INNOVATIONS MANUFACTURING
SAFETY MANUAL

2023

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&
GENERAL SAFETY

Innovations Manufacturing, Inc. (IM-Inc) (the Company)

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HSE Policy Statement

Innovations Manufacturing is Committed to Exceptional Team Safety Performance

- Innovations Manufacturing, Inc. (the Company) is committed to providing and maintaining a safe and healthy workplace for all of its employees.
- It is the philosophy of the Company that safety performance is a key indication of organizational excellence, therefore, safety must be incorporated into the everyday business process of the Company.
- The Company will meet or exceed regulatory Health, Safety and Environment (HSE) standards.
- Management will consider all employee suggestions for achieving a safer, healthier workplace through the organization of a safety committee that includes employer and employee representatives who are responsible for recommending safety and health improvements in the workplace.
- The Company is fully committed to the pursuit of the highest product and service quality while holding safety as a core value that ensures no harm to people and no damage to the environment.
- Innovations Manufacturing subscribes to the following key disciplines of business execution as its foundation for maintaining an injury free work environment:

Goal:

- To protect our Workers, the Environment, our Assets, and our Reputation by targeting zero accidents

Leading Measures:

- Have a good plan, that
- Identifies and mitigates the hazards, and
- Stop Work when something is not right

Performance Expectations:

- Measure the safety performance of the team
- Maintain a compelling scorecard
- Motivate team members through risk and reward

Accountability:

- Accountability is accomplished through the application of expectations, training, coaching, and continual improvement

All Company employees are expected to participate in the safety and health program activities including pre-job safety planning, wearing required personal protective equipment, attending safety meetings, reporting workplace hazards and unsafe work practices and reporting accidents, near misses, and good catches immediately to their supervisors.

Every employee of the Company has an obligation to stop unsafe acts from occurring or continuing- if you see a hazard, you own the hazard and you are expected to eliminate or mitigate the hazard immediately!

Owen Bunker
President & CEO

Scope & Responsibilities

Scope

This Health Safety & Environmental (HSE) Manual is intended as a reference tool for Innovations Manufacturing, Inc. employees and contractors who provide services on behalf of the Company. The health, safety, and environmental (HSE) information in this manual is intended to provide an overview of the work practice health, safety, and environmental policies and expectations that are required.

Each employee, in the interest of personal safety, must assume the responsibility for following the instructions and requirements covered in this safety manual, and each contractor must have safety policies, procedures, and best work practices that at a minimum meet the requirements of the requirements published within this manual. However, the HSE procedures within this manual may be adopted for use by contractors and consultants who do not meet the requirements outlined in this manual. To the extent that the contents of this manual or any portion thereof conflicts with any provision of the agreement between Innovations Manufacturing and its contractors, the provisions of the agreement will maintain control.

Common sense and experience must be applied when considering safety on any specific work assignment. If you are not familiar with a particular work process or procedure it is required that you seek advice and direction from your supervisor prior to beginning work.

The content of this Manual may not provide all the necessary information for a specific job or task, so it is important to always check manufacturer recommendations and other sources such as the safety data sheets or weather forecasts to see if special work procedures are required for a specific job, task, location, or condition.

At Innovations Manufacturing, we believe it is very important that our employees and contractors adopt a culture, or way of thinking, that all incidents are preventable. To assist in helping build this culture, we have created the Four Disciplines of Safety (4DS) that provides a brief overview of how we can get 95% of the way to our goal while only utilizing 5% of our time on the 4DS.

1. **Goal:**
   To protect our Workers, the Environment, our Assets, and our Reputation by targeting zero accidents.

2. **Leading Measures:**
   - Have a good plan, that
   - Identifies and mitigates the hazards, and
   - Stop Work when something is not right

3. **Performance Expectations:**
   - Measure the safety performance of the team
   - Maintain a compelling scorecard
   - Motivate team members through risk and reward

4. **Accountability:**
   Accountability is accomplished through the application of expectations, training, coaching, and continual improvement.

General Responsibilities

Housekeeping

All worksites shall be kept clean and free from materials or equipment that could cause workers to slip or trip. A floor or other surface used by any worker shall be kept free of obstructions, hazards and accumulations of refuse.

The Company requires that all worksites be maintained as and kept as clean as is reasonably practicable.

Safe Equipment Maintenance

Every employee of the Company has a duty to ensure our work site machines and equipment maintain a high level of efficiency and safety readiness. We shall ensure that all equipment is maintained at intervals that are sufficient to ensure the safe functioning of the equipment. All equipment is to be maintained, safe to perform, adequate strength for its purpose and free from obvious defects. Damaged and faulty equipment reporting procedures have been implemented and are available at the Company Solution Center www.im-safety.com.

Where a defect is found in equipment, the Company will ensure that steps are taken immediately to protect the health and safety of any worker who may be at risk until the defect is corrected.

Any worker who knows or has reason to believe that equipment or machinery is not in a safe condition shall immediately report the condition of the equipment to their supervisor and/or the Damaged and Faulty Equipment Form located at the company solution center so that repairs can be made.

Impairment

No person shall enter or remain at any workplace of employment while the person's behavior or ability to work is affected by alcohol, intoxicating beverages, drugs, or other substance that will or could impair their abilities to perform their duties safely.

Improper Conduct

All workers shall engage in proper activity or behavior. Improper behavior that might create or constitute a hazard to any person is not acceptable. Improper activity or behavior includes horseplay, scuffling, fighting, practical jokes, and unnecessary running or jumping.

Industrial Hygiene

Where a worker is exposed to a potential hazard of injury to the eye due to contact with a biological or chemical substance, an eyewash fountain shall be provided.

A worker who may be exposed to a biological, chemical, or physical agents that may endanger the worker's safety or health shall be adequately trained to perform the task safely.

No food, drink, or tobacco shall be taken into any room, area, or place where any substance that is poisonous by ingestion is exposed.

Protective clothing or other safety device that has been worn next to the skin shall be cleaned and disinfected prior to being worn by another worker.

Workers who handle or use corrosive, poisonous, or other substances likely to endanger their health shall be provided with washing facilities with clean water, soap and individual towels.

Smoking
Smoking is prohibited in areas where explosives, flammable liquids or gases, and combustible dust or fibers are processed, stored, or could potentially become present.

HSE Program Enforcement

Disciplinary Policy
The company's policy is to maintain a work environment that is as safe as possible for all employees and to operate in accordance with all laws and regulations. We expect each person to always act in a mature and responsible manner. Employees who violate safety procedures are subject to disciplinary action up to and including termination.

Disciplinary Action
Any employee who violates a procedure or policy is subject to one or more the following actions:

- A verbal and/or written reprimand
- Suspension without pay
- Termination

The department manager and supervisor will determine disciplinary action based upon the seriousness of the violation, their job position, their responsibilities, and the offending employee's record of prior violations. Infractions will usually result in the application of progressive disciplinary action.

Immediate Dismissal
The following actions are of such seriousness that they may result in immediate dismissal without notice:

- Failure to report an incident/accident in a timely manner or ignoring incident reporting procedures/guidelines.
- Failure to report an incident.
- Willful violation of any company policy or any deliberate action which could be reasonably expected to cause injury or damage to Company owned property.
- Being under the influence of drugs or alcohol.
- Theft from the Company or co-workers.
- Intentionally lying or hiding the truth to deceive the Company.

ABRASIVE BLASTING

Innovations Manufacturing, Inc. (the Company)

Purpose

The purpose of this program is to provide safe guidelines for the operation and maintenance of abrasive blasting equipment and their related components for the Company.

Scope

This program covers all employees involved in abrasive blasting jobs. Whenever hazardous substances such as dusts, fumes, mists, vapors, or gases exist or are produced in the course of construction work, their concentrations shall not exceed the limits specified in the "Threshold Limit Values of Airborne Contaminants – 1970" of the American Conference of Governmental Industrial Hygienists. When ventilation is used as an engineering control method, the system shall be installed and operated according to the requirements of 1926.57 (Ventilation).

Key Responsibilities

Supervisors

- Be aware of potentially hazardous conditions that may arise during the blasting process prior to starting any blasting job and must take measures to protect employees.
- Ensure that all employees are trained on related safety topics.
- Understand the importance of regularly scheduled maintenance for continued safe operation of blast equipment. Ensure that all employees comply with this policy and all other related policies.

Blast Employees

- Be familiar with the safe operating functions of blasting equipment to be used on a job.
- Comply with all company policies.
- Have knowledge of hazards associated with respirable silica.
- Understand they are prohibited from using compressed air for cleaning unless the pressure is reduced to less than 30 pounds per square inch and be equipped with effective chip guarding and proper PPE.

Procedure

General

Abrasives and the surface coatings on the materials being blasted are shattered and pulverized during blasting operations and the dust formed will contain particles of respirable size. The composition and toxicity of the dust from these sources shall be considered in making an evaluation of the potential hazards.

Dust shall not be permitted to accumulate on the floor or on ledges outside of an abrasive blasting enclosure. Dust spills shall be cleaned up promptly. Aisles and walkways shall be kept clear of steel shot or similar abrasives which may create a slipping hazard.

Equipment Handling

Follow these guidelines when moving blasting equipment to prevent back strains and crushing injuries:

- Use a forklift, crane or other type of lifting device for transporting a blast machine; always use a lifting device when the machine contains abrasive.
- Never manually move a blast machine where abrasive has been spilled on hard surfaces or on a wet or slippery surface.

- Never attempt to manually move a blast machine containing abrasive.
- Always disconnect hoses from machines to avoid interference during moving.

Air Compressors

- Air compressors must be located in a well-ventilated area. It must be able to contain large volumes of clean, toxicant-free air. This means the compressor must be placed up wind from the blasting operation and out of the range of dust and flying abrasives.
- Due to the high pressure that air compressors create, precautions must be taken to prevent unleashing of strong forces that can cause serious bodily injury.
- Air for abrasive blasting respirators must be free of harmful quantities of dust, mists, or noxious gases and must be inspected daily, prior to use and comply with CFR 1910.134(I) (Respiratory Protection).
- Never adjust the pressure setting on a compressor above the blast equipment maximum working pressure rating. The maximum working pressure rating is indicated on the manufacturer's metal identification plate.

Blast Pot

- Position blast pots and/or compressors on level ground. Machines operate best when they sit on level surfaces.
- For communication purposes place blast pot between the compressor and the surface to be blasted. This will enable the pot tender and operator to make visual contact.
- All couplings and pipefitting on the blast pot, compressor, and hoses must be airtight.
- Blast pots must be inspected daily prior to use.

Hoses and Connectors

- Couplings must have safety wires in place and be secure as required by federal safety regulations. The operator shall be responsible to ensure that each coupling has safety wires in place.
- Whip checks must be installed at bull hose connections.
- Operator should hold onto the blast hose until the air pressure from the nozzle drops off to zero.
- Do not use hoses with soft spots.
- Never use tape to repair a blown-out hose.
- Immediately replace a hose if a blowout or leak occurs.
- Hose ends must come into contact with coupling gaskets to prevent leaks and to maintain static electricity conductivity.

Nozzles and Remote Controls

- Blast nozzles shall be bonded and grounded to prevent the buildup of static charges. Where flammable or explosive dust mixtures may be present, the abrasive blasting enclosure, the ducts, and the dust collector shall be constructed with loose panels or explosion venting areas, located on sides away from any occupied area, to provide pressure relief in case of explosion following the principles set forth in the National Fire Protection Association Explosion Venting Guide. NFPA 68-1954.
- Organic abrasives which are combustible shall be used only in automatic systems.
- Blast cleaning nozzles shall be equipped with an operating valve which must be held open manually. A support shall be provided on which the nozzle may be mounted when it is not in use.
- All blast machines must be equipped with remote control systems to start and stop the blasting process.
- Never tape, strap, or tie down an air actuated remote-control lever or choke electric remote-control switch.
- If there is the slightest delay in reaction time of the handle lever or lever lock to open, check for dust and dirt build-up around pivot pins before resuming blasting. Also, test the tension on the lever springs, and replace them immediately if they do not respond rapidly.
- Substituting component pieces with other manufacturer's parts is not allowed.

- Inspect blast nozzles for wear and cracks on the inner liner. When a nozzle orifice is worn 1/16" larger than its original size, it should be replaced.
- Check nozzles and nozzle holders for deterioration of thread form. Threads on nozzles and their companion holders must not be cross-threaded, worn or distorted.
- Hoses that are being tied and lifted to blasting operations being conducted above grade, i.e., scaffolds, shall be depressurized to prevent accidental start-up.

Operator Signals

- On the job site, voice communication is often impossible. Even shouts cannot be heard over the noise of compressors and blasting. In addition, the operator's head will be enclosed in the helmet, which blocks out sound and limits vision. For these reasons, an industry wide standard set of hand and sound signals has been developed.
- Signals may be visual hand movements, flashing light, pulls on a rope or sounds made by banging a hammer or using a horn or electric buzzer.
- Every operator must become familiar with the signals to be used on the jobsite.

Respirator Use

- A specific work-site procedure must be developed where respirators or CE blasting hoods/helmets are required to protect the health of the operator. A respiratory protection program shall be established wherever it is necessary to use respiratory protective equipment including worksite specific procedures and elements for required respirator use. Abrasive blasting respirators shall be worn by all abrasive blasting operators under certain conditions.
- Equipment for the protection of eyes, face and body shall be supplied to the operator when the respirator design does not provide such protection and to any other personnel working in the vicinity of abrasive blasting operations. This equipment shall conform to the requirements of 1926.102 (Eye and Face Protection).
- Equipment for protection of the eyes and face shall be supplied to any other personnel working in the vicinity of abrasive blasting operations.

Environmental Controls

- Organic abrasives which are combustible shall be used only in automatic systems. Where flammable or explosive dust mixtures may be present, the construction of the equipment, including the exhaust system and all electrical wiring, shall conform to the requirements of American National Standard Installation of Blower and Exhaust Systems for Dust, Stock, and Vapor Removal or Conveying, Z33.1-1961 (NFPA 91-1961), and Subpart S of 1926.57 (Ventilation).
- The work area must be inspected for exterior electrical power lines that may endanger operators.
- Operators should use care to avoid directly blasting power lines and insulators.
- Do not blast in atmospheres that contain flammable fumes.
- Take precautions at the work site to eliminate hazardous surface obstacles that may cause tripping hazards or interfere with worker mobility.
- Adequate ventilation must be provided for employees working within enclosures.
- Never operate compressor if hoses are frozen. When winter temperatures drop below freezing, check for ice prior to pressurizing hoses that are located in an environment where temperatures drop below 35 degrees Fahrenheit.
- Provide adequate drinking water and appropriate cool-down breaks for operators during the heat of summer.

Personal Protective Equipment

- Secure hoses by tying them to stationary objects when working from elevations, to prevent injury from hoses falling on other personnel working below or near blasting area.
- Before using any blasting abrasive, check the MSDS to find out the chemical composition of the abrasive material.
- Equipment for the protection of eyes, face and body shall be supplied to the operator when the respirator design does not provide such protection and to any other personnel working in the vicinity of abrasive blasting operations. This equipment shall conform to the requirements of 1926.102 (Eye and Face Protection).
- Ventilation systems and dust collectors may be necessary in enclosed conditions.
- Noise from abrasive blast nozzles can be loud enough to damage the hearing of blasters and others on the work site. Workers must not be exposed to noise levels exceeding 80 decibels as an eight-hour time weighted average (80 dBA TWA), therefore all blasters shall wear earplugs.
- Blaster must wear appropriate PPE.
- Helmet lenses should be changed as soon as pitting or frosting takes place.

ACCESS TO EMPLOYEE RECORDS

Innovations Manufacturing, Inc. (the Company)

Purpose

The purpose of this procedure is to insure right of access to relevant exposure and medical records to employees and/or their designated representatives.

Key Responsibilities

Safety Director

- Develops local medical records practices for all worksites in accordance with this procedure and ensures employees are aware of the requirements of this procedure.
- Responsible for the review, implementation and maintenance of the local worksite medical records procedure.

Project Manager/Safety Director

- Responsible for the implementation and maintenance of the medical records procedure for their facility and ensuring all assets are made available for compliance with the procedure.

Employees

- All shall be familiar with this procedure and have access to their records.

Overview

This section applies to all employee exposure and medical record, and analysis thereof, made or maintained in any manner, including on an in-house or contractual (e.g., fee-for-service) basis.

- Trade secret information disclosure must follow requirements as stated in 29 CFR 1910.1020 (f) (8).

Definitions

Access means the right and opportunity to examine and copy.

Analysis of exposure or medical records means any compilation of data, and research, or other studies based, at least in part, on information collected from individual employee exposure or medical records or other sources including information from health insurance claim forms provided that either the analysis must have been reported to the employer or no further work is being done by the person responsible for preparing the analysis.

Designated representative will mean any individual or organization to which an employee gives written authorization to exercise a right of access.

Employee exposure records include either environmental and/or biological monitoring. Employee exposure records include any of the types of information listed below:

- Environmental (workplace) monitoring or measuring of a toxic substance or harmful physical agent, including personal, area, grab, wipe, or other form of sampling, as well as related collection and analytical methodologies, calculations, and other background data relevant to interpretation of the results obtained.
- Biological monitoring results which directly assess the absorption of a toxic substance or harmful physical agent by body systems (e.g., the level of a chemical in the blood, urine, breath, hair, fingernails, etc.) but not including results which assess the biological effect of a substance or agent, or which assess an employee's use of alcohol or drugs;

- Safety Data Sheets indicating that the material may pose a hazard to human health; or In the absence of the above, a chemical inventory or any other record which reveals where and when used and the identity (e.g., chemical, common, or trade name) of a toxic substance or harmful physical agent.

Employee medical records are records that concern the health status of an employee and are made or maintained by a physician, nurse, or other health care personnel or technician. "Employee medical record" means a record concerning the health status of an employee which is made or maintained by a physician, nurse or other health care personnel, or technician.

NOTE: The following will not be considered a medical record:

- Physical specimens, such as blood or urine samples, which are routinely discarded.
- Health insurance claims, accident investigation reports and other non-medical correspondence if maintained separately from the medical file.
- The record of any voluntary employee assistance program (alcohol, drug, etc.) if maintained separately.
- Records created solely in preparation for litigation which are privileged from discovery under applicable rules of procedure or evidence.

Specific Written Consent means a written authorization containing the following:

- The name and signature of the employee authorizing the release of medical information.
- The date of the written authorization.
- The name of the individual or organization that is authorized to release the medical information.
- The name of the designated representative (individual or organization) that is authorized to receive the released information.
- A general description of the medical information that is authorized to be released.
- A general description of the purpose for release of the medical information.
- A date or condition upon which the written authorization will expire (if less than one year).

A toxic substance or harmful physical agent is defined as any chemical substance, biological agent (bacteria, fungus, virus, etc.) or physical stress (noise, heat, cold, ionizing radiation or non-ionizing radiation, hypo or hyperbaric pressure, etc.) which:

- Is regulated under federal law or rule due to a hazard to health.
- Is listed in the National Institute of Occupational Safety and Health (NIOSH) Registry of Toxic Effects of Chemical Substances (RTECS).
- Shows positive evidence of acute or chronic health hazard in human, animal or other biological test by or known to the employer.
- Has a Safety Data Sheet indicating that the substance may pose a hazard to human health.

Procedure

The Safety Director will maintain applicable medical and exposure records for all employees. All requests to access medical and exposure records and analysis based on those records must be submitted using the forms provided for that purpose.

Access to records is provided in a reasonable time, place and manner. Access to records must be provided in a reasonable time, place and manner. If access to records cannot reasonably be provided within fifteen (15) working days, the Company shall within the fifteen (15) working days apprise the employee or designated representative requesting the record of the reason for the delay and the earliest date when the record can be made available.

Personal identifiers (name, address, social security number, payroll number, etc.) are removed from records before access is granted. Whenever access is requested for an analysis which reports the contents of employee medical records by either direct identifier (name, address, social security number, payroll number, etc.) or by information which could reasonably be used under the circumstances indirectly to identify specific employees (exact age, height, weight, race, sex, date of initial employment, job title, etc.), personal identifiers must be removed before access is provided.

The Company, upon request, will assure the prompt access of records to representatives of the Assistant Secretary of Labor for Occupational Safety and Health to employee exposure and medical records and to analyses using exposure or medical records. The representative may not remove the records or share the records without written consent of the affected employee(s).

Any designated representative must have the employee's written permission for access to exposure records and analyses. It is also necessary for the representative to specify the occupational need for access to records.

Copies of medical records are provided at no cost to employees. Whenever an employee or designated representative requests a copy of a record, that record must be provided at no cost.

Any review of medical or exposure records by an employee shall be done on his or her own time, outside of normal working hours, at a time mutually agreeable to the parties. The review will be conducted in person with the individual requesting access to the records.

The employee is entitled access to his or her medical records except when a physician determines that this knowledge would be detrimental to the employee's health as in such cases of terminal illness or psychological conditions. However, if the employee provides a designated representative with specific written consent, access to medical records must be provided even if the physician has denied the employee access to the records.

The authorized physician, nurse or other responsible health care personnel maintaining employee's medical records may delete the identity of anyone who has provided confidential information concerning the employee's health status but cannot withhold the information itself.

When an analysis of medical records identifies the employee, a physician may remove direct or indirect personal identification. If this cannot be done, the personally identifiable portions need not be provided to the person seeking such information.

Employees and their designated representatives will be permitted upon request access to past and present exposure data to toxic substances or harmful physical agents.

Copies of exposure records of other employees with past or present job duties or working conditions like or similar to those of the employee will also be provided upon request.

Any employee or designated representative is also permitted access to any record of exposure information which pertains to a new workplace or condition(s) to which the employee is being assigned or transferred.

Records Retention

- Medical records must be preserved and retained for the duration of employment plus 30 years.
- Employee exposure records must be retained for 30 years.

Transfer of Records Should the Company Cease to Do Business

Whenever the Company ceases to do business, it shall transfer all records subject to this section to the successor employer. Whenever the Company either is ceasing to do business and there is no successor employer to receive and maintain the records, or intends to dispose of any records required to be preserved for at least thirty (30) years, the Company shall transfer the records to the Director of the National Institute for Occupational Safety and Health (NIOSH) if so required by a specific occupational safety and health standard.

Employee Information

Employees are informed of the provision of recordkeeping upon initial assignment and annually thereafter. Upon an employee's first entering into employment, and at least annually thereafter, information must be given to current employees of the existence, location, availability and the person responsible for maintaining and providing access to records and each employee's rights of access to these records.

The Access to Employee Exposure and Medical Records Standard (29 CFR 1910.1020) will be readily available for review by employees upon request.

A copy of the employee notice that will be used to comply with the employee information requirements is made available and posted as required by law at www.im-safety.com.

AUTHORIZATION LETTER FOR THE RELEASE OF EMPLOYEE MEDICAL RECORDS

I, _____ hereby authorize the _____
(Full name of employee) (Name of Organization)

to release to Innovations Manufacturing, the following medical record(s):

_____
Give specific description of the information to be released)

I give my permission for the medical information to be used for the following purpose(s):
_____
_____

_____ I do not give permission for any other use or reason.

_____ I understand that this authorization expires twelve (12) months from today's date unless I specify a particular date less than twelve months which is _____

_____ _____
Signature of employee or his/her legal representative
Date of Signature

Reviewed on: _____ with: _____
(Date) (Signature of Organization's Representative)

Copies given: Yes _____ No _____

ACCESS TO MEDICAL/EXPOSURE RECORDS NOTICE

Federal Regulation 29 CFR 1910.1020 requires us to inform you that Innovations Manufacturing does keep records designated as Employee Exposure and Employee Medical Records.

The above regulation gives you the right to review those records with certain exceptions.

The records are maintained in the Safety Department and the Safety Director is responsible for the records.

A copy of CFR 1910.1020 is available for viewing upon request to the Safety Director.

_____ _____

Signature Date

AERIAL LIFTS

Innovations Manufacturing, Inc. (the Company)

Purpose

The purpose of this program is to define the requirements for safely operating an aerial lift device.

Scope

This policy shall cover all aerial lift devices used on Company property.

Key Responsibilities

Supervisors

- Shall ensure that all aerial devices are properly operated by trained personnel.
- Shall ensure that aerial lift devices are designed and constructed in conformance with applicable requirements of the American National Standards for "Vehicle Mounted Elevating and Rotating Work Platforms" ANSI A92.2-1969, including appendix.

Employees

- Shall follow all aspects of this program.

General Instructions for Safe Operation

According to the manufacturer of our aerial lift, lift operators will display a professional attitude and will demonstrate the following skills:

- Respect for personal safety.
- Regard for the safety of others.
- Obey procedures at all times.
- Demonstrate excellent work habits, efficiency, and reliability.
- Demonstrate respect for facilities and property.
- Any person operating the controls of the Scissor lift or occupying the platform must be familiar with these Safety and Operating Procedures.
- The machines at Innovations Manufacturing are not insulated. The operator must maintain safe clearances from electrical power lines and apparatus.
- You must allow for platform sway, rock, or sag.

Most aerial lift accidents are caused by the failure to follow simple and fundamental safety rules and precautions. The Operator must be familiar with the manufacturers operating instructions before using any aerial personnel lifting device. Never deviate from the manufacturers recommendations!

Every project is different and so the hazards are always changing. Before starting any overhead work make sure you have assessed the hazards and identify the appropriate personal protective equipment needed to protect your eyes, ears, hands, feet and body.

Overhead Work

When working above an area where workers could be present, the ground floor area shall be taped off with yellow or red tape or the area should have cones and a spotter present to warn others of the overhead falling object hazard. YELLOW tape signifies the need to take caution and make the overhead workers aware of your presence, then you may enter the area. RED danger tape signifies a NO ENTRY condition. There is an active danger that requires all workers to stay out of the taped off area. No one should enter a Danger area once it is roped off.

Procedures for Operation

The purpose of the Scissor Lift work platform is to transport and raise personnel and tools to overhead work areas. The following points must be remembered when operating a Scissor Lift:

- Do not drive near drop-offs, holes, or loading docks.
- Do not raise platform on slope or drive onto slope when elevated.
- Do not raise platform on uneven or soft surfaces.
- Do not drive onto uneven or soft surfaces when elevated.
- Do not use without guardrails, mid rails, chain, or bar in place.
- Do not raise platform in windy or gusty conditions.
- Do not exceed rated load.
- Do not use if working platform is not working properly or if any part is damaged, worn or missing.
- Do not use near moving vehicles or cranes.
- Do not stand or sit on guardrails.
- Do not use under the influence of alcohol or drugs.
- Do not override safety devices.
- Do not raise platform while machine is on a truck, forklift, or other device or vehicle.
- Do not use ladder, scaffolding, or other devices to increase the working height of the platform.
- Do not use with damaged tires.
- Do not attach ropes or chains to the guardrails.
- Do not use as a crane for lifting.
- Do not use with tires that are not per manufacturers, specifications.
- Follow the manufacturers operating instruction for the specific lift you will be using.
- FAILURE TO AVOID THE ABOVE HAZARDS MAY RESULT IN SERIOUS INJURY OR DEATH!

AIR COMPRESSORS

Innovations Manufacturing, Inc. (the Company)

Purpose

Though air compressors are exceptionally versatile, supremely useful, and functionally essential to WHAT WE DO HERE AT Innovations Manufacturing, they are only as valuable as they are safe. Safe operating and maintenance procedures not only ensure worker safety, but also protect equipment, reduce downtime, increase productivity, and lower long-term operating and capital costs.

Scope

This program covers all employees involved in the use of equipment that utilizes compressed air.

General Safety

Air compressors are powerful tools. When used incorrectly, they have the potential to cause serious damage to both workers and equipment. Overheated components can cause contact burns, while damaged or broken air hoses can result in serious bodily injury. Pressurized air can rupture the skin or even internal organs if directed at the body. And burst pressure tanks are liable to result in serious damage.

First and foremost, if you operate or perform maintenance on the air compressors, it's important to thoroughly read and understand the owner's manual before performing your duties. On-site training should be provided to all workers who will be using the equipment, and follow-up sessions scheduled as needed to make sure everyone's up to date on safety procedures. Workers should always wear appropriate protective equipment, including safety glasses or face shields along with adequate ear protection depending on the purpose for which they are using compressed air.

Air compressors should be kept in a clearly visible area, with air tanks positioned out in the open for easy inspection. Instructions for equipment use should be clearly displayed on the air system itself. The air intake should have access to a fresh air source; if you're operating indoors, you can increase air circulation with fans or other devices.

Electrical wires should be clean, unobstructed, and inspected for damage before the machine is turned on. Ensure that your machine is properly grounded. Improperly grounded machines can cause damage to electrical circuits, resulting in electrocution or fire.

Operation

When using an air hose with a blowgun, ensure that the nozzle is pointed in a safe direction, and that the trigger is not engaged. Air nozzles or air tools should never be pointed at the face or body. Hair and clothing should be properly secured and kept away from tools at all times.

Make sure that a shutoff valve is always within reach of operators. If anything goes wrong during operation, immediately cut off the air supply using the shutoff valve and address the issue before restarting the equipment.

Intake air can contain pollutants and carbon monoxide and should never be inhaled without the proper filtration and monitoring equipment. Pressure gauges should be monitored regularly to ensure that the maximum working pressure of the air receiver is never exceeded.

If air nozzles are used to clean the body, the air pressure shall be reduced to 30 psi or less and a back blow safety nozzle shall be used.

Maintenance

The manufacturer safe air compressor operating procedures should be followed during maintenance of the air compressor. Regular servicing and maintenance of the compressor is the best way to ensure your equipment is in proper working order.

Pressure-regulating equipment should never be changed, replaced, or adjusted by anyone other than trained personnel. These devices should be installed so that they cannot be removed or rendered inactive during operation.

When performing an inspection, shut off the source of air, bleed the air pressure, and disengage the air hose. Oil or fuel should only be changed or added when the machine is off, and after it has adequately cooled. If you remove a tool from the compressed air system, the tool should always be isolated from the compressed air and should be fully depressurized first.

Air tanks rust over time from the inside-out due to high humidity and the presence of condensate. The tend to rust out near the bottom where the condensate collects. Rust eats away at the metal leaving it thinner and less capable of handling pressure. A rusted tank is very dangerous as it increases the likelihood that the integrity of the vessel cannot withstand the pressure and may burst causing major damage to personnel and/or the facility. If you suspect your tank poses reason for concern, bleed the tank of air, and have an authorized dealer examine it so they can recommend the proper course of action.

