2025

SAFETY & HEALTH MANUAL

ACOUSTICS ASSOCIATES, INC. SAFETY AND HEALTH MANUAL

REVISED MAY 29TH, 2025

ACOUSTICS ASSOCIATES
10750 XYLON AVE N., SUITE 140, BROOKLYN PARK, MN 55445
MAIN: 763.544.8901

2025 AAI SAFETY AND HEALTH MANUAL - REVISIONS

Date	Item Revised	Purpose of Revision
18-Feb-2025	Injury Response Plan	New Policy Added to Manual
28-Mar-2025	Revisions Page	New Page Added to Manual
28-Mar-2025	Near Miss Report Form	Form Updated to Include Option to Upload Photos
29-May-2025	Attendance Policy	New Policy Added to Manual
29-May-2025	Foreman Pay Policy	New Policy Added to Manual
15-Jun-2025	Referral Bonus Program	New Program Added to Manual
1-Aug-2025	Hard Hat Reimbursement Policy	New Policy Added to Manual
1-Aug-2025	One Ear Open Policy	New Policy Added to Manual
1-Aug-2025	Trailer Transport Policy	New Policy Added to Manual

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POLICY STATEMENT ON SAFETY

Acoustics Associates strives to provide a healthy and safe environment for all of its workers, supervisors, managers, contractors, and guests. To achieve this, Acoustics Associates has established several health and safety programs, policies and procedures and is committed to continual maintenance and improvements. Workplace health and safety is a shared responsibility and therefore, we must all work together to see success in our measures.

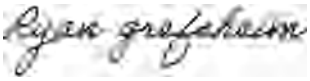
Safety is a top priority at Acoustics Associates, and we believe that all accidents and injuries are preventable. Each employee is accountable for their own safety and for the safety of all others. Active participation at all levels will ensure that our goals are achieved.

Acoustics Associates is dedicated to providing proper and relevant employee training, job-specific safe work practices, personal protective equipment, operational and maintenance procedures, and safety guidelines that focus on awareness on reducing the risk of incidents in all activities.

Acoustics Associates workers, supervisors, managers, contractors, and guests are responsible for complying with all federal, state and local health and safety standards and regulations.

Acoustics Associates is committed to safe and sustainable practices in all aspects of our operations and therefore will review and update our safety program on a yearly basis to adapt to industry changes, trends, and requirements.

Sincerely,



Ryan Grefsheim
EVP / Safety Manager

ASBESTOS AWARENESS PROGRAM

Purpose

The purpose of this program is to inform workers how to identify asbestos containing materials (ACM), how to handle them safely and the potential health hazards related to asbestos exposure. Employees who work in areas where asbestos is suspected should be aware of the properties of asbestos, and the dangers of working around it. In addition, this program contains general guidelines and training requirements to prepare and protect employees from asbestos exposure.

Scope

This program applies to Acoustics Associates, Inc. employees and contractors who work near asbestos containing materials. It applies to all Acoustics Associates, Inc. worksites. If an Acoustics Associates, Inc. employee performs work on a site other than an Acoustics Associates, Inc. site, the facility owner's plan should be used if it exists and is as strict (or stricter) than this plan. In cases where the other facility's plan does not exist or is less strict than this plan, Acoustics Associates, Inc. employees will operate under this plan. Prior to working at a site, Acoustics Associates, Inc. employees must be aware of any site-specific contingency/emergency plans that apply.

Responsibilities

Safety Manager & Supervisors

- If presumed asbestos containing material (PACM) is discovered, ensure owners are notified.
- Do not allow ACOUSTICS ASSOCIATES INC employees to work with PACM until it is confirmed that it does not contain asbestos, or the risk is diminished.
- Ensure all employees complete asbestos awareness training.
- Acoustics Associates, Inc. will train employees on an Asbestos Exposure Controls Plan depending on their exposure level.

Employees

- Comply with all parts of this program. If there is an unresolved concern about exposure to asbestos, the employee should delay or discontinue work.
- If you suspect that a material contains asbestos, report it immediately to your supervisor

Asbestos Background Information

Asbestos is the name applied to six naturally occurring minerals that are mined from the earth. It has fibers that are very strong and flexible, as well as resistant to chemicals, heat and deterioration. It is also a good insulator. The fibers can be woven, spun, bound to other materials, or pressed. Asbestos is relatively inexpensive, and as such it has been used in many commercial products over the years.

The different types of asbestos are:

- Amosite
- Chrysotile
- Termolite
- Actinolite
- Anthophylite
- Crocidolite

Of these six, three are more commonly used:

- Chrysotile (White) is the most common
- Amosite (Brown or Off-White)
- Crocidolite (Blue)

All types of asbestos tend to break into very tiny fibers. These individual fibers are so small they must be identified using a microscope. Asbestos fibers are also virtually indestructible. They are resistant to chemicals, heat, and are very stable in the environment. They do not evaporate into air or dissolve in water, and they do not break down over time. Usually, asbestos is mixed with other materials to actually form the products. Depending on what the product is, the amount of asbestos in asbestos containing materials (ACM) may vary from 1% - 100%.

There is serious health risks associated with exposure to asbestos fibers. The fibers are made up of microscopic filaments that can remain airborne for several hours after it is disturbed. The filaments can penetrate human tissue, and prolonged exposure can disable a person and cause fatal diseases.

Where Is Asbestos Found

Workers come into contact with many materials that may contain asbestos and could potentially release fibers. A product is rarely labelled as containing asbestos, and generally the presence of asbestos cannot be identified visually. The only method of identification is through laboratory analysis of samples. If asbestos is suspected, always assume that it does contain asbestos, and have the material analyzed.

Asbestos may be found in many different products and many different places. Examples:

- Sprayed-on fireproofing and insulation in buildings
- Insulation for pipes and boilers
- Wall and ceiling insulation
- Ceiling tiles
- Floor tiles
- Putties, caulks, and cements (such as in chemical carrying cement in pipes)
- Roofing shingles
- Siding shingles on old residential buildings
- Wall and ceiling texture in older buildings and homes
- Joint compound in older buildings and homes
- Brake linings and clutch pads

When Is Asbestos Dangerous

In order to minimize exposure, employees should be able to recognize asbestos containing materials and understand the conditions under which they are dangerous.

Asbestos containing material is not generally considered to be harmful unless it is releasing dust or fibers into the air where they can be inhaled or ingested. Many of the fibers will become trapped in the mucous membranes of the nose and throat where they can be removed, but some may pass deep into the lungs, or, if swallowed, into the digestive tract. Once they are trapped in the body, the fibers can cause health problems.

Asbestos is most hazardous when it is friable. The term friable means that the asbestos is easily crumbled by hand, releasing fibers into the air, and as a result, it is more likely to be disturbed. Sprayed on materials used for insulation, fireproofing or sound insulation are friable.

Non-friable materials include vinyl-asbestos floor tile or roofing felts and do emit fibers into the air unless they are subject to sanding or sawing. Other materials such as asbestos cement pipe or sheet can emit fibers into the air if they are sanded or sawed, or if they are broken during demolition.

Sprayed on asbestos insulation is highly friable where asbestos floor tile is not. Asbestos-containing ceiling tiles, floor tiles, undamaged laboratory cabinet tops, shingles, fire doors, siding shingles, etc. will not release asbestos fibers unless they are disturbed or damaged in some way.

Asbestos pipe and boiler insulation does not present a hazard unless the protective canvas covering is cut or damaged in such a way that the asbestos underneath is actually exposed to the air.

Damage and deterioration will increase the friability of asbestos-containing materials. Water damage, continual vibration, aging, and physical impact such as drilling, grinding, buffing, cutting, sawing, or striking can break the materials down making fiber release more likely.

Health Effects

The most common way for asbestos fibers to enter the body is through breathing and/or ingesting. Inhaling airborne fibers is the most dangerous type of asbestos exposure. Even though the human body can rid itself of some of the fibers, the higher the asbestos exposure, the more fibers that become embedded in the lungs.

Because it is so hard to destroy asbestos fibers, the body cannot break them down or remove them once they are lodged in lung or body tissues. They remain in place where they can cause disease. There are three primary diseases associated with asbestos exposure:

- *Asbestosis* - Asbestosis is a serious, chronic, non-cancerous respiratory disease. Inhaled asbestos fibers aggravate lung tissues, which cause them to scar. Symptoms of asbestosis include shortness of breath and a dry crackling sound in the lungs while inhaling. In its advanced stages, the disease may cause cardiac failure.
- *Lung Cancer* - Lung cancer causes the largest number of deaths related to asbestos exposure. The incidence of lung cancer in people who are directly involved in the mining, milling, manufacturing and use of asbestos and its products is much higher than in the general population. The most common symptoms of lung cancer are coughing and a change in breathing. Other symptoms include shortness of breath, persistent chest pains, hoarseness, and anemia. Evidence suggests that cancers in the esophagus, larynx, oral cavity, stomach, colon and kidney may be caused by ingesting asbestos.
- *Mesothelioma* - Mesothelioma is a rare form of cancer that most often occurs in the thin membrane lining of the lungs, chest, abdomen, and (rarely) heart. About 200 cases are diagnosed each year in the United States. Virtually all cases of mesothelioma are linked with asbestos exposure.

How To Avoid Exposure

Even though asbestos exposure may be hazardous, you can minimize your health risk. Generally, asbestos fibers are released only if the material is disturbed. Asbestos containing materials (ACM) that are left undisturbed do not endanger the health of occupants. Proper handling of ACM prevents or minimizes the release of fibers into the air. This, in turn, reduces the risk of asbestos related diseases. But remember, asbestos materials are hazardous when they are damaged; disturbed or they deteriorate causing the release of fibers into the air.

In order to avoid being exposed to asbestos, you must be aware of the locations where it is likely to be found. If you do not know whether something is asbestos or not, assume that it is until it is verified otherwise. Remember that you cannot tell if floor or ceiling tiles contain asbestos just by looking at them. If you have reason to suspect that something is asbestos, either because it is labeled as such, or because it is something that is likely to contain asbestos (9" floor tile, for example). **DO NOT DISTURB IT.**

Employees will abide by warning signs and labels and will not disturb the asbestos containing material. Signs and labels shall identify the material which is present, its location, and appropriate work practices which, if followed, will ensure that asbestos containing material (ACM) and/or presumed asbestos containing material (PACM) will not be disturbed.

Following are some general precautions to reduce exposure, and help lower the risk of health problems associated with asbestos exposure:

- Avoid drilling, sawing, or piercing materials containing asbestos.
- Never sand floor tiles, ceiling tiles or adhesives that contain asbestos.
- When moving furniture, ladders, or other objects, be careful not to damage asbestos.
- Be aware of the location of asbestos in your work area. Be cautious when working around asbestos containing materials. Avoid disturbing asbestos materials.
- Periodically check asbestos containing materials for damage or deterioration. Report loose asbestos, damage or deterioration of asbestos materials to a supervisor.
- Removal of asbestos, or repair work involving asbestos must only be done by personnel specially trained in working with asbestos.
- Wetting asbestos helps to prevent fibers from being released into the air because the soaked fibers are too heavy to remain suspended.
- If asbestos dust measures above the PEL, employees must use a respirator that is approved for asbestos work. A dust mask is not sufficient protection.
- When vacuuming dry asbestos, you must use a vacuum cleaner with a special high efficiency filter (HEPA). Sweeping or dusting dry asbestos puts fibers back in the air.
- If you cannot use a HEPA vacuum for cleanup, you must use a wet cloth or mop unless the moisture presents a hazard in itself (e.g., near electricity).

At facilities that are client owned and/or operated, the employee must confirm the absence of asbestos in surface material or insulation before disturbing the material. If the material cannot be confirmed as non-asbestos, the client/owner must have the material tested, and if necessary abated, before Acoustics Associates, Inc. employees may work on the site.

If an employee is working on a multi-contractor worksite, they will be protected from exposure. If an employee is working next to a Class 1 asbestos job, and is exposed because the containment was insufficient, Acoustics Associates, Inc. will remove the employee from the area until the breach is repaired or will perform an exposure assessment.

Air Monitoring

The permissible exposure limit (PEL) for asbestos is 0.1 fibers per cubic centimeter of air (0.1 fiber/cc) averaged over an 8-hour workday. The excursion limit (EL) is 1.0 fiber/cc, which is the maximum amount of asbestos that can be present in the air over a 30-minute period. If the exposure level warrants it, Acoustics Associates, Inc. will perform air sampling.

Asbestos Spills

Disturb the material as little as possible. Also report any damaged pipe insulation, ceiling tile, 9" floor tile, fallen clumps of sprayed-on insulation, etc. to your superintendent and Safety Specialist. Take measures to prevent others from disturbing the spill until the Asbestos Abatement crew arrives. All waste, bags, containers, equipment and contaminated clothing will be disposed of in sealed, labeled impermeable containers or bags (>6 mm thick).

Respiratory Protection

During the asbestos exposure assessment process, Acoustics Associates, Inc. employees will use respirators as protection against asbestos only when confirming that engineering controls and work practices for the particular work activity are sufficient to maintain exposure levels below the PEL limit. Any work that requires respirators and exceeds the PEL will be done by a qualified contractor.

Medical Surveillance

All employees exposed to asbestos levels that exceed the regulated level will receive medical supervision provided by Acoustics Associates, Inc. as part of a medical surveillance program. All examinations and procedures will be performed by or under the supervision of a licensed physician, at a reasonable time and place, and at no cost to the employee.

Signage Requirements

Acoustics Associates, Inc. shall affix signs and labels to identify the presence of asbestos. Appropriate work practices will ensure that materials containing asbestos will not be disturbed. ACOUSTICS ASSOCIATES INC will ensure that employees are aware of the warning signs. When working, employees will heed warning signs and labels on materials indicating asbestos. Employees will not disturb the asbestos containing material in any way.

Buildings that have asbestos containing materials (ACM) in them will have signage posted near the main entrances, frequently near the fire alarm panel. Pipe and boiler insulation that contains asbestos will be labels with identifying stickers and placards. Asbestos containing ceiling tiles will not be labeled or marked. These tiles cannot be differentiated from other tiles by visual means. They must be analyzed by a laboratory test.

Training

All employees who work in areas that contain, or potentially contain, asbestos must participate in annual asbestos awareness training, and that training must be documented. In addition, training must occur for all employees whose work activities may contact asbestos containing material (ACM) or Presumed Asbestos Containing Material (PACM) even though they do not disturb the ACM or PACM.

Training includes:

- Health effects of exposure to asbestos.
- Risk of lung cancer due to the relationship between smoking and asbestos exposure.
- Where asbestos is located, how much, how it is used, how it is released and how it is stored.
- Operations that may result in exposure to asbestos.
- Engineering controls and work practices required by the employee's job assignment.
- Procedures that have been implemented to protect employees from asbestos exposure (e.g., appropriate work practices, emergency and clean-up procedures and personal protective equipment)
- How to use respirators and protective clothing and understanding their purpose and limitations.
- Understanding the purpose of a medical supervision program.
- The OSHA permissible exposure limit (PEL) asbestos standard.
- The reasons for posting signs and labeling asbestos containing materials and understanding the legends for these signs and labels.

Subcontractors shall follow this program and abide by the requirements of all applicable regulatory and environmental regulatory requirements as well as this standard.

ASSURED EQUIPMENT GROUNDING PROGRAM

Purpose

The purpose of this program is to eliminate potential hazards presented by the use of power equipment, power equipment cords, extension cords, receptacles, and other related equipment.

Scope

This program shall apply to all Acoustics Associates employees, and all contractors and subcontractors who work with, on or near electrical tools or equipment. This program also applies to all Acoustics Associates works sites where Acoustics Associates employees, contractors and subcontractors are present.

Key Responsibilities

Safety Manager

- Responsible for assured equipment grounding program execution.
- Keep informed of current regulations and revise the program when necessary.
- Preform annual audits of this program to ensure adequacy.
- Serve as competent person.

Supervisors

- Ensure that all employees operate within the guidelines of this program.
- Ensure that visual inspections are performed on electrical equipment and repair or replace removed, tagged or defective equipment as soon as possible.
- Enforce compliance with this program.

Employees

- Comply with all parts of this program.
- Perform visual inspections of electrical tools, equipment and energy sources before each use.
- Remove and tag defective electrical equipment and notify supervisor of defects.

Definitions

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 the equipment along the circuit conductors. When the amount going differs from the amount returning by approximately 5 mill amperes, the GFCI interrupts the current.

Competent Person

A person 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.

Procedures

The following procedures and guidelines are designed to eliminate all injuries resulting from possible malfunctions, improper ground and/or defective tools. It is the responsibility of both supervisors and employees to ensure that these procedures are strictly adhered to.

Assured Equipment Grounding Conductor Program

A site-specific assured grounding conductor program shall be implemented on all ACOUSTICS ASSOCIATES INC work sites that covers all cords, plug-in electrical power tools, and receptacles which are not part of the permanent structure and are available for use by ACOUSTICS ASSOCIATES INC employees.

Ground Fault Circuit Interrupters (GFCI)

All 120 and 240-volt receptacles which are not part of the permanent structure and are used by ACOUSTICS ASSOCIATES INC employees must have approved ground fault circuit interrupters. All GFCI must be tested prior to each use.

Equipment Requirements

Equipment that does not meet the requirements of this program or is found to be defective shall not be used by ACOUSTICS ASSOCIATES INC employees and shall be repaired or replaced so that program requirements are satisfied.

Equipment Inspections

Visual equipment inspections shall occur daily and before each use in order to identify hazards presented by equipment defects. Possible defects include but are not limited to cuts, abrasions, burns, exposed wires and broken or missing pins of extension cords, equipment power cords and receptacles.

Any equipment or equipment parts, which are found to be defective or present a potential hazard, shall be repaired or replaced prior to use. All equipment that cannot be repaired must be tagged and discarded immediately.

Equipment Tests and Records Maintenance

Tests on all equipment grounding conductors must be conducted prior to each use, following any repairs and at 3-month intervals for non-fixed equipment or 6-month intervals for permanently fixed equipment which is not exposed to damage, in order to ensure continuous electrical continuity.

Equipment testing records shall indicate equipment identity such as cord, receptacle that is not part of the permanent structure or plug-in power equipment and the date it was last tested or interval test dates. Records shall be in the form of written logs or color-coding and shall be available at the work site at all times for Acoustics Associates review.

All extension cords and power equipment cords shall be marked on either end of the cord with color tape that corresponds with the month represented in the table below to ensure that the monthly test schedule is maintained.

Monthly Test Schedule Chart

Test Month	Corresponding Tape Color
January	Blue
February	Green
March	Red
April	White
May	Black
June	Brown
July	Continue Color Sequence with Blue for July

ATTENDANCE POLICY

Purpose

The purpose of this policy is to set forth Acoustics Associates Inc.'s policy and procedures for handling employee absences and tardiness to promote the effective operation of the company and minimize unscheduled absences. Punctual and regular attendance is an essential responsibility of each employee at Acoustics Associates. It is vital to the success of everyone at Acoustics Associates that we are able to perform the work before us, and regular and prompt attendance is essential for all positions. Absences, tardiness and leaving work early not only create an additional workload on your fellow workers but also affect your performance record. Employees are expected to report to work as scheduled, on time and prepared to start working. Employees also are expected to remain at work for their entire work schedule. Late arrival, early departure or other absences from scheduled hours are disruptive and must be avoided.

Scope

This program applies on Acoustics Associates worksites or locations and to all Acoustics Associates employees regardless of position or employment duration with Acoustics Associates. This policy does not apply to absences covered by the Family and Medical Leave Act (FMLA) or leave provided as a reasonable accommodation under the Americans with Disabilities Act (ADA).

Absence

Employee "Absence" is defined as the failure of an employee to report for work when he or she is scheduled to work. The two types of absences are defined below:

- *Excused absence* occurs when **both** of the following conditions are met:
    - The employee provides their supervisor sufficient notice at least 48 hours in advance of absence.
    - The absence request is approved by the employee's supervisor.
- *Unexcused absence* occurs when any of the above conditions are not met. If it is necessary for an employee to be absent or late for work because of an illness or an emergency, the employee must notify his or her supervisor no later than the employee's scheduled starting time on that same day. If the employee is unable to call, he or she must have someone make the call.

You are expected to arrive at work promptly each day and remain at work for your scheduled hours, unless you have made other arrangements with your manager. Unexcused or excessive absences and tardiness will not be tolerated and may be grounds for discipline up to and including immediate termination of employment. Excused absences are those approved in advance by your manager or allowed by law.

An unexcused absence counts as one occurrence for the purposes of discipline under this policy.

Tardiness and Early Departures

Employees are expected to report to work and return from scheduled breaks on time. If employees cannot report to work as scheduled, they must notify their supervisor no later than their regular starting time. This notification does not excuse the tardiness but simply notifies the supervisor that a schedule change may be necessary.

Employees who must leave work before the end of their scheduled shift must notify a supervisor immediately.

Tardiness and early departures are each one occurrence for the purpose of discipline under this policy.

Disciplinary Procedure

The following disciplinary action procedures shall be applied when an Attendance Violation has occurred:

- 1st Attendance Violation:
  - The first violation will result in a verbal warning.
- 2nd Attendance Violation:
  - The second violation shall result in a written disciplinary action form, and you will be sent home without pay. The disciplinary action form shall include the issue date, name and signature of employee, name and signature of supervisor, violation description and disciplinary / corrective actions which were taken or are to be taken.
- 3rd Attendance Violation:
  - The third violation shall result in another disciplinary action form and will include a meeting with your supervisor and / or other applicable personnel. The severity of the violation is to be considered when disciplinary action is applied.
- 4th Attendance Violation:
  - The fourth violation could result in termination of employment unless there is a compelling reason to retain the employee which is to be determined by the supervisor and other applicable personnel.

*The affected employee may submit a written rebuttal at any time before, during or after the disciplinary period.

*Violations shall expire 12 months after the date they are issued.

All employees are expected to be honest and accountable for time recording. Failure to do so will be cause for termination.

Failure to notify your manager of your absence for three consecutive days could be considered voluntary resignation.

Expectations from Acoustics Associates are to show up on time and put in a full workday. We do understand that certain situations are unavoidable.

Recordkeeping

All attendance violation documentation will be kept on file for 2 years after employment is terminated. In cases where the disciplined or terminated employee claims discriminatory or unfair disciplinary / corrective action or termination; the employee's entire employee file (including all violation documentation) shall be kept for 3 years after their employment is terminated.

BLOODBORNE PATHOGEN EXPOSURE CONTROL PLAN

Purpose

The purpose of this policy is to establish and maintain a written exposure control plan that protects employees who may have contact with blood or any other potentially infectious material. This program is also designed to meet the requirements of OSHA 29 CFR 1910.1030, which requires employers who can reasonably anticipate exposure to prepare and implement a written exposure control plan.

Scope

This policy applies to all occupational exposure to blood or other potentially infectious materials and covers all Acoustics Associates, Inc. employees. Employees whose responsibilities include cleaning up after a workplace injury, rendering first aid, providing life support or other tasks that involve directly working with biohazards are more likely to have occupational exposure. However, any employee could be at risk as a result of blood from an injury that occurred in the past or a historical presence of bodily fluids that were not adequately decontaminated.

Responsibilities

Safety Manager (Exposure Control Officer)

- Serve as the designated "Exposure Control Officer", which is responsible for the overall development and implementation of the exposure control procedure for all Acoustics Associates, Inc. worksites.
- Ensure that Acoustics Associates, Inc. complies with this policy.

Supervisors

- Serve as the responsible person for all exposure control activities within their area of responsibility.
- Ensure that all employees comply with this policy and report all non-compliance matters to the exposure control officer.

Employees

- Comply with all parts of this program and report all non-compliance matters to the Exposure Control Officer or their direct supervisor.
- Be aware of specific job tasks, situations and environments that may present biohazards.
- Help Acoustics Associates, Inc. prevent blood or potentially infectious material exposure by working safely and practicing good personal hygiene.

Exposure Control Plan Access

Employees shall have access to a copy of the exposure control plan by requesting it from their supervisor or the Exposure Control Officer. A copy will be supplied in a reasonable time, place and manner.

Procedure Reviews and Updates

The exposure control procedure must be reviewed on an annual basis and updated whenever a new procedure, activity or function with the potential to expose employees to biohazards is introduced into a worksite.

Universal Precautions

Acoustics Associates, Inc. and its employees shall observe universal precautions by treating all human blood and certain human body fluids as if they are known to be infectious for HIV, HBV and other pathogens even under circumstances where exposure is highly unlikely.

Bloodborne Pathogens (BPPs) are microorganisms such as viruses or bacteria that are found in blood and body fluids and can cause disease in people. Those of most concern are Human Immunodeficiency Virus (HIV), Hepatitis B Virus, and Hepatitis C Virus.

Exposure to BPPs could occur through needlesticks or cuts from used needles or sharps. Contact of your eyes, nose, mouth, or broken skin with blood. Assaults – bites, cuts, or knife wounds. Splashes or punctures – especially when drawing blood.

Even though these fluids are not associated with transmission of bloodborne pathogens unless blood is also present, care should still be taken to minimize exposure to these fluids. Urine, Feces, Saliva, Vomit, Tears, Nasal Secretions and Sweat cannot transmit bloodborne pathogens unless they contain VISIBLE BLOOD.

Exposure Controls

Exposure controls are designed to reduce or eliminate employee exposure to blood or potentially infectious materials and should be re-evaluated and revised, if necessary, on a regular basis to maximize their effectiveness in controlling employee exposure. Therefore:

- Hand washing facilities are readily available at all work locations except those that cannot support or simply do not have such facilities. In these cases, appropriate antiseptic solutions and / or towelettes are available for use.
- All sharps containers shall have a biohazard-warning label or a specific color to identify it as a biohazard, shall be resistant to punctures and shall be leak proof. The same characteristics shall apply to all secondary sharps containers.

Safe Work Practices

Safe work practices are designed to support exposure controls and further minimize or eliminate occupational exposure. Therefore:

- Employees must wash their hands and other applicable body parts as soon as potentially contaminated gloves or other PPE are removed to further prevent contamination.
- If any part of the body has contact with blood or any other infectious material, employees must wash their hands and other exposed body parts with soap and water immediately.
- Only trained and authorized personnel are allowed to handle sharps, sharps containers and any other potentially sharp and infectious needles or equipment.
- Activities such as applying make-up, handling contact lenses, smoking or any other hand and eye, mouth, nose, ear or other body part contact is prohibited in areas where exposure to biohazards is possible.
- Storage areas such as pantries, freezers, refrigerators and others that may contain potentially infectious materials shall not contain food or drink.
- All equipment and surfaces that have had contact with blood or other infectious materials must be properly cleaned and decontaminated.

- All biological specimens must be contained in leak proof containers for handling, storage and transport to minimize potential contact with other surfaces and employees.
- In cases where the exterior surface of the specimen container is contaminated; the container must be placed into another leak proof container, which shall be labeled as “for handling and storage”.
- All emergency responder, first aid or other potentially infectious supplies must be disposed of immediately and appropriately after contamination.

Personal Protective Equipment (PPE)

PPE shall be provided by ACOUSTICS ASSOCIATES INC at no cost to the employee and must be of proper fit, adequate for the task at hand and readily available. Defective or damaged PPE must be discarded / replaced or repaired in order to ensure maximum effectiveness.

The following safe work practices shall be followed with regard to biohazards and PPE:

- Protective garments that are penetrated by blood or other infectious material must be removed and properly disposed of.
- PPE that may be contaminated must be removed and properly stored / contained before leaving the work area.
- PPE such as protective gloves must be worn whenever contact with potentially infectious material exposure is anticipated.
- Disposable PPE such as rubber gloves must be replaced as soon as practical when contamination has occurred or when they are rendered ineffective by a tear, puncture or other occurrence.
- Masks and eye protection (such as goggles, face shields, etc.) are used whenever splashes or sprays may generate droplets of infectious materials.
- Whenever infectious material splashes, sprays or other similar occurrences are possible, PPE such as face shields, goggles, head garments or other appropriate PPE shall be used to protect face, eyes etc.
- Adequate PPE must be used unless temporarily declined by the employee and approved by the safety manager.
- PPE should be cleaned, laundered & properly disposed of if contaminated.
- All PPE must be cleaned, maintained, used, stored and disposed of properly when applicable.

Post-Exposure Requirements

All potential blood or infectious material exposure incidents shall be investigated by ACOUSTICS ASSOCIATES INC thoroughly to ensure that hazards are abated and that affected employees receive the necessary treatment needed to minimize the impact of potential or actual exposure.

All reported exposure incidents shall be formally investigated by the exposure control officer / safety manager or supervisor when the safety manager cannot be present. A detailed report of the incident outlining root cause, corrective actions and the current status of affected employees is then completed and reviewed by ACOUSTICS ASSOCIATES INC to help prevent re-occurrence. Additionally, the following confidential information shall be provided to exposed employees:

- All documentary reports and information of the exposure incident and its circumstances.
- The identity of the exposure source individual unless applicable laws prevent such identification.

Upon completion of the above procedures, the exposed employee shall be appointed to a qualified healthcare professional who will evaluate the exposed employee, provide information to the employee about his or her medical status and initiate treatment where applicable.

Acoustics Associates provides the following information to the healthcare professional:

- A copy of the biohazard standard.
- A detailed description of the exposure incident.
- Additional information that is relevant to the healthcare professional.

The following information will be provided to ACOUSTICS ASSOCIATES INC by the healthcare professional as a "written report" and copied to the exposed employee upon completion of the healthcare professional's evaluation of exposed employee:

- If a Hepatitis B vaccination is recommended for the exposed employee.
- If the exposed employee has received the Hepatitis B vaccination since the incident.
- Verification that the exposed employee has received results information of the medical evaluation. Verification that the exposed employee was made aware of medical conditions caused by the exposure incident that require additional medical evaluation or treatment.

* All other medical information remains confidential and will not be a part of the written report.

* The Hepatitis B vaccine will be made available to all employees with occupational exposure at no cost.

Training

All employees with occupational exposure shall receive bloodborne pathogens training before initial assignment and within 1 year of previous training. The training includes but is not limited to:

- A detailed explanation of bloodborne pathogens and their causes / effects.
- OSHA's bloodborne pathogens standard and requirements.
- How to protect yourself from occupational exposure.
- Common warning methods such as signs, labels, etc.
- Availability of the Hepatitis B vaccine.

Recordkeeping

Acoustics Associates, Inc. shall meet OSHA 29 CFR 1920.1020(h) transfer of records standards in order to ensure regulatory compliance. Applicable records related to this standard and program shall be available to ACOUSTICS ASSOCIATES INC employees and regulatory authorities upon request except for medical records, which are kept confidential and require the employee's written consent unless otherwise specified in 29 CFR 1910.1030 or other applicable laws.

Medical records shall be maintained in a safe and secure location for the duration of each employee's employment plus 30 years. The following information must be included for each employee's medical record:

- Full Name
- Social Security Number
- Hepatitis B vaccination status
- Hepatitis B vaccination date(s)

- Hepatitis B declination(s)
- All records, notes, evaluations, etc. to and from the healthcare professional
- All ACOUSTICS ASSOCIATES INC documentary records, notes, letters and other forms of communications

All training records must be kept for no less than 3 years from the date of training. Training records shall include the following:

- All training materials and content used at the time of training.
- Training instructor name and title.
- Training student names, titles and training dates.

CONFINED SPACES PROGRAM

Purpose

The purpose of Acoustics Associates Inc.'s Confined Space Program is to set procedures that will ensure workers safe entry into confined spaces and permit-required confined spaces to perform routine tasks associated with their employment. This procedure is designed to provide the minimum safety requirements in accordance with the Occupational Safety and Health Administration's (OSHA) Confined Space Standard, 1910.146.

Scope

This program applies to all Acoustics Associates Inc. employees and contractors who enter confined spaces, which are owned by Acoustics Associates, Inc. In cases where the site owner is not Acoustics Associates, Inc., the site owner's confined space program shall take precedence. If the site owner does not have an adequate confined space program, this program shall be used.

Responsibilities

Safety Manager

- Monitor the effectiveness of this program.
- Provide atmospheric testing and equipment as needed.
- Provide personal protective equipment as needed.
- Provide training to affected employees and supervisors.
- Preview and update the program on at least an annual basis or as needed.

Supervisors

- Ensure that a list of confined spaces at all Acoustics Associates, Inc. worksites is maintained.
- Ensure training of personnel is conducted and documented.
- Coordinate with outside responders.
- Ensure that equipment is in compliance with standards.
- Ensure that the RESPONSIBLE PERSON in charge of the confined space work shall:
  - Ensure requirements for entry have been completed before entry is authorized.
  - Ensure confined space monitoring is performed by personnel qualified and trained in confined space entry procedures.
  - Ensure a list of monitoring equipment and personnel qualified to operate the equipment is maintained.
  - Ensure that the rescue team has simulated a rescue in a confined space within the past twelve (12) months.
  - Know the hazards that may be faced during entry, including the mode (how the contaminant gets into the body), signs or symptoms, and consequences of exposure.
  - Fill out a permit.
  - Determine the entry requirements.
  - Require a permit review and signature from the authorized Entry Supervisor.
  - Notify all involved employees of the permit requirements.
  - Post the permit in a conspicuous location near the job.
  - Renew the permit or have it reissued as needed (a new permit is required every shift).
  - Determine the number of Attendants required to perform the work.
  - Ensure all Attendant(s) know how to communicate with the entrants and how to obtain assistance. Post any required barriers and signs.

- Remain alert to changing conditions that might affect the conditions of the permits (i.e., require additional atmospheric monitoring or changes in personal protective equipment).
- Change and reissue the permit or issue a new permit as necessary.
- Ensure periodic atmospheric monitoring is done according to permit requirements.
- Ensure that the personnel completing the work, and all support personnel adhere to permit requirements.
- Ensure the permit is canceled with the work is done.
- Ensure the confined space is safely closed and all workers are cleared of the area.

Entry Supervisor/Responsible Persons

Responsible Person(s) shall serve as the Entry Supervisor(s) and shall be qualified and authorized to approved confined space entry permits. The Entry Supervisor(s) shall be responsible for:

- Determining if conditions are acceptable for entry.
- Authorizing entry and overseeing entry operations.
- Terminating entry procedures as required.
- Serving as an Attendant, as long as the person is trained and equipped appropriately for that role.
- Ensuring measures are in place to keep unauthorized personnel clear of the area.
- Checking the work at least twice a shift to verify and document permit requirements are being observed (more frequent checks shall be made if operations or conditions are anticipated that could affect permit requirements).
- Ensuring that necessary information on chemical hazards is kept at the worksite for the employees or rescue team.
- Ensuring a rescue team is available and instructed in their rescue duties (i.e., an onsite team or a prearranged outside rescue service).
- Ensuring the rescue team members have current certification in first aid and cardiopulmonary resuscitation (CPR).

Attendants

Responsible Person(s) shall function as an Attendant(s) and shall be stationed outside of the confined workspace. The Attendant(s) shall:

- Be knowledgeable of and be able to recognize potential confined space hazards.
- Maintain a sign-in/sign-out log with a count of all persons in the confined space and ensure all entrants sign in and out.
- Monitor surrounding activities to ensure the safety of personnel.
- Maintain effective and continuous communication with personnel during confined space entry, work, and exit.
- Order personnel to evacuate the confined space if he/she:
    - Observes a condition which is not allowed on the entry permit.
    - Notices the entrants acting strangely, possibly as a result of exposure to hazardous substances.
    - Notices a situation outside the confined space which could endanger personnel.
    - Notices a hazard within the confined space that has not been previously recognized.
    - Must leave his/her workstation.
    - Must focus attention on the rescue of personnel in some other confined space that he/she is monitoring.

- Immediately summon the Rescue Team if crew rescue becomes necessary.
- Keep unauthorized persons out of the confined space, order them out, or notify authorized personnel of an unauthorized entry

Rescue Team

The Rescue Team members shall:

- Complete a training drill using mannequins or personnel in a simulation of the confined space prior to the issuance of an entry permit for any confined space and at least annually thereafter.
- Respond immediately to rescue calls from the Attendant or any other person recognizing a need for rescue from the confined space.
- In addition to emergency response training, receive the same training as that required of the authorized entrants.
- Have current certification in first aid and CPR.

Entrants/Affected Employees

Employees who are granted permission to enter a confined space shall:

- Read and observe the entry permit requirements.
- Remain alert to the hazards that could be encountered while in the confined space.
- Properly use the personal protective equipment that is required by the permit.
- Immediately exit the confined space when:
    - They are ordered to do so by an authorized person.
    - They notice or recognize signs or symptoms of exposure.
    - A prohibited condition exists.
    - The automatic alarm system sounds.
- Alert Attendant(s) when a prohibited condition exists and/or when warning signs or symptoms of exposure exist.

Background

A confined space is defined as any location that has limited openings for entry and egress, is not intended for continuous employee occupancy, and is so enclosed that natural ventilation may not reduce air contaminants to levels below the threshold limit value (TLV). Examples of confined spaces include manholes, stacks, pipes, storage tanks, trailers, tank cars, pits, sumps, hoppers, and bins. Entry into confined spaces without proper precautions could result in injury, impairment, or death due to:

- An atmosphere that is flammable or explosive.
- Lack of sufficient oxygen to support life.
- Contact with or inhalation of toxic materials.
- General safety or work area hazards such as steam or high-pressure materials.

Training

Acoustics Associates, Inc. shall provide training so that all employees whose work is regulated by this Confined Space Program acquire the understanding, knowledge, and skills necessary for the safe performance of their duties in confined spaces.

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

- Explanation of the general hazards associated with confined spaces.
- Discussion of specific confined space hazards associated with the facility, location, or operation.
- Reason for, proper use, and limitations of personal protective equipment and other safety equipment required for entry into confined spaces.
- Explanation of permits and other procedural requirements for conducting a confined space entry.
- A clear understanding of what conditions would prohibit entry.
- Procedures for responding to emergencies.
- Duties and responsibilities of the confined space entry team.
- Description of how to recognize symptoms of overexposure to probable air contaminants in themselves and co-workers, and method(s) for alerting the Attendant(s).

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

- Responsible Person shall provide training to each affected employee:
- Before the employee is first assigned duties within a confined space.
- Before there is a change in assigned duties.
- When there is a change in permit space operations that presents a hazard for which an employee has not been trained.
- When Company Name has reason to believe that there are deviations from the confined space entry procedures required in this program, or that there are inadequacies in the employee's knowledge or use of these procedures.

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

- Training for atmospheric monitoring personnel shall include proper use of monitoring instruments, including instruction on the following:
    - Proper use of the equipment.
    - Calibration of equipment.
    - Sampling strategies and techniques.
    - Exposure limits (PELs, TLVs, LELs, UELs, etc.).
- Training for Attendants shall include the following:
    - Procedures for summoning rescue or other emergency services.
    - Proper utilization of equipment used for communicating with entry and emergency/rescue personnel.
- Training for Emergency Response Personnel shall include:
    - Rescue plans and procedures developed for each type of confined space that is anticipated to be encountered.
    - Use of emergency rescue equipment.
    - First aid and CPR techniques.
    - Work location and confined space configuration to minimize response time.

Periodic assessment of the effectiveness of employee training shall be conducted by Responsible Person. Training sessions shall be repeated as often as necessary to maintain an acceptable level of personnel competence.

Identification of Hazards and Evaluation of Confined Spaces

Survey

Responsible Person shall ensure a survey of the worksite is conducted to identify confined spaces. This survey can be partially completed from initial and continuing site characterizations, as well as other available data (i.e., blueprints and job safety analyses). The purpose of the survey is to develop an inventory of those locations and/or equipment at Acoustics Associates, Inc. that meet the definition of a confined space. This information shall be communicated to personnel, and appropriate confined space procedures shall be followed prior to entry. The initial surveys shall include air monitoring to determine the air quality in the confined spaces. The potential for the following situations shall be evaluated by Responsible Person:

- Flammable or explosive potential.
- Oxygen deficiency.
- Presence of toxic and corrosive material.

Hazard Reevaluation

The Responsible Person shall identify and reevaluate hazards based on possible changes in activities or other physical or environmental conditions that could adversely affect work. A master inventory of confined spaces shall be maintained. Any change in designation of a confined space will be routed to all affected personnel by Responsible Person.

Pre-Entry Hazard Assessment

A hazard assessment shall be completed by Responsible Person(s) prior to any entry into a confined space. The hazard assessment should identify:

- The sequence of work to be performed in the confined space.
- The specific hazards known or anticipated.
- The control measures to be implemented to eliminate or reduce each of the hazards to an acceptable level.

No entry shall be permitted until the hazard assessment has been reviewed and discussed by all persons engaged in the activity. Personnel who are to enter confined spaces shall be informed of known or potential hazards associated with said confined spaces.

Hazard Controls

Hazard controls shall be instituted to address changes in the work processes and/or working environment. Hazard controls must be able to either control the health hazards by eliminating the responsible agents, reduce health hazards below harmful levels, or prevent the contaminants from coming into contact with the workers.

The following order of precedence shall be followed in reducing confined space risks:

- Engineering Controls
    - Engineering controls are those controls that eliminate or reduce the hazard through implementation of sound engineering practices.

    - Ventilation is one of the most common engineering controls used in confined spaces. When ventilation is used to remove atmospheric contaminants from a confined space, the space shall be ventilated until the atmosphere is within the acceptable ranges. Ventilation shall be maintained during the occupancy if there is a potential for the atmospheric conditions to move out of the acceptable range. When ventilation is not possible or feasible, alternate protective measures or methods to remove air contaminants and protect occupants shall be determined by Responsible Person prior to authorizing entry.
    - When conditions necessitate and can accommodate continuous forced air ventilation, the following precautions shall be followed:
        - Employees shall not enter the space until the forced air ventilation has eliminated any hazardous atmosphere.
        - Forced air ventilation shall be directed to ventilate the immediate areas where an employee is or will be present within the space.
        - Continuous ventilation shall be maintained until all employees have left the space.
        - Air supply or forced air ventilation shall originate from a clean source.
- Work Practice (Administrative) Controls
    - Work practice (administrative) controls are those controls which eliminate or reduce the hazard through changes in the work practices (i.e., rotating workers, reducing the amount of worker exposure, and housekeeping).
- Personal Protective Equipment (PPE)
    - If the hazard cannot be eliminated or reduced to a safe level through engineering and/or work practice controls, PPE should be used. Responsible Person(s) shall determine the appropriate PPE needed by all personnel entering the confined space, including rescue teams. PPE that meets the specifications of applicable standards shall be selected in accordance with the requirements of the job to be performed.

Entry Permits

The Confined Space Entry Permit is the most essential tool for assuring safety during entry in confined spaces with known hazards, or with unknown or potentially hazardous atmospheres. The entry permit process guides the supervisor and workers through a systematic evaluation of the space to be entered. The permit should be used to establish appropriate conditions. Before each entry into a confined space, an entry permit will be completed by the Responsible Person. The Responsible Person will then communicate the contents of the permit to all employees involved in the operation and post the permit conspicuously near the work location. A standard entry permit shall be used for all entries.

- Key Elements of Entry Permits
    - A standard entry permit shall contain the following items:
        - Space to be entered.
        - Purpose of entry.
        - Date and authorized duration of the entry permit.
        - Name of authorized entrants within the permit space.
        - Means of identifying authorized entrants inside the permit space (i.e., rosters or tracking systems).
        - Name(s) of personnel serving as Attendant(s) for the permit duration.

