your hands visible;

A subsidiary of Federal Signal Corporation

- Follow instructions of any police officers; and
- Call 911 (Section B below) and make radio/PA announcement when it is safe to do so.
- 2. Hide from Danger: If safe evacuation is not possible, find a place to hide from the active shooter.

The hiding place should:

- Be out of the active shooter's view;
- Provide protection if shots are fired (e.g., an office with a closed and locked door)
- Not restrict options for movement.

To prevent the active shooter from entering a hiding place:

- Lock the door;
- Blockade the door with heavy furniture or equipment; and
- Close, cover, and move away from any windows.

While hiding, other actions to take include:

- Hide behind a large item;
- Silence your cell phone and pager; and
- Remain quiet.
- Call 911 (Section B below) and make radio/ PA announcement when it is safe to do so.
- 3. **Fight:** As an absolute last resort, and only if your life is in imminent danger, attempt to disrupt or incapacitate the active shooter.
  - Act as aggressively as possible;
  - Throw items or used improvised weapons;
  - Work together to incapacitate the shooter; and
  - Commit to your actions.

<u>Calling 911 & Making Radio/PA Announcement</u>: Only when safe to do so, as soon as possible, involved persons should notify law enforcement (call 911) and provide overhead announcement (radio or PA) of a Security Alert, "Active Shooter Situation."

Reports should include the following information:

- Location of the shooter(s);
- Number of shooter(s);
- Physical description of the shooter(s); and
- Number and type of weapons held by the shooter(s).

The call to 911 should also include a report of the number of potential victims at the location and any additional information requested by law enforcement.

When calling 911, remain calm. If you cannot speak, leave the phone line open to allow the dispatcher to listen.

**Law Enforcement**. The most Sr. Manager and/or Health & Safety Team Member will meet and guide law enforcement officers if possible, when safe to do so, and as appropriate. The goal of law enforcement is to locate, isolate, and neutralize the shooter as quickly as possible to prevent additional deaths or injuries.

An "all clear" will be announced to employees by the most Sr. Manager only when the situation has been addressed and the scene is declared safe by law enforcement officials.

#### Recovery.

A subsidiary of Federal Signal Corporation

The health and wellbeing of our visitors and employees is critical. As soon as possible after law enforcement has relinquished Command and Control of the scene, the Company will develop information strategies to address, employee and family questions related to the event.

Initially, the site of a violent incident will be secured as a crime scene. After the authorities have completed their investigation and have released the crime scene, management will need to have the facility appropriately cleaned and sanitized.

#### TRAINING

Management will facilitate the necessary training on this policy and its procedures to all employees. All employees who are expected to participate in this training.

The Company will provide on-going training:

- At regular intervals
- When there is a change in legislation
- When there has been an incident

#### COMMUNICATION

The Company will:

• Provide consistent, coordinated, timely, and effective communications of this policy;

Any of the following method(s) may be used to communicate this policy:

- Company email
- Company memo
- Posting of policies and procedures
- Training
- Meetings and Safety talks

#### **EXHIBITS/FORMS**

https://www.dhs.gov/video/options-consideration-active-shooter-preparedness-video

## Policy & Procedure: USP203 Subject: Contractor Safety Program

#### PURPOSE

To ensure all Contractors are aware of their role in the Internal Responsibility System and understand and accept their health and safety responsibilities to maintain a safe environment for all employees and Workers while working for the "Company" (Joe Johnson Equipment LLE o/a JJE USA) and on the Company premises.

#### POLICY

This policy covers a wide range of security and safety related activities that <u>may or may not be applicable</u> to the entire scope of work the Contracted firm, and its employees, are being hired to perform. The Contracted firm's representative reviewing this document must identify and ensure all sections that apply to the scope of the work that their Workers will be performing, is understood and that the required actions are taken by the Contracted firm to ensure all the workers supplied to the Company are competent to perform the work in a safe manner.

Except for emergency services, the Contracted firm representative will be required to review, complete all forms, attach supporting documentation, and return the completed package to the Project Manager before performing any work at the Company.

**Contractors** must report to the front reception desk upon arrival and will be requested to read the Contractor General Workplace Safety Requirements section of this document. Once complete, the Contractor will acknowledge that they understand the Company's expectations by signing in using the **Visitor's Log**. Contractors must visibly wear a Visitor's Badge beyond the reception area and for the duration of the visit.

Upon leaving the Company premises, contractors must report to Reception/Office Administrator and sign out in the Visitor's Log.

#### DEFINITIONS

**Contractor:** A person, partnership, or group of persons who, through a contract, an agreement, or ownership, directs the activities of one or more employers or self-employed persons involved in work at a work site.

**Project:** The construction, demolition, repair, alteration, or removal of a structure, building, pipeline, sewage system, or electric, telecommunication line; the installation, modification, repair, or removal of any equipment, machinery; or any work designated by a Company Project Manager.

**Project Manager**: A person designated by the Company in overall charge of the planning and execution of a particular project or work performed on the Company premises.

Competent Person: in relation to specific work, means a worker who,

- a) is qualified because of knowledge, training, and experience to perform the work,
- b) is familiar with the Occupational Health and Safety Act and with the provisions of the regulations that apply to the work, and
- c) has knowledge of all potential or actual danger to health or safety in the work;

Scope of Work: Scope of work is a written document containing a detailed description of a job contract.

#### **SCOPE OF WORK**

Having a complete and clear scope of work before initiating the project allows the Company and the Contracted firm to a accomplish project goals under the expected timeline while reducing potential misunderstandings and conflicts. A clear scope of work will be provided by the Contracted Firm to the Company's Project Manager and include a brief, general description of the projected work, methodologies and tools used.

The Contract firm will ensure their subcontractors and/or workers have been trained on the tasks associated to the scope of work identified.

#### RESPONSIBILITIES

To maintain a positive and safe working relationship between Contractors and the Company, all parties must meet their obligations set out in the program.

#### **Employer/ Company:**

- Ensure that projects are defined and are approved by senior management prior to engaging in a Contracted firm
- Ensure that the scope of the work follows the Health & Safety Legislation for the **province** or state in which the work is being performed
- Provide training to Project Managers to deem them competent to oversee the Contracted firm and understands their roles and responsibilities
- Review the Contractor Program annually

#### Project Manager:

- Ensure the Contractor is listed in the Company Approved Contractor Database prior to hire
- Confirm a completed and up-to-date Contractor Program package is on file for the Contractor prior to work commencing
- Send a Contractor Program package to a Contractor under consideration for hire when it is identified that the Contractor is not listed in our Contractor Database or when their information is expired
- Obtain a copy of the Contract Worker's skilled trade certificate (if applicable i.e. Electrician, Plumber, etc.)
- Ensure all Contract Workers read and understand their Health & Safety responsibilities
- Review check-in procedures with Contract Workers
- Review emergency response and evacuation procedures including alarms and meeting place/muster point with Contract Workers
- Ensure Contractor's Workers are working in a safe manner and are compliant with all the Company's Health & Safety requirements, rules, regulations & applicable legislation
- Review hazards in the workplace and provide instruction on Hazard Reporting procedures to Contract Workers
- Provide instruction on reporting procedures for injuries, illnesses, near misses, or property damage to Contract Workers
- Provide an orientation to Contract Workers using the Contractor Site Orientation Acknowledgement checklist

#### **Contractors:**

• See Contractor Responsibilities in the Internal Responsibilities Section of this manual.

#### **CHECK-IN PROCEDURES**

Due to the varying levels of Contractors based on the services they provide it is important to define and establish specific check-in procedures for each classification of Contractor. The Project Manager responsible for the Contractor will determine the level and check-in procedure for each Contractor based on the scope of the project. This will be established at <u>each</u> contract negotiation.

**Level 1** – Contractors who access the Company grounds but not premises (i.e., Lawn maintenance, couriers) are required to notify Reception of their arrival and departure. This level of Contractor is not required to sign in and out.

**Level 2** – Contractors who access the Company's premises but do not perform high risk tasks, (Office equipment maintenance/repair, uniform supply service) are required to read the General Health and Safety Responsibilities and sign in and sign out at front reception.

**Level 3** – Contractors who access the Company's premises to perform higher risk/skilled trade repairs (Electrician, plumber), or who are usually onsite for more than 1 consecutive day, (Camera installers, building repair/renovation contractors) are required to read Contractor responsibilities, sign in and out at front reception, produce trade certificate/license upon request and participate in an orientation with the Project Manager.

The Project Manager will conduct routine check-ins with the Contractor to verify the progress of the project and confirm the use of proper personal protective equipment and safety procedures.

#### GENERAL WORKPLACE SAFETY REQUIREMENTS FOR CONTRACTORS

The Company is committed to building and preserving, for its employees, a safe work environment based on mutual respect which is <u>free from violence, threats of violence, discrimination, harassment of any kind, or</u> <u>intimidation</u>. All other persons: contractors, suppliers, customers, and visitors to the Company must also comply with legislative requirements and the requirements of this policy. Individuals failing to abide by this policy will be promptly removed from the properties(s).

#### The Contractor will:

- 1. Appoint a competent person to supervise work and whenever requested to do so, provide the Company with certificates of training through a recognized industry organization as evidence of the individual's competence
- 2. Ensure that all workers employed to carry out the scope of the work are properly trained, possess the knowledge, skills and protective devices required by law or recommended for use to allow them to work safely
- 3. Not operate any equipment owned or operated by the Company and must provide all tools and/or equipment required to perform their work
- 4. Not be under the influence of, or in possession of any alcoholic beverages or illegal drugs
- 5. Obey all signage and instructions
- 6. Report injuries and incidents to the designated Company's Project Manager in accordance with the OHS Act as soon as possible and participate in investigations of injuries and incidents as requested.
- 7. Follow all safety guidelines and precautions in place at the facility
- **8.** Co-operate with any person exercising their duty under the act, the regulations, or the code and comply with the act, the regulations, and the code
- 9. Treat all employees with respect and abide by this policy while conducting business at the Company's workplace

#### WHMIS/HAZCOM

#### The Contractor will:

- 1. Comply with the requirements of WHMIS/HAZCOM legislation regarding the use, handling, storage and disposal of hazardous materials
- 2. Ensure that all controlled products used in performing the work are appropriately labeled
- 3. Maintain, at all times during the work, copies of material safety data sheets for controlled products on site in an easily accessible location
- 4. Provide their Workers with the appropriate personal protective equipment required

Further to the requirements of WHMIS/HAZCOM, the Contractor will ensure that the application of flammable or toxic materials is commenced only after the following requirements are met:

- Adequate ventilation is provided during and after application
- Enclosures are provided, when required, to contain fumes/vapours within the application area

A subsidiary of Federal Signal Corporation

- The building heating, ventilating and air-conditioning system will not distribute fumes/vapours throughout the building
- Warning signs and barriers, as required by regulations or to prevent entry into the application area, are used
- Workers are provided with the necessary respiratory protection devices to safeguard their health
- A suitable number of fire extinguishers are immediately adjacent to the area of application for volatile and flammable materials
- All information regarding the handling of materials, avoidance of spills, cleanup, installation of materials, ventilation, or other features designed to minimize the level of worker exposure to airborne contaminants are appropriately communicated

#### PROTECTIVE CLOTHING, EQUIPMENT AND DEVICES

The Contractor shall maintain on-site compliance with all requirements respecting protective clothing, equipment and devices.

#### FALL PROTECTION

The Contractor shall maintain on-site compliance with all requirements regarding fall protection and shall use fall arrest protection devises when working at elevations of 6 feet or higher.

The Contractor is solely responsible for the training of their Workers who are using fall arrest equipment and working from heights. All fall arrest equipment will be supplied by the Contractor.

#### HOUSEKEEPING

The Contractor shall implement a daily job site clean-up program to maintain the work site in a tidy and safe condition. All work areas, stairways and walkways are to be kept clean and free of obstructions. Material must be piled or stacked in an orderly manner.

#### **CONFINED SPACE**

The Contractor is solely responsible for the training of their Workers who are required to work in confined spaces. The Contractor shall ensure if the work involves entering a confined space, that safe procedures are followed and that proof of competency of workers entering confined spaces is readily available.

#### LADDERS

The Contractor is solely responsible for the training of their Workers who are using ladders and must ensure that ladders are designed, constructed, installed and maintained in a manner consistent with all regulatory requirements.

#### **ELECTRICAL/MECHANICAL**

The Contractor will ensure:

- 1. Qualified competent workers holding a valid skilled trade license perform all work on or near electrical equipment or installation
- 2. All electrical equipment in use during performance of the work is appropriately designed, located, and inspected so as to prevent a hazard to workers or others
- 3. All workers performing work on or near electrical equipment and/or installations are provided with, and use, appropriate personal protective equipment
- 4. All work performed on electrical installations must comply with all relevant acts, codes, regulations and guidelines
- 5. All Plumbing & Mechanical work must comply with all relevant acts, codes, regulations and guidelines
- 6. Any hazards arising from the worker's maintenance or repairs of electricity are to be reported to the Company's Designate immediately to ensure protection of all employees and workers

#### LOCK OUT

The Contractor is solely responsible for the training of their Workers who are locking out equipment and shall maintain on-site compliance with all requirements regarding lockout procedures. Should the Contractor be required to perform repairs on the equipment which has been locked out, the Contractor's worker will report to the Lead Manager to review the hazards of the equipment and reason for lock out.

If maintenance or repair cannot be completed, ensure that the equipment remains locked out and post signs warning "UNDER REPAIR – DO NOT OPERATE" prior to leaving the equipment and report this to the Company's Project Manager to ensure locks and tags are applied.

Upon completion of repair or maintenance, the worker will report to the Lead Manager to verify if the equipment is back to full and safe operation. Once the contract worker and Foreman/Manager agree that the equipment is safe, the internal lock out tag out process will be completed, and the equipment rendered available for use.

#### LIFTING

No worker is to lift over 51 lbs. independently - should assistance be required; the contract worker is to notify the Project Manager.

#### **FIRE PREVENTION**

Firefighting equipment shall not be moved, blocked or otherwise made inaccessible. Pre-authorization is required and must be obtained from the Company for all work that involves welding, cutting, grinding, use of open flames or any other operations where there is a risk of fire.

When welding or cutting must be done in a location not designated for this purpose, inspection and authorization shall be required in writing (Hot Work Permit) before any such operation commences. The permit shall be issued by an experienced Fire Safety Manager, or his/her appointee, who shall have inspected the work area and confirmed that all necessary precautions have been taken to prevent a fire.

#### **ROOF WORK**

No one is permitted to access the roof without the pre-approval of a Senior Manager.

All roof-top workers shall follow fall protection requirements. The Company must approve all lifting apparatuses used to transport materials and equipment on the roof. The Contractors shall supply lifting apparatus', preferably fixed to the ground, which are able to transport the material to a proper distance away from the roof curb.

Smoking on the roof is strictly prohibited.



## **Contractor Site Orientation Acknowledegment**

A brief escorted tour or discussion conducted by JJE Representatives to inform the contractor to become **familiar** with the **worksite** and any areas where special caution is required. It also affords the contractor the opportunity to ask questions about the worksite and offer information that might assist JJE in providing for their health and safety needs. The tour should address the following elements:

- ✓ Contractor Responsibilities
- ✓ Violence & Harassment
- ✓ Exit locations
- ✓ Emergency evacuation notification & muster point
- ✓ Fire extinguisher locations
- ✓ Hazard Reporting
- ✓ Occupational Injury/Illness Reporting, Incident & Near Miss Reporting
- ✓ First aid supplies & identification of first aiders
- ✓ Washroom facilities
- ✓ Eyewash stations
- Identification of areas requiring personal protective equipment
- ✓ Restricted areas
- Designated smoking area
- ✓ SDS Online
- ✓ Housekeeping
- ✓ Scope of Work

Contractor Company Name: _	
Contract Worker's Name:	
Date:	
JJE Representative:	

I hereby acknowledge that I have participated in a site orientation of the JJE facility and have been made aware of all of the elements as listed.

Contractor Signature: \_\_\_\_\_

## Policy & Procedure: USP211 Subject: Emergency Response Policy

#### PURPOSE

The purpose of this policy is to establish and maintain procedures in the event of an emergency, and to ensure that all reasonable precautions and steps are taken to protect the safety of employees and visitors in the event of an emergency.

#### POLICY

In the event of an emergency where serious injury may occur, established procedures and protocols will be outlined in the branch specific Emergency Response Plan and must be followed. These procedures will address emergency situations such as fire, threats or acts of violence, and general evacuations of any nature.