Basic Requirements

- Double Check Equipment is Off Before Servicing: Before performing any type of maintenance or repair, air compressors need to be disconnected from their power and fully powered down to ensure there is no built-up pressure. Lock out, tag out of the electrical disconnect must be performed before servicing equipment.
- Let Air Compressor Cool Down Before Maintenance: After running, air compressor components are hot to the touch and can easily cause burns. Give the machine time to cool down before handling. Changing oil or fuel in a hot air compressor can also lead to smoke, or in some cases, fires.
- Regularly Drain the Compressor Tank: To prevent rust or explosions, the compressor tank needs to be drained on a regular basis. A rusted tank can lead to workplace hazards and put other employees in danger. A no air loss, pneumatic controlled drain is recommended to avoid faulting and loss of compressed air. This is a good way to ensure that moisture is not collecting in the tank.
- Be Mindful of Hair, Hands, and Clothing: Air compressors are comprised of quickly rotating parts- cooling fans, couplings, and belts. These components can quickly and easily catch on to any loose clothing and can cause serious injury.
- Protect Your Ears and Eyes: Air compressor operators will be exposed to loud machines that create lots of debris, making ear and eye protection is a must. Daily exposure to loud machinery can lead to permanent hearing loss, and the debris from these machines can lead to eye injury and vision impairment.
- Secure tools and hoses before powering on air compressor: always check that the trigger on pneumatic tools are not engaged and that hoses are properly secured. Lose hoses can whip around and cause serious injury. All hoses should have the proper safety clamps on each end to avoid hoses breaking loose.
- Do not use PVC Pipe: OSHA does not approve the use of PVC in compressed air applications, and therefore should never be used. PVC is susceptible to cracking and bursting.
- Always Keep Safety Top of Mind: Air compressors should always be handled with care. Never point hoses or tools at yourself or anyone else. Even low pressures are capable of causing serious bodily harm. It's also important to remember that industrial compressed air is not approved as breathing air as it does not have the appropriate filtration, treatment, and monitoring. There are strict health and safety standards in place for breathing air that industrial equipment does not meet.

ALCOHOL AND SUBSTANCE ABUSE POLICY

Innovations Manufacturing, Inc. (the Company)

Introduction

The following is the Alcohol and Substance Abuse Policy for Innovations Manufacturing (the Company). Please read this policy thoroughly and then take the Alcohol and Substance Abuse Awareness Training and sign the enclosed acknowledgement. The Acknowledgement and compliance with this policy is a condition of employment.

Purpose

The Company is concerned and recognizes a responsibility to provide a safe, healthy, and productive work environment for all employees. This Policy is designed to help accomplish that goal by preventing and eliminating active drug and alcohol abuse among our employees. Employees who use illegal drugs or abuse other controlled substances or alcohol tend to be less productive, less reliable, less cautious, and prone to greater absenteeism resulting in the potential for increased cost, delay, and risk to our business. Ultimately, they threaten our competitiveness.

We believe our employees have the right to work with persons free from the effects of alcohol and drugs. This Policy is designed to help accomplish that goal by eliminating the use of or influence of alcohol and drug abuse while on actively performing services on Company time.

Scope

This policy applies to all employees of the Company and certain parts of this policy apply to prospective employees or employee candidates.

Conditional Job Offer Screening

The Company will utilize conditional job offer screening practices to prevent hiring or rehiring:

a) individuals who use illegal drugs, or
b) individuals whose use of legal drugs or alcohol indicates a risk of unsatisfactory or unsafe job performance.

Use, Possession, or Sale of Drugs or Alcohol

Alcohol

The possession, consumption, purchase, or sale of alcohol on Company premises is prohibited. Furthermore, no employee shall be under the influence of alcohol or mind-altering drugs while performing services to the Company.

Drug and Alcohol Screening

A. A urinalysis, or other drug/alcohol screening may be conducted without discrimination and at the discretion of Company management under the following conditions:
   1. Pre-employment test.
   2. Post-accident or if probable cause is suspected.

3. When there is reason to believe that an employee may be using drugs or may be under the influence of drugs or alcohol.
4. As part of periodic follow-up testing if the employee is found to have breached these policies but has been permitted to remain employed.

B. An employee's cooperation with such a test is required as a condition of employment. The employee's refusal to cooperate with such a request and provide a specimen may be grounds for termination. This specimen may be collected by a Company representative at a Company facility, or a company designated collection facility. Failure to produce a negative urine test result or to comply with all the tenants of this document and the established Company procedures for its implementation will constitute noncompliance with this Policy.

Searches

- Routine searches of Company property may be conducted unannounced and at any time. This includes, but is not limited to, lockers, storage areas, jobsite trailers, Company vehicles and rooms normally used to store employee's personal property.
- Should the Company suspect that an employee has sold, purchased, used, or possessed alcohol, drugs or drug paraphernalia on Company premises, the Company may inspect the employee's personal effects (lunch boxes, toolboxes) or automobile that is parked on Company property.

Violations of This Policy

- Any violation of this Policy may be grounds for termination. However, in some circumstances and at the sole discretion of the Company, a lesser penalty may be selected.
- If the employee has not engaged in misconduct, unsafe conduct, or poor job performance, but is found to have alcohol or drugs in his/her system, the employee may be placed on an unpaid medical leave (maximum one month) until he/she presents reliable medical evidence that he/she has overcome any substance use problem, and he/she shall be reinstated to his/her former position if he/she consents in writing to occasional testing on request over the next 12 months to be certain that he/she has not resumed usage of drugs or alcohol in violation of this Policy. If such subsequent usage is detected, the employee will be terminated.

Reservation of Rights

The Company reserves the right to change, rescind or depart from this Policy in whole or in part. Nothing in this Policy alters an employee's status. The Company hopes each employment relationship will be a happy and enduring one. Nevertheless, employees remain free to rescind their employment at any time with or without cause.

ASSURED EQUIPMENT GROUNDING

Innovations Manufacturing, Inc. (the Company)

Purpose

The purpose of this program is to provide procedures and guidelines to eliminate all injuries resulting from possible malfunctions, improper grounding and/or defective electrical tools. This program applies to all sites, employees and contractors, and shall be used on all Company owned and/or controlled premises.

Definitions

Competent Person - one who is capable of identifying existing and predictable hazards in the surroundings or working conditions which are unsanitary, hazardous, or dangerous to employees, and who has authorization to take prompt corrective measures to eliminate them.

Ground Fault Circuit Interrupter - a device for the protection of personnel that functions to de-energize a circuit or portion thereof within an established period of time when a current to ground exceeds some predetermined value that is less than that required to operate the overcurrent protective device of the supply circuit.

Responsibilities

Supervisors are designated as competent persons for the Assured Equipment Grounding Conductor Program and are responsible for program execution. One or more competent persons must be designated (as defined in 1926.32(f) to implement and execute the program.

Employees are responsible for following the requirements of this program, to perform visual inspections and to take defective equipment out of service.

Procedures and Guidelines to Eliminate Injuries

The following procedures and guidelines are designed to eliminate all injuries resulting from possible malfunctions, improper ground and/or defective tools.

Assured Grounding Site Program Requirement
An assured grounding conductor program must be implemented on all Company sites covering all cord sets, receptacles which are not part of the building or structure & equipment connected by cord and plug which are available for use or used by employees.

Ground Fault Circuit Interrupters
All 120-volt, single-phase 15 and 20 ampere receptacle outlets at all Company sites, which are not part of the permanent wiring of the building or structure, and which are in use by employees, shall have approved ground fault circuit interrupters for personnel protection.

- All hand portable electric tools and extension cords shall use a GFCI.
- Additionally, approved GFCI's shall be used for 240-Volt circuits in the same service as described above.
- GFCI's must be used on all 120 volt, single-phase 15 amp and 20-amp receptacles within 6 feet of a sink, damp areas or on installed outdoor equipment.
- The GFCI must be the first device plugged into a permanent receptacle.

Assured Equipment Grounding Conductor Program
The Assured Equipment Grounding Conductor Program (AEGCP) shall cover all cord sets, receptacles not a part of the permanent wiring of a structure and equipment connected by cord and plug on all temporary and outdoor sites sites.

This written description of the program shall be made readily available for inspection and copying by OSHA and any affected employee.

Removing Equipment
Restrictions for the use of equipment that does not meet requirements or if it is found to be defective shall be applied and enforced. Any equipment which has not met the requirements of this program shall not be available or permitted to be used by the Company. Damaged items shall not be used until repaired.

How Often Inspection of Cords and Equipment are to be Made
Daily Visual inspections – The following shall be visually inspected before each day's use for external defects (such as deformed or missing pins or insulation damage) and for indication of possible internal or external damage:

- Cord sets
- Attachment caps
- Plug and receptacle of cord sets
- Any equipment connected by cord and plug (with the exception of cord sets and receptacles which are fixed and not exposed to damage) such as deformed or missing plug, and
- Insulation damage
- Damaged items shall not be used until repaired or shall be discarded.

How and When Tests are Performed and What Records are Maintained
All equipment grounding conductors shall be tested for continuity and shall be electrically continuous.

Each receptacle and attachment cap or plug shall be tested for correct attachment of the equipment grounding conductors. The equipment grounding conductor shall be connected to its proper terminal.

When tests are performed:

- Before each use.
- Before equipment is returned to service following any repairs.
- Before equipment is used such as when a cord has been run over.
- At intervals not to exceed 3 months, except that cord sets and receptacles which are fixed and not exposed to damage shall be tested at intervals not exceeding 6 months.

Tests performed as required by this program shall be recorded in the Company Safety Assessment program in the Electrical and/or Grounding section of the assessment. This record shall be kept by electronic means in the Company online Document Management System (DMS) and shall be maintained for a minimum of five (5) years. These records shall be made available at the job site for inspection by OSHA and any affected employees.

BACK SAFETY AND LIFTING

Innovations Manufacturing, Inc. (the Company)

Purpose

The Company is committed to providing a safe and healthy working environment for all employees. Musculoskeletal disorders (MSD) account for a majority of the reported injuries and we must minimize the risk and incidence of MSDs.

Scope

This program applies to all employees.

General

Many lifting injuries can be prevented by reducing the weight and number of lifts as much as possible, and by learning how to use appropriate lifting techniques when it is necessary to lift and carry objects.

It is important to use forklifts, hoists, carts, dollies, and/or help from co-workers lifting or moving heavy or bulky objects. If you must lift or move objects by hand, use of proper lifting techniques can save you a great deal of discomfort.

Before lifting an object, assess the situation by asking yourself the following questions:

- Can you lift this load safely, or is it a two-person lift?
- How far will you have to carry the load?
- Is the path clear of clutter, cords, slippery areas, overhangs, stairs, curbs and uneven surfaces?
- Will you encounter closed doors that need to be opened?
- Once the load is lifted, will it block your view?
- Can the load be broken down into smaller parts?
- Would gloves improve your grip or protect your hands?

Size up the load

- Test the weight by lifting one of the corners. If it is too heavy or is shaped awkwardly, stop.
    - Try to use a mechanical lift or a hand truck.

The Art of Lifting

There is really no “right way” to lift. However, there are more and less demanding ways to lift. The key to working safely is to figure out how to lift in the least demanding way possible when you have to move materials or tools. Here are some guidelines to reduce your risk exposure when lifting:

Keep It Close and Keep the Curves!
The closer a load is kept to your power zone, the easier it is to keep the natural curves of your back. When the spine is in its natural curves, the vertebra, discs, ligaments and muscles are in their strongest and most supportive position.

Staggered Stance:
Lifting with the feet close together and in line with each other makes it more difficult for you to use your legs to help with the lift. Staggering your stance encourages the legs to become involved and reduces the

demands on your back. Simply stepping toward a load (with a staggered stance) moves the center of gravity closer to the load and minimizes the demands of the lift. If you feel your weight shifting forward onto your forward leg, you have successfully transferred this weight demand from your back to your stronger legs.

Build a Bridge:
In most cases, the demands of any lift are determined by the position of the lifter's upper body during the lift. Many people lift by bending over at the waist, leaving their upper body hanging like a "one-sided bridge". This places all the demands of the lift onto the lower back. This load can be reduced by "building a bridge" to support the weight of the upper body. To do this, place an arm on your leg or a nearby stationary object. If you need both of your arms to manage the object you are lifting, step forward toward the load with one leg and create a "bridge" with your legs to reduce the workload on your back.

Feet First:
Moving your feet first gets you closer to the load and reduces the amount you have to reach. The farther you reach, the more you have to lift your upper body as well as the load. Turning with your feet first (pivoting) also helps reduce the risk of twisting while you lift. Discussion

Prepare and Compensate:
Lifting and carrying loads can be hard work. Like athletes, workers can avoid injuries or discomfort by preparing the body for work. Muscles generate more force when warm and full of oxygen. Stretching and moving around prior to work helps pump blood into your muscles. Blood warms up muscles and brings in oxygen, allowing your muscles "to breathe". This can be particularly effective at the beginning of the workday and after breaks.

Mechanical Lifting Equipment

The best way to avoid a back injury is to reduce the number of lifts you have to do as much as possible. Hand trucks, pushcarts and forklifts are great engineering controls that reduce your exposure to lifting hazards. If you use a forklift, make sure you have training and are authorized to operate one.

Using hand trucks and pushcarts

- Push rather than pull. It is easier and safer to push than to pull. You can use your body weight to assist when pushing.
- Use powered carts when available.
- Keep close and lock your arms. Stay close to the load, try not to lean over, and keep the curves of your back when pushing or pulling.
- Use both hands. Carts are easier to push and control using both hands.
- Use tie-downs, if necessary, to secure the load. Reaching to correct an unstable load can strain your muscles.

BEHAVIOR BASED SAFETY
A GOOD CATCH PROGRAM

Innovations Manufacturing, Inc. (the Company)

Purpose

The purpose of this program is to provide guidelines for the intervention of dangerous conditions or at-risk behaviors observed in the workplace.

Scope

This program covers all employees, contractors, and visitors that observe or assume to observe a dangerous condition or an at-risk behavior present or active on any Company owned or operated worksite.

Key Responsibilities

Supervisors

- Set an example by participating in this Behavior Based Safety program
- Ensure that all employees are participating in the program
- Call attention to any employee observed not participating in the program

Employees

- Participate in the Behavior Based Safety program

Procedure

General

The message at Innovations Manufacturing is clear: everyone – from employees to contractors and visitors – is obligated to intervene anytime a dangerous condition or at-risk behavior is observed. In fact, the Company encourages all affected persons to stop an activity even if they suspect there is an at-risk condition or behavior.

The company has created a fictional character that goes by "Singing Bob" who's intended existence is to help create a barrier between the uncomfortable act of intervening when an unsafe condition is present or when another worker is committing an unsafe act. It is intended that a worker can call out another worker by saying something like, "what would Singing Bob say about what you are doing", or "remember in the safety orientation when Singing Bob was doing that?". It is always easier for a worker to reference the risky behaviors of an individual who is not present in the situation than it is to call out a co-worker individually. This is why Singing bob is referenced throughout the Safety Training workers receive during their onboarding training.

Stopping an operation is better than risking even a minor injury. It's a message continually reinforced by Company senior management, and the cornerstone of the Company Behavior Based Safety program.

The program empowers everyone associated with the company to keep their eyes peeled for anything that could present a threat to the safety of People, harm to the Environment, integrity of our Assets and the Reputation of the company (PEAR) and encourages them to pause the operation when and where the risk is present. The goal is for nobody to get hurt, ever, on a Company job. It's a simple message that redefines the concept of whistle blowing from a negative to a positive and emphasizes that looking the other way is not acceptable.

The goal of the Behavior Based Safety program is very simply to prevent injury and incidents from occurring and encourage healthy interaction within the team.

Singing Bob

When a worker, contractor, or visitor intervenes to prevent an at-risk behavior or a dangerous condition from occurring or continuing, it is important that we document the interaction so we can incorporate the learnings into the Company training program. Therefore, we have created the Good Catch form. When a Good Catch is received, the person submitting the Good Catch will be entered to win a safety award at the end of the month. There will be 12 Good Catch awards distributed each year and at the end of the year the best overall Good Catch will be awarded a Great Catch award. Your safety is of the highest value here at Innovations Manufacturing and we expect every employee, visitor, and contractor to participate in this program!

There are no reprisals or fallout for a person stopping the work or for the person(s) involved in the at-risk activity. If a Good Catch is called, immediate immunity from negative consequences is granted to everybody involved. Certain acts such as theft, violence, illicit drug use, and intentional damage to property will not be forgiven in the immunity consideration.

Innovations Manufacturing strives to make the act of stopping at-risk activities second nature to every person contributing to Company activities.

I CHOSE TO LOOK THE OTHER WAY

I could have saved a life that day, but I chose to look
the other way. It wasn't that I didn't care.

I had the time, and I was there. But I didn't want to
seem a fool or argue over a safety rule.

I knew he'd done the job before. If I called it wrong, he
might get sore. The chances didn't seem that bad.

I've done the same he knew I had. So, I shook my
head and walked on by, he knew the risks as well as
I. He took the chances, I closed an eye, and with that
act I let him die.

I could have saved a life that day, but I chose to look
the other way. Now every time I see his wife, I'll know I
could have saved his life. The guilt is something I
must bear, but it isn't something you must share.

If you see a risk that others take, that puts their life or
health at stake. The question asked or things you say
could help them live another day.

If you see a risk and walk away, then hope you never
have to say.
I could have saved a life that day, but I chose
to look the other way.

BLOODBORNE PATHOGENS

Innovations Manufacturing, Inc. (the Company)

Purpose

This Bloodborne Pathogen Exposure Control Plan has been established to ensure a safe and healthful working environment and act as a performance standard for all employees. This program applies to all occupational exposure to blood or other potentially infectious materials. The content of this plan complies with OSHA Standard 29 CFR 1910.1030 (Occupational Exposure to Bloodborne Pathogens).

Scope

This program addresses all occupational exposure to blood or other potentially infectious materials. OSHA requires that all employers that can "reasonably anticipate exposure" to infectious material must have access to and training on a written exposure control plan. This procedure applies to all Company employees.

Key Responsibilities

Exposure Control Officer (Safety Director)
Has overall responsibility for developing and implementing the Exposure Control Procedure for all facilities.

Site Manager and Supervisors
Site manager and supervisors are responsible for exposure control in their respective areas.

Employees

- Know what tasks they perform that have occupational exposure.
- Plan and conduct all operations in accordance with our work practice controls.
- Develop good personal hygiene habits.

Procedure

Training
Training shall be provided at the time of initial assignment to tasks where occupational exposure may take place, and at least annually thereafter. Annual training for all employees shall be provided within one year of their previous training. Training shall include:

- What bloodborne pathogens are; how to protect themselves from exposure
- Methods of warnings (signs, labels, etc.)
- The OSHA requirements of bloodborne pathogens
- The Hepatitis B vaccine shall be made available to all employees that have occupational exposure at no cost to the employee(s).

Biohazard Label

Availability of Procedure to Employees
All employees have access to a copy of this exposure control plan at www.im-inc.com in the Procedures tab.

Reviews and Update of the Procedure
This procedure is reviewed at minimum on an annual basis, and is updated when changes in Company operations necessitate an update.

Exposure Determination

- There are no job classifications in which some or all employees have occupational exposure to bloodborne pathogens that may result from the performance of their routine duties.
- Designated employees are trained to render first aid and basic life support. Rendering first aid or basic life support may expose employees to bloodborne pathogens and will require them to adhere to this program.
- In addition, no medical sharps or similar equipment is provided to, or used by, employees rendering first aid or basic life support.
- This exposure determination has been made without regards to the Personal Protective Equipment that may be used by employees.
- A listing of all first aid and basic life support trained employees shall be maintained on the company solution center.

Methods of Compliance

Universal Precautions

Under circumstances in which the difference between body fluids and other non-hazardous fluid is difficult or impossible to determine, all fluids will be considered potentially infectious. This rule only applies in situations where there is a reasonable expectation that a bodily fluid has contaminated the work area. Examples include: urine; feces;

Engineering Controls

Engineering and work practice controls shall be used to eliminate or minimize employee exposure. Engineering controls should be examined and maintained or replaced on a regular schedule to ensure their effectiveness. Hand washing facilities shall be readily available at all Company facilities. If provision of hand washing facilities is not feasible, then an appropriate antiseptic hand cleanser in conjunction with cloth/paper towels or antiseptic towelettes shall be provided by the Company.

The Company does not provide sharps containers for the employees. If an employee's personal medical situation requires the use of sharps, that employee is required to dispose of their own sharps. No employee is allowed to leave an unsecured sharps medical device on company property. All sharps medical devices must be stored in a secure location away from other employees. Failure to meet the requirements of this policy may result in disciplinary action up to and including termination of employment.

Work Practice Controls

- Employees shall wash their hands immediately, or as soon as feasible, after removal of potentially contaminated gloves or other personal protective equipment.
- Following any contact of body areas with blood or any other infectious materials, employees wash their hands and any other exposed skin with soap and water as soon as possible.
- Hand washing facilities shall be available. If hand washing facilities are not feasible, the Company will provide either an appropriate antiseptic hand cleanser in conjunction with cloth/paper towels or antiseptic towelettes.
- Contaminated needles and other contaminated sharps should not be handled if you are not authorized or trained to do so.
- All surfaces shall be cleaned and decontaminated after contact with blood or other infectious materials.
- Bloodborne pathogens kits are located near the first aid kits and are to be used in emergency situations by qualified and trained employees. Employees are not allowed to provide first aid services to another employee that is able to self-render first aid.

Personal Protective Equipment
When the possibility of occupational exposure is present, PPE is to be provided at no cost to the employees such as gloves, gowns, etc. PPE shall be used unless employees temporarily declined to use under rare circumstances. PPE shall be repaired and replaced as needed to maintain its effectiveness. All PPE shall be of the proper size and made readily accessible.

Our employees adhere to the following practices when using their personal protective equipment:

- Any garments penetrated by blood or other infectious materials are removed and disposed of immediately.
- All potentially contaminated personal protective equipment is removed prior to leaving a work area.
- Gloves are worn whenever employees anticipate hand contact with potentially infectious materials or when handling or touching contaminated items or surfaces.
- Disposable gloves are replaced as soon as practical after contamination or if they are torn, punctured or otherwise lose their ability to function as an "exposure barrier".
- Any PPE exposed to bloodborne pathogens shall be disposed of properly.
- PPE should be cleaned, laundered and/or properly disposed of if contaminated.
- The Company will repair and replace PPE as needed to maintain its effectiveness.

Housekeeping
Our staff employs the following practices:

- All equipment and surfaces are cleaned and decontaminated after contact with blood or other potentially infectious materials.
- All trash containers, pails, bins, and other receptacles that held contaminated material are cleaned and decontaminated as soon as possible following the contamination event.

Post-Exposure and Follow Up
Post-Exposure Evaluation & Follow-Up
If there is an incident where exposure to bloodborne pathogens occurred, we immediately focus our efforts on investigating the circumstances surrounding the exposure incident and making sure that our employees receive medical consultation and immediate treatment.

The Company Safety Director investigates every reported exposure incident and a written summary of the incident, and its causes is prepared, and recommendations are made for avoiding similar incidents in the future. We provide an exposed employee with the following confidential information:

- Documentation regarding the routes of exposure and circumstances under which the exposure incident occurred.
- Identification of the source individual (unless not feasible or prohibited by law).

Once these procedures have been completed, an appointment is arranged for the exposed employee with a qualified healthcare professional to discuss the employee's medical status. This includes an evaluation of any reported illnesses, as well as any recommended treatment.

Information Provided to the Healthcare Professional. We forward the following:

- A copy of this procedure.
- A description of the exposure incident.

- Other pertinent information.

Healthcare Professional's Written Opinion

After the consultation, the healthcare professional provides the Company with a written opinion evaluating the exposed employee's situation. We, in turn, furnish a copy of this opinion to the exposed employee. The written opinion will contain only the following information:

- Whether Hepatitis B Vaccination is indicated for the employee.
- Whether the employee has received the Hepatitis B Vaccination.
- Confirmation that the employee has been informed of the results of the evaluation.
- Confirmation that the employee has been told about any medical conditions resulting from the exposure incident which require further evaluation or treatment.
- All other findings or diagnoses will remain confidential and will not be included in the written report.

Record Keeping

All records shall be made available upon request of employees, OSHA's Assistant Secretary and the Director of OSHA for examination and copying. Medical records must have written consent of employee before released. The Company shall meet the requirements involving transfer of records set forth in 29 CFR 1910.1020(h).

The respective Human Resources representative shall maintain Bloodborne Pathogen exposure records.

Employee medical records shall be kept confidential and are not to be disclosed without the employee's written consent, except as required by 29 CFR 1910.1030 or other law.

Accurate medical records for each employee with occupational exposure must be maintained for at least the duration of employment plus 30 years and shall include at least the following:

- Employee's name and Social Security number.
- Employee's Hepatitis B vaccination status, including vaccination dates.
- All results from examinations, medical testing and follow-up procedures, including all health care professional's written opinions.
- Information provided to the health care professional.
- Any Hepatitis B Vaccine Declinations.

Training records shall be maintained for 3 years from the date on which the training occurred and shall include at least the following:

- Outline of training program contents.
- Name of person conducting the training.
- Names and job titles of all persons attending the training.
- Date of training.

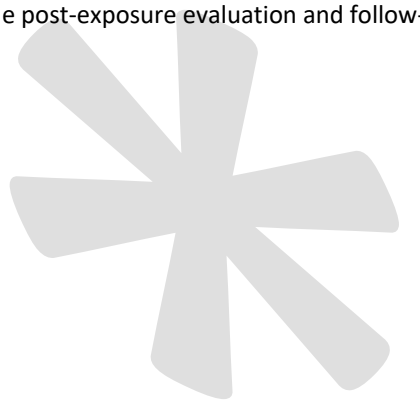
Labels and Signs

Biohazard warning labeling shall be used on containers of regulated waste; Sharps disposal containers; contaminated laundry bags and containers; contaminated equipment.

Information

Information provided to our employees includes:

- This Bloodborne Pathogens procedure.
- The modes of transmission of bloodborne pathogens.
- Our facility's Exposure Control Procedure (and where employees can obtain a copy).
- Appropriate methods for recognizing tasks and other activities that may involve exposure.
- A review of the use and limitations of methods that will prevent or reduce exposure.
- Selection and use of personal protective equipment.
- Actions to take and persons to contact in an emergency involving potentially infectious material.
- The procedure to follow if an exposure incident occurs, including incident reporting.
- Information on the post-exposure evaluation and follow-up, including medical consultation.



INNOVATIONS MANUFACTURING, INC

VACCINATION DECLINATION FORM

Date:_____

Employee Name: _____

Employee ID#: _____

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

_____ _____

Employee Signature Date

_____ _____

Facility Representative Signature Date

POST-EXPOSURE EVALUATION AND FOLLOW-UP CHECKLIST

The following steps must be taken, and information transmitted, in the case of an employee's exposure to bloodborne pathogens:

ACTIVITY	COMPLETION DATE
Employee furnished with documentation regarding exposure incident.	_____
Source individual identified. (_____) Source individual	_____
Appointment arranged for employee with healthcare professional. (_____) Professional's name	_____

Documentation forwarded to healthcare professional

_____ Bloodborne Pathogens Standard
_____ Description of exposed employee's duties
_____ Description of exposure incident, including routes of exposure

CONFINED SPACES

Innovations Manufacturing, Inc. (the Company)

Purpose

The purpose of this program is to ensure the safety of all employees and contractors working for the Company and to comply with all regulations that pertain to confined spaces.

Scope

This program covers all employees regardless of the site they are working on. This program applies to all non-employee workers that may be involved in confined space entry while on Company owned or operated sites.

Definitions

Acceptable entry conditions: the conditions that must exist in a confined space to allow entry and to ensure that employees involved with a confined space entry can safely enter into and work within the space.
Attendant: an individual stationed outside one or more Confined spaces who monitors the authorized Entrants and who performs all Attendant's duties assigned in the Company Confined Spaces Program. Attendants must have sufficiently completed and fully understands the Confined Space training and is approved by the HSE Manager to work in a confined space as an Attendant.
Authorized Entrant: an individual who is authorized by Company to enter a confined space. Entrants must have sufficiently completed and fully understands the Confined Space training and is approved by the HSE Manager to work in a confined space as an Authorized Entrant.
Blanking or Blinding: the absolute closure of a pipe, line, or duct by the fastening of a solid plate (such as a spectacle blind or a skillet blind) that completely covers the bore and that is capable of withstanding the maximum pressure of the pipe, line, or duct with no leakage beyond the plate.
Confined Space:

- A space that is large enough and so configured that an employee can bodily enter and perform assigned work;
- Has limited or restricted means for entry or exit (for example, tanks, vessels, coolers, storage bins, hoppers, vaults, and pits are spaces that may have limited means of entry); and
- Is not designed for continuous occupancy.

Double block and bleed: the closure of a line, duct, or pipe by closing and locking or tagging two in-line valves and by opening and locking or tagging a drain or vent valve in the line between the two closed valves.
Emergency: any occurrence (including any failure of hazard control or monitoring equipment) or an event internal or external to the confined space that could endanger Entrants.
Engulfment: the surrounding and effective capture of a person by a liquid or finely divided (flowable) solid substance that can be aspirated to cause death by filling or plugging the respiratory system or that can exert enough force on the body to cause death by strangulation, constriction, or crushing.
Entry: the action by which a person passes through an opening into a confined space. Entry includes ensuing work activities in that space and is considered to have occurred as soon as any part of the Entrant's body breaks the plane of an opening into the space.
Entry permit: means the written or printed document that is provided by Company to allow and control entry into a confined space that contains the information specified in this program.
Entry Supervisor: the person responsible for determining if acceptable entry conditions are present at a confined space where entry is planned, for authorizing entry and overseeing entry operations, and for terminating entry as required by this section.

- Entry Supervisors must have sufficiently completed and fully understands the Confined Space training and is approved by the HSE Manager to work in a confined space.

- An Entry Supervisor also may serve as an Attendant or as an authorized Entrant, as long as that person is trained and equipped as required by this section for each role he or she fills. Also, the duties of Entry Supervisor may be passed from one individual to another during the course of an entry operation.
- The Entry Supervisor is responsible to test and monitor the atmosphere conditions.

Hazardous atmosphere: an atmosphere that may expose employees to the risk of death, incapacitation, and impairment of ability to self-rescue (that is, escape unaided from a confined space), injury, or acute illness from one or more of the following causes:

- Flammable gas, vapor, or mist in excess of 10 percent of its lower flammable limit (LFL), (0% is normal).
- Atmospheric oxygen concentration below 19.5 percent or above 23.5 percent, (20.9 % is normal).
- Any other atmospheric condition that is immediately dangerous to life or health. (Ex.-H2S 10%, 0% is normal).
- Note: For air contaminants for which OSHA has not determined a dose or permissible exposure limit, other sources of information, such as Safety Data Sheets that comply with the Hazard Communication Standard, published information, and internal documents can provide guidance in establishing acceptable atmospheric conditions.

Hot work permit: the written authorization to perform operations (for example, riveting, welding, cutting, burning, and heating) capable of providing a source of ignition.

Immediately dangerous to life or health (IDLH): any condition that poses an immediate or delayed threat to life or that would cause irreversible adverse health effects or that would interfere with an individual's ability to escape unaided from a confined space.

- Note: Some materials -- hydrogen fluoride gas and cadmium vapor, for example -- may produce immediate transient effects that, even if severe, may pass without medical attention, but are followed by sudden, possibly fatal collapse 12-72 hours after exposure. The victim "feels normal" from recovery from transient effects until collapse. Such materials in hazardous quantities are considered to be “immediately dangerous to life or health”.

Inerting: the displacement of the atmosphere in a permit space by a non-combustible gas (such as nitrogen) to such an extent that the resulting atmosphere is non-combustible. This procedure produces an IDLH oxygen deficient atmosphere.

Isolation: the process by which a confined space is removed from service and completely protected against the release of energy and material into the space by such means as: blanking or blinding; misaligning or removing sections of lines, pipes, or ducts; a double block and bleed system; lockout or tagout of all sources of energy; or blocking or disconnecting all mechanical linkages.