        - Name of individual serving as Entry Supervisor, with a space for the signature or initials of the Entry Supervisor who originally authorized the entry.
        - Hazards of the permit space to be entered.
        - Measures used to isolate the permit space and to eliminate or control permit space hazards before entry (i.e., lockout/tagout of equipment and procedures for purging, ventilating, and flushing permit spaces).
        - Acceptable entry conditions.
        - Results of initial and periodic tests performed, accompanied by the names or initials of the testers and the date(s) when the tests were performed.
        - Rescue and emergency services that can be summoned, and the means of contacting those services (i.e., equipment to use, phone numbers to call).
        - Communication procedures used by authorized entrants and Attendant(s) to maintain contact during the entry.
        - Equipment to be provided for compliance with this Confined Space Program (i.e., PPE, testing, communications, alarm systems, and rescue).
        - Other information necessary for the circumstances of the particular confined space that will help ensure employee safety.
        - Additional permits, such as for hot work, have been issued to authorize work on the permit space.
- Permit Scope and Duration
    - A permit is only valid for one shift. For a permit to be renewed, the following conditions shall be met before each reentry into the confined space:
        - Atmospheric testing shall be conducted, and the results should be within acceptable limits. If atmospheric test results are not within acceptable limits, precautions to protect entrants against the hazards should be addressed on the permit and should be in place.
        - Responsible Person shall verify that all precautions and other measures called for on the permit are still in effect.
        - Only operations or work originally approved on the permit shall be conducted in the confined space.

A new permit shall be issued, or the original permit will be reissued, if possible, whenever changing work conditions or work activities introduce new hazards into the confined space. Responsible Person shall retain each canceled entry permit for at least one (1) year to facilitate the review of the Confined Space Entry Program. Any problems encountered during an entry operation shall be noted on the respective permit(s) so that appropriate revisions to the confined space permit program can be made.

Entry Procedures

When entry into a confined space is necessary, either the Entry Supervisor or Responsible Person may initiate entry procedures, including the completion of a confined space entry permit. Entry into a confined space shall follow the standard entry procedure below.

- Prior to Entry
    - Affected personnel shall be trained to establish proficiency in the duties that will be performed within the confined space.
    - The internal atmosphere within the confined space shall be tested by Responsible Person with a calibrated, direct-reading instrument.

- Personnel shall be provided with the necessary PPE as determined by the Entry Supervisor.
- Atmospheric monitoring shall take place during the entry. If a hazardous atmosphere is detected during entry:
  - Personnel within the confined space shall be evacuated by the Attendant(s) or Entry Supervisor until the space can be evaluated by a Responsible Person to determine how the hazardous atmosphere developed.
  - Controls shall be put in place to protect employees before reentry.

- Opening a Confined Space
  - Any conditions making it unsafe to remove an entrance cover shall be eliminated before the cover is removed. When entrance covers are removed, the opening shall be promptly guarded by a railing, temporary cover, or other temporary barrier that will prevent anyone from falling through the opening. This barrier or cover shall protect each employee working in the space from foreign objects entering the space. If it is in a traffic area, adequate barriers shall be erected.
- Atmospheric Testing
  - Atmospheric test data is required prior to entry into a confined space. Atmospheric testing is required for two distinct purposes: (1) evaluation of the hazards of the permit space, and (2) verification that acceptable conditions exist for entry into that space. If a person must go into the space to obtain the needed data, then Standard Confined Space Entry Procedures shall be followed. Before entry into a confined space, Responsible Person shall conduct testing for hazardous atmospheres. The internal atmosphere shall be tested with a calibrated, direct-reading instrument for oxygen, flammable gases and vapors, and potential toxic air contaminants, in that order. Testing equipment used in specialty areas shall be listed or approved for use in such areas by Responsible Person. All testing equipment shall be approved by a nationally recognized laboratory, such as Underwriters Laboratories or Factory Mutual Systems.
    - *Evaluation Testing* - The atmosphere of a confined space should be analyzed using equipment of sufficient sensitivity and specificity. The analysis shall identify and evaluate any hazardous atmospheres that may exist or arise, so that appropriate permit entry procedures can be developed, and acceptable entry conditions stipulated for that space. Evaluation and interpretation of these data and development of the entry procedure should involve a technically qualified professional (i.e., consultant, certified industrial hygienist, registered safety engineer, or certified safety professional).
    - *Verification Testing* - A confined space that may contain a hazardous atmosphere shall be tested for residues of all identified or suspected contaminants. The evaluation testing should be conducted with specified equipment to determine that residual concentrations at the time or testing and entry are within acceptable limits. Results of testing shall be recorded by the person performing the tests on the permit. The atmosphere shall be periodically retested (frequency to be determined by Responsible Person) to verify that atmospheric conditions remain within acceptable entry parameters.
    - *Acceptable Limits* - The atmosphere of the confined spaces shall be considered to be within acceptable limits when the following conditions are maintained:
      - Oxygen: 19.5 percent to 21 percent;
      - Flammability: less than 10 percent of the Lower Flammable Limit (LFL); and
      - Toxicity: less than recognized American Conference of Governmental Industrial Hygienists (ACGIH) exposure limits or other published exposure levels [i.e.,

OSHA Permissible Exposure Limits (PELs) or National Institute of Occupational Safety and Health (NIOSH) Recommended Exposure Limits (RELs)].

- Isolation and Lockout/Tagout Safeguards
    - All energy sources that are potentially hazardous to confined space entrants shall be secured, relieved, disconnected, and/or restrained before personnel are permitted to enter the confined space. Equipment systems or processes shall be locked out and/or tagged out as required by the Acoustics Associates, Inc. Lockout/Tagout Program [which complies with OSHA's 29 CFR 1910-147 and American National Standards Institute (ANSI) Z244.1-1982, Lockout/Tagout of Energy Sources] prior to permitting entry into the confined space. In confined spaces where complete isolation is not possible, Responsible Person shall evaluate the situation and make provisions for as rigorous an isolation as practical. Special precautions shall be taken when entering double-walled, jacketed, or internally insulated confined spaces that may discharge hazardous material through the vessel's internal wall. Where there is a need to test, position, or activate equipment by temporarily removing the lock or tag or both, a procedure shall be developed and implemented to control hazards to the occupants. Any removal of locks, tags, or other protective measures shall be done in accordance with the Acoustics Associates, Inc. Lockout/Tagout Program.
- Ingress/Egress Safeguards
    - Means for safe entry and exit shall be provided for confined spaces. Each entry and exit points shall be evaluated by Responsible Person to determine the most effective methods and equipment that will enable employees to safely enter and exit the confined space. Appropriate retrieval equipment or methods shall be used whenever a person enters a confined space. Use of retrieval equipment may be waived by the Responsible Person(s) if use of the equipment increases the overall risks of entry or does not contribute to the rescue. A mechanical device shall be available to retrieve personnel from vertical confined spaces greater than five (5) feet in depth.
- Warning Signs and Symbols
    - All confined spaces that could be inadvertently entered shall have signs identifying them as confined spaces. Signs shall be maintained in a legible condition. The signs shall contain a warning that a permit is required before entry. Accesses to all confined spaces shall be prominently marked.

Multiple Employers

In order to eliminate confusion and prevent endangering employees of other entities, the entry supervisor must:

- Inform other employers and their employees of all permit-required confined spaces.
- Supply all relevant confined space specific documentation to employers who may have personnel enter or work near confined spaces.
- Inform the employer that compliance with this program or one that is more stringent is mandatory before confined space entry is permitted.
- 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.
- Keep employers informed on the status of each confined space such as when the permits are terminated or re-issued.
- Additional employers who are responsible for performing confined space operations shall:

    - Verify that all documented information regarding all confined spaces has been received before entry is permitted.

- Coordinate all confined space operations with Acoustics Associates, Inc. entry supervisor when employees of both entities will be working in or near permit-required confined spaces.
- Inform Acoustics Associates, Inc. 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.
- Provide copies of all confined space documentation to Acoustics Associates, Inc. entry supervisor.

Emergency Response Plan

- Emergency Response Plan
  - Responsible Person shall maintain a written plan of action that has provisions for conducting a timely rescue of individuals within a confined space, should an emergency arise. The written plan shall be kept onsite where the confined space work is being conducted. All affected personnel shall be trained on the Emergency Response Plan.
- Retrieval Systems and Methods of Non-Entry Rescue
  - Retrieval systems shall be available and ready when an authorized person enters a permit space, unless such equipment increases the overall risk of entry, or the equipment would not contribute to the rescue of the entrant. Retrieval systems shall have a chest or full-body harness, and a retrieval line attached at the center of the back near shoulder level or above the head. If harnesses are not feasible, or would create a greater hazard, wristlets may be used in lieu of the harness. The retrieval line shall be firmly fastened outside the space so that rescue can begin as soon as anyone is aware that retrieval is necessary. A mechanical device shall be available to retrieve personnel from vertical confined spaces more than five (5) feet deep.

Rescue Services

Rescue services vary depending on the specific circumstances of the confined space or work site. Therefore, coordination between the safety manager and the entry supervisor shall occur in order to determine which service is best suited for the specific circumstances of each confined space. Rescue services shall be provided by:

- The host facility;
- An outside service which is given an opportunity to examine the entry site, practice rescue and decline as appropriate, or
- Acoustics Associates, Inc. by selecting a rescue team that is equipped and trained to perform the needed rescue services.

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

DISCIPLINARY PROGRAM

Purpose

The purpose of Acoustics Associates Disciplinary Program is to provide a method for ensuring compliance with rules concerning operation, personnel, safety, security and other regulations. All employees are subject to this program. Personnel authorized to enforce or administer the Disciplinary Program are determined by management. Fair and impartial enforcement requires that the circumstances of each case be determined and that disciplinary action, when appropriate, be taken and documented.

Scope

This program applies on Acoustics Associates worksites or locations and to all Acoustics Associates employees regardless of position or employment duration with Acoustics Associates.

Key Responsibilities

Safety Manager

- Responsible for the implementation and enforcement of this program
- Ensure that disciplinary actions are adequate to ensure program effectiveness
- Conduct disciplinary action procedures in accordance with this program
- Retaining document records

Supervisors

- Assist the Safety Manager in enforcing this program
- Ensure that employees are aware of what constitutes a safety violation and follow on actions
- Report all safety violations to the Safety Manager who will determine what action items should follow the violation
- Support the Safety Manger in disciplinary action procedures

Employees

- Understand and comply with all parts of this program
- Help prevent incidents by reporting safety violations to their supervisor
- Formally report any disciplinary / corrective actions that you believe are unfair or discriminatory to our supervisor immediately

Requirements

Employee safety is extremely important to the owners and management of Acoustics Associates. Not following safety rules or procedures could cause serious injury or death and is considered unacceptable. Complying with this safety program is mandatory. Safety violations include but are not limited to:

- Intentional disregard of the safety rules, procedures or guidelines required by Acoustics Associates or it's clients
- Horseplay or other actions that compromise safety and health
- Non-compliance with Acoustics Associates PPE Program requirements or other written Acoustics Associates requirements

- Using or possessing alcohol or illegal drugs working work hours or on Acoustics Associates premises or worksites
- Not reporting incidents as required by Acoustics Associates policies and programs
- Attempted or actual physical force to cause injury, threatening statements or other actions to cause an employee to feel that they are at risk or injury
- Harassing, threatening or otherwise putting the health or safety of others at risk

Procedure

The following disciplinary action procedures shall be applied after a Safety Violation Notice has been issued:

- 1st Safety Violation:
    - The first safety violation will result in a verbal warning. However, a copy of the safety violation notice shall be issued and kept on record for the duration of the employee's employment. The supervisor or safety manager will inform the employee of which safety rules or procedures were violated and recommend corrective actions or actions to prevent re-occurrence. The employee's direct supervisor and or other applicable persons shall also be notified of the violation and shall receive a copy of the safety violation notice.
- 2nd Safety Violation:
    - The second safety violation shall result in a written disciplinary action form and possible training on the safety violation subject matter. The disciplinary action form shall include the issue date, name and signature of employee, name and signature of supervisor, violation number, violation description and disciplinary / corrective actions which were taken or are to be taken.
- 3rd Safety Violation:
    - The third safety violation shall result in another disciplinary action form but must include temporary layoff for a duration which shall be determined in collaboration between the safety manager, supervisor and / or other applicable personnel. The severity of the violation is to be considered when disciplinary action is applied.
- 4th Safety Violation:
    - The fourth safety violation shall result in termination of employment unless there is a compelling reason to retain the employee which is to be determined by the safety manager, supervisor and other applicable personnel.

*The affected employee may submit a written rebuttal at any time before, during or after the disciplinary period.

*Safety Violations shall expire 12 months after the date they are issued.

*All disciplinary actions are subject to change based on the severity or degree of negligence. For example, if an employee physically harms another employee, intentionally commits an unsafe act that results in harm, potential harm, damage or potential damage that places Acoustics Associates or its employees at significantly higher level of risk or results in losses that are considered serious; the employee could be terminated without having multiple safety violations. Therefore, the degree of disciplinary action will often be determined on a case-by-case basis and will vary depending on the violations severity or effects of the violation.

Recordkeeping

All safety violation documentation will be kept on file for 2 years after employment is terminated. In cases where the disciplined or terminated employee claims discriminatory or unfair disciplinary / corrective action or termination; the employee's entire employee file (including all safety violation documentation) shall be kept for 3 years after their employment is terminated.

ACOUSTICS ASSOCIATES
10750 XYLON AVE N., SUITE 140, BROOKLYN PARK, MN 55445
MAIN: 763.544.8901

SAFETY VIOLATION / DISCIPLINARY ACTION FORM

Issue Date:	Issued By:	Issued To:	Department:	Violation #:
Violation Description:				
Disciplinary / Corrective Actions:				
Additional Comments:				

Employee Name Printed:	Employee Signature:	Date:
Supervisor Name Printed:	Supervisor Signature:	Date:

☐ Check Box if Employee Refused To Sign

Date Mailed:

DRIVING SAFETY POLICY

Purpose

The purpose of policy is to reduce vehicle incident and at-fault work related incidents and injuries by promoting a safe driving culture within the Company, make drivers aware of the main risks they face or create while driving and to make sure that employees who drive Company vehicles demonstrate safe, efficient driving skills.

Scope

Acoustics Associates will provide managers, supervisors and their employees with the regulatory requirements necessary for compliance with the operation, management and safety of Acoustics Associates vehicles.

Key Responsibilities

Managers and Supervisors

Acoustics associates will take all steps to ensure company vehicles are as safe as possible and will not require employees to drive under conditions that are unsafe or likely to create an unsafe environment, physical distress or fatigue. The manger will do this by:

Vehicle maintenance

- Ensuring all vehicles are well maintained and that the equipment promotes driver, operator and
- passenger safety by:
- Fitting all vehicles with a first aid kit, a fire extinguisher, a high visibility vest, and a flashlight
- Servicing the vehicles according to manufacturers' recommendations
- Check the vehicle's oil, water, tire pressures and general cleanliness on a monthly basis
- Keeping maintenance schedules in the glove boxes of all vehicles, which are completed each time the vehicles are serviced in any way
- Following the maintenance schedules in the vehicles' manuals
- Setting up a procedure to identify and rectify all defects no how matter how small, as soon as practicable

Data on collisions and incidents

Collecting and collating statistics on incidents, collisions and their causes, including:

- The number of collisions
- Who was thought to be at fault
- The probable causes of the collisions and other contributors, such as unrealistic work schedules
- The financial cost of all collisions
- The number of prosecutions
- The number of near-miss events
- Other costs, such as downtime, compensation claims, temporary workers and lost productivity

Driving time and driver hours

Monitoring and managing work schedules to ensure they do not encourage unsafe driving practices by:

- Requiring drivers to comply with driver hours regulations and DOT requirements (if applicable)
- Requiring non-commercial drivers to take 15-minute breaks every two hours of driving

Taking into account individual drivers' needs by:

- Requiring employees to keep driving logs that are regularly checked by a supervisor or manager.

Driver training

Identifying driver training needs and arranging appropriate training or refresher training, including providing:

- A thorough induction to the company's road safety policies and procedures
- Driver training opportunities
- Training aimed at managing the driving risk or specific practical training as required and identified
- Regular employee seminars or refresher meetings on safety features, fatigue, driver responsibility, drunk-driving and fuel-efficient driving

Safe driver behavior

Encouraging safe driving behavior by:

- Not paying employees' speeding or other infringement fines
- Forbidding the use of mobile phones in vehicles while driving
- Encouraging regular breaks while driving
- Making sure the employer is informed if existing employees become unlicensed

Employees

Every driver of a company vehicle must:

- Make sure they hold a current driver license for the category of vehicle they are driving and this license is carried when driving a company vehicle
- Immediately notify their supervisor or manager if their driver license has been suspended or cancelled, or has had limitations placed upon it
- Take time to familiarize themselves with the vehicle's handbook
- Be responsible and accountable for their actions when operating a company vehicle or driving for the purposes of work
- Carry out a full daily walk around check prior to using the vehicle
- Display the highest level of professional conduct when driving a company vehicle
- Regularly check the oil, tire pressures, radiator and battery levels of company vehicles they regularly use
- Comply with all Acoustics Associates safety and health policies, procedures and programs
- Assess hazards while driving and anticipate 'what if' scenarios
- Drive within the legal speed limits, including driving to the conditions
- Wear a seat belt and make sure all occupants always wear their seat belt
- Only drive when fit to do so – never drive under the influence of alcohol or drugs, including prescription and over the counter medication if they cause drowsiness

- Avoid distraction when driving – if you need to, adjust or set sat-navs / car stereos / mirrors before setting off. If you need to re-adjust whilst driving pull over safely to do so
- Report any near-misses, crashes and scrapes, including those that do not result in injury
- Report vehicle defects before the next vehicle use
- Never carry any hazardous substances without the prior approval of the warehouse manager.

Hazardous goods may only be carried in full compliance with relevant legislation

In addition, it is required that all drivers:

- Take regular and adequate rest breaks, at least every two hours
- Stop when tired
- Plan their journeys, taking into account pre-journey work duties, the length of the trip and post-journey commitments
- Stay overnight if driving time and non-driving duties exceed 10 hours in one day

Drivers using their own car for work

If an employee is driving their own vehicle for work, the same policies apply.

In addition:

- The employee must seek the employer's approval before using their vehicle for work
- The vehicle must be legally registered, authorized and insured for the purposes of work – the employee must show evidence of this on request
- The employee must not carry loads for which the vehicle is unsuited, nor may they carry more passengers than there are seat belts
- The vehicle must not be used in conditions for which it was not designed (such as off-road)

Safe Driving Practices

In order to drive a particular Acoustics Associates or client vehicle, employees must possess a valid driver's license for that particular vehicle, have prior authorization to drive a Company-owned vehicle, possess at least three years of experience operating that type of vehicle and received recent evaluation and training for that vehicle.

In addition to these practices, the following rules must be followed:

- Reversing a vehicle is forbidden in most circumstances, as drivers should make every effort to park a vehicle so that they can drive forward when leaving
- Ensure that vehicles are of correct size and designed for the intended use
- When reversing an automobile, if the vehicle does not have a reversing alarm, the driver should walk around the back of the vehicle or use a spotter before backing
- Delivery trucks should not carry any passengers
- All storage areas within a vehicle are to be free of any loose materials, in case of an accident
- Any open cargo holds should be covered with a net or netting equivalent
- No alterations shall be made to vehicles without prior authorization from the vehicle's manufacturer
- Any signs or stickers placed on the vehicle should not impair the driver's field of vision or operation of the controls

Employees driving vehicles are required to follow safe driving practices:

- All laws, both local and federal, must be followed along with any client requirements
- Always stay focused on the road and keep both hands on the wheel
- Drive defensively, so that conditions and potential hazards are being continually assessed
- No electronic devices may be used while operating a vehicle. The vehicle must be parked for a driver to use a cell phone or two-way radio
- Posted speed limits shall never be exceeded
- Any traffic warnings, citations, collisions, near-collisions or vehicle damage must be immediately reported to the supervisor
- Any changes to an employee's driving status must be reported to the supervisor,
- Seat belts must be worn by all passengers while the vehicle is moving; passengers may only use seats that are equipped with the proper seatbelt (three-point inertial-reel model belts)
- Drive slowly upon entering construction areas and in areas where encounters with large vehicles or wildlife are likely
- Drive cautiously in hazardous driving conditions like rain, snow, fog or sleet. If necessary, drive for the conditions and under the recommended speed limit
- Employees are forbidden to drive under the influence of alcohol, illegal drugs, or prescription and over-the-counter medications that may inhibit their driving. Also, alcohol and illegal drugs should never be in leased or Acoustics Associates or client owned vehicles.

Drivers are to be prepared before leaving:

- The driver must be well-rested and fully alert in order to operate an Acoustics Associates vehicle
- Drivers should check their vehicle for damages and immediately report any new damage to the supervisor
- Check for windshield damage that might impair the driver's field of vision
- Remove all dirt, snow and ice from the vehicle's lights and windows so that there is nothing blocking the driver's view
- Make sure there is enough fuel in the gas tank to reach your destination. Other than adding fuel and other necessary fluids, drivers are not permitted to perform any kind of maintenance or repairs
- Check the license plates and inspection tag on the automobile to ensure that both are current
- Double check to make sure that the vehicle is equipped with a first-aid kit and an inspected fire extinguisher

Vehicle Requirements:

- All vehicles will be maintained in safe working order
- Any vehicle weighing less than 1000 kg is not allowed on public roads
- Vehicles with a restricted rear view (such as a fully loaded pickup truck) or that are longer than 20 feet (6 meters) must be equipped with an audible reversing alarm
- Every seat must have a head-rest
- Every light-duty vehicle, including buses, must come with adjustable left, right and center rear view mirrors
- All loads must be secured and are not to exceed either the manufacturer's specs or the legal limit for the automobile

- All vehicles will have rollover protection installed, in compliance with the industry standard regulatory practices
- Every light equipment vehicle must be equipped with two high-intensity lights. These high-intensity lights must be located as high, as far apart and as far back as possible. The lights will be wired to the headboard switch, and will have their own override switch, should local regulations allow it.

Regarding Tires:

- Tires, including a full-sized spare, must be of the same make, model and tread patterns. The only exception to this rule is when the automobile or tire manufacturer recommends a different type of tire for particular axles
- The vehicle's equipped tires are the ones recommended by the automobile or tire manufacturer
- All vehicles must carry a spare tire and the equipment necessary to safely change a tire

All vehicles must come equipped with:

- A fire extinguisher that has a capacity of least 0.9 kg or 2 lbs
- The fire extinguisher must be mounted securely in a location that is easily accessible in case of an emergency, and where it won't become a hazard itself in case of an accident
- A first-aid kit that is stored in a safe and secure place
- A high-visibility vest to use if there is an emergency
- At least one hazard warning triangle

Transportation

- Whenever an employee is assigned to drive an Acoustics Associates vehicle, the driving conditions, including the roads, weather and traffic, should be safe for the employees
- Before an employee can drive a Company vehicle, the employee must ensure that the vehicle has been properly inspected
- Both drivers and passengers must be wearing seat belts while the vehicle is in motion
- Passengers must be seated and all body parts must remain inside the vehicle at all times, unless doing so is essential to an employees work and then, only if the worker is properly restrained
- Tools and other materials must be securely stored inside of a compartment to prevent injury to the driver or passengers

ELECTRICAL SAFETY AWARNESS PROGRAM

Purpose

The purpose of this program is to establish Acoustics Associates safe work practices for electrical tools, equipment and their related components.

Scope

The scope of this program covers all permanent and temporary Acoustics Associates employees and Acoustics Associates contractors while working on Acoustics Associates owned sites. If Acoustics Associates does not own the site, the site owner's program shall be used on the site unless the site owner's program is less stringent.

Key Responsibilities

Safety Manager

- Develop electrical safety programs & procedures in accordance with regulatory standards and as required by each individual site.
- Ensure that ACOUSTICS ASSOCIATES INC employees fully comply with this program.
- Ensure that no unqualified employees work on energized electrical circuit equipment or their parts.

Managers and Supervisors

- Ensure that only qualified employees and / or qualified contractors perform electrical repairs and installations.
- Ensure that electrical programs and procedures address site specific hazards or hazards that are presented by unique circumstances at their respective areas of responsibility.
- Ensure that no unqualified employees work on energized electrical circuit equipment or their parts.
- Ensure that no unqualified employees work on energized electrical circuit equipment or their parts.
- Ensure individual familiarity with the use of special precautionary techniques, personal protective equipment, insulated tools, insulating materials and shielding materials.

Employees

- Ensure that only qualified employees work on energized electrical circuit equipment or other related parts.
- Report all potential electrical hazards to supervisors immediately.
- Adhere to the requirements of this and all Acoustics Associates safety and health programs, policies and procedures.

Definitions

Class I Hazardous Locations – areas having the presence of flammable *gases or vapors* in the air, such as natural gas or gasoline vapor. When these materials are found in the atmosphere, a potential for explosion exists, which could be ignited if an electrical or other source of ignition is present. The Code writers have referred to this first type of hazard as Class I. So, a Class I Hazardous Location is one in which *flammable gases or vapors* may be present in the air in sufficient quantities to be explosive or ignitable. Some typical Class I locations are:

- Petroleum refineries and gasoline storage and dispensing areas

- Drycleaning plants where vapors from cleaning fluids can be present
- Spray finishing areas
- Aircraft hangars and fuel servicing areas
- Utility gas plants and operations involving storage and handling of liquified petroleum gas or natural gas

All of these are Class I *gas or vapor hazardous* locations. All require special Class I hazardous location equipment.

Class II Hazardous Locations – areas made hazardous by the presence of combustible *dust*. Finely pulverized material, suspended in the atmosphere, can cause as powerful of an explosion as one occurring at a petroleum refinery. Some typical Class II locations are:

- Grain elevators
- Flour and feed mills
- Plants that manufacture, use or store magnesium or aluminum powders
- Producers of plastics, medicines and fireworks
- Producers of starch or candies
- Spice-grinding plants, sugar plants and cocoa plants
- Coal preparation plants and other carbon handling or processing areas

Class III Hazardous Locations – areas where there are *easily-ignitable fibers or flying's* present, due to the types of materials being handled, stored, or processed. The fibers and flying's are not likely to be suspended in the air, but can collect around machinery or in the lighting fixtures and where heat, a spark or hot metal can ignite them. Some typical Class III locations are:

- Textile mills, cotton gins
- Cotton seed mills, flax processing plants
- Plants that shape, pulverize or cut wood and create sawdust or flying's

Qualified Person – A person who has current training in the operation, repair, maintenance, construction and implementation of electrical equipment and electrical hazards.

Circuit Breaker – An automatic switch that stops the flow of electric current in a suddenly overloaded or otherwise abnormally stressed electric circuit.

Disconnecting Means – A device or other means by which circuit conductors can be disconnected from a power supply.

Disconnecting Switch - A device, which is used to isolate a circuit or equipment from a power source.

Double Insulated Tool – Tools which are constructed using non-conductive materials that do not require grounded, 3-wire plugs.

Grounded Conductor – A conductor that is used to connect equipment or the grounding circuit of a wiring system to a grounding electrode or several grounding electrodes.

Ground Fault Circuit Interrupter (GFCI) – A device that interrupts the electrical circuit to the load when a fault current to the ground exceeds a predetermined value that is less that what is required to operate the over current protective device of the supply circuit.

Safe Work Practices

General

- All electrical equipment, tools and related components must be inspected prior to each use.
- Equipment, tools and related components, which are unserviceable or faulty, shall be removed from service and tagged appropriately with the date of inspection, the name of the inspecting employee and signature of inspecting employee.
- Only qualified personnel may repair electrical tools, cords and other related equipment.
- Only certified electricians may repair or conduct maintenance on electrical equipment and wiring systems.
- The site supervisor shall verify contract electrician credentials before work begins.
- Employees shall not wear conductive apparel such as rings, watches, etc. unless they are rendered nonconductive by covering, wrapping or other insulating means.
- When working on or near exposed de-energized parts, those parts shall be treated as live.
- 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 must be plugged into a wall receptacle.
- Multiple outlet boxes must not be used to provide power to microwave ovens, toasters, space heaters, hot plates, coffeepots, or other high-current loads.
- Double insulated tools must have the factory label intact indicating the tool has been approved to be used without a 3-wire grounded supply cord connection.
- Double insulated tools must not be altered in any way, which would negate the factory rating.
- Only approved, certified, electrical contractors may perform construction and service work on Acoustics Associates or client property.
- It is the Manager/Supervisors responsibility to verify the contractor's certification.

Extension Cords

- Use only 3-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.
- Only commercial or industrial rated-grounded extension cords may be used in shops and outdoors.
- Cords for use other than indoor appliances must have a rating of at least 14 amps.
- Cords must have suitable strain relief provisions at both the plug 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 must have a service rating for hard or extra-hard service and have S, AJ, ST, SO, SJO, SJT, STO, or SJTO printed on the cord.
- Cords may not be run through doorways, under mats or carpets, across walkways or aisles, concealed behind walls, ceilings or floors, or run through holes in walls, or anywhere they can become a tripping hazard.
- High current equipment or appliances should be plugged directly into a wall outlet whenever possible. All extension cords should be plugged into one of the following:
    - A GFCI outlet
    - A GFCI built into a cord

  - A GFCI adapter used between the wall outlet and cord plug
- All extension cords and or electrical cords shall be inspected daily or before each use, for breaks, plug condition and ground lugs, 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.
- Extension cords shall not be used on compressor skid to operate heat tapes or any other type of equipment on a temporary basis. Heat tapes or other equipment shall be hard wired per applicable electrical codes.

Illumination

- Employees shall not enter spaces containing exposed energized parts unless qualified and proper illumination exists to enable employees to work safely.

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 labelled with the voltage rating.
- Each breaker within a breaker panel must be labelled for the service it provides.
- Disconnect switches providing power for individual equipment must be labelled accordingly.

Ladders

- Portable ladders must have non-conductive side rails.
- Ladders must be manufactured using non-conductive materials such as fiberglass or wood.
- Aluminum or metal ladders are strictly prohibited.
- Ladders shall be free of defects and defective components.
- Ladders shall be used per the manufacturer's recommendations only.

Energized and Overhead High Voltage Power Lines and Equipment

- A minimum clearance of 10 feet from high voltage lines must be maintained when operating vehicular and mechanical equipment such as forklifts, cranes, winch trucks, and other similar equipment.
- When possible, power lines shall be de-energized and grounded or other protective measures shall be provided before work is started.
- The minimum approach distance to energized high power voltages lines for unqualified employees is 10 feet.
- Minimum approach distance for qualified employees shall be followed per 29 CFR 1910.333(c)(3)(i) Qualified – Table S5 Selection and Use of Work Practices - Approach Distances for Qualified Employees – Alternating Current). Approach distances are 10’ for 50kV plus 4” for every additional 10kV.

Confined or Enclosed Workspaces

- 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 (Only qualified electricians can work on an exposed energy source.)
- Protective shields, protective barriers or insulating materials are necessary and should be provided.

Enclosures, Breaker Panels 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 safe operation and to permit access for maintenance and alteration.
- A minimum of two-foot working floor space in front of panels and enclosures shall be painted yellow.
- 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, ect.)

Lock Out / Tag Out

- No work shall be performed on (or near enough to them for employees to be exposed due to the dangers of tools or other equipment coming into contact with the live parts) live parts and the hazards 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 de-energized but have not been locked or tagged out shall be treated as live parts.
- Per Acoustics Associates policy all electrical will be outsourced and performed only by qualified and licensed electrical contractors who are familiar with the use of special precautionary techniques, PPE, insulating and shielding materials and insulated tools. Any equipment being made ready for maintenance will be locked out using Acoustics Associates Lock Out/Tag Out Program. Lockouts are performed by the Safety Manager, Shop Foreman or Branch Manager. Designated employees in some branches may be trained by local management to lock out equipment. If live sources are to be worked, it will only be performed with the knowledge of local management. Only certified electricians may work on electric circuit parts or equipment.
- Only authorized personnel may perform lock out/tag out work on electrical equipment and will follow ACOUSTICS ASSOCIATES INC's Control of Hazardous Energy – 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.

Fire Extinguishers

- Approved fire extinguishers must be provided near electrical breaker panels and distribution centers.
- Water type extinguishers shall not be located closer than 50 feet from 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 make contact with 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

- All gas compressors, air compressors, separators, vessels, etc. shall be grounded by means of using a lug and ground strap, nominal in size to a 1/2" bolt or larger, attached to a ground rod six feet or longer.
- Equipment bonding jumpers shall be of copper or other corrosion-resistance material.
- The transfer of hazardous or flammable material from a metal or plastic container with a flash point of 100 degrees F or less shall have a ground strap from the container and attached to the skid or a ground rod placed in the ground.

Assured Grounding

OSHA requires that employers use either ground fault circuit interrupters (GFCI) or an assured equipment grounding conductor program to protect personnel from electrical shock while working. See Acoustics Associates Assured Equipment Grounding Program.

Ground Fault Circuit Interrupters

All 120-volt, single-phase 15 and 20 ampere receptacle outlets on construction or maintenance 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.
- The GFCI must be tested before each use.

Training

- All Acoustics Associates employees, temporary and full time, shall be trained in electrical safety practices and procedures to minimize the risk of electrical shock.
- Unqualified employees who may be exposed to electrical shock shall receive training and acquire familiarity with electric safety work practices.
- All Acoustics Associates shall be trained in safety related work practices that pertain to their respective job assignments.

- Safe work practices shall be used to prevent electric shock or other related incidents as a result of energy source contact while working near or on energized equipment or circuits.
- Acoustics Associates employees must adhere to the approach distances in Table S5 of CFR 1910.333.

Table S5 of CFR 1910.333

Voltage Rage (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)

EMERGENCY ACTION PLAN

Purpose

The purpose of this Emergency Action Plan is to establish requirements for responding to any kind of emergency situation, which could result in an employee injury or illness.

Scope

This program supports compliance with the Occupational Safety and Health Administration emergency plan Standard as found in 29 CFR 1910.38. This program applies to all company employees. Specific construction site emergency response procedures are outlined in the attached "Site-Specific Emergency Action Plan".

Responsibilities

Safety Manager

- Issues and administers this program and makes sure that the program satisfies the requirements of all applicable Federal, State or Local requirements.
- Delegates the day-to-day administration of the program to the Superintendents.
- Provides initial training to employees.
- Maintains the training records of all employees included in the training sessions.
- Maintains an emergency escape route map for the office areas.
- Maintains unblocked escape routes in the office areas.

Supervisors/Foreman

- Ensuring each location has a dedicated emergency action plan
- Ensuring that each site foreman acts as the dedicated emergency coordinator
- Ensuring that emergency drills are conducted for each permanent site at least annually
- Ensuring that inspections and corrective actions are performed for each site at least monthly
- Site Emergency Coordinators (foreman) shall:
    - Train all site employees on site-specific emergency action
    - Ensure employees are trained on proper fire extinguisher use
    - Conduct monthly inspections of site to ensure compliance with fire safety and emergency requirements
    - Report to ACOUSTICS ASSOCIATES INC Safety Specialist regarding all non-compliance issues

Employees

- Always maintains unblocked escape routes on the jobsite.
- Understands the fire hazards of specific processes.
- Know the location of the nearest fire extinguisher.
- Know the locations of exits and severe weather shelters in their areas.
- Follow all emergency evacuation procedures at all times and act only as trained.

General Requirements

The following requirements shall be met in order to maintain compliance with Acoustics Associates and regulatory fire safety and emergency safety requirements.

- The site-specific emergency action plan shall be available to all employees for review and shall include procedures for reporting a fire or other emergency.
- Each emergency action plan shall have procedures for emergency evacuation, reporting fires & other emergencies
- Each emergency action plan shall include procedures to account for all employees after the evacuation
- Contact information shall be provided to employees who need additional information pertaining to the plan or to their respective duties
- Each site will have a system in place to alert employees
- Each site foreman shall review the emergency action plan with employees
- No employee may remain onsite during and emergency to operate critical operations (not permitted)
- Upon arriving at the designated safety area (outlined in the site-specific safety plan), a head count shall be performed to ensure that all employees are accounted for.
- Contact information shall be made available to employees who need additional information regarding the plan or their specific duties.
- Our emergency action plan shall be reviewed when; the plan is developed or the employee is assigned initially to a job, the employees' responsibilities under the plan change or when the plan itself is changed.
- Acoustics Associates shall ensure that the alarm system is distinctive and recognizable as a signal to evacuate the work area or perform actions designated under the emergency action plan.

List of Emergency Types

Potential emergency types shall be addressed in each site-specific emergency action plan and shall include procedures for:

- Fires or Explosions
- Release of hazardous gases or chemical substances
- Bomb or Terror Threats
- Health / Medical Emergencies
- Workplace Violence
- Natural Disasters

Emergency Equipment

Each site shall have a detailed list within its site-specific emergency action plan that outlines emergency equipment requirements. Unless otherwise determined by the site emergency coordinator, each site will have a minimum of the following emergency equipment items:

- 1 First Aid Kit for every 20 employees
- Emergency exit signs and lighting as required by local fire codes
- Portable fire extinguishers which are properly mounted and marked so they are easily identified
- Alarms and other required audible emergency sounding devices

Training & Education

ACOUSTICS ASSOCIATES INC shall facilitate emergency action and evacuation training to ensure that employees understand the emergency and evacuation procedures applicable to their specific site. Training shall include the safe and orderly evacuations of other employees.

Records & Documentation

Each site shall maintain all training and / or other documentation related to its' site for at least 5 years.

Appendix

1. Site-Specific Emergency Action Plan Template

ACOUSTICS ASSOCIATES
10750 XYLON AVE N., SUITE 140, BROOKLYN PARK, MN 55445
MAIN: 763.544.8901

Site-Specific Emergency Action Plan

Although ACOUSTICS ASSOCIATES INC. takes precautions to prevent them, emergencies do occur. When they do, they require quick, correct and decisive responses. Employees have been informed of the company's planned response to emergency situations, and they are expected to adhere to these guidelines for the duration of this project.

The elements of this plan, as required by 29 CFR 1926.35, are as follows:

I. Emergency evacuation plan
II. Critical operations
III. Methods to account for ACOUSTICS ASSOCIATES INC. employees
IV. Rescue and medical duties
V. Means of reporting emergencies
VI. Company representative(s) responsible for plan

I. Emergency Evacuation Plan

-Evacuation procedures are as follows: _____

_____

_____

_____

II. Critical Operations

-If any emergency occurs on a project involving propane, combustion engine equipment or electrical tools, ACOUSTICS ASSOCIATES INC. employees will shut off propane sources at the cylinders and turn off all equipment before evacuating, provided employee safety is not jeopardized by doing so.

Does this project involve the use of propane?	Yes _____	No _____
Does this project involve the use of combustion engine equipment?	Yes _____	No _____
Does this project involve the use of electrical tools or other ignition sources?	Yes _____	No _____
Does this project involve the use of other critical operations not listed?	Yes _____	No _____

Explain:_____

_____

-If our employees are not able to shut off propane supplies, the fire department or other responding emergency agency will be notified of the presence and locations of the propane tanks.

-List locations of propane on this site: _____

III. Methods to Account for Acoustics Associates Inc. Employees

-Employees have been instructed to meet at a designated location so that they can be accounted for on the project. If it is determined that any employees are missing, the responding emergency agency will be notified. The agency also will be informed about the last approximate whereabouts of missing employees.

-The meeting location will be chosen based on the type of emergency involved. The Job Foreman will account for wind direction and potential hazards in determining the meeting place.

The meeting location for this project will be:_____

_____

IV. Rescue and Medical Duties

This crew has been specifically trained to rescue and/or attend to injured employees. Yes _____ No _____

If "No" has been checked, our employees will rely on paramedics or other emergency rescue teams.

-If "Yes" has been checked, those employees trained in rescue operations will perform duties according to the training they have received. The remaining employees will meet at the designated meeting area.

V. Means of Reporting Emergencies

-When a fire or emergency occurs, it is our intention to notify all employees, affected contractors, building owners and homeowners about the crisis.

-The first call will be made to the local fire department by using 911. If 911 is unavailable in the job's area or there is an on-site fire department, such as on military installations, that emergency telephone number will be used instead. Emergency telephone numbers are included in this plan.

-If there are 10 employees or fewer in the area, a human voice will be used to notify those on the job. For projects involving more than 10 employees, airhorns or similar equipment will be used.

VI. Company Representative(s) Responsible for Plan

-The Job Foreman is the responsible person to contact with any questions regarding this plan. If additional information is needed, the Safety Specialist should be contacted.

Emergency Contacts

Project Address:

Project Telephone: ( )

Home Office Telephone: ( )

Local Police Telephone: ( )

Local Fire Telephone: ( )

Local Paramedics Telephone: ( )

Local Hospital Address:

Local Hospital Telephone: ( )

Directions from Job Site to Nearest Hospital:

Use the space below to draw directions to the hospital. Be sure to include the north arrow.

EMPLOYEE RIGHT TO KNOW

HAZARD COMMUNICATION (HAZCOM)

Purpose

The purpose of this program is to ensure that the hazards of all chemicals and substances are identified and evaluated, and that the information concerning their hazards is communicated to employees, emergency response organizations, state and federal agencies, and other employers and contractors, as necessary. This hazard information will be clearly communicated and displayed in accordance with this Minnesota Right To Know (RTK) Program.

ACOUSTICS ASSOCIATES INC is firmly committed to providing each of its employees with a safe and healthy work environment. It is recognized that workers may use chemicals or substances that have potentially hazardous properties. When using these substances, workers must be aware of the identity, toxicity or hazardous properties of a chemical or substance. We believe an informed employee is more likely to be a safe employee. To this end, we have established and implemented a written Minnesota Right To Know (RTK) Program.

Scope

This program is applicable to all employees who may come in contact with hazardous chemicals while working for ACOUSTICS ASSOCIATES INC. This document is to be followed by all ACOUSTICS ASSOCIATES INC employees and contractors on ACOUSTICS ASSOCIATES INC owned premises. In addition, this program is to be used in the event an operator program does not exist or is less stringent than our own.

Responsibilities

Safety Manager

- Approves the RTK Program.
- Ensures budgetary allotments to support the RTK Program.
- Delegates to the Superintendents the day-to-day implementation and administrative responsibilities of the program.
- Upon need, establishes specific responsibilities and performance levels for the Foreman.
- Requires Superintendents to label secondary containers with required label information.
- Requires Superintendents to include an orientation of chemical type/used within that department.

Safety Specialist

- Develops, writes and updates RTK when needed.
- Keeps abreast of RTK regulatory changes.
- Arranges the RTK annual training sessions.
- Responds to and makes available upon request to employees, their designated representatives, and OSHA Safety Investigators the written RTK Program or a product's SDS.
- Overall, implements the RTK Program.
- Investigates serious accidents involving chemicals or incidents of "over-exposure".
- Custodian of RTK training records and the written program.

- Enforces safe chemical handling rules recommending disciplinary action to the Superintendents for repeated violation of policies and procedures.

Superintendents

- Informs Safety Specialist of any serious chemical handling exposures, needed PPE, training issues.
- Understands the purpose and process of the RTK Program.
- Requires all employees to attend annual RTK safety training.
- Reviews chemicals used in the production process so to control employee's exposure.
- Requires proper training in safety and proper chemical handling.
- Provides feedback to the Safety Specialist for chemical process or use changes that will eliminate or minimize chemical exposure to employee.
- Reviews new incoming SDS used in production for significant health/safety information.

Foreman

- Monitors to ensure secondary containers are appropriately marked and are not missing.
- Regularly checks to see if SDS is available on new chemicals in the SDS Binder.
- Informs the vendor of missing SDS needing to be in the SDS Book.
- Reviews employees for PPE usage compliance when handling chemicals.
- Reviews production for chemical hazards that may occur from the operation or process.
- Upon initial employment to the work area, inform the employees of the location of the SDS, RTK highlights and employee responsibilities.
- Attends RTK safety training sessions.
- Assists employees in understanding the benefits of this program when needed.
- Keeps abreast of RTK regulatory changes.