#### DEFINITIONS

**Emergency Response Plan (ERP)** – A document that effectively responds to an emergency situation that could cause death, injury, disruption of operations or physical or environment damage

Emergency Preparedness - Training for the response of an emergency situation

**Emergency Response Marshal** – A designated person(s) at each branch who will be responsible for maintaining an ordering evacuation, conduct a sweep of their area(s), and cooperate and communicate with fire officials

Manager Designate – This will be the most Sr. Manager that is on site at the time of the emergency

#### **ROLES AND RESPONSIBILITIES**

The following responsibilities apply:

#### **Employer will:**

- Ensure that an Emergency Response Policy and corresponding Emergency Response Plans are developed, maintained, and responsibilities are delegated
- Ensuring the necessary resources and training are provided to all employees

#### Managers will:

- Provide and maintain an updated emergency contact list
- Ensure employees participate in the Emergency Response training and all emergency response drills
- Ensure the branches Emergency Response plan is communicated and made available to all employees and visitors at their branch

#### **Employees will:**

- Follow the Emergency Responses Plan procedures in the event of an emergency
- Participate in training
- Participate in all emergency response drills

#### Manager Designate will:

- Assume overall command of the emergency situation
- Participate in emergency response drills
- Cooperate and communicate with emergency response officials
- Participate in debriefing resulting from an emergency situation

#### **Emergency Response Marshals will:**

• Execute the emergency response plan

A subsidiary of Federal Signal Corporation

- Conduct a sweep of their area to ensure evacuation is complete, including;
  - Washrooms, rest areas, or any place where alarms may not be audible
- Ensure building entrances are not congested
- Assist the Manager Designate in assuming overall command of the emergency situation
- Participate in emergency response drills when required
- Cooperate and communicate with emergency response officials
- Participate in debriefing resulting from an emergency situation

#### Joint Health and Safety Committee (JHSC)/Health and Safety Members will:

- Conduct emergency response drills at a minimum of once per year
- Participate in the evaluation of the drill results and assist in conducting a risk assessment to determine potential gaps in the Emergency Response Plan procedures
- After an emergency event, participate in the evaluation of the Emergency Response Plan to determine the effectiveness and to identify gaps in the plan based on those events
- Conduct risk assessments to determine potential emergency situations and the branch's ability to respond to the identified emergencies
- Based on the risk assessments and the evaluations of an evacuation drill or after an emergency event, make continuous improvement and corrective action recommendations to Management to address any findings

#### Human Resources will:

- Update or create new emergency response procedures in response to newly identified emergency situations
- Retain training records
- Develop individual emergency response plans as requested by those who acknowledge barriers in the workplace in case of emergency

#### Visitors & General Public will:

• Follow the Emergency Response Plan and its procedures in the event of an emergency

#### PROCEDURES

In the event of an emergency, the procedures outlined in each branch's Emergency Response Plan (ERP) must be followed. The emergency response procedures apply to all employees, visitors, and contractors of the Company. Should an emergency occur that is not addressed in the ERP, the Emergency Response Marshals and Designate Manager on site should lead in the decision-making, and provide direction in order to ensure everyone is kept as safe as possible.

#### An Emergency Response Plan includes:

- Identification of emergency responses to incidents and disasters specific to their location which may include but are not limited to;
  - Fire or Explosion
  - Severe Storms or Tornadoes
  - Environmental Hazards
  - Active Shooter or Act of Violence
  - Serious Injury
- Method of communication of emergency and the emergency response procedure for that particular facility, which may include:
  - Air Horns
  - Paging systems
  - o Verbal
- Written emergency procedures to respond to each potential emergency incident or disaster. The plan includes:

- Emergency contact list
- Employee personnel emergency contact list
- o Communication procedures
- Evacuation and Take-Cover (shelter) information and procedures

The following must occur at each branch:

- Employee must be trained to understand their responsibilities related to emergencies and disasters in the workplace
- Emergency Response Marshals must be established and trained to perform specific tasks to facilitate the Emergency Response Plan procedures
- An emergency contact list must be posted on the health and safety board
- The Emergency Response Plan must be posted at the designated exits of the building as well as on the health and safety board

Emergency Response Off-site

Where employees perform work at sites that are not on the Company premises, all Company
managers must know the whereabouts of their employees and have established check-in
procedures. Employees must complete a risk-assessment of potential emergencies prior to
performing their work at that site.

#### COMMUNICATION

All employees must be aware of the Emergency Response Plans and Procedures. Communication of these procedures will be reviewed with the department manager through the new hire health and safety orientation process.

Visitors will be accompanied by a Company representative who will advise the visitor to stay with them during an emergency as well as point out the emergency exits and designated meeting point.

#### TRAINING

The Company will ensure that all employees are trained and educated on the Emergency Response Plan and ensure that they are clear about their roles and responsibilities as well as this policy and its procedures.

Any of the following method(s) may be used to communicate this policy:

- Company email
- Company memo
- Posting of policies and procedures
- Training
- Meetings and Safety talks

The individuals assigned specific responsibilities during an emergency will be trained on their responsibility annually. Human resources will retain records of training.

Practical training will occur during planned drills. Employees will sign and date attendance at the drills, as required.

#### **EVALUATION**

The JHSC/ Health and Safety Representatives will evaluate the Emergency Response Plan annually, as a minimum to ensure:

- Emergency Response Plans are created for high risk emergency situations and are current
- Training has occurred as required
- Emergency contact list is current

#### **EXHIBITS/FORMS**

F211.1 – Emergency Response Drill Record

A subsidiary of Federal Signal Corporation

USP206 – Incident Reporting and Investigations Policy

(SMARTSHEET) – Incident Reporting Form

USP208 – Workplace Violence, Harassment, and Sexual Harassment Prevention and Reporting Policy

## Policy & Procedure: USP216 Subject: Fall Protection

#### PURPOSE

The purpose of this fall protection program is to establish guidelines in accordance with OSHA 1910.140, to protect all employees of the "Company" (JJE LLC.), engaged in outdoor or indoor work activities that expose them to potential falls from elevations. This fall protection program is applicable to <u>all</u> Company employees and Contractors, particularly those workers engaged in work activities which expose them to falls from heights of 4 feet or more.

#### POLICY

Through effective education and controls, the use of fall protection systems, and enforcement of the program, prevention of falls from elevations of 4 feet or higher may be achieved.

While off site, any trained employee required to use the fall arrest system shall notify their Manager prior to working. The Manager shall review the task to examine if any engineering controls can be used prior to working at heights.

When working at heights is required, the Manager shall determine the level of risk associated with the task. If a high level of risk is possible, a spotter will be provided in the event of a fall. Should there be less of a risk, the Manager shall give the employee authorization to perform and use the equipment. The Manager shall continue to monitor the employee periodically.

#### **DEFINITIONS:**

**Anchor Point** – A secure point of attachment for lifelines, lanyards, or deceleration devices. An anchor point must be capable of supporting at least 5000 pounds (3600 pounds if engineered/certified by a qualified person) per person and must be independent of any anchorage being used to support or suspend platforms.

**Full Body Harness** – Webbing/straps which are secured about an employee's body in a manner that will distribute the fall arrest forces over the thighs, pelvis, waist, chest and shoulders. Having means for attaching it to other components of a fall arrest system, preferably at the shoulders and/or middle of the back. It is recommended to have a fall arrest harness with a D-ring in the mid to upper back, for which to connect the lanyard.

**Connector** – A device which is used to couple (connect) parts of the fall arrest system together.

**Cage** – A device used in conjunction with a regulated forklift to help lift and lower trained people from heights greater than 4 feet. The cage will be equipped with a safety bar on all side and have a constructed steel hook on the back of the cage to link the fall arrest harness.

Free Fall – The act of falling before a fall arrest system begins to apply force to arrest the fall.

**Free Fall Distance** – The vertical displacement of the fall arrest attachment point on the employee's body harness between the onset of the fall and just before the system begins to apply force to arrest the fall. Free fall distance must not exceed 4 feet. **This distance excludes deceleration distance and lifeline/lanyard elongation distance.** 

**Total Fall Distance** – The maximum vertical change in distance from the bottom of an individual's feet at the onset of a fall, to the position of the feet after the fall is arrested. This includes the free fall distance and the deceleration distance.

**Guardrail System** -- A barrier erected to prevent employees from falling to lower levels. This system includes a toe board, mid-rail and top-rail able to withstand 200 pounds of force applied in any direction.

**Lanyard** – A flexible line of rope or strap that has self-locking snap hook connectors at each end for connecting to body harnesses, deceleration devices and anchor points. A lanyard can be shock absorbing, tie back or self-retracting.

**Lifeline** – A component consisting of a flexible line for connection to an anchorage at one end to hang vertically (vertical lifeline), or for connection to anchorages at both ends to stretch horizontally (horizontal lifeline). This serves as a means for connecting other components of a fall arrest system to the anchorage.

**Fall Arrest System** – A system used to arrest (catch) an employee in a fall from a working level. It consists of an anchorage location, connectors, a body harness, and may include a lanyard, deceleration device, lifeline, or any combination of the before-mentioned items.

**Toe board** – A low protective barrier that will prevent the fall of materials and equipment to lower levels, usually 4 inches or greater in height.

**Unprotected Sides and Edges** – Any side or edge of a walking or working surface (e.g., floor, roof, ramp, runway, etc.) where there is no guardrail at least 42 inches high.

#### FALL PROTECTION SYSTEMS

Appropriate fall protection will be determined by the task (job) to be performed.

- 1) An articulating man lift provided with a restraint system and full body harness to an anchor point below the waist (preferably at the floor level)
- 2) Guardrail with a toe board, mid-rail and top-rail (i.e. cage)
- 3) Fall arrest systems
  - Anchor points (rated at 5000 pounds per person)
  - Full body harness
  - Restraint line or lanyard
  - Retractable lanyard
  - Rope grabs
  - Connectors (self-locking snap hooks)
- 4) Engineered lifelines

#### LOCATIONS

Fall protection is required wherever the potential to fall 4 feet or more exists. The Company has identified the following places concerning fall protection:

- All equipment vehicles, when the employee is required to be on top of the vehicle and where the top of the vehicle is 4 feet or above
- All exterior and interior equipment platforms, mezzanine and balcony edges, catwalks, without the required foot board, mid and upper rails
- For fixed ladders that extend more than 24 feet (7.3 m) above a lower level, the employer must ensure:
  - Each fixed ladder is equipped with a fall arrest system, ladder safety system, cage, or well;
- All open excavations or pits
- All tasks requiring use of the articulating man lifts
- All tasks requiring employees to lean outside the vertical rails of ladders (i.e., painting, stairwell light bulb replacement, etc.)
- Scaffolding structure 4 feet in height or greater

#### CONTROLS

Evaluate the task and examine other feasible options prior to working at heights whenever possible or utilizing a contractor in extremely hazardous areas.

#### **Guardrails:**

On all projects, only guardrails made from steel, wood, and wire rope will be acceptable. All guardrail systems will comply with the current standards (i.e., contain a 42" high top-rail, a mid-rail and toe board, which can withstand 200 pounds of force in any direction). These guardrails will be placed in the following areas if necessary or feasible based on job location or requirements:

- On all open sided floors
- On leading edges of mezzanines
- Any man lifts

#### Fall Protection Systems:

All employees on any project that will be required to wear a fall arrest or restraint system will follow these guidelines:

- 1) A full body harness will be used at <u>all</u> times
- 2) Only shock absorbing lanyards or retractable lanyards are to be used so as to keep impact forces at a minimum on the body
- 3) Only nylon rope or nylon straps with locking snap hooks are to be used for restraints
- 4) All lanyards will have self-locking snap hooks
- 5) The employee will inspect all fall arrest equipment before each use. Any deteriorated, bent, damaged, impacted, and/or harness showing excessive wear will be removed from service

#### **Total Free Fall Distance:**

The maximum free fall distance is not to exceed 4 feet. Consideration must be given to the total fall distance. The following factors can affect total fall distance:

- Length of connecting fall arrest (i.e. lanyard length, use of carabineers, snap hooks, etc.)
- Position and height of anchorage relative to work platform/area (keep above the head whenever possible).
- Position of attachment and D-ring slide on the full body harness.
- Deployment of shock absorber (max. 42").
- Movement in the lifeline.
- Initial position of worker before free fall occurs (i.e., sitting, standing, etc.).

**Total Free Fall Distance Calculation** = total length of shock absorbing lanyard + height of the person + the location distance of the D-ring from the work surface or platform

# Always allow a minimum of 6 feet of clearance above the ground, equipment, etc., at the end of the fall from the fall arrest point.

#### **Engineered Lifeline:**

Lifeline systems must be designed and approved by an engineer or competent person.

#### INSPECTIONS

#### Full Body Harnesses:

- 1. Inspect before each use
- 2. Closely examine all of the nylon webbing to ensure there are no burn marks, which could weaken the material
- 3. Verify there are no torn, frayed or broken fibers, pulled stitches or frayed edges anywhere on the harness
- 4. Examine the D-ring for excessive wear, pits, deterioration or cracks
- 5. Verify that buckles are not deformed, cracked, and operate correctly
- 6. Check to see that each grommet (if present) is secure and not deformed from abuse or a fall
- 7. The harness should never have additional punched holes
- 8. All rivets should be tight and not deformed
- 9. Check tongue/straps for excessive wear from repeated buckling
  - A competent person will complete an annual inspection of all harnesses and documentation will be maintained

A subsidiary of Federal Signal Corporation

- Storage will consist of hanging in an enclosed cabinet, to protect from damage
- All harnesses that are involved in a fall will be destroyed

#### Lanyards/Shock Absorbing Lanyards:

- 1. Inspect before each use.
- 2. Check lanyard material for cuts, burns, abrasions, kinks, knots, broken stitches and excessive wear
- 3. Inspect the snap hooks for distortions in the hook, locks, and eye
- 4. Check carabineer for excessive wear, distortion and lock operation
- 5. Ensure that all locking mechanisms seat and lock properly
- 6. Once locked, locking mechanism should prevent hook from opening
- 7. Visually inspect shock absorber for any signs of damage, paying close attention to where the shock absorber attaches to the lanyard
- 8. Verify that points where the lanyard attaches to the snap hooks are free of defects
  - A competent person will complete an annual inspection of all lanyards and documentation will be maintained
  - Storage will consist of hanging in an enclosed cabinet, to protect from damage
  - All lanyards that are involved in a fall will be destroyed

#### Snap hooks:

- 1. Inspect before each use.
- 2. Inspect snap hook for any hook and eye distortions
- 3. Verify there are no cracks or pitted surfaces
- 4. The keeper latch should not be bent, distorted, or obstructed.
- 5. Verify that the keeper latch seats into the nose without binding
- 6. Verify that the keeper spring securely closes the keeper latch
- 7. Test the locking mechanism to verify that the keeper latch locks properly
  - A competent person will complete an annual inspection of all snap hooks and documentation will be maintained
  - All snap hooks involved in a fall will be destroyed

#### Self-Retracting Lanyards/Lifelines:

- 1. Inspect before each use
- 2. Visually inspect the body to ensure there is no physical damage to the body
- 3. Make sure all nuts and rivets are tight
- 4. Make sure the entire length of the nylon strap/wire rope is free from any cuts, burns, abrasions, kinks, knots, broken stitches/strands, excessive wear and retracts freely
- 5. Test the unit by pulling sharply on the lanyard/lifeline to verify that the locking mechanism is operating correctly
  - A competent person will conduct a monthly inspection of all self-retracting lanyards/lifelines and documentation will be maintained
  - If the manufacturer requires, make certain the retractable lanyard is returned to the manufacturer for scheduled annual inspections
  - Service per manufacturer specifications (1-2 years)
  - Inspect for proper function after every fall

#### **Tie-Off Adapters/Anchorages:**

- 1. Inspect for integrity and attachment to solid surface.
  - A competent person will complete an annual inspection of all tie-offs and anchorages and documentation will be maintained.
  - All tie-offs and anchorages will be destroyed after a fall.

#### **Articulating Man Lift:**

- 1. Inspect before each use.
- 2. Inspect/service per manufacturer guidelines. Forklift and scissors lifts will be inspected at the beginning of each day it is in use. Structural integrity of the forklift Cage will be checked per the same schedule.

- A competent person will complete an annual inspection of the forklift Cage and documentation will be maintained.
- Fall protection will be worn when working in lifts.

#### **Horizontal Lifelines:**

- 1. Inspect before each use for structural integrity of line and anchors.
  - A competent person will complete an annual inspection.

#### **Guardrails:**

- Temporary systems Daily visual inspection will be completed by a competent person.
- Temporary systems Weekly, a complete structural inspection will be completed by a competent person.
- Permanent systems Annual structural inspections will be completed by a competent person with future frequency of inspection defined based on conditions/controls present.

#### **STORAGE & MAINTENANCE**

- 1. Never store the fall arrest equipment in the bottom of a toolbox, on the ground, or outdoors exposed to the elements (i.e., sun, rain, snow, etc.).
- 2. Hang equipment in a cool, dry location in a manner that retains its shape.
- 3. Always follow manufacturer recommendations for inspections.
- 4. Clean with a mild, nonabrasive soap and hang to dry.
- 5. Never force dry or use strong detergents in cleaning.
- 6. Never store equipment near excessive heat, chemicals, moisture, or sunlight.
- 7. Never store in an area with exposures to fumes or corrosive elements.
- 8. Avoid dirt or other types of build-up on equipment.
- 9. Never use this equipment for any purpose other than fall arrest.
- 10. Once exposed to a fall, remove equipment from service immediately.