Line Breaking: the intentional opening of a pipe, line, or duct that is or has been carrying flammable, corrosive, or toxic material, an inert gas, or any fluid at a volume, pressure, or temperature capable of causing injury.

Non-Permit Confined Space: A confined space that does not contain or, with respect to atmospheric hazards, have the potential to contain any hazard capable of causing death or serious physical harm.

Oxygen deficient atmosphere: an atmosphere containing less than 19.5 percent oxygen by volume.

Oxygen enriched atmosphere: an atmosphere containing more than 23.5 percent oxygen by volume.

Permit-Required Confined Space: a confined space that has one or more of the following characteristics:

- Contains or has a potential to contain a hazardous atmosphere.
- Contains a material that has the potential for engulfing an Entrant.
- Has an internal configuration such that an Entrant could be trapped or asphyxiated by inwardly converging walls or by a floor which slopes downward and tapers to a smaller cross-section.
- Contains any other recognized serious safety or health hazard.

Permit system: the employer's written procedure for preparing and issuing permits for entry and for returning the confined space to service following termination of entry.

Prohibited condition: any condition in a confined space that is not allowed by the permit during the period when entry is authorized.
Rescue service the personnel designated to rescue employees from Permit-Required Confined Spaces.
Retrieval system: the equipment (including a retrieval line, chest or full-body harness, wristlets, if appropriate, and a lifting device or anchor) used for non-entry rescue of persons from confined spaces.
Testing: the process by which the hazards that may confront Entrants of a confined space are identified and evaluated. Testing includes specifying the tests that are to be performed in the permit space.

Responsibilities

Managers/Supervisor

- Shall ensure that all employees have been trained and fully understand the requirements of this program.
- Shall provide the necessary equipment to comply with these requirements and ensure that all employees are trained on its use.
- Shall ensure that all confined space assessments have been conducted and documented.
- Shall ensure that provisions and procedures are in place for the protection of employees from external hazards including but not limited to pedestrians, vehicles and other barriers and by use of the pre-entry checklist verifying that conditions in the permit space are acceptable for entry during its duration.
- Shall ensure that all Permit-Required Confined Spaces permits are posted.
- Shall ensure an annual review of the program including all entry permits issued that during that annual period.
- Shall ensure that confined spaces are identified properly as either a Non-Permit Confined Space or a Permit-Required Confined Space.
- Shall ensure that all confined spaces that have been identified as “no entry” have signs that state, “DANGER-DO NOT ENTER”.
- Shall ensure signs have been posted at all Permit-Required Confined Space areas that state, “DANGER – PERMIT ENTRY CONFINED SPACE” along with the proper warning word such as “ASPHYXIANT, FLAMMABILITY or TOXIC HAZARD”
- Shall file all permits on the Company safety solution center. Completed permits shall be kept on file in the company electronic document management system for no less than 3 years.

Affected Employee

- Shall attend Confined Space Entry training commensurate with their duties and when duties change as required.
- Shall comply with all aspects of this program.
- Authorized Entrants, Attendants and Entry Supervisors may be any Company employee that is authorized by management to work in a confined space setting and that has been trained and is proficient in the understanding of program requirements.

Authorized Entry Supervisor Duties

- Shall have a tailgate safety meeting, with all workers to be involved in the confined space entry and review the job to be performed and what safety concerns may be present.
- Shall confirm that all isolation, Lock/out and Tag/outs have been completed prior to entry into a confined space.
- Shall ensure that the requirements of this program are followed and maintained.
- Shall test all atmosphere conditions prior to entry and shall complete and maintain the confined space permit form, and have it accessible for review on the job site at all times.

- Shall notify Company supervisor of entry into a confined space, and notify the supervisor of any changes that may occur, during an entry.
- If the confined space poses a hazard that cannot be eliminated, the Entry Supervisor must arrange for a rescue services.
- If the confined space poses no hazards to the Entrants, the Entry Supervisor can reclassify the confined space to a Non-Permit Confined Space.
- A stand-by rescue team is not required to be on site for Non-Permit Confined Space entries.

Authorized Attendant Duties

- Knows the hazards that may be faced during entry, including information on the mode, signs or symptoms, and consequences of the exposure.
- Is aware of possible behavioral effects of hazard exposure in authorized Entrants.
- Continuously maintains communication and an accurate count of authorized Entrants in the confined space and ensures that the means used to identify authorized Entrants, and accurately identifies who is in the confined space.
- Remains outside the confined space during entry operations until relieved by another Attendant.
- Company has procedures to be used by a single attendant monitoring several confined spaces during an emergency. If more than one confined space is to be monitored by a single attendant, the program must include the means and procedures that will be used in order to enable the attendant to respond to emergencies in one or more permit spaces that he/she is monitoring without distraction from all responsibilities. This will include radio communications with emergency responders or other methods of summoning aid, directing entrants to leave the confined spaces, etc. The procedures shall be on the confined space permit.
- Monitors activities inside and outside the confined space to determine if it is safe for Entrants to remain in the space and orders the authorized Entrants to evacuate the confined space immediately under any of the following conditions:
    - If the Attendant detects a prohibited condition
    - If the Attendant detects the behavioral effects of hazard exposure in an authorized Entrant
    - If the Attendant detects a situation outside the space that could endanger the authorized Entrants
    - If the Attendant cannot effectively and safely perform all the duties required
- Summon rescue and other emergency services as soon as the Attendant determines that authorized Entrants may need assistance to escape from confined space hazards
- Takes the following actions when unauthorized persons approach or enter a confined space while entry is underway:
    - Warn the unauthorized persons that they must stay away from the confined space
    - Advise the unauthorized persons to exit the confined space immediately, if they have entered the space
    - Inform the authorized Entrants and the Entry Supervisor if unauthorized persons have entered the confined space
- Performs no duties that might interfere with the Attendant's primary duty to monitor and protect the authorized Entrants.
- Authorized Attendants shall not monitor more than one confined space at a time .

Authorized Entrant Duties

- Knows the hazards that may be faced during entry, including information on the mode, signs or symptoms, and consequences of the exposure.
- Uses appropriate personal protective equipment properly, e.g., face and eye protection, and other forms of barrier protection such as gloves aprons, coveralls, and breathing equipment.
- Is aware of possible behavioral effects of hazard exposure in authorized Entrants.

- Shall witness and verify calibrated air monitoring data and if approved, sign off, before entry is made.
- Is entitled to request additional monitoring at any time.
- Maintain communication with the Attendants to enable the Attendant to monitor the Entrants status as well as to alert the Entrant to evacuate if needed, and
- Exit from confined spaces as soon as possible when ordered by an Attendant or Entry Supervisor, when the Entrant recognizes the warning signs or symptoms of an exposure exists, or when a prohibited condition exists, or when an alarm is activated.

Procedure

Non-Permit Confined Space Entry

If testing of the confined space atmosphere is within acceptable limits without the use of forced air ventilation and the space is properly isolated, the space can be entered by following the requirements for Level I confined space entry.

- Entrants and/or their representative shall be given the opportunity to observe and participate in the air monitoring process.
- Entrants shall review and sign the confined space permit.

Employees may enter and work in the confined space as long as LEL, O2, and toxicity hazards remain at safe levels.

- Complete the Company Confined Space Entry Permit to document that there are no confined space hazards. Make this certification available to all personnel entering the space.
- A trained Attendant must always be outside the confined space. The Attendant must monitor the authorized Entrants for the duration of the entry operation.

Exception: The Attendant requirements for Level I confined space entry may be exempted, if the job assessment is performed and has determined that there are no inherent dangers to allow single person entry.

- This provision is intended to permit field operations to enter crankcases, shallow valve boxes, cellars, excavations, etc. without an Attendant being present and all other aspects of the entry permit complied with.
- When there are changes in the use and configuration of a confined space that might increase the hazards to the Entrants (e.g., using epoxy coating on a tank floor, welding, painting, etc.), re-evaluate the space. If necessary, reclassify the space as a Permit-Required Confined Space.
- Continuously monitor the confined space atmosphere to ensure that it is still safe.
- The space must not contain a hazardous atmosphere while personnel are inside.
- If a hazardous atmosphere is detected during an entry, personnel must immediately evacuate the space.
- Re-evaluate the space to determine how the hazardous atmosphere developed.
- The Entry Supervisor shall cancel the entry permit.
- Take action to protect personnel before any subsequent activity to re-enter the space takes place.
- Reissue the Company Confined Space Entry Permit before allowing Entrants to re-enter the space.
- If necessary, reclassify the space as a Permit-Required Confined Space.
- Ensure that vehicle or other equipment exhaust does not enter the space.

Permit-Required Confined Space Entry

If the space is properly isolated and results of air monitoring are above acceptable parameters without local exhaust ventilation in operation, classify the entry as a Permit-Required Confined Space.

- Complete the Company Confined Space Entry Permit before proceeding with work in a Permit-Required Confined Space.

- Entrants and/or their representative shall be given the opportunity to observe and participate in the air monitoring process.
- Entrants shall review and sign the confined space permit.
- At least one trained Attendant must always be outside the Permit-Required Confined Space.
- The Attendant must monitor the authorized Entrants for the duration of the entry operation.
- Only authorized Entrants may enter a Permit-Required Confined Space.
- All Entrants must sign in and out on the entry permit when entering and leaving a Permit-Required Confined Space.
- The back of the permit or a sign-in sheet must be used for this purpose.
- Post signs and barricades outside all Permit-Required Confined Spaces to notify personnel that a confined space entry is in progress and unauthorized entry is prohibited.
- Conditions must be continuously monitored where Entrants are working to determine that acceptable conditions are maintained during entry.
- If a hazardous atmosphere is detected during an entry, personnel must immediately evacuate the space.
    - The Entry Supervisor shall cancel the entry permit.
    - Re-evaluate the space to determine how the hazardous atmosphere developed.
    - Take action to protect personnel before any subsequent activity to re-enter the space takes place.
    - Re-issue the Company Confined Space Entry Permit before allowing Entrants to re-enter the space.
    - Employees or their representatives are entitled to request additional monitoring at any time.
- The permit must be terminated when the entry operations are complete or when permit conditions change (i.e., hazardous air monitoring results are noted, unsafe behaviors are observed, etc.).
- The minimum rescue equipment required for Permit-Required Confined Space entry is covered in the Rescue & Emergency section of this program.
- Permit-Required Confined Space entry operations will be reviewed when Company believes that the requirements of this confined space program may not adequately protect personnel.
- If deficiencies are found in the program, the program will be revised, and personnel will be trained in the new revisions before subsequent entries are authorized.

Pre-Job Planning and Space Preparation

- The Entry Supervisor must determine that the confined space is properly isolated by blinding, disconnecting, and/or by following local Lockout/Tagout procedures.
- The Entry Supervisor must discuss with all Entrants the hazards of the space, communication methods and emergency procedures during the confined space entry.
- Eliminate any condition making it unsafe to open the equipment to atmosphere.
- Promptly guard the opening to prevent an accidental fall through the opening and to protect each employee working in the space from foreign objects entering the space.
- If applicable, wash, steam, ventilate or degas the confined space to properly free it of possible contaminants. Vent vapors to a safe location.
- Do not allow unauthorized personnel to enter a confined space. Barricade and/or guard all confined spaces to prevent entry of unauthorized Entrants.
- If performing hot work in the confined space, precautions must be taken consistent with the Company Hot Work Permit procedure.
- Ensure that vehicle or other equipment exhaust does not enter the space.

Pre-Entry Safety Meeting

- The Entry Supervisor must declare when the confined space is ready for entry.

- The Entry Supervisor shall hold a pre-entry safety meeting to discuss all requirements and procedures with all authorized Entrant(s) and Attendant(s) involved with the entry. He/she will discuss other concerns such as previous contents, vessel coating, PPE required etc., during this meeting.
- The Entry Supervisor must coordinate entry operations when employees of more than one company are working simultaneously in the confined space. This coordination is necessary so that one company's work does not endanger the employees of another company.

Equipment

Check all work equipment to ensure that it has the proper safety features and is approved for the locations where it will be used. The Entry Supervisor shall ensure that all equipment is properly maintained in a safe condition and that Entrants use the equipment properly.

The following equipment must be considered and may be required when entering a confined space:

- Atmospheric Testing and Monitoring Equipment.
- Barriers, Shields, and Signs – Post signs and barricades outside all Permit-Required Confined Spaces to notify personnel that a confined space entry is in progress and unauthorized entry is prohibited. Any signs used must state "Danger – Permit Entry Confined Space" along with the proper warning word such as "Asphyxiant, Flammability or Toxic Hazard". All barricades must be capable of preventing a person from inadvertently walking into or kicking an object into the space.
- Communications Equipment – Only use intrinsically safe equipment in areas where a hazardous atmosphere may exist. Use a communication system that will keep the Attendant in constant, direct communication with the Entrant(s) working in the confined space. Also, use a communication system that allows the Attendant to summon help from rescue or emergency service.
- Entry and Exit Equipment – (For example: ladders may be needed for safe entry and exit).
- Lighting Equipment – Needed for safe entry, work within the space and exit. Lighting equipment used in the confined space must be certified safe for the location.
- Portable electric lighting used in wet and/or other conductive locations (drums, tanks, vessels) must be operated at 12 volts or less. 120 volt lights may be used if protected by a ground-fault circuit interrupter.
- Personal Protective Equipment – Ensure that personnel wear the required personal protective equipment. For respiratory protection requirements, refer to the Respiratory Protection Program.
- Rescue and Emergency Equipment – Except if provided by outside rescue services.
- The Attendants must also have an approved first aid kit.
- Vacuum Trucks – When used, trucks must be properly grounded or bonded to prevent static sparks.
- Ventilating Equipment – Local exhaust air movers used to obtain acceptable atmospheric entry conditions (e.g., Copus air movers).
- Other – Any other equipment necessary for safe entry into and rescue from permit required confined spaces.

Air Monitoring

- Before an employee enters the space, the internal atmosphere shall be tested, with a calibrated direct-reading instrument, for oxygen content, for flammable gases and vapors, and for potential toxic air contaminants, in that order. Monitoring of the space must inform the entrants of the potential hazards and results and they must participate in the permit review and signing.
- Air shall be periodically test while continuous ventilation is applied.
- Any employee, who enters the space, or that employee's authorized representative, shall be provided an opportunity to observe the pre-entry testing required by this paragraph.
- Employees or their representatives are entitled to request additional air monitoring at any time.

Ventilation
Continuous forced air ventilation must be used and tested as follows:

- An employee may not enter the space until the forced air ventilation has eliminated any hazardous atmosphere;
- The forced air ventilation shall be so directed as to ventilate the immediate areas where an employee is or will be present within the space and shall continue until all employees have left the space;
- The air supply for the forced air ventilation shall be from a clean source and may not increase the hazards in the space.
- The atmosphere within the space shall be periodically tested as necessary to ensure that the continuous forced air ventilation is preventing the accumulation of a hazardous atmosphere. Any employee, who enters the space, or that employee's authorized representative, shall be provided with an opportunity to observe the periodic testing and may request additional monitoring at any time.
- If a hazardous atmosphere is detected during entry each employee shall leave the space immediately and the space shall be evaluated to determine how the hazardous atmosphere developed; and measures shall be implemented to protect employees from the hazardous atmosphere before any subsequent entry takes place.

Multiple Employer Procedure
In order not to endanger the employees of any other employer, the Entry Supervisor shall:

- Verify that all contractor employees have been trained in confined space and that all contractor employees fully understand the Company procedures pertaining to Confined Space.
- Inform the contractor that the workplace contains permit spaces and that permit space entry is allowed only through compliance with a permit space program meeting the requirements of this section.
- Apprise the contractor of the elements, including the hazards identified and the employees experience with the space, that make the space in question a permit space.
- Inform the contractor of any precautions or procedures that Company has implemented for the protection of employees in or near permit spaces where contractor personnel will be working.
- Coordinate entry operations with the contractor, when both Company personnel and contractor personnel will be working in or near confined spaces.
- Debrief the contractor at the conclusion of the entry operations regarding the permit space program followed and regarding any hazards confronted or created in confined spaces during entry operations.
- In addition to complying with the confined space requirements that apply to all employees; each contractor, who is retained to perform permit space entry operations, shall:
    - Obtain any available information regarding confined space hazards and entry operations from the Company Entry Supervisor.
    - Coordinate entry operations with the Company Entry Supervisor, when both Company personnel and contractor personnel will be working in or near permit spaces.
    - Inform Company of the confined space program that the contractor will follow and of any hazards confronted or created in the confined space, either through a debriefing or during the entry operation.

Rescue and Emergency Services
General

Rescue service must be on-site for immediately dangerous to life and health (IDLH) conditions while work is being performed. Rescue services must be either:

- Provided by the host facility,

- Provided by an outside service which is given an opportunity to examine the entry site, practice rescue and decline as appropriate, or
- Provided by Company by selecting a rescue team that is equipped and trained to perform the needed rescue services.
- The Attendant shall order the other Entrants not to move the injured nor allow untrained or unauthorized workers into the space that are not trained to handle a confined space rescue.
- Safety Data Sheet's for substances that an injured Entrant was exposed to must be provided to the medical facility treating the injured worker.

Permit-Required Confined Space Rescue:

- When the Attendant becomes aware of the need for rescue, the Attendant shall immediately summon the onsite rescue team by the agreed upon communication method, verbally, radio or cell phone, without leaving the vicinity of the confined space.
- The Attendant shall prevent unauthorized personnel from attempting a rescue.
- After the rescue team has been notified, the Attendant shall alert the Entry Supervisor of the emergency via the same communication methods.
- The preferred means of providing rescue service is through the use of a qualified outside rescue service vendor (client host). The outside rescue service vendor must be:
    - Informed of the hazards that they may confront during a rescue
    - Provided access to the Permit-Required Confined Space to examine the entry site, practice rescue, and decline as appropriate
    - Access to the space allows the rescue service and local supervision to jointly develop appropriate rescue plans
    - If the host operator is designated to provide rescue services for Company, the agreement of services must be included in contract for the job
- If Company employees are to perform Permit-Required Confined Space rescues, they must be:
    - Provided and trained in the use of the proper personal protective equipment necessary to make the rescue
    - Provided PPE at no cost
    - Trained to perform the assigned duties
    - Required to practice making rescues at least once every 12 months
    - Trained in basic first aid and CPR
    - A minimum of one member of the rescue team must hold a current certification in first aid and CPR

Non-entry Rescue

- To facilitate non-entry rescue, an Entrant must be attached to a retrieval system whenever he/she enters a Permit-Required Confined Space with a vertical depth of more than 5 feet.
- The retrieval equipment is not required if it will increase the overall risk of the entry, e.g., creating an entanglement hazard, or will not contribute to the rescue of the Entrant.
- Each Entrant shall use a full body harness equipped with a "D" ring located between the shoulders or above the head.
- Wristlets may be used instead of the full body harness if the use of the full body harness is not feasible or creates a greater hazard *and* that using wristlets is the safest and most effective alternative.
- The retrieval line must be attached to the "D" ring and the other end of the retrieval line attached to a retrieval device or fixed point located outside the space so that rescue can begin as soon as the rescuer becomes aware that rescue is necessary.

Issuance/Reviewing of Permit

Only when all pre-entry requirements are satisfied, the Entry Supervisor shall issue a completed and signed confined space permit. The confined space permit is valid for one shift.

In the event of any unauthorized entry, employee complaints, a hazard not covered by the permit, the occurrence of an injury or near miss the entry permit shall be cancelled and a review shall be conducted to provide employee protection and for revising the program prior to authorizing subsequent entries.

An annual review of this program, using the cancelled permits retained within 1 year after each entry shall be conducted by the HSE Manager to revise the program as necessary, to ensure that employees are protected. If no confined space entries were performed during a 12-month period, no review is necessary.

Termination and Closing or Cancelling of Permits

The Entry Supervisor shall terminate the confined space permit, at the end of the job operation, at the end of the shift or when the Entry Supervisor or Attendant determine that conditions in or near the confined space have changed and is hazardous to the Entrants.

The Entry Supervisor shall, at the conclusion of entry operation, close out the permit and provide the safety department the original copy of the Confined Space Permit.

Training

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

Training shall be provided to each affected employee, before the employee is first assigned duties under this program, if a new hazard has been created or special deviations have occurred and before there is a change in assigned duties.

The employee shall be retrained:

- Whenever there is a change in confined space operations that presents a hazard about which an employee has not previously been trained.
- Whenever the supervisor has reason to believe either that there are deviations from the permit space entry procedures required by this section or that there are inadequacies in the employee's knowledge or use of these procedures.

The training shall establish employee proficiency in the duties required by this program and shall introduce new or revised procedures, as necessary.

The supervisor shall certify that the training required by this program has been accomplished.

- The certification shall contain each employee's name, the signatures or initials of the trainers, and the dates of training.

The certification shall be available for inspection by employees, their authorized representatives, management, clients and the safety department

COMBUSTIBLE DUST

Innovations Manufacturing, Inc. (the Company)

Purpose

The purpose of this plan is to provide guidance and requirements necessary for efficient, effective, and compliant combustible dust safety.

Scope

This procedure applies to all Company employees. When work is performed on a non-owned or operated site, the operator's program shall take precedence, however, this document covers Company employees and contractors and shall be used on all Company owned and/or operated sites.

Responsibilities

- The Safety Director shall administer the Combustible Dust Plan.
- Supervisors and Managers shall ensure the requirements of this plan are followed and implemented.
- Employees shall understand this plan, follow its guidelines, and report any unsafe work conditions.

General Information

What is a Combustible Dust

There are several definitions, but all agree that it is a very small particulate that when dispersed in air can explode under certain conditions. The NFPA 654 (2006) defines it as a combustible dust particulate solid that presents a risk of fire or explosion, regardless of size or shape, when suspended in air (or other oxidant) at various concentrations. This was the definition adopted by OSHA for its National Emphasis Program, launched in 2008. The following will be considered as solid particulate matter.

- dust
- fibers
- fragments
- flakes
- chips, or
- mixtures of any of the above mentioned.

What Elements Should be Considered to Prevent an Explosion

Two of the most contributing factors to a combustible dust explosion are the accumulation of dust in the work areas and surfaces and the presence of ignition sources.

General Requirements

Ignition Sources

Proper equipment and processes shall be installed to adequately control ignition sources in areas where combustible dust may be present. This may include, but is not limited to, not performing hot work in areas where combustible dust may be present or smoking only in designated smoking areas as outlined by Company policy.

Equipment Used

Electrical cleaning devices used in dusty areas should be approved for the hazard classification. Equipment shall be approved not only for the class of location, but also for the ignitable or combustible properties of the specific gas, vapor, dust, or fiber that will be present.

Compressed Air
Compressed air shall not be used, and vigorous sweeping shall not be performed, in any area where combustible dust may be present in order to prevent dust clouds from forming. Only vacuums or wet sweeping methods shall be used.

Housekeeping
Proper housekeeping and cleaning measures are in place to minimize dust accumulations. Cleaning and wetting frequencies should be established for floors and horizontal surfaces, such as ducts, pipes, hoods, ledges, and beams, to minimize dust accumulations in operating areas of the facility.

Hazardous Areas
The following areas are where combustible dust is gathered via dust collection systems:

- Shipping- wood dust
- Windows- vinyl dust
- Windows- Styrofoam dust

The assured grounding systems of the vacuum collection systems are designed to prevent a static ignition source in said equipment.

Training

Employees who are involved with operating, maintaining, and supervising facilities that handle combustible dust shall be trained in the hazards relating to combustible dust. Training shall be completed on an annual basis.

DRIVING

Innovations Manufacturing, Inc. (the Company)

Purpose

This program is written in compliance with regulatory requirements and provides directives to managers, supervisors, and employees about their responsibilities in the operations and management of company vehicles.

The purpose of this policy is to ensure the safety of those individuals who drive company vehicles and to provide guidance on the proper use of company fleet vehicles. Vehicle accidents are costly to our company, but more importantly, they may result in injury to you or others. It is the driver's responsibility to operate the vehicle in a safe manner and to drive defensively to prevent injuries and property damage. As such, Innovations Manufacturing recognizes all applicable state motor vehicle regulations relating to driver responsibility as policy in the Company. The Company expects each driver to drive in a safe and courteous manner pursuant to the following safety rules. The attitude you take when behind the wheel is the single most important factor in driving safely. The Safety Director and the Human Resources Manager is responsible for the general administration of this policy.

Key Responsibilities

Safety Director

- The Company Safety Director is responsible for developing and maintaining this program and related procedures.
- The Safety Director is responsible for ensuring all workers meet the requirements of this procedure.

Driving Safety Committee

The Driving Safety Committee is comprised of the Safety Director, Human Resources Manager, VP of Operations, and the President of the Company. The committee is responsible for:

- Reviewing accidents and employer's overall driver safety record to determine if there should be changes in policy or procedure; or if other corrective action (such as training, equipment changes, etc.), should be implemented to enhance the safe operation of company vehicles, and/or personal vehicles on company business.
- Reviewing driving records of individual employees and making changes when driving privileges should be suspended or revoked.
- Reviewing all other issues that arise with respect to compliance with this policy.

Production Manager

- Responsible for the implementation and maintenance of the program for their respective site and ensuring all assets are made available for compliance with the plan.

HR Manager

- Responsible for the disciplinary and drug testing program associated with the driving program.

Employees

- All employees shall be familiar with this procedure and the local workplace vehicle safety program.
- Follow all requirements, report unsafe conditions, and follow all posted requirements.
- Only authorized employees will drive a motor vehicle in the course and scope of work or operate a company owned vehicle.
- Drivers will be appropriately licensed and trained to operate the vehicle they have been authorized to operate.

- Authorized drivers are not allowed to operate a motor vehicle while under the influence of alcohol, illegal drugs, certain medications, prescription, or over-the counter medications that might impair their driving skills.

Vehicle and Transportation Related

Driving Safety

- Backing is prohibited whenever practicable. Where backing is required, drivers, when parking, should make every effort to park the vehicle in a manner that allows the first move when leaving the parking space to be forward. This policy does not apply in parking lots with marked parking stalls.
- Passenger compartments are to be free from loose objects that might endanger passengers in the event of an accident. Any vehicle with non-segregated storage shall be equipped with a cargo net or equivalent to separate the storage area.
- Signs, stickers, or labels are to be fitted in such a manner that they do not obstruct the driver's vision or impede the driver's use of any controls.

Driver Guidelines and Reporting Requirements

- Company vehicles are to be driven by authorized employees only, except in case of repair testing by a mechanic.
- Any employee who drives a company vehicle and has a driver's license revoked or suspended shall immediately notify the HR Manager by the next business day, and immediately discontinue operation of the company vehicle. Failure to do so may result in disciplinary action, including termination of employment.

Vehicle Accidents

All accidents in company vehicles, regardless of severity, must be reported to the police and to the Safety Director. Accidents are to be reported immediately from the scene of the accident. Accidents in personal vehicles while on company business must follow these same accident procedures. Work related vehicle accidents that cause injury to the employee must be reported to the Safety Director and Human Resources Manager for Worker's Compensation purposes. Failing to stop after an accident and/or failure to report an accident may result in disciplinary action, up to and including termination of employment.

Accident Procedures

- In an attempt to minimize the results of an accident, the driver must prevent further damages or injuries and obtain all pertinent information and report it accurately.
    - Call for medical aid if necessary.
    - Call the police. All accidents, regardless of severity, must be reported to the police. If the driver cannot get to a phone, he should write a note giving location to a reliable appearing motorist and ask them to notify the police.
    - Record names and addresses of driver, witnesses, and occupants of the other vehicles and any medical personnel who may arrive at the scene.
    - Complete the Incident Notification form located in the Solution Center at www.im-safety.com.
    - Gather the following information: license number of other drivers; insurance company names and policy numbers of other vehicles; make, model, and year of other vehicles; date and time of accident; and overall road and weather conditions.

  - Use your cell phone to take pictures of the scene from a distance far enough away to capture all vehicles involved and get close up photos of the damage. If there are any contributing factors or tangibles, get photos of those as well.
- Do not discuss the accident with anyone at the scene except the police. Do not accept any responsibility for the accident. Don't argue with anyone.
- Provide the other party with your name, address, driver's license number, and insurance information.
- Immediately report the accident to your manager and the HR Manager.

Note: There will be a formal accident review conducted on each accident to determine cause and how the accident could have been prevented.

Traffic Violations
Drivers must report all ticket violations received during the operation of a company vehicle, or while driving a personal vehicle on company business within 72 hours to the Human Resources Manager.

Driving Record
Motor Vehicle Records will be obtained on all drivers prior to employment and no less than every six months. A driving record that fails to meet the criteria stated in this policy or is considered to be in violation of the intent of this policy by the Driving Safety Committee will result in a loss of the privilege of driving a company vehicle.

Company Business
Company business is defined as driving at the direction, for the benefit, or on behalf of the Company. If you are receiving compensation for your drive time, you are driving on company business. It does not include normal commuting to and from work or while on a break or lunch break.

Driver Safety Rules
- Driving on company business and/or driving a company vehicle while under the influence of intoxicants and other drugs (which could impair driving ability) is forbidden and is sufficient cause for discipline, up to and including termination of employment.
- Cell phone use while driving should be kept to hands free devices. Drivers need to be aware when use of the cell phone is creating a distraction from safe driving and adjust their usage accordingly, including pulling off the road to continue/finish the conversation if needed. Whenever possible, Drivers should complete calls while the vehicle is parked and/or use the phone in a "hands free" mode via a headset or speaker. While driving, attention to the road and safety should always take precedence over conducting business over the phone.
- No driver shall operate a company vehicle when his/her ability to do so safely has been impaired by illness, fatigue, injury, or prescription medication.
- All drivers and passengers operating or riding in a company vehicle must wear seat belts, even if air bags are available.
- No unauthorized personnel are allowed to ride in company vehicles.
- Drivers are responsible for the security of company vehicles assigned to them. The vehicle engine must be shut off, ignition keys removed, and vehicle doors locked whenever the vehicle is left unattended.
- Head lights shall be used at all times.
- All State and Local laws must be obeyed.

Drivers are to be prepared before the journey
- Inspect for vehicle damage and immediately report any damage to the supervisor if not previously observed

- Make sure dirt or snow is removed from lights on all sides of the vehicle
- Brush or clean off snow or ice on all windows to ensure complete vision
- Check fuel level to be certain the destination can be reached
- Check to ensure the license plates and inspection tag on vehicle are current
- Be rested and alert for driving

Vehicle Requirements

- Vehicles shall be maintained in safe working order
- Vehicles are to be fitted with a spare wheel and changing equipment
- All vehicles are to be equipped with an adjustable left, right and central rear-view mirrors where applicable
- Loads shall be secured and within the manufacturer and legal limits and shall not exceed the manufacturer's specifications and legal limits for the vehicle

Transportation

If workers are required to travel in a worker transportation vehicle, the Company Supervisor must ensure that reasonable measures are taken to evaluate road, weather, and traffic conditions to ensure the safe transit of the workers.

- The operator of a worker transportation vehicle must ensure that the vehicle has been inspected prior to use or before the journey.
- Seated workers must wear seat belts while being transported in a vehicle equipped with seat belts.
- A worker must not ride in a vehicle in a standing position, unless protected from being thrown off balance.
- A worker must not ride in a vehicle with any part of the body outside the vehicle unless essential to the work process and then only if the worker is adequately restrained.