Employee

- Understands the purpose and process of the Company's RTK/Hazardous Substances Program.
- Communicates RTK safety policies and procedures to fellow employees by example.
- Makes suggestions to help improve workplace employees chemical handling, information, hazardous conditions, PPE usage, etc. to the Foreman.
- Attends annual RTK training.
- Reports identified chemical risk factors and hazards to the Foreman that can cause personal injury, property, product, and equipment damage.
- Reviews Safety Data Sheets that are applicable to the job.
- Wears and maintains PPE provided by the company to ensure against chemical injuries and accidents.
- Follows company training criteria on chemical use.
- Reviews the container label for warnings before use.
- Reports all chemical related injuries and accidents to the Foreman and if not available, then the Superintendents.

Definitions

Chemical - any element, chemical compound, or mixture of elements and/or compounds.

Chemical Inventory List - a list of chemicals used at this facility, or by personnel that report to this facility.

Electronic Access – using electronic media (telephone, email, internet, etc.) to obtain Safety Data Sheets or health information.

Facility - an establishment at one geographical location containing one or more work areas.

(GHS) Globally Harmonized System - The Globally Harmonized System (GHS) is an international approach to hazard communication, providing agreed criteria for classification of chemical hazards, and a standardized approach to label elements and safety data sheets. NOTE: Most new GHS requirements apply to substance manufacturers or distributors since they are responsible for including safety data sheets with purchased substances. However, all employers are still required to train each employee on the new label elements and safety data sheets format. Specific training information can be found at: https://www.osha.gov/dsg/hazcom/

Hazardous Chemical/Substance - any chemical that is a physical hazard, a health hazard, or has a Permissible Exposure Limit established for it.

Health Hazard - a substance for which there is statistically significant evidence based on at least one study conducted in accordance with established scientific principles that acute or chronic adverse health effects may occur in exposed employees.

IDLH - immediately dangerous to life and health.

Immediate Use - the chemical will be under the control of and used only by the person who transfers it from a labeled container and only within the work shift in which it is transferred.

Job Site - an area remote from a facility where hazardous chemicals are stored or used and employees are present for the purpose of business.

(NFPA) National Fire Protection Association Labeling - a common industry labeling method developed by the National Fire Protection Association to identify the hazards associated with a particular chemical.

(PEL) Permissible Exposure Limit - the maximum eight-hour time weighted average of any airborne contaminant to which an employee may be exposed.

Readily Available - when an employee has access during the course of his/her normal work shift.

(SDS) Safety Data Sheet – a written or printed document containing chemical hazard and safety handling info, prepared in accordance with the new HAZCOM GHS requirements.

Substance - see Chemical.

(TLV) Threshold Limit Value - the airborne concentration of a substance that represents conditions under which it is believed that nearly all normal workers may be repeatedly exposed day after day without adverse effect.

Work Area - a room or defined space in a facility where hazardous chemicals are stored or used and where one or more employees are present.

Workplace - see Facility.

Workplace Chemical List - see Facility Chemical List.

Chemical Inventory

- A Chemical Inventory includes a list of products and chemicals used by our company. A determination has been made as to which products used will fall under the RTK Rules.
- The Chemical Inventory will have corresponding SDS sheets stored on the company's intranet, through the SDS vendor or in the SDS binder available for review by all company employees.
- Information on the products and/or chemicals obtained in the survey can be obtained by reviewing the SDS sheet.
- Employees will be instructed on how to review an SDS so that he/she may utilize the information provided.

Management Review (MR)

- Management Review is a process to pre-identify unexpected or adverse chemical reactions to prevent physical or health injuries to employees and to maintain product quality. The process also includes reviewing regulatory compliance issues of chemicals. This process is typically implemented when introducing "like chemicals", new chemicals or samples into the facility for production purposes.
- The MR process also addresses the approval of new chemicals, ordering (purchasing), updating the SDS and the finished products used.
- Chemicals and the chemical's byproduct evaluations will be reviewed for environmental reporting, storage compatibility, and physical and health hazards.

Understanding Safety Data Sheets (SDS)

The SDS is a technical document containing 16 sections. Many sections describe the products and chemical characteristics. The following indicates SDS section headings:

- **Section 1: Identification** includes product identifier, manufacturer or distributor name, their address, phone number, emergency phone number, recommended use, and any restrictions.
- **Section 2: Hazard(s) Identification** includes all hazards regarding the chemical; required label elements.
- **Section 3: Composition/Information on Ingredients** includes information on chemical ingredients, trade secret claims.
- **Section 4: First-Aid Measures** includes important symptoms or effects, whether acute or delayed, and required treatment.
- **Section 5: Fire-Fighting Measures** lists suitable extinguishing techniques, equipment, chemical hazards from fire.
- **Section 6: Accidental Release Measures** lists emergency procedures, protective equipment, proper methods of containment and cleanup.
- **Section 7: Handling and Storage** lists precautions for safe handling and storage, including incompatibilities.
- **Section 8: Exposure Controls/Personal Protection** lists OSHA's Permissible Exposure Limits (PELs); Threshold Limit Values (TLVs); appropriate engineering controls; personal protective equipment (PPE).
- **Section 9: Physical and Chemical Properties** lists the chemical's characteristics.
- **Section 10: Stability and Reactivity** lists chemical stability and possibility of hazardous reactions.
- **Section 11: Toxicological Information** includes routes of exposure; related symptoms, acute and chronic effects; numerical measures of toxicity.

- **Section 12: Ecological Information***
- **Section 13: Disposal considerations***
- **Section 14: Transport information***
- **Section 15: Regulatory information***
- **Section 16: Other Information** includes the date of preparation or last revision.

***Note:** OSHA will not be enforcing Sections 12 through 15 since other Agencies regulate this information.

Hazard Communication Standard Pictogram

The Hazard Communication Standard (HCS) requires pictograms on labels to caution users of the chemical hazards that they may be exposed to. A pictogram consists of a symbol on a white background framed within a red border and represents a distinct hazard(s). The pictogram on the label is determined by the chemical hazard classification. Each pictogram may only appear once on a label. If multiple hazards require the use of the same pictogram, it may not appear a second time on the label.

Pictogram ***Appendix A***

Hazard Categories

- The current hazard communication standard uses 8 pictograms (i.e., flame) to denote the type of hazard. The hazards are evaluated by the manufacturer as far as how toxic the chemical is to people by using numbers identified in the SDS.
- The numerical range for each category differs. Many of the categories will have a range of 1- 4 (for example flammable, carcinogen, acute toxicity, etc.). While others will have categories (1 and/or 2 and/or 3) where they are subdivided further into letters indicating the chemical hazard. Explosives use Divisions (1.1, 1.2 etc.) to rank the hazard. Oxidizer only has 1 category.
- The lower the number the more hazardous that chemical ranking is from 1 (bad) to 4 (some potential).
- All chemicals used should be evaluated prior to employee use, however chemicals ranked as 1 should also be reviewed for employee exposure.

Hazard Warnings / NFPA 704

The NFPA 704 Diamond is a means of disseminating hazard warning and information for specific material. The diamond is divided into four sections. Each of the first three colored sections has a number in it associated with a particular hazard. The higher the number is, the more hazardous a material is for that particular characteristic. The fourth section includes special hazard information. The four sections and an explanation of the numbers in them are provided as a reference in ***Appendix B***.

Training

Acoustic Associates Inc. will train its employees annually on the RTK Program. The training program will provide the following information:

- An overview of the RTK Program Requirements including employees' rights under the "Act".

- Location and identification of chemicals in work area, harmful physical agents and infectious disease.
- Where the RTK Program and the SDS binder on chemicals used is located for review.
- Methods and observations that may be used to detect the presence and/or release of a hazardous chemical in their work area.
- The health and physical hazards of chemicals used. In addition, provide information on known levels of chemical exposure through hygiene testing.
- Steps the employee can take to protect themselves from exposure to hazardous chemicals such as work practices, emergency procedures, and personal protective equipment usage.
- Explanation of the SDS information to enable the employee to obtain and use the appropriate hazard information reviewed.
    - What are pictograms?
    - What are the signal words?
    - What are the hazard statements?
    - What are the precautionary statements?
- Steps employees can take to improve the program and take charge of their actions in controlling exposure to chemicals:
    - Contacting the Foreman for guidance on questions that arise outside of the training sessions.
    - Review new chemicals with the Foreman before use.
    - Inform the Foreman of missing SDS's.

Hazardous Non-Routine Tasks

A. Periodically, employees may be required to perform hazardous non-routine tasks that may present a chemical hazard. Prior to starting work on such projects, each affected employee will be given information by the Superintendents about hazards to which they may be exposed during such an activity. The information will include:

- Specific hazards of the chemical.
- Protective safety measures which must be utilized.
- Measures the Company has taken to lessen the hazards, including ventilation, respirator usage, presence of another employees, and emergency procedures.

Recordkeeping

- Training records are to be maintained for three years.
- Records will contain dates trained, employee's name, job position or department and instructor qualifications with instructor's signature.
- Training records are kept in the primary office location on the company server.

Container Labeling

- The Foreman is responsible for container labeling procedures, reviewing, and updating.
- Hazardous chemicals in the facility will have:
    - The original manufacturer's label that includes a product identifier, an appropriate signal word, hazard statement(s), pictogram(s), precautionary statement(s) and the name, address, and telephone number of the chemical manufacturer, importer, or other responsible party.
    - A label with the appropriate label elements just described.

  - Workplace labeling that includes the product identifier and words, pictures, symbols, or combination that provides at least general information regarding the hazards of the chemicals.
- An “immediate use" secondary container need not be labeled if under the control of one employee’s control and the substance in the container will be used up within a work shift. A secondary container must be labeled if more than one person uses the container or is used by the next work shift. Secondary containers not classified as “immediate use” require a label with the information identified in X. A. above. The employee first noticing a secondary container not labeled is responsible to label secondary containers.
- Foreman will ensure that all containers are appropriately labeled. No container will be released for use until this information is verified. Workplace labels must be legible and in English.

Maintaining and Providing SDS

- The product manufacturer is to provide a current, accurate, and complete SDS to Acoustic Associates Inc. upon request and on products purchased. The Foreman is the point of contact with outside vendors for SDS requests. If the manufacturer refuses, contact the Safety Specialist for follow-up.
- SDS's are readily available to all employees during their work shifts. Employees can review SDS for all hazardous chemicals used at this workplace. SDS are located on the Company Website https://www.acousticsassociates.com/quiet-solutions/safety-resources/
- The SDS's are updated and managed by Foreman. If an SDS is not immediately available for a hazardous chemical, an employee can obtain the required information by calling (name of person or job title responsible for providing information in an emergency).
- Upon request, the Company, through the Foreman will provide SDS and the written program to employees, a designated employee representative, and an OSHA representative.
- Outside Contractors: If employees of other employer(s) may be exposed to hazardous chemicals at our workplace (for example, employees of a construction contractor working on-site) It is the responsibility of Foreman to provide contractors and their employees with the following information:
  - Any hazardous chemicals with which they may come in contact.
  - Measures the contractor’s employees may take to lessen the risk of chemical exposure.
  - Where to get SDS for all hazardous chemicals used in the facility.
  - The labeling system in use.
- The Foreman will obtain SDS for all hazardous chemicals which an outside contractor may bring into the facility; inform the manager of these chemicals that may affect Acoustic Associates Inc. employees.

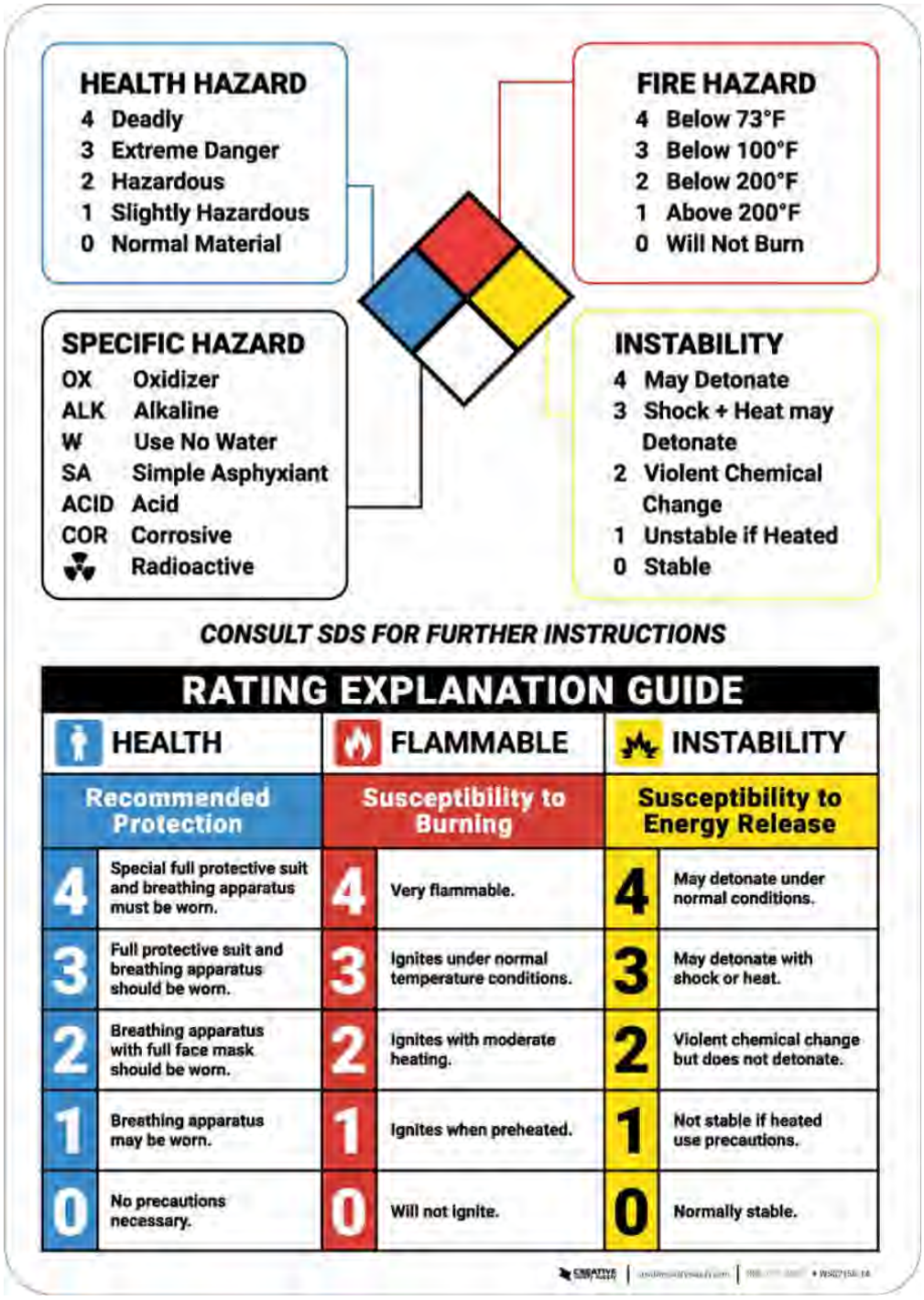
Transfer of Records

- The Safety Manager is responsible for transferring environmental & biological test and SDS to a successor employer where the new owner is the keeper of these records under corporate guidance.
- Where there is not a successor employer, Acoustic Associates Inc. is to notify current employees of their right to access of their records at least 3 months prior to business cessation.
- Notify at least three months before the cessation of business the transfer records to MN OSHA.

Appendix A

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 • Desensitized Explosives	**Exclamation Mark**  • Irritant (skin and eye) • Skin Sensitizer • Acute Toxicity (harmful) • Narcotic Effects • Respiratory Tract Irritant • Hazard Not Otherwise Classified (non-mandatory) • Hazardous to Ozone Layer (non-mandatory)
Gas Cylinder  • Gases Under Pressure • Chemicals 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)

Appendix B


HEALTH HAZARD
4 Deadly
3 Extreme Danger
2 Hazardous
1 Slightly Hazardous
0 Normal Material
FIRE HAZARD
4 Below 73°F
3 Below 100°F
2 Below 200°F
1 Above 200°F
0 Will Not Burn
SPECIFIC HAZARD
OX Oxidizer
ALK Alkaline
W Use No Water
SA Simple Asphyxiant
ACID Acid
COR Corrosive
Radioactive
INSTABILITY
4 May Detonate
3 Shock + Heat may Detonate
2 Violent Chemical Change
1 Unstable if Heated
0 Stable
CONSULT SDS FOR FURTHER INSTRUCTIONS
RATING EXPLANATION GUIDE
HEALTH
FLAMMABLE
INSTABILITY
Recommended Protection
Susceptibility to Burning
Susceptibility to Energy Release
4 Special full protective suit and breathing apparatus must be worn.
4 Very flammable.
4 May detonate under normal conditions.
3 Full protective suit and breathing apparatus should be worn.
3 Ignites under normal temperature conditions.
3 May detonate with shock or heat.
2 Breathing apparatus with full face mask should be worn.
2 Ignites with moderate heating.
2 Violent chemical change but does not detonate.
1 Breathing apparatus may be worn.
1 Ignites when preheated.
1 Not stable if heated use precautions.
0 No precautions necessary.
0 Will not ignite.
0 Normally stable.

FALL PROTECTION PROGRAM

Purpose

The purpose of this program is to establish requirements for working at heights which exceed or are equal to the fall protection requirement height threshold and where guard rails, safety nets or other engineering controls are not present.

Scope

This program applies to all Acoustics Associates employees who work on surfaces which are at or above fall requirement height threshold form the next lower level, including excavations.

Responsibilities

Safety Manager

- Implement and ensure the requirements of this program are always followed.
- Ensure each site uses a fall protection plan which accounts for site specific hazards and conditions.
- Ensure that other applicable personnel are trained to use fall protection systems and personal fall arrest systems (PFAS) where applicable.

Supervisors/Foreman

- Ensure that no employee works at heights which are at or above the fall protection requirement height threshold without using proper fall protection measures.
- Ensure that employees who use PFAS's are trained on how to use the systems.
- Use engineering controls such as guardrails whenever possible.
- Ensure that a competent person inspects all work areas which are at or above the fall protection requirement height threshold to ensure proper controls are in place.

Employees

- Will follow the requirements of this program where applicable.
- Will NOT work at heights at or above the fall protection requirement threshold unless you are trained and confident in the fall protection system that is protecting you from falls.
- Report all unsafe conditions immediately to your manager or supervisor.
- Consider your personal safety and the safety of the people around you before you access a working surface that exceeds the fall protection requirement height threshold.

Requirements

Because Acoustics Associates could work on both general industry, construction or other industry sites, the fall protection requirement height threshold will vary. Therefore, the fall protection requirement height shall be determined by the industry list below and the corresponding fall protection requirement height thresholds.

Important Note: *OSHA requires that fall protection be provided at elevations of 4 feet or more in general industry workplaces, 5 feet or more in shipyards, 6 feet or more in the construction industry and 8 feet or more in longshoring operations. In addition, OSHA requires that fall protection be provided when working over dangerous*

equipment and machinery, regardless of the fall distance. Therefore, threshold heights and requirements will vary depending on the type of job being performed.

Additional Note: *Some states have state specific fall protection criteria which Acoustics Associates must comply with. Therefore, it is the safety manager's responsibility to determine when state specific fall protection requirements conflict with Federal OSHA requirements and to establish fall protection criteria for that site's fall protection plan.*

Anytime an Acoustics Associates employee intends to work at or above the fall protection threshold height, guardrails, safety nets, personal fall arrest systems or other approved fall protection systems shall be used. Fall protection requirement height thresholds depend solely upon the nature of the site or client location and shall be used in accordance with the following industry criteria list:

- General Industry Environments: 4 feet or more
- Shipyards: 5 feet or more
- Construction Environments: 6 feet or more
- Longshoring Environments: 8 feet or more

Site Specific Fall Protection Plan

Whenever site-specific fall protection plans are utilized, the plan may only be developed by the competent person. The plan must also take into account any site-specific requirements which initially called for the use of a site-specific fall protection plan.

Whenever conventional fall protection is not feasible or creates a greater hazard than the fall itself, a fall protection plan may be used. In these cases, the site-specific plan shall include the reason why conventional fall protection methods are not feasible, the locations of the areas where conventional fall protection is not feasible. These areas shall also be classified as "controlled access zones".

Fall Protection Equipment

All Fall Protection Equipment shall meet the requirements of applicable ANSI, ASTM, or OSHA requirements.

Rescue Plan

All sites using fall protection equipment shall have a site-specific rescue plan. Acoustics Associates shall ensure that rescue details are established prior to the commencement of work at elevated heights. In the event of a fall, Acoustics Associates shall ensure prompt rescue of the affected person(s).

Incident Investigations

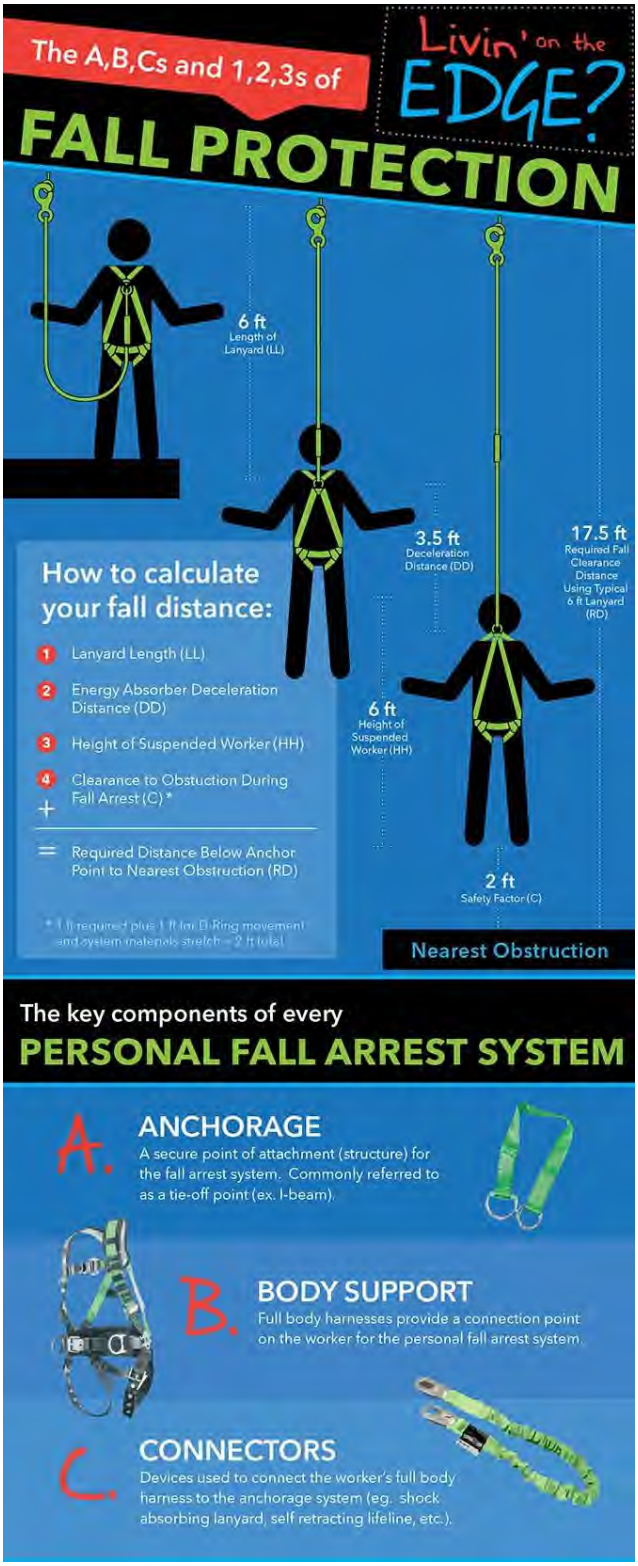
In the event of a fall, near miss or other serious incident, Acoustics Associates shall conduct a thorough incident investigation and shall maintain all incident investigation records for at least 10 years after the affected employee's employment has been terminated.

Training

All employees who work at or above the fall protection requirement threshold shall receive training which pertains to the recognition of fall hazards, fall hazards controls and proper use of fall protection equipment. After initial training, employees will receive refresher training on an annual basis, after any incident, if an employee requests additional training and whenever deemed necessary by management.

Records and Documentation

All training shall be documented, and records shall be maintained for a minimum of 3 years after the termination of the employee's employment with Acoustics Associates.



FIRE PREVENTION / EXTINGUISHER PROGRAM

Purpose

The program is designed to provide procedures to ensure that fire extinguishers work properly, employees know how to locate fire extinguishers and so employees know how to properly operate fire extinguishers.

Scope

This program's scope encompasses all employees at all locations.

Responsibilities

Safety Manager

- Implement and ensure the requirements of this program are always followed.
- Develops procedures for the use and maintenance of fire extinguishers.
- Devises training programs that teach the proper use of these devices.
- Implements fire extinguisher training.

Supervisors/Foreman

- Ensure all employees have received training and understand the training they have received.
- Enforces all programs and procedures related to fire safety and fire extinguishers.

Employees

- Will follow the requirements of this program.
- Report any damaged or expired fire extinguishers to manager or supervisor.

Procedure

Portable fire extinguishers are provided for use by employees. These fire extinguishers vary based on the type of fire they are made to extinguish, the size of the fire and the degree of hazard that affects the use of the extinguisher. The four classes of fire extinguishers used by Acoustics Associates are as follows:

- Class A Fire Extinguishers:
    - A green triangle with the letter "A". Used on common combustibles or fibrous materials such as wood, cloth, paper, rubber and some plastics. The distance from employees to any fire extinguisher must not exceed 75 feet (22.9 m).
- Class B Fire Extinguishers:
    - A red square with the letter "B". Used on flammable or combustible liquids such as gasoline, kerosene, paint, paint thinners and propane. The distance of the extinguisher from an area with Class B hazardous materials must not exceed 50 feet (15.2 m).
- Class C Fire Extinguishers:
    - Blue circle with the letter "C". Used on electrical equipment that has been energized, such as appliances, panel boxes and power tools. They must be located within 50 feet (15.2 m).
- Class D Fire Extinguishers:
    - Used on combustible metals such as magnesium, titanium, potassium and Sodium. The distance from a Class D working area to an extinguisher is no greater than 75 feet (22.9 m).

Fire Extinguisher Labels

OSHA requires that fire extinguishers have labels that accurately identify their contents and follow the Hazard Communication Standard. These labels help employees follow safety and health procedures. Fire extinguishers must also have a tag or label that shows when maintenance was performed and who did it. The expiration date of a fire extinguisher can be found on the inspection tag or on the cylinder's body. Signs that indicate the location of a fire extinguisher should be visible from the normal path of travel and close to the extinguisher.

Inspection, Maintenance and Testing

- Fire extinguishers are mounted in locations that can be easily accessed by employees, are no more than 75 feet from any employee, and are identified by a sign reading, “Fire Extinguisher”.
- Fire extinguishers will not be blocked, even on a temporary basis, by equipment, boxes or products.
- A unique number will be assigned to each fire extinguisher.
- All fire extinguishers must be mounted no higher and no lower than four feet from the floor.
- Must be numbered to identify their designated location.
- Must be fully charged and operable.
- Must be clean and free of defects.
- Must be accessible at all times.
- All fire extinguishers shall be inspected on a monthly basis.
- Certified staff from a fire extinguisher dealer will perform an annual maintenance check on all fire extinguishers.
- Certified staff will inspect and recharge fire extinguishers after use.
- In the event a fire extinguisher shows a loss of pressure during the monthly inspection, certified staff will inspect and recharge the fire extinguisher.
- Completed fire inspection logs are to be maintained in the safety files for five years.

Use of Fire Extinguishers

- In the event of a fire, an employee will get the nearest appropriate fire extinguisher for use on the burning materials and will attempt to put out the fire,
- All other employees in the area will prepare to evacuate the area of the fire, if necessary,
- Other employees in the building will be notified of the fire,
- A standard fire extinguisher empties in 10-15 seconds. All employees must leave the area at this time, even if the fire is not out.

Training and Education

This section establishes the training procedures required for understanding fire extinguishers, their proper use and incipient-stage firefighting. Training is required upon hire and on an annual basis thereafter. Additional retraining will be provided when deemed necessary by management.

- Even Numbered Years: A member of the local fire department will conduct training, which will include hands on use of a fire extinguisher in a “live fire” situation.
- Odd Numbered Years: The safety manager will conduct training involving a demonstration of the use of a fire extinguisher, without the actual discharge of the unit.

New employees will undergo the odd numbered year training upon hire.

Initial Training Outline

- General fire principles and fire extinguishers.
- Hazards of fires in the beginning stages.
- When to evacuate the area of a fire.
- Hazards of fire extinguisher use.
- Proper use of a fire extinguisher.

FIRST AID

Purpose

The program outlined in this document has been implemented to ensure adequate amounts of first aid equipment and supplies are available for employees and to put in place proper procedures for situations requiring first aid.

Scope

This program specifically applies to all our employees regardless of where they are performing work unless otherwise notified by the safety manager and documented on the site-specific plan.

Responsibilities

Safety Manager

- Implement and ensure the requirements of this program are always followed.
- Responsible for assuring that at least one employee on each site has CPR and First Aid training provided by a First Aid and CPR trainer that has a valid certificate by the National Safety Council, American Red Cross, etc. that can be verified.
- Keep all records pertaining to this program in order and current including a list of all certified First Aid and CPR employees. The list is maintained at the company home office.
- Keep records of a First Aid Injury Log maintained in the office.

Supervisors/Foreman

- Ensure that first aid kits are made available and adequately stocked for each work site.
- Will make sure that provisions for prompt medical attention, including transportation in case of a serious injury, are in place before a project begins.
- Will provide adequate first aid supplies and equipment within easy reach when required,
- Ensure that access to emergency and medical phone numbers is available in a conspicuous place to all employees.
- Contents of the kit should be placed in a weatherproof container with individual sealed packages for each type of them
- Responsible for transporting the injured employee that requires medical attention or calling emergency numbers that are posted conspicuously for providing transportation for the injured person.

Employees

- Will follow the requirements of this program where applicable.
- Will use first aid supplies and equipment responsibly.
- Immediately notify the supervisor of any low first aid kit supplies.
- Know the location of emergency telephone numbers.

Requirements

First Aid Supplies and Equipment

- First aid supplies and equipment must always be available and easily accessible to employees.
- The expense of first aid equipment and services will be carried by the employer.

- First aid kits will contain all appropriate items determined to be adequate for the environment in which they will be used.
- First aid kits will be assessed periodically to ensure adequate amounts of first aid supplies are always available. Inadequate first aid kits must be reported to your immediate supervisor who will then have the kits restocked with adequate supplies prior to the start of the work shift.
- The site supervisor shall perform an inspection of the first aid supplies on a weekly basis. Kits shall be replenished as needed by the site supervisor.
- A safety shower, eye wash, and/or other suitable facilities for quick drenching or flushing shall be provided within the work area of any facility where the eyes or body of any person may be exposed to injurious corrosive materials. Ensure expiration dates are checked for safety reasons and that the water used in storage devices is sanitized.
- An assessment of the material or materials used shall be performed to determine the type of flushing/drenching equipment will be required at the job site. Portable or temporary stations must be set up prior to the use of corrosive materials on all client job sites.

Medical Response

- All minor first aid is to be self-rendered. Because of the risks associated with certain blood-borne pathogens, no one is allowed to tend the minor injuries of another person.
- A person who has a valid certificate in first aid shall be available to render first aid, in the absence of an infirmary, clinic, hospital, or physician that is reasonably accessible in terms of time and distance to the worksite. It is mandatory that a valid certificate in first-aid training must be obtained from the U.S. Bureau of Mines, The American Red Cross or an equivalent training authority which can be verified by documentary evidence.
- Universal precautions must always be observed when first aid is rendered by authorized employees with the proper training. (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 phone numbers for prearranged medical response providers. All authorized first responders of ACOUSTICS ASSOCIATES INC should have a cell phone as a means of communication; otherwise, handheld radios or telephones shall be used as a means of communication.

Transportation

- Based on the first responders' assessment of the injuries involved, decide what type of treatment will be performed and the location of the treatment (emergency room, occupational medicine provider, or on-site first aid).
- Examples of serious injuries requiring transport to a medical provider are those resulting in severe blood loss, possible permanent disfigurement, head trauma, spinal injuries, internal injuries and loss of consciousness. Keep in mind that the needs and well-being 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 should always be available.
- Choices to consider for proper transport include private automobile, ACOUSTICS ASSOCIATES INC vehicle, helicopter, crew boat, 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 the injured employee incurring any additional complications or injuries.

- Transportation needs must be preplanned and coordinated with the transportation provider prior to an incident requiring such service.

Training

Volunteers or selected employees are trained by the American Red Cross or equivalent in CPR and first aid. Each of these trained and certified employees are equipped with protective gloves and other required paraphernalia. CPR training must be re-certified annually and first aid training must be re-certified every three years.

Definitions

- **Abrasion** - A superficial wound in which the topmost layers of the skin are scraped off.
- **ABCs** - Abbreviation for Airway, Breathing and Circulation.
- **AED** - Abbreviation for Automated External Defibrillator.
- **Airway** - The passages which transfer air from the outside environment to the lungs; the trachea, bronchi, bronchioles and alveoli.
- **Artery** - A blood vessel carrying blood away from the heart; contains oxygen-rich, high-pressure blood in the systemic cardiorespiratory system.
- **Avulsion** - A tearing away of a section of skin from the layers of tissue beneath it.
- **Bystander** - Any person, trained or untrained, who assists in an emergency situation, but not as part of a duty of employment.
- **Capillary** - The smallest blood vessels in the body; the skin is rife with capillaries.
- **Carotid Artery** - This is the main artery providing blood supply to the head.
- **Consciousness** (level of) - The level of awareness.
- **CPR** - Abbreviation for Cardiopulmonary Resuscitation.
- Defibrillation - Delivering a therapeutic dose of electrical energy to the affected heart with a device called a defibrillator.
- **Duty of care** - A legal obligation imposed on an individual requiring that they exercise a reasonable standard of care while performing any acts that could foreseeably harm others.
- **EMS** - Abbreviation for Emergency Medical System or Emergency Medical Services.
- **Laceration** - Irregular wounds caused by a blunt impact to soft tissue which lies over hard tissue, tearing of skin.
- **Puncture** - A wound caused by an object puncturing the skin.

FOREMAN PAY POLICY

Purpose

The purpose of this policy is to outline Acoustics Associates Inc.'s expectations for our assigned working foreman.

Scope

This policy applies to all Acoustics Associates Inc.'s employees who receive a pay increase for the performance of working foreman duties.

Working Foreman

A "working foreman" refers to an assigned field supervisor who oversees daily operations, including leading a team of workers, managing resources, and ensuring projects are completed safely and efficiently. They work alongside their team, performing some of the same tasks as the workers they supervise, while also handling administrative duties and communicating with higher-level personnel.

Key Responsibilities

Working Foreman

Responsibilities include but are not limited to:

- *Supervision:* Overseeing workers, ensuring they complete tasks on time and to quality standards.
- *Resource Management:* Managing resources including staff, equipment and materials.
- *Safety:* Emphasizing safe work practices and ensuring the safe use of tools and equipment.
- *Communication:* Acting as a liaison between workers, superintendents, and clients, communicating project requirements and progress.
- *Quality Control:* Ensuring the quality of work performed meets Acoustics Associates standard of excellence.
- *Training:* Mentoring and training new hires, ensuring they have the necessary skills and knowledge to perform their tasks safely and effectively.
- *Scheduling and Planning:* Assist superintendents with developing work schedules and plans to ensure efficient use of resources and manpower.

Foreman are expected to have the training (including OSHA 30), knowledge and skills required to oversee day to day operations on their jobsite. On occasion, foreman will be expected to haul and deliver material to jobsites. Additional pay may be provided when this task is performed.

General Conduct

During the course of your work, you are representing Acoustics Associates. Maintaining a professional image and reputation is vital to our success. Therefore, we expect all Acoustics Associates employees to conduct themselves appropriately within our offices, any of our locations, or any off-site setting such as trade shows and jobsites. It is not possible to list all the forms of behavior that are considered unacceptable in the workplace, but it may be helpful to identify some types of conduct that are impermissible. The examples below do not replace sound judgment and common sense. The following list is not exhaustive and is intended simply to provide examples of infractions or rules of conduct that may result in disciplinary action, up to and including immediate termination of

employment. Acoustics Associates may discipline an employee, up to and including immediate termination, for conduct other than that listed below.

Examples of unacceptable conduct include, but are not limited to:

- Insubordination, including but not limited to failure or refusal to obey the lawful instructions of any manager or member of management; refusal to do an assigned job.
- Treating others, including managers, co-workers, or customers, in an abusive, discourteous, inattentive, or unprofessional manner including using disrespectful, inappropriate, or threatening language towards others.
- Unexcused absenteeism or tardiness; failing to notify the appropriate manager in advance when unable to report to work; failing to obtain permission to leave work for any reason during normal working hours; failing to observe working schedules.
- Arriving at the jobsite and not starting work immediately.
- Working overtime without advance authorization or refusing to work assigned overtime.
- Falsification of employment records, timecards, employment information or other records.
- Unsatisfactory work performance.
- Failure to exhibit a positive, can-do attitude.
- Failure to follow procedures and processes.
- Failure to maintain confidentiality of confidential information.
- Theft of any Acoustics Associates property or the property of any employee or client; removing or borrowing property without prior authorization; or unauthorized use of Acoustics Associates equipment, time, materials, or facilities.
- Sexual or other unlawful harassment or discrimination, or inappropriate behavior.
- Sleeping or malingering on the job.
- Possessing, distributing, selling, transferring, or using – or being under the influence of – alcohol, marijuana, or illegal drugs while working or on Acoustics Associates' premises or jobsites.
- Failing to follow safety regulations, rules, and programs including failing to appropriately and immediately report safety violations, accidents and incidents.
- Failing to cooperate in an investigation.
- Engaging in or threatening violence.
- Misconduct or other violations of Acoustics Associates policies or procedures.

Acoustics Associates reserves the right to determine whether particular conduct violates this policy or is otherwise inappropriate. Employees who violate this policy or otherwise engage in inappropriate conduct will be subject to discipline up to and including immediate termination of employment.

Except for when specifically stated in our union signatory contracts, the decision of an employee's working foreman classification rests with Acoustics Associates. Acoustics Associates reserves the right to change this classification of an employee at their discretion.

FORKLIFT SAFETY PROGRAM

Purpose

The purpose of this program is to establish general rules and safe operating procedures for using powered industrial trucks (forklifts and electric pallet jacks).

Scope

All Acoustics Associates employees operating a forklift in the performance of their duties and assignments will adhere to the rules and procedures set forth. This document covers Acoustics Associates employees and contractors and shall be used on Acoustics Associates premises and jobsites. In addition, these guidelines are to be followed in the event an operator's program is either not in place or is less stringent.

Key Responsibilities

Safety Manager

- Implement and enforce this program.
- Ensure that assigned modified duties do not present a hazard to the affected employees.

Managers and Supervisors

- Will establish the competency of each lift operator by ensuring they successfully complete the training and evaluation process.
- Will ensure that all forklifts are inspected for use before each shift begins and any necessary repairs are completed before the forklift is operated.
- Ensure that only fully authorized, trained and certified employees operate forklifts.

Employees

- Comply with all parts of this program.
- Shall be current on all training and certifications.
- Operate the forklifts according to the manufacturer guidelines and requirements.
- Always only operate the forklift in a safe manner.
- Inspect the forklift before each use.
- Report any damage or defects to the manager immediately.

Requirements

All approved forklifts must have a manufacturer's identification plate attached clearly showing all specifications of the forklift. It must also show the forklift is accepted by a nationally recognized testing laboratory.

Only persons 18 years of age and older who have completed the required training and certifications shall operate forklifts.

Only employees who have been properly trained and certified are allowed to operate the forklift equipment in which they have been properly qualified to use. Acoustics Associates is responsible for the certification of all authorized personnel after determining them to be competent in each type of equipment.

Any modifications or additions affecting the capacity and safe operation of the forklift cannot be performed without prior written approval by the manufacturer. If modifications or additions are performed, all capacity, operation, and maintenance instruction plates, tags, or decals shall be changed to reflect this.

If the forklift is equipped with front-end attachments other than those installed by the factory, the supervisor will make sure the forklift is marked to identify the attachments and to show the approximate weight of the forklift and attachment combination at maximum elevation with load laterally centered.

The operator shall ensure all nameplates and markings are in place and are maintained in clear, legible condition before use.

All forklifts MUST be equipped with safety seat belts. In addition, all forklifts must be equipped with a horn, backup alarm, beacon light, headlights and taillight.

All forklifts must be fitted with an overhead rollover cage in accordance to the manufacturer's specifications.

The forklift will be equipped with a vertical load backrest extension, following the manufacturer's guidelines if the type of load presents a hazard to the operator.

Training and Education

Training shall be carried out by a qualified person using a combination of teaching methods (e.g., lecture, discussion, interactive computer learning, video tape and written material), practical training (as properly demonstrated by the trainer along with the practical exercises being performed by the trainee) and observation and evaluation of the operator's performance in the workplace.

All operator training and evaluation will be conducted by a qualified person who has the knowledge, documented training, and experience to both train and evaluate a forklift operator to establish competency.

Each operator will be re-evaluated every 3 years to ensure their continued ability to operate a forklift.

Training shall include the following topics, except in topics for locations where they are not applicable to safe operation of the truck due to type of equipment or facility conditions:

- Operation instructions, warnings, and precautions for each type of truck the employee will be authorized to operate.
- Differences between the truck and the automobile.
- Forklift controls and instrumentation: their location, their purpose, and their function.
- Engine or motor operation.
- Steering and maneuvering.
- Visibility (including visibility due to load restrictions).
- Fork and attachment adaptation, operation, and use limitations.
- Vehicle capacity.
- Vehicle stability.
- Vehicle inspection and maintenance procedures that must be performed by the operator.
- Refueling and/or charging and recharging of batteries.
- Operating limitations.
- Any other operation instructions, warnings, or precautions listed in the operator's manual for the type of vehicle that the employee will be operating.
- Surface conditions where the vehicle will be operated.

- Load composition and load stability.
- Load manipulation, stacking, and unstacking.
- Maintaining awareness of pedestrian traffic in areas where the vehicle will be operated.
- Narrow aisles and other restricted places in the vehicle operation areas.
- Identification of hazardous (classified) locations where the vehicle will be operated.
- Ramps and other sloped surfaces that could affect the vehicle's stability.
- Identify areas where insufficient ventilation or poor vehicle maintenance could cause a buildup of carbon monoxide or diesel exhaust.
- Other unique or potentially hazardous environmental conditions in the workplace that could affect safe operation.
- 29 CFR 1910.178 Requirements.

Mandatory refresher training must be provided in the following instances:

- When unsafe operations are observed.
- After an incident.
- If operating a different vehicle type.
- Changes in conditions.
- Any time Acoustics Associates 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 successfully trained and evaluated for competency as required.

The certification will 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.

General Operations

- All operators shall wear a safety seat belt while operating the forklift.
- Forklifts shall not be driven up to anyone standing in front of a bench or other 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.
- 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 or not in use, the forks shall be fully lowered, controls will be neutralized, power shall be shut off, and brakes must be set.
- The wheels must be blocked if the forklift is parked on an incline.
- A forklift is considered unattended when the operator is 25 ft. or more away from the vehicle which remains in view, or whenever the operator leaves the forklift, and it is not in view.
- When the operator of a forklift is dismounted and within 25 ft. of the forklift still in view, the load engaging means shall be fully lowered, controls neutralized, and the brakes set to prevent movement.

- A safe distance shall be maintained from the edge of ramps or platforms while on any elevated dock, platform or freight car.
- Never use the forklift to open or close freight doors.
- Brakes shall be set and the wheels blocked to prevent movement of trucks, trailers, or railroad cars while loading or unloading.
- Fixed jacks may be necessary to support a semi-trailer during loading or unloading when the trailer is not coupled to a tractor.
- Trucks, trailers, and railroad cars shall be checked for breaks and weakness in the flooring before they are driven onto. There must be sufficient clearance above overhead installations, lights, pipes, sprinkler system, etc.
- An overhead guard (cages) must be used to protect the operator from 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 heavy capacity load.
- Fire aisles, access to stairways, and fire equipment shall be kept clear at all times.