#### **EMERGENCY REPSONSE**

#### **The Company Premises**

Prior to beginning any work activity where fall protection equipment is going to be used, the following emergency response plan must be discussed and understood by employees in case of a fall:

- 1. The Manager will be notified
- 2. The Manager will assign a qualified employee to obtain either the articulating man lift or ladders where feasible.
- 3. The Manager will remain with the employee to ensure safety.
- 4. Both the assigned employee and the Manager will quickly, and with caution, rescue the fallen employees.
- 5. In the event where equipment will not allow for rescue or the employee is unconscious or significantly injured, the Manager will assign an employee to contact 911 emergency services.
- 6. All employees involved in a fall arrest or fall will be sent immediately for a medical evaluation to determine the extent of injuries, if any.

#### Off-site

The most important step in this process is for the employee to advise their Manager of the fall arrest requirements, as well as another party who can assist in the rescue should the employee fall. Communication remains the same.

In the unlikely event that a fall occurs off-site (road mechanic) the following fall arrest and rescue plan shall include:

1. Prevention: any trained employee required to use the fall arrest system shall notify their Manager prior to working. If the employee has not received training, the employee is instructed not to use the fall arrest system nor are they able to work from heights above 4 feet.

A subsidiary of Federal Signal Corporation

- 2. The Manager shall review the task to evaluate if any engineering controls can be used prior to working at heights. When working at heights is required, the Manager shall determine the level of risk associated with the task.
- 3. If a high level of risk is possible, the employee is to request a fellow employee to be available in the event of a fall. Should no employee be available, the employee shall request the Manager onsite, customer or contractor to monitor them. Should a fall occur, the Manager on-site shall be called and will assign a qualified employee to obtain either the articulating man lift or ladders whenever feasible. The On-site Manager will remain with the employee to ensure safety and the assigned employee and the Onsite Manager will quickly and with caution rescue the fallen employee(s). The employee is to provide these instructions to the customer/contractor prior to performing climbing. The in-house Manager shall continue to contact the employee during the task to ensure safety.
- 4. Should there be less of a risk, the Manager shall give the employee authorization to perform and use the equipment. The Manager shall continue to supervise the employee every 5 minutes during this plan through the phone system to request contact to ensure their safety. In the event of a fall, the employee is instructed to call 911 whenever feasible. In the event the employee does not respond to contact request. The Manager is to call 911 immediately.
- 5. In the event where equipment will not allow for rescue or the employee is unconscious or significantly injured, the Manager will assign an employee to contact 911 emergency services.
- 6. All employees involved in a fall arrest or fall will be sent immediately for a medical evaluation to determine the extent of injuries, if any.

# NOTIFICATION

In the event of a fall, the following people will be notified as soon as possible and in the following in order:

- 1. Manager
- 2. Assigned or dedicated employee
- 3. Fire Department and emergency medical services if necessary
- 4. HR Manager

#### REPORTING

As soon as practicable following the accident:

- The Manager and Worker will complete the Occupational Injury/Illness Report Interviews with employees and witnesses, including customers or contractors
- A copy will be sent to HR
- With a JHSC Representative, the employee shall complete the Incident/Accident Investigation report
- The JHSC Representative and the Manager shall also complete the Incident Accident Investigation report.

## TRAINING

Document the attendance of all trainees. All employees engaged in fall protection will be trained and have the knowledge to:

- Recognize the fall hazards of/on their job sites.
- Understand the hazards associated with working near fall hazards.
- Work safely in hazardous areas by utilizing appropriate fall protection measures.
- Understand and follow all components of this fall protection program.
- Identify and understand the enforceable CSA/OSHA standards and ANSI standards that pertain to fall protection.

# Policy & Procedure: USP205 Subject: Hazard Communication (HazCom)

#### PURPOSE

The hazard communication program ensures that employees have the information necessary to understand the hazards of a material, protect themselves from the hazards, and use the material in a safe manner. It assigns responsibility for maintenance of SDS records, labelling of in-service and shipping containers, and training.

#### POLICY

Employers are responsible to ensure that hazardous materials in the workplace are properly labeled, Safety Data Sheets (SDS) are current and made available to employees and that employees receive adequate training regarding hazardous materials.

All Company employees must be provided hazardous material training and complete a knowledge assessment within their first week of employment. The following topics are covered in the training:

- Rights of Workers
- Duties and Responsibilities of Employers, Workers and Managers
- What are hazardous materials
- How hazardous materials enter the body
- Warning symbols and classifications
- Supplier labels
- Workplace labels
- Safety Data Sheets (SDS)
- Hazard Controls
- Prevention

Employees must receive task specific training from their manager prior to working with or around hazardous materials. Hazardous material refresher training will be provided every 3 years or as applicable.

Management must assign the responsibility of maintaining SDS sheets to a Company employee(s) who will keep the SDS database up to date with revised or new forms.

#### DEFINITIONS

Hazardous Chemical - Any chemical that could pose a physical hazard or a health hazard

Chemical - Any element or chemical compound or mixture of elements and/or compounds

**Container** - Any bag, barrel, bottle, box, can, cylinder, drum or the like that contains a hazardous chemical. Pipes and piping are not considered containers

**Hazard Classification** - The process of assigning a hazard or danger category based on its health and physical hazards

#### **GLOBAL HARMONIZING SYSTEM (GHS)**

OSHA's Hazard Communication Standard has aligned the regulation with international standards with the implementation of GHS. GHS helps ensure improved quality and consistency in the classification and labeling of all chemicals and provides a single set of harmonized criteria for classifying chemicals and mixtures according to health, physical and environmental hazards.

A subsidiary of Federal Signal Corporation

The GHS improves hazard communication by specifying communication elements, such as signal words, pictograms and precautionary statements, which are used on container labels or Safety Data Sheets (SDS). GHS assigns each chemical or mixture a hazard classification. Hazard Classification assigns a hazard or danger category based on its health and physical hazards.

- **Physical Hazards** are properties of a gas, liquid or solid that could adversely affect an individual or the workplace in a physical way, such as a fire or explosion.
  - Explosives
  - Flammable gases
  - o Aerosols
  - Oxidizing gases
  - Gases under pressure
  - Flammable liquids
  - Flammable solids
  - Self-reacting substances & mixtures
  - Pyrophoric liquids
  - o Pyrophoric solids
  - Self-heating substances & mixtures
  - o Substances & mixtures emitting flammable gases when contacting water
  - Oxidizing liquids
  - Oxidizing solids
  - Organic peroxides
  - Substances corrosive to metal
- Health Hazards are determined by the properties of a substance or mixture that can cause illness or injury to the skin, eyes, lungs or other organs and body parts.
  - Acute toxicity
  - Skin corrosion & irritation
  - Serious eye damage or eye irritation
  - o Respiratory or skin sensitization
  - Germ cell mutagenicity
  - Carcinogenicity
  - Reproductive toxicology
  - Specific target organ toxicity from a single exposure
  - o Specific target organ toxicity from repeated exposure
  - Aspiration hazard

#### PICTOGRAMS

Health Hazard	Flame	Exclamation Mark
<ul> <li>Carcinogen</li> <li>Mutagenicity</li> <li>Reproductive Toxicity</li> <li>Respiratory Sensitizer</li> <li>Target Organ Toxicity</li> <li>Aspiration Toxicity</li> </ul>	<ul> <li>Flammables</li> <li>Pyrophoric</li> <li>Self-Heating</li> <li>Emits Flammable Gas</li> <li>Self-Reactive</li> <li>Organic Peroxides</li> </ul>	<ul> <li>Irritant (skin and eye)</li> <li>Skin Sensitizer</li> <li>Acute Toxicity (harmful)</li> <li>Narcotic Effects</li> <li>Respiratory Tract Irritant</li> <li>Hazardous to Ozone Layer (Non-Mandatory)</li> </ul>
Gas Cylinder	Corrosion	Exploding Bomb
Gases under Pressure	<ul> <li>Skin Corrosion/ burns</li> <li>Eye Damage</li> <li>Corrosive to Metals</li> </ul>	<ul><li>Explosives</li><li>Self-Reactives</li><li>Organic Peroxides</li></ul>
Flame over Circle	Environment (Non-Mandatory)	Skull and Crossbones
Oxidizers	Aquatic Toxicity	Acute Toxicity (fatal or toxic)

#### SAFETY DATA SHEETS (SDS)

The Master File of SDSs shall be maintained by a designated employee and will be available on the CCOHS website, CANManage – SDS Management Online. To reduce safety hazards and increase safe chemical handling knowledge and application in our workplace, the CHEMINFO database is recognized as one of the most comprehensive chemical safety resources available worldwide.

#### Access the Company's online SDS database:

MyJJE  $\rightarrow$  SDS Online

- <u>http://ccohsid.ccohs.ca/canmanage/login.html</u>

Username: jjesafety Password: jjei123!

#### Features Include:

- Search and view Company SDS collection
- Print an SDS or full binder collection
- Export the product list to excel
- Access to over 1,800 Chemical information sheets (CHEMINFO)
- Print SDS Workplace Label

A subsidiary of Federal Signal Corporation

Add SDS to the Company's SDS database:

- Usually the supplier / manufacturer will issue a current data sheet to you at the time of purchase. (For WHMIS 2015, the supplier must provide you with a copy of the safety data sheet upon first purchase of a product.)
- Send that data sheet (both English and French, if available) as an email attachment to the designated Health and Safety Representative
  - The designate Health and Safety Representative will forward the SDS's to <u>msds@ccohs.ca</u> to have the databased updated

When a new product is introduced to the workplace, the following procedure must be followed:

- 1. Using the SDS sheet specific to the chemical, provide workers with task specific training prior to allowing workers access to the chemical
- 2. Identify workplace specific controls to minimize exposure to the chemical including use, storage, handling, access, PPE, etc.
- 3. Provide a copy of the SDS sheet to the Company employee responsible for maintaining the SDS binder

## LABELLING REQUIREMENTS

Labeling requirements are defined in OSHA Standard 1910.1200 (Hazardous Communication) or applicable state OSHA regulation.

#### Incoming Shipments:

- All incoming containers of hazardous chemicals should have a label affixed. This label should state the name of the chemical, any hazards and the name and address of the manufacturer
- Should any such containers be received without the manufacturer's label, the company will label the containers with the name of the chemical and the associate hazard before being moved to the work area

#### In-service Containers:

- The person(s) responsible for ensuring that in-service containers are properly labeled are each manager for his/her department(s) and the department's employees. Labeling requirements, as a minimum, must include the name of the chemical and the associated hazards
- The labeling system used will be the Hazardous Material Identification System (HMIS) label. Each inservice container of hazardous material requiring further labeling, shall be labeled, tagged, or marked with the identification of the substance contained and appropriate hazardous warnings per HMIS. The numerical degree of hazard will be shown.

#### Portable Containers:

- Each portable container shall be labeled with the identity of the chemical and any associated hazards
- Portable containers into which hazardous chemicals are transferred from labeled containers need not be labeled if these are intended for use during the work shift of the employee making the transfer
- Obsolete labeling shall be removed from reusable containers before they are used for a different material. Also, the reusable container should be drained of all product/residue into the appropriate waste stream container before another product is placed in the reusable container
- The container should be rinsed if deemed necessary for the old product's compatibility with the new product before the new product is put into the container. The rinsing waste should also be put into the appropriate waste stream container. This is the responsibility of each manager for his/her department(s) and the department employees

#### Bulk Containers:

• Bulk containers (tanks) will be labeled with the name of the chemical and associated hazards as a minimum

A subsidiary of Federal Signal Corporation

• A label will be affixed to the container, or a sign(s) will be located adjacent to the container or containers. Such a sign should be visible from all normal personnel travel routes

# TRAINING

Each employee shall be informed of the following:

- The requirements of the Hazard Communication Standard.
- Identification of any operation in their work area where hazardous materials are present, and
- The location and availability of this Hazards Communication Program, including the list of hazardous chemicals and SDSs

Each employee shall be trained, in the following:

- The identify of any hazardous materials in their workplaces
- The physical and health hazards of such chemicals
- Protective measures, procedures, and equipment to be used to protect employees from the hazardous chemicals
- Methods to be used to detect the presence or release of a hazardous chemical in the work place (these may include observations, such as color, odor, or form) and what to do in an emergency.
- How labeling is accomplished, and
- How the employee can obtain and use hazard information, particularly MSDSs

Formal training session shall be documented on the form provided. This record shall be retained by the Human Resources Department. Refresher training will be conducted every 3 years.

#### **EXHIBITS**

SDS ONLINE - <u>http://ccohsid.ccohs.ca/canmanage/login.html</u>

- USERNAME: jjesafety
- PASSWORD jjei123!

# Policy & Procedure: USP220 Subject: Lock Out/ Tag Out

#### PURPOSE

The purpose of this procedure is to establish the standards required for the lockout/tagout (LOTO) of hazardous energy isolating devices.

#### POLICY

This policy shall be used to ensure that the machinery or equipment is isolated from all potentially hazardous energy and locked out and tagged out <u>before</u> employees perform any servicing or maintenance activities on any machine or equipment where the unexpected energization, start-up or release of stored energy could cause injury to the employee(s) performing the service or maintenance or damage to machine, equipment or property. "Lockout" involves more than merely disconnecting or locking out a power source. All machines or equipment capable of being energized or activated electrically, pneumatically, air, gravity or hydraulically must be de-energized or de-activated by physically disconnecting or otherwise making the apparatus inoperable prior to any maintenance or repair work performed on it. This is often referred to as zero energy, or zero mechanical state.

Appropriate employees shall receive specific instruction in the safety and significance of the lockout/tagout policy and procedure.

All new employees and employees transferred into operations or employees who are or may be in the area of the service/maintenance work being performed on their machine(s) shall be instructed in the purpose and use of the lockout/tagout procedure. Employees will be re-trained as indicated by OH&S's lockout/tagout standard.

The Department Manager shall be responsible for the implementation, compliance and annual review of this policy/procedure.

The Company will ensure that all appropriate employees who work with or are or may be in the area of an energized source when work is being performed on machinery or equipment is informed of the hazards associated, is trained in the Lockout/Tagout policy and procedure and adheres to this standard.

#### DEFINITIONS

**Equipment** – Includes but is not limited to machinery, devices, stationary tools, vessels, pipes, tanks, and vehicles.

**Energy source** – Includes but is not limited to electrical, pneumatic, hydraulic, chemical, gravity, thermal, steam, tension, momentum, spring pressure, head pressure and line pressure (fluid/gas).

LOTO – is an acronym that stands for Lock Out/Tag Out

**Lockout** – Means disengaging all energy sources from equipment, safely releasing stored energy or materials, and securing the control device(s) in the "off" position with an approved lock, thereby rendering it incapable of operation, release or movement.

**Tagout** – **M**eans an approved/durable label that is made of non-conductive material, which provides information about the purpose of locking the equipment out, and particulars such as whose lock it is and the date/time.

**Control Device – M**eans a device that physically isolates equipment from its energy source, and can be secured, locked or isolated in the "off" or closed position (e.g. keyed locks, lockout bars, braces, line blanks, line caps, electrical disconnect switches, programmable logic controllers, blocks).

#### RESPONSIBILITY

#### Employer will:

- Establish a process for evaluating work operations, machinery and equipment to determine where lockout/tagout procedures, devices and training are needed
- Develop and maintain a written lockout/tagout program that includes a lockout system
- Develop and maintain specific lockout/tagout-related safe working procedures, where necessary, in compliance with occupational health and safety legislation, this policy and associated guidelines
- Ensure all existing equipment and machinery has the capability for lockout, de-energizing or isolation from all sources of energy, including stored energy or materials
- Provide and maintain necessary equipment to enable lockout/tagout of equipment or machinery, where necessary
- Ensure that new equipment or machinery is designed and installed in a manner that provides the capability for lockout, de-energizing or isolation from all sources of energy, including stored energy or materials
- Provide general and specific training to workers who work on machinery or equipment under conditions requiring lockout/tagout provisions
- Ensure that work is performed in compliance with the Occupational Health and Safety Act and applicable regulations and industry standards

#### Manager will:

- Be familiar with all aspects of the lockout/tagout program
- Evaluate work operations, machinery and equipment to determine where lockout/tagout procedures, devices and training are needed
- Ensure that the requirements of the program and related elements of the Occupational Health and Safety Act and regulations, and applicable industry standards, are applied at all times
- Ensure that all employees under their supervision who work on machinery or equipment are competent to do assigned work, are provided with written instructions and training (where required), and are authorized to perform the lockout procedure
- Conduct appropriate inspections to ensure procedures are followed and, when violations are found, take appropriate action
- Maintain a record or training and a list of equipment or locations with specific lockout/tagout procedures

#### Workers will:

- Attend lockout/tagout training and apply knowledge acquired through training in the performance of their work
- Acquire permission to work on equipment that requires a lockout
- Use lockout/tagout devices provided as specified in the procedures

#### PROCEDURE

Control switches, power sources, computer-controlled sources, robotics or other such devices must be personally **locked out and tagged** by an authorized worker and Manager who are involved in the operation or repair.