Any enclosed portion or compartment of a vehicle in which workers are transported must have:

- effective ventilation, independent of doors, providing clean air
- adequate lighting and means for heating and cooling
- an effective means of communication between the operator and passengers, and
- more than one means of exit

ATV Vehicles

If a Company employee or contractor/consultant is required to utilize an ATV vehicle, the following shall apply:

- Follow all manufacturer guidelines when operating an ATV
- The Supervisor must ensure that each ATV operator is properly trained in the safe operation of the vehicle.
- The training program for an ATV operator must cover:
    - the operator's pre-trip inspection
    - use of personal protective apparel
    - operating skills according to the ATV manufacturer's instructions
    - basic mechanical requirements, and
    - loading and unloading the vehicle if this is a job requirement
- An ATV operator and any passenger on an ATV must wear clothing suitable for the environmental conditions and any additional protective measures as necessary to protect against the hazards presented at the worksite.
- Approved head protection shall be worn by the operator and passenger.

- Loading and unloading of an ATV onto or off a carrier vehicle must be done in a safe manner. If ramps are used when loading or unloading an ATV they must be securely anchored, placed at a suitable angle, be sufficiently wide and have a surface finish which provides an adequate grip for the ATV's tires.

ELECTRICAL

Innovations Manufacturing, Inc. (the Company)

Purpose

The purpose of the Electrical safety program is to set forth procedures for the safe use of electrical equipment, tools, and appliances at the Company.

Scope

This program applies to all Company employees, temporary employees, and contractors.

Definitions

Affected Personnel: Personnel who normally use and work with electrical equipment, tools, and appliances, but who do not make repairs or perform lock out/tag out procedures.
Appliances: Electrical devices not normally associated with commercial or industrial equipment such as air conditioners, computers, printers, copiers, coffee pots, microwave ovens, toasters, etc.
Circuit Breaker: A device designed to open and close a circuit by non-automatic means and to open the circuit automatically on a predetermined over current without injury to itself when properly applied within its rating.
Disconnecting Means: A device, or group of devices, or other means by which the conductors of a circuit can be disconnected from their source of supply.
Disconnecting Switch: A mechanical switching device used for isolating a circuit or equipment from a source of power.
Double Insulated Tool: Tools designed of non-conductive materials that do not require a grounded, three wire plug.
Ground - Connected to earth or some conducting body that serves in place of the earth.
Grounded Conductor: A conductor used to connect equipment or the grounded circuit of a wiring system to a grounding electrode or electrodes.
Ground Fault Circuit Interrupter (GFCI): A device whose function is to interrupt the electric circuit to the load when a fault current to ground exceeds some predetermined value that is less than that required to operate the over current protective device of the supply circuit. *Company shall use GFCIs in lieu of an assured grounding program*.
Insulated: A conductor encased within material of composition and thickness that is recognized as electrical insulation.
Premises Wiring: That interior and exterior wiring, including power, lighting, control, and signal circuit wiring together with all its associated hardware, fittings, and wiring devices, both permanently and temporarily installed, which extends from the load end of the service drop, or load end of the service lateral conductors to the outlet (s). Such wiring does not include wiring internal to appliances, fixtures, motors, controllers, motor control centers, and similar equipment.
Qualified Person: One that has been trained in the repair, construction and operation of electrical equipment and the hazards involved.
Strain Relief: A mechanical device that prevents force from being transmitted to the connections or terminals of a cable or extension cord.
Class I Locations: Are those in which flammable gases or vapors are or may be present in the air in quantities sufficient to produce explosive or ignitable mixtures.

> Class 1 Division 1 - Is a location (a) in which hazardous concentrations of flammable gases or vapors may exist under normal operating conditions; or (b) in which hazardous concentrations of such gases or vapors may exist frequently because of repairs or maintenance operations or because of leakage; or (c) in which a breakdown or faulty operation or equipment or processes might release hazardous concentrations of flammable gases or vapors, and might also cause simultaneous failure of electrical equipment.

Class 1 Division 2 - Is a location (a) in which volatile flammable liquids or flammable gases are handled, processed, or used, but in which the hazardous liquid, vapors, or gases will normally be confined within closed containers or closed systems from which they can escape only in case of accidental rupture or breakdown of such containers or systems, or in of abnormal operation of equipment or (b) in which hazardous concentrations of gases or vapors are normally prevented by positive mechanical ventilation, and which might become hazardous through failure or abnormal operations of the ventilating equipment; or (c) that is adjacent to a Class 1, Division 1 location, and to which hazardous concentrations of gases or vapors might occasionally be communicated unless such communication is prevented by adequate positive-pressure ventilation from a source of clean air, and effective safeguards against ventilation failure are provided.

Class II locations: Class II locations are those that are hazardous because of the presence of combustible dust. Class II locations include the following:

Class II, Division 1 - A Class II, Division 1 location is a location (a) in which combustible dust is or may be in suspension in the air under normal operating conditions, in quantities sufficient to produce explosive or ignitable mixtures; or (b) where mechanical failure or abnormal operation of machinery or equipment might cause such explosive or ignitable mixtures to be produced, and might also provide a source of ignition through simultaneous failure of electric equipment, operation of protection devices, or from other causes, or (c) in which combustible dusts of an electrically conductive nature may be present.

NOTE: This classification may include areas of, areas where metal dusts and powders are produced or processed, and other similar locations that contain dust producing machinery and equipment (except where the equipment is dust-tight or vented to the outside).

- These areas would have combustible dust in the air, under normal operating conditions, in quantities sufficient to produce explosive or ignitable mixtures.
- Combustible dusts that are electrically nonconductive include dusts produced in the handling and processing produce combustible dusts when processed or handled.
- Dusts containing magnesium or aluminum are particularly hazardous and the use of extreme caution is necessary to avoid ignition and explosion.

Class II, Division 2 - A Class II, Division 2 location is a location in which: (a) combustible dust will not normally be in suspension in the air in quantities sufficient to produce explosive or ignitable mixtures, and dust accumulations are normally insufficient to interfere with the normal operation of electrical equipment or other apparatus; or (b) dust may be in suspension in the air as a result of infrequent malfunctioning of handling or processing equipment, and dust accumulations resulting there from may be ignitable by abnormal operation or failure of electrical equipment or other apparatus.

NOTE: This classification includes locations where dangerous concentrations of suspended dust would not be likely but where dust accumulations might form on or in the vicinity of electric equipment. These areas may contain equipment from which appreciable quantities of dust would escape under abnormal operating conditions or be adjacent to a Class II Division 1 location, as described above, into which an explosive or ignitable concentration of dust may be put into suspension under abnormal operating conditions.

Responsibilities

Managers/Supervisor/Employees

- The Safety Director will develop electrical safety programs and procedures in accordance with OSHA requirements and/or as indicated by events and circumstances.
- Operations Managers and the Safety Supervisors are responsible for ensuring that only qualified employees and or qualified contractors perform electrical repairs or installations.
- Operations Managers are also responsible for ensuring all applicable electrical safety programs are implemented and maintained at their locations.
- Employees are responsible to use electrical equipment, tools, and appliances according to this program, for attending required training sessions when directed to do so and to report unsafe conditions to their supervisor immediately.
- Electrical work may only be performed by qualified persons. Only qualified persons may work on electric circuit parts or equipment that have not been deenergized. Such persons shall be made familiar with the use of special precautionary techniques, PPE, insulating and shielding materials and insulated tools.

Safe Work Practices to Prevent Electric Shock

Safe work practices shall be employed to prevent electric shock or other injuries resulting from either direct or indirect electrical contacts when work is performed near or on equipment or circuits which are or may be energized.

Inspections

- Electrical equipment, tools, and appliances must be inspected quarterly at a minimum.
- The use of a hard fixed GFCI or a portable GFCI adapter shall be used where water is or can be present.
- Faulty equipment, tools, or appliances shall be removed from service immediately and tagged “Out of Service”, dated and signed by the employee applying the tag.

Repairs

- Only Qualified Personnel, who have been authorized by the department supervisor or manager, may make repairs to electrical equipment, supply cords on electrical tools and to extension cords.
- The supervisor obtaining the services of a certified electrician is responsible to verify the electrician’s credentials.
- Employees shall not enter spaces containing exposed energized parts unless qualified and proper illumination exists to enable employees to work safely.

Extension Cords

- Use only three-wire, grounded, extension cords and cables that conform to a hard service rating of 14 amperes or higher, and grounding of the tools or equipment being supplied.
- Cords for use other than indoor appliances must have a rating of at least 14 amps.
- Cords must not be strained at the plug, or the receptacle ends.
- Work lamps (drop light) used to power electrical tools must have a 3 wire, grounded outlet, unless powering insulated tools.
- Adapters that allow three wire, grounded prongs, connected to two wire non-grounded outlets are strictly prohibited.
- Cords may not be run through doorways, across walkways or aisles, concealed behind walls, ceilings or floors, or run through holes in walls, or anywhere where they can become a tripping hazard.
- High current equipment or appliances should be plugged directly into a wall outlet whenever possible.

- All extension cords and or electrical cords shall be inspected before each use, for breaks, plug condition and pulled ends, possible internal breaks, and any other damage. If damage is found, the extension cord or electrical cord shall be removed from service and repaired or replaced.

Outlets

- Outlets connected to circuits with different voltages must use a design such that the attachment plugs on the circuits are not interchangeable.

Multiple Outlet Boxes

- Multiple outlet boxes must be plugged into a wall receptacle.
- Multiple outlet boxes must not be used to provide power to heaters or ovens or other high-current loads.

Double Insulated Tools

- Double insulated tools must have the factory label intact indicating the tool has been approved to be used without a three-wire grounded supply cord connection.
- Double insulated tools must not be altered in any way, which would negate the factory rating.

Switches, circuit breakers, and disconnects

- All electrical equipment and tools must have an on and off switch and may not be turned on or off by plugging or unplugging the supply cord at the power outlet.
- Circuit breaker panel boxes and disconnects must be labeled with the voltage rating.
- Each breaker within a breaker panel must be labeled for the service it provides.
- Disconnect switches providing power for individual equipment must be labeled accordingly.

Portable Ladders

- Only approved, non-conductive ladders, may be used when working near or with electrical equipment, which includes changing light bulbs.
- Ladders must be either constructed of wood or fiberglass
- Portable ladders shall have non-conductive side rails.
- Wood ladders should not be painted, which can hide defects, except with clear lacquer.
- When using ladders, they shall be free from any moisture, oils, and greases.

Overhead Lines

- When working near overhead lines, a clearance distance of 10' must be maintained or the lines will be de-energized and grounded.
- When an unqualified person is working in an elevated position near overhead lines, the location shall be such that the person and the longest conductive object he or she may contact cannot come closer to any unguarded, energized overhead line than the following distances:
    - For voltages to ground 50kV or below - 10 feet (305 cm);
    - For voltages to ground over 50kV - 10 feet (305 cm) plus 4 inches (10 cm) for every 10kV over 50kV.
- Any vehicle or mechanical equipment capable of having parts of its structure elevated near energized overhead lines shall be operated so that a clearance of 10 ft. (305 cm) is maintained. If the voltage is higher than 50kV, the clearance shall be increased 4 in. (10 cm) for every 10kV over that voltage.
- When possible, power lines shall be de-energized and grounded or other protective measures shall be provided before work is started.
- Minimum approach distance to energized high power voltages lines for unqualified employees is 10 feet.
- Minimum approach distance for qualified employees shall be as per 29 CFR 1910.333(c)(3)(i) Qualified – Table S5 Selection and Use of Work Practices.

Confined or Enclosed Work Spaces

- When an employee works in a confined or enclosed space that contains exposed energized parts, the employee shall isolate the energy source and turn off the source and lock and tag out the energy source prior to commencing work (Only qualified electricians can work on an exposed energy source).
- Insulating shields/barriers must be used where necessary.

Enclosures, Breaker Panels, Illumination and Distribution Rooms

- A clear working space must be maintained in the front, back and on each side of all electrical enclosures and around electrical equipment for a safe operation and to permit access for maintenance and alteration.
- A minimum two-foot working floor space in front of panels and enclosures shall be painted yellow.
- Proper illumination must be available before employees are permitted to enter work areas containing exposed energized parts. Employees may not enter spaces containing exposed energized parts unless illumination is provided that enables the employees to work safely.
- Housekeeping in distribution rooms must receive high priority to provide a safe working and walking area in front of panels and to keep combustible materials to the minimum required to perform maintenance operations.
- All enclosures and distribution rooms must have "Danger: High Voltage – Authorized Personnel Only" posted on the front panel and on entrance doors.
- Flammable materials are strictly prohibited inside distribution rooms (Boxes, rags, cleaning fluids, etc.)

Lock Out/Tag Out

- Lockout/Tagout is used before performing electrical work of any kind. While any employee is exposed to contact with parts of fixed electric equipment or circuits which have been deenergized, the circuits energizing the parts shall be locked out or tagged or both.
- No work shall be performed on or near exposed energized parts. This applies to work performed on exposed live parts (involving either direct contact or by means of tools or materials) or near enough to them for employees to be exposed to any hazard they present.
- If any employee is exposed to contact with parts of fixed electric equipment or circuits which have been deenergized, the circuits energizing the parts shall be locked out or tagged or both.
- Conductors and parts of electrical equipment that have been deenergized but not been locked or tagged out shall be treated as live parts.
- Only authorized personnel may perform lock out/tag out work on electrical equipment and will follow Company's Lock out/Tag Out Program.
- Authorized personnel will be trained in lock out/tag out procedures.
- Affected personnel will be notified when lock out/tag out activities are being performed in their work area.

Contractors

- When hiring a third-party entity to perform electrical services, only approved, certified, electrical contractors may perform construction and service work on Company or client property.
- It is the Manager/Supervisors responsibility to verify the contractor's certification.

Fire Extinguishers

- Approved class C fire extinguishers must be provided within 75 feet of electrical breaker panels and distribution centers.
- Water type extinguishers shall not be located closer than 50 feet from electrical equipment and the extinguisher must have a warning label that states "DO NOT USE ON ELECTRICAL EQUIPMENT".

Electric Shock-CPR

- If someone is discovered that has received an electric shock and is unconscious, first check to see if their body is in contact with an electrical circuit. Do not touch a person until you are sure there is no contact with an electrical circuit.
- When it is safe to contact the victim, begin CPR if the person's heart has stopped or they are not breathing.
- Call for help immediately.

Electric Welders

- A disconnecting means shall be provided in the supply circuit for each motor-generator arc welder, and for each AC transformer and DC rectifier arc welder which is not equipped with a disconnect mounted as an integral part of the welder.
- A switch or circuit breaker shall be provided by which each resistance welder and its control equipment can be isolated from the supply circuit. The ampere rating of this disconnecting means may not be less than the supply conductor ampacity.

Equipment Grounding

- Equipment bonding jumpers shall be of copper or another corrosion-resistance material.

Assured Grounding

OSHA requires that employers shall use either ground fault circuit interrupters (GFCI) or an assured equipment grounding conductor program to protect personnel from electrical shock while working.

Ground Fault Circuit Interrupters

All 120-volt, single-phase 15 and 20 ampere receptacle outlets on construction or maintenance sites or temporary sites where moisture could be anticipated, which are not part of the permanent wiring of the building or structure, and which are in use by employees, shall have approved ground fault circuit interrupters (GFCI) for personnel protection.

- All hand portable electric tools and extension cords shall use a GFCI.
- Additionally, approved GFCI's shall be used for 240-Volt circuits in the same service as described above.
- GFCI's must be used on all 120 volt, single-phase 15 amp and 20-amp receptacles within 6 feet of a sink, damp areas or on installed outdoor equipment.
- The GFCI must be the first device plugged into a permanent receptacle.
- The GFCI must be tested before each use.

Employees who face a risk of electric shock but who are not qualified persons shall be trained and familiar with electrically related safety practices. All employees shall be trained in safety related work practices and clearance distances that pertain to their respective job assignments.

Qualified employees must adhere to the approach distances in Table S5 of CFR 1910.333 (below).

Voltage Range (phase to phase)	Minimum Approach Distance
Over 300V, not over 750V	1 ft. 0 in. (30.5 cm).
Over 750V, not over 2kV	1 ft. 6 in. (46 cm).
Over 2kV, not over 15kV	2 ft. 0 in. (61 cm).
Over 15kV, not over 37kV	3 ft. 0 in. (91 cm).
Over 37kV, not over 87.5kV	3 ft. 6 in. (107 cm).
Over 87.5kV, not over 121kV	4 ft. 0 in. (122 cm).
Over 121kV, not over 140kV	4 ft. 6 in. (137 cm).

- Conductive apparel shall not be worn unless it is rendered non-conductive by covering, wrapping or other insulating means.
- Conductive items of jewelry or clothing shall not be worn unless they are rendered non-conductive by covering, wrapping or other insulating means.
- Employees working in areas where there are potential electrical hazards shall be provided with, and shall use, electrical protective equipment that is appropriate for the specific parts of the body to be protected and for the work to be performed.
- Such protective equipment shall be periodically inspected and/or tested.
- If the insulating capability of protective equipment may be subject to damage during use, the insulating material shall be protected. (An example might be an outer covering of leather used for the protection of rubber insulating material.)
- Employees shall wear nonconductive head protection wherever there is a danger of head injury from electric shock or burns due to contact with exposed energized parts.
- Employees shall wear protective equipment for the eyes or face wherever there is danger of injury to the eyes or face from electric arcs or flashes or from flying objects resulting from electrical explosion.
- Each employee shall use insulated tools or handling equipment if they might make contact with conductors or parts. Program shall state that if the insulating capability of insulated tools or handling equipment is subject to damage, the insulating material shall be protected.
- Ropes and handlines used near exposed energized parts shall be nonconductive.
- Protective shields, protective barriers, or insulating materials shall be used to protect each employee from shock, burns, or other electrically related injuries while that employee is working near exposed energized parts.
- When normally enclosed live parts are exposed for maintenance or repair, they shall be guarded to protect unqualified persons from contact with the live parts.
- Alerting techniques used to warn and protect employees from hazards which could cause injury due to electric shock, burns or failure of electric equipment parts can take the form of safety signs and tags, barricades & attendants.
- Equipment shall be maintained in a safe, reliable condition.

FIRE PROTECTION

Innovations Manufacturing, Inc. (the Company)

Purpose

The purpose of this program is to provide information that will aid employees to prevent fires and appropriately respond in the event there is a fire.

Scope

This procedure applies to all Company employees all Company operated and controlled locations.

Responsibilities

The Safety Director:

- is responsible for developing and maintaining this procedure as well as the development and application for a training program that reflects the requirements of this program.

The Supervisors are responsible for:

- making sure workers meet the requirements of this procedure
- enforcing the provisions of this procedure.
- All employees are responsible for following these provisions.

Fire Prevention

Fire, or combustion, is when fuel reacts with oxygen to release heat energy. Combustion can be slow or fast depending on the amount of oxygen available. Combustion that results in a flame is very fast and is called burning. Combustion can only occur between gases.

The fuel must be heated to its ignition temperature for combustion to occur. The reaction will keep going as long as there is enough heat, fuel and oxygen. This is known as the fire triangle.

Fire Triangle

The fire triangle, or combustion triangle, is the three components needed to ignite and sustain a fire. The three ingredients of a fire triangle are **heat**, **fuel** and **oxygen**.

If just one of these components is removed, the fire triangle will collapse, and the fire will be extinguished.

Let's explore these components in more detail:

1. Heat
A source of heat is required in order for ignition to occur, and different materials have different 'flash points' e.g. the lowest temperature at which they ignite.

Unfortunately, combustion reactions also produce heat as they burn, further increasing the temperature of the fuel. For some types of fire, the heat can be cooled with the application of water.

2. Fuel
A fire cannot begin if there is no material to burn. Homes and businesses are full of flammable materials, such as paper, oil, wood and fabrics. Any of these can serve as a fuel for a fire.

Some materials burn more easily than others. Fuels are probably the most difficult 'side' of the fire triangle to remove, so it's wise to store them appropriately to prevent them from becoming a fire hazard.

3. Oxygen

To sustain the combustion reaction, oxygen (or an oxidizing agent) is needed, as it reacts with the burning fuel to release heat and CO2. Earth's atmosphere consists of 21% oxygen, so there is plenty available to trigger a fire if the other two components are present.

Fire blankets and certain fire extinguishers remove the oxygen 'side' of the triangle by removing it or displacing it, causing suffocation and thereby ceasing the combustion reaction.

Fire Facts

Fire normally generates three different types of hazards: heat, oxygen depletion and smoke.

Heat: The most obvious hazard is heat. Although the majority of fire deaths are caused by smoke, many deaths and severe injuries are caused by burns. When the temperature of skin reaches 133°F, it's associated with pain.

A room fire can range from 212°F at floor level to 2192°F at the ceiling. As temperatures rise above 260°F, skin will burn with permanent injuries, and if extremely hot air is inhaled it can scorch internal organs.

Oxygen Depletion: A decrease in the partial pressure of oxygen (PO2) can cause serious harm to the brain. As fire roars and grows, it consumes enormous amounts of Oxygen. I.e., a 5x5x10 fire in a 2000sqf house will normally consume all the oxygen inside the home in under 30 seconds. The brain needs a constant supply of oxygen. If the oxygen intake is interrupted for more than 3 minutes the brain can suffer irreversible damage.

Smoke: Smoke is all the airborne products of the pyrolysis and combustion of materials, and it can be very toxic. It's particles, gases such as carbon monoxide, volatilized organic molecules, aerosols, and free radicals are deadly when inhaled. A fire often gives off a dark, thick smoke. In a serious fire, it can be hard to see what's ahead and where you're going. Breathing in even the smallest amount of the toxic smoke can disorient a person quickly, causing them to pass out.

How to prevent and stop the spread of fires

Heat: Heat usually originates from people smoking, poorly maintained machinery and equipment, hot work, neglected electrical, or arson.
Heat is occasionally inevitable to some operations in which case it is important that fuel is kept away from heat or that it's being carefully managed under a controlled environment.

Fuel: As previously mentioned, flammable materials (fuel) are materials that burn readily in a normal atmosphere. It's important that all these flammable materials are identified and that appropriate measures are taken to control them. You need to store these materials appropriately, and in appropriate quantities, furthermore you need to maintain good housekeeping. For extra volatile flammable materials, make sure that these are stored with extra precautions.

Oxygen: The air we breathe contains ~21% of oxygen. With just a small increase to say 23% oxygen – a fire will burn hotter and more fiercely. With just a little more oxygen in the air, a fire can become almost impossible to put out. The oxygen bottles should always be kept close to an exit door where firefighters can easily remove them from the building, and away from combustible materials.

Fire Extinguishers

Selection and Distribution

Portable fire extinguishers shall be provided for employee use and selected and distributed based on the classes of anticipated workplace fires and on the size and degree of the hazard which would affect their use. Fire extinguishers used by the company are for three classes of fires:

- Class A Fire Extinguishers. Use on ordinary combustibles or fibrous material, such as wood, paper, cloth, rubber and some plastics. Travel distance for employees to any extinguisher is 75 feet (22.9 m) or less.

- Class B Fire Extinguishers. Use on flammable or combustible liquids such as gasoline, kerosene, paint, paint thinners and propane. Travel distance from the Class B hazard area to any extinguisher is 50 feet (15.2 m) or less.

- Class C Fire Extinguishers. Use on energized electrical equipment, such as appliances, switches, panel boxes and power tools. Travel distance from the Class C hazard area to any extinguishing agent is 50 feet (15.2 m) or less.

Labeling Of Fire Extinguishers

Fire extinguishers are to be mounted in easily accessible locations that are indicated by a sign that reads "Fire Extinguisher". Fire extinguishers are to be located so that no employee will ever be more than 75 feet from an extinguisher. No equipment, boxes or product may be placed (even temporarily) in the way of a fire extinguisher. Each fire extinguisher will be assigned a unique number for tracking purposes.

Maintenance

All fire extinguishers should be mounted on brackets or in wall cabinets with their carrying handles placed 3-1/2 to 5 feet above the floor. All fire extinguishers shall be maintained as follows:

- Numbered to identify their proper location
- Fully charged and in operable condition
- Clean and free of defects
- Readily accessible at all times

Inspection, Maintenance and Testing

All fire extinguishers are to be visually inspected by COMPANY employees monthly. All fire extinguishers are to receive an annual maintenance check by certified personnel from a fire extinguisher dealer. Fire extinguishers are to be inspected and re-charged by certified personnel after any use.

Any fire extinguisher that shows a loss of pressure during the monthly inspection will be inspected and re-charged by certified personnel. Completed fire extinguisher inspection logs will be maintained in the safety files and become a part of the safety records. They are to be maintained for 5 years.

Use

In the event of a fire, one employee will get the nearest fire extinguisher and use it to attempt to put the fire out. All other employees in the immediate area will prepare to evacuate if needed. All other employees in the building need to be advised that a fire is in progress.

The employee attempting to extinguish the fire will break the safety seal on the handle and pull the pin. He will then aim his extinguisher at the base of the fire and discharge it with a sweeping motion from side to side; continuing until the fire is out or the extinguisher is emptied.

Remember that a standard fire extinguisher will be emptied in about 10 to 15 seconds. If the fire is not out when the extinguisher has been completely discharged, the employees must evacuate the area.

Training and Education

The purpose of this section is to establish training procedures which are necessary for the proper use and understanding of a fire extinguisher and incipient stage firefighting. Training will occur prior to initial assignment and at least annually thereafter.

Training will be provided annually via the Company online safety solution center in the Safety Orientation. For employees who demonstrate that they do or did not absorb the knowledge necessary to meet the requirements of this procedure, and more extensive training session will be required.

Initial Training Outline

- General principles of a fire
- Hazards employed with an incipient stage fire(s)
- When to "back off' (evacuate) of an incipient stage fire(s)
- General principles of a fire extinguisher
- Hazards employed with the use a fire extinguisher
- Use of a fire extinguisher

Retraining

- All workers will be retraining on an annual basis.

Training Documentation

- All training will be documented, and each employee's understanding will be subject to a written test.
- Documentation will consist of; as a minimum, the employee's name, the trainer's name, the date of the training, and an outline of training provided.

FIRST AID AWARENESS

Innovations Manufacturing, Inc. (the Company)

Purpose

The purpose of this program is to establish the minimum first aid supplies, equipment, and actions to properly respond to injuries that occur on Company premises.

Scope

This program is applicable to all Company employees while engaged in work at Company owned or operated facilities and/or facilities operated by others.

Responsibilities

- It is the responsibility of the safety Director to ensure that first aid kits are provided and maintained.
- All employees are responsible for using first aid materials in a safe and responsible manner.
- The Safety Director is responsible for corresponding with the Red Cross or an equivalent to keep employee training levels current if the distance from emergency medical services requires training.

Requirements

Planning

The site manager will:

- Ensure that a minimum of one employee, with a valid certificate, shall be present to render first aid at all times work is being performed if medical assistance is not immediately available within 3-4 minutes.
- Ensure adequate first aid supplies and equipment are easily accessible.
- Ensure that in areas where 911 is not available, the telephone numbers of the physicians, hospitals, or ambulances to be used are posted on the first aid station.

Medical Response

All minor first aid is to be self-rendered. Because of the risks presented by certain bloodborne pathogens, no one is allowed to tend to the minor injuries of another worker.

In the absence of an infirmary, clinic, hospital, or physician, that is reasonably accessible in terms of time and distance to the worksite, which is available for the treatment of injured employees, a person who has a valid certificate in first aid shall be available to render first aid. A valid certificate in first-aid training must be obtained from the American Red Cross or equivalent entity that can be verified by documentary evidence.

Employees authorized to render first aid will always observe universal precautions. (Universal Precautions means that the aid giver treats all bodily fluids as if they were contaminated).

If 911 is not available, refer to the list of posted emergency phone numbers located on the solution center and the safety wall for prearranged medical response providers. All Company authorized first responders shall have a cell phone as a means of communication; otherwise, stationary telephones shall be used as a means of communication.

Supplies and Equipment

First aid supplies shall be easily accessible when required. Always follow the manufacturer's instructions when using first aid materials.

All Company first aid kits must contain appropriate items determined to be adequate for the environment in which they are used and if at an outdoor site are stored in a weatherproof container with individual contents sealed from the manufacturer for each type of item.

The Company is responsible to ensure the availability of adequate first aid supplies and to periodically reassess the availability for supplies and to adjust its inventories. First Aid kits are to be inspected:

- On the first working day of each quarter to verify that they are fully stocked and that no expiration dates have been exceeded, and
- Before being employed into operations
    - Replace any items that have exceeded their expiration dates or that have been depleted.

Where the eyes or body of any person may be exposed to injurious corrosive materials, a safety shower and/or eye wash (suitable facilities) or other suitable facilities shall be provided within the work area. Ensure expiration dates are checked and water used in storage devices is sanitized.

Transportation

Based on the first responder's assessment of the injuries involved, decide whether the injured requires to be taken directly to a hospital's emergency room, occupational medicine provider or administer first aid on location only.

Examples of serious injuries that result in the injured being transported to a medical provider are those resulting in severe blood loss, possible permanent disfigurement, head trauma, spinal injuries, internal injuries, potential fracture(s), and/or loss of consciousness. Keep in mind that the needs and wellbeing of the injured are the first priority.

Proper equipment for prompt transportation of the injured person to a physician or hospital or a communication system for contacting necessary ambulance service shall be provided. Choices to consider include: private automobile, company vehicle, helicopter, EMS vehicles including Medi-vac helicopters, or any other transportation that can provide safe transportation to the hospital or doctor's office in order to provide medical attention to the injured in the quickest manner without any additional complications or injuries to the injured employee.

FORKLIFTS

Innovations Manufacturing, Inc. (the Company)

Purpose

The purpose of this program is to establish requirements for the safe operation and use of Powered Industrial Trucks (Forklifts).

Scope

This program applies to all Company employees who operate a Powered Industrial Truck in the scope of their job duties and assignments.

NOTE: All employees are required to be trained and certified prior to operating each specific type of forklift equipment.

Definitions

Authorized Employee – A person, at least 18 years of age and who has completed the company's required safety training for the safe operations of forklifts.

Forklift (Powered Industrial Truck) – Any mechanical device used for the movement of supplies, material or finished a product that is powered by an electric motor or an internal combustion engine.

Key Responsibilities

Manager/Supervisor

- Shall ensure that each powered forklift operator is competent to operate a forklift safely, as demonstrated by the successful completion of the training and evaluation program.
- Shall ensure that all forklifts are inspected before each shift and all repairs are made before the forklift is operated.

Employees

- Shall be current on applicable training.
- Operate forklift in accordance with the forklift standards and manufacture requirements.
- Inspect forklift before use at the beginning of each shift and remove from service to correct defects.
- Operate forklift in a safe manner.

Procedure

General

All approved forklifts shall have a manufactures identification plate attached showing all specifications of the forklift and that the forklift is accepted by a nationally recognized testing laboratory.

Modifications and additions that affect capacity and safe operation shall not be performed without engineering or manufacturer's prior written approval.

The operator shall see that all nameplates and markings are in place and are maintained in a legible condition.

All forklifts shall be equipped with safety seat belts. All forklifts shall be equipped with a horn and backup alarm.

Safety Guards
Forklifts shall be fitted with an overhead rollover cage, as per manufactures specifications.