Loading

- Only stable, safely arranged loads will be handled.
- Use extreme caution when handling off-center loads that cannot be centered.
- Only handle loads within the forklift's rated capacity.
- Forklifts equipped with attachments shall be operated as partially loaded forklifts when not handling a load.
- A load engaging means shall be placed under the load as far as possible; the mast shall be carefully tilted backward to stabilize the load.
- Extreme care shall be used when tilting the load forward or backward, especially when high tiering.
- Tilting forward with load engaging means elevated is prohibited unless picking 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.
- Use only enough backward tilt to stabilize the load when stacking or tiering.

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 must be taken out of service until safe operating condition has been restored.
- Never fill the fuel tanks with the engine running.
- Spillage of oil or fuel must be washed away or completely evaporated and the fuel tank cap replaced before restarting engine.
- When fueling with Liquefied Petroleum Gas (LPG), precautions and handling requirements set forth in the "Safe Handling of LPG" program must be followed.
- No forklift will be operated with a fuel system leak.
- Open flames shall not be used for checking proper fluid levels in storage batteries or fuel tanks.
- Operator must verify trailer chocks, supports, and dock plates are secured prior to loading/unloading.

Maintenance and Inspection of Forklifts

- Only authorized personnel shall perform maintenance and make repairs.
- Repairs to the fuel and ignition systems of forklifts shall be performed only in locations designated for such repairs.
- Forklifts in need of repairs to the electrical system must have the battery disconnected prior to such repairs taking place.
- Only equivalent parts to those of the original design shall be used in the replacement of any forklift requiring repair.
- Forklifts shall not be altered so the 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.
- Any counter weighting of fork trucks shall not be done unless approved by the manufacturer.
- Forklifts shall be inspected daily by the operator before being placed in 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 – prior to each shift (visual – non-documented). Inspection items shall be clearly posted on each forklift. Operators must ensure the vehicle is safe prior to operating.
- Forklifts used on a round-the-clock basis must be inspected before each shift begins.
- Defects shall be immediately reported to the supervisor and corrected before the forklift can be operated.
- When any part of the forklift exceeds its normal operating temperature, thus creating a hazardous condition, the forklift shall be removed from service and not returned to service until the cause for its overheating has been eliminated.
- Forklifts shall be kept in a clean condition, free of lint, excess oil, and grease.
- Noncombustible agents should be used for cleaning trucks.
- Low flash point (below 100 degrees F.) solvents should not be used.
- High flash point (at or above 100 degrees F.) solvents may be used if the necessary precautions regarding toxicity, ventilation, and fire hazard are mitigated with the agent or solvent used.

Record Keeping

The Occupational Safety and Health Administration (OSHA) requires employers to keep records of forklift operator training and certification for at least three years. These records should include: the date of the training, the type of training, the name of the trainer, the operator's test scores, and the name and signature of the instructor.

Acoustics Associates will also keep records of: performance evaluations, incident reports, safety meetings and training sessions, inspections and maintenance logs for each forklift, and accident reports related to forklift operations.

GENERAL SAFETY POLICY

Purpose

This program is written to ensure compliance regarding local regulatory and general safety requirements related to the operation and management of all Acoustics Associates facilities. Furthermore, this program provides directives and guidelines to managers, supervisors and employees regarding their specific responsibilities.

This program applies to all regular employees, temporary employees, and any contractors working on Acoustics Associates premises. In addition, for any off-site work, these guidelines are to be followed in the event an operator's program is either not in place or is less stringent.

Key Responsibilities

Safety Manager

- The Safety Manager is responsible for developing and maintaining the General Safety Requirements program and will keep these procedures in the designated safety manager's office.

Managers and Supervisors

- The managers and supervisors are responsible for enforcing and maintaining the safety plan and ensuring everything required for compliance is available at all times.

Employees

- Every employee shall be familiar with the workplace General Safety Requirements program of Acoustics Associates.
- Must abide by the requirements laid forth and report all unsafe conditions to their immediate supervisor and/or the Safety Manager.
- Will use all safeguards, safety appliances, and personal protective equipment made available to them in order to follow the safe work practices and procedures of their workplace.

Competency and Training

All workers will be proficient in the operation of equipment in the performance of their assigned job tasks. A competent worker is someone who is sufficiently qualified, trained, and experienced enough to safely perform their job either without supervision, or with only a minimal degree of supervision. Any work that might endanger an employee must be performed by a qualified worker or by a worker who is under the direct supervision of a worker who is competent in the assigned job task. All workers must be trained in the procedures for each job they are required to perform until they become proficient in each task or skill. Only qualified workers who have been properly trained and experienced will be permitted to operate the equipment.

Training must include:

- Procedures to be followed in the event of a fire or other emergency.
- The location of first aid facilities.
- The identification of all prohibited or restricted areas.

- Precautions to be taken in order to protect the worker against any physical, chemical or biological hazards they may come into contact with.
- Any procedures, plans, policies and programs that ACOUSTICS ASSOCIATES INC is mandated to develop.
- Anything else deemed necessary to ensure the health and safety of the worker while they are on the job.
- All employees shall be instructed in both the recognition and avoidance of unsafe conditions that pertain to their specific work environments and work activities.

Inspections

Acoustics Associates must:

- Ensure that frequent, regular inspections of the workplace, jobsites, materials, and equipment are performed by a competent person,
- Ensure that all work processes and procedures are examined in order to identify any risk to the safety or health of any person at the workplace,
- Investigate every dangerous occurrence or incident as soon as is reasonably possible.
- Ensure that all identified risks and unsafe conditions will be corrected as soon as is reasonably practicable and, in the interim, take immediate steps to protect the safety and health of any person who may be at risk.

General Facility Requirements

Housekeeping

- Each work site shall be kept clean and free from materials or equipment that could cause workers to slip or trip.
- All surfaces used by any worker shall be clear of obstructions, hazards, and accumulations of refuse, snow or ice.
- Acoustics Associates requires that a worksite is as clean and sanitary as reasonably practicable.
- An adequate supply of potable drinking water shall be kept easily accessible at a project for the use of all workers.

Safe Equipment Maintenance

- Acoustics Associates is responsible for ensuring that work site maintenance, systems of work, and working
- environments are maintained properly for the health, safety, and welfare of workers while at the job site.
- Acoustics Associates will ensure all equipment is maintained at regular intervals to ensure the equipment will function safely in the way it was designed and to be free from obvious defects. Damaged and faulty equipment reporting procedures must be in place to facilitate timely repair of all malfunctioning equipment.
- Where a defect is found, Acoustics Associates will ensure that immediate action is taken to protect the health and safety of any worker who may be at risk until the defect is corrected by a competent person.
- Any machinery, tool, material, or equipment which is not in compliance with any applicable OSHA requirement is prohibited. The machine, tool, material or equipment shall either be identified as unsafe by tagging or locking the controls to render them inoperable or by physically removing the non-compliant object from its place of operation.

- Any worker who knows or has reason to believe that equipment under their control is not in a safe operating condition shall immediately report the condition to their manager or supervisor immediately so repairs to the malfunctioning equipment can be made by the proper personnel.
- Acoustics Associates expressly prohibits and does not permit compressed air to be directed towards a worker for the purpose of cleaning clothing or personal protective equipment used by that worker or for any other purpose if the use of compressed air may cause contaminant dispersion into the air which may be harmful to workers.
- Whenever workers are present at a worksite, the Company will provide adequate lighting for the health and safety of our workers to ensure all work is done properly and safely.
- No worker is allowed to smoke in an enclosed place of employment, worksite or work-related area except in designated smoking areas.

Impairment

No person shall enter or remain at any workplace of employment while the person's behavior or ability to work is impaired by alcohol, intoxicating beverages, drugs or other substances to create a nuisance or to endanger any person, or to create an undue risk to workers, themselves or anyone else.

Improper Conduct

All workers shall engage in proper activity or behavior. Improper behavior that might create or constitute a hazard to any person is unacceptable. Improper activity or behavior includes horseplay, scuffling, fighting, practical jokes, and unnecessary running or jumping.

Industrial Hygiene

An eyewash fountain shall be provided anywhere a worker may be exposed to any biological or chemical substance hazardous in nature.

All workers who may potentially be exposed to a chemical, biological, or physical agent that may endanger their safety or health shall be trained in the necessary precautions and procedures to be followed when handling, using, and storing the agent. They will also be trained in the proper use and care of all required personal protective equipment, and in the proper use of emergency measures and procedures.

No food, drink or tobacco shall be taken into, left, or consumed in any area where any poisonous substance may be present.

Protective clothing or other safety devices that have 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.

Thermal Stress

A worker must not be exposed to levels that exceed those listed in the screening criteria for heat stress exposure in the heat stress and strain section of the ACGIH Standard. Clothing corrections must be applied in accordance with the heat stress and strain section of the ACGIH Standard.

Acoustics Associates must conduct a heat stress assessment to determine the potential for hazardous exposure of workers, using measures and methods that are acceptable to the local government or territorial agency in whose jurisdiction Acoustics Associates resides. Acoustics Associates will also develop and implement a heat stress exposure control plan.

Acoustics Associates must implement engineering controls to reduce the heat exposure of workers to levels below those listed in the screening criteria for heat stress exposure in the heat stress and strain section of the ACGIH Standard. If the above action is not practical, the employer must reduce the exposure of workers to levels below those listed in the screening criteria for heat stress exposure in the heat stress and strain section of the ACGIH Standard by providing:

- Administrative controls, including a work-rest cycle, or
- Personal protective equipment, if the equipment provides protection equally effective as administrative controls.

Acoustics Associates must provide and maintain an adequate supply of cool potable water close to the work area for the use of a heat exposed worker.

If a worker shows signs or reports symptoms of heat stress or strain, the worker must be removed from the hot environment and treated by an appropriate first aid attendant, if available, or by a physician.

The employer must conduct a cold stress assessment to determine the potential for hazardous exposure of workers, using measures and methods that are acceptable and to develop and implement a cold exposure control plan, if a worker is-or may be exposed to-the conditions specified below:

- Thermal conditions that could cause cold stress or injury.
- Thermal conditions that could cause a worker's core body temperature to fall below 36°C (96.8°F).
- Thermal conditions that are below the levels classified as "little danger" to workers in the criteria for the cooling power of wind on exposed flesh in the cold stress section of the ACGIH Standard.

The Company must implement effective engineering controls to reduce the exposure hazard to levels above those classified as "little danger" to workers in the criteria for the cooling power of wind on exposed flesh in the cold stress section of the ACGIH Standard. If the above action is not practical, Acoustics Associates must reduce the exposure to the hazard by providing effective administrative controls or personal protective equipment if the equipment provides protection equally effective as administrative controls.

All workers must wear adequate insulating clothing and personal protective equipment to protect them from the cold if their work takes place outdoors in snow- or ice-covered terrain. If excessive ultraviolet light, glare or blowing ice crystals may present a risk of injury to the eyes, workers must wear eye protection appropriate to the hazardous conditions.

If a worker exposed to cold shows signs or reports symptoms of cold stress or injury, the worker must be removed from further exposure and treated by an appropriate first aid attendant, if available, or a physician.

GENERAL WASTE MANAGEMENT PROGRAM

Purpose

This waste management strategy has been developed to provide guidance and requirements necessary for efficient, effective and compliant waste management during construction and day to day operations.

Scope

This program covers all Acoustics Associates employees and contractors and shall be used on owned premises or when an operator's program doesn't exist or is less stringent.

Procedure

Acoustics Associates Safety Manager or other designated person is accountable for managing waste and the disposal of wastes generated at the worksite.

Waste Estimation

Each work site will estimate the waste, trash and/or scrap that will be generated and taken into consideration prior to work being performed so the need for containers and waste removal, if necessary, can be determined.

Each site should utilize the following for planning of dumpster scheduling and total non-hazardous dry waste material. These figures do not include any recycling or waste minimization efforts and reflect no use of an incinerator. Dumpster figures are based on a 40-yard container and should be changed to reflect the use of another size dumpster by changing the table below.

SAMPLE ONLY SOLID WASTE					
Number of Employees	**10**	**25**	**35**	**50**	**100**
Total Estimated Square Feet of Waste (@ 0.675 cu ft per person daily)					
Daily	7	17	24	34	68
Weekly	47	118	165	236	473
Monthly (4.33 wks)	205	511	716	1,023	2,046
Annual	2,455	6,138	8,593	12,276	24,551
Total Estimated Weight of Waste (@ 4lb per person daily)	40	100	140	200	400
Weekly	280	700	980	1,400	2,800
Monthly (4.33 wks)	1,212	3,031	4,243	6,062	12,124
Annual	14,549	36,372	50,921	72,744	145,488
Number of Total Dumpster Fills 40 yard dumpster 7x8x22 = 1,232 square feet					
Daily	0.0	0.0	0.0	0.0	0.1
Weekly	0.0	0.1	0.1	0.2	0.4
Monthly (4.33 wks)	0.2	0.4	0.6	0.8	1.7
Annual	2.0	5.0	7.0	10.0	19.9

Acoustics Associates must work in conjunction with the project site or owner to ensure proper disposal of wastes or scrap materials.

Acoustics Associates must ensure the owner or client is aware of how wastes and scrap materials will be disposed of and whether they will be taken off site by the Company or will be disposed of on the owner or client's site.

Waste Segregation

- Do not mix waste streams or types.
- Only place waste in the designated container, satellite accumulation area (SAA), recyclable accumulation area (RAA), universal waste accumulation area (UWAA) or designated dumpster.

Recycling

Waste should be recycled whenever practicable. ACOUSTICS ASSOCIATES INC will encourage the proper separation of all waste materials to ensure opportunities for reuse or recycling occurs at each work site. The collection of recycled material will reduce the total load on the environment. Sufficiently sized bins must be lined with a plastic bag and clearly labeled for use. Posters from ACOUSTICS ASSOCIATES INC will be posted throughout the work site to encourage recycling for everyone. Collection bins will also be placed in administrative areas and will use the following color guiding:

- Blue – Paper
- Green - Aluminum cans
- Yellow – Plastic

All cardboard will be flattened. Staples and excess shipping tape removed from the cardboard. No cardboard shall be placed in dumpsters heading for a landfill.

Waste Handling Matrix

Each work site will develop a Waste Handling Plan that will:

- Address safe practices related to the immediate storage and handling of waste, scrap or leftover material.
- The handling, organization and storage of waste and scrap materials to minimize potential impact to the environment. In order to minimize the potential for a spill or impact on the environment, waste materials will be properly stored and handled. During outdoor activities receptacles must be covered to prevent dispersion of waste materials and to control the potential for runoff.

Storage Requirements

Project related wastes are to be stored and maintained in an organized fashion to encourage proper disposal and minimize risks to employees. Proper waste receptacles must be provided for all trash and materials that may be reused or recycled during a project.

PPE

As part of each site waste management plan ACOUSTICS ASSOCIATES INC shall determine a PPE matrix that includes gloves, hand protection, eye and face protection and/or other necessary PPE.

Training and Education

Employees shall be instructed on managing waste generated at the work site along with the proper disposal method of waste. Examples include:

- Instruction on the proper handling, storage and disposal of waste. General instruction on disposal of non-hazardous wastes, trash or scrap materials generated at the site will also be given to all employees. If waste generated is classified as hazardous, employees must also be trained to ensure proper disposal and compliance with regulations.
- Methods for minimizing waste.
- Recycling methods and proper PPE to be utilized.

HAND AND POWER TOOLS PROGRAM

Purpose

The purpose of the Hand and Power Tools Program is to establish policies and procedures for the safe operation of hand tools, power tools and other portable tools, including guarding. All hand and power tools shall be maintained in a safe and working condition.

Scope

This program applies to all employees who use hand and power tools while engaged in work at Acoustics Associates facilities and/or offsite facilities.

Key Responsibilities

Managers and Supervisors

- Ensure that operation, maintenance and proper use of tools are fully understood by all employees.
- Train employees and provide them with all personal protective equipment (PPE) needed to safely operate portable tools.

Employees

- Will notify their manager immediately of any hand or power tools that are defective and will remove them from service.
- Will use the proper tools for each task preformed.
- Will follow the manufacturer's instructions on the safety and operation of each tool they use.

Requirements

General

All tools must be an approved type and in good condition in order to be used.

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

Tools may be inspected at any time.

Any employee has the authority, and responsibility, to remove unsafe tools from use, no matter who they belong to.

Tools deemed unsafe by any employee must be labeled with a “DO NOT USE OR OPERATE” tag to prevent use of the tool.

Employees are required to always use the appropriate tool for the task at hand. Substitute tools are not allowed. Makeshift tools are strictly prohibited.

Avoid using tools containing metal around energized electrical circuits or equipment (e.g., hammers with metal handles, screwdrivers with metal in the handle, metal measuring tapes).

Throwing tools from one place to another or one person to another is prohibited. Tools must be safely carried and, if lowered from one elevation to another, must be secured in tool bags or buckets and firmly attached to hand lines.

Tools must never be placed on unsecure, elevated surfaces.

Impact tools (e.g., chisels and punches) that become cracked or mushroomed must be dressed, repaired or replaced prior to further use.

Pipes, ground rods, drills, chisels and punches must be held with applicable holders or tongs while being struck by another employee. These must never be held with the hands.

Employees are not permitted to use shims to make a wrench fit. Wrenches with damaged or sprung jaws will not be used.

Employees may only use tools for the purposes for which they are intended.

Sharp-edged tools must be safely handled and stored to prevent injury or damage to the tool or other property. These tools will not be carried in pockets without the use of appropriate protectors to preserve the edge.

Splintered, loose or cracked wooden handles must be replaced. Taping or lashing the handle with wire is unacceptable.

Employees must not leave tools lying around where they may cause other people to trip or fall.

Employees working on or above open grating must cover the grating with a canvas or other covering to prevent tools and parts from dropping through the grate where others are present. Alternately, the danger area below the grating may be guarded or barricaded.

The insulation on hand tools is primarily for comfort and must not be depended on to protect employees from high voltage shock. Exceptions to this are approved live line tools.

Portable Electric Tools

Metal portable electric tool parts that do not carry current (e.g. drills and saws) must be effectively grounded when connected to a source of power unless:

- The tool has approved double insulation.
- The tool is connected to an isolated transformer or power supply.

Power tools must be inspected before each use to ensure the device is in proper working order and has all of its applicable safety devices.

Power tools may only be used as they were designed and intended to be used, according to the manufacturer's instructions. Using the tool's electrical cords for raising or lowering tools is prohibited.

Tools should be well-maintained. Power tools should be safely disconnected from the power source before adjustments or repairs are made.

Employees without a valid Hot Work Permit are prohibited from using electrical tools in hazard areas exposed to flammable vapors, gases or dusts.

When using portable electric tools, ground fault circuit interrupters (GFCI) or assured grounding must be in place. This requirement does not apply to equipment that runs off of portable or vehicle mounted generators at 5 kilowatts or less, those that are isolated from ground or to equipment running directly off of secondaries.

Pneumatic Tools

- Pneumatic tools must never be pointed toward another person.
- Pneumatic power tools must be secured to the hose or whip in such a way to prevent accidental disconnection of the tool from the hose.
- Pneumatic impact tools (percussion tools) must have safety clips or retainers installed and maintained to prevent accidental discharge of their attachments.

Compressed Air Tools

- Must be reduced to less than 30 psi when used for cleaning purposes and then only used with personal protective equipment (PPE) and effective chip guarding.
- Cannot be used to blow dust or dirt off clothing.
- May not be left unattended while under pressure.
- Are only to be operated by a person trained in the appropriate use of the tool.

Safe operating pressure, as recommended by the manufacturer, must be maintained for hoses, valves, pipes, filters and other fittings. The manufacturer recommended limits must not be exceeded.

Use of hoses for lifting or lowering tools is strictly prohibited.

Adjusting or changing air tools requires that the air is shut off at the air supply valve, ahead of the hose. Before breaking the connection, bleed the hose at the tool. This is not necessary for tools equipped with quick-change connectors.

Secure air tool connections before turning on the air pressure. The tool should be properly under control by the operator before the air is turned on.

Clamps and couplings on pressurized air hoses must be pinned with appropriate fasteners. Only approved end-fitting clamps may be used. Screw type heater hose clamps are unacceptable.

Hoses and their connections used in the conduction of compressed air to equipment must be designed for the pressure and service they are being used for. Never point a hose toward someone while blowing it down. Conductive hoses should not be used near energized equipment.

Employees are required to wear foot protection when operating impact tools (e.g., paving breakers, rotary drills, tampers, clay spades, etc.) and any other time as required by the supervisor.

Pneumatic nailers, staplers and other equipment with automatic fastener feeds that operate at 100 psi or higher pressure at the tool are required to have a safety device on the muzzle to prevent against the ejection of fasteners, unless this muzzle would be in contact with the work surface.

Airless spray guns that atomize paint and fluids at high pressures of 1,000 lbs. or more per square inch must be equipped with safety devices (automatic or manual) to prevent accidental pulling of the trigger and to prevent the release of paint or fluid before the safety device is manually released. Alternately, a diffuser nut, high velocity release and a nozzle tip guard or other equivalent protection is acceptable.

Powder Actuated Tools

- Powder actuated tools are those that are activated by an explosive charge, and:
- Only qualified employees certified in the use of these tools may operate them.
- Explosive charges for these tools must be transported and carried in approved containers.
- Employees using these tools will be provided with face, eye and hearing protection.

Tools are to be maintained and serviced regularly by qualified a person. Prior to using these tools, the materials on which the tools are to be used must be inspected to eliminate hazards and to determine the tool's suitability for the task at hand. Prior to use:

- The operator will make sure the protective shield is securely attached to the tool.
- The operator will inspect the tool to determine that:
    - It is clean.
    - Its moving parts operate smoothly.
    - Guards and safety devices are in place.
    - The barrel is free of obstructions.
- Only qualified employees trained in the use of these tools may operate them.
- The operator must read and familiarize himself/herself with the operating guidelines and procedures as recommended by the manufacturer.

When a tool sustains damage or develops a defect during use, the employee will stop using the tool and remove it from service, as noted in this program.

Tools are not to be loaded until just before the intended firing time. Unattended tools should not be left loaded. Tools, whether loaded or unloaded, should never be pointed at another person. Tools must never be left unattended in a place where unauthorized persons may have access to the tool.

If the tool misfires, the operator will hold the tool in the operating position for at least 30 seconds. The operator will then try the tool a second time. If the tool misfires again, the operator will hold the tool in position for another 30 seconds. The operator must then remove the explosive charge with strict adherence to the manufacturer's instructions.

Fasteners must not be driven into unusually hard or brittle materials including, but not limited to, surface hardened steel, live rock, hollow tile, glazed tile, cast iron, glass block, live rock or face brick.

On the other hand, driving into easily penetrable materials should be avoided unless the materials are backed in such a way that will prevent the pin or fastener from passing completely through the material and creating a flying missile hazard on the other side.

Tools must not be used in flammable or explosive atmospheres.

Hydraulic Power Tools

Hydraulic powered tools must use fire-resistant fluids approved according to Schedule 30 of the U.S. Bureau of Mines, Department of the Interior, which will retain its operating properties at the most extreme temperatures to which it is exposed.

The manufacturer's safe operating pressures must be adhered to for hoses, pipes, valves, filters and other fittings.

When using hydraulic tools on or around energized lines or equipment, non-conducting hoses of adequate strength for the normal operating pressure must be used.

Hydraulic Jacks

Loading and Marking

- The operator must ensure that the jack being used is rated sufficiently to lift and sustain the load to which it is subjected.
- The rated load must be marked in a legible and permanent manner in a prominent location on the jack via stamping, casting or other means.

Operation and Maintenance

- If a firm foundation is not available, the base of the jack must be blocked. If there is a possibility that the cap will slip, a block must be placed between the load and the cap.
- The operator must keep an eye on the stop indicator, which must be kept clean, in order to determine the travel limit. The indicated limit must not be exceeded.
- After the load is raised, it must be secured at once.
- Antifreeze will be supplied in adequate quantities for hydraulic jacks that are exposed to freezing temperatures.
- Jacks must be well-lubricated according to the manufacturer's recommendations at regular intervals.

The operator must inspect the jack before each use. Jacks that are deemed unsafe must be tagged accordingly and taken out of use until repairs are made.

Abrasive Blast Cleaning Nozzles

Blast cleaning nozzles will have an operating valve that must be held open manually. A support will be provided to mount on the nozzle when it is not in use.

Fuel Powered Tools

Fuel-powered tools must be stopped during refueling, servicing or maintenance. Fuel must be handled, stored and transported according to the Flammable and Combustible Liquids Program.

When using fuel powered tools in enclosed spaces, the requirements for concentrations of toxic gases apply. The use of protective equipment must be adhered to.

Guarding Portable Tools

Guarding must always be in place and in operating condition when the tool is in use. The operator is prohibited from manipulating the guard in a manner that will compromise the integrity of the guard or the protection for which it is intended. Guarding on portable tools will meet ANSI B15.1 requirements.

Portable Circular Saws

- Portable, powered circular saws that have a blade diameter greater than 2 in. must have guards in place above and below the base plate or shoe.
- The upper guard must cover the depth of the saw's upper teeth, except for the minimum arc required to allow retraction of the guard and contact with the work surface.

- The lower guard must cover the depth of the saw's lower teeth, except for the minimum arc required to allow the retraction of the guard and contact with the work surface.
- When the tool is pulled back from the work surface, the lower guard automatically returns to the covering position.
- Cracked or damaged saw blades must be removed from service.

Switches and Controls

- All handheld power tools are required to have a constant pressure switch or control and may be provided with a lock-on control that allows turnoff by a single motion of the same finger or fingers that turn it on.
- A constant pressure switch or a control that will shut off the power when the pressure is released must be in place on all hand-held powered circular saws with blade diameters of 2 inches or more, hydraulic, electric, or pneumatic chain saw, and percussion tools without positive accessory holding.
- Hand-held gasoline powered chain saw must have a constant pressure throttle control to shut off the power to the chain when the pressure is released.
- Operating controls on hand-held power tools will be placed to minimize the possibility of accident operation, if accidental operation would be a potential hazard to employees.
- Portable electric powered tools will be grounded according to the requirements set forth in the Electrical Safety Program. All electric power tools must have a three-prong plug.

Portable Abrasive Wheels

Safety Guards Exceptions

- Mounted wheels used in portable operations 2 inches or less in diameter.
- Wheels used for internal work while within the work being ground.
- Types 16, 17, 18, 18R, and 19 cones, plugs and threaded-hole pot balls where the work offers protection.
- Guards must be made of steel or other material of suitable strength.
- A safety guard must cover the spindle end, nut and flanges. The guard must be mounted in a way that maintains its proper alignment with the wheel. The strength of the fasteners must exceed the strength of the guard.
    - Exception: Safety guards may be constructed so that the spindle end, nut, and outer flange are exposed if the work provides adequate protection to the operator. These may also be exposed when the portable machine is designed for and used with type 6, 11, 27 and 28 abrasive wheels, cutting off wheels, and tuck-pointing wheels.
- When the work provides cover for the entire side of the wheel, the guard's side covers can be omitted.

Mounting and Inspection of Abrasive Wheels

- All wheels must be examined before mounting. A ring test must be conducted to ensure they have not been damaged during transit, storage, etc.
- To conduct the ring test, "tap" the wheels about 45 degrees each side of the vertical midline and about 12 inches from the periphery. Then, rotate the wheel 45 degrees and repeat the test. Undamaged wheels will have a clear metallic sound. If the wheel is cracked, there will not be a clear "ring".
- The machine's spindle speed must be checked before mounting wheels to ensure that it doesn't exceed the maximum operating speed as marked on the wheel.
- Grinding wheels must fit freely and remain free on the spindle under all grinding conditions.

- To avoid excessive pressure from spindle expansion and mounting, a controlled clearance must be maintained between the wheel hole and spindle.
- The machine's spindle must be manufactured to nominal (standard) size plus zero minus .002 inch. The wheel hole must be suitably oversized to ensure safety clearance under the conditions of operating heat and pressure.
- All surfaces in contact with wheels, flanges and blotters must be flat and free of aberrant objects.
- When the use of a bushing is required in a wheel hole, it must not exceed the width of the wheel and must not come into contact with the flanges.

Portable Grinders

"Revolving cup guards" that mount behind and turn with the wheel will be used. These will be made of steel or other adequate materials and will enclose the wheel sides up from the back for one third (1/3) of the thickness of the wheel. A clearance of no more than one-sixteenth inch must be maintained between the guard and wheel side.

Right angle grinders, or vertical portable grinders, will have a maximum angle of exposure of 180 degrees. The guard will be placed between the wheel and the operator during use. The guard may be adjusted to ensure that, in case of an accident, pieces of the broken wheel will be deflected away from the worker.

Other Portable Grinders

The maximum allowable angular exposure for the periphery of the grinding wheel and the sides for safety guards must not exceed 180 degrees. The top half of the wheel must be enclosed at all times.

Personal Protective Equipment

Employees will be provided with personal protective equipment (PPE) if they may be exposed to any of these possible hazards:

- Falling, flying, abrasive or splashing objects.
- Harmful dust, vapors, gases, fumes or mist.

HARD HAT REIMBURSEMENT POLICY

Policy Statement

Acoustics Associates is committed to ensuring a safe and healthy workplace environment for all of our employees.

To ensure proper head protection in the workplace, Acoustics Associates provides all of our employees that are required to wear head protection based on their job duties with hard hats that meet both OSHA and ANSI standards. We understand that the hard hats we provide may not be the preferred option for all employees and for this reason we will provide reimbursement of up to $100.00 per employee once every 5 years to purchase a hard hat brand they prefer. This policy will only reimburse for approved Type 2 Class C helmet style hard hats that include an attached chin strap.

Most hard hat manufacturers recommend replacement every 5 years under normal use. Factors like harsh conditions (extreme temperatures, chemicals, sunlight) may necessitate more frequent replacement, possibly every two years. Regular inspections for damage are crucial, and any signs of wear or impact should trigger immediate replacement.

According to OSHA regulations, a hard hat that has been subjected to an impact should be immediately replaced, even if no visible damage is present. This policy must be followed for the approval process to replace the hard hat, but occurrence is not limited to once per 5 years, but instead per incident.

Purpose

The purpose of this policy is to establish a process and criteria for determining the appropriate head protection for eligible employees that may be exposed to hazards in the workplace and to outline the reimbursement process for the purchase of said head protection.

Scope

This program applies to all Acoustics Associates employees who are required to use head protection for the scope of work they perform and according to their specific job duties.

Procedure

General

- Supervisor will notify the applicant and/or employee of the requirement to wear head protection on the job during the interview process and/or during the new employee orientation/onboarding. Language will also be included in the applicant's appointment letter, which will include examples of appropriate hard hats.
- If at any time the employee has a change in duties and PPE is now required, the employee and supervisor will follow the procedures in this policy.
- This policy will only reimburse for approved Type 2 Class C helmet style hard hats that include an attached chin strap.
- The new employee will have 30 days from the date they are hired to acquire and request reimbursement for their purchased hard hat. Existing employees will have 30 days from the time they notify their manager or superintendent they would like to submit a request. A company provided hard hat must be used until the new hard hat is approved, purchased, and received.

- The employee must submit the manufacturer's information on the hard hat they wish to purchase to the Safety Department for approval.
- Once Employee receives approval and acquires the hard hat, the employee will bring the hard hat to the Safety Department for final approval and verification of OSHA compliance/company standards and will agree to have a company logo sticker added to the hard hat.
- The employee will then submit a request for reimbursement along with their purchase receipt to their manager or superintendent for review via the payroll mobile app. The manager or superintendent will approve the request and receipt for reimbursement to the Payroll Department and the reimbursement will be included on the employee's next paycheck.

Failure to follow any of the requirements or procedures will result in the reimbursement request being denied.

For more information, please contact your manager, superintendent or a member of the safety department.

INCIDENT INVESTIGATION AND REPORTING

Purpose

The purpose of this program is to put in place effective procedures for reporting, evaluating, and investigating reported incidents and non-conformance in order to prevent further occurrences. The goal of an accident investigation is hazard identification and prevention, not to affix blame. Objectives also include improving the work environment, improving operational and safety procedures, raising safety awareness and reaffirming the Company's commitment to the safety and well-being of its employees.

The Safety Manager, supervisors, and safety committee members complete accident investigations, which should be conducted as soon as possible. The basic goal is to determine the root causes, and to determine appropriate corrective action so that the incident does not happen again.

Responsibilities

Responsibilities for incident investigation will be assigned to individuals prior to occurrence of an incident. Individual responsibilities for reporting and investigation must also be already in place and assigned prior to incidents.

Safety Manager

- Ensures investigations are conducted in a timely manner, assists in the identification of corrective actions, and makes sure the corrective actions are carried out expeditiously.
- Ensures all incidents are corrected in order to comply with Acoustics Associates policy.
- Investigates (or assists in) incident investigations.

Supervisors

- Investigates (or assists in) incident investigations.
- May assist the injured employee(s) to a medical provider for initial treatment.
- Immediately report any injury, job related illness, spill, or damage to any property to their immediate Safety Manager according to the Injury Reporting Process.

Employees

- Immediately report any injury, job related illness, spill, or damage to any property to their immediate supervisor according to the Injury Reporting Process. Appendix A.
- If their immediate supervisor is unavailable, the employee will then immediately notify the Safety Manager and Safety Specialist. Employees who are eligible to be first responders will be trained and qualified in first aid techniques in order to help mitigate the degree of loss during the immediate post-incident phase.

Procedure

After rescue or response, actions to prevent further loss should immediately occur if the scene is safe. For example, maintenance personnel should be summoned to assess integrity of buildings and equipment, engineering personnel to evaluate the need for bracing of structures, and special equipment/response requirements such as safe rendering of hazardous materials or explosives employed.

Investigations of Incidents & Non-conformance

Investigation is an important part of an effective safety program in that it determines the root cause and corrective actions necessary to prevent similar incidents or non-conformance from occurring in the future.

The following incident must be reported IMMEDIATELY to the employee's supervisor. If that person is not available, then the Safety Manager shall be immediately notified for:

- Near miss incidents with the potential to harm people, the environment, or assets,
- Work related injuries or illnesses,
- Any damage to property, including vehicle incidents,
- Hazardous chemical spillage, which includes loss of containment and contamination,
- Non-conformance to safety or environmental rules, policies, or standards. The supervisor will notify all necessary individuals and agencies and then begin the incident investigation process.

In the case of a major injury or incident, the scene of the event should be closed off and kept "as is" at the time of the incident. This is vital for effective incident investigation.

Incident investigation will take place as soon as possible, while the facts are still fresh within the minds of everyone involved (i.e. witnesses). Take the opportunity to talk to all of those involved before they become unavailable or their memory fades. An incident investigation must be thorough and only focused on the cause and prevention. Administrative disciplinary action will be kept separate from the investigation process.

Equipment

All necessary equipment will be made available to aid in conducting a proper investigation. Equipment may include some or all of the following items:

- writing equipment such as pens/paper,
- measurement equipment such as tape measures and rulers,
- cameras, small tools, and audio recorder,
- PPE, flags, equipment manuals, etc.

The Safety Manager shall have an incident investigation kit prepared in advance to facilitate a thorough investigation.

OSHA Reporting

The OSH Act requires employers to keep records of certain injuries and illnesses, and to report certain workplace incidents to OSHA within specific time periods. Specifically, all employers must report:

- Any work-related fatality within eight hours
- Any of the following, if it results from a work-related incident, within 24 hours:
    - Inpatient hospitalization
    - Amputation
    - Loss of an eye

In addition, a 2016 final rule requires certain establishments to submit injury and illness information electronically to OSHA. Employers that are not in a partially exempt industry and have more than 10 employees must also

prepare and maintain records of serious occupational injuries and illnesses using OSHA forms 300, 300A and 301. More information on these forms can be found on OSHA's website.

Incident Review Team and Incident Investigation Report

All incidents will be investigated according to levels of incident severity. While all incidents will be investigated, the extent of such investigation shall reflect the seriousness of the incident according to a root cause analysis process or other similar method approved and put in place by ACOUSTICS ASSOCIATES INC Safety Manager. An Incident Review Team that participates in the determination of the final root cause will be formed to aid investigative incident reporting. The team will consist of representatives of management, or other personnel assigned by Acoustics Associates Safety Manager.

Initial Identification/Assessment of Evidence

Initial identification of evidence immediately following the incident should include:

- the location of the incident, a listing of people on the scene,
- equipment, and materials involved,
- and a recording of environmental factors such as weather, illumination, temperature, noise, ventilation, etc.

Collection/Preservation and Security of Evidence

Evidence such as people, positions of equipment, parts, and papers must be preserved, secured and collected through the use of notes, photographs, witness statements, flagging, and the seizing of documents and equipment. All evidence shall be dated appropriately.

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 will consist of findings with critical factors, evidence, corrective actions, responsible parties, and a schedule for corrective action and timeline for completion.

Results of incident investigations are communicated to employees via the Incident Notice form. Preparation of the Written Incident Report

Written incident reports will be prepared and will include the Field Incident Report Form along with a detailed narrative statement concerning the events. The format of the narrative report should include an introduction, methodology, summary of the incident, Incident Review Team member names, narrative of the event, findings and recommendations. Photographs, witness statements, drawings, etc. should be included in the report.

The Supervisor/Foreman takes the steps outlined below when beginning an incident investigation:

- Provide emergency assistance, as needed and if qualified to do so,
- Secure the area as quickly as possible to retain area in the same condition as the time of the incident,
- Notify management by phone,
- Identify potential witnesses,
- Use investigation tools, as needed (camera, drawings, video, etc.),

- Secure by Lock out/Tag out any equipment involved, as evidence,
- Interview witnesses (including the affected employee) and obtain written, signed statements which will be emailed to the Safety Manager,
- Prepare a Field Incident Report, sign the form, and then email it to the Safety Manager.
- Implement any corrective actions needed immediately.

Incident Notice Form

Acoustics Associates shall provide documentation and communication of lessons learned and reviews of similar operations to prevent re-occurrence. Lessons learned are reviewed and communicated to the appropriate personnel. Changes to processes and procedures must then be put into immediate effect to prevent reoccurrence of similar events.

In order to communicate incident information and the lessons learned from them, the Safety Manager shall share the Incident Notice with the Safety Committee. The form shall be posted on all employee bulletin boards and shall be discussed in weekly safety meetings until all employees at the job site have been informed of both the incident and the corrective actions put in place.

Corrective Actions Resulting from Incident Investigations

Incident investigations should result in corrective actions. Individuals should be assigned responsibilities relative to the corrective actions and should be monitored until all corrective actions have been implemented. The incident investigation and report can be closed after verifying the necessary corrective actions are now in place.

Site Managers are held accountable for closing corrective actions. Corrective actions for safety improvement input are posted at each site and tracked by ACOUSTICS ASSOCIATES INC Safety Manager to ensure timely follow up and completion.

Corrective actions will also be used as needed for revisions to site specific safety plans and ACOUSTICS ASSOCIATES INC wide Safety and Health Management System.

Injury Classifications

Injuries shall be classified per the following:

- First Aid – Dressing on a minor cut, removal of a splinter, or other such typical treatments for household type injuries.
- Lost Workday Case (LWDC) – An injury that results in an employee being unfit to perform any work on any day after the occurrence of an occupational injury.
- Number of Lost or Restricted Workdays – The number of days, excluding the day of injury and the day of return, missed from scheduled work due to being unfit for work or medically restricted to the point that the essential functions of a position cannot be worked.
- Occupational Injury – An injury which results from a work-related activity,
- Occupational Illness – Any abnormal condition or disorder caused by exposure to environmental factors while performing work. The illness would result in medical treatment by a physician for a skin disorder, respiratory condition, poisoning, hearing loss, or other disease (frostbite, heatstroke, sunstroke, welding flash, diseases caused by parasites, etc.). Minor treatments (first aid) for illnesses do not fall within this classification.

- Recordable Medical Case (RMC) – An occupational injury more severe than first aid that requires advanced treatment (such as fractures, more than one stitch, prescription medication of more than one dose, unconsciousness, removal of foreign body embedded in eye (not flushing), admission to a hospital for more than observation purposes) but does not result in lost work time beyond the day of injury.
- Restricted Workday Case (RWDC) – An occupational injury which results in a person being unfit for essential functions of the regular job on any day after the injury but where there is no time lost beyond the actual day of injury. For example, an injured employee is kept at work but not performing the essential functions of their regular job.
- Work or Work-Related Activity – All incidents that occur in work related activities during work hours, field visits, etc. are reportable and must be included if the occupational injury or illness is more serious than requiring simple first aid. Incidents occurring during off hours and incidents while in transit to or from locations that are not considered an employee's primary work are not reportable.

The following are examples of incidents that will not be considered as recordable:

- The injury or illness involves signs or symptoms that surface on the job but are the result of a non-work-related event or exposure that occurs outside the work environment.
- The injury or illness results from voluntary participation in a wellness program, or a flu shot, exercise class, racquetball, baseball, or other such activities.
- The injury or illness is the result of an employee eating, drinking, or preparing food or drink for personal consumption (whether bought on the employer's premises or brought in).
- The injury or illness is the direct result of an employee doing personal tasks (unrelated to their employment) at the establishment outside of the employee's assigned working hours.
- The illness is the common cold or flu (Note: contagious diseases such as tuberculosis, brucellosis, hepatitis A, or plague are considered work-related if the employee is infected at work).

Training

Acoustics Associates shall train all personnel in their roles, responsibilities, and in proper incident investigation techniques.

Training frequency will be based on the specific area of responsibility but will never be more than two years apart. Training requirements relative to incident investigation and reporting shall include the following:

- Awareness
- First Responder Responsibilities
- Initial Investigation at the Accident Scene
- Managing the Accident Investigation
- Collecting and analyzing data
- Developing Conclusions
- Judgments needs
- Reporting the Results

ACOUSTICS ASSOCIATES
10750 XYLON AVE N., SUITE 140, BROOKLYN PARK, MN 55445
MAIN: 763.544.8901

FIELD INCIDENT REPORT FORM

Date of Incident:		Time of Incident:
Incident Location:		
Employees Involved:		
Type of Incident: ☐ Job Related Illness ☐ Job Related Injury ☐ Property Damage ☐ Other (describe):		Cause of Incident: ☐ Unsafe Act ☐ Unsafe Condition of Area ☐ Unsafe Condition of Equipment ☐ Unsafe Use of Equipment ☐ Safety Policy Violation ☐ Other (describe):
Describe the incident in detail:		
Were safety procedures violated? Describe:		
Job Name:	Job #:	Job Project Manager:
Jobsite Address:		
Witness Name:		Witness Phone:
Incident site inspection - Why was an unsafe act committed, or why was the unsafe condition present?:		
Incident Photos:		
Recommendations/steps to take to prevent a similar incident:		
Reporters Name:		Date Reported:
Additional Comments:		

Safety Manager - Ryan Grefsheim - 763.458.3137 - ryang@aaimn.com
Safety Specialist - Nina Hennen - 763.200.2616 - kristinah@aaimn.com
Panel Shop Superintendent - Jamey Johnson - 763.286.7117 - panelshop@aaimn.com
Carpenter Superintendent - Craig Serfas - 763.286.8223 - craig.s@aaimn.com
Flooring Superintendent - Craig Gunderson - 763.286.8484 - gundy@aaimn.com
Tile/Concrete Superintendent - Rodney Baldwin - 763.286.8213 - rodney@aaimn.com

INJURY AND ILLNESS RECORDKEEPING

Purpose

The purpose of this program is to establish standards for recording ACOUSTICS ASSOCIATES INC injuries and illnesses and to comply with applicable regulatory requirements.

Scope

This program applies to all employees on all Acoustics Associates or client facilities.