The initial lock will be placed on by the Manager, Foreman or acting body of authority. This Manager, Foreman or acting body of authority shall only remove the lock after all work is completed and an inspection has been conducted to ensure that all Workers are clear of any danger.

#### Each employee <u>must:</u>

- Use his or her personal lockout/tagout device
- Install his or her personal device only
- Remove his or her personal device only
- Never exchange devices with others

A subsidiary of Federal Signal Corporation

- Each worker's lock must have a tag attached with the following information:
  - a) Worker's name
  - b) Home and work phone number
  - c) Date and time of lockout
- Each worker must retain his or her key while the lock is in place. Only the worker in charge of the lock should have a key.

It is the responsibility of the Manager running the shift transition meeting to ensure the next shift is aware of the active Lockout/Tagout(s) that are currently in place.

In any of the following steps, if more than one individual is required to work on the machine or equipment being repaired, this will require more than one lockout or tagout device. Each person shall place his/her own personal lockout/tagout devices on the energy isolating device.

Multiple lockout/tagout devices are to be used where the energy, isolating device has provisions for more than a single lockout/tagout device.

All company employees must be aware of our prescribed Lockout/Tagout program in order to prevent accidental or inadvertent energization or operation of locked/tagged machines or equipment.

Employees will not attempt to operate any switch{s}, valve{s} or other isolating devices where it is locked/tagged out.

The following steps outline the application and use of lockout/tagout procedures and will apply to all employees involved in the repair and maintenance of machinery or equipment, and <u>must</u> be followed at all times without exception:

#### **STEP 1: Identify Energy Sources**

Identify all energy sources affecting the equipment or machinery. An inventory/survey of all forms of hazardous energy sources must be made to identify various energy forms to determine which switch(s) 1 valve(s) or other energy isolating devices apply to the machinery or equipment that is to be locked out/tagged out. More than one energy source may be involved. The most common forms of energy sources are:

- Electrical
- Pneumatic
- Hydraulic
- Mechanical
- Fluids, gases and chemicals
- Gravity

#### STEP 2: Parts to Be Locked Out or Isolated

Identify systems that affect, or are affected by, the work being performed. These may include primary, secondary, backup, or emergency systems and interlocked remote equipment.

Review the current system for remote energy sources and confirm the existence and location of any switches, power sources, controls, interlocks, or other devices necessary to isolate the system.

Remember that equipment may also be affected by:

- Time restrictions for completing the work
- Time-activated devices

#### **STEP 3: Notify All Affected Employees**

All affected employees must be notified that a lockout/tagout is going to be utilized and the reason. The person authorized to implement the lockout/tagout shall know the type(s) and magnitude(s) of energy that the machine or equipment utilizes and shall understand the hazards. Employees shall request assistance if they are not aware of all energy sources of a machine(s) and all lockout procedures.

#### **STEP 4: Shut Down Equipment and Machinery**

Authorized personnel must shut down the equipment, machinery, or other system components, placing them in a zero-energy state. Trace all systems to locate and lock out energy sources. To isolate or block energy, take the following steps:

#### Electrical

- De-energize electrical circuits by disconnecting the power source from the circuit.
- Unplug machine, use plug lockout or use a disconnect switch with padlock, lockouts and tags.
- Bleed off stored electrical energy to zero state.
- Use a tester to ensure that all circuits are dead.
- Lock and tagout all power sources.

#### **Pneumatic**

- Release pressure to zero energy state.
- Use shut off valves, energy isolation valves, padlocks, lockouts and tags to lockout energy source.

#### **Hydraulic**

- Release pressure to zero energy state.
- Use shut off valves, energy isolation valves, padlocks, lockouts and tags to lockout energy state.

#### Mechanical

- Disconnect or shut down engines or motors that power mechanical systems.
- Release and/or block all stored mechanical energy
- Be aware of gravity, springs, tension and other sources of energy that are not always obvious.
- Use blocks to restrain energy.
- Use padlocks, lockouts, tags to lock and tagout mechanical energy.

#### Fluids, gases and chemicals

- Block fluid (gas, liquid, or vapor) flow in hydraulic, pneumatic, or steam systems by using control valves or by capping or blanking the lines.
- Recognize all hazards.
- Insert a blank or blind in the line.
- Use valve lockouts, padlocks, lockouts and tags at isolating source.

#### **Gravity**

• Block machine parts against motion that might result from gravity (falling).

Some forms of energy must also be dissipated after a system has been de-energized. System components such as electrical capacitors, hydraulic accumulators, or air reservoirs may retain sufficient energy to cause serious injury or death— even though the component has been de-energized, isolated, or blocked from the system and locked out.

#### **STEP 5: Tagging**

Regulation requires each worker involved in a lockout operation to attach a durable tag to his or her personal lock. The tag must identify the worker's name, the worker's employer, the date and time of lockout, the work area involved, and the reason for the lockout.

A tag in itself offers no guarantee that a machine or system is locked out. It simply provides information.

#### STEP 6: Restoration of Machines or Equipment to Normal Operations:

Upon completion of repair or maintenance ensure all tools have been removed, guards have been re-installed

A subsidiary of Federal Signal Corporation

and Manager has checked the area around the machine or equipment to ensure that no one is exposed to the operating parts of the machine or equipment. The Manager will verify if the equipment is back to full and safe operation by cautiously starting the equipment and look for any movement or functions issues or irregularities.

- If none are observed, the worker and Manager will agree that the equipment is safe.
- Remove all lockout and/or tagout devices.
- Re-engage all energy isolating devices to restore energy to the machine or equipment.
- Re-start the equipment back to regular safe function.

The person removing the last lockout device should inform all affected personnel, especially the affected machine operator{s} that lockout has been removed and the machine is operable.

Records of lock outs and verification of the repair or maintenance must be written and kept in the Maintenance Logbook

EXHIBITS:

Lockout Tagout Form

# Policy & Procedure: USP230 Subject: Hot Work Policy

#### PURPOSE

To provide employees with a procedure to follow when conducting hot work, in order to ensure hot work activities are conducted in a safe manner.

#### POLICY

This policy was developed to ensure that the **Hot Work** will be managed and proper actions are taken to prevent loss due to fire caused by **Hot Work** (cutting, soldering & welding, explosion or any other activity that involves an open flame). All affected employees and contractors will receive instruction as to the expectations of them to ensure compliance with this policy.

#### DEFINITIONS

**Hot Work** – any operation that produces flames, sparks or heat that is capable of initiating fires or explosions such as torch heating/cutting, welding, brazing, grinding, etc.

**Fire Watch** – is a person, other than the person conducting the **Hot Work**, and who works alongside the employee who performs hot work, who is designated to maintain a constant vigil for stray sparks, ignition or other fire hazards during the hot work. This could be the person who is working directly beside the person who is conducting the **Hot Work** or a designated person who works with the person conducting he Hot Work.

#### **ROLES AND RESPONSIBILITIES**

The following responsibilities apply:

#### **Employer will:**

- Assess the workplace for any possible fire hazards associated with **Hot Work**
- Prepare a written Hot Work Program which will be reviewed periodically and changed as required
- Take all precautions to eliminate or control all identified Hot Work hazards
- Involve workers in the hazard assessment and control process
- Educate all workers on the hazards and the methods of elimination or control of performing Hot Work
- Ensure all applicable PPE is available to perform Hot Work safely

#### Manager will:

- Ensure Hot Work equipment (gas cylinder, torch, valve, hose, etc.) is in good condition
- Ensure Hot Work operators are trained and are provided the required PPE
- Ensure fire prevention measures have been taken
- Sign off on the Hot Work Permit form

#### **Employees will:**

- Inspect to ensure Hot Work equipment (gas cylinder, torch, valve, hose, etc.) is in good condition
- Use the appropriate PPE for **Hot Work**
- Complete the Hot Work Permit checklist as a fire prevention precautionary measure

#### Fire Watch will:

- Assist Hot Work Operator in preparation and clean-up of Hot Work area
- Assess 35' radius for potential fire hazards
- Be alert to any changes and identify changes or concerns to Hot Work Operator

A subsidiary of Federal Signal Corporation

## Joint Health and Safety Committee (JHSC)/Health and Safety Members will:

- Participate in an annual review of this procedure and make recommendations if necessary
- Observe powered lift trucks operations and report unsafe practices to the appropriate manager
- Review copies of inspection checklists

#### Human Resources will:

- Ensure safe operating procedures are developed, known, understood and used
- Maintain copies of training and evaluation documentation; electronically and in employee files

#### **Contractors will:**

- Report any fire hazards to their designated Company employee
- When **Hot Work** is to be performed by Contract employees the Contractor's Manager will be the requester, sign the **Hot Work Permit form**, and serve as manager for the work. A Company Manager or representative's initials are required to endorse the work and ensure discussion of any special requirements with the Contractor.
- See also Contractor Responsibilities in the Internal Responsibilities Section of this manual

## PROCEDURE

## The **Hot Work** Operator performing **Hot Work**:

- Is responsible for performing a fire prevention hazard assessment by completing the **Hot Work** Permit checklist.
- If any flammable/ combustible materials exist within the Hot Work area, NO Hot Work is permitted until all material is removed
- If any flammable/combustible surfaces exist within 11m (35ft) of the **Hot Work** area, <u>NO</u> Hot Work is permitted until the surfaces are shielded, covered, or barricaded with heat resistance/welding blankets/ curtains or materials
- Obtain an authorization signature from a manager on the checklist is complete, PRIOR to conducting **Hot Work**
- Must inspect the area after the **Hot Work** is completed to identify any potential smoldering fires
- Must periodically monitor the **Hot Work** area for a minimum of 1 hour after the **Hot Work** is complete so any fire risk is able to be assessed

A subsidiary of Federal Signal Corporation

#### FIRE WATCH MONITORING PERIODS

- Noncombustible with any combustibles contained within closed equipment (e.g., ignitable liquid within piping)
- Office, retail or manufacturing with limited combustible loading
- Manufacturing with moderate to significant combustible loading except as noted below
- Warehousing
- Exceptions: Occupancies with processing or having bulk storage of combustible materials capable of supporting slowgrowing fires (e.g., paper, pulp, textile fibers, wood, bark, grain, coal or charcoal)

	13 1						
Construction Factors							
Noncombusti tion, or FM Ap Class 1 or Cla materials		Combustible construction without concealed cavities		Combustible construction with unprotected concealed cavities			
Watch	Monitor	Watch Monitor		Watch	Monitor		
30 minutes	0 hours	1 hour	3 hours	1 hour	5 hours		
1 hour	1 hour	1 hour	3 hours	1 hour	5 hours		
1 hour	2 hours	1 hour	3 hours	1 hour	5 hours		
1 hour	2 hours	1 hour	3 hours	1 hour	5 hours		
1 hour	3 hours	1 hour	3 hours	1 hour	5 hours		

#### COMMUNICATION

Any of the following method(s) may be used to communicate this policy:

- Company email
- Company memo
- Posting of policies and procedures
- Training
- Meetings and Safety talks

#### TRAINING

The Company will ensure that all employees authorized to perform **Hot Work** are trained and educated in performing **Hot Work** and that they are clear about their roles and responsibilities as well as this policy and its procedures.

#### **EVALUATION**

Human Resources collaborate with the Joint Health and Safety Committee, to evaluate the success of the program by reviewing:

- Hot Work Permit
- Accident and incident data

#### **EXHIBITS/FORMS**

Hot Work Permit SWP – Hot Work SWP – Oxy-Fuel Application Safety SWP – Connecting and Adjusting Gas Supply .

WARNIN	G - HOT	- WC	DR			<b>RO</b>	GR	ESS!	
This Hot Work Permit is required for any temporary operation involving open flames or producing heat and/or sparks, conducted outside a Hot Work Designated Area. This includes, but is not limited to brazing, cutting, grinding, soldering, torch-applied roofing, and welding.									
HOT WORK PERFO			-	Date			Time	9	
HOT WORK LOCATION	VEHICLE #	HOT W	/ORK	DESC	RIPTIC	ON	I		
NAME OF PERSON	PERFORMIN	NG FIRE	E WA	TCH:	:				
I verify the above location h		, the requir orized for t	-		s have b	een ta	ken, and	d permissio	on is
NAN	1E OF PERSO	ON AUT	THOF	RIZIN	g pef	RMIT	-		
Print:		Si	ign:						
THIS P DATE:	ERMIT EXPIRES	ON (LIM	IT PEF		O ONE	SHIFT	Г)		
Hot Work Start Time:		Hot Wo		<b>_</b>					
AM PM ***THIS LOCATION WIL					DECALL			TAVENT	0
		ON OR INJ	URY/I	LLNESS					U
	INITIAL CHECK         CUMBUSTIBLES IN AREAR ARE CLEARED, SHEILDED, OR ISOLATED       YES						0		
AND ARE KEPT 35FT AWAY FROM THE WORK AREA									
WALL/FLOOR/ELECTRICAL COVERINGS IN PLACE?					0				
FLOOR AREAS ARE CLEAN?				<u> </u>	/ES	<b>N</b>	0		
FIRE EXTINGUISHER IS AVAILBLE?					0				
PORTABLE EXHAUST EXTRACTOR AVAILABLE?					<u>۱</u>	/ES	<b>N</b>	0	
WELDING CURTAINS ARE AVAILABLE?				<u>۱</u>	/ES	<b>N</b>	0		
REQUIRED PERSONAL PR	REQUIRED PERSONAL PROTECTIVE EQUIPMENT AVAILABLE?				<u>۱</u>	/ES	<b>N</b>	0	
EQUIPMENT HAS BEEN INSPECTED AND IS IN GOOD REPAIR?				<u>۱</u>	/ES	<b>N</b>	0		
*** If "NO" is answered in any question, special precautions <u>must</u> be taken! Please report to your Manager o Team Lead for assistance as necessary.					ger or				
Special Precautions to be	e taken:								
	WARNING H			PRO	GRESS				
		IRE WA							
1-hour post-work fire watc	h check		Perm	nit Hold	ler Signa	ature:			
2-hour post-work fire watch	h check		Permit Holder Signature:						
Final post-work check. Enter Time:				Supervisor/Manager Signature:					
	In case of emergency, call 911								

# Policy & Procedure: P231 Subject: Respirator Protection Program

# PURPOSE

To provide employees guidelines for respirator use in the workplace and comply with the Occupational Health and Safety Act and applicable regulations.

#### POLICY

The Company is committed to taking every reasonable precaution to ensure the protection of workers from exposure to airborne hazardous substances while working. The company will do this by substitution of the hazardous agent; using engineering and administrative controls, including work practices, and providing personal protective equipment. Where the company cannot limit or eliminate employee exposure, a respirator will be provided.

Respirators must only be used in accordance with the manufacturer's instructions. Employees will not be assigned to an operation that requires the use of a respirator unless they can physically perform the operation while using the respirator and have received the appropriate training.

A respirator that is designed to be tight fitting must be tested by the employee for fit using either a qualitative or quantitative fit test. Employees must conduct a positive and negative pressure user seal check before each use of a tight-fitting elastomeric respirator. Tight-fitting respirators must not be provided to or used by an employee with facial hair that interferes with the functioning of the respirator.

An employee may request the Company to provide a respirator if they are concerned about possible exposure to an airborne designated substance or a hazardous biological or chemical agent.

In addition to this written program, the following may be helpful for implementation and administration:

- A copy of the OSHA Respiratory Protection Standard 29 CFR 1910.134
- The NIOSH Guide to Industrial Respiratory Protection DHHS (NIOSH) Publication 87-116, September 1, 1987 The NIOSH Respirator Decision Logic DHHS (NIOSH) Publication 87-108, May 1987
- The federal OSHA website: www.osha.gov
- The NIOSH website: <u>www.cdc.gov/niosh/homepage.html</u>
- The NIOSH respirator documents on their website: <u>www.cdc.gov/niosh/respinfo.html</u>

#### DEFINITIONS

**Airline respirator** - A respirator and air supply hose with a hood or helmet, a tight-fitting facepiece, or a loose-fitting facepiece or visor, that is supplied with compressed breathing air from a compressed breathing air system

**Air-purifying respirator** - A respirator with an air-purifying filter, cartridge, or canister that removes specific air contaminants by passing ambient air through the air-purifying element

**Assigned protection factor** - The anticipated level of respiratory protection that would be provided by a properly functioning respirator or class of respirators to properly fitted and trained users

**Fit Test** - A fit test is a test protocol conducted to verify that a respirator is both comfortable and provides the wearer with the expected protection. Fit testing uses a test agent, either **qualitatively** detected by the wearer's sense of taste, smell, or involuntary cough (irritant smoke) or **quantitatively** measured by an instrument, to verify the respirator's fit.