Training
Training shall consist of a combination of formal instruction (e.g., lecture, discussion, interactive computer learning, video tape, written material, etc.), practical training (demonstrations performed by the trainer and practical exercises performed by the trainee) and evaluation of the operator's performance in the workplace.

All operator training and evaluation shall be conducted by authorized persons who have the knowledge, documented training, and experience to train powered industrial truck operators and evaluate their competence.

Each operator is required to be re-evaluated every three years.

Training shall include the following topics:

1. Operating instructions, warnings, and precautions for the types of forklift the operator will be authorized to operate
2. Differences between the forklift and the automobile
3. Forklift controls and instrumentation: where they are located, what they do, and how they work
4. Engine or motor operation
5. Steering and maneuvering
6. Visibility (including restrictions due to loading)
7. Fork and attachment adaptation, operation, and use limitations
8. Vehicle capacity
9. Vehicle stability
10. Any vehicle inspection and maintenance that the operator will be required to perform
11. Refueling and/or charging and recharging of batteries
12. Operating limitations
13. Any other operating instructions, warnings, or precautions listed in the operator's manual for the types of vehicle that the employee is being trained to operate
14. Surface conditions where the vehicle will be operated
15. Composition of loads to be carried and load stability
16. Load manipulation, stacking, and unstacking
17. Pedestrian traffic in areas where the vehicle will be operated
18. Narrow aisles and other restricted places where the vehicle will be operated
19. Hazardous (classified) locations where the vehicle will be operated
20. Ramps and other sloped surfaces that could affect the vehicle's stability
21. Closed environments and other areas where insufficient ventilation or poor vehicle maintenance could cause a buildup of carbon monoxide or exhaust
22. Other unique or potentially hazardous environmental conditions in the workplace that could affect safe operation, and
23. The requirements of CFR 1910.178 (Powered Industrial Trucks).

Mandatory refresher training shall be provided when unsafe operations are observed, after an incident, if operating a different vehicle type, changes in conditions or any time the Company feels an operator requires refresher training.

Certification
- Only trained and certified operators, including supervisors, are allowed to operate the device (this includes refresher training requirements).

- The trainer shall certify in writing that each operator has been trained and evaluated as required.
- The certification shall include the name of the operator, the date of the training, the date of the evaluation and the identity of the person(s) performing the training and/or evaluation.

Operations

General

- All operators shall wear a safety seat belt when operating a forklift.
- Forklifts shall not be driven up to anyone standing in front of a fixed object.
- No person shall be allowed to stand or pass under the elevated portion of any forklift, whether loaded or empty.
- Unauthorized personnel shall not be permitted to operate forklifts.
- No riders or passengers are permitted during forklift operations.
- It is prohibited for arms or legs to be placed between the uprights of the mast or outside the running lines of the forklift.
- When a forklift is left unattended, the vehicle shall be fully lowered, controls shall be neutralized, power shall be shut off, and brakes shall be set.
    - A forklift is unattended when the operator is 25 ft. or more away from the vehicle, with the vehicle in view, or whenever the operator leaves the forklift, and it is not in view.
- Wheels shall be blocked if the forklift is parked on an incline.
- A safe distance shall be maintained from the edge of ramps or platforms while on any elevated dock, or platform or freight car.
- Forklifts shall not be used for opening or closing freight doors.
- The flooring of forklifts and/or trailers shall be checked for breaks and weakness before they are driven onto.
- There shall be sufficient headroom under overhead installations, lights, pipes, sprinkler system, etc.
- An overhead guard (cages) shall be used as protection against rollover and falling objects.
- An overhead guard is intended to offer protection from the impact of small packages, boxes, bagged material, etc., representative of the job application, but not to withstand the impact of a falling capacity load.
- Fire aisles, access to stairways, and fire equipment shall be kept clear.

Traveling

- The operator shall slow down and sound the horn at cross isles and other locations where vision is obstructed.
- If the load being carried obstructs forward view, the operator shall be required to travel with the load trailing.
- The operator shall be required to look in the direction of and keep a clear view of the path of travel.
- Grades shall be ascended or descended slowly.
- When ascending or descending grades in excess of 10 percent, loaded forklifts shall be driven with the load upgrade.
- On all grades the load shall be tilted as applicable and raised only as far as necessary to clear the road surface.
- Under all travel conditions the forklift shall be operated at a speed that will permit it to be brought to a stop in a safe manner.
- Stunt driving and horseplay are prohibited.
- The operator shall slow down for wet and slippery floors.
- Dock board or bridge plates shall be properly secured before they are driven over.
- Dock board or bridge plates shall be driven over carefully and slowly, and their rated capacity never exceeded.

- While negotiating turns, speed shall be reduced to a safe level by means of turning the hand steering wheel in a smooth, sweeping motion.
- Except when maneuvering at a very low speed, the hand steering wheel shall be turned at a moderate, even rate.

Loading

- Only stable or safely arranged loads shall be handled.
- Caution shall be exercised when handling off-center loads, which cannot be centered.
- Only loads within the rated capacity of the forklift shall be handled.
- Forklifts equipped with attachments shall be operated as partially loaded forklifts when not handling a load.
- Lifting apparatus shall be placed under the load as far as possible and as practical the mast shall be carefully tilted backward to stabilize the load prior to lift.
- Extreme care shall be used when tilting the load forward or backward, particularly when high tiering.
- Tilting forward with load shall be prohibited except to pick up a load.
- An elevated load shall not be tilted forward except when the load is in a deposit position over a rack or stack.
- When stacking or tiering, only enough backward tilt to stabilize the load shall be used.

Operation of the Truck

- If at any time a forklift is found to be in need of repair, defective, or in any way unsafe, the forklift shall be taken out of service until it has been restored to safe operating condition.
- Spillage of oil or fuel shall be carefully washed away or completely evaporated and the fuel tank cap replaced before restarting engine.
- No forklift shall be operated with a leak in the fuel system.
- Open flames shall not be used for checking leaks, electrolyte level in storage batteries, or gasoline level in fuel tanks.
- Operator must verify trailer brakes/chocks, supports, and dock plates are secured prior to loading or unloading.

Maintenance and Inspection of Forklifts

- Only authorized personnel shall perform maintenance and make repairs.
- Those repairs to the fuel and ignition systems of forklifts, which involve fire hazards, shall be conducted only in locations designated for such repairs.
- Forklifts in need of repairs to the electrical system shall have the battery disconnected prior to such repairs.
- Only parts equivalent with those used in the original design shall replace all parts of any forklift requiring replacement parts.
- Forklifts shall not be altered so that the relative positions of the various parts are different from what they were when originally received from the manufacturer, nor shall they be altered either by the addition of extra parts not provided by the manufacturer or by the elimination of any parts.
- Additional counter weighting of forklifts shall not be done unless approved by the truck manufacturer.
- Forklifts shall be inspected daily by the operator before being placed into service and shall not be placed in service if the inspection shows any condition adversely affecting the safety of the forklift.
- Inspection shall be made at least daily or prior to each shift.
- Where forklifts are used on a round-the-clock basis, they shall be inspected before each shift.
- Defects when found shall be immediately reported to the supervisor and corrected before operating the forklift.
- Forklifts shall be kept in a clean condition, free of trash, excess oil, and grease.
- Noncombustible agents, where at all possible, shall be used for cleaning forklifts.
- Low flash point (below 100 degrees F.) solvents shall not be used.

- High flash point (at or above 100 degrees F.) solvents may be used if precautions regarding toxicity, ventilation, and fire hazard are mitigated with the agent or solvent used.

HAND & POWER TOOLS

Innovations Manufacturing, Inc. (the Company)

Purpose

The purpose of this program is to provide established requirements for the safe operation of hand and power tools and other portable tools, including proper guarding.

Scope

This program is applicable to all Company employees while engaged in work at Company owned or operated worksites.

Responsibilities

Any tool which is not in compliance with any applicable requirement of this plan is prohibited and shall either be identified as unsafe by tagging or locking the controls to render them inoperable or shall be physically removed from service.

Managers/Supervisors

- Ensure that all employees using portable tools have been trained and fully understand the operations and maintenance procedures of such tools, including their proper use.
- Provide and train employees with all additional PPE that may be needed for the safe operation of portable tools.

Employees

- Shall ensure they have and properly use the correct tool for each task.
- Shall follow manufactures safety and operating instructions before using

Requirements

General

- All tools, regardless of ownership, shall be of an approved type and maintained in good condition.
    - Tools are subject to inspection at any time.
    - All employees have the authority and responsibility to condemn unsafe tools, regardless of ownership.
- Unsafe tools shall be tagged with a “DO NOT USE OR OPERATE” tag to prevent their use or physically removed from service.
- Employees shall always use the proper tool for the job to be performed. Makeshift and substitute tools shall not be used.
- Hammers with metal handles, screwdrivers with metal continuing through the handle, and metallic measuring tapes shall not be used on or near energized electrical circuit or equipment.
- Tools shall not be thrown from place to place or from person to person; tools that must be raised or lowered from one elevation to another shall be placed in tool bags/buckets firmly attached to hand lines.
- Tools shall never be placed unsecured at overhead elevated places where there is a potential for the tool to fall onto workers below.
- Impact tools such as chisels, punches, and drift pins that become mushroomed or cracked shall be dressed, repaired, or replaced before further use.
- Chisels, drills, punches, ground rods, and pipes shall be held with suitable holders or tongs (not with the hands) while being struck by another employee.
- Shims shall not be used to make a wrench fit.

- Wrenches with sprung or damaged jaws shall not be used.
- Tools shall be used only for the purposes for which they have been approved.
- Tools with sharp edges shall be stored and handled so that they will not cause injury or damage. They shall not be carried in pockets unless suitable protectors are in use to protect the edge.
- Wooden handles that are loose, cracked, or splintered shall be replaced. The handle shall not be taped or lashed with wire.
- Tools shall not be left lying around where they may cause a person to trip or stumble.
- When working on or above open grating, a canvas or other suitable covering shall be used to cover the grating to prevent tools or parts from dropping to a lower level where others are present, or the danger area shall be barricaded or guarded.
- The insulation on hand tools shall not be depended upon to protect users from high voltage shock (except approved live line tools).

Portable Electric Tools

- The non-current carrying metal parts of portable electric tools such as drills, saws, and grinders shall be effectively grounded when connected to a power source unless:
    - The tool is an approved double-insulated type, or
- The tool is connected to the power supply by means of an isolating transformer or other isolated power supply.
  All powered tools shall be examined prior to use to ensure general serviceability and the presence of all applicable safety devices.
- Powered tools shall be used only within their design and shall be operated in accordance with manufacturer's instructions. The use of electric cords for hoisting or lowering tools shall not be permitted.
- All tools shall be kept in good repair and shall be disconnected from the power source while repairs or adjustments are being made.
- Electrical tools shall not be used where there is hazard of flammable vapors, gases, or dusts without a valid Hotwork Permit.
- Ground fault circuit interrupters or use of an Assured Grounding Program shall be used with portable electric tools. This does not apply to equipment run off of portable or truck mounted generators at 5kw or less that are isolated from ground or to equipment ran directly off of secondaries.

Pneumatic Tools

- Pneumatic tools shall never be pointed at another person.
- Pneumatic power tools shall be secured to the hose or whip by some positive means to prevent the tool from becoming accidentally disconnected.
- Safety clips or retainers shall be securely installed and maintained on pneumatic impact (percussion) tools to prevent attachments from being accidentally expelled.
- Compressed air shall not be used for a person's body cleaning purposes, except where reduced to less than 30 psi and then only with effective chip guarding and personal protective equipment.
- The manufacturers stated safe operating pressure for hoses, pipes, valves, filters, and other fitting shall not be exceeded.
- The use of hoses for hoisting or lowering tools shall not be permitted.
- Before making adjustments or changing air tools, unless equipped with quick-change connectors, the air shall be shut off at the air supply valve ahead of the hose. The hose shall be bled at the tool before breaking the connection.
- Compressed air tools, while under pressure, must not be left unattended.
- All connections to air tools shall be made secure before turning on air pressure.
- Air at the tool shall not be turned on until the tool is properly controlled.

- All couplings and clamps on pressurized air hose shall be bridged (pinned) with suitable fasteners.
- Hose and hose connections used for conducting compressed air to utilization equipment shall be designed for the pressure and service to which they are subjected.
- Use only approved end-fitting clamps (screw type heater hose clamps are not acceptable).
- While blowing down hose, do not point it toward people.
- Power tools are to be operated only by competent persons who have been trained in their proper use.
- Conductive hose should not be used near energized equipment.
- All pneumatically driven nailers, staplers, and other similar equipment provided with automatic fastener feed, which operate at more than 100 psi shall have a safety device on the muzzle to prevent the tool from ejecting fasteners, unless the muzzle is in contact with the work surface.
- Airless spray guns of the type which atomize paints and fluids at high pressures (1,000 pounds or more per square inch) shall be equipped with automatic or visible manual safety devices which will prevent pulling of the trigger to prevent release of the paint or fluid until the safety device is manually released.
    - In lieu of the above, a diffuser nut (which will prevent high pressure), high velocity release (while the nozzle tip is removed), plus a nozzle tip guard (which will prevent the tip from coming into contact with the operator), or other equivalent protection, shall be provided.

Hydraulic Power Tools

- The fluid used in hydraulic powered tools shall be fire-resistant fluids approved under Schedule 30 of the U.S. Bureau of Mines, Department of the Interior, and shall retain its operating characteristics at the most extreme temperatures to which it will be exposed.
- The manufacturer's safe operating pressures for hoses, valves, pipes, filters, and other fittings shall not be exceeded.
- All hydraulic tools, which are used on or around energized lines or equipment, shall use non-conducting hoses having adequate strength for the normal operating pressures.

Abrasive Blast Cleaning Nozzles

- The blast cleaning nozzles shall be equipped with an operating valve, which must be held open manually. A support shall be provided on which the nozzle may be mounted when it is not in use.

Fuel Powered Tools

- All fuel-powered tools shall be stopped while being refueled, serviced, or maintained, and fuel shall be transported, handled, and stored in accordance with the flammable and combustible liquids program requirements.
- When fuel powered tools are used in enclosed spaces, the applicable requirements for concentrations of toxic gases and use of personal protective equipment, shall be adhered to.

Guarding Portable Tools

Guards shall be in place and operable at all times while the tool is in use. The guard may not be manipulated in such a way that will compromise its integrity or compromise the protection in which intended. Guarding shall meet the requirements set forth in ANSI B15.1.

Portable Circular Saws

- All portable, power-driven circular saws having a blade diameter greater than 2 in. shall be equipped with guards above and below the base plate or shoe.
- The upper guard shall cover the saw to the depth of the teeth, except for the minimum arc required to permit the base to be tilted for bevel cuts.
- The lower guard shall cover the saw to the depth of the teeth, except for the minimum arc required to allow

proper retraction and contact with the work.

- When the tool is withdrawn from the work, the lower guard shall automatically and instantly return to covering position.
- All cracked saw blades shall be removed from service.

Switches and Controls

- All handheld powered tools, circular saws, drills, tappers, fastener drivers, horizontal or vertical angle grinders, etc., shall be with a constant pressure switch or control, and may have a lock-on control provided that turnoff can be accomplished by a single motion of the same finger or fingers that turn it on.
- All hand-held powered circular saws having a blade diameter greater than 2 inches, electric, hydraulic or pneumatic chain saws, and percussion tools without positive accessory holding means shall be equipped with a constant pressure switch or control that will shut off the power when the pressure is released. All hand-held gasoline powered chain saws shall be equipped with a constant pressure throttle control that will shut off the power to the saw chain when the pressure is released.
- The operating control on hand-held power tools shall be so located as to minimize the possibility of its accidental operation, if such accidental operation would constitute a hazard to employees.
- Grounding of portable electric powered tools shall meet the electrical requirements that can be found in the Electrical Safety Program. All electric power tools shall be equipped with a three-prong plug.

Portable Abrasive Wheels
Safety Guards Exceptions

- Wheels used for internal work while within the work being ground.
- Mounted wheels used in portable operations 2 inches and smaller in diameter.
- Types 16, 17, 18, 18R, and 19 cones, plugs, and threaded hole pot balls where the work offers protection.
- Guards shall be made of steel or other material with adequate strength.
- A safety guard shall cover the spindle end nut and flange projections. The safety guard shall be mounted so as to maintain proper alignment with the wheel, and the strength of the fastenings shall exceed the strength of the guard.
- Exception: safety guards on all operations where the work provides a suitable measure of protection to the operator may be so constructed so that the spindle end, nut, and outer flange are exposed. Where the nature of the work is such as to entirely cover the side of the wheel, the side covers of the guard may be omitted.
- Exception: the spindle end, nut, and outer flange may be exposed on portable machines designed for, and used with, type 6, 11, 27, and 28 abrasive wheels, cutting off wheels, and tuck-pointing wheels.

Mounting and Inspection of Abrasive Wheels

- Immediately before mounting, all wheels shall be closely inspected, and a ring test performed, to make sure they have not been damaged in transit, storage, or otherwise.
- Ring test – “tap" wheels about 45 degrees each side of the vertical centerline and about 1 or 2 inches from the periphery; then rotate the wheel 45 degrees and repeat the test; a sound and undamaged wheel will give a clear metallic tone - If cracked, there will be a dead sound and not a clear "ring.”
- The spindle speed of the machine shall be checked before mounting of the wheel to be certain that it does not exceed the maximum operating speed marked on the wheel.
- Grinding wheels shall fit freely on the spindle and remain free under all grinding conditions.
- A controlled clearance between the wheel hole and the machine spindle (or wheel sleeves or adaptors) is essential to avoid excessive pressure from mounting and spindle expansion.
- The machine spindle shall be made to nominal (standard) size plus zero minus .002 inch, and the wheel hole shall be made suitably oversize to assure safety clearance under the conditions of operating heat and

pressure.

- All contact surfaces of wheels, blotters, and flanges shall be flat and free of foreign matter.
- When a bushing is used in the wheel hole it shall not exceed the width of the wheel and shall not contact the flanges.

Portable Grinders

Special "revolving cup guards" which mount behind the wheel and turn with it shall be used. They shall be made of steel or other material with adequate strength and shall enclose the wheel sides upward from the back for one-third of the wheel thickness. It is necessary to maintain clearance between the wheel side and the guard. The clearance shall not exceed one-sixteenth inch.

Vertical portable grinders, also known as right angle grinders, shall have a maximum exposure angle of 180 degrees and the guard shall be located between the operator and the wheel during use. Adjustment of the guard shall ensure that pieces of an accidentally broken wheel will be deflected away from the operator.

Other Portable Grinders

The maximum angular exposure of the grinding wheel periphery and sides for safety guards used on other portable grinding machines shall not exceed 180 degrees and the top half of the wheel shall be enclosed at all times.

Personal Protective Equipment

Employees using hand and power tools and exposed to the hazard of falling, flying, abrasive, and splashing objects, or exposed to harmful dust, fumes, mists, vapors or gases shall be provided with the particular PPE necessary to protect them from the hazard.

HAZARD COMMUNICATION AND SPILLS

Innovations Manufacturing, Inc. (the Company)

Purpose

The purpose of this program is to ensure the safe use of hazardous chemical substances and to comply with the requirements of OSHA HCS 2012.

Introduction

In 2012, OSHA revised the Hazard Communication Standard (HCS) to align with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS). As a result, this Hazard Communication Program (HCP) has been revised to comply with the requirements of the OSHA HCS 2012.

It spells out how the Company will inventory chemicals stored and used, obtain and use Safety Data Sheets, maintain labels on chemical substances and train employees about the hazards of chemicals they are likely to encounter on the job.

Preparation of this program indicates our continuing commitment to safety among our employees in all of our locations.

- Each facility is expected to follow this program and maintain its work areas in accordance with these requirements.
- Employees, their designated representatives, and government officials must be provided copies of this program upon request.
- In addition to the program, other information required as part of our hazard communication effort is available to workers upon request.
- Asking to see this information is an employee's right.
- Using this information is part of our shared commitment to a safe, healthy workplace.

Scope

This program is applicable to all Company employees who may be exposed to hazardous chemical substances. It is important to note that at the time this program was developed, the Company did not store, consume, or use. Or transport chemicals of a bulk nature anywhere in its operations. Other than compressed gas cylinders, the chemicals used in operations at the Company are in small quantities of consumer products which use results in a duration and frequency of exposure that is not greater than the range of exposures that could reasonably be experienced by consumers when used for the purpose intended. Regardless, the Company does provide a chemical inventory in the form of Safety Data Sheets for all chemicals regardless of quantity.

Responsibilities

This procedure represents the core of the Company's written Hazard Communication program. This program describes how labels and other forms of warning, safety data sheets, and employee information will be met.

Safety Director or Designee

The Safety Director, or designee, is responsible for administering this hazard communication program. This person is also responsible for:

- Reviewing the potential hazards and safe use of chemicals.
- Maintaining a list of all hazardous chemicals and a master file of SDSs.
- Ensuring that all containers are labeled, tagged or marked properly.
- Providing new-hire and annual training for employees.
- Maintaining training records.

- Identifying hazardous chemicals used in nonroutine tasks and assessing their risks.
- Informing outside contractors who are performing work on Company property about potential hazards.
- Reviewing the effectiveness of the hazard communication program and making sure that the program satisfies the requirements of all applicable federal, state, or local hazard communication requirements.

Employees

- Employees are responsible for following the requirements in the Hazard Communication Program.
- Any employee who transfers any material from one container to another is responsible for labeling the new container with all required information.
- All employees are responsible for learning the requirements of this section and for applying them to their daily work routine.
- Identifying hazards before starting a job.
- Reading container labels and SDSs.
- Notifying the supervisor of torn, damaged, or illegible labels or of unlabeled containers.
- Using controls and/or personal protective equipment provided by the company to minimize exposure.
- Following company instructions and warnings pertaining to chemical handling and usage
- Properly caring for personal protective equipment, including proper use, routine care and cleaning, storage and replacement.
- Knowing and understanding the consequences associated with not following the Company policy concerning the safe handling and use of chemicals.
- Participating in the Company training.

Procedure

List of Hazardous Chemicals

An inventory/list of hazardous chemicals is maintained at the company online safety solution center located at www.im-safety.com in the "Right To Know" tab or by going to the following link: https://im-safety.com/right-to-know.

The Hazardous Chemical List is updated by the Safety Director as new chemicals are introduced to the workplace. The Hazardous Chemical List is available for access and/or download 27/7/365.

Safety Data Sheets (SDS)

- Safety Data Sheets (SDS) are obtained for all hazardous chemicals. Chemical manufacturers are responsible for developing SDSs. The company shall have a SDS for each chemical used.

- The purchasing of any potentially hazardous chemical products from any supplier that does not provide an appropriate Safety Data Sheet in a timely fashion is prohibited.

- The Safety Data Sheet must be kept in the SDS library for as long as the chemical is used by the facility.

- Electronic access (telephone, fax, internet, etc.) may be used to acquire and maintain SDS libraries and archives.

- The Manager is responsible for seeing that the Chemical Inventory List inventory is maintained, is current, and is complete. He/she will review the Chemical Inventory List at least annually. When a hazardous material has been permanently removed from the workplace, its SDS is to be removed from the Chemical

Inventory List. Chemicals that are temporarily removed from the workplace may be maintained in the Chemical Inventory List.

- SDS' for hazardous materials to which Company employees have been exposed must be maintained after the employee leaves the employment of the Company for a period of no less than 5 years from the date of exposure.

Methods to be Used to Inform Employees of the Hazards of Non-Routine Tasks

The methods that the Company will use to inform employees of the hazards of non-routine tasks (i.e., the painting of floors or walls, etc.) and the hazards associated with the non-routine task include:

- Conducting a Job plan that considers the following information:
  - Tasks associated with the job
  - Hazards associated with the tasks
  - Controls to manage the hazards to the lowest risk level as practical
  - The obligation to stop the job if something is not right
  - Change the plan id the job changes in scope or nature of work
- Employees will seek methods of use, special precautions, PPE, and the hazards associated with chemicals and the hazards associated with chemicals they will use in their work areas via the SDS for the product being used.

The Use and Care of Labels and Other Forms of Warning

- Containers of hazardous chemicals are labeled. Container labels should contain the following information:
  - Product identifier
  - Signal word
  - Hazard statement
  - Pictogram(s)
  - Precautionary statement(s), and
  - Name, address and telephone number of the chemical manufacturer, importer, or other responsible party.
- The Manager will ensure that all hazardous chemicals used or stored in the facility are properly labeled.
- Damaged labels or labels with incomplete information shall be reported immediately.
- Workplace labels or other forms of warning will be legible, in English and prominently displayed on the container or readily available in the work area throughout each work shift.
- If employees speak languages other than English, the information in the other language(s) may be added to the material presented as long as the information is presented in English as well.
- The Company will use the GHS labeling system for secondary containers.
- Portable containers into which hazardous chemicals are transferred from labeled containers and that are intended for the immediate use of the employee who performs the transfer do not require a label.
- If the portable container will be used by more than one employee or used over the course of more than one shift, the container must be labeled.
- Chemical containers received from vendors that are not properly labeled must be rejected.

CONTINUED ON NEXT PAGE

Pictograms and Hazards

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

Example Label

Training

Employees are provided with information and training on the hazardous chemicals they may be exposed to. Employees shall be provided with effective information and training on hazardous chemicals in their work area at the time of their initial assignment, and whenever a new physical or health hazard the employees have not previously been trained about is introduced into their work area. Information and training may be designed to cover categories of hazards (e.g., flammability, carcinogenicity) or specific chemicals. Chemical-specific information must always be available through labels and safety data sheets.

Additional training will be provided whenever a new chemical hazard is introduced into the work area. To reinforce the importance of handling chemicals properly when performing new or non-routine tasks supervisors will conduct supplementary training as needed.

Formal training will be conducted by facility employees or individuals who are knowledgeable in the Hazard Communication program.

The Hazard Communication Program documented training shall, at a minimum, include:

- Requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200 (General Industry) or 29 CFR 1926.59 (Construction Industry).
- Operations in the work area where hazardous chemicals are present.
- Location and availability of the hazard communication program, chemical inventory list and SDSs.
- Methods and observations used to detect the presence or release of a hazardous chemical in the work area, such as monitoring devices, visual appearance or odor of hazardous chemicals when being released.
- Explanation of the labels received on shipped containers.
- Explanation of the workplace labeling system.
- Explanation of the SDS, including order of information and how employees can obtain and use the appropriate hazard information.

The records of employee training are maintained in the Company online safety solution center document management system. Training records are readily available for whomever may have a legitimate reason and business related purpose for accessing such records.

Implementation Requirement

Per OSHA Requirements

Effective Completion Date	Requirement(s)	Who
December 1, 2013	Train employees on the new label elements and safety data sheet (SDS) format.	Employers
June 1, 2015* December 1, 2015	Compliance with all modified provisions of this final rule, except: The Distributor shall not ship containers labeled by the chemical manufacturer or importer unless it is a GHS label	Chemical manufacturers, importers, distributors and employers
June 1, 2016	Update alternative workplace labeling and hazard communication program as necessary, and provide additional employee training for newly identified physical or health hazards.	Employers
Transition Period to the effective completion dates noted above	May comply with either 29 CFR 1910.1200 (the final standard), or the current standard, or both	Chemical manufacturers, importers, distributors, and employers

HAZARD IDENTIFICATION AND ASSESSMENT

Innovations Manufacturing, Inc. (the Company)

Purpose

- To provide guidelines for identifying, assessing and controlling workplace hazards
- To ensure the potential hazards of new processes and materials are identified before they are introduced into the workplace
- To identify the jobs/tasks which require risk assessment

Key Responsibilities

The Safety Director or his/her designate must assess a work site and identify existing or potential hazards before work begins at the work site or prior to the construction of a new work site

Hazard and Risk Identification

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

The Safety Director, George Bunker, conducted a baseline worksite hazard assessment which is a formal process in place to identify the various tasks that are to be performed and the accompanying identified potential hazards. The results are included in a report of the results of the hazard assessment and the methods used to control or eliminate the hazards are identified in the company safety manual, safety training, and various other safety resources. The hazard assessment report must be signed and have the date on it.

Inputs into the baseline hazard identification include, but are not limited to:

- Types of hazards identified
- Scope of work
- Legal and other requirements
- Previous incidents and non-conformances
- Sources of energy, contaminants and other environmental conditions that can cause injury
- Walk through of work environment
- Signage requirements
- Procedures required
- Training required

Hazards identifications (as examples) are to include:

- Isolation of Energy
- Hearing Protection
- Musculoskeletal Disorders
- Bloodborne Pathogens
- Fire
- Electrical
- Crush or pinch points
- Noise
- Driving
- General Safety Precautions
- And any other established policy or procedure by the Company
- Any other site-specific work scope hazard identified in the process

All identified hazards are assessed for risk and risk controls are assigned within the worksite hazard assessment for that specific hazard.

The Company program provides processes to ensure employees and/or sub-contractors are actively involved in the hazard identification process and hazards are reviewed with all employees concerned.

Employees will be trained in the hazard identification process including the use and care of proper PPE.

The supervisor discusses the worksite hazard assessment with employees at the respective work location during the employee's documented orientation.

Review of Hazard Assessment

Existing worksite hazard identifications are formally reviewed annually or repeated at reasonably practicable intervals to prevent the development of unsafe and unhealthy working conditions and specifically updated when new tasks are to be performed that have not been risk assessed, when a work process or operation changes, before the construction of a new site, or when significant additions or alterations to a job site are made.

The respective supervisor or project manager advises the Safety Director when additional hazards are introduced into the workplace in order to revise planning and assessment needs.

Risk Ranking

Hazards are classified and ranked based on severity. The program identifies hazards are classified/prioritized and addressed based on the risk associated with the task. (See the risk analysis matrix outlining severity and probability).

COMPANY RISK RANKING MATRIX

Consequence					PROBABILITY				
Severity	People	Assets	Environment	Reputation	A	B	C	D	E
					Never	Rarely	Once a week	Several Times in a Week	Multiple Times in a Day
0	No health effect	No damage	No effect	No impact					
1	Slight health effect	Slight damage	Slight effect	Slight impact					
2	Minor health effect	Minor damage	Minor effect	Limited impact					
3	Major health effect	Localized damage	Localized effect	Considerable impact					
4	Single fatality	Major damage	Major effect	National impact					
5	Multiple fatalities	Extensive damage	Massive effect	Global impact					
Key	Manage for continuous improvement			Incorporate risk reduction measures			Intolarable		

Risk Controls/Methods to Ensure Identified Hazards Are Addressed and Mitigated

The following describes how identified hazards are addressed and mitigated:

- Risk assessed hazards are compiled with and addressed and mitigated through dedicated assignment according to their respective risk from a highest to lowest level risk consideration.

- If an existing or potential hazard to workers is identified during a hazard assessment, the Company must take measures to eliminate the hazard, or if elimination is not reasonably practicable, control the hazard. If reasonably practicable, the Company must eliminate or control a hazard through the use of engineering controls. If a hazard cannot be adequately controlled using engineering controls, the Company must use administrative controls that control the hazard to a level as low as reasonably achievable. If the hazard cannot be adequately controlled using engineering and/or administrative controls, the Company must ensure that the appropriate personal protective equipment (PPE) is used by workers affected by the hazard.

The Company may use a combination of engineering controls, administrative controls, and personal protective equipment if there is a greater level of worker safety because a combination is used.