Key Responsibilities

Safety Manager

- Implement this program and make supervisors aware of its requirements.
- Responsible for maintaining all records pertaining to this program.

Supervisors

- Ensure that all work-related injuries and illnesses are promptly reported to the safety manager.
- Shall become familiar with the requirements of this program.

Employees

- Ensure that all work-related injuries and illnesses are reported to your supervisor immediately.

Procedure

Written records of all work-related fatalities, injuries, and illnesses must be kept, ensuring accurate recordkeeping procedures. Therefore, Acoustics Associates shall:

- Injuries are reported according to the Injury Reporting Process and First Report of Injury Form.
- Record all illnesses or injuries on the OSHA 300 log within 7 calendar days of receiving information that the injury or illness occurred.
- Post the OSHA 300A summary form in a place that is accessible and visible to employees from February 1st through April 30th.
- Maintain OSHA 300 records for at least 5 years.

* The OSHA 300A form shall be reviewed and signed by an Acoustics Associates officer.

Posting Requirements

Acoustics Associates shall post the OSHA 300A summary form in a conspicuous place that is easily accessible and available to employees such as a lunchroom, time clock area or other effective common area.

Post the OSHA 300A summary form from February 1st through April 30th as per the OSHA recordkeeping requirements.

If the posted OSHA 300 summary form is defaced, altered or otherwise unreadable, it shall be replaced so that employees can effectively read the form information. All OSHA recordkeeping forms shall be kept for at least 5 years as per the OSHA recordkeeping requirements.

Injury Reporting Process

1. In the event of a Medical Emergency, Call 911
2. For Minor injuries, administer First Aid and determine if additional treatment will be needed
3. Notify superintendent of incident/injury
4. Seek treatment based on the **Policy for medical service location determination** below
5. Superintendent will provide the First Report of Injury form to the injured employee, safety manager and safety specialist
6. Superintendent will inform Acoustics Associates Project Manager of incident
7. Employee fills out First Report of injury along with associated clinic documentation
8. Employee must send the documentation to safety manager, safety specialist and superintendent within 24 hours of incident

Policy for medical service location determination

Minor injuries (examples include Cuts, Lacerations, Minor Dislocations, Burns, Scalds, General Pain)

Minnesota Occupational Health nearest to jobsite
Locations and Hours:

Coon Rapids - 600 Coon Rapids Blvd NW, Coon Rapids, MN 55449
(Monday to Friday 7:00 am to 4:00 pm)

Woodbury - 4123 Radio Drive, Woodbury, MN 55125
(Monday, Tuesday, Thursday, Friday 7:30 am to 4:30 pm)

Eagan - 1400 Corporate Center Curve, #200, Eagan, MN 55121
(Monday to Friday 7:00 am to 4:00 pm)

Shakopee - 4360 12th Ave E., Shakopee, MN 55379
(Monday to Friday 7:00 am to 4:00 pm)

St. Paul/Midway - 1661 St Anthony Ave., 2nd floor, St. Paul, MN 55104
(Monday to Friday 7:00 am to 4:00 pm)

**For minor injuries that occur outside of normal clinic hours employee will visit Urgent Care nearest to jobsite*

Major injuries (examples include Severe Hemorrhage, Severe Chest Pain, Extensive Burns, Poisoning)

Emergency Room nearest to jobsite

Panel Shop Superintendent	Carpenter Superintendent	Flooring Superintendent	Tile/Concrete Superintendent	Safety Manager	Safety Specialist
Jamey Johnson	Craig Serfas	Craig Gunderson	Rodney Baldwin	Ryan Grefsheim	Nina Hennen
763-286-7117	763-286-8223	763-286-8484	763-286-8213	763-458-3137	763-200-2616
panelshop@aaimn.com	craig.s@aaimn.com	gundy@aaimn.com	rodneyb@aaimn.com	ryang@aaimn.com	kristinah@aaimn.com

ACOUSTICS ASSOCIATES
10750 XYLON AVE N., SUITE 140, BROOKLYN PARK, MN 55445
MAIN: 763.544.8901

FIRST REPORT OF INJURY FORM

Date of claimed injury:		Time of injury: AM ☐ PM ☐	
Social Security #:	Employee Full Name:		
Date of Birth:		Gender: Male ☐ Female ☐	
Marital Status: ☐ Married ☐ Unmarried		Apprentice: Yes ☐ No ☐	
Home Address:			
Occupation:		Date hired:	Hourly Rate:
Did the injury occur on the employers premesis?		Yes ☐ No ☐	
Job Name:	Job #:	Job Project Manager:	
Jobsite Address:			
Type of injury:			
Body part(s) injured:		Side of body injured: Right ☐ Left ☐	
In detail, how the injury occurred and what you were doing before the incident:			
Date employer notified of injury:		Expected return to work date:	
First date of lost time:		Date employer notified of lost time:	
Treating Physician Name, Address, Phone:		Hospital/Clinic Name and address:	
Emergency room visit: Yes ☐ No ☐		Overnight in-patient: Yes ☐ No ☐	
Witness name:		Witness phone:	
Date form completed:			

Safety Manager - Ryan Grefsheim - 763.458.3137 - ryang@aaimn.com

Safety Specialist - Nina Hennen - 763.200.2616 - kristinah@aaimn.com

Panel Shop Superintendent - Jamey Johnson - 763.286.7117 - panelshop@aaimn.com

Carpenter Superintendent - Craig Serfas - 763.286.8223 - craig.s@aaimn.com

Flooring Superintendent - Craig Gunderson - 763.286.8484 - gundy@aaimn.com

Tile/Concrete Superintendent - Rodney Baldwin - 763.286.8213 - rodney@aaimn.com

Injury Response Plan - Medical Emergency

Purpose

Acoustics Associates employee injury response plan outlines the immediate actions to be taken when a worker is injured on site, including providing first aid, notifying relevant parties, arranging medical transportation if needed, documenting the incident, and initiating a thorough investigation to prevent future occurrences.

Scope

To outline procedures for immediate first aid and medical attention, reporting mechanisms for injuries, designated roles and responsibilities for response, post-incident investigation and corrective actions, and regular plan reviews and updates to ensure effectiveness in managing workplace injuries.

Key Responsibilities

The first priority is to secure the accident scene and ensure the safety of everyone present.

Superintendents

1. If 911 hasn't been called yet, instruct the employee to do so.
2. Ask: Who, What, Where, When, How and Why.
3. Contact Safety Specialist with information provided by the employee.
4. Go to the location of the employee (jobsite or hospital).
5. Instruct remaining employees to stay onsite until Safety Specialist arrives for investigation.
6. Stay in contact with Safety Specialist to provide any updates or new information as available.
7. Stay at hospital until the employee's family and either a member of leadership or Safety Specialist arrive.

Safety Specialist

1. Notify Safety Manager and provide available information.
2. If the employee is unable, call the employee's emergency contact.
3. Immediately go to the jobsite to begin investigation.
4. Contact OECS for assistance, if needed.
5. Notify Project Manager of injury.
6. Notify General Contractor of injury.
7. Work with EMS/other onsite to gather information.
8. Once the investigation is complete, go to hospital to meet with Superintendent and member of leadership.
9. Provide Safety Manager with any updates or new information.
10. Create a detailed investigation report.
11. File FROI with Berkly risk.

Safety Manager

1. Provide members of leadership with available information.
2. Assign a member of leadership to go to the employee's location (jobsite or hospital).
3. Contact AAI's legal team for additional information if needed.
4. Provide Safety Specialist and Superintendent with instructions from the legal team.
5. Review response procedures.
6. Contact OSHA to report the injury (8 hours death, 24 hours hospitalization).

Injury Response Plan - Minor Medical

Purpose

Acoustics Associates employee injury response plan outlines the immediate actions to be taken when a worker is injured on site, including providing first aid, notifying relevant parties, arranging medical transportation if needed, documenting the incident, and initiating a thorough investigation to prevent future occurrences.

Scope

To outline procedures for immediate first aid and medical attention, reporting mechanisms for injuries, designated roles and responsibilities for response, post-incident investigation and corrective actions, and regular plan reviews and updates to ensure effectiveness in managing workplace injuries.

Key Responsibilities

All accidents and incidents, regardless of their severity, need to be reported immediately.

Superintendents

1. Ask: Who, What, Where, When, How and Why.
2. Help determine the level of care needed.
3. Instruct the employee on the nearest clinic/urgent care.
4. Instruct the employee to complete the First Report of Injury form.
5. Contact the Safety Specialist and provide the information that has been gathered.
6. If needed, go to the jobsite or clinic or arrange transportation to medical facility.
7. Stay in contact with the Safety Specialist to provide any new updates or information.

Safety Specialist

1. Notify Safety Manager and provide available information.
2. Determine if an onsite investigation is needed and complete within 24 hours.
3. Contact OECS for assistance if needed.
4. Notify Project Manager of injury.
5. Notify General Contractor of injury.
6. Create a detailed investigation report.
7. File the FROI with Berkley Risk.
8. Follow up with the employee on future medical needs and workability.
9. Provide Safety Manager with any updates or new information.

Safety Manager

1. Provide members of leadership with available information.
2. Review response procedures.
3. Review investigation report with the Safety Specialist.
4. Recommend any changes that need to be made.

LADDER SAFETY PROGRAM

Purpose

The purpose of this ladder safety program is to establish guidelines and procedures to prevent hazards associated with ladder use. Taking steps to use ladders safely can prevent injuries, save lives, and minimize the economic impact of ladder-related accidents and incidents.

Scope

This program applies to all Acoustics Associates employees, contractors and subcontracts and shall be used on all Acoustics Associates owned and operated premises. When work is performed off-site, the site owners program has precedence unless it is less stringent than Acoustics Associates program.

Key Responsibilities

Managers and Supervisors

- It is the responsibility of all managers and supervisors to ensure that all employees and contractors are trained to use and inspect ladders according to the manufacturer's guidelines.
- It is the responsibility of all managers and supervisors to ensure that all employees and contractors are aware that any inspected ladder found to have a defect may not be used and must be taken out of service.

Employees

- Employees are responsible for inspecting ladders before, during and after each use to make certain the condition of the ladder is safe for its occupants,
- Employees are responsible for following the procedures outlined in this program,
- Employees are responsible for reporting damage or needed repairs to their manager or supervisor.

Definitions

Ladder – a device consisting of side rails joined at regular intervals by rungs, steps or cleats, on which a worker may step in an ascending or descending motion.

Step ladder - a portable ladder that is self-supporting and nonadjustable lengthwise. The steps are flat; the back is hinged. The size of a step ladder is designated by the length of the ladder when measured along the front edge of the side rails.

Single ladder – a portable, nonadjustable ladder with only one section. This ladder requires support. The length of the side rail denotes its size.

Extension ladder – a portable ladder consisting of two or more sections that can be adjusted lengthwise by moving the sections along brackets. Its size is denoted by the sum of the lengths of all sections measured along the side rails.

Fixed ladder – a ladder that is permanently attached to equipment or a structure.

Individual-rung ladder - a fixed ladder with no side rails. Each rung is individually attached to a building, structure, or equipment.

Cage – an enclosure surrounding a fixed ladder designed to encircle the climbing space of the ladder to keep the climber safe.

Procedure

Inspections

Ladders must be inspected for visible defects by a qualified person periodically and after any incidents that may affect the safe use of the ladder.

- Ladders must have uniformly spaced rungs or meet OSHA/ANSI specifications for rungs. These rungs, steps or cleats must be parallel and level while the ladder is positioned for use.
- Any portable or fixed ladder that is found to have structural defects must immediately be marked in such a way that identifies the ladder as defective, or tagged with a "Do Not Use" sign and removed from service until repaired. These structural defects include, but are not limited to: broken rails, corrosion, broken or missing rungs or other faulty parts.
- Ladders that are tipped over must be inspected by a qualified person for dents and bends in the side rails or unusually dented rungs. Hardware connections, rivets and connections between rungs and side rails shall also be inspected at this time.
- Use of ladders with broken side rails, broken or missing steps, or other defective equipment is strictly prohibited. Employees are not permitted to make improvised repairs to these ladders.
- Wooden ladder parts must be free from splinters and sharp edges, free from shake and free from other irregularities.

Ladder Care

Ladders must always be well-maintained.

- The joints between steps and side rails must be tight with all hardware and fittings attached securely.
- Movable parts must operate freely without play or binding in the movement.
- Metal bearings in locks, pulleys, wheels, etc. must be lubricated frequently.
- Rope must be replaced when it is frayed or badly worn.
- Auxiliary equipment and safety feet must be kept in good condition.
- Rungs must be clean of grease and oil.
- Ladders must be stored in areas that are well-ventilated to avoid sagging and warping.

Ladder Safe Work Practices

- Ladders must only be used for their intended purposes.
- Ladders are required to be secured at the top or held in place by a person standing at the base.
- Ladder footing must be placed on a level, stable surface.
- Extension ladders are to be placed in a 4:1 ratio. Non-self-supporting ladders are to be used at an angle to ensure that the horizontal distance from the top support to the foot of the ladder is one-quarter of the working length of the ladder (the distance between the foot and top support).
- If a ladder cannot be extended, the ladder must be secured at the top to a strong support that will not allow the ladder to bend or veer.
- Ladders must never be placed on unstable bases, such as boxes or barrels, in order to get additional height.
- Ladders may not be placed in a horizontal position to be used as runways, scaffolds or platforms.
- Only one person shall occupy a ladder at any given time.

- Ladders must not be placed in a doorway wherein the door opens toward the ladder unless the door is locked, guarded, or blocked open.
- Ladders used in high traffic areas must be barricaded to avoid accidents and collisions.
- Ladder occupants are not permitted to stand on the top two rungs of a ladder or on the top of a step ladder.

The minimum overlap during the use of two-section extension ladders is 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

Ladders must extend at least three (3) feet above the top of the upper landing surface. Side rails must extend a minimum of three (3) feet above the upper landing surface. When ladders cannot be extended, the top of the ladder must be secured to a rigid support to prevent movement.

Employees must always keep a three (3) point grip on the ladder. Tools and equipment must be carried up on a hoist or belt. Employees are prohibited from carrying anything in their hands that could result in a fall or injury.

Employees must face the ladder when going up or down the ladder.

Employees shall not climb on the back legs of stepladders; these are designed for increased stability, not climbing.

No person may move a ladder while it is occupied.

Portable Ladders

Length of stepladders shall not exceed 20 feet. Single ladder length shall not exceed 30 feet.

Two-section extension ladders shall not exceed 60 feet in length. All two-section ladders are designed with sections that fit together and are arranged to enable the upper section to be raised and lowered.

Ladders must be kept a minimum of 10 feet away from power lines.

Ladders must have the appropriate load capacity for the task at hand. Ladders may not be loaded beyond the maximum recommended load for that ladder, nor more than the capacity as rated by the manufacturer. Weight consists of the combined weight of the climber and his equipment:

- I (250 lbs capacity)
- I-A (300 lbs capacity)
- II (225 lbs capacity)
- III (200 lbs capacity)

Fixed Metal Ladders

Ladders must be made to withstand a minimum of 200 pounds.

Metal rungs must have a diameter of at least 3/4 inches; wooden rungs must have a diameter of at least 1 1/8 inches.

The distance between rungs shall not be more than 12 inches (1 ft.) apart and must be uniform along the length of the ladder.

Rungs must be at least 16 inches long and provide protection to prevent a foot from slipping off the end. A rung must have at least seven (7) inches between itself and the structure behind it.

Employees must use fall restrain systems when on fixed ladders exceeding six (6) feet in length,

- A cage is required if the ladder is 20 feet tall or greater.
- Cages on fixed ladders must be positioned at least seven (7) feet but no more than eight (8) feet from the walking surface below the cage.
- Cage widths must clear 15 inches on either side of the centerline of the rung.
- Cages must not extend less than 27 inches or greater than 28 inches from the rung's centerline.
- Fall restraint systems may be used in place of ladder cages.

LOCKOUT TAGOUT PROGRAM

Purpose

The purpose of this program is to protect employees from machines and equipment capable of causing injury due to unexpected energization, release of stored energy or the start-up of equipment while an employee is performing maintenance or servicing equipment. Procedures have been established to disable equipment to prevent unintended start up, energization or release of stored energy that may cause accidents or injuries.

Scope

The procedures outlined in this program cover the maintenance and servicing of equipment and machines where unintentional energization or start-up of said equipment, or the release of stored energy, could result in an accident. Minimum performance standards for the control of hazardous energy shall be established. Work performed offsite is regulated by the site operator's program unless it is less stringent than Acoustics Associates program. This document covers all Acoustics Associates contractors and employees and must be used on Acoustics Associates owned premises.

Key Responsibilities

Managers and Supervisors

- Responsible for maintaining and enforcing this program.
- Ensure that all employees and contractors affected by the lockout/tagout program have the required training and competency to ensure the safe installation, utilization and removal of all energy controls and devices.
- Ensure employees are following the requirements set forth in this program.

Employees

- Affected employees are required to attend annual training for the lockout/tagout program.
- Responsible for following all requirements and provisions of this program.

Definitions

Affected employees – Employees who operate or use machines and equipment that require maintenance and service under the lockout/tagout program, or employees who work in areas where maintenance and servicing of such equipment is performed.

Authorized employees – Employees that conduct lockout/tagout operations on machines and equipment so as to service or perform maintenance on that equipment. Affected employees become authorized employees when their duties include performing service or maintenance as prescribed in this program.

Energy source – Any source of electrical, chemical, thermal, gas, mechanical, pneumatic, hydraulic, tension, gravitational, electrical or other energy source.

Energized – Having connection to a source of energy or containing stored or residual energy.

Energy isolating devices – Mechanical devices that prevent energy from being transmitted or released. Energy isolating devices include, but are not limited to:

- Manually operated electrical circuit breakers
- Manually operated switches that prevent conductors and poles from being independently operated.
- Disconnect switches.
- Line valves.
- Blocks.
- Any other devices used to isolate or block energy.

The following are not isolating devices:

- Selector switches.
- Push buttons.
- Other control circuit type devices.

Hot tap – Welding on equipment under pressure (pipelines, tanks or vessels) to install connections or other accessories. This procedure is used in maintenance, service and repair of said equipment.

Lockout – Placing a lockout device on an energy isolating device to make sure that the device and controlled equipment is inoperable until the lockout device is removed.

Lockout device – A device that uses a key or combination lock to fix an energy isolating device in a safe position to prevent start up and energizing of the equipment. This includes bolted slip blinds and blank flanges.

Capable of being locked out – Energy isolating devices are able to be locked out if that particular device has a hasp or other attachment for attachment of a lock, or if the device has a locking mechanism built in. Other energy isolating devices can be locked out if lockout can be performed without dismantling, rebuilding or replacing the device or permanently altering its energy control capabilities.

Tagout - Using established procedures to place a tagout device on an energy isolating device. This is used to indicate that the energy isolating device and the controlled equipment cannot be used until the tagout device is safely removed.

Tagout device – A warning device, such as a tag and a means of attaching it, located in a prominent area and securely attached to an energy isolating device according to these established procedures. This is used to indicate that the energy isolating device and the controlled equipment cannot be used until the tagout device is safely removed.

Normal operation – Using a machine or piece of equipment as it is intended.

Servicing and/or maintenance – Activities such as setting up, constructing, inspecting, adjusting, modifying, maintaining, or servicing machines and equipment in environments where the employee is potentially exposed to release of hazardous energy sources or accidental start up or energization of equipment.

Setting up - Any work performed to prepare a machine or equipment for performing its normal operation.

Procedures

General

Only employees authorized to perform service or maintenance under this program are permitted to perform lockout or tagout.

Devices

Lockout Device – If it is possible for an energy source to be locked out to hold an energy isolating device in a safe position, a device that utilizes a lock will be used. Acoustics Associates will specify the type of lock and will provide them to each site.

Tagout Device – If an energy source cannot be locked out, a tagout device must be used. Tagout devices are only warnings and must be resistant to chemicals and weather, of the standardized color with a clear written warning of hazardous energy. Examples of tags include: Do Not Start, Do Not Operate, Do Not Energize, etc. Acoustics Associates will provide each site with the same standardized style of tags.

Specific Energy Control Procedures

Each supervisor or manager is responsible for the development of site-specific step-by-step startup and shutdown procedures for each type of machine and piece of equipment in their respective areas. Periodic inspections of the energy control procedure will be conducted and documented annually to ensure procedures and requirements are being followed.

Written, step-by-step isolation procedures detailing shutdown and startup will be put together for each type of equipment or machine. These procedures will include the following:

- Assigned equipment number, if applicable.
- Location of equipment.
- Source of energy (e.g., hydraulic, electrical, gas, etc.).
- Isolating control location (e.g., valves, breaker switches, etc.).
- Number of isolating controls.
- Number of locks required to isolate the piece of equipment.
- The hardware required to isolate the equipment (e.g., blocks, valve covers, chains, etc.).
- Information regarding any residual energy that must be expended prior to beginning work.

Specific Sequence for Application of Energy Control

Notification – Authorized employees are required to notify affected employees when lockout/tagout devices are put on or removed prior to the controls being implemented.

Preparation for Shutdown – Prior to an authorized or affected employee shutting down a piece of equipment or machinery, the authorized employee must know the energy's type and magnitude, the potential hazards of the energy to be controlled, and the method or device required to control the energy source.

Shutdown of Machines and/or Equipment – Machinery and equipment must be shut down using the established procedures in this program for that particular type of machine or equipment. Shutdown must be conducted in a safe and orderly fashion to prevent additional hazards to employees as a result of the shutdown.

Isolation of Machines or Equipment – When energy isolating devices are required to control energy, the device will be placed and used in such a manner as to isolate the machine or piece of equipment from the energy source.

Lockout/Tagout Devices and Application - Authorized employees will have the appropriate number of locks and devices to enable them to perform lockout/tagout procedures for machines or equipment they are working on. Lockout/tagout devices will be attached to energy isolating devices by authorized employees and each lockout/tagout device will include the name of the person who placed the device. Lockout devices will placed in such a way as to hold the energy isolating device in a safe or off position. Tagout devices will be placed in such a way that will clearly indicate that operating or moving the isolating device from the safe or off position is not permitted. When using tagout devices on energy isolating devices that could be locked out, the tagout device shall be attached at the same point the lock would have been attached. If a tag cannot be attached directly to the energy isolating device, it will be placed as closely as possible to the device in a safe position that will immediately alert anyone who attempts to operate the device. Each source of energy must be locked out, completely isolating the equipment. Isolating machines or equipment include, but are not limited to: Pumps, generators, compressors, storage tanks, electric distribution, etc.,

Each type of isolated equipment will have its own specific procedures for isolation. For example, to isolate compressors: suction, discharge, power, starting, fuel and dumps must be closed, locked and tagged out properly. The blow-down valve must be opened, locked, and tagged out. NOTE: If the compressor has a side stream, the side stream must also be closed, locked and tagged out properly.

Stored Energy and the Possibility of Re-accumulation – After lockout/tagout devices are affixed to energy isolating devices, all potentially hazardous stored or residual energy must be restrained, relieved or disconnected and rendered safe in some manner. If re-accumulation of stored energy is a possibility, isolation will be verified until the equipment receives service or maintenance or until the possibility of re-accumulation does not exist.

Verification of Isolation – The authorized employee who performs the lockout procedure must verify that the equipment is disconnected or isolated from the source of energy by:

- Checking that no personnel are exposed.
- Verifying the isolation of the equipment by operating the controls.
- Testing to ensure the equipment is inoperable.

Multiple Workers & Group Lockout

Crews of authorized employees can use group lockout/tagout devices, which will provide the same level of protection as a personal lockout or tagout device. The authorized employee has primary responsibility for all employees working under the protection of a group lockout or tagout device.

- A short tailgate meeting will be held to go over the lockout procedures and other information needed to continue to work safely. All affected departments are required to participate.
- Isolation of the equipment will be performed by an authorized employee who must also determine the exposure status of the individuals in the group.
- All individual members will put their individual locks on the group's lockout or tagout device after they have verified the procedure.
- The crew leader or other designated authorized employee will be responsible for ensuring consistency of the lockout procedures including documenting lockout information to be passed along during shift or personnel changes.

Release from Lockout/Tagout

Upon completion of service or maintenance, or when lockout/tagout devices are removed temporarily, the equipment must be tested to determine whether the equipment is ready to return to its normal operations. The follow steps must be taken, in this order, to assess and prepare the equipment:

- Check the piece of equipment and its surrounding area to make sure that all extraneous items have been removed and that the components of the equipment are intact for operation.
- Ensure that all personnel in the work area have been removed from or safely positioned in the area.
- Remove the lockout/tagout device.
- Energize and begin testing.
- De-energize and reapply controls and lockout/tagout devices.
- Use the completed isolation log to document the procedure. Provide this documentation to the supervisor to be filed.

Lock Removal

The authorized employee who puts the lock on should be the one to remove the lock. Certain conditions may be encountered which prohibit this person from being present to remove the lock after the work is completed. The following procedures must be adhered to when removing the lock that another person has applied:

- Try to contact the authorized employee who put the lock on in order to obtain the key(s).
- If the key cannot be obtained, the employee who requires the lock to be removed must contact their supervisor.
- The supervisor must confirm that every effort was made to contact the employee who applied the lock.
- It shall be noted in the Service Report that the lock(s) were taken off with the permission of the supervisor.
- The supervisor will make a reasonable effort to notify the employee that their lock has been removed to ensure the worker has knowledge of the same before returning to work.
- If the equipment is owned by a client, the supervisor or employee requiring the lock's removal must contact the client to have the lock removed.
- Clients must remove their own lock(s).

NOTE: Acoustics Associates employees are not permitted to remove any client locks.

Personnel or Shift Changes

When personnel or shifts change during the maintenance or repair of equipment, the designated person in charge is responsible for ensuring the continuity of the lockout/tagout procedures. This includes ensuring that all procedures are strictly followed and that the required transfers of lockout/tagout devices between authorized personnel is achieved.

Contractors

Contractors who perform lockout procedures on Acoustics Associates owned or leased property must comply with these procedures. Contractors are responsible for supplying their own locks.

Acoustics Associates will initially lock out its own equipment. The contractor's lock will be used in addition to the lock provided by Acoustics Associates.

Annual Audits

The manager, supervisor, or safety department will perform an annual evaluation of the Lockout Program in their respective areas to assess the program's effectiveness. An authorized employee (other than the person performing the energy control procedure) will conduct the audit and confirm that:

- All affected and authorized employees have received the required training.
- Specific lockout procedures have been developed and documented in writing for each new piece of equipment.
- Procedures currently in place adequately address completely isolating equipment in order to obtain a zero-energy state.
- Annual audits must be certified in writing. A copy of the audit will be filed and maintained in the supervisor's office.

Training

Training will be provided by ACOUSTICS ASSOCIATES INC to verify that the purpose and implementation of the energy control program are understood by employees and that they have acquired the knowledge and skills necessary to safely apply, use, and remove the energy controls. Training will include the following:

- Identification of relevant hazardous energy sources, the magnitude and type of energy present in the workplace and the procedures necessary for the isolation and control of energy.
- The purpose and utilization of procedures to control energy.

When using tagout systems, authorized employees will be trained in these tag limitations:

- Tags are warning devices attached to energy isolating devices. Tags do not provide the same physical hold that is provided by a lock.
- Tags attached to energy isolating devices are not to be removed without prior authorization of the person responsible for it.
- Tags must be legibly written and easily understood by all authorized and affected employees and other personnel in the work area.
- Tags and tag attachments must be constructed of materials that can withstand the environmental conditions in which they will be placed.
- Tags will be securely affixed to the energy isolating devices to prevent against accidental detachment.
- The meaning of tags should be understood to avoid evoking a false sense of security regarding their effectiveness in the overall energy program.

Other personnel whose work operations are in or near areas where energy control procedures are necessary must be instructed about this procedure. They must also be informed about the prohibitions regarding restarting or re-energizing locked out or tagged out equipment.

Retraining

Retraining will be conducted when:

- An inspection reveals deviations from the use of or inadequacies in the employees' knowledge of the energy control procedures.
- Acoustics Associates has reason to believe there are deviations from the use of or inadequacies in the employee's knowledge of the energy control procedures.

- There is a change in machines, energy control procedures or in job assignments.
- A new hazard is introduced.

Retraining will validate the proficiency of the employees and introduce new or revised control procedures when necessary.

Training Documentation

Acoustics Associates will verify that the required employee training has been completed and is kept up to date. All training and retraining must be documented, signed and kept on file at our main office location.

MOBILE ELEVATED WORK PLATFORM PROGRAM

Purpose

The purpose of this program is to establish safe operating standards and requirements for all Mobile Elevated Work Platform (MEWP) lift devices and their related components. This program describes procedures to prevent injury while conducting work with a scissor lift.

Scope

This program shall cover all Acoustics Associates, Inc. owned, leased, rented or otherwise used MEWP lifts and all Acoustics Associates, Inc. employees who may use MEWP lifts during the course of their employment. This program applies to all Mobile Elevated Work Platform operations.

Responsibilities

Safety Manager

- Implement and enforce this program.
- Ensure that this program complies with regulatory standards and update the program accordingly.
- Ensure that all MEWP lifts and related equipment comply with applicable regulatory standards and manufacturer recommendations.
- Record keeping of all training, inspections and maintenance related to MEWP lifts.

Supervisors

- Ensure that all employees who may operate scissor lifts are properly trained.
- Ensure that horseplay and other unsafe acts are addressed through refresher training and or disciplinary action if applicable.

Employees

- Comply with all parts of this program.
- Ensure they are properly trained, certified and comfortable operating the MEWP lift equipment prior to use.

Safe Work Practices

The following procedures shall be followed in order to achieve compliance with regulatory standards and ultimately keep employees safe on the job:

- Only authorized employees who have been trained and certified may operate scissor lifts.
- Scissor lift manufacturer weight limits shall not be exceeded. This includes employees, materials, tools and all other items.
- All MEWP lift equipment will have a working back-up alarm. A spotter may be used in certain circumstances or when the back-up alarm does not serve as an effective warning device.
- Employees shall always stand firmly on the platform floor and shall not sit or climb on the guardrails or use planks, ladders, or other devices for a work position.
- Leaving the platform while it is elevated is not permitted.
- Belting off to an adjacent pole, structure, or equipment while working from an MEWP lift is not permitted.
- The lift and any part of the equipment must keep a minimum of 20 feet away from energized power lines.

- Survey the worksite for ground stability before setting up. This survey should include debris, electrical cords and hoses, potholes, uneven surfaces, drop-offs, bumps, slopes and other site features.
- All MEWP lifts equipped with positioning devices, stabilizers and outriggers will be operated according to the manufacturer's procedure manuals.
- When entering or exiting the platform, the worker shall exit backwards, facing the platform, and maintain 3-point contact.
- A copy of the manufacturer's owner's manual will be kept on the MEWP lift.

Pre-Start Inspections and Maintenance

All Acoustics Associates, Inc. MEWP lift devices and equipment shall be inspected and maintained in accordance with the following:

- Only authorized personnel shall perform maintenance and make repairs.
- Replacement parts must meet the original design specifications of the manufacturer.
- Modifications to the equipment shall not be made without the written approval of the manufacturer
- A pre-start inspection following the manufacturer's owner manual shall be made at least daily and prior to each shift.
- Lift controls and equipment shall be tested each day prior to use to determine that such controls are in safe working condition.
- When an inspection indicates damaged or defective parts, the equipment will not be used until it is repaired and inspected according to the manufacturer's owner's manual.
- Preventive maintenance and inspection of the lift will be conducted according to the manufacturer's owner's manual. Tag equipment out-of-service until repairs are completed.
- Lifts shall be maintained in a safe, reliable condition, free of excess grease, oil and other lubricants.
- Noncombustible cleaning agents will be used to clean equipment whenever possible.

Stop Work Authorization

The Authority to Stop Work Program is used to resolve a perceived act, error, omission, unsafe condition, or lack of understanding or training that could potentially result in an undesirable event. It involves a stop, notify, correct and resume approach. If there are concerns or questions regarding the control of health, safety or environmental risks of any task or operation, all Acoustics Associates, Inc. employees are authorized and obligated to stop it. Employees will not be reprimanded for issuing a stop work intervention. Please see the Acoustics Associates, Inc. Stop Work Authority Policy for additional information.

Training and Employee Qualifications

Acoustics Associates, Inc. employees who may operate MEWP lifts must first complete training and become certified on the use of the specific lift they may operate. Training shall include a combination of physical instruction or interactive computer learning and a written examination followed by a practical application / evaluation by an authorized and certified trainer who has the knowledge and skills to adequately train and evaluate trainees. The authorized trainer must certify that the operators have been trained by issuing a certification card or certificate with the instructor's name, the operator's name, the type of MEWP and the training date printed legibly on the card or certificate. Certification must be completed at least once every three (3) years.

Minimum training requirements include:

- Use of the owner's manuals and lift limits.
- Operator controls for normal operations and emergencies.
- Pre-start inspection of the lift.
- Factors affecting stability.
- Work site inspections.
- Safe work practices.
- Fall protection harness specifically for MEWP lifts.

Record Keeping

All Acoustics Associates, Inc. MEWP lift training documentation shall be kept for the duration of the operator's employment. Inspection and maintenance records shall be kept for as long as the equipment is in service.

NEAR MISS REPORTING POLICY

Purpose

Acoustics Associates Inc.'s Near Miss Reporting Policy is to set out the Company's position on the reporting, suitable recording and investigation of all accidents, incidents and near misses. Acoustics Associates is committed to providing a safe and healthy workplace by protecting employees from workplace injury and disease when reasonably possible to do so.

The purpose of this policy is to ensure that all near-miss incidents (including minor incidents) are reported, recorded and investigated. Documenting and sharing information within the Company creates an opportunity to answer the questions of what happened and why and then use this insight to determine how to prevent a reoccurrence. Following the steps outlined in this policy will:

- Promote an open and honest learning culture regarding workplace safety
- Employ a systematic approach for all employees to report near miss incidents
- Encourage an opportunity to gain understanding and insight from an incident's analysis
- Utilize that knowledge to prevent or reduce future risk of reoccurrence
- Support Acoustics Associates goal of establishing a reporting culture with an aim to identify and control hazards, reduce risk and prevent harmful incidents

Scope

This policy applies to all employees of Acoustics Associates, who, regardless of level, location or job description, all have a role in creating and maintaining an injury-free workplace. While the leadership of Acoustics Associates acknowledges responsibility for implementing and managing health and safety for the workplace as a whole, employees must also recognize and accept responsibility for their decisions and actions which can, and will, affect their own personal safety as well as the personal safety of others.

Key Responsibilities

Acoustics Associates Leadership Team

- Enforce federal health and safety laws, standards and procedures
- Support the development and implementation of safe working practices through provision of proper resources
- Review health and safety procedures annually (at a minimum) or as necessary
- Consider incentives that encourage NEAR MISS reporting and enhance culture

Safety Manager and Safety Department

- Enforce federal health and safety laws, standards and procedures
- Acknowledge and document potential hazards reported by employees
- Monitor health & safety performance, re-designing health and safety practices and procedures when prudent to do so
- Include training for new employees to identify hazards and work safely as a part of their orientation
- Perform thorough investigations based on the facts and provided recommendations for corrective action to ensure that the potential for any future occupational injury, disease and accidents is eliminated

Employees

- Ensure action has been taken to maintain safety and ensure safety of the area
- Promptly report (within 24 hours) all incidents by completing the near miss report form and submit it to the Safety Department
- Provide statements and participate in the near miss investigation
- Review, understand and follow all of Acoustics Associates health and safety policies and programs

Tracking Importance

Above all, near misses are a valuable source of information. Near misses provide Acoustics Associates with an opportunity to identify hazards or weaknesses in their risk management programs and correct them to prevent future incidents.

Proactive monitoring – Near misses are symptoms of undiscovered safety concerns. Near-miss reporting can help Acoustics Associates be proactive when it comes to identifying negative trends and safeguarding employees. This, in turn, can help reduce workplace accidents overall and increase company safety culture.

Identifying a Near Miss

A near miss is an opportunity to improve health and safety in a workplace based on a condition or incident with potential for more serious consequences, including:

- Unsafe conditions
- Unsafe behavior, such as a worker modifying personal protective equipment for comfort
- Minor incidents and injuries that had potential to be more serious
- Events where injury could have occurred but didn't
- Events where property damage could have resulted but didn't
- Events where a safety barrier was challenged, such as a worker bypassing a machine guard
- Events where potential environmental damage could have resulted but didn't

Reporting a Near Miss

Workers must report all workplace incidents, hazardous conditions, near misses, and property and environmental damage to their immediate supervisor as soon as possible. Workers who experience a work-related injury or occupational illness should seek immediate medical attention and promptly report the injury/illness to their supervisor according to the Acoustics Associates Injury Reporting Process. **NOTE: All work-related injuries/illnesses, no matter how slight, should be reported to a supervisor.**

Near Miss Reporting:

1. An employee who witnesses a near miss incident must complete the Near Miss Reporting form (located on AcousticsAssociates.com under the Safety Resources Tab) and submit it to the Safety Department. The reporting system will not result in disciplinary action of the reporter and, if desired by the person reporting, may be anonymous.
2. All near miss incidents will be reviewed by the Safety Department and management to identify the root cause and weaknesses in the system contributing to the incident. The reporting individual may be asked to participate in the incident investigation.

3. Investigation results will be used to improve safety systems, hazard control, risk reduction and to educate employees. All of these represent opportunities for training, feedback on performance and a commitment to continuous improvement.

Communication

The steps taken (engineering or administrative controls, training, new policies & procedures, etc.) to improve workplace safety as a result of the near miss investigation will be reported to management as well as all relevant staff.

Monitoring and investigation results of near miss incidents will be communicated to employees in at least one of the following ways:

- Manager discussion with employees
- Bulletin board postings
- Safety Committee Meeting minutes
- All staff/department email

Non-Retaliation

Near miss reporting is encouraged/required and workers will not be subject to progressive disciplinary measures unless their behavior coincides with one of the following serious offences:

- Willful breach of safety policies
- Acts of gross negligence
- Acts of gross misconduct (eg. Possession of alcohol, illicit narcotics or non-prescribed pharmaceuticals while on company property, or use thereof while operating equipment)
- Repeated unreported violations
- Malicious activities (including malicious reporting of untrue allegations against a coworker)
- Workplace violence, including but not limited to: fighting, assault, harassment or possession of a weapon

OSHA REPORTING

The OSH Act requires employers to keep records of certain injuries and illnesses, and to report certain workplace incidents to OSHA within specific time periods. Specifically, all employers must report:

- Any work-related fatality within eight hours
- Any of the following, if it results from a work-related incident, within 24 hours:
    - Inpatient hospitalization
    - Amputation
    - Loss of an eye

In addition, a 2016 final rule requires certain establishments to submit injury and illness information electronically to OSHA. Employers that are not in a partially exempt industry and have more than 10 employees must also prepare and maintain records of serious occupational injuries and illnesses using OSHA forms 300, 300A and 301. More information on these forms can be found on OSHA's website.

ACOUSTICS ASSOCIATES
10750 XYLON AVE N., SUITE 140, BROOKLYN PARK, MN 55445
MAIN: 763.544.8901

NEAR MISS INCIDENT REPORT FORM

Department:		Work area/Jobsite:
Date of Incident:		Time of Incident:
Witnesses (optional):		
Type of Near Miss: ☐ Near-Miss ☐ Safety Concern ☐ Safety Idea/Suggestion ☐ Other (describe):		Type of Concern: ☐ Unsafe Act ☐ Unsafe Condition of Area ☐ Unsafe Condition of Equipment ☐ Unsafe Use of Equipment ☐ Other (describe):
Describe the potential incident/hazard/concern and possible outcome (be detailed):		
Were safety procedures violated? (describe):		
Job Name:	Job #:	Job Project Manager:
Jobsite Address:		
Incident site inspection - Why was an unsafe act committed, or why was the unsafe condition present?:		
Recommendations/steps to take to prevent a similar incident:		
Reporters Name:		Date Reported:
Photos:		
Additional Comments:		

Safety Manager - Ryan Grefsheim - 763.458.3137 - ryang@aaimn.com

Safety Specialist - Nina Hennen - 763.200.2616 - kristinah@aaimn.com

Panel Shop Superintendent - Jamey Johnson - 763.286.7117 - panelshop@aaimn.com

Carpenter Superintendent - Craig Serfas - 763.286.8223 - craig.s@aaimn.com

Flooring Superintendent - Craig Gunderson - 763.286.8484 - gundy@aaimn.com

Tile/Concrete Superintendent - Rodney Baldwin - 763.286.8213 - rodney@aaimn.com

NOISE EXPOSURE AND HEARING CONSERVATION PROGRAM

Purpose

The purpose of this program is to establish processes and procedures to reduce hearing loss of employees exposed to excessive occupational noise.

Scope

All employees who are at risk of exposure to noise levels greater than 85 decibels are subject to the procedures and requirements of this program. This program covers Acoustics Associates employees and contractors and will be used on all Acoustics Associates owned premises. When performing work offsite, that operator's program takes precedence over this one unless there is no program, or it is less stringent.

Key Responsibilities

Managers and Supervisors

- Make certain that the program requirements are implemented and maintained.
- Make certain that affected employees are trained and in compliance with the program requirements.

Employees

- Wear hearing protection when required by this program.
- Attend all required training.
- Comply with testing and sampling according to this program.

Definitions

Audiometric testing – testing the intensity and frequency range of sound by playing a series of pure tones to determine which are perceptible by the human ear. For each tone, the person being tested indicates the lowest intensity that he or she is able to hear.

Decibels – a unit of measurement of the volume of sounds. More specifically, decibels are measured by a sound level meter using the "A" scale, which simulates the response of the human ear to low and high noise frequencies.

Slow Response – sound level meter settings that average impulses of brief duration that would result in wide fluctuations in the sound level meter readings.

Standard Threshold Shift – a significant change in hearing thresholds, characterized by a decline of 10 decibels or more, corrected for age, at 2000, 3000, and 4000 Hz in either ear relative to the baseline audiogram.

Permissible Exposure Limit (PEL) - The permissible exposure limit (PEL) for noise in the workplace, set by the Occupational Safety and Health Administration (OSHA).

Procedures

Occupational hearing loss occurs as a result of repetitive and continual sound absorption by the ear. Protection is provided to employees to reduce the noise level at the ear or to limit the employee's exposure time to noise. The

Company will provide hearing protection to all employees who are exposed to potentially damaging noise levels and to all employees who request hearing protection.

Hearing Conservation Program

Acoustics Associates will implement a hearing conservation program for employees who work in areas with exposure to noise levels of 85 decibels or more for the eight (8) hour time-weighted average. These employees are required to wear hearing protection. A monitoring program will be established to identify employees to be included in this program. Employees will also wear hearing protection in all designated areas while on client owned premises.

Surveys

Surveys must be administered by a qualified employee or third party.

In order to evaluate the noise exposure and risk of hearing damage, one must know the overall sound level ("A" measurement), the exposure time of the employee measured as hours per day and the length of time the employee has worked in the surveyed area. The following data will also be considered:

- Name of surveyed area and its location.
- Date and time of the survey.
- Instruments used in the survey, including the model and serial numbers of said instruments.
- Environmental conditions.
- Description of the employees exposed.
- Name of the person conducting the survey.

The Company is responsible for notifying each employee of their monitoring results and/or if their job exposes them to noise levels of 85 decibels or more.

A plot of noise levels will be made for Acoustics Associates owned facilities and will be posted.

Acoustics Associates will evaluate hearing protective equipment for effectiveness for the specific noise environments the equipment will be used in. The sufficiency of hearing PPE will be reevaluated whenever noise exposure increases to the point that the PPE may no longer provide sufficient hearing protection. At that point, the Company will provide PPE appropriate to those conditions.

Sound measuring equipment must be calibrated both before and after each survey. Records of calibration and surveys must be kept for 20 years.