**IDLH atmosphere** - An atmosphere that poses an immediate threat to life or that will cause irreversible adverse health effects or impair a worker's ability to escape from the environment

A subsidiary of Federal Signal Corporation

**Maximum use concentration** - The maximum concentration of an airborne designated substance that a respirator can be expected to protect a worker using the respirator from

**NIOSH** - is an acronym for the National Institute for Occupational Health and Safety which is responsible for conducting research and making recommendations for the prevention of work-related illnesses and injuries. The NIOSH website can be viewed at <a href="http://www.cdc.gov/niosh/">http://www.cdc.gov/niosh/</a>

**Powered air-purifying respirator** - An air-purifying respirator that by means of a powered blower worn by the user passes ambient air through an air-purifying element and then supplies purified air to a helmet, hood, facepiece, or visor worn by the user

**PLHCP** - <u>P</u>hysician or other <u>L</u>icensed <u>H</u>ealth <u>C</u>are <u>P</u>rofessional - OSHA requires that the PLHCP (the acronym includes the physician) must be legally permitted by his or her professional license to conduct the type of medical evaluation required by the respiratory standard.

**Qualitative Fit Test (QLFT)** - is a pass/fail test method that relies on the subject's sensory response to detect a challenge agent in order to assess the adequacy of respirator fit (Canada Standards Association)

**Quantitative Fit Test (QNFT)** - is a test method that uses an instrument to assess the amount of leakage into the respirator in order to assess the adequacy of respirator fit (Canada Standards Association)

## **ROLES AND RESPONSIBILITIES**

The following responsibilities apply:

#### **Employer will:**

- Employees who may be exposed to airborne designated substances or hazardous biological or chemical agents are provided with a respirator
- The respirator used is appropriate in the circumstances for the form and concentration of airborne designated substances or hazardous biological or chemical agents
- The requirements for respirators are met
- Employees know where to find respirators during an emergency
- The respirator is used appropriately by employees
- Written measures and procedures are established for the selection, care, and use of respirators
- Employees are trained and instructed on how to care for and use respirators before use; and
- The details of the respirator type selected, and the anticipated working conditions are provided to a health care professional conducting a medical assessment of an employee who was exposed to a designated substance or a hazardous biological or chemical agent while using a respirator

#### Manager will:

- Make sure that health screening, fit testing and training are completed before allowing any worker to use a respirator
- Make sure all respirators are clean, sanitized, inspected, maintained, repaired and stored according to manufacturer's specifications
- Make sure respirators are used as per instructions, training received and safe operating procedures within the workplace
- Make sure respirator users maintain a clean-shaven face, free from any object or material that would interfere with the seal or operation of a tight-fitting face piece
- Provide the details of the respirator type selected and the anticipated working conditions to the health care professional who will conduct a medical assessment of the respirator user
- Notify the program administrator of respirator users' concerns, changes in processes, equipment or
  operating procedures which can impact environmental conditions and respiratory protection
  requirements
- Notify the program administrator of investigation reports which reveal that the use of the respirator may have prevented or contributed to an incident or injury (Canada Standards Association)

#### **Employees will:**

- Understand and follow all safe work procedures
- Always use respirators as instructed
- Follow the manufacturer's instruction carefully and understand the limitation of the respirator being used
- Inspect their respirator before each use
- Report any equipment malfunction immediately to the supervisor
- Properly clean, maintain and store respirators
- Report any symptoms related to exposure and respirator use immediately
- Report unsafe conditions
- Notify a supervisor if any concerns arise about using the respirator

#### Joint Health and Safety Committee (JHSC)/Safety Members will:

• Participate in the review and updates of the respiratory protection program

#### Program Administrator will:

- Will be trained in the Respiratory Protection program
- Conduct required evaluations of the program effectiveness
- Ensure that the program is understood and followed by the employees
- Ensure that all employees (including new hires) receive appropriate training, fit testing
- Ensure the availability of appropriate respirators, sufficient supplies (e.g., filters, chemical cartridges, canisters, cleaning and disinfecting solutions) and respirator spare parts
- Ensure that respirators are properly cleaned, maintained, and stored according to the respiratory protection program
- Monitor respirator use to ensure that respirators are used in accordance with their certifications
- Maintain respiratory fit testing records

#### Fit Tester will:

- Be qualified through experience and training to conduct accurate and appropriate fit tests for the respirators selected for use in the workplace
- Create and maintain fit test records in accordance with written instructions
- Create and maintain fit test records of the equipment maintenance, calibration and repair (Canada Standards Association)

#### **RESPIRATOR REQUIREMENTS**

Respirators must be CSA- or NIOSH-approved, and they must meet or exceed the applicable assigned protection factor for respirators set out in applicable legislation.

Respirators will be selected based on the following criteria:

- The airborne concentration of the designated substance or hazardous biological or chemical agent that the employee is exposed to and the maximum use concentration of the respirator;
- The manufacturer's information on the intended use, scope, and limitations of the respirator;
- The potential for an atmosphere with an oxygen concentration of less than 19.5 percent, an IDLH atmosphere, or oil in the atmosphere;
- If used to protect an employee from asbestos, having a HEPA filter or a N-100, R-100, or P-100 particulate filter; and
- If an airline respirator is used in an IDLH atmosphere, it must be fitted with an auxiliary supply of breathing air that allows the employee to escape unassisted from the atmosphere.
- See Appendix D Respirator Use Requirements Flow Chart

#### SELECTION OF RESPIRATORS

• The designated Competent Person will evaluate jobs and tasks and select respirators for all affected jobs as indicated in this section

A subsidiary of Federal Signal Corporation

- Respirators shall be selected based on the hazards present and used only in conditions which are not oxygen deficient or immediately dangerous to life or health (IDLH) (2)
- The assigned protection factors from NIOSH(3) will be used, as indicated in the table "Assigned Protection Factors" in the **Appendix A**
- Each job or task shall be evaluated to determine if respirator use is required.

For those jobs requiring respirator use, a respirator evaluation will be made that documents:

- The specific chemical creating the air contamination, and its physical form as either a particulate (dust, fume, mist) or vapor/gas
- A reasonable estimate of the employee's exposure
- The appropriate exposure limit
- The protection factor which the respirator must meet to provide for employee protection

Respirators will not be approved for, and employees will not be authorized to enter, atmospheres that are oxygen deficient or contain contaminant levels that are immediately dangerous to life or health

• In addition, facial fit and worker comfort will be taken into consideration

#### HAZARD ASSESSMENT

When selecting respiratory protective equipment, the following hazard assessment must be completed to properly select an appropriate respirator:

- Identify what contaminant(s) may be present in the workplace
- Identify the physical states of all airborne contaminant(s)
- Estimate or measure the concentration level of the contaminant(s)
- Establish the oxygen concentration level
- Identify the Occupational Exposure Limit (OEL) for the contaminant(s)
- Determine if an IDLH atmosphere is present
- Determine what is the potential for oil to become airborne
- Identify If skin or eye absorption, or skin irritation may occur
- Identify if conditions have the potential to be immediately dangerous to an employee's life or health
- Determine if a known odor, taste or irritation concentration exists.

ADDITIONAL PROVISIONS FOR RESPIRATOR USE IN IDLH ATMOSPHERES See Appendix B.

NO EMPLOYEE OF the Company is authorized to enter an atmosphere or take part in any situation that would be a known or expected IDLH (Immediately Dangerous to Life and Health) situation. If such a condition is occurring, due to an unforeseen emergency situation, employees are to evacuate the area or facilities and call 911.

#### **TYPE OF RESPIRATOR**

The following types of respiratory protective equipment are available for use by Joe Johnson Equipment employees:

- Atmosphere-Supplying Respirators
- Air-Purifying Respirators
- Non-Powered Air-Purifying Respirators
- Powered Air-Purifying Respirators
- Gas Masks
- Special-Use Respirators

#### **USE OF RESPIRATOR**

The Company will develop specific written operating procedures for the use of respirators and ensure they are accessible to employees during their work shift.

Standard requirements for respirator users are:

A subsidiary of Federal Signal Corporation

- Any employee having any condition that interferes with the face to face-piece seal, including any facial hair that comes between the sealing surface of the face-piece and the face, is prohibited from wearing a respirator
- Any employee having any condition that interferes with valve function, including facial hair, is prohibited from wearing a respirator
- All personal protective equipment including corrective glasses or goggles must be worn in a manner that does not interfere with the seal of the face-piece to the face of the employee
- Employees shall perform a user seal check each time they put on a tight fitting respirator
- Supervisors shall monitor all employees using respirators for the degree of employee exposure and stress. Whenever there is a change in working conditions which will affect respirator effectiveness, the user of respirators will be re-evaluated
- In order to prevent eye or skin irritation associated with respirator use, employees shall leave the work area to wash their faces and respirators face-pieces
- If employees detect vapor or gas breakthrough, changes in breathing resistance, they shall leave the work area to replace the filters or cartridges
- If employee detects leakage of the face-piece, they shall leave the work area and only re-enter it with the properly working respirator
- If the employee detects vapor or gas breakthrough, changes in breathing resistance, or leakage of the face-piece, the respirator must be repaired or replaced before the employee can return to the work area
- If the respirator end of service life indicator (ESLI) indicates the need to change the filter or cartridge, employees will leave the work area to replace it
- If it is time for changing the canister or cartridge according to the canister change schedule, employees will leave the work area to replace it

# (Mandatory) Information for Employees Using Respirators when not Required under OSHA Regulations (Standards - 29 CFR)- 1910.134

Respirators are an effective method of protection against designated hazards when properly selected and worn. Respirator use is encouraged, even when exposures are below the exposure limit, to provide an additional level of comfort and protection for workers. However, if a respirator is used improperly or not kept clean, the respirator itself can become a hazard to the worker. Sometimes, workers may wear respirators to avoid exposures to hazards, even if the amount of hazardous substance does not exceed the limits set by OSHA standards.

If your employer provides respirators for your voluntary use, or if you provide your own respirator, you need to take certain precautions to be sure that the respirator itself does not present a hazard.

You should do the following:

- 1. Read and heed all instructions provided by the manufacturer on use, maintenance, cleaning and care, and warnings regarding the respirators limitations
- Choose respirators certified for use to protect against the contaminant of concern. NIOSH, the National Institute for Occupational Safety and Health of the U.S. Department of Health and Human Services, certifies respirators. A label or statement of certification should appear on the respirator or respirator packaging. It will tell you what the respirator is designed for and how much it will protect you
- 3. Do not wear your respirator into atmospheres containing contaminants for which your respirator is not designed to protect against. For example, a respirator designed to filter dust particles will not protect you against gases, vapors, or very small solid particles of fumes or smoke
- 4. Keep track of your respirator so that you do not mistakenly use someone else's respirator

#### MAITENANCE AND CARE OF RESPIRATORS

A subsidiary of Federal Signal Corporation

- The Supervisor employee is responsible for ensuring that respirators are cleaned, disinfected, stored, inspected and repaired
- Employees with defective respirators should take them to the Supervisor for inspection and repair, or for issuing a new respirator
- Employees will be provided with respirators that are clean, sanitary and in good working order
- Respirators issued to individual employees will be cleaned and disinfected as often as necessary to remain in a sanitary condition. This will be in according to the procedure described by the manufacturer or the procedure described in the **Appendix C** section on Respirator Cleaning
- Respirators used in fit testing, and respirators used **by more than one employee** will be cleaned and disinfected before being worn by different people. This will be according to the procedure described by the manufacturer or the procedure in the **Appendix C** section on Respirator Cleaning
- Respirators will be stored to protect them from damage, contamination, sunlight, extreme temperatures, excessive moisture, and damaging chemicals
- Respirators will be packed or stored to prevent deformation of the face-piece and exhalation valve
- Employees will inspect their respirators before each use and during cleaning. If any defect is found the respirator will be immediately removed from service and either discarded or repaired prior to use. Inspections will include:
  - A check of respirator function
  - A test of the tightness of connections
  - A visual inspection of the conditions of various parts including the face-piece, head straps, valves, connecting tube and cartridges, canisters or filters, and any other part that may affect the performance of the respirator
  - A check of elastomeric parts for pliability and signs of deterioration
  - A check that the label and color coding indicated NIOSH approval is not removed and remains legible on all filters, cartridges and canisters
- Repairs or adjustment to respirators will be made only by people appropriately trained to perform such operations
- Repairs or adjustments will only use the respirator manufacturer's NIOSH approved parts designed for the respirator
- Repairs to respirators will be made only according to the manufacturer's recommendations and specifications for the type and extent of repairs to be made
- Reducing and admission valves, regulators and alarms shall be adjusted or repaired only by the manufacturer of a technician trained by the manufacturer

Maintenance of Respirator:

- Employee must be qualified through training and experience to inspect, maintain and repair respirators in accordance with the manufacturer's specifications
- Respirators must be inspected, maintained and repaired as necessary
- All maintenance tools are maintained in good condition and properly calibrated
- An accurate record of maintenance and repair must be created and maintained
- Respirators must be cleaned and inspected after each use, in accordance with manufacturer's instructions. The inspection must include a check of the tightness of connections and the condition of the face-piece, headbands, valves, connecting tube, and canisters. Rubber or elastic parts must be inspected for pliability and signs of deterioration
- Respirators must be sanitized after use and are strictly prohibited from being used or shared among workers
- The Company shall replace cartridges and canisters before the end of their service life.
- Respirators for emergency use must be inspected at least once a month, and after each use, to assure that they are in satisfactory working condition. A record must be kept of such inspection dates and findings
- Worn or deteriorated parts will be replaced immediately and in accordance with the manufacturer's specifications
- Respirators and respirator equipment must be stored in a ready-to-use condition and in a sanitary, dry and easily accessible location when not in use

## **FIT TESTING**

#### **General Guidelines**

- The designate Competent Person is responsible for fit testing employees.
- Prior to initial use, and annually thereafter all employees assigned respirators will be fit tested using
  one of the methods described in the section on fit testing appropriate for the type of respirator used
- <u>Quantitative fit testing</u> procedures (actually measuring the reduction in exposure from the respirator) must be used for all tight fitting facepieces requiring fit factors greater than 100. Qualitative fit testing procedures (using either irritant smoke, isoamyl acetate, saccharine or Bitrex) can be used for fit testing tight fitting facepieces with fit factors of 100 or less
- The record of the most recent fit test will be maintained in the employees respirator program file (a sample form should contain:
  - The name of the employee tested
  - The type of fit test performed
  - The specific make, model, style and size of respirator tested
  - The date of the test
  - The pass/fail results for qualitative fit tests (or the fit factor and strip chart recording or other recording of the test results for quantitative fit testing
- Additional fit testing will be conducted whenever visual observations of changes in the employee's
  physical condition which could affect respirator fit are indicated. This could include facial scarring,
  dental changes, cosmetic surgery or an obvious change in body weight, and could be reported by
  either:
  - o The employee
  - The health care provider (PLHCP)
  - o The supervisor
  - The program administrator

#### **Quantitative Fit Test**

Quantitative fit tests involve the measurement of respirator leakage by monitoring leakage inside the respirator face piece with an instrument. These instruments can be purchased or rented from health and safety equipment suppliers and there are three types available:

- Generated Aerosol Photometer
- Particle-Counting Instrument
- Controlled Negative Pressure

These tests do not depend on the wearer's sense of smell or taste and tend to be more accurate than qualitative methods. With the nature of the equipment used being more sophisticated, the fit tester will require a higher level of training to conduct the above tests.

#### **Qualitative Fit Test**

The types of qualitative fit tests include:

- Odorous Chemical Types rely on the wearer's ability to smell the test agent.
- Tests that rely on the wearer's ability to taste the test agent (Bitrextrade and saccharin).
- Irritant Smoke Test relies on the wearer's ability to sense irritation of the nose and throat.

#### TRAINING

The Company will ensure that all employees who are required to use a respiratory protection devise are trained and educated and that they are clear about their roles and responsibilities as well as this policy and its procedures. As a best practice, and at the recommendation of CSA, the Company shall provide refresher training at a minimum of every two (2) years.

- Employees who are expected to use respirators will be trained:
  - Prior to initial use

A subsidiary of Federal Signal Corporation

- o Annually
- When changes in the workplace or the type of respirator require additional training
- When the employee has not retained the required understanding or skill as indicated by inadequacies in the employee's knowledge or use of the respirator
- Whenever any other situation arises which indicates that additional training is necessary to ensure the safe use of respirators
- The training will be understandable to the employee, provided at no cost to the employee, and be comprehensive
- Training on hazards of chemicals will be done according to the chemical hazard communication program (complying with 29 CFR 1910.1200).
- Employees will be trained on the proper use of respirators, including putting them on and removing them, any limitations on their use and maintenance and any other knowledge required for them to complete their task as assigned in this program.
- Employees will be trained until they can demonstrate their knowledge of all of the following:
  - Why respirator is necessary
  - How improper fit, usage, or maintenance can compromise the protective effect of the respirator
  - The limitations and capabilities of the respirator
  - How to use the respirator effectively in emergency situations including situations in which the respirator malfunctions
  - How to inspect, put on and remove, use and check the seals of the respirator
  - $\circ$  ~ The procedures for maintenance and storage of the respirator
  - How to recognize medical signs and symptoms that may limit or prevent the effective use of respirators
  - o The general requirements of this program and the OSHA respiratory protection standard

#### COMMUNICATION

Any of the following method(s) may be used to communicate this policy:

- Company email
- Company memo
- Posting of policies and procedures
- Training
- Meetings and Safety talks

#### **EVALUATION**

An evaluation of the health and safety orientation program will be performed by the Program Administrator to determine if all applicable staff have been trained, if there are any weaknesses in the program or if organizational changes in the company require amendments.