Emergency Control of Hazards

Only those employees competent in correcting emergency controls of hazards may be exposed to the hazard and only the minimum number of competent employees may be exposed during hazard emergency control. An example is a gas leak in a building. Only those personnel with training on fire safety, gas supply shut off and other related controls will attempt to resolve the emergency control of a hazard, otherwise, trained emergency or third-party service providers shall be used to control the hazard. The Company will make every possible effort to control the hazard while the condition is being corrected.

Certification of Hazard Assessment

The Safety Director completes and signs the certification of hazard assessment for the worksite hazard assessment (also see PPE Program) and includes it within the Safety Procedures. Hazard assessments are reviewed annually and updated when new tasks are to be performed that have not been risk assessed.

Job Safety Analysis (JSA)

For those jobs with the highest injury or illness rates, jobs that are new to our operation, jobs that have undergone major changes in processes and procedures or jobs complex enough to require written instructions will have a Job Safety Analysis performed. Completed JSAs will be stored in the Company electronic Document Management System.

HEAT ILLNES PREVENTION

Innovations Manufacturing, Inc. (the Company)

Purpose

This program is designed to reduce the risk of work-related heat illnesses.

Scope

This procedure applies to all employees and/or contractors providing services to the Company.

Definitions

Acclimatization: Temporary adaptation of the body to work in the heat that occurs gradually when a person is exposed to it. Acclimatization peaks in most people within four to fourteen days of regular work for at least two hours per day in the heat.

Heat Illness: A serious medical condition resulting from the body's inability to cope with a particular heat load, and includes heat cramps, heat exhaustion, heat syncope and heat stroke.

Preventative recovery period: A period of time to recover from the heat in order to prevent heat illness.

Shade: Blockage of direct sunlight through the use of canopies, umbrellas and other temporary structures or devices may be used to provide shade. One indicator that blockage is sufficient is when objects do not cast a shadow in the area of blocked sunlight. Shade is not adequate when heat in the area of shade defeats the purpose of shade, which is to allow the body to cool. For example, a car sitting in the sun does not provide acceptable shade to a person inside it, unless the car is running with the air conditioning on.

Requirements

All managers and supervisors are responsible for implementing and maintaining the Heat Illness Program in their work areas.

Provision of Water

Employees shall have access to potable drinking water. Where it is not plumbed or otherwise continuously supplied, it shall be provided in sufficient quantity at the beginning of the work shift.

Access to Shade for outdoor workers

Outdoor workers will be provided with access to shade. Employees suffering from heat illness or believing a preventative recovery period is needed shall be provided access to an area with shade that is either open to the air or provided with ventilation or cooling. Such access to shade shall be permitted at all times. See definition of “Shade”.

Control Measures

Each work location involved in working in hot environments shall implement measures that must be in place to control the effects of environmental factors that can contribute to heat related illnesses. The most common environmental factors are air temperature, humidity, radiant heat sources and air circulation.

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

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

Each remote or outdoor work site shall develop site specific procedures but shall include the minimum:

- Bring at least 2 quarts per employee at the start of the shift and the supervisors/designated persons will monitor water containers every 30 minutes, and employees are encouraged to report to supervisor/designated person any low levels or dirty water.
- Supervisors will provide frequent reminders to employees to drink frequently.
- Prior to every shift start there will be short tailgate meetings to remind workers about the importance of frequent consumption of water throughout the shift during hot weather.
- Place water containers as close as possible to the workers.
- When drinking water levels within a container drop below 50%, the water shall be replenished immediately, or water levels should not fall below the point that will allow for adequate water during the time necessary to effect replenishment.
- Disposable/single use drinking cups will be provided to employees or provisions will be made to issue employees their own cups each day.
- Supervisors will set-up an adequate number of umbrellas, canopies or other portable devices at the start of the shift and will relocate them to be closer to the crew, as needed.
- Non-agricultural employers can use other cooling measures if they demonstrate that these methods are as effective as shade.

Supervisors will continuously check all employees and stay alert to the presence of heat related symptoms.

Supervisors will carry cell phones or other means of communication, to ensure that emergency services can be called and check that these are functional at the worksite prior to each shift.

All newly hired workers will be assigned a buddy or experienced coworker to ensure that they understood the training and follow the company procedures.

Training

Training in the following topics shall be provided to all supervisory and non-supervisory employees:

- The environmental and personal risk factors for heat illness
- The importance of frequent consumption of small quantities of water, up to 4 cups per hour, when the work environment is hot and employees are likely to be sweating more than usual in the performance of their duties
- The importance of acclimatization
- The different types of heat illness and the common signs and symptoms of heat illness
- The importance to employees of immediately reporting to the employer, directly or through the employee's supervisor, symptoms or signs of heat illness in themselves, or in co-workers
- Company procedures for responding to symptoms of possible heat illness, including how emergency medical services will be provided should they become necessary
- Company procedures for contacting emergency medical services, and if necessary, for transporting employees to a point where they can be reached by an emergency medical service provider

- Company procedures for ensuring that, in the event of an emergency, clear and precise directions to the work site can and will be provided as needed to emergency responders.

Supervisors must receive training in the prevention of heat related illnesses prior to supervising employees working in heat. Supervisors will be trained in the Company heat illness emergency response procedures to prevent heat illness and procedures to follow when an employee exhibits symptoms consistent with possible heat illness, including emergency response procedures.

Communication for employees shall be in a form readily understandable by all affected employees.

The Company shall ensure all contractors, subcontractors, staffing companies, etc. employees (including temporary) working outdoors have been trained in heat illness prevention.

HOT WORK

Innovations Manufacturing, Inc. (the Company)

Purpose

The purpose of this program is to assure a safe work environment during welding, cutting and hot work operations.

Scope

This program is applicable to all employees directly involved or assisting in the welding, cutting and hot work operations.

Definitions

Welding/Hot Work Procedures: any activity which results in sparks, fire, molten slag, or hot material which has the potential to cause fires or explosions.
Examples of Hot Work: Cutting, Brazing, Soldering, Thawing Pipes, Grinding, using an electric tool in a hazardous area and Welding.
Special Hazard Occupancies: any area containing Flammable Liquids, Dust Accumulation, Gases, Plastics, Rubber and Paper Products.
Hazards: includes, but not limited to the following: fires and explosions, skin burns, welding "blindness", and respiratory hazards from fumes and smoke.

Key Responsibilities

Managers and Supervisors

- Establish safe areas for welding and cutting operations.
- Provide training for all employees whose task includes heat, spark, or flame producing operations such as welding, brazing, or grinding.
- Develop and monitor effective hot work procedures.
- Provide safe equipment for hot work.
- Provide proper and effective PPE for all hot work.
- Monitor all hot work operations.
- Ensure all hot work equipment and PPE are in safe working order.
- Allow only trained and authorized employees to conduct hot work and conduct routine inspections of the hot work area.
- Ensure that the Hot Work Inspection Checklist is used for all hot work outside the authorized safe welding areas.

Employees

- Follow all hot work procedures.
- Properly use appropriate hot work PPE.
- Inspect all hot work equipment on a routine basis.
- Report any equipment problems or unsafe conditions.

Procedure

General

A Hot Work Inspection Checklist must be completed before performing any hot work operations outside of the Safe Hotwork Area. A Hot Work Inspection Checklist must also be completed on a weekly schedule for all safe hotwork areas. Before cutting or welding is permitted, the area shall be inspected, and a written Hot Work

Inspection Checklist shall be used to authorize welding and cutting operations. The Hot Work Inspection Checklist can be found at: www.im-safety.com in the "Permits" tab.

Where practicable all combustibles shall be relocated at least 35 feet from the work site. Where relocation is impractical, combustibles shall be protected with flameproof covers, shielded with metal, guards, curtains, or wet down the material to help prevent ignition of material.

Ducts, conveyor systems, and augers that might carry sparks to distant combustibles shall be protected or shut down.

Where cutting or welding is done near walls, partitions, ceilings, or openings in the floor (grating, manholes, etc.), fire-resistant shields or guards shall be provided to prevent ignition.

If welding is to be done on a metal wall, partition, ceiling, or solid decking/flooring, precautions shall be taken to prevent ignition of combustibles on the other side, due to conduction or radiation of heat. Where combustibles cannot be relocated on the opposite side of the work, a fire watch person shall be provided on the opposite side of the work.

Welding shall not be attempted on a metal partition, wall, and ceiling or decking/flooring constructed of combustible sandwich panels.

Cutting or welding on pipes or other metal in contact with combustible walls, partitions, floors, ceilings, or roofs shall not be undertaken if the work is close enough to cause ignition by combustion.

Cutting or welding shall not be permitted in the following situations:

- In areas not authorized by management.
- In sprinkled buildings while such protection is impaired.
- In the presence of potentially explosive atmospheres, e.g. flammables.
- In areas near the storage of large quantities of exposed, readily ignitable materials.
- In areas where there is dust accumulation of greater than 1/16 inch within 35 feet of the area where welding/hot work will be conducted.
- All dust accumulation shall be cleaned up before welding or hot work is permitted.

Whenever welding or cutting is performed in locations where other than a minor fire might develop or any of the conditions mentioned above cannot be met, a fire watch shall be provided.

- The fire watch shall be provided during and for a minimum of 30 minutes past the completion of the welding.
- The fire watch shall be trained in the use of fire extinguishers and the facility's alarm system.
- During this time the fire watch will have appropriate fire extinguishers readily available.
- Suitable extinguishers shall be provided and maintained ready for instant use.
- A Hot Work Inspection Checklist will be issued on all welding or cutting outside of the designated welding area.
- A Hot Work Inspection Checklist shall be conducted for all authorized safe welding areas on a weekly schedule.

Fire Prevention Measures

A designated welding area shall be established to meet the following requirements:

- Floors swept and cleaned of combustibles within 35 feet of work area.

- Flammable and combustible liquids and material will be kept 35 feet from work area.
- Adequate ventilation providing 20 air changes per hour.
- At least one 10-pound dry chemical fire extinguisher shall be within 35 feet of the work area.
- Protective dividers such as welding curtains or noncombustible walls will be provided to contain sparks, slag, and light to the combustible free area.

Requirements for welding conducted outside the designated welding area:

- Portable welding curtains or shields must be used to protect other workers from the light generated within the welding area.
- A Hot Work Inspection Checklist must be completed prior to initiating welding operations.
- Respiratory protection is mandatory unless an adequate airflow can be established to pull the fumes away from the workers.
- Plastic materials must be covered with welding tarps during welding procedures.
- Fire Watch must be provided for all hot-work operations outside the authorized safe welding area.
- Fire watch shall remain in the are for 30 minutes after the hot work occurs.

Confined Space Welding

A confined space is:

- A space that Is large enough and so configured that an employee can bodily enter and perform assigned work
- Has limited or restricted means for entry or exit (for example, tanks, vessels, coolers, storage bins, hoppers, vaults, and pits are spaces that may have limited means of entry), and
- Is not designed for continuous human occupancy

All three of the above elements must be present for the area to be considered a confined space.

Refer to the Company Confined Space procedure before commencing any welding, cutting, and/or brazing operations in an area meeting the requirements of a confined space.

Ventilation is a prerequisite to work in confined spaces.

When welding or cutting is being performed in any confined spaces, the gas cylinders and welding machines shall be left on the outside. Before operations are started, heavy portable equipment mounted on wheels shall be securely blocked to prevent accidental movement.

When a welder must enter a confined space through a manhole or other small opening, means shall be provided for quickly removing him in case of an emergency.

- When safety belts and lifelines are used for this purpose, they shall be so attached to the welder's body that it cannot catch and wedge in a small exit opening.
- An attendant with a preplanned rescue procedure shall be stationed outside to observe the welder at all times and be capable of putting rescue operations into effect.

When arc welding is to be suspended for any substantial period of time, such as during lunch or overnight, all electrodes shall be removed from the holders and the holders carefully located so that accidental contact cannot occur, and the machine shall be disconnected from the power source.

In order to eliminate the possibility of gas escaping through leaks of improperly closed valves, when gas welding or cutting, the torch valves shall be closed and the fuel-gas and oxygen supply to the torch positively shut off outside the confined space area whenever the torch is not to be used for a substantial period of time, such as during lunch hour or overnight. If practical, the torch and hose shall also be removed from the confined space.

When welding must be performed in a space entirely screened on all sides, the screens shall be so arranged that no serious restriction of ventilation exists. It is desirable to have the screens so mounted that they are about 2 feet (0.61 m) above the floor unless the work is performed at so low a level that the screen must be extended nearer to the floor to protect nearby workers from the glare of welding.

A fixed enclosure shall have a top and not less than two sides which surround the welding or cutting operations, and a rate of airflow sufficient to maintain a velocity away from the welder of not less than 100 linear feet (30 m) per minute.

All welding and cutting operations conducted in confined spaces shall be adequately ventilated to prevent the accumulation of toxic materials or possible oxygen deficiency. This applies not only to the welder, but also to helpers and other personnel in the immediate vicinity. All air withdrawn will be replaced with air that is clean.

In circumstances for which it is impossible to provide safe ventilation, airline respirators or hose masks approved for this purpose by the National Institute for Occupational Safety and Health (NIOSH) will be provided. In areas immediately hazardous to life, a full-face positive pressure supplied-air respirator with an auxiliary self-contained air supply approved by NIOSH must be used.

Where welding operations are carried on in confined spaces and where welders and helpers are provided with masks, blowers, supplied air, or self-contained breathing equipment, a worker shall be stationed on the outside of such confined spaces to ensure the safety of those working within.

Fumes, Gases and Dust

Fumes produced by some welding processes can be toxic and may require source extraction. An assessment of the work to be performed must be completed before each job is undertaken. Fumes generally contain particles from the material being welded. Welding fumes can have an acute effect on the respiratory system.

Any welding, cutting, or burning of lead base metals, zinc, cadmium, mercury, fluorides, beryllium or exotic metals or paints not listed here that could produce dangerous fumes shall have proper ventilation or respiratory protection. This includes inert-gas metal-arc welding or oxygen cutting of stainless steel.

Welders and helpers will refer to the Company Respiratory Protection Program to determine the appropriate respiratory protection to be used during welding operations.

All welding and cutting operations shall be adequately ventilated to prevent the accumulation of toxic materials. This applies not only to the welder, but also to helpers and other personnel in the immediate vicinity.

Personal Protection

- Helmets and hand shields shall be made of a material, which is an insulator for heat and electricity. Helmets, shields, and goggles shall not be readily flammable and shall be capable of withstanding sterilization.
- Helmets and hand shields shall be arranged to protect the face, neck, and ears from direct radiant energy from the arc.
- Helmets shall be provided with filter plates and cover plates designed for easy removal.
- All parts shall be constructed of a material, which will not readily corrode or discolor the skin.

- Goggles shall be ventilated to prevent fogging of the lenses as much as practicable.
- All glass for lenses shall be tempered, substantially free from scratches, air bubbles, waves, and other flaws. Except when a lens is ground to provide proper optical vision correction, the front and rear surfaces of lenses and windows shall be smooth and parallel.
- Lenses shall bear some permanent distinctive marking which may readily identify the source and shade.
- The following is a guide for the selection of the proper shade numbers. These recommendations may be varied to suit the individual's needs:

Welding Operation		Shade Number
Shielded metal — arc welding 1/16, 3/32, 1/8-5/32 inch electrodes		10
Gas-shielded arc welding (nonferrous) 1/16, 3/32, 5/32 inch electrodes		11
Gas-shielded arc welding (ferrous) 1/16, 3/32, 1/8, 5/32 electrodes		12
Shielded metal arc welding: 3/16	7/32,1/4 inch electrodes	12
	5/16, 3/8-inch electrodes	14
Atomic hydrogen welding		10 – 14
Carbon arc welding		14
Soldering		2
Torch brazing		3 or 4
Light cutting, hp to 1 inch		3 or 4
Medium cutting, 1 inch to 6 inches		4 or 5
Healy cutting, 6 inches or over		5 or 6
Gas welding (light) up to 1/8 inch		4 or 5
Gas welding (medium) 1/8 - 1/2 inch		5 or 6
Gas welding (heavy) 1/2 inch or over		6 or 8

NOTE:
In gas welding or oxygen cutting where the torch produces a high yellow light, it is desirable to use a filter or lens that absorbs the yellow or sodium line in the visible light of the operation. All filter lenses and plates shall meet the test for transmission of radiant energy prescribed in ANSI Z87.1 — 1968 — American National Standard Practice for Occupational and Educational Eye and face Protection. Booths and screens shall permit circulation of air at floor level. Workers or other persons adjacent to the designated welding areas shall be protected from the rays by noncombustible or flameproof screens or shields or shall be required to wear appropriate goggles.

Adequate hand protection and clothing must be used to protect the body from welding hazards.

Cleaning Compounds
In the use of cleaning materials, because of their possible toxicity or flammability, manufacturer instructions shall be followed.

- Degreasing and other cleaning operations involving chlorinated hydrocarbons shall be so located that no vapors from these operations will reach or be drawn into the atmosphere surrounding any welding operation.
- In addition, trichloroethylene and perchloroethylene shall be kept out of atmospheres penetrated by the ultraviolet radiation of gas-shielded welding operations.

Oxygen cutting, using a chemical flux, iron powder, or gas shielded arc cutting for stainless steel shall be performed using mechanical ventilation adequate to remove the fumes generated.

Cylinders

Compressed gas cylinders shall be DOT-approved and legibly marked near the shoulder of the cylinder for the purpose of identifying the gas content with either the chemical or trade name of the gas.

- All compressed gas cylinder connections must comply with ANSI B57. 1-1965 Standards.
- Compressed gas cylinders shall be always secured in an upright position except if necessary for short periods of time while cylinders are actually being hoisted or carried.

All cylinders shall be kept away from sources of heat and from radiators and piping systems that may be used for electrical grounding purposes. Cylinders and cylinder valves including couplings and regulators shall be kept free from oily or greasy substances and must not be handled with gloves or rags in the same condition.

Stored oxygen cylinders shall be kept at least 20 feet from the fuel gas cylinders or combustible materials, especially oil or grease, or separated by a non-combustible barrier at least 5 feet high with a fire rating of at least one-half hour. All empty cylinders shall have closed valves and valve protection caps shall always be in place and hand-tight except when cylinders are in use or connected for use.

Cylinders shall not be kept in unventilated enclosures such as lockers and cupboards.

Fuel gas cylinders stored inside buildings shall be limited to a total capacity of 2000 cubic feet (300 pounds) of liquefied petroleum gas, except for those in actual use or attached ready for use.

All acetylene cylinders shall be stored valve-end up.

Assigned storage spaces shall be located where cylinders cannot be knocked over or damaged by falling objects or subject to tampering by unauthorized persons.

- Back flow protection shall be provided by an approved device that will prevent oxygen from flowing into the fuel-gas system or fuel from flowing into the oxygen system.
- An approved device that will prevent flame from passing into the fuel-gas system shall provide flashback protection.
- An approved pressure-relief device set at the appropriate pressure shall provide backpressure protection.

Special care must be taken when transporting gas cylinders:

- Cylinders must be secured with valve cap installed.
- Cylinders shall not be lifted by the valve protection caps, the regulators must be removed, and cylinders shall not be dropped or permitted to strike each other.
- Removed regulators must be carried in the cab of the vehicle.
- Cylinders shall not be tampered with, nor should any attempt be made to repair them.
- They shall be handled carefully - rough handling, knocks, or falls are liable to damage the cylinder, valve, or safety device and cause leakage.

Safety devices shall not be tampered with.

Arc Welding and Cutting

All personnel operating, installing, and maintaining welding equipment shall be qualified or trained to operate and maintain such equipment.

- All workers assigned to operate or maintain equipment shall be familiar with the respective equipment. Electrical welding equipment shall be chosen for safe operation and comply with applicable Requirements

for Electric Arc Welding Standards to include: 29 CFR 1910.254, 29 CFR 1910.252 (a)(b) (c) and if gas shielded arc welding is done the worker must be familiar with the American Welding Society Standard A6-1-1966.

  - Arc welding equipment must be designed to meet respective conditions for which it will operate.
  - It shall be operated at recommended voltage in accordance with the manufacturer recommendations.
  - All leads shall be periodically inspected and replaced if insulation is broken, or splices are unprotected.
  - Leads shall not be repaired with electrical tape.

- All ground connections shall be checked to determine that they are mechanically strong and electrically adequate for the required current.

A disconnecting switch or controller shall be provided at or near each welding machine along with over-current protection.

All direct current machines shall be connected with the same polarity and all alternating current machines connected to the same phase of the supply circuit must be connected with the same polarity.

- To prevent electrical contact with personnel, all electrode holders shall be placed where they do not make contact with persons, conducting objects, or the fuel of compressed gas tanks.
- Cables with splices within 10 feet of the holder shall not be used.

If the object to be welded or cut cannot readily be moved, all moveable fire hazards should be removed.

If an object to be welded or cut cannot be moved and if all the fire hazards cannot be removed, then guards shall be used to confine the heat, sparks, and slag and to protect the immovable fire hazards.

Resistance Welding
All personnel operating, installing, and maintaining welding equipment shall be qualified or trained to operate and maintain such equipment.

- Voltage, interlocks, guarding, grounding, and shields shall be in accordance with manufacturer recommendations.
- Precautions such as flash guarding, ventilation, and shields shall be provided to control flashes, toxic elements, and metal fumes.

If the object to be welded or cut cannot readily be moved, all moveable fire hazards should be removed.

Oxygen Fuel Gas Welding and Cutting:
Only approved apparatuses such as torches, regulators, or pressure-reducing valves, setting generators, and manifolds shall be used:

- Mixtures of fuel gases and air or oxygen may be explosive and must be guarded against.
- All hoses and hose connections shall comply with the Compressed Gas Association and Rubber Manufacturers' Associations' applicable standards.
- Workers in charge of the oxygen or fuel-gas supply equipment, including generators, shall be instructed and deemed competent by the Company before being left in charge.

If the object to be welded or cut cannot readily be moved, all moveable fire hazards should be removed.

Fire Watch Requirements

A fire watch shall be present when welding, cutting, brazing and/or soldering is performed near combustible materials and/or locations where fire may develop:

- Locations where other than a minor fire might develop.
- Combustible materials are closer than 35 feet to the point of operation.
- Combustibles that are 35 feet or more away but are easily ignited.
- Wall or floor openings within a 35 feet radius of exposed combustible materials.
- Combustible materials are adjacent to the opposite side of metal partitions, ceilings or roofs.

Fire watch personnel shall be maintained at least 30 minutes after welding or cutting operations have been completed.

Training

Training shall include:

- Worker Responsibilities
- Cutters, welders, and their supervisors must be suitably trained in the safe operations of their respective equipment and the safe use of the process.
- Fire Watchers must be trained on the following Responsibilities:
    - Their ONLY duty is Fire Watch.
    - When they can terminate the watch.
    - How to use the provided fire extinguisher(s).
    - Be familiar with facilities and how to activate the fire alarm if a fire develops beyond the incipient stage.
    - Employer responsibilities
    - Documentation requirements
    - Respirator usage requirements

INCIDENT MANAGEMENT

Innovations Manufacturing, Inc. (the Company)

Purpose

The purpose of this program is to have effective procedures for reporting and investigating incidents.

Responsibilities

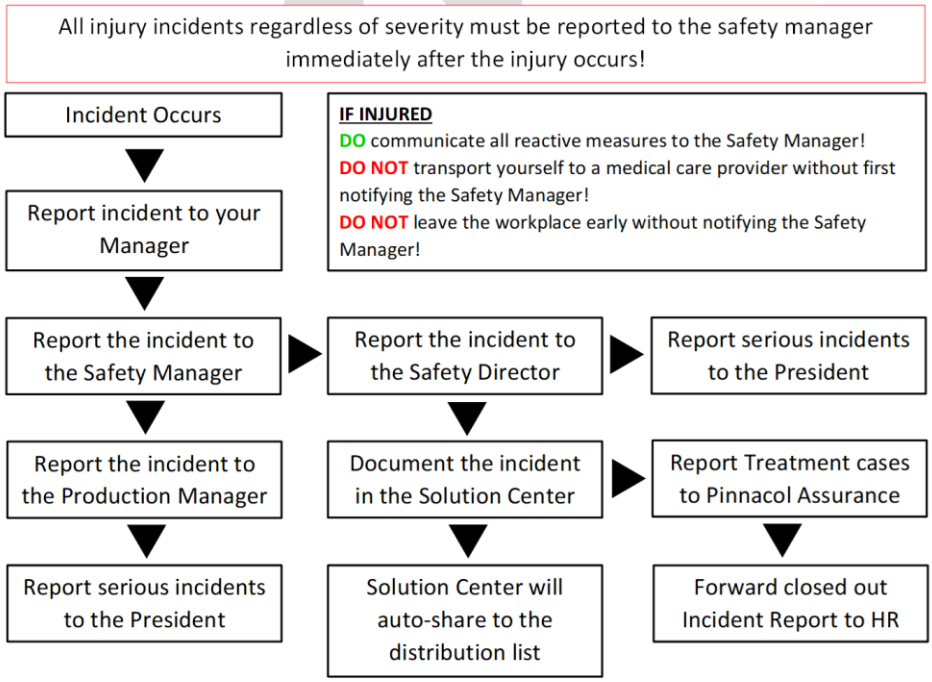
Individual responsibilities for reporting incidents to OSHA must be pre-determined and assigned prior to incidents.
Safety Director ensures incidents are reported to executive management as required
Safety Director ensures incidents are reported to OSHA as required by regulation.
Safety Manager and Production or Shop Manager ensure all incidents are reported to the Safety Director
Employees Immediately report any incident or near miss to their immediate supervisor and the Safety Manager.

Procedure

Incident Reporting Matrix

The Incident Reporting Matrix identifies, based on type of incident, who within corporate management shall be verbally notified and when. It also specifies which type of report from the field shall be completed based on the type of incident.

INCIDENT NOTIFICATION MATRIX



Main Guidelines of OSHA Reporting

OSHA is notified within 8 hours of a work-related fatality that is a direct result of a work-related incident (suicide is not work-related).

All amputations, loss of an eye, or in-patient hospitalizations resulting from a work-related incident are reported to OSHA within 24 hours.

Reporting procedures for severe injuries and/or fatalities

The Safety Director shall make appropriate reports using one of the following methods:

- by telephone or in person to the OSHA Area Office that is nearest to the site of the incident,
- by telephone to the OSHA toll-free central telephone number, 1-800-321-OSHA (1-800-321-6742), or
- by electronic submission using the reporting application located on OSHA's public web site at www.osha.gov.

Initial Identification/Assessment of Evidence

Initial identification of evidence immediately following the incident could include a listing of people, equipment, and materials involved and a recording of environmental factors such as weather, illumination, temperature, noise, ventilation, etc. The site supervisor or manager must maintain the scene of an incident as it was at the time of the incident until the Safety Director has been notified.

Collection/Preservation and Security of Evidence

Evidence such as people, positions of equipment, parts, and papers must be preserved, secured, and collected through notes, photographs, witness statements, flagging, and impoundment of documents and equipment. Everything shall be dated.

Witness Interviews and Statements

Witness interviews and statements must be collected. Locating witnesses, ensuring unbiased testimony, obtaining appropriate interview locations, and use of trained interviewers should be detailed. The need for follow-up interviews should also be addressed. All items shall be dated.

The final incident investigation report consists of findings with critical factors, evidence, corrective actions, responsible parties, timelines, and corrective action items.

Written Incident Report

The incident report that shall be used by the Company is located at the Company safety solution center at www.im-safety.com under the “Incident Management” tab.

Incident Response

The supervisor takes the below steps following an incident.

- Call 911 is the seriousness of the incident warrants. It is always better to respond in an excessive nature rather than to not have the needed resources. We can always call off response personnel and services if they are not needed.
- Assist as circumstances dictate as prudent- don’t ever place yourself in harms way or in a situation you are not trained for.
- Secure the area as quickly as possible to preserve evidence. The scene will be released by the Safety Director.
- Notify management by phone per the Incident Notification Matrix.
- Identify potential witnesses and get their statements.
- Use investigation tools as needed (camera, drawings, video, etc.) to capture visuals or other tangible evidence.

- Tag out for evidence any equipment that was involved. The equipment shall only be released by the Safety Director or their designate.
- Interview witnesses (including the effected employee) and obtain written, signed statements and share with the Company Safety Director.
- Implement any immediate corrective actions needed to preserve the safety of the site.

Injury and Illness Recordkeeping

The Company is required to report and keep records of injury incidents that:

- work-related; and
- is a new case; and
- meets one or more of the general recording criteria.

The Company must enter each recordable injury or illness on an OSHA 300 Log and the Company incident report form within seven (7) calendar days of receiving information that a recordable injury or illness has occurred.

The OSHA 300A Summary will be signed by a company official. A Company executive must certify that he or she has examined the OSHA 300 Log and that he or she reasonably believes, based on his or her knowledge of the process by which the information was recorded, that the annual summary is correct and complete.

OSHA 300A Posting

The Company must post a copy of the annual summary on the Company Safety Solution Center The Company must ensure that the posted annual summary is not altered, defaced or covered by other material.

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

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

Training

The Company shall train personnel in their responsibilities for incident reporting. Training requirements relative to incident reporting are described below:

- Awareness
- First responder responsibilities
- Incident scene preservation
- Collecting evidence
- The initial response at the accident scene
- Managing the accident investigation
- Collecting information
- Developing conclusions and making personal judgments (admitting to wrong doing)
- How to share information

LADDERS

Innovations Manufacturing, Inc. (the Company)

Purpose

The purpose of the program is to prescribe rules and establish minimum requirements for the construction, care, and use of the common types of ladders.

Scope

This program is applicable to all employees who may utilize ladders.

Definitions

Ladder: an appliance usually consisting of two side rails joined at regular intervals by cross- pieces called steps, rungs, or cleats, on which a person may step in ascending or descending.
Stepladder: a self-supporting portable ladder, nonadjustable in length, having flat steps and a hinged back. Its size is designated by the overall length of the ladder measured along the front edge of the side rails.
Single ladder: a non-self-supporting portable ladder, nonadjustable in length, consisting of but one section. The overall length of the side rail designates its size.
Extension ladder: a non-self-supporting portable ladder adjustable in length. It consists of two or more sections traveling in guides or brackets so arranged as to permit length adjustment. Its size is designated by the sum of the lengths of the sections measured along the side rails.
Fixed ladder: a ladder permanently attached to a structure, building, or equipment.
Individual-rung ladder: a fixed ladder each rung of which is individually attached to a structure, building, or equipment.
Cage: a guard that may be referred to as a cage or basket guard, which is an enclosure that is fastened to the side rails of the fixed ladder or to the structure to encircle the climbing space of the ladder for the safety of the person who must climb the ladder.

Key Responsibilities

Managers and Supervisors

- Managers and supervisors are responsible for ensuring that all employees, and/or contractors have been trained in the use and inspection of ladders in accordance with the manufacture's guidelines.
- Managers and supervisors are responsible for ensuring that all employees and contractors are aware that if an inspection discovers a defect, the ladder shall not be used, and it must be taken out of service.

Employees

- Employees shall inspect ladders prior, during, and at the completion of each use to ensure the condition of the ladder and the safety of its occupants.
- Employees are responsible for following this program and reporting any damage or repairs that may be needed to their supervisor.