Surveys must be repeated when changes in the workplace environment pose a risk of exposing additional employees to high noise levels or when PPE does not adequately reduce the exposure to noise to a level below 85 decibels.

Sound Level Surveys

Acoustics Associates owned facilities that are suspected of having noise levels in excess of 85 decibels must be screened according to this program.

Exposure Surveys

A sampling of employees will be surveyed to determine noise exposure over a period of time. This sampling will be representative of all employees present in the noise exposed environment.

Noise dosimeters must integrate all continuous, intermittent and impulsive sounds in the range of 80 decibels to 130 decibels. Noise dosimeters must be calibrated so a dose of 50% corresponds to a time weighted average of 85 decibels.

Signage

Clear and conspicuous signs will be posted at all entrances to areas where employees are at risk of exposure to noise levels greater than 85 decibels. These signs must describe the hazard, and the protective actions required to reduce risk of exposure.

Audiometric Testing

Acoustics Associates will implement and maintain an audiometric testing program by making said testing available to all employees who are exposed to noise levels in excess of 85 decibels (8 hour time weighted average). Employees are required to take an audiogram every year; this will be provided at no cost to employees.

- The Company will determine a valid baseline audiogram to compare future audiograms to. Employees must take a baseline audiogram within the first six months of exposure to noise levels in excess of 85 decibels for an eight (8) hour period. When a mobile van is used, the baseline must be established within the first year.
- Employees must take annual audiograms for every year they work in areas exposed to noise in excess of 85 decibels.
- A qualified third party will perform all audiometric tests, evaluations, reports and retesting.
- Prior to taking an audiogram, employees must not be exposed to sound levels in excess of 80 decibels for a period of 14 hours or more:
    - Employees will be notified to avoid high noise levels.
    - This requirement may be satisfied by wearing PPE to reduce the noise exposure level below 80 decibels.
- An otoscopic exam is required before an audiogram is performed. This otoscopic exam must be performed by a qualified person who will examine the ear canal for ear plugs, signs of infection or other irregularities that may affect the audiogram.

Records

Acoustics Associates will maintain accurate records regarding employee exposure measurements. All records are maintained according to the Occupational Noise Exposure requirements set forth by CFR 1910.95. Audiograms are considered medical/exposure records and will be kept for the length of employment plus 30 years.

Hearing Protection Devices

Earplugs and earmuffs will be available to employees in a variety of sizes and configurations in order to provide comfortable protection for employees. Hearing protection will be available to all employees who are exposed to noise levels of 85 decibels or greater (8-hour TWA) at no cost to employees. Employees will be given the opportunity to choose their hearing protection from the ACOUSTICS ASSOCIATES INC provided selection. Hearing protective equipment should be replaced as necessary. Employees will be instructed on selecting the proper fit for hearing protectors. The ACOUSTICS ASSOCIATES INC will ensure that hearing protectors are worn when required.

Training

A Training program will be provided and required for all employees who work in high noise areas as determined by this program. Noise awareness training will be provided to employees before their initial assignment and every year thereafter. Employees must repeat this training annually.

The training will address:

- Effects of noise on hearing.
- Purpose of hearing protectors, to include the advantages and disadvantages of using them.
- Various types of hearing protectors.
- Instructions for selecting, fitting, using, and caring for hearing protectors.
- Purpose of audiometric testing.
- Explanation of audiometric test procedures.

Training must be updated to ensure its pertinence to changes in the work process, PPE requirements and appropriate usage and wear of hearing protection.

Training must be documented.

All employees will have a copy of this program and noise exposure procedures. These will be posted at the worksite and made available to employees, their representatives, and regulatory agencies. The Safety Department and Human Resources will have access to the records.

NON-DOT DRUG AND ALCOHOL POLICY

Purpose

It is the objective of Acoustics Associates to:

- Promote, provide and maintain a safe working environment for its employees and employees of its affiliates or subsidiaries.
- Protect Company property.
- Cooperate with customers in their efforts to establish a safe, drug and alcohol-free work environment.
- Comply with contractual obligations and existing Federal regulations.

Acoustics Associates Premises

For the purpose of this Policy, the term “premises” refers to Acoustics Associates premises, its affiliates or subsidiaries and includes all property, facilities, land, platforms, buildings, structures, fixtures, installations, automobiles, truck and other vehicles and equipment – whether owned or leased. This policy also includes any other work location, parking lots or mode of transportation to and from locations while in the course and scope of Acoustics Associates employment and/or business.

Policy Statement

Being under the influence of drugs and/or alcohol while on Acoustics Associates premises is strictly prohibited. The unauthorized use, possession, sale, transfer, storage or manufacture of illegal substances or drug paraphernalia; the abuse of legal drugs; or the unauthorized use, possession or sale of alcoholic beverages by an employee of Acoustics Associates is strictly prohibited.

No Acoustics Associates employee will report to work, enter Acoustics Associates premises, or conduct Company business under the influence of illegal/controlled substances or alcohol. “Under the influence” means:

- A sufficient amount of substance is in the employee’s system to produce a positive test result.
- The employee is exhibiting erratic abnormal behavior posing a risk to the employee and/or others.

Compliance to this policy, including consent to searches and medical testing, is a condition of employment. Employees have the right to refuse to cooperate with Acoustics Associates medical testing and search requirements. However, refusal to permit such searches and/or medical testing will be grounds for termination.

Illegal drugs, unauthorized controlled substances, look-a-likes, designer and synthetic drugs (including the presence of any detectable amount in the employee while working), and any other drugs or abnormal substances which may affect an employee's senses, motor functions or alter a person's perception while working are strictly prohibited.

Under no circumstances will alcoholic beverages be brought onto Acoustics Associates property or consumed while on Acoustics Associates premises.

Drug paraphernalia and other unauthorized items may not be brought onto Acoustics Associates premises under any circumstances.

Prescription Drugs may not be brought onto Acoustics Associates premises - except under the following conditions:

- Employees shall have a valid medical prescription for any prescription drugs. If this medication can/does impair the employee's performance, the employee will immediately notify his/her supervisor or alternate member of management.
- The medication shall be in the employee's name in the original vial and have the doctor's name and prescription number on the label.
- Each prescription shall not be older than one year of the date issue.
- Employees shall only possess enough medication for the normal work shift.

NOTE: ACOUSTICS ASSOCIATES INC SHALL RESERVE THE RIGHT TO HAVE AN OUTSIDE PHYSICIAN DETERMINE IF A PRESCRIPTION DRUG OR MEDICATION INHIBITS EMPLOYEE PERFORMANCE. ACOUSTICS ASSOCIATES INC SHALL RESTRICT THE USE OF ANY SUCH DRUG OR MEDICATION WHILE ON ACOUSTICS ASSOCIATES INC PREMISES OR CONDUCTING ACOUSTICS ASSOCIATES INC BUSINESS. THIS SHALL ALSO INCLUDE RESTRICTING THE EMPLOYEE'S WORK ACTIVITY OR PRESENCE AT THE CUSTOMER'S WORK SITE

Employee Assistance Program

The Employee Assistance Program will include displaying/providing a list of community service hot-line numbers, and distributing informational material on drug use, chemical dependency and Acoustics Associates Alcohol and Controlled Substance policy.

All management and supervisory personnel who will determine whether an employee should be tested for prohibited drug use based upon reasonable cause will receive a minimum of sixty (60) minutes of training. This training will provide instruction on the specific and contemporaneous physical, behavioral and performance indicators of probable prohibited drug use.

All employees will participate in an informational session structured to give the participants; (1) an understanding of the effects/consequences of substance abuse/dependency on personal safety, health and work environment and (2) an understanding of the substance abuse regulations (DOT, USCG).

All Employee Assistance Program training will be documented and kept on file.

Acknowledgment

Employees shall acknowledge that compliance with this policy is a condition of employment with Acoustics Associates.

Drug Testing Procedure

Employees may be tested for drugs and/or alcohol by any accepted method to include but not limited to urinalysis and/or blood testing:

- During the pre-employment physical.
- Randomly, whenever random testing is in effect.
- Upon reasonable cause as determined by a competent person.
- When any injury, accident or incident occurs that may create reasonable suspicion that drugs and/or alcohol may have been involved.

Unacceptable Results

Employees with unacceptable test results shall be prohibited from working on Acoustics Associates, client, host sites or facilities.

Refusal to take a test for the presence of drugs and/or alcohol will result in disciplinary action to include termination.

ONE EAR OPEN POLICY

Purpose

The primary reason for this policy is to mitigate safety risks associated with wearing headphones or earbuds, which can block out important sounds like alarms, announcements, or coworkers calling out warnings. Keeping one ear open allows employees to be more aware of their surroundings, which is crucial in environments with moving equipment, pedestrian traffic, or potential hazards.

Scope

This policy covers Acoustics Associates employees and contractors and will be used on all Acoustics Associates owned premises. When performing work offsite, that operator's program takes precedence over this one unless there is no program, or it is less stringent.

Key Responsibilities

Managers and Supervisors

- Make certain that the policy requirements are implemented and followed.
- Conduct disciplinary actions for any violations of this policy.

Employees

- Wear hearing protection when required by this program.
- Attend all required training.
- Comply with the requirements of this policy.

Definitions

For the purpose of this policy, earbuds and headphones are defined as any device that will be worn on, in or over the ear that plays voice, music, or any other sound.

Policy

Listening to music or podcasts while working can be a beneficial productivity tool for some employees. Music can release dopamine, a neurotransmitter associated with pleasure and motivation, potentially making work tasks more enjoyable and engaging. For some, it can also act as a buffer against distracting noises, helping them to concentrate on the task at hand.

For these reasons, Acoustics Associates has established this One Ear Open policy to set guidelines for the acceptable use of earbuds while working.

Acoustics Associates employees and subcontractors are allowed to wear one (1) earbud or headphone while working if the following conditions are met:

- Only one (1) earbud or headphone may be used.
- Earbuds or headphones may not be worn in place of hearing protection. If your work area has a noise level at or above 85 decibels, you must wear proper hearing protection.
- Earbuds or headphones may not be worn while operating or near machinery, industrial trucks, or motor vehicles. They may also not be used in high traffic or hazardous areas.

- Earbuds and headphones may only be worn while employees are stationary and in a controlled environment free of potential hazards.
- Corded earbuds or headphones are prohibited in areas where cords can become caught in machinery or power tools.
- For hearing conservation, employees must follow a 60:60 rule. Listen at 60% of the maximum volume or less and for no more than 60 consecutive minutes. Never listen at 100% of the maximum volume.

Enforcement

Violation of this policy shall be considered just cause for disciplinary action as described in the Acoustics Associates Disciplinary Program.

The implementation of this policy is at the discretion of Acoustics Associates. Acoustics Associates reserves the right to alter or eliminate this policy at any time.

PERSONAL PROTECTIVE EQUIPMENT (PPE) PROGRAM

Purpose

The purpose of this Personal Protective Equipment (PPE) program is to prevent or minimize employee exposure to hazards and injuries by providing a barrier between them and those hazards. PPE is not a substitute for engineering or administrative controls, but rather should be used in conjunction with them. PPE is considered the last line of defense against injury and illness.

Scope

This program applies to all Acoustics Associates employees. It is to be always used on Acoustics Associates worksites and locations. If an employee performs work on a site other than Acoustics Associates site, the facility owner's plan should be used if it exists and is as strict (or stricter) than this plan. In cases where the other facility's plan does not exist or is less strict than this plan, Acoustics Associates employees will operate under this plan.

Key Responsibilities

Safety Manager

- Helps to select appropriate PPE.
    - Some work tasks expose employees to hazards that cannot be eliminated by means of engineering or administrative controls. In these cases, the SAFETY Manager assists the supervisor and project manager in identifying and selecting suitable PPE based on the task being performed, the work conditions, and the frequency and duration of the exposure.
- Assists the supervisor and site manager to ensure the PPE obtained meets the requirements of this program and applicable regulations
- Conducts Worksite Hazard Assessments. This assessment must determine whether hazards exist or are likely to exist, that require the use of PPE. Hazards may include those related to:
    - high/low temperatures, impact/motion, sharp objects, falling objects, rolling or pinching objects, chemicals, materials, radiation, electrical hazards, and general workplace layout.
- The SAFETY Manager documents the tasks that were evaluated, hazards that were discovered and the PPE required to protect employees.
- Ensure that affected employees are aware of hazards and the required PPE prior to being assigned to the hazardous task.

Managers and Supervisors

- Managers and supervisors regularly monitor employees to ensure PPE is being properly used and cared for.
- Ensure employees receive follow-up training if required so they have adequate knowledge, skill, and ability to use PPE.
- Managers and supervisors will use Acoustics Associates progressive discipline to enforce PPE safety rules and ensure that the Required PPE Poster is properly posted.

Employees

- Provide feedback to the supervisor regarding the fit, comfort, and suitability of the PPE to be used.
- Properly use and care for PPE.

- Report any changes in exposure that may necessitate a reassessment of the task for PPE.
- Report and replace defective or damaged PPE. Never use defective or damaged PPE.
- You must wear the required PPE. Failure to do so could result in termination of employment.

Procedure

General

Acoustics Associates will provide protective equipment, including personal protective equipment (for head, eyes, face, and extremities), respiratory devices, protective clothing, and protective shields and barriers. This protective equipment must be used wherever injury or impairment of function of any body part (through absorption, inhalation or physical contact) is likely that because of process or environmental hazards, radiological hazards, chemical hazards, or mechanical irritants. All PPE shall be provided, used and maintained in a sanitary and reliable condition.

Employees are NOT allowed to use employee-owned equipment, except prescription safety glasses and safety footwear. ACOUSTICS ASSOCIATES INC must ensure that employee-owned safety glasses and footwear are adequate, and ACOUSTICS ASSOCIATES INC will maintain and clean them.

Defective or damaged equipment shall not be used and must be tagged or destroyed and replaced.

All issued personal protective equipment will be cost-free to the employee. All employees must understand and follow the procedures identified in this program.

Eye Protection

When exposed to facial or eye hazards from flying fragments, chemicals, acids or caustic liquids, melted metal, or chemical gases or vapors, employees must use the required eye or face protection. PPE used to protect the eyes and face must be in compliance with ANSI Standard Z87.1-2003 (Z87+), Occupational and Educational Personal Eye and Face Protective Devices.

Safety Glasses

While on Acoustics Associates property, employees, subcontractors, and visitors must at all times wear safety glasses with side shields that meet ANSI Z-87.1-2003 standards with “high Impact lenses”. Requirements as described below:

- In shops and warehouses, and at field locations, except in striped safety zones that have been designated and approved.
- In all yard work zones. Everyone in the vicinity of loading or unloading equipment. All employees who perform mechanical or maintenance work, operate equipment (e.g., forklift and welding), test stand operations, or do any work that may potentially cause an eye injury.
- In a restroom, office, or any other building when performing work that may potentially cause an eye injury.
- Acoustics Associates will provide with visitor glasses. If approved prescription safety glasses are not available for an individual, they must wear “Over the glass” type safety goggles or glasses over their regular prescription glasses until they obtain approved prescription safety glasses.
- When assisting welders, employees must wear absorbent safety glasses to protect the assistant from ultraviolet (UV) and/or infrared rays (IR).

- No employee is allowed to wear dark shaded lens (sunglasses) darker than # 1 shade unless welding or assisting a welder.
- The requirement to wear safety eyewear will be exempt only based on a written "exceptions for medical reasons" from a doctor.
- Employees are not required to wear safety glasses:
    - Inside an office.
    - In parking lots when traveling to and from vehicles, or office buildings using main doors that do not enter shops.

Goggles

- When handling or mixing liquid chemicals, solvents, paints, etc., employees must wear chemical splash proof goggles as recommended on the Safety Data Sheet for the material being handled.
- When blowing equipment down with air the employee must wear dust-proof goggles. They must also be worn when the employee is performing a job task where safety glasses do not do an adequate job of preventing airborne particles from entering the openings around the lenses and side shields.

Face Shields

- When operating a handheld or immobile grinder with a wire or abrasive wheel the employee must wear a full-face shield over safety glasses. The full-face shield must also be used when chipping paint or concrete. Also, when performing job tasks where flying objects may potentially strike the face, if safety glasses or goggles do not provide adequate protection, the employee must wear a full-face shield over safety glasses.

Head Protection

When working in areas where a head injury is possible due to employee-initiated impact, or impact from falling or other moving objects, employees must wear protective helmets. Helmets must be in compliance with ANSI Standard Z89.1¬1997 Class E, American National Standard for Industrial Head Protection for Type II head protection or must be equally effective.

Hardhats must be worn when working in areas where head injury is possible from falling objects.

Hardhats must be worn at all warehouse, field, and shop locations, or any location where it is determined to be necessary as per the location's PPE Hazard Assessment.

- Never alter hardhats in any way.
- Never paint or apply unauthorized stickers, name plates, etc. on hardhats.
- Never drill, cut, bend, or apply heat to a hardhat.
- Never alter the suspension system of a hardhat.
- Employees must inspect hardhat regularly for chips, scratches, cracks, or signs of heat exposure.
- Immediately replace any defective hardhats.
- Never place a hardhat in the rear window of a vehicle (they will be exposed to the sun or may become a projectile in a vehicle accident).
- Hardhats must be made available to visitors.
- Acoustics Associates must provide hardhats.
- Acoustics Associates will train employees in the use, care and maintenance of head protection equipment.

Hearing Protection

While in posted "High Noise" areas, all employees, subcontractors, and visitors must wear hearing protection. See Acoustics Associates Hearing Conservation Program for additional information.

All areas that are known, or suspected to have, noise levels in excess of 85 dBA (constantly or intermittently) must have warning signs posted.

When noise caused by machinery, tools, etc., prevents normal conversations from being clearly heard, employees shall wear hearing protection even if warning signs are not posted.

General rule of thumb: If you must yell to be heard, you require hearing protection.

Types

- Preformed Inserts (ear plugs).
- Canal Caps (head band type).
- Muff, either headband or hard hat mounted.

Acoustics Associates will supply earmuffs and ear plugs to employees in sizes and configurations that are comfortable for the employee.

Care and Maintenance

- Employees must inspect hearing protection before each use.
- Keep hearing protection clean to prevent ear infections.
- Discard disposable ear plugs when they become dirty, greasy, or cracked.
- Replace any earmuffs that have cracked seals, deteriorated foam inserts, or are defective.

Fit

Because everyone is different, hearing protection must be selected for the individual. The employee must try a variety of styles to find one that is comfortable and provides adequate protection. Acoustics Assoicates will instruct employees in how to obtain the proper fit.

Hand Protection

Gloves

When performing work tasks that may expose the hands to extreme temperatures, cuts and abrasions, or exposure to chemicals, employees must wear gloves. To select the correct glove type, refer to the specific chemical's Safety Data Sheet. Employees who work with chemicals, i.e., solvent vats, will be issued their own gloves for hygienic purposes.

- Welding: When performing arc welding or oxy/gas cutting, employees must wear welding gloves made of leather or other heat-resistant materials.
- Chemical: When handling chemicals that specify gloves as PPE, the employee must be impervious (chemical resistant) gloves.
- Leather: When working with sharp materials, or when handling rigging equipment, employees must wear leather gloves.
- Cloth: When handling objects or materials that could cause blisters, splinters, cuts, etc., the employee must wear cloth gloves.

- Heat Resistant: When handling hot bearings, races, or other materials or objects (heated beyond room temperature), employees must wear heat resistant gloves.
- Insulated: To prevent frostbite in extreme cold climates, employees must wear insulated gloves.

Glove Inspections

- Prior to each use, inspect gloves for holes, tears, and worn areas.
- Periodically air test chemical gloves for pinholes by tightly twisting the cuff, expand the glove by applying low air pressure, and submersing the glove in water to check for bubbles.
- Immediately discard any defective gloves.

Exception: While working with rotating machinery, machinists are exempt from wearing gloves.

Foot Protection

All employees with regular duties at field locations, in shops and warehouses must wear safety footwear.

- Visitors and office workers entering these areas infrequently are not required to wear foot protection as long as they stay away from the work being performed.
- If visitors or office workers must be in the close proximity to the work, the work must be stopped while in the area or safety footwear must be worn.
- When in shops, warehouses, field locations and parts departments, employees must wear leather or equivalent boots (lace up or pull up).
- Boots must provide ankle protection and must have soles that are designed to protect the feet from punctures and must have defined heels for climbing ladders.
- When job tasks there is a risk of equipment or material crushing the foot, toe guards must be worn.
- Safety footwear must comply with ANSI Z41-1999 standards.
- Some client locations may require everyone to wear safety footwear. Before visiting field locations, check with the local supervisor for client requirements.

Fall Protection

When performing certain elevated jobs (over six feet), employees must use personal fall protection. Refer to Acoustics Associates Fall Protection Program.

Electrical Protection **-** Refer to Acoustics Associates Electrical Safety Awareness Program.

Worksite Hazard Assessment

Hazard assessments must be performed, signed and documented. If it is determined that a hazard exists or is likely to exist, a PPE must be used. Following are some hazard sources that may be identified:

- High or low temperatures.
- Chemical exposure (see SDS for guidance).
- Flying fragments, melted metal or other face, eye, or skin hazards.
- Falling objects, or the possibility of dropping an object.
- Employee falling from a height more than 6’.
- Sharp objects.
- Rolling or pinching that could crush hands or feet.
- Electrical hazards.

Anytime that these hazards may cause injury to employees, PPE must be selected to eliminate or substantially reduce the potential for injury. Employees will be notified for the selection and reason.

Each affected employee will be apprised of the results of this assessment, and a copy of the assessment will be kept at the local office.

Each affected employee must be fitted with the selected/identified PPE. The Training section of this program addresses fitting (including proper donning, and doffing), cleaning and maintenance of PPE. All PPE use exemptions must be supported by the PPE hazard assessment.

Monitoring

Site managers and supervisors must monitor worksite tasks to identify changes in hazards, or the introduction of new hazards. If the site manager or supervisor discovers a new hazard, they must advise the Safety Manager. The Safety Manager conducts a hazard assessment for appropriate PPE for the new hazard.

The Safety Manager monitors how effective the PPE Procedure is and recommends improvements to management.

Training

Acoustics Associates will train all employees who may need to wear PPE. Each affected employee must be fitted for PPE as required. Training will include:

- When it is required to use PPE.
- What type of PPE is required.
- How to put PPE on, take it off, adjust it and wear it.
- PPE limitations.
- How long PPE is useful, and how to dispose of it.
- How to clean and maintain PPE to ensure it is sanitary and in reliable condition.
- How to report and replace defective or damaged PPE. Never use defective or damaged PPE.

Retraining

Retraining is necessary when:

- There are changes to workplace the workplace that make the previous training obsolete.
- There are changes in the type of PPE.
- The employee shows improper use, a lack of use, or insufficient skill or understanding in selecting PPE, the necessity of PPE, the use of PPE and its limitations.

Documentation

Records of training will be kept at the local office. The training record will include:

- The name of the employee(s) trained.
- The training dates.
- The subject of the training.

REFERRAL BONUS PROGRAM

Introduction

At Acoustics Associates, we believe that our employees are the best advocates for our company and its values. Referrals from current employees help us identify top talent, build a strong workforce, and maintain a company culture that supports collaboration, growth, and innovation. To achieve this, we've implemented an Employee Referral Program designed to reward employees who help us recruit quality candidates for open positions. By participating, employees can help streamline our hiring process, reduce recruitment costs, and bring in talented individuals who align with our organization's goals and values.

Our Employee Referral Program is designed to reward employees who help us hire talented individuals for job openings at Acoustics. Current employees can refer potential candidates for positions listed on our careers page. If a referred candidate is hired and meets the conditions outlined in this policy, the referring employee will be eligible for a referral bonus as a token of appreciation.

Eligibility

To participate in the program, employees must meet the following eligibility criteria:

Referring Employee Eligibility:

- All current employees are eligible to participate in the program, except for the following:
    - Members of the HR team, hiring managers, or individuals involved in the selection process for the referred candidate.
    - Employees in leadership or executive roles directly responsible for the recruitment process.
- Employees Must be actively employed by Acoustics Associates at the time of the bonus payment.

Referred Candidate Eligibility:

- Referrals must be for qualified candidates who meet the requirements outlined in the job description.
- Referred candidates must not already be in our application tracking system or have applied for the same role within the past 6 months.
- Referrals cannot include current employees, contractors, interns, or former employees of Acoustics Associates.

Position Eligibility:

- The program applies only to full-time or part-time employees hired for eligible open positions listed on our careers page. Contract or temporary roles are not eligible unless otherwise stated.

Referral Process

To ensure a smooth and effective referral process, the following steps should be followed:

Submission:

- Employees must submit the referred candidate's resume and a completed referral form via email to mollym@aaimn.com.
- Referrals should clearly state the position the candidate is applying for.

Acknowledgement:

- The HR department will review the referral submission and confirm receipt with the referring employee.

Evaluation:

- The HR team will assess the referred candidate against the job requirements and initiate the hiring process if the candidate qualifies.

Tracking:

- The HR team will keep track of all referred candidates and their progress through the recruitment process.

Referral Bonus Structure

Employees whose referrals result in successful referrals (i.e., the referred candidate is hired and meets all conditions) will receive a referral bonus as follows:

Initial Bonus:

- A Gas Card of $500.00 will be awarded.
- The referred candidate must be successfully hired and complete a 2-week probationary period.

Secondary Bonus:

- A Gas Card of $1,000.00 will be awarded.
- The referred candidate must be successfully hired and complete 6 months of employment.

The referring employee must still be employed at Acoustics Associates when the bonus payment is issued. Bonuses will be paid within 1 week of the new hire's probationary period.

Exclusions

- Referrals for positions not listed as eligible for the program.
- Self-referrals or referrals of immediate family members.
- Referrals of candidates who have previously been employed by Acoustics Associates.
- Referrals of candidates submitted by external recruitment agencies.

Program Administration

The HR department is responsible for administering the Employee Referral Program. This includes:

- Maintaining an up-to-date list of eligible job openings.
- Reviewing referral submissions for compliance with the program's terms.
- Issuing referral bonus payments in a timely manner.

Acoustics Associates reserves the right to amend or discontinue this program at any time. Changes will be communicated to all employees.

By participating in the Employee Referral Program, employees can help us build a stronger, more talented workforce while enjoying meaningful rewards for their efforts.

Let's work together to bring in the best and brightest to Acoustics Associates!

RESPIRATORY PROTECTION PROGRAM

Purpose

The purpose of Acoustics Associates respiratory protection program is to protect employees from hazardous substances in the workplace air by:

- Establishing accepted practices for selecting, using, and caring for respirators
- Ensuring employees are trained and fit tested
- Providing written procedures for the program

Acoustics Associates will make every attempt to remove potentially harmful vapors and exposure to oxygen deficient hazards from the workplace environment. Respiratory equipment shall be provided at no cost to all employees that may be exposed to harmful vapors and oxygen deficient atmospheres. Respirators will be provided during emergencies with high risk of exposure and whenever engineering controls do not effectively eliminate respiratory hazards.

Scope

This program shall apply to all Acoustics Associates employees whether they are part time or full time. This program is applicable to all Acoustics Associates projects, sites, operations, locations and contractors.

Key Responsibilities

Acoustics Associates recognizes that individual supervisors will need to implement and enforce most of this program. Performance problems will be reported by the Program Administrator to the appropriate manager. The manager is responsible for implementing a plan to resolve performance problems. The Safety Manager or their appointee carries the responsibility of administering all aspects of the Respiratory Protection Program.

Respiratory Program Administrator

Responsibility for the respiratory protection program falls to the Safety Manager who must make sure that the requirements are followed. The Administrator must have appropriate training, a thorough knowledge of the program and be able to conduct evaluations. Program Administrator responsibilities include, but are not limited to:

- Administering an annual written evaluation of the Respiratory Protection Program. This evaluation must be completed by December 31st of each year.
- Making certain that respirators and their required parts are in sufficient supply. This duty may be delegated to an appointee, but the Program Administrator maintains overall responsibility. The title of the appointee to whom this duty is assigned is the Project Manager or Field Supervisor
- Determining hazards and providing only those respirators certified by NIOSH based on those hazards
- Ensuring that all workers who may need to use a respirator have been trained in how to use, select and know the limitations of the respirators that may be used. This must be done before the first time the respirator is used. The training may be delegated to another person, but the Program Administrator has the overall responsibility of ensuring that all employees are suitably trained.
- Ensuring that those who use respirators have been evaluated by a medical professional and deemed fit to use the type of respirator required for their job. Medical evaluations are to be completed before an employee is assigned to a task that involves the use of a respirator.

- Establishing that all workers who use respirators are tested at least annually for good fit or more often if other federal requirements stipulate it.
- Making certain that each individual has their own respirator and ensuring that all respirators are cleaned regularly and stored in a clean, easily accessible area. If this duty is delegated, the Program Administrator still maintains final responsibility over the task.
- Selecting respirators based on the hazards that are encountered. This program details basic types of respirators used at this site and which tasks they are used for. In certain circumstances, the Program Administrator may consult with health and safety staff for assistance in selecting the appropriate respirators.
- 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.
- Monitoring employees who wear respirators to ensure the employees leave the area to wash, change respirator cartridges or if break through or resistance is detected.
- Enforcing the program requirements for the selection, use, storage, maintenance and fit are followed.
- Seeing to it that there is no exchange of parts between brands of respirators.
- Guaranteeing that respirators, required training for respirators and medical evaluations are provided to the employees at no cost to them.

Employees

- Comply with all parts of this program.
- Ensure they understand the training they have received.
- Report any issues with their respirator to their manager immediately.
- Making sure their respirator is cleaned regularly

Medical Requirements

General

A medical evaluation will be provided by Acoustics Associates to evaluate the employee's ability to safely use a respirator before the employee is fitted or uses a respirator in the workplace. Should the employee be no longer required to use a respirator, Acoustics Associates may suspend medical evaluations for that employee.

Procedures for Medical Evaluations

Medical evaluations will be performed by a physician or other licensed health care professional selected by Acoustics Associates. These evaluations will be conducted using a medical questionnaire or an equivalent measure. See Medical Questionnaire form.

This medical evaluation will be conducted prior to fit-testing, will be confidential, and conducted during normal business hours, at a convenient location and time. The results of the evaluation must be understandable; the employee is provided with the opportunity to discuss the results with a physician or PLHCP.

Supplemental Information for the PLHCP

In order to make an informed recommendation, the following information will be provided to the PLHCP to help determine whether an employee is able to use a respirator:

- Type and weight of the respirator to be used by the employee.

- Extent and frequency of respirator use, including emergency use.
- Physical work effort expected of the employee.
- Protective equipment and clothing to be worn in addition to the respirator.
- Extreme variations in temperature and humidity that may be encountered by the employee.

The PLHCP will be given a copy of Acoustics Associates Respiratory Protection Program.

Note: When a PLHCP is replaced, Acoustics Associates is responsible for ensuring that the new PLHCP is provided with this information either by providing the documents directly or by transfer of documents from the former PLHCP. Employees will not be re-evaluated just because a new PLHCP is selected.

Medical Determination

To aid Acoustics Associates in determining an employee's ability to safely use a respirator, the Company will get a written recommendation from the PLHCP. The PLHCP's recommendation will contain the following information:

- Whether or not the employee is subject to any medical conditions or workplace conditions which may prevent the employee from being medically able to use the respirator.
- Recommendations for follow-up evaluations if needed.
- A signed statement that the employee has received a copy of the PLHCP's written recommendations.

The Safety Manager will receive a copy of all the recommendations.

Additional Medical Evaluations

Acoustics Associates will provide additional medical evaluations according to the program requirements if:

- An employee discloses medical symptoms or signs that may affect the employee's ability to use a respirator.
- A supervisor, the Program Administrator or a PLHCP recommends that an employee should be reevaluated.
- Information from the procedures set forth in this program, including observations during fitting, indicates that the employee needs to be re-evaluated.
- Changes in workplace conditions (e.g., an increase in physical work effort or changes in protective clothing or temperature) that may create increased physiological burden on the employee.

Work Site Respirator Procedures

Each work site that employs the use of respirators shall have site procedures that adhere to the guidelines set forth in this program. Additional procedures may be enforced by the client, which will be followed. The following site-specific information must be included:

- Identification of site-specific hazards that require respiratory protection.
- Selection of respiratory equipment that shall be appropriate to the particular hazards, characteristics and concentration levels at the site. Identification of particular brand and models of recommended respiratory equipment shall be included in the procedures.
- Confirmation that all users of respiratory protection are qualified, trained and competent according to the guidelines set forth in this program (i.e., approved medical evaluation, fit tested and trained annually).

Criteria for the Selection of Respirators

Respiratory equipment is selected based on the hazards the employee is exposed to. ACOUSTICS ASSOCIATES INC will:

- Identify hazards.
- Provide respirators according to those hazards and factors that affect performance.
- Identify specific brands and models to be used.
- Provide information on estimated exposures and contaminants.

Hazard Identification

Due to the variety of work locations, ACOUSTICS ASSOCIATES INC will identify respiratory hazards according to specific work site safety plans. Common respiratory hazards that employees may be exposed to include:

- Chemical particles.
- Gases.
- Oxygen deficient conditions.
- Fumes.
- Dust.

Characteristics of Hazardous Operations or Processes

- Shaping operations to include cutting, filing, sawing, grinding, drilling and milling.
- Solid operations to include pouring, mixing, separating, conveying, crushing, loading, extracting, bagging and demolishing.
- Liquid operations to include degreasing, spraying, painting, dipping, etching, cleaning, brushing, coating, plating, mixing, pickling, galvanizing and other chemical reactions.
- Hot operations including soldering, melting, burning, melding, welding and other chemical reactions.
- Pressurized spraying to include applying pesticides, cleaning parts, sand blasting, degreasing and painting.

Gaseous Contaminants

- Inert gases (neon, argon, helium, etc.), which displace air to create oxygen deficiencies but do not metabolize in the body.
- Alkaline gases (NH3, etc.) which are alkalis or create alkalis when they react with water.
- Acidic gases (HCL, SO2, H2S, etc.), which are acids or create acids when they react with water.
- Organic gases (acetone, butane, etc.), which exist as true gases or vapors from organic liquids.
- Organometallic gases (organo-phosphates, tetraethyl lead, etc.), which have metals attached to organic groups.

Particulate contaminants

- Smoke is a combination of chemically generated gases and airborne particles (solid and liquid) of organic origins (0.01 to 0.3 micron).
- Fumes are particles of solid condensation (0.1-to-1.0-micron diameter).
- Dusts are solid particles, (0.5-to-10-micron diameter), generated by mechanical means.
- Mists are liquid particulate matter (5-to-100-micron diameter).

Selection of Respirator

When selecting a respirator, the following factors should be considered:

- Contaminant Type and Concentration
    - The model and type of respirator selected, and their affiliated parts such as cartridges and filters, is determined based on the type and concentration of the contaminant. The concentration is obtained by taking a sample from the atmosphere.
- Identification of the Location of Hazardous Areas
    - Hazardous areas may include confined spaces, those exposed to nearby contaminants, etc.
- Worker Activity
    - Worker activities include being exposed to extreme heat or cold, wearing a welding hood, etc.

Types of Respirators

Air-purifying respirators are either half masks or full-faced masks that filter dusts, fumes, gases, mists or vapors through mechanical or chemical cartridges.

Powered air-purifying respirators are those that pass contaminated air through a filter using a blower. Like regular air-purifying respirators, they filter dusts, fumes, gases, mists or vapors. The purified air goes into a mask or hood.

Air-purifying respirators are not suitable for environments that are oxygen-deficient. This can result when another gas displaces the oxygen in the atmosphere or by a chemical reaction that consumes the oxygen. When oxygen levels drop below 19.5%, a source of supplied air or supplied-air respirators are required. Oxygen levels below 16% are considered very dangerous and could result in death. Contact the Safety Manager or qualified safety representative of the client to help determine the appropriate cartridge for air-purifying respirators. Take into consideration the information on the Material Safety Data Sheet regarding the substance that requires filtering.

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 gases and organic vapors
- Purple: Radioactive materials
- Orange: Dust, fumes and mists
- Olive: Other gases and vapors (multi-contaminants)

As soon as the respirator's user can detect an odor, irritation, or taste the contaminant, the cartridge should be immediately replaced. At the beginning of the shift, all cartridges and filters should be changed.

Supplied-air respirators provide the best protection against potentially highly toxic materials. Supplied air respirators are air-line respirators or self-contained breathing apparatuses (SCBAs). SBCAs allow a limited amount of air to be carried by the user, providing fewer restrictions and more mobility than air-line respirators.

Air-line respirators are connected to a central supply of fresh air via a hose. Fresh air can be obtained from a compressed air cylinder or an air compressor with a minimum of Grade D breathing air.

Emergency Escape Breathing Apparatuses (EEBAs) provided oxygen in 5, 10 or 15 minutes depending on the apparatus. EEBAs are to be used in emergencies when an employee needs to escape a situation that is immediately dangerous to life or health (IDLH).

SCBA (Self Contained Breathing Apparatus)

NOTE: Acoustics Associates does NOT permit employees to work in environments that are Immediately Dangerous to Life and Health (IDLH).

To maintain NIOSH and MSHA approval of respirators, mixing parts (e.g., valves, cartridges, airline hoses, gaskets, etc.) between respirator manufacturers is strictly prohibited. For example, do not use MSA cartridges or gaskets with a North product.

Brand and Models

North Safety brand NIOSH-certified respirators have been selected for use by ACOUSTICS ASSOCIATES INC. Only North Safety brand may be used to be in compliance with the policies and conditions of this Respiratory Protection Program. Additionally, NIOSH certified respirators are selected based on the hazards that the worker is exposed to.

The specific model to be used will be based on the type of hazard encountered, oxygen levels, concentration of the contaminant, type of work being performed, and work environment. Selections shall be made by identifying the appropriate North respiratory equipment for the work performed and the encountered hazard using the following guides:

- NIOSH Pocket Guide to Chemicals.
- North Respirator Selection Guide.
- North Cartridge Selection Guide.

Estimate of Exposures and Contaminant Information

- Employees are not permitted to enter IDLH environments.
- Oxygen levels shall be maintained at a normal level.
- Employees will not be exposed to atmospheric conditions that contain concentrations exceeding the STEL or PEL for a particular hazard.

Respirator Fit Testing

Prior to an employee using a respirator with negative or positive pressure tight-fitting face pieces, the employee must be fitted with the same make, model, size, and style of respirator that will be used when situations require it. This portion of the document lays out the types of fit tests allowed, how to conduct them, and how the results of the tests are to be used.

Employees using respirators must be fit-tested annually, at a minimum, and more frequently if federal requirements dictate. Supplied air respirators must also be tested for fit.

Qualitative fit tests (QLFTs) or quantitative fit tests (QNFTs) are required for all employees using tight-fitting face piece respirators. Fit tests for tight-fitting face piece respirators must be conducted prior to an employee using the respirator, when the employee uses a different respirator or face piece (make, model, size or style) and at least annually after that.

Additional fit tests are required if the employee reports, or a ACOUSTICS ASSOCIATES INC supervisor, PHLCP or Program Administrator observes changes in the physical condition of the employee that could affect fit. These physical conditions include but are not limited to: obvious changes in body weight, cosmetic surgery, facial scarring or dental changes.

If an employee passes a QLFT or QNFT and later notifies ACOUSTICS ASSOCIATES INC, supervisor, PLHCP or Program Administrator that the fit is not suitable, the employee will be given opportunity to choose a different respirator face piece to be retested.

Fit tests are conducted according to OSHA-accepted QLFT or QNFT protocol. The accepted procedures and protocols are outlined in this section.

QLFT is only to be used for fit-testing negative pressure air-purifying respirators that are required to have a fit factor of 100 or less. Half face air filtering respirators are fit tested with a smoke irritant. Full face respirators must be fit tested using Portacount.

If protocol determines that the fit factor is 100 or greater for tight-fitting half face pieces, or 500 or greater for tight-fitting full-face pieces, the quantitative fit test has been passed with that particular respirator.

The negative pressure mode will be performed during the QLFT or QNFT to fit test tight-fitting atmosphere-supplying respirators and tight-fitting powered air-purifying respirators. The negative pressure mode will be used for the fit test regardless of whether the usual mode of operation for that respirator is positive or negative.

To conduct a qualitative fit test for these respirators, the respirator user's face piece will be converted into a negative pressure respirator with appropriate filters. Alternately, an identical negative pressure air-purifying face piece with the same sealing surfaces may be substituted.

To conduct a quantitative fit test for these respirators, the face piece will be modified to allow sampling inside the face piece's breathing zone, halfway between the nose and mouth. This will be accomplished by installing a fixed sampling probe onto a substitute face piece or by using a sampling adapter which provides a temporary means of sampling the air.

Any face pieces that are modified for the purposes of fit testing will be completely restored to their NIOSH-approved configurations before they are used by employees in the workplace.

Fit Test Procedures

The requirements in this section apply to all QLFT and QNFT OSHA-accepted fit test methods.

The test subject will be provided with a sufficient variety of respirator sizes to select the most acceptable respirator that correctly fits the subject.

Before beginning the selection process, the subject will be shown how to put a respirator on, how to position it on the face, how to set strap tension and how to evaluate acceptable fit. A mirror will be provided to aid the test subject in determining the position and fit of the respirator. The instruction provided during fit testing does not substitute for the formal training on respirator use; it is only a review.

The test subject will be informed that a respirator is to be selected that provides the best fit. Each respirator presented is of a different size and shape. If fitted and used properly by the subject, the respirator will provide sufficient protection.

Test subjects will be instructed to hold up each chosen face piece to the face to quickly eliminate those that are obviously a poor fit.

The acceptable face pieces are noted. The most comfortable mask must be put on and worn for five minutes or more to evaluate comfort. To assess comfort, the following points should be considered:

- If the subject is not familiar with how to use a respirator, he or she will be instructed to put the mask on several times and to adjust the straps each time, so the subject becomes well-versed in setting the proper tension on the straps.
- Position of the mask on the cheeks and face.
- Room to talk.
- Position of the mask on the nose.
- Room for eye protection.

The following criteria will be used to evaluate the suitableness of the respirator's fit:

- Proper placement of the chin.
- Sufficient, but not overly tight, strap tension.
- Proper fit across the bridge of the nose.
- Respirator's tendency to slip.
- Respirator sized appropriately to span the distance of the subject's nose to chin
- Subject's self-evaluation in mirror to assess the respirator's fit and position.

Evaluations should incorporate use of the Fit Test form.

User Seal Check

Prior to beginning the negative and positive pressure checks, subjects will be instructed to place the mask on the face and move the head up and down and from side to side while taking slow, deep breaths. The subject will perform a user seal check by using either the positive or negative pressure seal checks outlined below:

Positive Pressure Check

Remove the exhalation valve cover and close off the exhalation valve. Exhale gently into the face piece. If a slight positive pressure builds up inside the face piece with no outward leaks of air at the seal, the face fit is sufficient. Carefully replace the exhalation valve cover after conducting the pressure check.

Negative Pressure Check

Replace the filter seal over the opening of the canister or cartridge. If the filter seal is not available, cover the inlet opening with the palm of the hand. If the hand does not sufficiently cover the inlet opening, cover it with a thin latex or nitrile glove. Inhale gently. The face piece should collapse slightly. Hold your breath for ten (10) seconds. If the face piece remains slightly collapsed, and no air leaks inward, the tightness of the respirator is sufficient.

The test cannot be conducted if the subject has hair growth at the areas with the skin seals on the surface of the respirator. This includes a beard, moustache, sideburns, or stubble. Any apparel or accessories (including glasses) that interfere with the fit should be removed.

If the subject determines that the fit of the respirator is unsatisfactory, the subject will be allowed to select a different respirator and will be retested. The fit test will be terminated immediately if the subject has difficulty breathing during the tests. The subject will be referred to a physician or other health care profession for evaluation regarding whether the subject can wear a respirator in the performance of his or her job duties.