Employees who use respirators will be consulted to determine their views on program effectiveness and any problems with the program. The respiratory protection program administrator will ensure that all problems identified during the assessment are corrected.

Initial factors to be assessed during each evaluation include:

- Respirator fit, including the ability to use the respirator without interfering with effective workplace performance
- Appropriate respirator selection for the hazards to which the employee is exposed
- Proper respirator use under workplace conditions the employee encounters; and
- Proper respirator maintenance

#### **RECORD KEEPING**

- The specific record-keeping requirements for medical records and fit test records are incorporated into those sections of this program
- The current copy of this written program will be maintained in the Service Manager's office and on the Company's intranet public documents drive

A subsidiary of Federal Signal Corporation

• This program, and all of the required elements of it, will be provided to the U.S. Department of Labor (OSHA) for examination and copying at their request as required by 29 CFR 1910.134(m)(4).

#### **EXHIBITS/FORMS**

Respiratory Fit-Testing Form SWP Respiratory Fit Testing OSHA Respirator Medical Evaluation Questionnaire (Mandatory) Appendix A – Protection Factors Appendix B – Addition Provisions for Respirator use in IDLH atmospheres Appendix C – Respirator Cleaning Appendix D – Respirator Use -Requirements Flow Chart Appendix E - (Mandatory) Information for Employees Using Respirators When Not Required Under the Standard

#### **Appendix A – Protection Factors**

**Assigned Protection Factors (APFs)** Employers must use the assigned protection factors listed in Table 1 to select a respirator that meets or exceeds the required level of employee protection. When using a combination respirator (e.g., airline respirators with an air-purifying filter), employers must ensure that the assigned protection factor is appropriate to the mode of operation in which the respirator is being used.

#### Table 1. -- Assigned Protection Factors<sup>5</sup>

Type of respirator <sup>1</sup> , <sup>2</sup>	Quarter mask	Half mask	Full facepiece	Helmet/ hood	Loose-fitting facepiece
1. Air-Purifying Respirator	5	<sup>3</sup> 10	50		
2. Powered Air-Purifying Respirator (PAPR)		50	1,000	<sup>4</sup> 25/1,000	25
<ul> <li>3. Supplied-Air Respirator (SAR) or Airline Respirator</li> <li>Demand mode</li> <li>Continuous flow mode</li> <li>Pressure-demand or other positive-pressure mode</li> </ul>		50	50 1,000 1,000	<sup>4</sup> 25/1,000	25
<ul> <li>4. Self-Contained Breathing Apparatus (SCBA)</li> <li>Demand mode</li> <li>Pressure-demand or other positive-pressure mode (e.g., open/closed circuit)</li> </ul>				50 10,000	

#### Notes:

- 1. Employers may select respirators assigned for use in higher workplace concentrations of a hazardous substance for use at lower concentrations of that substance, or when required respirator use is independent of concentration.
- 2. The assigned protection factors in Table 1 are only effective when the employer implements a continuing, effective respirator program as required by this section (29 CFR 1910.134), including training, fit testing, maintenance, and use requirements.
- 3. This APF category includes filtering facepieces, and half masks with elastomeric facepieces.
- 4. The employer must have evidence provided by the respirator manufacturer that testing of these respirators demonstrates performance at a level of protection of 1,000 or greater to receive an APF of 1,000. This level of performance can best be demonstrated by performing a WPF or SWPF study or equivalent testing. Absent such testing, all other PAPRs and SARs with helmets/hoods are to be treated as loose-fitting facepiece respirators, and receive an APF of 25.
- 5. These APFs do not apply to respirators used solely for escape. For escape respirators used in association with specific substances covered by 29 CFR 1910 subpart Z, employers must refer to the appropriate substance-specific standards in that subpart. Escape respirators for other IDLH atmospheres are specified by 29 CFR 1910.134 (d)(2)(ii).

#### Appendix B - ADDITIONAL PROVISIONS FOR RESPIRATOR USE IN IDLH ATMOSPHERES

A subsidiary of Federal Signal Corporation

Only the following respirators will be used in atmosphere that are or may become immediately dangerous to life or health (IDLH):

- A self contained breathing apparatus (SCBA) with a full-face-piece operated in pressure demand mode with a minimum service life of thirty (30) minutes; or
- A supplied air respirator (SAR) with a full face-piece operated in pressure demand mode in combination with an auxiliary self-contained air supply

# IDLH procedures includes as a minimum:

- 1. One employee or, when needed, more than one employee is located outside the IDLH atmosphere
- 2. Visual, voice or signal line communication is maintained between the employee(s) in the IDLH atmosphere and the employee(s) located outside the IDLH atmosphere
- 3. The employee(s) located outside the IDLH atmosphere are trained and equipped to provide effective emergency rescue
- 4. The Safety Manager (as the employer's designee) is to be notified by any employee before the employee located outside the IDLH atmosphere enter the IDLH atmosphere to provide emergency rescue
- 5. Employee(s) located outside the IDLH atmosphere are to be equipped with:
  - a. Pressure demand or other positive pressure SCBA's, or a pressure demand or other positive pressure supplied air respirator (SAR) with auxiliary SCBA; and either
  - b. Appropriate retrieval equipment for removing the employee(s) who enter(s) these hazardous atmosphere where retrieval equipment would contribute to the rescue of the employees and would not increase the overall risk from entry; or
  - c. Equivalent means for rescue where retrieval equipment is not required

## **Appendix C – Respirator Cleaning**

These procedures are provided for employer use when cleaning respirators. They are general in nature, and the employer as an alternative may use the cleaning recommendations provided by the manufacturer of the respirators used by their employees, provided such procedures are as effective as those listed here in Appendix C.

#### I. Procedures for Cleaning Respirators

A. Remove filters, cartridges, or canisters. Disassemble facepieces by removing speaking diaphragms, demand and pressure- demand valve assemblies, hoses, or any components recommended by the manufacturer. Discard or repair any defective parts.

B. Wash components in warm (43 deg. C [110 deg. F] maximum) water with a mild detergent or with a cleaner recommended by the manufacturer. A stiff bristle (not wire) brush may be used to facilitate the removal of dirt.

C. Rinse components thoroughly in clean, warm (43 deg. C [110 deg. F] maximum), preferably running water. Drain.

D. When the cleaner used does not contain a disinfecting agent, respirator components should be immersed for two minutes in one of the following:

- Hypochlorite solution (50 ppm of chlorine) made by adding approximately one milliliter of laundry bleach to one liter of water at 43 deg. C (110 deg. F); or,
- Aqueous solution of iodine (50 ppm iodine) made by adding approximately 0.8 milliliters of tincture of iodine (6-8 grams ammonium and/or potassium iodide/100 cc of 45% alcohol) to one liter of water at 43 deg. C (110 deg. F); or,

• Other commercially available cleansers of equivalent disinfectant quality when used as directed, if their use is recommended or approved by the respirator manufacturer.

E. Rinse components thoroughly in clean, warm (43 deg. C [110 deg. F] maximum), preferably running water. Drain. The importance of thorough rinsing cannot be overemphasized. Detergents or disinfectants that dry on facepieces may result in dermatitis. In addition, some disinfectants may cause deterioration of rubber or corrosion of metal parts if not completely removed.

F. Components should be hand-dried with a clean lint-free cloth or air-dried.

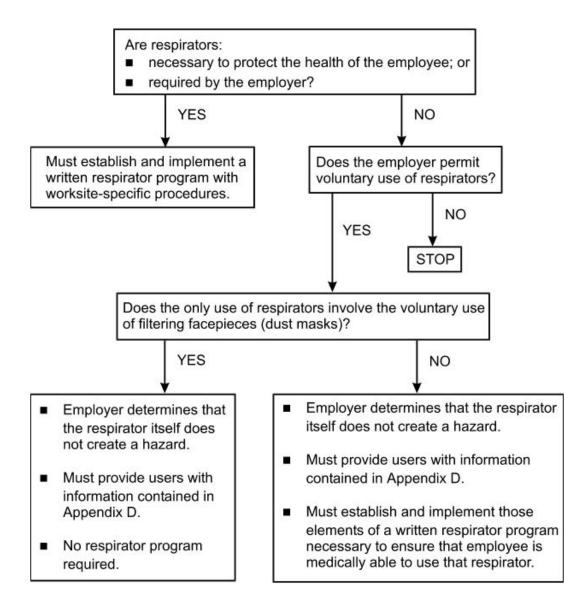
G. Reassemble facepiece, replacing filters, cartridges, and canisters where necessary.

H. Test the respirator to ensure that all components work properly.

[63 FR 1152, Jan. 8, 1998]

# Appendix D

# Respirator-Use Requirements Flow Chart 29 CFR 1910.134(c)



# Appendix E - (Mandatory) Information for Employees Using Respirators When Not Required Under the Standard

1. Respirators are an effective method of protection against designated hazards when properly selected and worn. Respirator use is encouraged, even when exposures are below the exposure limit, to provide an additional level of comfort and protection for workers. However, if a respirator is used improperly or not kept clean, the respirator itself can become a hazard to the worker. Sometimes, workers may wear respirators to avoid exposures to hazards, even if the amount of hazardous substance does not exceed the limits set by OSHA standards. If your employer provides respirators for

your voluntary use, or if you provide your own respirator, you need to take certain precautions to be sure that the respirator itself does not present a hazard.

- 2. You should do the following:
- Read and heed all instructions provided by the manufacturer on use, maintenance, cleaning and care, and warnings regarding the respirator's limitations.
- Choose respirators certified for use to protect against the contaminant of concern. NIOSH, the National Institute for Occupational Safety and Health of the U.S. Department of Health and Human Services, certifies respirators. A label or statement of certification should appear on the respirator or respirator packaging. It will tell you what the respirator is designed for and how much it will protect you.
- Do not wear your respirator into atmospheres containing contaminants for which your respirator is not designed to protect against. For example, a respirator designed to filter dust particles will not protect you against gases, vapors, or very small solid particles of fumes or smoke.
- Keep track of your respirator so that you do not mistakenly use someone else's respirator.

# Policy & Procedure: USP214 Subject: Spill Prevention and Response

#### PURPOSE

To provide employees with guidelines for spill prevention and spill response. Responding to chemical spills can lead to severe illness and injuries, and environmental damages when not approached properly. The purpose of this policy is to establish requirements and a procedure to respond to a workplace chemical spill in an effective and safe manner.

#### POLICY

The Company is committed to the prevention of chemical spills in its operation. If a spill were to occur the Company will ensure the proper response is taken to mitigate any associated risks as well as to follow all legislative measures.

There shall be a minimum of two employees at each branch trained in spill response and will comprise the "Spill Response Team" (SRT), one of which shall be in a management position. Only the Spill Response Team shall respond to and attempt the clean-up of a chemical spill.

**Clean up is only permitted when the chemical is known.** Government Emergency Response must be contacted to remove any unknown chemical spills.

The safety the Company's employees is our first priority – DO NOT put yourself or others at risk.

Each Company premise should have at least two (2) spill kits on site.

#### DEFINITIONS

Chemical – Any substance used in, or obtained by a chemical process

**Hazardous Material** – Any substance or material that could adversely affect the safety of the public, handlers, and/or environment

**Pollutant** – A substance or condition that contaminates air, water, or soil. **Pollutants** can be artificial substances, such as pesticides and PCBs, or naturally occurring substances, such as oil or carbon dioxide, that occur in harmful concentrations in a given environment.

**Reportable Spill** – Reportable spill is defined as a release of a pollutant that is likely to be an imminent environmental or human health hazard. It must be reported.

Small Spill – A spill of up to 300 ml of material; considered a low-risk spill

Medium Spill – A spill of 300 mL-5L of material; considered a moderate to high-risk spill

Large Spill – A spill greater than 5L; considered a high-risk spill

**SDS** – Safety Data Sheet is a summary document that provides information about the hazards of a product and advice about safety precautions. SDSs are usually written by the manufacturer or supplier of the product

#### PREVENTION

#### **ROLES AND RESPONSIBILITIES**

The following responsibilities apply:

#### **Employer will:**

• Assess the workplace for any possible hazards associated with spills

A subsidiary of Federal Signal Corporation

- Prepare a written hazard assessment which will be reviewed periodically and changed as required
- Take all precautions to eliminate or control all identified hazards
- Involve workers in the hazard assessment and control process
- Educate all workers on the hazards and the methods of elimination or control

#### Spill Response Team (SRT) will:

- Take all necessary precaution to protect themselves and other worker's health and safety
- Participate in all training
- Provide consultation and assistance in the management of spills when requested
- Ensure that appropriate spill response materials and personal protective equipment are available and accessible
- Ensure that all spills or incidents involving hazardous materials are reported to the branch Health and Safety Committee and to HR by submitting a Spill Response Report (Form F214.1)

#### Managers will:

- Take all precautions to eliminate or control all identified hazards
- Report all hazards and spills
- Notify the SRT and First Aid Responders to attend a spill site
- Contact the Government Emergency Spill Response department (refer to Reporting section in this policy for details)
- Participate in completing the Spill Response Report form with the SRT

#### Employees will:

- Take all necessary precaution to protect themselves and other worker's health and safety
- Participate in all training
- Report any hazards or spills

#### Joint Health and Safety Committee (JHSC)/Health and Safety Members will:

• Inspect the kit containers and contents monthly at the time of the departmental inspections (verify proper WHMIS and workplace labels are affixed to containers)

#### Human Resources will:

- Provide a Spill Response policy
- Training Spill Response Team members and Managers on Spill Response procedures, and hazard identification
- Maintain copies of training documentation; electronically and in employee files
- Participate in the incident reporting procedure
- Track and analyze incidents for trending and prevention initiatives

#### Visitors & General Public will:

• Report any hazards or spills to their designated Company employee

#### **INSPECTIONS**

• Spill kit containers and contents will be inspected monthly at the time of the workplace inspections.

#### STORAGE HANDLING

• The Company will ensure that all substances are stored in a safe location in compliance with all legislation and manufacturer's specifications

A subsidiary of Federal Signal Corporation

• The Company will ensure all substances are handled appropriately according to all health and safety guidelines and best practices

#### KITS

- Spill response materials or spill kits will be readily available for any anticipated spills
- A proper spill kit will contain the appropriate supplies for materials that may be spilled
- Supplies will be easily accessible when required, and considerations will be made for both the type and quantity of materials
- The contents of spill response kits shall be periodically assessed to ensure the availability of adequate spill response supplies

# SDS (Safety Data Sheets)

- SDSs will have specific information on "Preventive Measures" which will outline the specific procedures to be followed if the product is spilled.
- Employees will be trained on how to read and where to find SDSs.
- Assessments shall be required once a spill has occurred to assist in the determination of the following:
- What components make up the spill;
- How dangerous is the spill;
- How far has the spill travelled;
- What damage has been caused by the spill;
- What remedial action is required to alleviate damage caused by the spill; and
- If there has been environmental damage.

#### PROCEDURE

Small Spill: An individual has identified a small spill has occurred, immediately:

- Use appropriate PPE to protect yourself from the spill.
- Attempt to shut off the source of the release.
- Eliminate sources of ignition (if it is safe to do so).
- Protect drains by the use of adsorbent, booms, or drain covers (if it is safe to do so).
- Contain any spilled material.
- Clean the spill up in a timely manner to prevent accidental injury or other damage if trained to do so

**Large Spill**: In the event that the spill/release is large or any amount has been released to soil, surface water, or storm drains or cannot be safety dealt with by staff, the following procedures apply:

- The individual at the spill site will alert others in the immediate vicinity to evacuate the area. Employees should refer to the Emergency Evacuation Procedures and notify a Manager, Spill Response Team and First Aid Responders. Call 911 if appropriate.
- Spill Response Team must coordinate response. If the chemical is unknown, extremely hazardous and may pose a risk to the health and safety of the Spill Response Team, the Manager must contact Government Emergency Spill Response (please refer to Reporting a Spill in this policy for details)
- Contact spill cleanup contractor to properly assist with the cleanup
- Manager and Spill Response Team commanders must also notify the appropriate agency if the release has entered the environment.
- Managers will notify employees that it is safe to return to regular work

# **RESPONSE**:

#### SRT Responder(s):

- 1) Secure the area to prevent unauthorized entry
- 2) Identify the chemical

- i. Obtain as much information as possible from the employee, the container label and/or from the Safety Data Sheet (SDS)
- i. Using the SDS, obtain information re: personal protective equipment, first aid measures, and data relating to fire or reactivity risk.
- 3) Ensure all SRT's and First Aiders wear the appropriate PPE
- 4) Assess the scene for any other hazards
- 5) Use the chemical spill kit to contain the spill
- 6) Eliminate any fire or explosive hazards
- 7) Shut off any valves and turn off ignition sources in the presence of flammables if safe to do so.
- 8) Disperse gases or vapors to outside atmosphere using doors, windows, exhaust systems, fans, etc.
- 9) Notify First Aid Responders in the event of exposure
- 10) Before returning the spill response kit to its designated storage location, an inventory of all items will be conducted and all replacement items will be ordered.