Procedure

Inspection, Care, and Safe Work Practices of Ladders

Inspection

- Ladders shall be inspected by a competent person for visible defects on a periodic basis and after any occurrence that could affect their safe use.
- Ladders used by COMPANY employees must meet OSHA/ANSI specifications.
- Ladder rungs, cleats, and steps shall be parallel, level, and uniformly spaced, when the ladder is in position for use.
- Portable and fixed ladders with structural defects, such as, but not limited to, broken or missing rungs, cleats, or steps, broken or split rails, corroded components, or other faulty or defective components, shall either be immediately marked in a manner that readily identifies them as defective, or be tagged with "Do Not Use" or similar language, and shall be withdrawn from service until repaired.
- If a ladder is tipped over, it shall be inspected by a competent person for side rail dents or bends, or excessively dented rungs; check all rung to side rail connections; check hardware connections; check rivets for shears.
- Ladders with broken or missing steps, rungs, or cleats, broken side rails, or other faulty equipment shall not be used; improvised repairs shall not be made.
- All wood parts shall be free from sharp edges and splinters; sound and not painted.

Care

- Ladders shall be maintained in good condition at all times, the joint between the steps and side rails shall be tight, all hardware and fittings securely attached, and the movable parts shall operate freely without binding or undue play.
- Metal bearings of locks, wheels, pulleys, etc., shall be frequently lubricated.
- Frayed or badly worn rope shall be replaced. Safety feet and other auxiliary equipment shall be kept in good condition to ensure proper performance.
- Rungs shall be kept free of grease and oil.
- Ladders shall be stored in a well-ventilated area in a manner to prevent sagging and warping.

How to Safely Use Ladders

- Ladders shall be used only for the intended purpose for which they were designed. Never use ladder in a horizontal position or as scaffolding and do not place ladders on top of boxes, barrels, crates, etc.
- The ladder shall be secured at the top or held by another person at the base.
- The footing of the ladder shall be placed on a stable and level surface.
- Extension ladders are placed against the top support at a 4:1 incline. Ladders shall be used at an angle such that the horizontal distance from the top support to the foot of the ladder is approximately one-quarter of the working length of the ladder. (The distance along the ladder between the foot and the top support.)
- When ladders are not able to be extended then the ladder shall be secured at its top to a rigid support that will not deflect.
- Ladders shall not be used in a horizontal position as platforms, runways, or scaffolds.
- Ladders shall not be used by more than one person at a time.
- Ladders shall not be placed in front of doors opening toward the ladder unless the door is blocked open, locked, or guarded.
- If a ladder is used in a high traffic area, barricades shall be placed to avoid accidental displacement due to collisions.
- Do not stand on the top two rungs or top of step ladders.

On two-section extension ladders the minimum overlap for the two sections in use shall be as follows:

Size of Ladder (feet)	Overlap (feet)
Up to and including 36’	3

Over 36 up to and including 48’	4
Over 48 up to and including 60’	5

- The upper supports of ladders used to access elevated work areas must extend a minimum of 3 feet above the elevated surface. The ladder side rails shall extend at least 3 feet (.9m) above the upper landing surface. When ladders are not able to be extended then the ladder shall be secured at its top to a rigid support that will not deflect.
- The employee shall maintain a three (3)-point grip on the ladder at all times and carry tools and/or equipment on a belt or hoist up. Do not carry anything in the hands that could cause injury in case of fall.
- The employee shall face the ladder while ascending or descending.
- The bracing on the back legs of stepladders is designed solely for increasing stability and not for climbing.
- The ladder shall not be moved while occupied.

Portable Ladders

- Stepladders shall not be longer than 20 feet. Single ladders shall not be longer than 30 feet. A two-section extension ladders shall not be longer than 60 feet. All ladders of this type shall consist of two sections, one to fit within the side rails of the other and arranged in such a manner that the upper section can be raised and lowered.
- Keep all ladders at least ten (10) feet away from power lines.
- Load limits for ladders may not be exceeded. Ladders shall not be loaded beyond the maximum intended load for which they were built, nor beyond the manufacturer's rated capacity.
- Weight includes the combined weight of the climber and his tools/equipment. Ladders are rated as the following:
    - I (holds 250 lbs)
    - I-A (holds 300 lbs)
    - II (holds 225 lbs)
    - III (holds 200 lbs)

Fixed Metal Ladders

- Ladders shall be constructed to withstand a minimum of 200 pounds.
- All metal rungs shall have a minimum diameter of ¾ inches and wooden rungs shall have a minimum diameter of 1 1/8 inches.
- Rungs shall not be more than 12 inches apart and shall be uniform throughout the length of the ladder.
- Rungs shall be a minimum length of 16 inches and provide protection so a foot cannot slip off the end.
- Rungs shall have a minimum of 7 inches between itself and the structure behind it.
- A fall restraint system must be provided for all fixed ladders greater than six feet in height.
    - A Cage is required when the fixed ladder is twenty or more feet in height.
    - Cages on fixed ladders shall not begin at a point less than 7 feet nor greater than 8 feet from the walking surface below the cage.
    - Cages shall provide a clear width of 15 inches in each direction of the rung's centerline.
    - Cages shall not extend less than 27 inches, but not greater than 28 inched from the centerline of the rung.
    - A climbing fall restraint system may be substituted for a ladder cage.

LOCKOUT TAGOUT

Innovations Manufacturing, Inc. (the Company)

Purpose

The purpose of this program is to establish procedures for affixing appropriate lockout/tagout equipment to energy isolating devices and to otherwise disable machines or equipment to prevent unexpected energization, start up or release of stored energy to prevent injury or incident.

Scope

This program covers the servicing and maintenance of machines and equipment where the unexpected energization or startup of the machine or equipment, or the release of stored energy could cause an undesirable event or injury. This program establishes minimum performance requirements for the control of such hazardous energy. This procedure applies to all Company Employees providing services on Company time regardless of where they are performing their duties.

Definitions

Affected Employee: An employee whose job requires them to operate or use a machine or equipment on which servicing and maintenance is being performed under lockout/tagout, or whose job requires the employee to work in an area in which such servicing or maintenance is being performed.

Authorized Employee: A person that performs lockout/tagout procedures on machines or equipment in order to perform servicing or maintenance on that machine or equipment. An affected employee becomes authorized when that employee's duties include performing servicing or maintenance covered under this program.

Energized: Connected to an energy source or containing residual or stored energy.

Energy Isolating Device: A mechanical device that physically prevents the transmission or release of energy including, but not limited to, the following:

- A manually operated electrical circuit breaker, a disconnect switch, a manually operated switch by which the conductors and no pole can be operated independently, a line valve, a block and any similar device used to block or isolate energy.
- Push buttons, selector switches, and other control circuit type devices are not isolating devices.

Lockout: The placement of a lockout device on an energy isolating device in accordance with an established procedure, ensuring that the energy isolating device and the equipment being controlled cannot be operated until the lockout device is removed.

Lockout Device: A device that utilizes a positive means, such as either a key or combination type lock to hold an energy isolating device in the safe position and prevent the energizing of a machine or equipment. Included are blank flanges and bolted slip blinds.

Potential Energy Sources: Any energy source whether it be electrical, mechanical, hydraulic, pneumatic, chemical, gravity, steam, thermal, tension, gas, or other energy sources.

Tagout: The placement of a tagout device on an energy isolating device, in accordance with an established procedure, to indicate that the energy isolating device and the equipment being controlled may not be operated until the tagout device is removed.

Tagout device: A prominent warning device such as a tag hanger that can be attached to a machine or equipment to indicate that the machine or equipment may not be operated until the tagout device is removed.

Key Responsibilities

Safety Director

- Responsible for ensuring this program is current and meets all applicable regulations.
- Ensures that the affected managers and employees are meeting the requirements of this program.

Managers and Supervisors

- Responsible to control and enforce this plan and to see that all their employees and contractors that are affected by lockout/tagout procedures have the knowledge and understanding required for safe application, usage, and removal of all energy controls and devices.
- Ensure employees are trained and comply with the requirements of this program.

Employees

- Employees who are affected by this program are required to attend training on an annual basis.
- Are required to follow the provisions of this program.

Procedure

General

Only an authorized employee or employees performing the duty of servicing or maintenance shall perform lockout duties. All employees are allowed to apply a tagout device to any tools, equipment, machines or any other physical item to warn of a danger and instruction not to use that item.

Devices

- Lockout Device: If an energy source can be locked out, a device that utilizes a lock to hold an energy isolating device in a safe position shall be used. Each site shall have the same type of lock as specified by the Company.
- Tagout Device: If an energy source cannot be locked out with a lockout device, a tagout device shall be used. Tagout devices are a warning only level of protection and shall be weather and chemical resistant, standardized in color, with clear written warning of the hazardous energy (i.e. Do Not Operate, Do Not Start, Do Not Energize, etc.) Each site shall have the same style of tags specified by the Company.

Specific Energy Control Procedures

Each manager or supervisor is responsible for developing specific step-by-step shutdown and startup procedures for a particular machine or piece of equipment in their respective area.

- A written, step-by-step isolation procedure for shutdown and startup shall be prepared for each type of machine or piece of equipment.
- This procedure shall include:
    - Equipment number if assigned.
    - Equipment location.
    - Energy Source(s) (i.e. electrical, hydraulic, gas pressure, etc.)
    - Location of isolating controls (i.e. breaker switches, valves, etc.)
    - Quantity of isolating controls
    - Quantity of locks required to isolate the equipment
    - Other hardware required to isolate the equipment (i.e. chains, valve covers, blocks, etc.)
    - List any residual energy required to be dissipated before work begins.

Specific Sequence for Application of Energy Control

1. Notification
Authorized employees must notify all other affected employees of the application and removal of lockout/tagout devices via the Crew App. Notification shall be given before the controls are applied and before they are removed from the machine or equipment.

2. Preparation for Shutdown
Before an authorized or affected employee disconnects the power source of a machine or equipment, the authorized employee shall have knowledge of the type and magnitude of the energy, the hazards of the energy to be controlled and the methods or means to control the energy. The Company will create QR Code stickers that will be applied to the equipment that will provide all pertinent isolation information. This action is planned for mid-2023.

3. Machine or Equipment Shutdown
The machine or equipment shall be turned off or shutdown using the procedures established for the machine or equipment. An orderly shutdown must be utilized to avoid any additional or increased hazard(s) to employees as a result of the equipment stoppage.

4. Machine or Equipment Isolation
All energy isolating devices that are needed to control the energy to the machine or equipment shall be physically located and operated in such a manner as to isolate the machine or equipment from the energy source.

5. Lockout/Tagout Devices and Application

- Each authorized employee shall have the proper number of locks and devices to be able to perform proper lockout/tagout procedures for machines or equipment that they may be working on.
- Lockout or tagout devices shall be affixed to each energy isolating device by authorized employees.
- Lockout and tagout devices shall include name of individual placing device. Devices shall indicate the identity of the employee applying the device.
- Lockout devices shall be affixed in a manner to hold the energy isolating devices in a safe or off position.
- Tagout devices used with energy isolating devices with the capability of being locked out shall be fastened at the same point at which the lock would have been attached. If a tag cannot be directly attached to the energy isolation device, it shall be located as close as safely possible to the device in a position that will be immediately obvious to anyone attempting to operate the device.
- Each energy source shall be locked out completely isolating the equipment.

6. Stored Energy and the Possibility of Reaccumulation
Following the application of lockout or tagout devices to energy isolating devices, all potentially hazardous stored or residual energy shall be relieved, disconnected, restrained, and otherwise rendered safe.

If there is a possibility of re-accumulation of stored energy, verification of isolation shall be continued until the servicing or maintenance operation is completed, or until the possibility of such accumulation no longer exists.

7. Verification of Isolation

Prior to starting work on machines or equipment that have been locked or tagged out, the authorized employee shall verify that isolation and deenergization of the machine or equipment have been accomplished.

Procedures for Handling Multiple Groups of Workers Involved in a Group Lockout

A crew of authorized employees may use a group lockout or tagout device. This will afford the group of employees a level of protection equal to that provided by a personal lockout or tagout device. Procedures include:

- A tailgate meeting shall be conducted to review the lockout procedures and other information as required for safe work to continue – all crafts and effected departments shall be involved.
- An authorized employee will isolate the equipment and ascertain the exposure status of individual group members.
- All workers will then place their individual locks on the device's group lockout or tagout device after they have verified the procedure.
- An authorized employee has primary responsibility for a set number of employees working under the protection of a group lockout or tagout device. The authorized employee should ascertain the exposure status of individual group members. Each Company employee or contractor shall attach a personal lockout or tagout device to the group's device while he/she is working, and then removes it when finished.
- During shift change or personnel changes there are specific procedures to ensure the continuity of lockout or tagout procedures. These include:
    - In the event shift or personnel changes occur during maintenance and/or repair activities, the designated Company employee in charge shall take the necessary steps to maintain the continuity of the lockout/tagout protection. This includes maintaining that all provisions in this procedure are adhered to and the transfer of lockout/tagout devices between authorized employees is accomplished.
    - No work shall be allowed to proceed following personnel or shift change unless these requirements are met. The job supervisor must observe that all personnel or shift change locks or tags are properly transferred during the process.
    - Before the last outgoing person is allowed to leave, they must remove their lock (or warning tag) and the incoming authorized person shall affix their lock or (warning tag) to prevent the lock out device or tag warning device from ever not being locked or warning if a lock out device is not practicable.
    - This also applies to all group lockout tagout situations.
    - This also applies to all contract personnel working on Company projects.
    - If any outgoing person leaves the site and their lock/tag is still attached, then follow Removal of Locks guidelines below.

Release from Lockout/Tagout

When servicing or maintenance is completed or when Lockout / Tagout devices must be temporarily removed, the equipment requires testing. In such case the following steps shall be taken, in this order:

- Check the machine or equipment and the immediate area surrounding the machine or equipment to ensure that all nonessential items such as tools have been removed and that the machine or equipment components are operationally intact.
- Check the work area to ensure that all personnel have been safely positioned or removed from the area.
- Remove the Lockout/Tagout device
- Energize and proceed with testing
- Deenergize and reapply control methods including Lockout / Tagout devices
- Document the procedure by use of the completed isolation log and provide to supervisor for filing

Removal of Locks
The authorized employee who applied the lock shall be the one to remove their lock. However, after all work has been completed, certain conditions may arise which prohibit this person from being present to remove the lock.

The following procedures shall be followed to allow for the removal of a lock that another person has applied:

- Every effort shall be made to contact the authorized employee who applied the lock to obtain the key(s).
- If the key(s) cannot be made available, the employee who requests removal of the lock shall contact their supervisor.
- The supervisor shall verify that every effort was made to contact the original authorized employee who applied the lock and to obtain the key(s).
- The employee removing the lock shall note on the Service Report that the lock(s) were removed with permission by supervisor.
- All reasonable efforts will be made by supervisor to notify that employee their lock has been removed, ensuring that the authorized employee has this knowledge before they return to work.
- If the equipment is client owned, the supervisor or employee requesting to remove the lock(s) shall contact the client to get the lock removed. Clients must remove their lock(s).
- NOTE: Company employees shall not remove any client locks.

Contractors
Contractors performing lockout procedures on Company property shall comply with this procedure. Contractors shall supply their own locks. Company shall initially lockout Company machines and equipment before the contractor will be allowed to apply their own lock in addition to the Company's lock.

Periodic Inspections of the Energy Control Procedure
Periodic inspections of the energy control procedure must be conducted at least annually to ensure that the procedure is being followed.

The Company Safety Director or their designee performs the inspection (it must be someone other than those actually using the lockout/tagout in progress). The inspector will produce a certified review of the inspection including date, equipment, employees, and the inspection shall be documented. They will verify that:

- Each authorized and/or affected employee has been trained as required.
- Any new equipment added has specific lockout procedures developed and documented.
- Current procedures are adequate for performing complete isolation of equipment and resulting in a zero-energy state.
- A copy of the audit maintained on file in the Company Document Management System.

EMPLOYEE TRAINING

The training must include recognition of hazardous energy source, type and magnitude of energy available, methods and means necessary for energy isolation and control.
Each authorized employee shall receive adequate training sufficient to be efficient at the task of LOTO.
All affected employees are instructed in the purpose and use of the energy control procedure.
Any other employees whose work operations are or may be in an area where energy control procedures may be utilized are instructed in the purpose and use of the energy control procedure.
Additional training includes:

- The purpose and use of energy control procedures.

- When tagout systems are used, employees shall also be trained in the following limitations of tags:
    - Tags are essentially warning devices affixed to energy isolating devices, and do not provide the physical restraint on those devices that is provided by a lock.
    - When a tag is attached to an energy isolating means, it is not to be removed without authorization of the authorized person responsible for it, and it is never to be bypassed, ignored, or otherwise defeated in any way.
    - Tags must be legible and understandable by all authorized employees, affected employees, and all other employees whose work operations are or may be in the area, in order to be effective.
    - Tags and their means of attachment must be made of materials which will withstand the environmental conditions encountered in the workplace.
    - Tags must be securely attached to energy isolating devices so that they cannot be inadvertently or accidentally detached during use.
    - Tags may evoke a false sense of security, and their meaning needs to be understood as part of the overall energy control program.

Retraining

- Retraining shall be conducted whenever a periodic inspection reveals, or whenever the Company has reason to believe that there are deviations from or inadequacies in the employee's knowledge or use of the energy control procedures.

- Retraining is required when there is a change in job assignments, in machines, a change in the energy control procedures, or a new hazard is introduced.

- The retraining shall reestablish employee proficiency and introduce new or revised control methods and procedures, as necessary.

Training Documentation

The Company shall certify that employee training has been accomplished and is being kept up to date. All training and/or retraining must be documented, signed and certified.

SPECIFIC EQUIPMENT LOCKOUT PROCEDURES

Department_____

Equipment No._____

Energy Source_____

Procedure for Shutdown and Isolation:

(List number of steps required to isolate machine or equipment - write N/A on lines not used or add additional steps if necessary)

STEP NO.

1._____
2._____
3._____
4._____
5._____
6._____
7._____
8._____
9._____
10._____

Additional Information:_____
_____
_____
_____

Prepared By:_____ Date:_____

(This procedure to be communicated to all authorized and affected employees and kept on file at location of machine or equipment)

SAMPLE TAG


DANGER
DO NOT
OPERATE
This Lock/Tag may only be removed by:
Name: _____
Date: _____
White letters in a Red oval
Field of Red and White diagonal stripes

ISOLATION LOG

The LOTO Isolation Log is located at the Company safety solution center under the Forms tab.

ANNUAL AUDIT OF THE CONTROL OF HAZARDOUS ENERGY PROGRAM

I certify that an audit of the COMPANY "Control of Hazardous Energy" Program was conducted and that each employee has been trained in the recognition and procedures to lockout equipment they may be required to work on or may be affected by.

I further acknowledge that the current procedure is adequate to safely lockout equipment in this department for servicing and maintenance.

Department: _____

Manager (or representative): _____

Date: _____

Original to file: _____

MACHINE GUARDING

Innovations Manufacturing, Inc. (the Company)

Purpose

The purpose of this procedure is to minimize the risks associated with the operation of machinery and equipment by providing requirements for the protection of machine operators, shop users, and others who work or traverse an area with machining hazards.

Scope

This procedure applies to all Company employees. This procedure applies to all contractors working on Company policy who do not have a machine guarding procedure.

Responsibilities

Safety Director

- Ensure this procedure has been implemented in all operations.
- Ensure machine specific training is provided and documented for shop affected machine operators as required.
- Maintain this written procedure to meet regulatory requirements and periodically review the program to assure it is current.
- Provide technical assistance to ensure this program is successfully implemented.
- Conduct routine inspections of machine shops to verify that the requirements of this procedure are being met and provide oversight to ensure any findings are addressed.

Production Manager/s

- Responsible for equipment maintenance, training, controlling access to hazardous machinery, implementing safety guidelines, and approving authorized operators.
- Be familiar with the safe operation of all shop machines, equipment, and tools.
- Ensure this procedure is enforced within their areas of responsibility.
- Ensure that all machine safeguards are in place and operational.
- Ensure employees follow machine safety operating procedures, including, but not limited to, not bypassing, removing, or defeating machine safeguards.
- Ensure that equipment in need of repair or service is taken out of service and that repairs and service are made only by authorized personnel.

Machine Operators

- Follow the requirements of this program.
- Operate machines and equipment with all safeguards in place.
- Conduct visual pre-operation inspections of machines and equipment to ensure guards are in proper operating condition.
- Not bypass, remove, or defeat safeguards.
- Maintain proper housekeeping of work area.
- Report all missing or damaged safeguards to the supervisor or designee immediately and not operate any machine or equipment with a missing or defective safeguard.
- Participate in required training.
- Not operate a machine until properly trained.

Definitions

Emergency Stop: A hardwired stop that is generally accessible to employees in their work area and is designed to cut off power to the machine or process when activated.

Ground Fault Circuit Interrupter (GFCI): A fast-acting circuit breaker designed to shut off electric power in the event of a ground- fault within as little as 1/40 of a second. It works by comparing the amount of current going to and returning from equipment along the circuit conductors.

Hazards: Mechanical, electrical and/or physical conditions that could cause harm to employees or other personnel in the vicinity of machinery or equipment. Mechanical Hazards include rotational motion, nip points, and cutting, shearing, punching and forming mechanisms.

Hot Work Activity: Any use of open flames such as welding, torch use or soldering. In addition this includes any activity which creates sparks such as grinding.

Interlock: An arrangement in which the operation of one part or mechanism automatically brings about or prevents the operation of another. Interlocks shall be durable, not easily bypassed, and shall stop all hazardous motion before employee interaction.

Machine Guards: Physical structures or electrical systems used to prevent access during machinery or equipment operation. This includes barrier guards, two-hand trip mechanisms and electronic safety devices.

Nip Point: An in-running machine or equipment part, in which two in-running parts rotate towards each other, or where one part rotates toward a stationary object.

Point of Operation: The point at which cutting, shaping or forming is accomplished upon the stock, including the hazards associated with inserting and manipulating the stock.

Safeguard: Term for a number of measures that provide workers with effective protection from harmful contact with moving parts or other harmful conditions. Safeguards include barrier guards, safety devices, shields, awareness barriers, warning signs, or other appropriate means, used singly or in combination.

Safeguarding Device: Devices used as alternatives to barrier guards, such as interlocked movable barrier guards, two-hand controls, and electronic presence-sensing devices such as light curtains and pressure-sensitive mats. These solutions are more complex and technical but are designed to provide protection during normal operation.

General Requirements

- Only trained and competent personnel are permitted to utilize machine shop equipment and tools.
- Machine shops shall be secured when the shop supervisor or designee is not in the shop.
- It is recommended that there are a minimum of 2 (two) personnel present in machine shops when equipment is in use.
- Appropriate personal protective equipment (PPE) shall be worn while working in machine shops or when using hand/portable power tools that may be hazardous to the operator.
- Damaged or broken equipment/tools shall be removed from service and tagged “DO NOT USE” or similar. Repairs shall be made prior placing equipment back into service.

- When guarding or other engineering controls are not feasible or are not fully capable of protecting the operator, conduct a written Job Safety Assessment (JSA) to identify all the hazards and devise remediations to protect against the hazards before proceeding.
- Machines designed for a fixed location shall be securely anchored to prevent walking or moving.
- Spring loaded chuck keys shall be used with all drill presses and lathes.
- Safeguards removed during repair or preventative maintenance shall be replaced before equipment is returned to service.
- Equipment with removed safeguards shall be locked and tagged.
- All machines equipped with emergency stop (e-stop) buttons shall have the e-stops located in close proximity (within the operator's reach) to the machine operator and be red in color with a yellow background.
- The use of compressed air to clean equipment shall utilize air nozzles that upon dead-ending the exit orifice, the static pressure is reduced to less than 30 psi. Use of compressed air for cleaning is only permitted when there are chip guards and when PPE is used by the operator and other personnel in the area. Compressed air shall never be used for cleaning personnel or their clothing.

Machine Guarding Requirements

- One or more methods of guarding shall be provided to protect operators and other personnel in the area from machine hazards.
    - Hazard examples include those created by point of operation, nip points, rotating parts, flying chips and sparks.
    - Examples of guarding methods include fixed guards, barrier guards, two-hand tripping devices, electronic safety devices, etc.

Routine Machine Guarding Checks

- Machinery and equipment shall be visually checked before each operation to verify that the guards are in place and that sensing devices and interlocks, if available, are functioning properly and have not been bypassed, removed or otherwise not functional.
- Missing guards or defective safeguards shall be corrected immediately, or the machines shall be taken out of service until corrections are completed.

Machine guards shall meet the following requirements:

- Prevent operator contact with the hazard by enclosing it or otherwise preventing access to the hazard by reaching over, under, around or through a guard.
- Firmly attached to equipment or secured elsewhere by use of fasteners that requires a tool to remove. If the guards cannot be affixed to the machine, a job safety analysis should be performed to ensure all hazards are identified and controlled.
- Guards must be constructed of durable material that will withstand normal conditions of use.
- Guards must protect objects from falling into the machine's moving parts.
- Guards must not introduce any new hazards or create unintended machine operations.
- Guards shall allow for safe lubrication and maintenance of equipment.

Point of operation guarding

- The point of operation of the machine shall be guarded. The guard shall be designed and constructed to prevent the operator from having any body part in the danger zone during the operating cycle.

- Special hand tools for placing and removing material should be used. If used, the tools shall permit easy handling of material without the operator placing a hand in the danger zone. Such tools shall only be used to supplement a guard.
- All foot operated switches shall be guarded to prevent accidental activation by personnel or falling objects.

Hand and Power Tool Guarding Requirements

- Exposed moving parts of power tools shall be safeguarded. This includes belts, gears, shafts, pulleys, sprockets, spindles, drums, flywheels, chains, or other moving parts.
- Safeguards shall never be removed when a tool is being used.
- Bench, pedestal, and portable grinders:
    - Bench and pedestal grinders shall have a work rest adjusted no greater than ⅛ inch away from the grinding wheel. Tongue guards shall be no greater than ¼ inch from the grinding wheel.
    - Wheels mounted on abrasive wheel tools shall be inspected prior to mounting. This includes conducting a ring test on bench and pedestal grinder wheels. Instructions can be found at the following link: ring test.
    - When mounting a wheel, always ensure that the grinder speed does not exceed the maximum operating speed marked on the wheel.
- Electric power tools are to be effectively grounded or be double insulated.
- Hand and power tools shall be in good operating condition free from defects or broken parts.
- Power tools shall be unplugged before performing service such as blade replacement, grinding wheel replacement, etc.

NEW EMPLOYEES

Innovations Manufacturing, Inc. (the Company)

Purpose

The purpose of the New Employee program is to prevent work related injuries and illnesses to new hires and temporary workers who do not yet have adequate knowledge of the hazards associated with their new role. The Company will assign supervisors and experienced employees to observe and mentor the daily activities of the New employee until that employee demonstrates a competency level satisfactory to the supervisor.

Scope

- Applies to all employees new to the Company regardless of experience.

Definitions

New Employee: An employee new to their assigned task and without any prior experience to the Company's processes, procedures, tools, and equipment.
Mentor: An experienced employee, who has been assigned to help and work with a New Employee by his/her supervisor.

Key Responsibilities

- Managers and Supervisors shall ensure that this program is implemented and followed.
- Employees shall follow the requirements of this program.

Monitoring of New Employees

- The Company shall train, monitor, and mentor new employees for safety awareness and mindset until the supervisor deems them competent to exit the program.
- If, at a certain time the New Employee demonstrates through their actions and behaviors that they can work safely and follow the Company safety requirements, adhered to HSE policies and has no recordable incident attributable to him/her, they will be allowed to work without constant observation and mentorship.
- An employee that has exited the New Employee observation and mentorship program may be selected and a New Employee observer/mentor.
- Regardless of time with the Company, every employee is required to stop an unsafe act or condition observed. These instances should be documented through the Good Catch reporting program.

NOISE HEARING CONSERVATION

Innovations Manufacturing, Inc. (the Company)

Purpose

The purpose of this program is to provide a process to minimize employee-hearing loss caused by excessive occupational exposure to noise.

Scope

This program is applicable to all employees who may be exposed to noise in excess of 85 decibels (decibels).

Definitions

Audiometric testing: detection by the person being tested of a series of pure tones. For each tone, the person indicates the lowest level of intensity that they are able to perceive.

Decibels: the sound energy measured by a sound level meter using the "A" scale. The "A" scale is electronically weighted to simulate the response of the human ear to high and low frequency noise.

Slow Response: the setting on the sound level meter that averages out impulses of brief duration that would cause wide fluctuation in the sound level meter reading.

Standard Threshold Shift: a change in hearing threshold relative to the baseline audiogram of an average of 10 dB (corrected for age) at 2000, 3000 and 4000 Hz in either ear.

Key Responsibilities

Managers and Supervisors

- Ensure requirements of this program are established and maintained.
- Ensure employees are trained and comply with the requirements of this program.

Employees

- Wear hearing protection when required, attend the training, and cooperate with testing and sampling.

Procedure

Occupational hearing loss is a cumulative result of repeated or continued absorption of sound energy by the ear. Employee protection is based on reduction of the noise level at the ear or limiting the employee's exposure time. The Company offers hearing protection to all employees exposed to potential high noise levels in working areas and to those employees requesting hearing protection.

Hearing Conservation Program

The Company has implemented a hearing conservation program for employees exposed to sound levels 85 dBA or greater. A continuing effective hearing conservation program shall be administered when employees are exposed to sound levels greater than 85 dBA on an 8-hour time-weighted average basis.

Employees will wear hearing protection in signed areas while on an owner client facility.

Monitoring Procedures to be Used When Exposure Limits Exceed the Established Level

Information collected by the Company has confirmed that noise exposure levels are above 85 dBA on a time weighted 8-hour period for most all areas of the factor operations. The resulting policy is that all workers will are

required to wear hearing protection that meets the requirements of CFR 1910.132. The company provides full time monitoring stations as a means to communicate to openly share the decibel levels of ongoing shop activities.

Surveys

Because the noise levels of the Company manufacturing facilities are constantly monitored, and because all employees are required to wear hearing protection at all times, there will be no independent noise surveys conducted. All manufacturing process areas are considered high noise areas.

No areas of the Company have been identified as excessive noise areas where operations will produce a single impulse noise level greater than 140 dBA. Because of this finding, there is no area in the manufacturing process where double hearing protection will be required. The adequacy of hearing PPE will be reevaluated whenever noise exposures increase to the point that the PPE provided may no longer provide adequate protection. The Company will then provide more effective PPE where necessary.

If any area of Company operations is identified as an excessively high noise area producing a single sound impulse greater than 140 dBA, then the company will have an independent survey conducted to determine the type of hearing protection that will be required to reduce the noise reception of workers to below 85 dBA.

All sound measuring equipment shall be calibrated before and after each survey.

Records of sound measuring equipment calibration and noise level surveys shall be kept for 20 years.

Noise Surveys must be repeated whenever changes in the workplace may expose additional personnel to high noise or hearing protection being used by employees may not be adequate to reduce the noise exposure to a level below 85 dBA over an 8-hour time weighted average.

Sound Level Monitoring

- All owned facilities that are suspected of having noise levels exceeding 85 decibels must be monitored.