Subjects will be given a description of the fit test and the subject's responsibilities during testing prior to beginning the test. This will include a description of the exercises to be performed by the test subject. The respirator must be worn for at least five minutes prior to beginning a test.

The subject must wear all safety equipment that may be required during actual respirator use while the fit test is performed.

Test Exercises

Each test exercise lasts one minute except the grimace test, which lasts 15 seconds. The test conductor will ask the subject questions about the comfort of the respirator upon completion of the procedures. If the respirator has been deemed unacceptable during or after completion of the tests, another model will be tested. If the subject cannot perform the test exercises due to medical or health conditions, the fit test will not be performed. In this case, the subject is prohibited from using a respirator until all elements of the fit test can be completed.

The subject will not be permitted to adjust the respirator once the exercises begin. Any adjustment made voids the test, and the test must be repeated.

All fit-testing methods will require the following exercises to be performed:

- Normal breathing. The subject will be required to breathe normally while in a standing position without talking.
- Deep breathing. The subject will be asked to stand in a normal position and take slow, deep breaths, taking care not to hyperventilate.
- Turning head side to side. While standing in place, the subject will be required to turn the head from side to side, to the farthest position at each side. At the farthest position, the subject will be asked to hold and inhale.
- Moving head up and down. While standing in place, the subject will be asked to move the head in an up and down motion. The subject will be asked to inhale when the head is in the up position.
- Talking. The subject will be asked to speak slowly and loud enough for the voice to be heard by the test conductor. For this exercise, the subject will read from the Rainbow Passage below for one minute.

Rainbow Passage

“When the sunlight strikes raindrops in the air, they act like a prism and form a rainbow. The rainbow is a division of white light into many beautiful colors. These take the shape of a long round arch, with its path high above, and its two ends apparently beyond the horizon. There is, according to legend, a boiling pot of gold at one end. People look, but no one ever finds it. When a man looks for something beyond reach, his friends say he is looking for the pot of gold at the end of the rainbow.” Continue to read for one minute.

- Grimacing. The test subject will be asked to grimace by smiling or frowning. (This exercise is only performed during QNFT tests).
- Jogging in place. The subject will be required to jog in place for one minute while taking care to be aware of their surroundings.
- Normal breathing. Repeat the first exercise.

Qualitative Fit Test (QLFT) Protocols

General

Acoustics Associates requires that persons conducting QLFT are able to calibrate equipment, ensure that equipment is in proper working order, prepare test solutions, properly perform tests and recognize invalid tests.

Acoustics Associates is responsible for ensuring that QLFT equipment is clean, well-maintained and operational within its intended parameters.

Irritant Smoke (Stannic Chloride) Protocol

This QLFT tests for leakage into the respirator by using the subject's reaction to chemical irritants released in "smoke" produced by a stannic chloride ventilation smoke tube.

General Requirements and Precautions for the Irritant Smoke Protocol:

Respirators will be equipped with high efficiency particulate air (HEPA) or P100 series filters for this test.

The test shall not be performed in an enclosure. The test subject shall not use a hood. Only stannic chloride smoke tubes are permitted for use during this protocol.

The smoke from this test may be irritating to the eyes, nasal passages and lungs. The test conductor will take precautionary measures to minimize the smoke irritant the subject is exposed to. Sensitivity varies according to the individual; some may experience greater irritation to the smoke. Precautions will be taken when performing the screening to use only the minimum amount of smoke necessary to elicit an olfactory response from the test subject.

This fit test will be conducted in an adequately ventilated area to prevent build-up of irritant smoke and to avoid exposing the test conductor to smoke.

The subject must be able to demonstrate that he or she can detect a weak concentration of the irritant smoke.

- The test conductor will break both ends of the stannic chloride ventilation smoke tube. One end of the smoke tube will be attached to a low flow air pump to administer 200 milliliters per minute, or an aspirator squeeze bulb. The conductor will cover the opposite end of the smoke tube with a short piece of tubing to guard against potential injury from the jagged end.
- The test conductor will inform the test subject that smoke can irritate the eyes, nasal passages, and lungs and will instruct the test subject to keep the eyes closed while the test is performed.
- The test subject will be permitted to smell a weak concentration of the smoke before putting the respirator on in order to become familiar with its irritating properties and to determine if the subject can detect the smoke's irritating properties. The test conductor will carefully administer a small amount of the smoke directed toward the test subject to determine if he or she can detect it.

Irritant Smoke Fit Test Procedure

- The test subject will put the respirator on without assistance and will perform the required user seal checks.
- The test subject will be instructed to keep the eyes closed if he or she is wearing a half face respirator.
- The test conductor will direct the stream of smoke from the tube toward the face seal area of the subject by using a low flow pump or squeeze bulb. The test conductor will be 12 inches or more from the face piece and will move the smoke stream around the entire perimeter of the mask. Gradually, the test conductor will make two more passes (for a total of three times) around the perimeter of the mask, moving closer each time. The test conductor will not move the smoke tube closer than six inches.
- If the irritant smoke does not elicit a response from the test subject, proceed with the test exercises.
- The exercises in the Test Exercises will be performed by the test subject. The respirator seal will continue to be challenged by directing smoke around the perimeter at a distance of six inches.

- If the test subject reports detection of the irritant, this is a failed test. The test subject must repeat the entire sensitivity check and fit test procedure before being retested.
- If the test subject passes the irritant smoke test (with no evidence of a response such as irritation or involuntary cough), the subject will be screened for sensitivity again after the respirator is removed, using smoke from the same tube used during the fit test. If he or she still reacts to the smoke, the fit test is valid. If there is no response to the irritant smoke, the results of the fit test are invalid.
- The glass tube will be properly disposed of after conducting the screenings and fit test.

Quantitative Fit Test (QNFT) Protocols

OSHA has deemed it acceptable to use controlled negative pressure and suitable instrumentation to measure a face piece's leak rate by volume in order to quantify the respirator.

Acoustics Associates requires that all persons administering quantitative fit tests (QNFT) are capable of calibrating equipment, ensuring that equipment is in proper working order, performing tests properly, calculating fit factors properly, and recognizing invalid tests.

Acoustics Associates is responsible for ensuring that equipment for GNFT is clean, well maintained and calibrated according to the manufacturer's recommendations in order to operate as it was designed to.

Portacount Fit Test Requirements

- Examine the respirator to ensure it is fitted with a high efficiency filter. Make sure the sampling probe and line are attached to the face piece according to established standards.
- Instruct the subject to put the respirator on five minutes prior to the beginning of the test to rid the respirator of ambient particles trapped inside and allow the subject to make sure the respirator is comfortable. The subject must already have been trained on proper use of the respirator.
- Check the following to ensure the respirator fits the subject sufficiently: Proper placement of chin, sufficient strap tension, correct placement on the nose, appropriate distance from nose to chin, tendency of the respirator to slip and subject's self-evaluation (in a mirror) of fit and position.
- Instruct the subject to perform a user seal check. If a leak is detected, examine the cause. If it is determined to be caused by an inadequately fitting face piece, instruct the subject to select a different size of the same model, or a different model of respirator.
- Proceed with the test ensuring the Portacount is operated according to the manufacturer's instructions.
- Instruct the test subject to perform the exercises according to the Test Exercises section of this procedure.
- After the subject has completed the test exercises, question the subject about the comfort of the respirator. If the fit has become unacceptable, instruct the subject to select another respirator model.

Portacount Test Instrument

The Portacount automatically stops and calculates the overall fit factor for all of the exercises completed. The overall fit factor is the one that counts; this is determined by a Pass or Fail message. If the test reads Pass, the test is over. Because the criteria for Pass or Fail are programmable by the user, the test conductor will make sure that the programmed criteria meet the requirements for the respirator's minimum performance.

Test results for passing tests will be sent to the Safety Manager and kept on file. This record must contain the subject's name; overall fit factor; make, model, style and size of respirator; and test date.

Use, Maintenance and Care of Respirators

Acoustics Associates is required to provide for the use, inspect, repair, storage, cleaning and disinfecting of respirators used by employees. All respiratory protective equipment shall be properly stored and inspected by Acoustics Associates.

Use

- Factors that can affect the mask to face seal are not permitted. This includes, but is not limited to, glasses, clothing and facial hair.
- A positive and negative pressure check must be conducted each time a respirator is worn.

Cleaning and Disinfecting Requirements

ACOUSTICS ASSOCIATES INC will provide each employee who requires a respirator one that is clean, sanitary, and in proper working order. The responsible person for the maintenance and care of respiratory equipment is the respiratory program administrator and safety manager. ACOUSTICS ASSOCIATES INC will make sure that respirators are cleaned and sanitized according to the procedures in the Respiratory Protection Program, or procedures recommended by the manufacturer if they are equivalently effective. Respirators are required to be cleaned and disinfected:

- When issued to an employee who will use the respirator exclusively, the respirator will be cleaned as often as necessary by the employee to maintain sanitary condition.
- When used in training and fit testing, the respirator must be cleaned by the Safety Manager or his/her designee after each use.
- Employees who are assigned cartridge respirators are responsible for the cleaning, inspection and proper storage of the respirator.

Cleaning Procedures

- Remove the respirator's filters, cartridges or canisters. Face pieces should be disassembled by removing speaking diaphragms, valve assemblies, hoses and any other components as recommended by the manufacturer. Defective parts should either be discarded or repaired.
- Wash all parts in a solution of warm water and mild detergent or with a manufacturer recommended cleaner. A non-wire, stiff bristled brush may be used to help remove dirt.
- Rinse all the washed components in clean, warm, running water. Drain after rinsing.
- If the cleaner does not contain disinfectant, parts should be submerged for two minutes in a disinfectant. Alternatively, alcohol wipes may be used, so long as they are intended for use with respirators.
- Rinse parts in clean, warm, running water. It is important to rinse thoroughly because dried detergents or disinfectants on face pieces may cause dermatitis. These cleansing agents may also deteriorate or corrode rubber and metal parts if they are not completely removed.
- Drain the parts after rinsing.
- Components should be hand-dried with a clean lint-free cloth or air dried. Reassemble face piece, replacing filters, cartridges, and canisters where necessary. Test the respirator to ensure that all components work properly.

Storage and Inspection

- Respirators and respiratory equipment must be stored properly to protect them from contamination, temperature extremes and other damaging conditions.

- Respiratory equipment that is intended for use in emergencies will be stored in an easily accessible area that is clearly marked.

Respirators must be inspected as outlined:

- Respirators used routinely must be inspected by its assigned employee before and after each use and during cleaning.
- The employee must also check the respirator for proper function, tightness of connections and the condition of its parts (e.g., the face piece, valves, head straps, connecting tubes, and cartridges, canisters or filters).
- Elastomeric parts must be checked for pliability and possible signs of deterioration.
- Emergency respiratory equipment must be inspected monthly, at a minimum, and before and after each use.
- Respiratory equipment used for escape only must be inspected before being carried into the workplace.

Breathing Air Quality and Use

Acoustics Associates will make certain that compressed air complies with the following specifications:

- Compressed breathing air shall meet at least the requirements for Type 1-Grade D breathing air described in ANSI/Compressed Gas Association Commodity Specification for Air, G-7.1-1989, to include:
    - Oxygen content (v/v) of 19.5-23.5%,
    - Carbon monoxide (CO) content equal to or less than 10 ppm,
    - Hydrocarbon (condensed) content of 5 mg per cubic meter of air or less,
    - Carbon dioxide content equal to or less than 1,000 ppm, and
    - Lack of noticeable odor.
- Acoustics Associates will make sure that oxygen is not used in compressed air units.
- Acoustics Associates will make sure that only equipment designed for oxygen service or oxygen distribution will use oxygen concentrations greater than 23.5%.
- Acoustics Associates will make sure that cylinders used in supplying breathing air to respirators meet Department of Transportation requirements and:
    - Cylinders of purchased breathing air have a certificate of analysis from the supplier stating that the breathing air meets the requirements for Type 1 Grade D breathing air, and
    - The moisture content of a cylinder does not exceed a dew point of -50 deg. F (045.6 deg. C) at 1 atmosphere pressure,
    - Cylinders are tested and maintained as recommended in the Shipping Container Specification Regulations of the DOT (49 CFR part 173 and part 178).
- Acoustics Associates will make sure that compressors used in supplying breathing air to respirators are constructed and placed in a manner that:
    - Prevents entry of contaminated air into the air-supply system,
    - Minimizes moisture content to keep the dew point at 1 atmosphere pressure to 10 deg. F (5.56 deg. C) below the ambient temperature,
    - Have appropriate in-line air-purifying sorbent beds and filters to protect the quality of the breathing air. Sorbent beds and filters must be maintained regularly and refurbished or replaced periodically according to the manufacturer's recommendations.
- Have a tag maintained at the compressor that contains the most recent change date and the signature of the authorized person who performed the change.

- For compressors that are not oil-lubricated, Acoustics Associates will make sure that carbon monoxide levels of the breathing air do not exceed 10 ppm.
- For oil-lubricated compressors, Acoustics Associates will use a carbon monoxide alarm and/or high temperature alarm to monitor levels of carbon monoxide. If using only high-temperature alarms, the air supply must be monitored at regular intervals to sufficiently prevent carbon monoxide in the breathing air from exceeding 10 ppm.
- Acoustics Associates INC will make sure that breathing air couplings are incompatible with outlets for non-breathable worksite air and other gas systems so as to prevent asphyxiating substances from being introduced into the breathing air lines.

Repairs

ACOUSTICS ASSOCIATES INC will make sure that respirators that fail inspection or are otherwise deemed defective are immediately removed from service. The defective respirators will be discarded, repaired or adjusted according to the following procedures:

- Adjustments and repairs are to be made only by authorized persons trained to perform those operations. Only the respirator manufacturer's NIOSH-approved parts designed for the respirator may be used.
- Repairs will be made according to the manufacturer's instructions, according to the type and extent of repairs needed to be performed.

Voluntary Use

If an employee elects to voluntarily wear a respirator when not required by this Program, they will be advised ofthe following during their training:

When properly selected and worn, respirators are an effective form of protection against designated hazards. Use of respirators is encouraged, even if exposures are below the exposure limit, to provide additional protection and comfort for employees.

If a respirator is not used properly, not maintained and not kept clean, the respirator may become a hazard to the employee. Certain precautions should be taken when employees are provided with respirators for voluntary use to include the following:

- Read thoroughly and follow all instructions as set forth by the manufacturer on the use, cleaning, care, maintenance, warnings and limitations of the respirator.
- Select respirators certified by NIOSH (National Institute for Occupational Safety and Health) to protect against the contaminant of concern. A label or statement of certification should be on the respirator or its packaging. This certification details what the respirator is designed for and how much protection it provides.
- Do not wear respirators in contaminated areas for which your respirator is not designed and certified to protect against. For example, a respirator designed to filter dust particles does not protect against vapors, gases, or very small solid particles of fumes or smoke.
- Keep track of your respirator to avoid mistakenly using someone else's respirator and vice versa.

Workplace Monitoring

The corporate health department has implemented a program to monitor potential employee exposure. Project personnel may be assigned to the task of air monitoring. Direct-reading instruments will be utilized to aid in

characterizing potential exposures. The data collected will be used to determine the respiratory equipment's appropriateness.

Recordkeeping

Acoustics Associates will establish and maintain written records regarding medical evaluations, fit testing and the respirator program. Medical evaluation records will be retained and made available according to 29 CFR 1910.1020. ACOUSTICS ASSOCIATES INC will give the employee an opportunity to discuss the questionnaire and the results of the employee's examination with the PLHCP.

Records will be treated in a confidential manner and maintained in the files of the Safety Manager in the corporate office.

Program Evaluation

Acoustics Associates will conduct evaluations of the workplace and environment whenever necessary to make sure that the policies and procedures of the current program are being implemented and continue to be effective.

Acoustics Associates will, on a regular basis, consult employees who use respirators to evaluate the employee's opinions on the effectiveness of the program and to identify any problems with said program. Identified problems will be corrected. Factors to be evaluated include, but are not limited to:

- Respirator fit.
- Ability to use the respirator without interfering with work duties and performance.
- Proper usage of the respirator under the usual conditions the employee encounters.
- Proper maintenance of the respirator.

Training

Every employee will participate in respirator training initially and at least annually thereafter, if their job classification requires it. Training will be provided prior to requiring the employee to use the respirator and shall address employee knowledge of the following:

- Respirators and fit.
- Wearing, use, and limitations
- Emergency situations.
- Fit Checks.
- Maintenance and storage.
- Medical signs and symptoms of effective use.
- General OSHA standards and requirements.

Retraining

Employees must be retrained annually and when the following circumstances apply:

- Changes in the workplace or the type of respirator make the previous training obsolete.
- The employees' knowledge is found to be inadequate.
- Other situations that arise make retraining necessary to ensure employee safety.

RISK ASSESSMENT / HAZARD IDENTIFICATION

Hazard Identification Overview

Hazard identification focuses on preventing loss from occurring i.e., physical hazards, work practices, and other loss potentials that are likely to cause personal injury or damage. The goal is that corrective action can be taken before a loss occurs.

Job Hazard Analysis

Job Hazard Analysis (JHA) is a proactive method to review the workplace and the task at hand to identify hazards before they occur and to minimize hazardous conditions and improper acts. A functional JHA can be achieved in the following manner:

- The safety specialist, superintendents and foremen will perform JHA's.
- Keep current on newly identified hazards in our industry and apply corrective actions as needed for the workplace.
- The safety specialist will review each highly hazardous job from time-to-time.
- Request feedback from employees on items that appear harmful.
- Discuss and review existing hazards and hazard controls.
- Use accident and near-miss investigation reports to analyze what caused the incident and review standard operating procedures for possible change.

To perform a JHA, we will ask:

- What can go wrong?
- What are the consequences?
- How could it happen?
- What are other contributing factors?
- How likely is it that the hazard will occur?

Standard Operating Procedures (SOP)

Standard operating procedures maintain consistency in how a job is done by employees. All the factors that "produce" the items have to occur in a sequence of steps. These steps should be examined for hazards to make sure appropriate methods that control the hazards are in place. All hazardous jobs will have a written standard operating procedure. This outline will be used for employee orientation and training.

Standard operating procedures can change due to many factors, such as hazard identification, discovering more efficient ways of doing the job, the purchase of new equipment, etc. Employees are encouraged to recommend SOPs other than "the established way of doing things," to develop a better way to perform the task.

Jobsite Inspection Checklist

The inspection checklist is a reminder of items that should be looked at or looked for. A checklist can be extensive depending on the complexity of the operation. Hazardous or critical areas and tasks should be reviewed continually. Other situations or conditions may be reviewed monthly or quarterly.

The advantage of a checklist is that it is a proactive method to identify factors that are known to cause loss. Another benefit is the ease of documentation and analysis in detecting trends. Reviewing checklists from past

inspections helps identify problems that are reoccurring. If a hazardous condition continues or reappears, management control is either lacking or not being emphasized adequately. Management's method of control will be reviewed to clarify responsibilities or added to an individual's role in controlling loss.

Accident Investigation

Accidents are investigated to determine their cause and to prevent them from happening again. An accident is a failure within a system or a collision of subsystems requiring correction, if possible. Accident investigations should be used as a tool to prevent future accidents, injuries and illnesses from occurring. The investigation should not have a single motive for determining fault but be used to correct areas where failures occurred.

Ideally, the JHA will identify hidden hazards before an accident occurs. However, accidents may occur resulting in personal injury or property loss.

Accident investigation is to be used to analyze the processes that are currently in place to determine the causes of the loss. This may mean that the actual work area on the job site will have to be changed, and/or the standard operating procedures altered to establish a stable work system. If the standard operating procedures need to be altered, this will initiate new employee orientation, SOPs and the operational training checklist on this piece of equipment.

Maintenance

Another means to reduce hazard is preventative maintenance procedures for equipment and machinery. All equipment and machinery must be maintained as recommended by the manufacturer or industry standards. The supervisor will document equipment or machinery maintenance. If equipment or machinery is not maintained properly, the chances of equipment failure increases.

Job Hazard Analysis and Control

The Company will identify and analyze hazards in the workplace by utilizing many different approaches. The people involved in this process will be all levels of Management, Employees, OECS Associates and Insurance Representatives. The aforementioned personnel must be knowledgeable in OSHA rules and regulations and capable of identifying general unsafe conditions and/or acts. Other areas the inspectors must be familiar with are those conditions and acts that cause accidents. This is accomplished by being in the business for many years and knowledge of how accidents occur. Reviewing accident investigations from previous years will aid us in determining how people are hurt and how losses occur. These conditions and acts can then be searched out and eliminated during the inspections. There are many types of inspections: pre-construction review inspections; daily (on-site) inspections; formal (on-site) inspections. All of these inspections have many different levels which will be described as follows:

- Pre-Construction Review Inspection:
    - The pre-construction review is held at a designated location before the actual on-site construction starts. The Superintendents and Foreman should all be in attendance to ensure all levels of safety. A complete review of the plans and scheduled activities must be performed to identify all possible hazards and problem areas. All hazard situations must then be analyzed, and ways must be found on how to best approach these situations to guarantee an accident-free worksite. This pre-planning is a very important step in controlling overall site safety.
- Daily On-Site Inspections:

- As part of a daily routine, the Foreman will always be alert to unsafe conditions and acts. When reviewing the day's work routine with the employee, the Foreman will point out the conditions the employee may encounter. Daily reminders are part of the daily routine, as well as teaching OSHA safety standards and avoiding unsafe acts. The main person responsible for the daily on-site inspections is the Foreman; but the added cooperation and input concerning safety and that of their co-workers, is the field employees. It is an employee's responsibility to report to management any unsafe or poor-quality work practices being done by their fellow employees or any other construction trades working on the site.

- Formal Inspections
  - The Foreman will have a formal type of jobsite inspection, either as a planned walkthrough or as part of the normal course of the workday. When the job is inspected the Foreman will make notes on the Jobsite Inspection Form on what safety problems are identified. This careful planning will reduce many possible accidents. Traffic patterns, crane movements, types of scaffolding, etc., will also be reviewed to determine the potential safety problems. The Foreman then will be able to formulate plans to avoid or work around these conditions. This safety inspection will give the Foreman a period of concentration to discuss the hazards our employees work around daily, but at times take for granted. Also, a review of all Toolbox Talks for unsafe conditions and acts will be discussed regarding the past month's topics.
  - All formal inspections and actions taken will be documented. Also, notations in daily reports will be utilized. A copy of all daily reports, formal safety inspections, and Toolbox Talks will be maintained at the jobsite and after completion of the job at the main office.

Professional Jobsite Safety Audits

Periodic safety audits will be conducted by the Safety Specialist or OECS. The Jobsite Safety Audits will be conducted on randomly chosen job sites from a current list of on-going projects or upon direction of company management. The person conducting the audit will walk the jobsite with the Foreman or any other designated Company Representative and comment verbally at the construction site on all safety concerns, positive observations, and on recommendations and will then submit a written report along with the corresponding pictures to the Safety Manager for further actions. Immediate Danger to Life and Health Situations (IDLH) will be addressed right away on-site and a handwritten report will be issued to the Foreman. The Safety Manager will also be notified immediately of the IDLH.

All safety recommendations will be reviewed by the Foreman immediately and all necessary reviews completed as soon as possible.

Job Hazard Analysis

The Job Hazard Analysis Program will be used by the safety specialist, superintendents, foremen, and/or employees to analyze the jobs they will perform. They will identify existing and potential hazards that are associated with each job and then establish controls for them. This will greatly help in detecting hazards before they can result in injury and/or damage. The work site is continually analyzed to identify, record and control all hazards.

Safety precautions will be taught to the employees prior to the beginning of a job. Specific job hazards will be pointed out in connection with each phase of the job and instructions will be given on specific safe work practices that will help avoid these hazards. The Foreman will be trained to understand the key role they play in job site safety, to enable them to carry out their safety and health responsibilities effectively. Training programs for the Foreman will include the following:

- Analyzing the work under their supervision to anticipate and identify potential hazards.
- Maintaining physical protection in their work areas.
- Reinforcing employee training on the nature of potential hazards in their work and on needed protective measures, through continual performance feedback and if necessary, through enforcement of safe work practices.
- Understanding their safety and health responsibilities.
- The Foreman will be responsible for all Acoustic Associates employees to comply with all projects environmental/pollution control requirements.

Job site walkthroughs are performed daily to detect and correct unsafe practices and conditions. These walkthroughs should focus on the identification and correction of potential safety, health and fire hazards. These walkthroughs are done by the Foreman.

To be an effective part of this program the Foreman must:

- Identify work areas and tasks with a high risk of loss.
- Set inspection responsibilities and schedules.
- Develop an administrative system for review of reports.
- Set up a procedure to follow-up remedial actions.
- Analyze inspection findings.

While the Company is committed to providing a safe workplace, we must never forget that it is the people who make the process work. Ultimately people cause injuries and damages. As part of an effective loss control program, Acoustic Associates Management must:

- Set program standards for observing employee's safe work practices.
- Communicate program safety standards to all employees.
- Monitor performance of employee's safe work practices.

Hazard Assessment Process

Hazard assessment evaluates probability and severity of the identified risk in order to determine where to initially invest resources.

Prioritizing Hazards

Each hazard represents a potential for occupational injury, property, or product damage. The purpose of identifying a hazard is to reduce the occurrence of a likely loss potential. Since some hazards have a greater likelihood of loss in terms of frequency and severity, a numeric code is assigned to hazards combining probability and severity of that risk.

Risk Assessment Chart

These assessments of hazards are classified by using Risk Assessment Codes. (RAC). A Risk Assessment Chart is used combining both severity and the probability evaluation codes of a hazard by a standardized method. The Chart prioritizes the hazard ensuring a consistent evaluation. Within the Risk Assessment Chart, the letters A, B, C, D reflect the probability of a mishap occurring. The far-left vertical column Roman numerals, I, II, III, & IV reflect the severity of the hazard. Within the boxes are normal numbers 1-5 indicating the priority of the hazard. These numbers identify the abatement priority the company should address first.

Risk Assessment Matrix		Probability			
		Likely	Occasional	Seldom	Unlikely
Severity		A	B	C	D
Catastrophic	I	1	1	2	3
Critical	II	1	2	3	4
Moderate	III	2	3	4	5
Minor	IV	3	4	5	5
Risk Assessment Codes (RAC) 1: Immediate Danger 2: Serious 3: Moderate 4: Minor 5: Negligible					

Hazard Severity

Severity reflects the consequences if the accident occurs. It is a degree of injury or occupational illness that could occur. The severity categories are as follows:

I. Death or permanent total disability.

II. Permanent partial disability, temporary total disability in excess of 3 months.

III. Lost workday.

IV. First aid or minor medical treatment. Many occupational deficiencies may fall into this category.

Hazard Probability

This is an assessment of the likelihood of an activity resulting in an accident. They are to be coded as follows:

A. Likely to occur immediately or within a short period of time.

B. Probably will occur in time.

C. Possibly to occur in time.

D. Unlikely to occur.

RAC Abatement

The lower the RAC number, the higher the priority should be placed on addressing the hazard. Therefore, a RAC of 1 is more serious than a RAC of 2, Risk Assessment codes of 1, 2, & 3 are considered a concern and require an abatement date. They are to be addressed in a timely fashion. RAC's 4 & 5 are low risk hazards and can be deferred until later when the company can schedule out to repair or replace the deficiency. RAC's 4 and 5 are to be checked periodically throughout the year, at least on a quarterly basis.

All RAC recommendations are to be monitored until they are complete. Records of actions taken, and all other documentation are to be on file for a minimum of 2 years after completion.

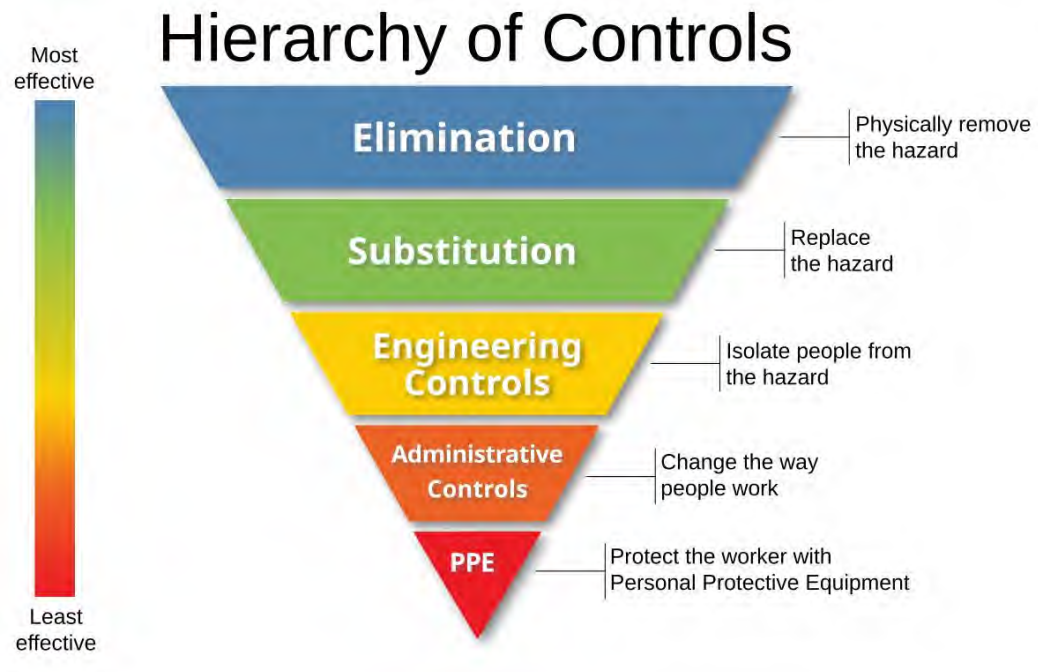
Methods of Correction

The company will select a method to correct the deficiencies feasible for the situation. The following are suggested methods to correct the hazard; they will be utilized in order when possible:

- Substitute hazardous materials or processes with those that are less hazardous.
- Utilize engineering controls.
- Isolate the hazard.
- Utilize work procedures to limit exposure when working around the hazard.
- Utilize administrative controls.
- Provide personal protective equipment.

When looking for corrections of risk potentials, the company will take the following areas into consideration:

- Technical feasibility and cost.
- The number of people exposed and length of time exposed.
- Previous accident experience.
- Future use of facilities or equipment.
- Available alternate methods to control the hazard or protect personnel.
- Interim control measures in effect. Solutions of these interim control measures can be used as temporary measures before more permanent solutions can be utilized.



ACOUSTICS ASSOCIATES
10750 XYLON AVE N., SUITE 140, BROOKLYN PARK, MN 55445
MAIN: 763.544.8901

JOBSITE INSPECTION REPORT

Inspector's Name: Job Name & Number: Date:

1. General Fall Hazards
- a. Guardrails missing/incomplete/damaged/inadequate
- b. Hole covers not in place/not marked/not secured/ inadequate
- c.Warning lines incomplete/not in place/not correct distance from the edge
- d. Controlled access zone not established
- e. Safety Monitor not present/not competent
- f. Personal Fall Arrest/Restraint System not being used
- g. Fall Protection Equipment damaged/inadequate
- h. Slide Guards not in place/inadequate
- i. Rescue plan not in place

2. General Electrical Hazards
- a. GFCI not used/not working
- b. Extension cords frayed/taped/missing ground pin
- c. Power Tool damaged/cut cord/missing ground pin
- d. Non-Construction Grade equipment being used
- e. Power Panels, outlets, switches not guarded/damaged
- f. Temp lights missing guards/bulbs/open splices/inadequate

3. General PPE
- a. Required PPE not worn/defective/inadequate/not available

4. Stairways and Ladders
- a.Handrails and/or Stair rails missing
- b. Stair/step not provided with elevation change of 19" +
- c. Ladder set-up/misuse/damaged/missing stickers

5. General Safety and Health
- a. On-Site sanitation not provided/not sanitary/not heated during winter months
- b. Drinking water not provided (Summer)/no shelter (Winter)
- c. Safety Program, OSHA posters, First Aid Kit, Eye Station missing/incomplete

6. General Housekeeping
- a. Slip/Trip hazards in passageway/stairs
- b. Entries/Exits blocked
- c. Protruding nails/debris/garbage on floor

7. Scaffolding/MEWP's
- a. Foundation not firm/level/mud sills/base plates
- b. Frame not plumb/rigid/brace missing
- c. Platform not fully decked/not level/no overhang
- d. Fall Protection not in place/no guard rails
- e. access not safe/no ladder frame/no ladder/no entry gate
- f. Scaffold components missing/damaged/inadequate
- g. Lift is damaged/missing parts/not correct for job task
- h. Lift Operator not certified/unsafe behavior

8. Fire Hazards
- a. Extinguishers missing/not inspected/not charged
- b. Flammables stored too close to ignition source
- c. Gas properly setup
- d. LP tanks not secured/stored in high traffic area/ not no fire extinguisher
- e. On-Site refueling tanks not protected/stickers missing/

9. General Forklift
- a. Operator not certified/no seatbelt/unsafe behavior
- b. Overhead powerlines closer than 10 ft

10. Other Miscellaneous
- a.
- b.
- c.
- d.
- e.

Item #	Hazard Description	Action Taken	Abatement Date

SAFE RETURN TO WORK

Purpose

The purpose of this program is to establish requirements for previously injured or ill employees returning to work and for administering modified duty employment to those employees. The objective of modified duty is to get the affected employees back to work as quickly and safely as possible in order to impact lost workdays and lost work time.

Scope

This program shall apply to all Acoustics Associates employees whether they are part time or full time.

Key Responsibilities

Safety Manager

- Implement and enforce this program.
- Ensure that assigned modified duties do not present a hazard to the affected employees.

Supervisors

- Ensure that all employees operate within the guidelines of this program.
- Ensure that assigned modified duties do not present a hazard to the affected employees.
- Ensure that the assigned modified duties do not exceed the employee's restrictions.
- Notify the Safety Manager of any new Report of Workability that you receive from the employee.

Affected Employees

- Comply with all parts of this program.
- Provide an updated Report of Workability to the supervisor after each medical visit. If restrictions have been modified a new review of duties must be completed.
- Ensure that your supervisor is notified if you have any questions about your responsibilities as an affected employee.
- Ensure that the supervisor is notified if you feel are continuing to experience pain or if the assigned job activities exceed your restrictions.
- Notify the Acoustics Associates Safety Manager if you do not have cooperation or communication with your supervisor.

Modified Duty Types

The following modified duty types are recognized and incorporated by ACOUSTICS ASSOCIATES INC:

- Restricted Duty: a modified duty type, which omits specific job tasks, which could risk the health and safety of the affected employee.
- Alternate Duty: a modified duty type is altogether different than the affected employee and does not risk the affected employees' health and safety. This is often recognized as a temporary "job change".

General Requirements

All Acoustics Associates supervisors, managers and affected employees shall adhere to the following general requirements:

- Acoustics Associates shall provide modified work opportunities to injured employees whenever practicable.
- Physical demands shall be assessed for modified duty jobs to ensure they can be performed safely by affected or injured employees.
- All Acoustics Associates employees shall be informed of this safe return to work (modified duty) program.
- All modified work provided to injured employees must be consistent with restrictions provided by the health care provider.
- Physicians' restrictions shall be obtained from the healthcare provider or physician and provided to those required to ensure that the restrictions are followed.

Acoustics Associates will inform employees that we offer modified work opportunities to employees who are unable to perform their regular job duties as a result of their injury or illness.

Acoustics Associates shall also coordinate with workers' compensation carrier claims representatives or other equivalent parties to ensure compliance with state and federal laws. Acoustics Associates shall also directly support claims representatives or equivalent parties with the smooth processing of all claims and efforts to get employees back to work safely.

If there is no field work available that meets the employees' modified or restricted work abilities, the employee shall report directly to the Safety Department. The Safety Department will assign office or warehouse work that meets their restrictions. The employee will continue to report directly to the Safety Department until either their restrictions are lifted or until the superintendent has notified the Safety Department of new field work that meets the restrictions.

Recordkeeping

All Acoustics Associates employee incident, injury, illness & workers' compensation claims documentation shall be maintained indefinitely by the Acoustics Associates Safety Manager; ensuring that all employee medical records are kept confidential and secured at all times.

SAFETY COMMITTEE PROGRAM

Purpose

Acoustic Associates Inc. has established a Safety Committee to assist in creating a safe and healthy environment to work in. The primary purpose of the Acoustic Associates Inc. safety committee is to promote a culture of safety, welfare and health for our employees, visitors and customers. The work of the safety committee is intended to eliminate or minimize workplace injuries and illnesses and ensure regulatory compliance by involving owners, managers, and employees in the process of creating and maintaining a safe work environment. This program establishes the outline to manage the safety committee process at Acoustic Associates Inc. and how it applies to all owners, management and employees who are involved in the safety committee.

Scope

The Safety Committee shall consist of volunteer individuals selected from various departments, with the approval of management. An individual will serve for a term of one year. The Safety Committee will meet every other month. The Safety Committee will schedule their yearly meeting calendar at the end of the current year for the upcoming year. Meeting times may vary but will be approximately one hour.

Key Responsibilities

Chairperson/Co-Chairperson

- Is the primary point of contact with Health and Safety
- Schedules regular committee meetings
- Prepares agenda, arranges meeting place, notifies members of meetings, conducts meetings
- Conduct the committee meeting in a structured manner
- Supervise the preparation of meeting minutes
- Keep the discussion during committee meetings on safety and health issues
- Consider each proposal carefully, no matter how trivial it may seem and allow enough time for full consideration
- Maintains training records of members of the safety committee
- Provides initial and periodic training to members of the safety committee where applicable
- Coordinates safety committee assignments with other departments when needed
- Serve as a communication liaison between management/owners and the Safety Committee
- Involves safety committee members in safety related issues where appropriate
- Conduct or support safety moments at each department sponsored event

Secretary

- To maintain, record and disseminate minutes of each Safety Committee meeting
- Approve committee correspondence and reports
- Take meeting minutes and distribute them to management and the safety committee members
- Include in the meeting minutes all recommendations
- To assume leadership of the Safety Committee when the chairperson is unavailable on a short-term basis, or for some reason, resigns from the Committee. The secretary should also take an active role in other committee activities

Minutes will be recorded at each committee meeting and distributed to all committee members. The committee secretary will post the minutes for all employees to view. The office will retain the copy for three years. The minutes will include all the reports, evaluations and recommendations of the committee. The minutes will also identify representatives who attended and representatives who were absent.

Superintendents

- Allow safety committee members to attend and participate in committee meetings
- Ensures safety committee members are given the time to accomplish their assignments
- Supports safety committee member in accomplishing assigned task
- Informs employees of their safety member representatives

All Members

- Attend all safety committee meetings
- Meet as often as necessary to complete work on committee projects
- Follows through with all assigned "open items" requiring action
- Be assigned action items for issues the committee may not be able to resolve during a meeting
- Be knowledgeable and representative of all areas of assigned representation
- Provide visible leadership in and commitment to health and safety
- Establish clear lines of communication with departmental area of representation
- Provide peer-to-peer safety consultation and review of existing or proposed operations with respect to health and safety and compliance with Acoustics Associates, Inc. policies
- Work safely and influence others to work safely
- Contribute ideas and suggestions for improvement of safety
- Report unsafe conditions and practices, accidents or near misses

The committee will encourage employees to identify workplace health and safety hazards. Employees can present concerns in writing or in person to any committee member. The committee shall address serious issues immediately and review all new concerns at the next regularly scheduled meeting. The committee shall respond to all employee concerns in writing and include the response in the meeting minutes.

Attendance and Alternates

Each representative will attend regularly scheduled committee meetings and participate in workplace inspections and other committee activities. Any representative unable to attend a meeting will appoint an alternate and inform the chair before the meeting. An alternate attending a meeting on behalf of a regular representative will be a voting representative for that meeting.

Functions and Duties

Management Commitment to Workplace Safety and Health

- Establish procedures for review and management's response to minutes
- Submit written recommendations for safety/health improvement/changes and response
- Evaluate employer's safety/health policies and procedures
- Respond in writing to safety committee recommendations
- Review corrective action taken by management

Committee Meetings and Employee Involvement

- Establish procedures for employee input, i.e. to receive suggestions, report hazards, and other pertinent safety and health information
- Include employee input on agenda for safety committee meetings
- Hold bi-monthly meetings
- Develop and make available a written agenda for each meeting
- Take meeting minutes and distribute them to management and the safety committee members
- Include in the meeting minutes all recommendations

Hazard Assessment and Control

- Establish procedures for workplace inspections to identify safety and health hazards
- Assist the employer in evaluating the accident and illness prevention program
- Appoint an inspection team of at least one employee representative and one employer representative
- Conduct workplace inspections at least quarterly
- Make a written report of hazards discovered during inspections
- Review corrective measures. Make written recommendation to correct the hazard and submit it to management for timely response

Safety/Health Planning

- Establish procedures to review inspection reports and make appropriate implementation of new safety/health rules and work practices
- Develop/establish procedures for an annual review of the company safety and health program

Accountability

- Evaluate the company safety and health accountability program
- Make recommendations to implement supervisor and employee account ability for safety and health

Accident/Incident Investigations

- Establish procedures for reviewing reports completed for all safety incidents, including injury accidents, illnesses and deaths
- Review these reports so that recommendations can be made for appropriate corrective action to prevent recurrence

Safety/Health Training for Committee Members

New representatives will receive training in safety-committee functions, hazard identification, accident-investigation procedures, and company safety policies and programs.

- Identify and make accessible applicable OSHA standards and other codes that apply to our industry
- Provide specific training on our type of industry. Including hazard identification of the workplace and how to perform effective accident incident investigation
- Identify the location of safety procedures provided with appropriate equipment and inform employees of their location
- Recommend training for new employees and refresher training on company, department and work location safety practices, procedures and emergency response

- Management should maintain (and make available to the safety committee) records on employee safety training. Records of training will include the employee's name, the dates of training and subject matter

Meeting Process

Successful, effective Workplace Safety Committees (WSC) will have competent leaders and dedicated members. The chairperson/co-chairperson will be able to direct group discussion while sticking loosely to the business at hand. A carefully planned agenda will assist the chairperson in doing this. If the agenda can be given to all members in advance, members will arrive at the meeting better prepared. It will also remind them of any responsibilities they have such as reporting on task force or inspection team progress. A standard agenda form can be developed by the committee to meet its specific needs.

Agenda Guidelines

The agenda should be distributed to WSC members at least three to five days prior to the actual meeting. A copy should be attached to the meeting minutes for distribution or posting.

These guidelines are for informational purposes only. Your own workplace needs will determine the discussions at your meetings.

1. Call to order by chairperson

2 Roll call of members

3. Introduction of visitors

4. Scorecard – Review the Safety Scorecard Metrics. Anything off track goes to Issues List.

5. To-Do List

6. Read/Review minutes of last meeting.

7. Approval of last meeting minutes.

8. Discussion of unfinished business:

- Reports on matters held over from last meeting.
- Correction recommendations.
- Safety suggestions.

9. Discussion of new business.

Report on injured or ill workers - follow-up welfare.

Accident or illness investigation:

- What was the accident or illness?
- What conditions contributed to the accident or illness?
- Why did the conditions exist?
- What can be done to mitigate another such incident?

10. Report on safety incidents:

- Follow-up action taken by management and/or committee.

11. Committee reports:

- WSC subcommittees can be developed to fit the specific needs of the company.

12. Miscellaneous:

- Quarterly inspection reports, special speakers, etc.

13. Announcement of next meeting date.

14. Adjournment.

ALL MEMBERS MUST SET AN EXAMPLE WITHIN ON THEIR OWN DEPARTMENT BY WEARING REQUIRED PPE, OPERATING EQUIPMENT IN A SAFE MANNER, AND FOLLOWING ALL SAFETY RULES, POLICIES, AND PROCEDURES.

SCAFFOLD SAFETY PROGRAM

Purpose

The purpose this scaffold safety program is to reduce the risk of injury and property damage from improper use of scaffolding by providing policies, procedures, and training and to establish guidelines for the protection of Acoustics Associates employees who work on scaffold work surfaces.