#### First Aid Responder(s):

- 1) Follow all protocols as outlined in the First Aid Policy
- 2) In a safe location, treat injuries and illnesses using SDS if available
- 3) Complete all related documentation (First Aid Report Form, Incident Report Form)

## **CONTAINMENT:**

Only clean up a spill when the chemical is known, and is considered to be a small to moderate size spill. Do not put yourself or others at risk. The clean-up method depends on the situation, product, SDS specifications and resource affected.

- Initiate spill containment by first determining what will be affected by the spill
- Assess speed and direction of spill and cause of movement (water, wind, slope)
- Determine best location for containing spill, avoid any water bodies
- Wear the proper PPE
- Contain spill by securing floor drains, shut down ventilation, assess the need to evacuate the facility
- Methods of clean up include: absorbents, pumps, and vacuums
- Initiate the clean from the far end of the spill moving toward the center of the spill
- Ensure the clean-up process is very thorough
- Refer to the Safe Work Procedure (SWP) for Spill Containment

#### **ON-SITE RESOURCES:**

Spill kits are located throughout the site. The contents are described below.

- <u>Spill Kit Bags</u>: (10) 15 X 19" Pads, (2) 3" x 4' Sorbent Socks, (1) pair Nitrile Gloves, Instructions and Disposal Bag.
- <u>Spill Kit 55-Gallon Drum</u>: (50) 15 x 19" Pds, (4) 3" x 12' Sorbent Socks, (8) 18 x 18" Pillows, (1) Paid Nitrile Gloves, Emergency Handbook, Goggles, and (5) Disposal Bags.
- Dry Absorbent

#### DISPOSAL:

Once the spill has been cleaned, proper disposal of contaminated items must take place.

- Do not mix contaminated water with other materials
- Dispose of waste as indicated in the SDS and applicable municipal requirements
- Store contaminated materials in an approved waste container in a designated area until a designated disposal company can be contacted and the material is removed
- All PPE used during the Spill Response will be thoroughly cleaned or properly disposed

#### **REPORTING:**

Any person or organization responsible for a release or spill is required to notify the federal government when the amount reaches a federally-determined limit. Separate reporting requirements exist for:

- <u>Oil spills</u>
- <u>Hazardous substance releases</u>

States also may have separate reporting requirements. However, anyone who discovers a hazardous substance release or oil spill is encouraged to contact the federal government, regardless of whether they are the responsible party. **National Response Center at (800) 424-8802.** 

New York: New York Spill Hotline → 1-800-457-7368 <u>https://www.dec.ny.gov/chemical/8692.html</u>

- Must notify within 2 hours of discovery except spills that meet all of the following criteria:
  - The quantity is known to be less than 5 gallons; and
  - The spill is contained and under the control of the spiller; and
  - The spill has not and will not reach the State's water or any land; and
  - The spill is cleaned up within 2 hours of discovery

**North Carolina**: North Carolina Environmental Quality  $\rightarrow$  1-800-858-0368 (afterhours) or <u>https://deq.nc.gov/about/divisions/water-resources/water-quality-regional-operations/emergency-response#OilSpills-4167</u>

- Oil spills that reach surface water must be reported to both North Carolina and the National Response Center
- Oil spills that don't reach surface water, report to the Regional Office listed here: <u>https://deq.nc.gov/about/contact/regional-offices</u>

**Colorado**: Department of Public Health & Environment  $\rightarrow$  1-877-518-5608 or

https://cdphe.colorado.gov/environmental-agriculture-program/discharge-spill-and-noncompliancereporting-and-monitoring

- Any discharge of pollutants to waters of the state (which include surface water, groundwater, or features like dry gullies or storm sewers leading to surface water) must be reported within 24-hours of discovery. The notification must describe, at a minimum:
  - The date, time, estimated length of time, and approximate volume of the discharge.
  - The cause of the discharge.
  - The level of wastewater in the discharging impoundment(s).
  - Whether the discharge entered, or could enter, waters of the United States.
- A spill which does not reach surface water does not have to be reported, but require clean up and mitigation

**Montana**: Disasters and Emergency Services  $\rightarrow$  1-406-324-4777 or

https://deq.mt.gov/Files/DEQAdmin/ENF/Documents/SpillPolicy\_02\_2016.pdf

- Releases and spills should be reported immediately.
- The following types of spills **must** be reported:
  - Releases or spills of hazardous substances in amounts that meet or exceed the reportable quantities in 40 CFR Part 302.
  - Spills, overfills, and suspected releases from underground storage tanks and petroleum storage tanks. ARM 17.56.501, et seq.
  - Releases or spills of any materials that would lower the quality of groundwater below water quality standards. ARM 17.30.1045. B.
- The following types of spills **should** be reported:
  - Spills that enter or may enter state water or a drainage that leads directly to surface water;

- Spills that cause sludge or emulsion beneath the surface of the water, stream banks or shorelines;
- Spills that cause a film, "sheen," or change the color of the water, stream banks or shorelines; or
- Spills of twenty-five (25) gallons or more of any petroleum product such as: crude oil, gasoline, diesel fuel, aviation fuel, asphalt, road oil, kerosene, fuel oil; produced water, injection water, salt water or combination thereof; and derivatives of mineral, animal, or vegetable oils.

#### **INVESTIGATION:**

The JHSC/Safety Representatives will conduct an investigation with the assistance of the SRT, Manager, Workers and/or witnesses. Should an injury/ exposure occur, the injured/exposed employee would complete an Incident Reporting and Investigation form and include witnesses and the JHSC/Safety Representative. Refer to P206 Incident Reporting and Investigation. All findings will be documented and submitted to HR and will be discussed at the next JHSC/Safety meeting. Refer to Form F214.1 for the Company Spill Response Report Form.

#### NON-COMPLIANCE

The Company understands that if we are responsible for a spill, and cannot respond to properly clean up the spill, the Minister has the authority under the *Environmental Protection Act* to order those responsible to clean it up. As well, failing to do so could result in the ministry undertaking the cleanup and recovering from the company the costs.

## COMMUNICATION

Any of the following method(s) may be used to communicate this policy:

- Company email
- Company memo
- Posting of policies and procedures
- Training
- Meetings and Safety talks

# TRAINING

The Company will ensure that all employees are trained and educated on spill prevention and response procedures, and that they are clear about their roles and responsibilities as well as this policy and its procedures. Training may be performed in-house or by a 3<sup>rd</sup> party.

#### **EXHIBITS/FORMS**

F214.1 Spill Response Report Form F214.2 SWP Spill Response

A subsidiary of Federal Signal Corporation

# Policy & Procedure: USP202 Subject: Confined Space

#### PURPOSE

Through the development of this program and safe work procedures, worker education and training, this program is will outline the controls and responsibilities for entering, working in and exiting a confined space to provide for the protection and to eliminate or minimize the risk to workers who enter or work in confined spaces.

#### POLICY

The Company works hard to keep employees informed of possible risks involved with job specific tasks and to provide training and equipment to mitigate workplace injuries. Since deaths from confined spaces often occur because the atmosphere is oxygen deficient or toxic, confined spaces should be tested prior to entry and continually monitored. More than 60 percent of confined space fatalities occur among would-be rescuers. Therefore, a well-designed and properly executed rescue plan with the Fire Department or properly trained rescue personnel is necessary.

#### DEFINITIONS

**Confined Space** – An area that meets all the following criteria:

- A. Is large enough and so configured that an individual can bodily enter and perform assigned work.
- B. Has limited or restricted means of entry or exit (i.e. tanks, vessels, storage bins, silos).
- C. Is not designed for continuous personnel occupancy.

**Permit – Required Confined Space –** An area that meets the definition of a confined space and has one or more of the following characteristics:

- A. Contains or has a potential to contain a hazardous atmosphere
- B. Contains a material that has a potential of engulfing an entrant (i.e. water/sand)
- C. Has an internal configuration such that an entrant can be trapped or asphyxiated by inwardly converging walls or by a floor that slopes downward and tapers to a small cross-section
- D. Contains any other recognized serious safety or health hazard (i.e.. Wind, insecure footing, electrical)

Below distinguishes the confined spaces hazard Class's:

• Class 1 – Immediately Dangerous to Life or Health "IDLH"- It is also a confined space that presents a situation that is immediately dangerous to life or health. The dangers include but are not limited to the potential of oxygen deficiency, explosive or flammable atmosphere, and concentrations of toxic substances. This type of entry requires among other things SCBA equipment.

#### For the purpose of this policy and procedure, the Company will **Never** enter a Class 1 Confined Space.

- Class 2 "Confined Space Entry Permit Required" A confined space that has the potential for causing injury and illness if preventive measures are not used and requires the use of a "Confined Space Entry Permit".
- **Class 3 "Limited Confined Space"** A confined space in which the potential danger to life or health would not require any special modifications of the work procedure. A confined space will be considered a Class 3 if all identified hazards are controlled, the potential for change is unlikely and *all* of the following apply:

- a. Oxygen concentration is between 19.5% and 23.0% by volume
- b. Concentration of explosive gases is less than 1% of LEL
- c. Airborne concentration of toxic substances is less than 50% of OEL

**Lower Explosive Limit "LEL"** – the concentration of a compound in air below which a flame will not propagate if the mixture is ignited.

**Upper Exposure Limit "UEL"** – is the maximum allowable concentration of a hazardous substance in a workplace. It is defined as the upper limit of concentration in the air.

**Limited or Restricted Openings** – Any of the following factors indicate that a workspace has a limited or restricted means:

- A. Has limited means of egress or entry
- B. Is designed for periodic employee entry under normal operating conditions
- C. Under normal operating conditions does not contain a hazardous atmosphere, but that may contain a hazardous atmosphere under abnormal conditions.

The following would also indicate that the space has limited or a restricted opening; the need to use a ladder or movable stairs, or stairs that are narrow or twisted; a door that is difficult to open or a doorway that is too small to exit while walking upright; obstructions such as pipes, conduits, ducts, or material that a worker would need to crawl over or under or squeeze around; the need to travel a long distance to a point of safety.

**Entry** – The action by which a person passes through an opening into a permit-required confined space. Entry includes ensuring work activities in that space and is considered to have occurred as soon as any part of the entrant's body breaks the vertical or horizontal plan of an opening into the space.

**Entry Permit** – A written or printed document that is provided by the employer to allow and control entry into a permit space.

**Entry Team** – Refers to the entire team assigned to a confined space (Entry Manager, Attendant, Entrants, and the Monitor).

**Entrant Manager (Supervisor)** – A person responsible for determining if acceptable entry conditions are present in a permit space where entry is planned and creating and signing the entry permit. Authorizing entry and overseeing entry operations, and for terminating entry as required.

**Confined Space Attendant** - A person who is stationed outside the permit space, who monitors the authorized entrant(s), who is trained in all the Attendants duties and responsibilities and facilitates an emergency rescue response.

Entrant "Entry Employee" - An individual who is authorized by the employer to enter a permit space.

**Testing Monitor** – The person assigned the task and specifically trained on how to perform specific testing in and around the permit space.

**Emergency Response Team** – Pre-determined group of individuals trained in the facilitating of a rescue of a confined space Entrant(s) in situations where the Entrant(s) cannot exit the space on their own.

**Isolation** – the process of blanking or blinding, removing a section of line, duct or pipe, a double block and bleed, lock-out/tag out of all sources of energy as may be required to protect a permit space against the release of energy and material into the space.

Atmosphere - Refers to the gases, vapors, mists, fumes and dusts within a confined space.

A subsidiary of Federal Signal Corporation

**Oxygen Deficiency Atmosphere** - Refers to an atmosphere containing oxygen at a concentration of less than 19.5 percent by volume.

**Oxygen Enriched Atmosphere** - Refers to an atmosphere containing oxygen at concentrations greater than 23.5%.

**Retrieval System** – the equipment (including a retrieval line, chest or full-body harness, rescue hook, wristlets, if appropriate, and a lifting device or anchor) used for non-entry rescue of persons from permit spaces.

**Testing/Monitoring** - The process of identifying and evaluating the hazards that may be present inside of a confined space. When testing for atmospheric hazards, first test for oxygen, then for combustible gasses and vapors, and then for toxic gasses or vapors.

# **GENERAL REQUIREMENTS**

The following general requirements are required to be implemented when working in or around confined spaces:

• When practical, all confined spaces shall be permanently marked. A sign shall be installed at each opening of the Confined Space. Signs should contain the following text or similar language:

# DANGER – PERMIT REQUIRED CONFINED SPACE DO NOT ENTER

- Spaces not permanently marked (ex. Manholes) shall be posted with a portable sign when access to the space is required.
- All confined spaces where there is an opening that can easily be walked into (floor openings, manhole openings, etc.) shall have a physical barrier (guardrail, cover, gate, etc.)
- When required, isolating energy sources to the confined space shall be performed in accordance with the Lock-out/Tag-out Program.
- If "hot work" conditions exist, precautions shall be taken in accordance with the Hot Work Program. Cylinders of compressed gases are never permitted in a confined space.
- No smoking is permitted in a Confined Space or near the entrance/exit area.
- Air monitoring is required before and during entry into any confined space.
- Portable electrical equipment used in Confined Spaces shall be supplied power through a ground fault interrupter or be battery powered.

Under the OSHA regulations, each site is also required to implement the following:

- 1. Make a list of all confined spaces at the site.
- 2. Determine if each space is a permit-required space and document this on an inventory form.
- 3. Complete the appropriate Required Confined Space Permit or Certificate to document the space hazards and control measures. For Non-Permit spaces, which have historically shown that no atmospheric hazards are present (through historically documented air monitoring readings), do not have to complete a Non-Permit Entry Certificate if documentation is in place that shows that there has never been a problem inside of the space
- 4. Have a written rescue plan.
- 5. Keep an up-to-date list of all trained Confined Space Entry Managers, Entrants and Attendants.

# RESPONSIBILITIES

Employer shall:

- Identify all confined spaces in which their workers may work and determine whether any are permit spaces.
- Create a risk assessment and emergency response plan (ERP) and ensure employees have access to the plan.

A subsidiary of Federal Signal Corporation

- Ensure employees are trained on the requirements of this procedure, the hazards associated with confined space entry, and the safety requirements to be implemented whenever working in or around confined spaces.
- Ensure the proper hazard controls, such as PPE, are available to employees and keep training records.
- Keep copies of completed confined space permits for at least 2 years

#### Entrant Manager shall:

- Be familiar with the requirements of this policy and procedures.
- Act as the Confined Space Entrant Manager, who will manage day-to-day confined space operations and complete confined space entry permits.
- Ensure all confined space entry equipment is maintained and inspected according to the manufacture's recommendations.
- Ensure Entry Employee and Attendants are trained and competent, and that they perform their duties as required while in the confined space.
- Ensure that the provisions of this procedure are implemented during all confined space operations and activities involving confined spaces
- Verify that all pre-entry steps have taken place, including ensuring rescuer workers are available.
- Ensure Attendant is maintaining acceptable conditions within the space.
- End the entry when appropriate and complete the required paperwork.
- Ensure employees stay out of any permit spaces present on the site, unless the employee is authorized for entry.
- Consult employees to assess their views the procedure effectiveness and to identify any problems with the procedure.

#### Confined Space Attendant shall:

- Understand the hazards that may be present or may develop in the Confined Space.
- Stay right outside the entryway
- Maintain effective and continuous communication with the Entrant as well as the Rescue Team.
- Control hazards and monitor the confined space conditions.
- Record the air quality readings
- Inform the Entry Employee to exit in case of irregularities. Attendant has the authority to order the Entrant out of the space if an unsafe condition developments.
- In an incident or accident occurs, the attendant must initiate the Emergency Response Plan (ERP) and Order workers to evacuate the confined space if he/she:
  - o observes a condition which is not allowed on the entry permit;
  - notices the entrants acting strangely, possibly as a result of exposure to hazardous substances;
  - o notices a situation outside the confined space which could endanger personnel;
  - notices a hazard within the confined space that has not been previously recognized or taken into consideration;
  - o must leave his/her work station; or
  - must focus attention on the rescue of personnel in some other confined space that he/she is monitoring.
- Keep unauthorized persons out of the confined space, order them out, or notify authorized personnel of an unauthorized entry.

# Testing Monitor shall:

- Monitor the confined space and surrounding area
- Continuously looking for dangerous conditions
- Remains outside of the confined space and does no other work which may interfere with their primary duty of monitoring the workers inside the confined space.