Exposure Surveys

- A representative sampling of employees shall be conducted to determine the exposure to noise over a an 8-hour time weighted period.

Signage

Clearly worded signs shall be posted at entrances to, or on the periphery of, areas where employees may be exposed to noise levels in excess of 85 decibels. These signs shall describe the hazards involved and the required protective actions.

Audiometric Testing

The Company has established that the work area produces sound levels equal to or in excess of 85 dBA over an 8-hour period. This noise level has been communicated to all employees in the new-hirer and annual safety training and constant hearing protection is required by all workers assigned to the production area and any worker or visitor entering the production work area.

<u>Baseline Testing Guidelines</u>

- Because constant hearing protection is required, it is determined that no Company employee will ever be exposed to noise above the action, the company will not conduct a baseline audiogram of employees. As per CFR 1910.95(g)(5)(i), if an employee is ever exposed to noise levels above the action level, they will receive a valid baseline audiogram within six months of the employee's first exposure at or above the action

level. The Company shall establish a baseline audiogram for each exposed employee within 6 months of their first exposure.

- Within 6 months of an employee's first exposure at or above the action level, a valid baseline audiogram shall be established against which future audiograms can be compared.
- When a mobile van is used the baseline shall be established within one year.
- A qualified third party shall perform all audiometric testing, evaluation, reporting and retesting.
- Testing to establish a baseline audiogram shall be preceded by at least 14 hours without exposure to workplace noise. Hearing protection may be used to meet the requirement. Employees shall also be notified to avoid high levels of noise.

Annual Testing Guidelines

In the event an employee does meet the entry threshold to receive a baseline audiogram, the Company shall provide an annual audiogram and if a standard threshold shift has occurred the employee will be notified in writing within 21 days of determination. At least annually after obtaining the baseline audiogram, the Company shall obtain a new audiogram for each employee exposed at or above an 8-hour time-weighted average of 85 decibels. Each employee's annual audiogram shall be compared to that employee's baseline audiogram to determine if the audiogram is valid and if a standard threshold shift has occurred. If a comparison of the annual audiogram to the baseline audiogram indicates a standard threshold shift, the employee shall be informed of this fact in writing, within 21 days of the determination.

Required Recordkeeping

The Company shall maintain accurate records of all employee exposure measurements and all records are maintained as required by CFR 1910.95 (Occupational Noise Exposure).

Employee audiograms are considered medical/exposure records. These records must be kept for the length of employment plus 30 years.

Hearing Protection Devices

- Hearing protectors are made available to all employees at no cost to the employee.
- All employees are required to wear hearing protection at all times while in the work production area.
- The Company shall ensure that hearing protectors are worn at all times in the production work area.
    - If an employee is observed not wearing hearing protection in the production work area, the observer must notify the employee to don their hearing protection.
        - Once the employee has been encountered, the observer is encouraged to fill out a Good Catch form to document the occurrence.
        - The Good Catch should note whether the immediate operations were producing a noise level of 85 dBA or greater by looking at the nearest survey monitor, or if the area was below the action level at the time of the observation.
- Employees shall be properly trained in the use, care and fitting of protectors. This is done at no cost to employees.
- Employees shall be given the opportunity to select their hearing protectors from a variety of suitable hearing protectors provided by COMPANY.

TRAINING

Employees must be provided with training on at least an annual basis and shall be updated to be consistent with changes in the PPE and work processes.

A training program shall be provided for all employees who are exposed to action level noise.

The Company provides public access to this Procedure at www.im-safety.com under the Procedures tab.

All training is documented and stored in the Company DMS.

All staff shall have a copy of this program, noise exposure procedures and it shall be posted at the worksite and a copy made available to all employees and their representatives if applicable.

PERSONAL PROTECTIVE EQUIPMENT

Innovations Manufacturing, Inc. (the Company)

Purpose

The purpose of the Personal Protective Equipment Program is to set forth the procedures for the use, care, and maintenance of personal protective equipment required to be used by employees and contractors of the Company for the prevention of injuries.

Scope

This program is applicable to all employees and contractors regardless of where they are performing duties for the Company.

Key Responsibilities

Safety Director

- Ensures a certified PPE hazard assessment is completed. The hazard assessment must indicate a determination if hazards are present or are likely to be present, which necessitate the use of PPE. The Safety Director is the certifier and must make sure his/her name, signature, and date(s) are present on the assessment documents. Sources of hazards include but are not limited to hazards from impact/motion, high/low temperatures, chemicals, materials, falling objects, sharp objects, rolling or pinching objects, electrical hazards, noise, flying particles, air contaminants, and workplace layout to name a few. The assessment certifies in writing the tasks evaluated, hazards found, and PPE required to protect employees and consultants against hazards and ensures exposed employees and contractors are made aware of hazards and required PPE before they are assigned to the hazardous task.

Safety Manager

- Assists in the selection of appropriate PPE. If a task exposes an employee or contractor to hazards which cannot be eliminated through engineering or administrative controls, the Safety Manager assists the worker to identify and select PPE suitable for the specific task performed, conditions present, and frequency and duration of exposure.
- Assists managers in assuring all PPE meets regulatory requirements.

Managers and Supervisors

- Supervisors and managers shall regularly monitor employees and consultants for correct use and care of PPE and obtain follow-up training if required to ensure each employee and/or consultant has adequate skill, knowledge, and ability to use PPE.
- Supervisors and managers shall enforce PPE safety rules following the guidance of this program.

Employees

- Complying with the correct use and care of PPE.
- Reporting changes in exposure to hazardous conditions that might require a follow-up assessment of the task for PPE.
- Reporting and replacing defective or damaged PPE, which shall not be used.
- Employees need to give feedback to management about the fit, comfort, and suitability of the PPE being selected.
- Wearing the required PPE is a condition of employment.

Procedure

General
Protective equipment, including personal protective equipment for eyes, face, head, and extremities, protective clothing, respiratory devices, and protective shields and barriers, must be provided, used, and maintained in a sanitary and reliable condition.

The Company is responsible for employee-owned equipment and consultants are responsible for consultant owned equipment. Where employees provide their own protective equipment, the Company must assure its adequacy, including proper maintenance and sanitation of such equipment.

The Company does not provide safety footwear, hardhats, or any other PPE to contractors or consultants.
The Company does provide temporary PPE for all visitors who must enter the work area where PPE is required.

All PPE issued shall be at no cost to employees only as required by federal regulation.

Eye Protection
Employees and consultants must use appropriate eye or face protection when exposed to eye or face hazards from flying particles, molten metal, liquid chemicals, acids or caustic liquids or chemical gases or vapors. Eye and Face PPE must comply with ANSI Standard Z87.1-2003 (Z87+), *Occupational and Educational Personal Eye and Face Protective Devices.*

Safety Glasses
Safety glasses, with side shields, that meet ANSI Z-87.1-2003 standards with "high Impact lenses" are required to be worn by all employees, contractors, and visitors while on Company owned or controlled property, at all times, as described below:

- At factories, in shops and warehouses, except in approved, designated safety zones.
- In all yard work zones or by everyone when in the vicinity of loading or unloading equipment, performing mechanic or maintenance work, operating equipment such as forklifts, welding, or any type of work which has the potential to cause injury.
- In any office, restroom, meeting room, or any other building or space while performing any type of work where a potential eye injury may be present.
- Visitors will be provided with visitor safety glasses. In the absence of approved prescription safety glasses, "Over the glass" type safety glasses or goggles, must be worn over the non-safety glasses until approved prescription safety glasses are obtained.
- Workers assisting welders must wear absorbent safety glasses that protect the wearer from ultra-violet (UV) and/or infrared rays (IR).
- Dark shaded lens (sunglasses) darker than a # 1 shade is prohibited to be worn indoors unless welding or assisting a welder.
- A doctor must support "exceptions for medical reasons" in writing to exempt safety eyewear requirements.
- Safety glasses are not required:
    - Inside offices where no eye injury potential is present.
    - Inside vehicles.
    - Parking lots when traveling from vehicles to and from trailers or buildings that do not pass-through active work areas.

Goggles

- Chemical splash proof goggles shall be worn when handling or mixing liquid chemicals, solvents, paints, etc., and/or as recommended on the Safety Data Sheet of the material being handled.
- Dust proof goggles shall be worn when blowing equipment down with air or while performing other jobs where safety glasses are not adequate to prevent airborne particles from entering the openings around the lenses and side shields.

Face Shields

- Full face shields shall be worn over safety glasses when operating hand held or stationery grinders with abrasive or wire wheels, while chipping paint or concrete or, performing jobs where there is the potential for flying objects striking the face and safety glasses or goggles would not provide adequate protection.

Head Protection

Employees must wear hardhats when working in areas where there is a potential for injury to the head from impact events. Helmets must comply with ANSI Standard Z89.1-1997 Class E, *American National Standard for Industrial Head Protection* for Type II head protection or be equally effective.

- Employees must wear hardhats when working in areas where there is a potential for injury to the head from falling objects.
- Hardhats will not be altered in any way.
- Do not paint hardhats.
- Do not drill, cut, bend, or apply heat.
- Hardhats will be inspected by the wearer regularly for cracks, chips, scratches, signs of heat exposure (sun cracks), etc.
- Defective hardhats will be replaced immediately.
- Hardhats must be made available to visitors.
- Employees will be trained in the use, care, and maintenance of head protection equipment.

Hearing Protection

Hearing protection is required to be worn by all employees, contractors, and visitors while in all shop and production areas of the company.

Warning signs will be posted in all shop and production areas of the company.

When signs are not posted, employees and contractors shall wear hearing protection when noise caused by machinery, tools, etc., prevents normal conversations from being heard clearly.

Rule of thumb: If you must yell to be heard, hearing protection is required

Types of Hearing Protection

- Molded Inserts (ear plugs)
- Canal Caps (head band type)
- Headband or hard hat mounted earmuffs and/or earplugs shall be provided to employees in sizes and configurations that will be comfortable to the employee.

Care and Maintenance

- Inspect hearing protection prior to each use.
- Hearing protection must be kept clean to prevent ear infections.
- If earplugs are of disposable type, they must be discarded when they become dirty, greasy, or cracked.

- Earmuffs that have deteriorated foam inserts, cracked seals, or are defective must be replaced.

Fit

- Due to individual differences, not everyone can wear the same type of hearing protection. A variety of styles may have to be tried before one is found to be comfortable and provide adequate protection.
- Employees shall be instructed how to obtain the proper fit.

Hand Protection

Gloves

- Gloves are required to be worn when performing work which may expose the hands to extreme temperatures, cuts and abrasions, or exposure to chemicals.
- Welding gloves made of leather or other heat resistant materials shall be worn when performing arc welding or oxy/gas cutting.
- Impervious (chemical resistant) gloves shall be worn when handling chemicals that specify gloves as personal protection equipment when handling.
- Refer to the specific chemical's Safety Data Sheet for the correct glove type.
- Persons assigned to working with chemicals, i.e., solvent vats, shall be issued their own individual gloves for hygiene purposes.
- Leather gloves should be worn when working with sharp materials or when handling rigging equipment.
- Cloth gloves should be worn when handling objects or materials, which could cause blisters, splinters, cuts, etc.
- Heat resistant gloves shall be worn when handling hot materials or objects that have been heated beyond ambient temperatures.
- Insulated gloves shall be worn to prevent frostbite in extreme cold climates.
- Glove Inspections
    - Gloves shall be inspected before each use for holes, tears, and worn areas.
    - Chemical gloves shall be periodically air tested for pinholes by twisting the cuff tightly, apply low air pressure to expand the glove, and then submersing in water to check for bubbles.
    - Defective gloves shall be discarded immediately.
    - **Exception:** machinists are exempted from wearing gloves while working with rotating machinery.

Foot Protection

Safety footwear shall be worn by all employees with regularly assigned duties at field locations, in shops and warehouses.

- Office workers and visitors who enter these areas on an infrequent basis will not be required to wear foot protection provided they stay clear of the work being performed.
    - If required to be in proximity of the work, the work will be stopped while visiting the area or safety footwear will be worn.
- All safety footwear must meet ANSI Z41-1999 standards.

Fall Protection

Personal fall protection is required when performing certain elevated jobs more than four feet. Consult the Company Fall Protection Program.

Electrical Protection

Consult the Company Electrical Safety Procedure.

Proper Fitting or Sizing of PPE
Consideration must be given to comfort and fit. PPE that fits poorly will not afford the necessary protection. Continued wearing of the PPE is more likely if it fits the wearer comfortably. PPE is generally available in a variety of sizes. Care should be taken to ensure that the right size is selected.

Defective PPE
Procedures must be in place to ensure defective or damaged PPE is not used. PPE that is in disrepair must be discarded or removed from service until repaired.

Training on the Use of PPE

Training should be given to employees about when to wear PPE, what PPE should be worn, how to put on and take off and adjust PPE. The limitations of the PPE and its use, care, and maintenance should also be included in the training.

Retraining on the Use of PPE
Each affected employee and/or consultant must demonstrate an understanding of training received and the ability to use PPE properly. When there is a reason to believe that any employee or consultant who has been trained does not have the required understanding and skill or there are changes in the workplace, the employee or consultant must be retrained.

PPE Training is Documented
Training shall be documented, and records maintained. The training certification shall include:

- Name of employee(s) or consultant(s) trained
- The name of the trainer
- The dates of training, and
- The training contents.

PPE Hazard Assessment continued on the next page

PPE Assessment

				PPE HAZARD ASSESSMENT CHECKLIST	
HAZARD TO EYES/FACE	YES	NO	EC	DESCRIBE HAZARDS NOTED	PPE REQUIRED/CONTROL(S)
Flying particles/dust	X			Flying debris from various operations	Safety glasses w/side shields
Chemicals		X		N/A	
Light/radiation	X			Welding arc	Welding hoods
HAZARD TO EARS (NOISE)	YES	NO	EC	DESCRIBE HAZARDS NOTED	PPE REQUIRED/CONTROL(S)
Impact noise >140 dB		X		N/A	
Continuous noise >85 dB	X			Noise over 85 dBA over 8-hour TW average	Hearing protection/all times/shop
HAZARD TO EARS (NOISE)	YES	NO	EC	DESCRIBE HAZARDS NOTED	PPE REQUIRED/CONTROL(S)
Fumes	X		X	Welding fumes	Ventilation/fans combo in place
Mists		X			
Dusts	X		X	Wood, Vinyl, Styrofoam cutting dust	Vacuum collection system
Vapors		X			
HAZARD TO HEAD	YES	NO	EC	DESCRIBE HAZARDS NOTED	PPE REQUIRED/CONTROL(S)
Falling objects	X		X	Extrusion bundles on shelves	Bundles are strapped to prevent fall
Electrical shock		X			
Low pipe/beams/etc.		X			
HAZARD TO HANDS	YES	NO	EC	DESCRIBE HAZARDS NOTED	PPE REQUIRED/CONTROL(S)
Cuts/scrapes/bruises	X			Sharp edges and pinch points	Gloves where hazard is present
Hot/cold/temperatures	X			Welding heat and slag	Welding gloves
Chemicals		X			
Electrical shock		X			
HAZARD TO FEET	YES	NO	EC	DESCRIBE HAZARDS NOTED	PPE REQUIRED/CONTROL(S)
Falling dropped objects	X			Falling/dropped objects-Welding, Fab, Shipping	Safety shoes
Electrical shock		X			
Burns		X			
Puncture		X			
Chemicals		X			
HAZARD TO BODY	YES	NO	EC	DESCRIBE HAZARDS NOTED	PPE REQUIRED/CONTROL(S)
Chemicals		X			
Hot/cold temperatures		X			
Dusts		X			
Sunlight/UV exposures		X			
EC: Engineered Controls in place					

RESPIRATORY PROTECTION

Innovations Manufacturing, Inc. (the Company)

Purpose

It is the intention of the Company to provide and maintain a respiratory protection program that meets or exceeds all federal standards. The Company will first seek to engineer potential harmful vapors and oxygen deficient atmosphere exposure hazards out of any Company owned or operated work environment. If engineering control measures are not feasible, or during emergency situations with high exposure, respirators shall be provided to employees which are applicable and suitable for the purpose intended.

Scope

This program applies to all employees.

Respiratory Program Administrator

The Safety Director is the Respiratory Protection program designated administrator in order to ensure that that the requirements of the same are complied with by all employees.

The Administrator is knowledgeable of the complexity of the program, able to conduct evaluations, and has been adequately trained.

The responsibilities of the Program Administrator will include, but are not limited to:

- Conducting an annual written evaluation of the program. The program evaluation should be completed no later than December 31, of each year.
- Ensuring an adequate supply of respirators, cartridges, and repair/replacement parts are available to employees. The Program Administrator may delegate this duty but will retain overall responsibility.
- Respiratory protective equipment must be selected based on respiratory hazards. Hazards must be identified, and NIOSH certified respirators must be selected and provided based on those hazards and factors affecting performance.
- Ensuring that all respirator users have been trained in the use, selection and limitations of the type of respirators they will be using prior to the first time the respirator must be used. While the duty of conducting the training may be delegated, the Program Administrator retains final responsibility for seeing that all employees are appropriately trained.
- Ensuring that all respirator users have been medically evaluated and found fit to use the type of respirators that will be required in their job. The medical evaluation must be completed before an employee can use a respirator.
- Ensuring that all respirator users are fit-tested at least annually and more often if other federal requirements apply.
- Ensuring that respirators are individually issued, are cleaned and sanitized on a regular basis, and respirators are stored in a clean and accessible location. This duty may also be delegated but the program Administrator retains final responsibility for seeing it through.
- Ensuring that respirators are selected based on the hazard that will be encountered.
- Ensuring that employee exposure is monitored to assure correct respirator type is used. Exposure monitoring may be delegated to others, however, the Program Administrator has final responsibility of monitoring completion and to request assistance when necessary.
- Ensuring an employee must leave the area if a vapor/gas breakthrough, changes in breathing resistance, and/or leakage of the facepiece occur. Employees must leave the respirator use area if they detect vapor or gas breakthrough, changes in breathing resistance, or leakage of the facepiece.

- Ensuring that the elements of the Respiratory Protection Program for the selection, use, cleaning/maintenance, storage and fit-testing of respirators are followed.
- Ensuring that respirator parts are not exchanged between brands of respirators.
- Ensuring medical evaluations, respirators, and required training are provided at no cost to the employee.

Medical Evaluation Requirements

General

General requirement responsibilities apply to Company employees and contractor/consultant employees separately. Because Contractors are not employees of the Company, they are responsible for and must manage their own respiratory protection program.

A medical evaluation must be completed before a worker can use a respirator. The medical evaluation must be confidential, during normal working hours, convenient, understandable and the employee should be allowed to discuss the results with the PLHCP.

The Company may discontinue an employee's medical evaluations when the employee is no longer required to use a respirator.

Medical Evaluation Procedures

Under guideline parameters required by federal regulation, the Company shall identify a physician or other licensed health care professional (PLHCP) to perform medical evaluations using a medical questionnaire or an initial medical examination that obtains the same information as the medical questionnaire. The medical evaluation shall obtain the information requested by the Medical Questionnaire (or equivalent).

The medical evaluation prior to fit-testing will be confidential, conducted during normal working hours, be at a convenient time and location, be understandable and the employee will be given a chance to discuss the results with the PLHCP.

Supplemental Information for the PLHCP

The following information must be provided to the PLHCP before the PLHCP makes a recommendation concerning an employee's ability to use a respirator:

- The type and weight of the respirator to be used by the employee
- The duration and frequency of respirator use (including use for rescue and escape)
- The expected physical work effort
- Additional protective clothing and equipment to be worn
- Temperature and humidity extremes that may be encountered

The Company shall provide the PLHCP with a copy of the Company's Respiratory Protection Program.

Note: When the Company replaces a PLHCP, the Company must ensure that the new PLHCP obtains this information either by providing the documents directly to the PLHCP or having the documents transferred from the former PLHCP to the new PLHCP. However, OSHA does not expect Companies to have employees medically re-evaluated solely because a new PLHCP has been selected.

Medical Determination

In determining the employee's ability to use a respirator, the Company shall obtain a written recommendation regarding the employee's ability to use the respirator from the PLHCP. The recommendation shall provide only the following information:

- Any limitations on respirator use related to the medical condition of the employee or relating to the workplace conditions in which the respirator will be used, including whether or not the employee is medically able to use the respirator.
- The need, if any, for follow-up medical evaluations, and
- A statement that the PLHCP has provided the employee with a copy of the PLHCP's written recommendation.

All recommendations are to be sent to the Company's Safety Director.

Additional Medical Evaluations

At a minimum, the Company shall provide additional medical evaluations that comply with the requirements of this program if:

- An employee reports medical signs or symptoms that are related to ability to use a respirator.
- A PLHCP supervisor or the respirator Program Administrator informs the Company that an employee needs to be re-evaluated.
- Information from the respiratory protection program, including observations made during fit testing and program evaluation indicates a need for employee re-evaluation, or
- A change occurs in workplace conditions (e.g., physical work effort, protective clothing, and temperature) that may result in a substantial increase in the physiological burden placed on an employee.

Work Site Procedures

The Company has created engineered protections against all identified potential respiratory exposures.

The Company does not provide respiratory protection to employees unless a contaminant that exceeds the OSHA PEL is introduced to the workplace. Employees are allowed to use dust filtering face masks on a voluntary basis, in such case the employee is provided with the Volunteer Use information in the later section of this procedure.

In the event a contaminant above the OSHA PEL is introduced to the workplace and engineered protections are not possible, each work site where respirators are required to protect the health of the worker shall have work site procedures that follow the guidelines of this program. The following areas shall be included:

- Identification of specific hazard requiring respiratory protection.
- The selection of the appropriate respiratory protection equipment based on the specific hazard and concentration levels, characteristics, etc.
- Specific brand and models of respiratory equipment to be used shall be identified in the procedures.
- Verification that each user of respiratory protection is qualified (medical approval, current fit test, annual training, and demonstrates competency.

Respirator Selection Criteria

The Company has created engineered protections against all identified potential respiratory exposures.

The Company does not provide respiratory protection to employees unless a contaminant that exceeds the OSHA PEL is introduced to the workplace. Employees are allowed to use dust filtering face masks on a voluntary basis, in such case the employee is provided with the Volunteer Use information in the later section of this procedure.

In the event a contaminant above the OSHA PEL is introduced to the workplace and engineered protections are not possible, the Company will provide respiratory equipment to employees at no cost to the employee.

The selection of the respiratory equipment is based on the hazards the employee is exposed to. The Company shall:

- Perform hazard identification
- Select and provide respirators based on the hazards and factors affecting performance
- Establish brands and models to be used, and
- Estimate exposures and contaminant information

Hazard Identification
The Company's identification of respiratory hazards will be contained in the site-specific respiratory protection plan. However, common respiratory hazards that may be encountered include:

- Dust
- Chips
- Welding Fumes

Characteristics of Hazardous Operation or Process

- Hot work operations: welding, chemical reactions, soldering, melting, melding, and burning
- Shaping operations: cutting, grinding, filing, milling, melding, sawing, and drilling

Particulate contaminants

- Dusts are mechanically generated solid particulates (0.5 to 10µm)
- Fumes are solid condensation particles of small diameter (0.1 to 1.0 µm)

Selection of Respirator
The following factors shall be considered when selecting the proper respirator

Concentration and Type of Contaminant
The concentration and type of contaminant will determine the model and type of respirator and cartridges/filters or filters to be used. The concentration is based on a sampling of the atmosphere.

Location of Hazardous Area
(nearby contaminants, etc.)

Worker Activity
(Cutting, drilling, grinding, welding & hood requirement, etc.)

Types of Respirators

Air-purifying respirators can be either full-face or half masks with mechanical or chemical cartridges to filter dusts, mists, fumes, vapors or gases.

Powered air-purifying respirators use a blower to pass the contaminated air through a filter. The purified air is then delivered into a mask or hood. They filter dusts, mists, fumes, vapors and gases, just like ordinary air-purifying respirators.

Air-purifying respirators cannot be used in oxygen-deficient atmospheres, which can result when another gas displaces the oxygen or consumption of oxygen by a chemical reaction occurs. Oxygen levels below 19.5% require either a source of supplied air or supplied-air respirator protection. Levels below 16% are considered to be unsafe and could cause death. To determine the proper cartridge for air-purifying respirators contact the Company's Safety Manager or a qualified on-site safety representative of the client. You should also consult the Safety Data Sheet of the substance that needs to be filtered.

All cartridges are assigned a color designating the type of contaminant they will filter:

White:	Acid gas
Black:	Organic vapors
Green:	Ammonia gas
Yellow:	Acid gas and organic vapors
Purple:	Radioactive materials
Orange:	Dust, fumes and mists
Olive:	Other gases and vapors

Once the wearer of the respirator can detect an odor, irritation, or taste of the contaminant, the cartridge should be replaced. All cartridges and/or filters shall be changed at the beginning of each shift.

Supplied-air respirators provide the highest level of protection against highly toxic and unknown materials. Supplied air refers to self-contained breathing apparatuses (SCBAs) and air-line respirators. SCBAs have a limited air supply that is carried by the user, allowing for good mobility and fewer restrictions than air-line respirators.

Air-line respirators have an air hose that is connected to a fresh air supply from a central source. The source can be from a compressed air cylinder or air compressor that provides at least Grade D breathing air. The Company does not allow employees to perform any work that requires Air-line respirators.

Emergency Escape Breathing Apparatuses (EEBAs) provide oxygen for 5, 10 or 15 minutes depending on the unit. These are for emergency situations in which an employee must escape from environments immediately dangerous to life or health (IDLH). There is no scenario where atmospheric conditions in Company facilities would require employees to wear emergency escape breathing apparatus.

SCBA (Self Contained Breathing Apparatus)
The Company does NOT allow employees to work in an Immediately Dangerous to Life and Health (IDLH) environment.

In order to maintain the NIOSH/MSHA approval of any respirator, mixing parts from other respirator manufacturers is prohibited. This includes airline hoses, valves, gaskets, cartridges, etc. For example, do not use North cartridges or valve gaskets with an MSA or Scott product.

Brand and Models
Due to mechanical engineering, the Company operations do not introduce air contaminants that requires the use of respiratory protection. For welding fumes, air replacement engineering has been introduced to ensure clean air is available for welders. Cutting operations vacuums gathers dust and chips of non-hazardous dust and chips. If an employee wants to wear a face mask for the purpose of Covid protection, the use is personal and of a voluntary nature.

Use, Maintenance and Care of Respirators

The Company has created engineered protections against all identified potential respiratory exposures.
The Company does not provide respiratory protection to employees unless a contaminant that exceeds the OSHA PEL is introduced to the workplace. Employees are allowed to use dust filtering face masks on a voluntary basis, in such case the employee is provided with the following information:

Voluntary Use
If an employee chooses to voluntarily wear a respirator when not required by this Program (contaminants do not meet protection standards, odors, etc.) they will be advised of the following in their training:

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 employees.

However, if a respirator is used improperly or not kept clean, the respirator itself can become a hazard to the employee. Sometimes, employees 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 Company 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:

- 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.
    - If you are aware of an atmospheric hazard that exceeds the OSHA PEL, the Company will provide the required respiratory protection program for your use.
- Keep track of your respirator so that you do not mistakenly use someone else's respirator.

Training

Employees are provided training on Respiratory Protection. Training shall address employee knowledge of respirators, fit, use, limitations, emergency situations, wearing, fit checks, maintenance and storage, medical signs and symptoms of effective use and general requirements of the OSHA standard. The training must be provided before requiring the employee to use a respirator or when a contaminant that exceeds the OSHA PEL is introduced.

Retraining
Retraining shall be administered annually, and when the following situations occur:

- Changes in the workplace or the type of respirator render previous training obsolete.
- Inadequacies in the employee's knowledge or use of the respirator indicate that the employee has not retained the requisite understanding or skill, or
- Any other situation arises in which retraining appears necessary to ensure safe respirator use.

WORKPLACE VIOLENCE

Innovations Manufacturing, Inc. (the Company)

Purpose

Violence against employees occurs in a variety of circumstances and situations including acts perpetrated by disgruntled co-workers or former co-workers, and domestic incidents that spill over into the workplace. It is the Company policy to promote a safe environment for our employees and the visiting public, and to work with our employees to maintain a work environment that is free from violence, harassment, intimidation, and other disruptive behavior. The company's position in this area is that violence or threats of violence in all forms is unacceptable behavior. It will not be tolerated and will be dealt with appropriately.

Scope

This program applies to all employees.

Types of Workplace Violence

There are many different forms of workplace violence that can go on. Any type of violence or aggression to other employees is prohibited at Innovations Manufacturing. Some examples of different types of workplace violence include:

- **Physical Aggression**
  - Physical aggression is the act of hurting another person physically. While the assault is purely physical, this act can cause disruption in your work and can take a mental toll on you emotionally. You can also consider a threat made about harming you in some way an act of physical aggression. If either of these occur, report these instances to your supervisor right away.

- **Acts of Violence**
  - There are many different ways that an employee can experience violence. Any type of violence that you experience from a co-worker or superior needs reported. Some different types of violent acts include:

    - **Intimidation**
      - Intimidating employees, or making employees timid or fearful, is a form of violence. It can be a form of harassment depending on the matter that is at hand. Intimidation will not be tolerated here!

    - **Threats**
      - A threat is a statement or an intention to inflict pain, injury, damage, or another hostile action on a co-worker. While some may not consider threats a direct form of violence, they should still be reported. If a coworker has made a threat that is about physical harm to you or your property, don't be silent, let your supervisor know. Threats will not be tolerated here!

    - **Disruptive Behavior**
      - When you are at work, you are there to do your job so you can make a living. Behavior shall be appropriate and focused on doing your job. If someone is using disruptive behavior, it means their behavior is distracting and inappropriate for the workplace. Disruptive behavior will not be tolerated!

How to Address Workplace Violence in the Moment

It is unfortunate that workplace violence has to be a reality for anyone. If you have found yourself in this situation without a supervisor present, you may be trying to decide how to address the situation in the moment. Here are a few ways that may help you:

1. Try to stay calm with the person to avoid making the situation worse.
2. Don't argue with them, it will only escalate the problem.
3. Do not argue with threats that are made, report them to your supervisor.
4. Try to diffuse the situation and leave.
5. If you feel the person is going to hurt you, yell to get someone's attention.

What To Do If You Experience Workplace Violence

It is important to talk with your supervisor if you have experienced violence at work. You may be asked to give a written statement about the situation. This will help to keep the story straight and have something in writing to document it. From there, the Company will address the situation with the other person. The Company will take whatever measures necessary to provide you with a safe environment to work in. Even if the issue started away from work and migrated into the workplace, the Company will take steps to eliminate the threat at work.

Always Report Workplace Violence & Don't Retaliate

When you are the victim of workplace violence, it can be tempting to retaliate. This is not always the best decision. If possible, try not to fight back and be confrontational. Diffuse the issue as much as possible and report to your supervisor. Walk away if at all possible.

There are times that you may feel that your problem is not taken seriously. If that has happened, take the problem to the person higher up than your supervisor. If it gets to this point, you are encouraged to discuss the issue with the Safety Director.

Company Commitment

Innovations Manufacturing is committed to making the workplace a safe environment for all employees, and we have a zero-tolerance rule in place for these types of instances. If you experience intimidation, threats, or disruptive behavior from a co-worker it is your responsibility to report this conduct to your supervisor or the Safety Director.