A subsidiary of Federal Signal Corporation

#### Entrant (Entry Employee) shall:

- Recognize hazards that come across while in the confined space.
- Taking care of PPE and use and know the limitations of the PPE being used as designed and use the proper personal protective equipment that is required by the permit.
- Reporting unusual conditions associated with confined space equipment or confined space operations to the Confined Space Entry Manager immediately (i.e., before entering a confined space).
- Following instructions from the Confined Space Entry Manager and the Attendant
- Following all health and safety measures developed by the Company around confined spaces and other safety hazards.
- Read and observe the entry permit requirements.
- Remain alert to the hazards that could be encountered while in the confined space.
- Identify any signs of symptoms of illness or injuries caused by working in confined spaces.
- Alert Attendant(s) when a prohibited condition exists and/or when warning signs or symptoms of exposure exist and exit the space if unacceptable conditions develop or if directed to exit by the Attendant.
- Stay out of any permit spaces present on the site, unless you are authorized for entry.
- Attending confined space refresher training at least annually.

The Emergency Response Team Shall:

- Be responsible for facilitating the rescue of confined space Entrant in situations where the Entrant(s) cannot exit the space on their own.
- Take charge of the situation and act according to their training, the situation at hand and the Emergency Response Plan.
- Respond immediately to rescue calls from the Attendant or any other persons recognizing a need for rescue from the confined space
- In addition to the Emergency Response Training, receive the same training as that required of the Entrants.
- Complete a training drill and simulate a rescue at least annually
- Have current certification in First Aid and CPR.

# TRAINING REQUIREMENTS

All personnel working in and around confined spaces must receive training. Training will consist of the following:

**Training Frequency** – training shall be conducted before the employee is first assigned duties within a confined space; before there is a change in assigned duties; when there is a change in permit space operations that presents a hazard for which an employee has not been trained; and when the has reason to believe that there are deviations from the confined space entry procedures required in this program, or that there are inadequacies in the employee's knowledge or use of these procedures.

**General Training** - All employees who will enter confined spaces shall be trained in entry procedures. Personnel responsible for supervising, planning, entering, or participating in confined space entry and rescue shall be adequately trained in their functional duties prior to any confined space entry. Training shall include:

- 1. Explanation of the general hazards associated with confined spaces.
- 2. Discussion of specific confined space hazards associated with the facility, location, or operation.
- 3. Reason for, proper use, and limitations of personal protective equipment and other safety equipment required for entry into confined spaces.
- 4. Explanation of permits and other procedural requirements for conducting a confined space entry.
- 5. A clear understanding of what conditions would prohibit entry.

- 6. Procedures for responding to emergencies.
- 7. Duties and responsibilities of the confined space entry team.
- 8. Description of how to recognize symptoms of overexposure to probable air contaminants in themselves and co-workers, and method(s) for alerting the Attendant(s).

Refresher training shall be conducted as needed to maintain employee competence in entry procedures and precautions.

**Specific Training** - Training for atmospheric monitoring personnel (Testing Monitory) shall include proper use of monitoring instruments, including instruction on the following:

- proper use of the equipment;
- calibration of equipment;
- sampling strategies and techniques; and
- OSHA exposure limits for anticipated contaminants (i.e., CO2, CO, O2, H2S, SO2, flammable atmospheres)

Training for Attendants shall include the following:

- procedures for summoning rescue or other emergency services; and
- proper utilization of equipment used for communicating with entry and emergency/rescue personnel.

Training for Emergency Response Team shall include:

- rescue plan and procedures developed for each type of confined space that is anticipated to be encountered;
- use of emergency rescue equipment;
- first aid and CPR techniques; and
- work location and confined space configuration to minimize response time.

### PROCEDURES

All employees should be made familiar with the following step procedures:

- Completion of a Risk Assessment
- Signage and Barricading
- Isolation of Hazards
- Cleaning, Purging & Ventilation
- Atmosphere Testing & Monitoring
- Completion of an Entry Permit
- The Role of the Attendant
- Rescue & Emergency Plan

#### **RECOGNITION, HAZARD ASSESSMENT, CONTOLS AND PERMITS**

A hazard assessment for each confined space must:

- Consider conditions that may exist before workers enter (such as location, configuration, or use of space).
- Consider conditions that may be present while work is being conducted in the space.

Hazard assessments are required for all confined spaces. These must be prepared by a qualified person with training and experience in recognizing, assessing, and controlling confined space hazards.

Most accidents in confined spaces happen when workers and untrained rescuers do not recognize hazards in the spaces, or they do not eliminate or control the hazards before they enter. Never assume a confined space is safe to enter. All hazards must be identified and addressed in the planning process prior to entry. Personal protective equipment (PPE) can be used to control exposure if hazards cannot be eliminated or controlled. This

A subsidiary of Federal Signal Corporation

is after engineering controls, administrative controls and other control methods have been exhausted. Safe work practices must always be used.

Hazard	Risks	Potential source(s)				
Oxygen – too little or too much	Too little can cause brain damage Too much increases risk of fire of explosion	Rusting metal can use oxygen Biological activity (molds and bacteria) can use oxygen				
Toxic gases and vapors	Dizziness, loss of consciousness, permanent damage to health, death	Work activities (painting, welding)				
Explosions	Fires or explosions	Fuel aerosol products Inadequate ventilation Dust accumulations				
Biological hazards	Mild reactions (coughing, sneezing) to severe immune reactions	Moldy materials				
Entrapment and engulfment	Buried or trapped by materials	Bins hoppers, excavations				
Moving parts of equipment and machinery	Physical injuries	Accidental start-up of equipment Unexpected movement of equipment that has not been locked-out				
Electrical shock	Electrocution Explosion	Defective extension cords, in wet conditions				
Substance entering through pipe	Drowning from liquids Being trapped, crushed	Piping or lines connected to a confined space				
Temperature extremes	Heat stress Cold stress	Working in very hot or cold confined spaces				
Noise	Hearing loss	Noisy equipment				
Drowning		Flooding, existing liquids				

Some of the most common hazards in confined spaces are:

#### Permit-Required Confined Space Entry Requirements

The following procedures must be implemented for all permit-required confined spaces:

- Identify and evaluate the hazards of permit spaces before employees enter them;
- Specify acceptable entry conditions (use the Confined Space Entry Permit);
- Perform air monitoring of the space prior to entry and continuously during entry;
- Isolate the permit space using lock-out/tag-out methods (i.e., lock and tag out compressed gas system on presses, lock out pumps and electrical connections in sumps, etc.);
- Purge, inert, flush, or ventilate the permit space as necessary to eliminate or control atmospheric hazards;
- Provide barriers as necessary to protect entrants from external hazards;
- Verify that conditions in the permit space are acceptable for entry throughout the duration of an authorized entry;
- Designate the communication methods that will be used between the entrant and the attendant;
- Designate rescue requirements and place equipment needed next to the permit-required confined space in the event that an emergency rescue is needed;
- Provide at least one Attendant outside the permit space for the duration of entry operations;
- Designate employees who have active roles in the entry process Entry Manager, Entrant, Attendant, Testing Monitor, etc.;
- The Confined Space Entry Permit (CSE) shall be completed and signed by the Entry Manager; and
- Permits shall be cancelled after the required work it completed, at the end of each shift, or when new hazards arise. A CSE Permit is only valid for one work shift (i.e., 8 hours).

#### A Confined Space Entry Permit must be completed for all permit required confined spaces prior to entry.

#### **Required Personnel for Permit Required Confined Space:**

- Entry Manager
- Attendant
- Entrant(s)

Note: An Attendant can also act as an Entry Manager if properly trained

#### **Non-Permit Spaces**

If the confined space poses no actual or potential atmospheric hazards and if all hazards within the space are eliminated without entry into the space, the permit space may be reclassified as a non-permit confined space for as long as the non-atmospheric hazards remain eliminated.

If it is necessary to enter the permit space to eliminate hazards, such entry will be performed as a permitrequired confined space entry.

If hazards arise while employees are working in a non-permit space, each employee shall exit the space immediately. The site shall then reevaluate the space and determine whether it must be reclassified as a permit space.

A Non-Permit Certificate, must be completed for all non-permit spaces prior to entry.

#### **Required Personnel for Non-Permit Required Confined Space:**

- Entry Manager
- Entrant(s)

#### ATMOSPHERIC TESTING, EVALUATION, AND MONITORING

The atmosphere within in the confined spaces shall be **TESTED** before entry to determine whether the confined space atmosphere is safe for entry.

Continuous air monitoring shall also be conducted while Entrants are working inside of a confined space, and readings documented every 15 minutes.

Tests should be made for oxygen level, CO, flammability, and known or suspected toxic known substances.

Prior to an entry, the internal atmosphere must be tested, with a calibrated direct-reading instrument. The following Table outlines Acceptable levels.

Conditions	Acceptable Level for Entry				
Oxygen	19.5 to 23.5 percent				
Flammable Gas/Vapor	<10 percent of LEL				
Hydrogen Sulfide	<10 ppm				
Carbon Monoxide	<10ppm				

The atmosphere tested prior to entry must be conducted at intervals of approximately every four feet vertically, with a direct reading instrument to monitor the containment levels.

During the Entry, conduct continuous air monitoring with a direct reading instrument with alarms, at the location where the Entrants are working. Periodic monitoring can be utilized if the monitoring is of sufficient frequency to ensure that any atmospheric hazards are being controlled at safe levels.

If continuous monitoring is not used, periodic monitoring is required with sufficient frequency to ensure that acceptable entry conditions are being maintained during the course of entry operations. If any of the

A subsidiary of Federal Signal Corporation

airborne readings fall outside of the range noted above in Table above, or if any of the four gas meter sensor alarms are activated, the following actions must be taken.

- a) All entrants shall leave the space immediately.
- b) Re-evaluate the atmosphere from outside the space. Implement additional measures to assure that a hazardous atmosphere will not develop prior to re-entry.
- d) Prepare a written certification indicating the date, location of space, atmospheric readings, and signature of certifying person prior to re-entry. If for any reason the procedures and operations used at a site are judged to be inadequate by the team or the Attendant, the attendant has the authority and responsibility to cancel the permit.

#### **EMERGENCY RESPONSE, RESCUE AND RETREIVAL**

#### **Emergency Response Plan**

The Entry Manager shall maintain a written plan of action that has provisions for conducting a timely rescue of individuals within a confined space, should an emergency arise. The written plan shall be kept onsite where the confined space work is being conducted. All affected personnel shall be trained on the Emergency Response Plan.

#### **Retrieval Systems and Methods of Non-Entry Rescue**

Retrieval systems shall be available and ready when an authorized person enters a permit space, unless such equipment increases the overall risk of entry, or the equipment would not contribute to the rescue of the entrant. Retrieval systems shall have a chest or full-body harness and a retrieval hook that allows the rescue team to remotely grab the harness and pull the entrant to the tank opening for removal. A mechanical device shall be available to retrieve personnel from vertical confined spaces more than five (5) feet deep.

For tanks with side access doors, a full body harness is required to be worn at all times while inside of tanks. A retrieval system shall either include the use of a lifeline, a rescue hook, or a paddle – whichever equipment makes the most sense for rescuing employees from these locations.

#### **EXHIBITS/FORMS**

<u>F202.1 – Confined Space Hazard Assessment</u> <u>F202.2 – Confined Space Entry Permit</u> <u>F202.3 – Confined Space Non-Permit Entry Form</u> <u>F202.4 – Confined Space Emergency Plan</u> Policy & Procedure: USP201 Subject: Worker's Rights

#### PURPOSE

To balance the employer's general right to direct the work force and control the production process in the workplace, Legislation gives three basic rights to Workers – the right to participate, the right to know and the right to refuse.

#### POLICY

The three basic rights of Workers are as follows:

#### The Right to Participate

Workers have the right to be part of the process of identifying and resolving workplace health and safety concerns. This right is expressed through worker membership on JHSCs, or Workers identifying the concerns to one of the health and safety representatives.

#### The Right to Know

Workers have the right to know about any potential hazards to which they may be exposed. This means the right to be trained and to have information on machinery, equipment, working conditions, processes and hazardous substances. The parts of the Act that implement the Workplace Hazardous Materials Information System (WHMIS)/ Hazard Communication (HAZCOM), or applicable Hazardous Material legislation, play an important role in giving Workers the right to know.

#### The Right to Refuse Unsafe Work

Workers have the right to refuse work they believe is dangerous to either their own health and safety or that of another worker. The Act describes the exact process for refusing dangerous work and the responsibilities of the employer in responding to such a refusal.

#### **Dangerous Circumstances**

Management, JHSC/Safety Representatives can stop work in "dangerous circumstances". This means a situation in which <u>all of the following apply</u>:

- The Act or regulations are being contravened
- The contravention poses a danger or hazard to a worker
- Any delay in controlling the danger or hazard may seriously endanger a worker

#### PROCEDURE

Work refusals can be associated with a failure to communicate concerns about unsafe conditions to the Employer, Manager or to a Worker. The Company encourages the reporting of unsafe work, so that we may promptly investigate and take remedial action, or implement the corrective measures that may be needed. If these initiatives fail however, work refusal procedures must be followed.

#### First Stage:

**Worker:** When a worker "has reason to believe" the work performed is causing injury, illness or is likely to endanger themselves or another worker, the worker will promptly report the circumstances and the intent to refuse the work to his/her Manager. The refusing worker is to remain in a safe place near the work location, while an investigation of the refusal takes place.

**Manager:** When a Worker has reported their intent to refuse unsafe work, the Manager will confirm the Worker's "reason to believe" and will immediately notify the JHSC/Branch Representative (Worker ember) to "attend without delay". The Manager must then investigate the circumstances of the refusal, and must do so in the presence of the refusing worker, and the JHSC/Branch Representative (Worker Member).

The Manager is entitled to retain and acquire such assistance as may be necessary for the effective investigation of the refusal, but it is important to remember that a Manager's legislated duties during the course of a work refusal cannot be delegated.

If the circumstances or conditions that led to the refusal are resolved to the worker's satisfaction at this initial stage, the worker is expected to return to work and commence the performance of his/her normal duties.

If the circumstances of the work refusal are not agreeably resolved, then the worker may choose to continue to refuse the work, but must now provide "reasonable grounds" that the conditions remain likely to endanger him/herself, or another worker.

In this case, the HR Manager or Senior Manager on-site will contact the Ministry of Labour (or equivalent based on state/provincial regulations) to report the situation and request that an Inspector be assigned to attend the workplace and investigate the circumstances of the refusal.

#### Second Stage:

The OSHA INSPECTOR will attend the workplace or may provide direction over the telephone for interim action to be taken pending their arrival.

**Worker:** When a worker continues to refuse work after the initial investigation by the Manager, the worker must provide those investigating with "reasonable grounds" to suggest that the work conditions are likely to continue to endanger. The worker may be assigned other reasonable alternative work pending the investigation and decision by the Inspector, or must otherwise remain in a safe place, as directed.

**Manager:** In circumstances where a worker continues to exercise his/her right to refuse based on "reasonable grounds", the Manager will make every effort to assign the refusing worker reasonable alternative work while waiting for the arrival of the Inspector. In the event that the alternative work cannot be found, the Manager will assign the worker to safe place, to await further direction.

It is important to note that, at this stage, another Worker may be asked to perform the work refused by the refusing worker (unless directed otherwise by the Inspector), but only if the Worker being asked is notified of the initial refusal and the reasons for the refusal.

Where the Manager can ensure that such action may be undertaken in a safe manner, and that every precaution reasonable in the circumstances has been taken to protect Workers, then he/she may ask another worker to perform the work that was refused.

The Manager will only make this request while in the presence of the JHSC/Branch Representative (Worker Member).

#### Inspector:

Upon arrival at the workplace, the Inspector will investigate the circumstance to the refusal in the presence of the refusing worker, the Manager, and the JHSC/Branch Representative (Worker Member).

Upon the completion of the investigation, the inspector will render a decision in writing whether the machine, device, thing, workplace or part thereof in question, "is likely to" or "is not likely to" endanger the refusing worker, or any other worker. If the decision is "likely to endanger" the Inspector will issue appropriate orders for compliance.

The Inspector will provide copies of his/her decision to the worker who refused, the employer, and to the JHSC/Branch Representative (Worker Member). A copy must be provided to the Company's Human Resources Department and a copy must be posted in the workplace.

#### **General Provisions:**

Where a Worker has refused to perform work in accordance with legislation the Company will make every effort to resolve the refusal amicably, effectively, and promptly. The Company will ensure a safe location for a

refusing Worker to remain during the course of the initial investigation. In the instance of a second stage refusal, we will assign the refusing worker to reasonable alternative work that will not be demeaning or disciplinary in nature, pending the Inspector's decision.

No employee involved in the conduct of work refusal will lose any pay for the time spent regarding this situation.

No reprisals of any kind will be taken against any worker involved in a legitimate work refusal conducted in accordance with the provisions of legislation.

Work refusals are a serious indicator of a break down in the Company's Health and Safety Program and the Internal Responsibility System. Every work refusal will be investigated appropriately to determine the causes and failure of the system, and to determine corrective measures to prevent re-occurrence.