Scope

This program applies to every work area where scaffolding is erected. It is to be used at all times on Acoustics Associates worksites. If an Acoustics Associates employee performs work on a site other than an Acoustics Associates site, the facility owner's plan should be used if it exists and is as strict (or stricter) than this plan. In cases where the other facility's plan does not exist or is less strict than this plan, Acoustics associates employees will operate under this plan.

Key Responsibilities

Managers and Supervisors

- Ensures that a qualified person erects scaffolds, set up inspections are conducted, and daily inspections are conducted before the workday begins.
- Ensures that all employees, and/or contractors have received training in the use of scaffolds and inspection methods for scaffolds.
- Ensures that all employees and contractors are informed that if a defect is discovered during an inspection, the scaffold must not be used until repairs are complete.

Employees

- Understand and follow this program and all safety guidelines.
- Attend annual scaffold training.
- Use proper PPE when required.
- Conducts daily scaffold inspections.
- Reports any damages or necessary repairs to their supervisor.

Definitions

Bearer - A horizontal scaffold member that the platform rests on, and that may be supported by ledgers. Brace - A tie that keeps scaffold members in a fixed position with respect to each other.

Coupler - A device that locks the components of a tubular metal scaffold together. It must be used to support loads that are below the maximum intended loads for which it was designed.

Double pole or independent pole scaffold - A scaffold system that is supported by a double row of uprights at the base, is not supported from the walls, and is constructed of uprights, horizontal platform bearers, ledgers, and diagonal bracing.

Guardrail - A rail that is attached to the uprights and is placed along the open sides and ends of platforms.

Heavy Duty Scaffold - A scaffold that is designed and built to carry a working load that is not more than 75 pounds per square foot.

Ledger (stringer) - A horizontal scaffold member that goes from post to post and supports the bearer or putlog that forms a tie between the posts.

Light Duty Scaffold - A scaffold that is designed and built to carry a working load that is not more than 25 pounds per square foot.

Manually Propelled Mobile Scaffold – A mobile scaffold that is moved manually (not motorized).

Maximum intended load - The total weight of all loads on the scaffold including the working load, the weight of the scaffold itself, and other anticipated loads.

Medium duty scaffold - A scaffold that is designed and built to carry a working load that is not more than 50 pounds per square foot.

Mid-Rail - A rail that is placed approximately halfway between the guardrail and the platform, and is attached to the uprights along the open sides and ends of platforms. Mid-rails are used when required.

Putlog – A scaffold member that the platform rests on.

Runner - The bracing that runs lengthwise horizontally, or the bearing members, or both.

Scaffold - A temporary raised platform and its support structure that is used to support workmen or materials or both.

Toe board - A barrier that is attached along the sides and ends of a platform that helps to stop material from falling off the scaffold platform.

Tube and coupler scaffold - A scaffold assembly that consists of tubing (serves as posts, braces, bearers, ties, and runners), a base that supports the posts, and special couplers that connect the uprights and join the members together.

Tubular welded frame scaffold - A panel, sectional, or frame metal scaffold that is mostly assembled using prefabricated welded sections (consists of posts and horizontal bearer with intermediate members). Panels or frames must be braced with diagonal (cross) braces.

Working Load – The weight load attributed to men, materials, and equipment.

Procedure

General Requirements

When work cannot be performed safely from the ground, or from solid construction, scaffolds must be supplied and erected according to the applicable standards for the employees involved. In the case that ladders are used, the work must conform to ladder safety standards.

Scaffolds must be erected by a qualified individual (someone who can certify that the scaffolding is safe to use).

Scaffolds must be set on footings or anchored to material that is sound, rigid, and able to support the maximum intended load without settling or shifting. Never use unstable objects such as loose boards, barrels, or boxes to support scaffolds or planks.

Only use scaffolds (and components) that are capable of supporting (without failure) at least four times the maximum intended load. All scaffold components must comply with OSHA requirements 29 CFR 1910.28 and 29 CFR 1926.451.

If using wood scaffold planks, they must be cross-supported every 8 feet. Cleat, wire or nail scaffold deck boards into place.

You must completely floor all working levels of scaffolds except where space is required for openings for internal ladders.

Maintenance of scaffolds and other components described in this program is required to keep them in safe condition. Never alter or move (horizontally) a scaffold that is occupied.

Immediately repair any damaged or weakened scaffold. Never use a damaged or weakened scaffold until repairs have been completed.

Never load a scaffold in excess of the working load that it is intended for.

Always use properly sized bolts in the construction of scaffolds and use sufficient number at each connection to create the designed strength of the scaffold.

Always overlap platforms (minimum of 12 inches) and secure them from any movement.

Always provide an access ladder or equivalent safe access.

Always extend scaffold planks over their end supports by not less than 6 inches and not more than 18 inches.

Ensure that poles, legs, and uprights of scaffolds are plumb, and are rigidly braced and securely to prevent swaying and shifting.

Always apply a tag line to materials being hoisted onto a scaffold.

Always provide overhead protection workers on a scaffold if they are exposed to overhead hazards.

If a scaffold or platform is erected over 6 feet off the ground, always install toe boards and guardrails. Where workers are required to work or pass under the scaffold, always install a screen between the toe board and the guardrail (along the entire opening), consisting of No. 18 gauge wire one-half inch mesh or the equivalent.

Never perform work on a scaffold during storms or high winds.

Never perform work on a scaffold that is covered with snow or ice, unless all the snow and ice is removed, and planking is sanded to prevent slipping.

Do not accumulate tools, material, and debris on a scaffold such that it presents a hazard.

Inspections

Scaffolding must be inspected by a qualified individual as per the manufacturer's recommendations. The qualified individual must also conduct inspections prior to each use and periodically throughout each shift.

A qualified individual inspects the scaffold after it is erected, prior to the start of the workday, and at the beginning of a shift change to ensure the scaffold is safe prior to and during use. At a minimum, the following shall be inspected:

- Ensure there is no settling in the ground or surface footing.
- Check for any signs of damage, missing pins, bolts and any locks and/or safety keepers on all main supports and cross braces.
- Check for damage, proper placement and any possible movement of all walking surfaces and/or planks.
- Check that all walkways and planks are secure to prevent movement.

The inspection will ensure that the scaffold is stable, and movement is prevented.

If a defect or damage to the scaffold is discovered during the inspection, the scaffold must be tagged out by a qualified individual. Use of the scaffold will be prohibited until the necessary repairs are made.

Mandatory Signs and Tags

Signs and tags must be visible at all times when performing work and must be promptly removed or covered when the hazard is abated. Tags shall also be used when defective equipment or unsafe conditions are found.

The qualified individual will tag out any defective or unsafe equipment or conditions (e.g., improper footings) using a weather resistant tag that is secured to the scaffolding structure on all four sides.

Only use danger signs where an immediate hazard exists. To alert other workers of possible danger from falling objects, post danger signs in the immediate area of the scaffold.

Caution - To mark off a larger area around scaffolding and warn other workers to use caution, use signs and/or barricade tape.

Modifications

A qualified person must perform all modifications and repairs. This qualified person must be able to certify that the scaffolding is safe to use to ensure that non-qualified personnel do not create additional hazards.

Only employees who are trained and certified shall perform modifications or repairs. Unqualified employees who fail to comply may receive disciplinary action and or termination.

Training Requirements

All employees that work on scaffolds must be trained by "competent" persons regarding hazards. The supervisor must ensure that each employee who works on a scaffold is trained by a competent person. Training will include recognizing the hazards associated with the type of scaffold being used and understanding the control procedures or how to minimize those hazards. Training must occur before use of the scaffold and will include:

- Information about basic safety.
- Hazards including falls, electrical, and falling objects, and how to protect from them.
- Tags – the types of tags and the requirement to comply with them.
- Correct use of the scaffold, and handling of materials on the scaffold.
- Correct procedures when dealing with electrical hazards, and when erecting, maintaining, and disassembling fall protection systems and falling object protection systems that are used.
- Maximum intended load capacity of the scaffolds that are used.

The supervisor must ensure that each employee who is involved in erecting, disassembling, operating, moving, maintaining, repairing, or inspecting a scaffold is trained by a qualified person. The training will include how to recognize hazards associated with the work. The training will include the following topics, as applicable:

- The nature of scaffold hazards.
- Correct procedures for erecting, disassembling, operating, moving, maintaining, repairing, and inspecting the type of scaffold that is used.
- Maximum intended load capacity and the intended use of the scaffolds that are used.

Acoustics Associates will re-train employees if the Company has reason to believe that the employee lacks the skill or understanding needed to work safely while erecting, or disassembling scaffolds. Acoustics Associates will also require retraining where:

- Changes in worksite scaffolding present a hazard that an employee has not been previously trained in.
- Changes in the types of scaffolds, falling object protection, fall protection, or other equipment present a hazard that an employee has not been previously trained in.
- Inadequacies in an affected employee's work involving scaffolds would indicate that the employee has not reached the required proficiency.

Tube and Coupler Scaffolds – Light Duty

Uniformly distributed load		Not to exceed 25 p.s.f.
Post Spacing (longitudinal)		10 ft. 0 in.
Post Spacing (transverse)		6 ft. 0 in.
Working Levels	Additional Planked Levels	Maximum Height
1	8	125 ft.
2	4	125 ft.
3	0	91 ft. 0 in.

Tube And Coupler Scaffolds - Medium Duty

Uniformly distributed load		Not to exceed 50 p.s.f
Post spacing (longitudinal)		8 ft. 0 in.
Post spacing (transverse)		6 ft. 0 in.
Working Levels	Additional Planked Levels	Maximum Height
1	6	125 ft.
2	0	78 ft. 0 in.

SILICA AWARENESS PROGRAM

Purpose

The purpose of Acoustics Associates silica program is to reduce or eliminate employee exposure to hazardous levels of crystalline silica. Crystalline silica is a mineral found in many materials, including sand, concrete, brick, stone, and mortar. Exposure to crystalline silica can occur during construction activities, maintenance, and repair.

Scope

This program applies to all Acoustics Associates employees, contractors and subcontractors. These work procedures protect everyone on the worksite (not just our employees).

2017 updates to the "Respirable Crystalline Silica Construction Standard", 29CFR 1926.1153 call for a new 8-hour time-weighted average (TWA), Permissible Exposure Limit (PEL) of 50 µg/m3, an action level (AL) of 25 µg/m3, and a host of ancillary requirements. To learn more, visit:

https://www.osha.gov/laws-regs/standardinterpretations/2017-10-19

Key Responsibilities

Respirable silica is significantly hazardous. Therefore, it is crucial that all workers that are involved in operations that may create silica dust do what they can to ensure that a hazard is not created.

Acoustics Associates

- Use less hazardous products instead of those that contain crystalline silica wherever possible.
- Ensure that materials (e.g., equipment, tools, PPE) and other resources (i.e., training materials) are readily available in order to implement and maintain this program.
- For each project, provide a job-specific ECP (exposure control plan) that identifies work techniques and practices that must be followed on site. This will include:
    - Required tools/equipment - availability and delivery
    - Extent and type of grinding work to be done
    - Control techniques to be used, and type of respiratory protection required
    - Coordination plan
- Periodically conduct a review of how effective the ECP is. This includes a review of dust-control technologies that are available to ensure they are selected and utilized when practical.
- When control methods for non-standard work practices have been proven to be inadequate in protecting workers, initiate testing of worker exposure to concrete dust.
- Ensure that equipment, tools, and PPE identified by the job-specific ECP are readily available, and are utilized as required.
- Ensure that supervisors and workers are trained to an acceptable competency level.
- Maintain records of all related fit-test results, training, crew talks, and inspections (equipment, PPE, work techniques/practices).
- Coordinate work with the primary contractor, and other employers, to ensure the work environment is safe.

Managers and Supervisors

- Obtain a copy of the ECP and make it available at the worksite.
- Select, implement, and document site-specific control measures that are appropriate.
- Instruct workers regarding the hazards of working with silica-containing materials (e.g., concrete), and on the control measures detailed in the job-specific plan regarding hazards at the work site.
- Ensure that workers use the correct respirators, have been properly fit-tested, and that results are documented.
- Direct work in a way that ensures minimal risk to workers and that risk is adequately controlled.
- Communicate with the primary contractor and sub-contractors to ensure the work environment is safe.

Employees

- Be aware of the hazards of silica dust exposure.
- Use the provided protective equipment effectively and safely.
- Set up the operation according to the site-specific plan.
- Follow the established work techniques as directed by the supervisor.
- Report unsafe acts or conditions to the supervisor.
- Know how and when to report incidents of exposure.

Silica Properties

Silica composes nearly all of what is termed “sand” and “rock”. It is the second most common mineral on earth. Silica is found in many forms. One form, “crystalline” silica (which includes quartz), is the most prevalent and poses the greatest human health hazard. Common materials that contain silica include:

- Sand and rock.
- Topsoil and ‘fill’.
- Cement, mortar and concrete.
- Brick, tile and masonry.
- Slate, sandstone and granite.
- Asphalt that contains rock and stone.
- Fibrous-cement board that contains silica.

Silica is a fundamental element in many common construction materials. Dust containing silica can be created as a result of many construction activities, including:

- Abrasive blasting (e.g., concrete or brick structures).
- Chipping, drilling or jackhammering rock or concrete.
- Cutting tiles or brick.
- Grinding or sawing concrete.
- Tuckpoint grinding.
- Constructing roads.
- Hauling, loading and dumping gravel.
- Demolishing structures that contain concrete.
- Sweeping concrete dust.

Exposure to harmful levels of airborne silica can result for unprotected workers performing these activities, or working in the vicinity. In other industries, workers can also be exposed to silica (e.g., when manufacturing toothpaste or pottery, or when loading coal into a ship's hold).

Health Hazards

It has been shown that silica exposure can lead to silicosis, pulmonary tuberculosis, lung cancer, and other airway diseases. Silicosis is a disabling, sometimes fatal disease that is caused by crystalline silica dust. When the fine crystalline silica particles deposit in the lungs, the lung tissue becomes thickened and scarred. The scar tissue affects the lungs' ability to take oxygen from the air. The affected worker may not notice symptoms for many years, but the damage is permanent.

There are three types of silicosis that may result, depending on how long the worker was exposed, and how much crystalline silica dust they were exposed to:

- Chronic silicosis—this type of silicosis develops after long-term exposure (10 or more years) at relatively low concentrations.
- Accelerated silicosis—this type of silicosis develops after mid-term exposure (5 to 10 years) at high concentrations.
- Acute silicosis—This type of silicosis develops after short to mid-term exposure (a few weeks, or 4 to 5 years) at very high concentrations.

Workers with silicosis may have no initial symptoms, but as the disease progresses, the affected worker may experience:

- Shortness of breath.
- Severe cough.
- Weakness.

The symptoms can gradually get worse and may eventually lead to death. Other diseases, including bronchitis, tuberculosis, and lung cancer have also been linked to silica exposure.

Code of Practice

Acoustics Associates has established a code of practice around storing, handling, using and disposing of silica where there is potential for exposure. This code of practice includes control measures that help to prevent the uncontrolled release of silica, and the procedures that must be followed if an uncontrolled release occurs. It is mandatory to use engineering controls such as ventilation or wet methods to control silica-containing dusts.

Risk Identification, Assessment and Control

During the hazard assessment, the potential for exposure to silica should be identified. The exposure to silica is kept as low as reasonably possible. Employees must never be exposed to concentrations of airborne silica over 0.025 mg/cubic meter in an 8-hour time period. Before a worker is exposed, environmental-testing results should be assessed.

When developing silica ECP, it is critical to identify work activities that potentially expose workers. Some things to consider:

- Work activities that may create silica dust. Exposure to silica is through the inhalation of airborne dust. A qualified person must review the planned work activities and identify those that may create airborne silica.
- Identifying workers who are at risk of exposure. For example, finish concrete workers are at greater risk of exposure than electrical workers or plumbers.
- Estimating the amount of exposure. Certain work activities create more dust than others. The amount of exposure should be estimated. Air sampling data and comparisons of silica dust levels from various construction activities are provided in available published resources.
- Duration of exposure. A worker who grinds concrete for an entire shift is at greater risk than a worker jackhammering for an hour.

Control Measures

It is vital to use effective control measures to eliminate or reduce the risk to workers from silica dust exposure. You must follow this hierarchy of control measures:

- Elimination/substitution (e.g., use products that have less silica, or use work techniques that eliminate surface grinding).
- Engineering controls (e.g., local exhaust ventilation, water, enclosure).
- Administrative controls (e.g., signage, coordinating tasks with subcontractors).
- Using proper personal protective equipment (e.g., gloves, coveralls and eye protection) when exposed to silica.

Acoustics Associates is dedicated to developing understanding and proficiency in control measures and will establish policies/procedures that protect workers from silica exposure and minimize the dependency on respirators. There are effective engineering controls readily available including HEPA vacuum attachments and wet methods (control silica dust at its source). It has been proven that these controls significantly reduce airborne dust levels when selected and used properly. Acoustics Associates acknowledges that engineering controls alone will not reduce airborne silica to safe levels. As a result, in most cases it is necessary to use other control measures, including respiratory protection.

If Acoustics Associates accepts a job that could result in the release of an unusually high amount of dust, and is unsure that the established control measures are adequate, Acoustics Associates will conduct air sampling to ensure that control methods protect the worker.

Acoustics Associates will select a combination of the following controls to reduce or eliminate silica dust exposure (listed in order of preference):

- Elimination
- Substitution.
- Engineering controls.
- Administrative controls.
- Personal Protective Equipment (PPE).

Elimination and Substitution

The Company recognizes that it is important to plan work in order to minimize the generation of silica dust. During the project planning phase, Acoustics Associates will promote methods that reduce cutting, grinding, or drilling of

concrete surfaces (e.g., formwork planning). Whenever possible, ACOUSTICS ASSOCIATES INC will schedule this type of work when concrete is still wet (releases significantly less dust).

Engineering Control of Dust

The specifics of the operation affect the appropriateness of a control measure. For example, during grinding operations, local exhaust ventilation (LEV) is more effective at controlling exposure than wetting methods. However, during cutting operations, wetting may be more effective than LEV (although using LEV may reduce the final cleaning required).

Dust control systems may utilize three well-established techniques:

- Local exhaust ventilation (LEV).
- Wet dust suppression (WDS).
- Barriers or full enclosures to restrict or isolate the work activity (where LEV or WDS is not practical or effective, this may be the only option).

Local Exhaust Ventilation (LEV)

When using LEV, Acoustics Associates will use the following systems and safe work practices:

- Whenever possible, use vacuum attachment systems to capture and control dust at its source.
- Dust control systems (must be regularly used and well maintained).
- Operate grinding wheels at the RPM recommended by the manufacturers (higher RPM's may significantly increase the amount airborne dust generated).
- For corner grinding, use retrofit shrouds or exhaust cowlings; be sure to operate at the RPM recommended by the manufacturer and use a well-maintained HEPA vacuum.
- Whenever practical, use diamond stone grinders which allow the use of a more efficient suction casing on the grinder.
- Use HEPA or good quality, multi-stage vacuum units that are approved for use with silica dust. [The vacuum units must be capable of a target airflow in excess of 70 cfm. This will achieve a face velocity at the shroud of approximately 1.3 m/s (260 fpm). Note: at higher face velocity, more dust is captured at the source.]
- Plan work so that concrete grinding is completed when wet (significantly reduces dust release).
- Maintain good housekeeping (e.g., use vacuums with HEPA filters, or use wet sweeping).
- Train workers and supervisors to properly use and maintain equipment.

Wet methods for Dust Control

When using water spray systems, ACOUSTICS ASSOCIATES INC will use the following safe work practices:

- If water is the control method, use pneumatic grinders instead of electric-powered grinders.
- Control pressure and flow rate of water according to the tool manufacturers' specifications (when using cutting saws, a minimum of 0.5 liters of water per minute should be used).
- Always use saws that provide water to the blade when sawing concrete or masonry.
- Use a wet vacuum or wet sweeping to clean wet slurry from work surfaces when the work is completed.

Barriers and Enclosures

When using barriers or enclosures, Acoustics Associates will use the following safe work practices:

- The type and design of barrier or enclosure will be determined by the site foreman (based on the work activity and the work area), the site foreman will ensure it is constructed according to the work plan. Barriers range from simple caution tape to more restrictive hoarding.
- Acoustics Associates will use negative air units when constructing a full enclosure.

Administrative Controls

Acoustics Associates will use the following safe work practices:

- Prior to starting work, the exposure control plans and the site risk assessment/workplan must be submitted to the general contractor.
- Acoustics Associates will develop procedures relating to restricting work areas, housekeeping, personal hygiene, worker training, and supervision.
- As part of project planning, the Company will assess whether silica dust may be created and will plan to eliminate or control the dust at its source. Acoustics Associates recognizes that awareness and planning are essential in preventing silicosis.
- Warning signs must be posted to make workers aware of the hazards of silica, and must specify required protective equipment (for example, respirators).
- A schedule of work must be posted on the periphery of work areas contaminated with silica dust.
- If access to unprotected workers cannot be restricted, work that creates silica dust will be done after hours.
- The Company will develop a site-specific ECP that covers project-specific issues (e.g., extent of the work, project location and site-specific hazards) which will be made available at the worksite.

Personal Protective Equipment (PPE)

Respiratory protection

- Respirators must be worn in adherence to our respirator program.
- The selection of respirators will be based on the measured exposure level and the assigned protection factor of the respirator.
- Workers may only use approved respirators.
- Workers must be clean-shaven to wear a respirator. A filtering face piece respirator provides little or no protection to workers with beards. Even minor stubble can significantly reduce the effectiveness of respiratory protection.
- Workers who wear respirators must be fit-tested.
- Workers must be properly trained to use respirators. A high standard of supervision, inspection, and maintenance must be followed.

Protective clothing

Workers in a restricted area will be provided with protective clothing to: protect other work clothing from silica contamination; ensure that street clothing is not contaminated by silica; and, ensure that workers do not leave a restricted area until they are decontaminated.

Health monitoring

Exposure to airborne silica must be maintained below the permissible exposure limits shown in 29 CFR 1910.1000 Table Z-3.

Employee-specific samples from a full shift must be representative of the employee's regular, daily exposure to silica.

Documentation

Records must be kept for:

- All workers that are exposed to respirable silica dust while at work.
- Education and training sessions for workers.
- Respirator fit testing.
- Maintenance and repair of equipment.
- Worksite inspections.

The ECP must be reviewed (at least annually) and updated as required by the employer, in consultation with the worker health and safety representative or the workplace Health and Safety Committee.

Education and Training

Acoustics Associates must inform workers who may be exposed to silica regarding the health hazards associated with exposure. Workers must also be informed about measurements made of airborne concentrations of harmful substances at the work site and must be trained in ACOUSTICS ASSOCIATES INC procedures to minimize the worker's exposure.

Prior to using silica-containing materials or working in an environment that is known to contain airborne concentrations of silica, the worker must be trained. Refresher training is also required on a periodic basis. ACOUSTICS ASSOCIATES INC will train all employees exposed to silica dust in the following:

- The hazards associated with exposure to silica dust.
- The risks of silica exposure.
- Signs and symptoms of silica-related diseases.
- Safe work procedures that must be followed (e.g., setting up enclosures, disposing of silica waste, personal decontamination).
- How to use respirators and other PPE (e.g., donning and doffing PPE, and cleaning and maintaining respirators).
- Using control systems (e.g., LEV and wet methods).
- Seeking first aid (e.g., the location and use of eyewash stations).
- Reporting exposure to silica dust.

STOP WORK AUTHORITY

Purpose

The Authority to Stop Work Program is used to resolve a perceived act, error, omission, unsafe condition, or lack of understanding that could potentially result in an undesirable event. It involves a stop, notify, correct and resume approach. If there are concerns or questions regarding the control of health, safety or environmental risks of any task or operation, all Acoustics Associates employees are authorized and obligated to stop it. Employees will not be reprimanded for issuing a stop work intervention.

Scope

This program applies to all projects and operations undertaken by Acoustics Associates.

Key Responsibilities

- When warranted, employees are responsible for launching a Stop Work Intervention.
- Management must create a work environment where employees feel they can apply SWA without restraint.
- Supervisors must ensure the work environment is such that SWA is applied and followed without restraint so that issues are resolved before resuming operations. Supervisors must also recognize proactive participation in SWA.
- Management must create and reinforce clear expectations for employees to apply SWA. Those who choose not to comply with the SWA policies must be held accountable by management.

Stop Work Authority Procedure

- If an employee identifies an unsafe condition, they launch the Stop Work Intervention in coordination with the supervisor. All affected personnel and supervisors are notified of the stop work issue. The issue is corrected, and work is resumed when it is safe to do so.
- Never resume work until all stop work issues and concerns are adequately addressed.
- ACOUSTICS ASSOCIATES INC will not tolerate any form of intimidation or retribution toward an individual or ACOUSTICS ASSOCIATES INC for initiating a Stop Work Intervention.

Follow-Up

- Stop Work Interventions must be documented, including the lessons learned and corrective measures to be installed.
- Supervisors will review Stop Work reports to gauge participation, intervention quality and follow-up, identify trends (common issues), improvement opportunities, and aid in sharing of learning.
- The aim of a Stop Work Intervention is that all involved people are satisfied that the identified safety concern(s) are adequately addressed before resuming work. Although in most cases issues can be satisfactorily resolved at the job site in a timely manner, sometimes pinpointing and addressing root causes requires supplementary investigation and corrective actions.

Training

Acoustics Associates will provide Stop Work Authority training for employees prior to their initial work assignment. Records of training will include the employee's name, the dates of training and subject matter.

HEAT STRESS PROGRAM

Purpose

The purpose of this program is to reduce risks associated with heat illnesses in the work environment.

Scope

The scope of this program extends to all tasks performed in heat-exposed environments.

Definitions

"**Acclimatization**" refers to the gradual process the body goes through when a person is exposed to heat on a consistent basis. The acclimatization peaks within four to fourteen days for most people with at least two hours of exposure to heat each day.

"**Heat Illness**" is a serious medical condition caused by the body's failure to handle a particular amount of heat. Signs of heat illness include cramps, heat exhaustion, fainting and heat stroke.

The "**preventative recovery period**" is the time it takes the body to recover from heat exposure in order to avoid heat illness.

"**Shade**" refers to the blocking of sunlight. Shade can be provided by canopies, umbrellas, and temporary structures designed to block out or minimize direct sunlight. Shade is sufficient when objects in the shaded area do not cast a shadow. Shade is inadequate when it does not allow the body to cool. For instance, a car parked in the sun does not provide adequate shade, unless the air conditioning is also used to assist with cooling the body.

Requirements

The responsibility of carrying out and maintaining the Heat Illness Program belongs to managers and supervisors. Physical work factors that may contribute to heat related illnesses shall be taken into consideration prior to performing a task. Additionally, supervisors must take personal factors into consideration prior to assigning a task where heat related illnesses are probable.

Access to Water

All employees will have access to safe and potable drinking water. Where there is no plumbing or continuous supply of water, it will be provided, in sufficient quantities, at the beginning of the employee's shift.

Access to Shade

All employees will have access to shade. Employees believed to be suffering from heat illness or believed to be in need of a recovery period will be provided a shaded area. The shaded area will be open to the air, ventilated or cooled. Access to shade will be permitted at all times. For more information, refer to definition of "Shade".

Control Measures

Each work location that is involved in working in heat exposed environments will set forth procedures to control the effects of environmental factors that may contribute to heat illness. The most common of these factors are temperature, air circulation, humidity, and exposure to radiant heat sources; while controls shall include proper PPE, engineering controls and administrative controls as outlined in this program.

Physical factors that may induce heat related illness must be considered before a task is performed. Common physical factors include level and duration of physical activity, type of work and clothing factors such as color, breathability and weight.

Supervisors must consider personal factors that may contribute to heat illness before assigning tasks where heat related illness may occur. These factors include weight, level of fitness, age, prior heat related illnesses and use of drugs or alcohol.

The following measures shall be in place to control the effects of environmental factors that can contribute to heat-related illnesses. Each work site will develop procedures specific to the site, but will include these minimums:

- At least 2 quarts of water per employee must be provided at the beginning of the shift.
- Supervisors or other designated personnel will check the water containers every 30 minutes.
- Employees are encouraged to report low water levels or dirty water to the supervisor or designee,
- Supervisors will frequently encourage employees to drink water,
- Short meetings will be held every morning to remind workers to drink water frequently throughout the duration of the shift during hot weather,
- Water containers will be placed as close as possible to workers,
- Water will be replenished when levels of drinking water fall below 50%
- Disposable drinking cups will be provided to workers or workers will be provided with their own cups daily,
- Umbrellas, canopies or other shade devices will be set up by supervisors at the beginning of the shift and will be relocated to be closer to the workers, as needed,
- Those that employ non-agricultural workers are permitted to use other cooling measures provided that the measures are proven to be as effective as shade.

The following high-heat procedures shall be followed whenever the temperature exceeds 95 degrees Fahrenheit:

- Ensuring that effective communication by voice, observation, or electronic means is maintained so that employees at the work site can contact a supervisor when necessary. An electronic device, such as a cell phone or text messaging device, may be used for this purpose only if reception in the area is reliable.
- Observing employees for alertness and signs or symptoms of heat illness. The employer shall ensure effective employee observation/monitoring by implementing one or more of the following:
  - (A) Supervisor or designee observation of 20 or fewer employees, or
  - (B) Mandatory buddy system, or
  - (C) Regular communication with sole employee such as by radio or cellular phone, or
  - (D) Other effective means of observation.
- Designating one or more employees on each worksite as authorized to call for emergency medical services, and allowing other employees to call for emergency services when no designated employee is available.
- Reminding employees throughout the work shift to drink plenty of water.
- Pre-shift meetings before the commencement of work to review the high heat procedures,
- encourage employees to drink plenty of water and remind employees of their right to take a cool-down rest when necessary.
- For employees employed in agriculture, the following shall also apply:
- When temperatures reach 95 degrees or above, the employer shall ensure that the employee takes a minimum ten-minute net preventative cool-down rest period every two hours. The preventative cool-down rest period required by this paragraph may be provided concurrently with any other meal or rest

period required by Industrial Welfare Commission Order No. 14 if the timing of the preventative cool-down rest period required meal or rest period thus resulting in no additional preventative cool-down rest period required in an eight-hour workday. If the workday will extend beyond eight hours, then an additional preventative cool-down rest period will be required at the conclusion of the eighth hour of work; and if the workday extends beyond ten hours, then another preventative cool-down rest period will be required at the conclusion of the tenth hour and so on. For purposes of this section, preventative cool-down rest period has the same meaning as "recovery period" in Labor Code Section 226.7(a).

When possible, working hours may be adjusted to work during cooler times of the day. If modified hours or a shorter work shift are not possible, workers will be provided with more water and more frequent rest breaks. Supervisors will monitor all workers and be aware of the onset of heat related symptoms.

Cell phones or other immediate means of communication will be provided to supervisors to ensure that emergency services can be reached, if necessary. Supervisors shall ensure the functionality of these devices at the designated worksite prior to the beginning of the shift.

Workers will be reminded every morning of the worksite address and directions to the site to inform first responders in case of emergency. All new hires will be assigned a buddy to ensure that training and Acoustics Associates procedures are understood and followed.

Training

Training on the following topics will be provided to all employees:

- Environmental, physical and personal factors that contribute to heat illness,
- The importance of water consumption, frequently and in small quantities, throughout the duration of the shift when the work environment is hot and workers are sweating more than usual while working,
- The significance of the process of acclimatization,
- Types of heat illness and the associated signs and symptoms,
- The importance of reporting to the supervisor or employer when signs or symptoms of heat illness are present in themselves or in another worker,
- Procedures set forth for responding to symptoms of heat illness, including the processes for providing emergency medical services, should those measures be necessary,
- Procedures for contacting emergency services and/or for transporting workers to a place that can be reached by emergency responders,
- Procedures to ensure that simple and accurate directions to the site can be provided to emergency responders.

It is mandatory that supervisors receive training in the prevention and detection of heat related illnesses prior to supervising workers. Supervisors must also be trained in all heat illness emergency response procedures.

Training will be provided on Acoustics Associates heat illness procedures to prevent heat illness and the procedures to follow when heat illness is suspected.

Communication regarding these policies will be provided in an easily understandable format to all affected employees.

Acoustics Associates will make certain that all outdoor workers, including temporary workers, have been trained in the prevention and detection of heat illness.

Heat Disorders

There are 5 significant responses our bodies take when they become overheated.

Heat Rash

- Also known as “prickly heat” and occurs in hot and humid environments where sweat is not easily removed from the surface of the skin by evaporation.
- Symptoms include red pimples with intense itching and tingling caused by inflammation around the sweat ducts.
- When extensive or complicated by infection, heat rash can be so uncomfortable that it inhibits sleep and impedes a worker’s performance. May even result in temporary total disability.
- Treatment includes rest in a cool place and allow the skin to dry.
- If severe, consult professional medical supervision.

Fainting

- Loss of consciousness for a brief amount of time for workers unaccustomed to hot temperatures.
- Symptoms prior to fainting include lightheadedness and weakness.
- For treatment, the affected worker should lie down in a cool area.
- Moving around, rather than standing still will reduce the incidence of fainting.

Heat Cramps

- Painful spasms of the muscles are caused when a worker drinks large quantity of water, but supposedly fails to replace their body’s salt loss.
- Symptoms include cramping of the muscles, usually the back of the leg or abdominal muscles.
- Cramps may occur during or after working hours.
- Treatment for cramped muscles includes taking additional liquids by mouth.
- Saline solutions intravenously, under medical supervision, for quicker relief.

Heat Exhaustion

- Results from not drinking enough fluids to replace those lost through excessive sweating.
- Symptoms include the following:
    - Severe thirst.
    - Extreme weakness or fatigue, giddiness, nausea, diarrhea, or headaches.
    - Clammy, moist skin.
    - Pale or flushed complexion.
    - Body temperature at normal or slightly above.
    - Heavy perspiration.
- Treatment includes the following:
    - Victims should be instructed to rest in a cool area.
    - Drink fluids containing electrolytes such as sports beverages used by athletes.
    - Elevate legs 8-12 inches.
    - Severe cases involving those who vomit or lose consciousness may require medical supervision.

Heat Stroke

- The most severe reaction to the body's rise in core temperature.
- There are 2 types of heatstroke:
    - Classic: Also known as the "slow cooker" may take days to develop and is often seen during summer heat waves and typically affects poor, elderly, chronically ill, alcoholic, or obese people.
    - Exertional: This type of heat stroke is known as the "fast cooker" and most often seen in athletes and workers who often sweat profusely. Because of its rapid onset, it does not allow enough time for severe dehydration to occur.
- Symptoms of heat stroke include:
    - Mental confusion, delirium, loss of consciousness, convulsion, or coma.
    - Body temperature of 104 of higher.
    - Hot, dry skin which may be red, mottled, bluish.
    - Death will occur if the victim is not treated promptly. Treatment includes the following:
        - Contact 911 immediately.
        - Move victim to a cool area.
        - Cool the victim as quickly as possible. Any of the following methods may be used:
            - Spray the person with water and then fan them. The water droplets act as artificial sweat and cool through evaporation. Use in low humidity conditions (less than 75% humidity).
            - Soak victim's clothing with water.
            - Ice bags wrapped in wet towels and placed against the large veins in the groin, armpits, and sides of the neck. This method is effective in high humidity conditions (greater than 75% humidity).
            - Discontinue the cooling process once the victim's mental status has improved and the body temperature has returned to normal. Unnecessary cooling could lead to hypothermia.
            - Never use rubbing alcohol to cool the skin. It can be absorbed into the blood and cause alcohol poisoning. It is also a potential fire hazard.

Preventing Heat Disorders

Most heat-related health problems can be prevented or the risk of developing them reduced by following a few basic precautions.

Acclimation

- Slowly have the worker become use to working in a hot environment through short exposures followed by longer periods of work in the hot environment.
- Slowly increase time over a 5-day period.
- If an employee is absence for one week, the worker needs to go through the acclimation process again.

Engineering Controls

- Use good ventilation and spot cooling by local exhaust ventilation at points of high heat production, cooling fans, and elimination of steam leaks.
- Use power tools to reduce manual labor and proper clothing to protect workers from hot conditions.

Work Practices

- Drink plenty of water to replenish lost liquids is the most important measure in reducing heat related disorders. Workers should drink an 8-ounce glass of water every 15-20 minutes. A rule to follow is drink more liquid than thirst indicates since thirst is not an adequate indicator of dehydration.
- Salt tablets should be avoided. Salt tablets irritate the stomach and can lead to vomiting, which results in further dehydration.
- Training employees to recognize heat related disorders and giving proper consideration as to whether the employee is fit for working in hot environments.

Work and Rest Periods

- Giving employees sufficient rest time in a cool area to help the body cool down.
- Scheduling heavy work during cooler part of the day and wearing the proper protective clothing.
- Training Foreman to detect heat early signs of heat stress and permit workers to
- interrupt their work and take a break.

Employee Education

- Ensure that employees are aware of the need to replace fluids lost through sweat and can recognize dehydration, exhaustion, fainting, and heat disorders.
- Daily weighing should be performed before and after work as an indicator of fluid loss to identify dehydration.

TRAILER TRANSPORT POLICY

Purpose

This policy outlines the authorized procedures for transporting company-owned trailers when carrying materials related to Acoustics Associates' projects. The intent is to ensure the safety of personnel and assets, while maintaining compliance with insurance coverage limitations.

Scope

This policy applies to all Acoustics Associates employees who use Acoustics Associates company owned trailers to transport material or property.

Policy

Transport of Job Materials

Company-owned trailers must only be towed by company-owned or company-approved vehicles when they are transporting materials or equipment intended for use on a job site or company project.

Insurance Limitations

For insurance and liability purposes, non-company vehicles are not authorized to haul company trailers when loaded with any job-related materials or equipment. Use of unapproved vehicles under these circumstances poses a significant risk, as such arrangements are not covered by the company's commercial auto policy.

Authorized Use

Company trailers loaded with job materials shall only be moved using vehicles that are:

- Owned or leased by Acoustics Associates, and
- Covered under the company's commercial vehicle insurance, and
- Operated by employees who have received authorization from the Warehouse Manager to drive on behalf of the company.

Violation

Unauthorized hauling of company trailers under this policy may result in disciplinary and/or legal action and potential personal liability in the event of an accident or damage.

ACOUSTICS ASSOCIATES
10750 XYLON AVE N., SUITE 140, BROOKLYN PARK, MN 55445
MAIN: 763.544.8901

EMPLOYEE TRAILER USE WAIVER - PERSONAL USE ONLY

Employee Name:	
Date of Request:	
Trailer Description (Type/ID):	
Requested Use Dates:	

Purpose

Acoustics Associates allows employees to use company-owned trailers for personal use as a discretionary benefit. This waiver outlines the terms of such use and affirms that the employee assumes full responsibility for the trailer and any consequences arising from its use.

Conditions of Use

Personal Use Only

The trailer will be used solely for personal, non-commercial purposes and will not be used to transport materials or equipment related to any Acoustics Associates project.

Responsibility for Damage

The employee is fully responsible for any damage to the trailer while in their possession, regardless of cause.

Liability for Accidents or Incidents

The employee accepts full liability for any incidents, accidents, or injuries that occur during the period of personal use. This includes, but is not limited to:

- Damage to third-party property
- Bodily injury to the employee or others
- Any legal claims or insurance disputes arising from use

Company Insurance Coverage

The employee understands that Acoustics Associates' insurance policy does not cover the trailer, or any damage/liabilities incurred while it is being used for personal purposes.

Return Condition

The trailer must be returned in the same condition as it was issued, cleaned and free of debris. Failure to do so may result in cleaning or repair charges.

Company Discretion

Approval of personal trailer use is at the sole discretion of Acoustics Associates and may be revoked at any time.

Employee Certification and Signature

I, the undersigned, acknowledge and agree to the terms above. I understand that I am fully responsible for the trailer and any liabilities associated with its personal use. I release Acoustics Associates from any claims, damages, or expenses related to my use of the trailer during the above dates.

Employee Printed Name:	
Employee Signature:	
Date:	
Approved By (Printed Name):	
Approved By (Signature):	
Date Approved:	

WELDING AND HOT WORK PROGRAM

Purpose

This program has been designed for the purpose of ensuring a safe work environment during the performance of welding, cutting and hot work operations.

Scope

The procedures set forth in this program apply to all employees who are directly involved, or assist in, welding, cutting and hot work tasks. This program covers Acoustics Associates employees and contractors and must be used on Acoustics Associates owned premises. When off site, the site operator's program takes precedence unless it is less stringent than Acoustics Associates program. Defective equipment or other safety hazards should be reported immediately. Defective equipment must be pulled from service until its safety has been validated. Repairs may only be made by qualified, authorized personnel.

If objects to be cut or welded are immovable and if all the present fire hazards cannot be cleared, the object must be removed or guards must be used to restrain the heat, slag and sparks, and to protect the immovable fire hazards.

Key Responsibilities

Managers and Supervisors

- Establish if the site is safe for cutting and welding operations.
- Determine the safe areas for performing cutting and welding operations.
- Supply training for all employees and contractors whose job duties include performing operations that produce heat, spark or flames, such as welding, grinding or brazing.
- Create and implement effective hot work procedures.
- Provide appropriate personal protective equipment (PPE) for hot work.
- Supply safe, properly working equipment for hot work.
- Make certain that all PPE and hot work equipment are in safe working order.
- Oversee all hot work operations.
- Inspect the hot work area before work begins.
- Permit only trained and authorized employees and contractors to conduct hot work.
- Make sure permits are obtained for all hot work performed outside of authorized work areas.

Employees

- Inspect all hot work equipment before use.
- Use applicable hot work PPE.
- Follow all established hot work procedures.
- Report unsafe conditions or defective equipment immediately.

Definitions

Welding and Hot Work Procedures – activities that have the potential to cause fires or explosions due to sparks, molten slag, fire or other hot material.

Hot Work Examples – welding, cutting, soldering, grinding, brazing, thawing pipes and using electric tools in hazardous areas.

Hazards – dangerous conditions that include, but are not limited to, the following: skin burns, fires, welding "blindness", explosions, fumes and smoke.

Special Hazard Occupancies – areas where the following potential fire hazards are present: gases, flammable liquids, accumulation of dust, rubber, plastics and paper products.

Procedure

General

Equipment operators must report equipment defects and discontinue use until it has been repaired or replaced.

Written permits must be obtained before hot work is performed. The work area must be inspected and authorization obtained via written permit before proceeding with cutting or welding operations.

Whenever possible, combustibles should be placed a minimum of 35 feet from the work area. When relocation of combustibles is not practicable, they must be protected via the following means to prevent accidental ignition of the material: flameproof covers, wetting the material, shielding with met, guards or curtains.

Auger conveyor systems and ducts that have the potential to carry sparks to distant combustibles must be protected or turned off.

If welding or cutting is performed near ceilings, walls, partitions or openings in the floor (such as grating and manholes), fire-resistant guards or shields must be used to avoid ignition.

When welding is conducted on metal ceilings, walls, partitions or flooring, care must be taken to prevent the ignition of combustible materials on the other side due to radiation or conduction of heat. When combustibles on the opposite side cannot be moved, a fire watch person will be provided on the opposite side to monitor the work.

Welding on a metal partition, ceiling, wall, or flooring made of combustible sandwich panels is strictly prohibited.

Welding and cutting operations may not be conducted when pipes or other metal to be welded are in contact with combustible walls, floors, partitions, ceilings or roofs close enough to cause ignition by combustion.

If welding cannot be conducted safely, the welding and cutting shall not be performed.

Cutting or welding must not be performed under the following circumstances:

- Unauthorized areas.
- In the presence of flammable or explosive atmospheres.
- In sprinkled buildings where the sprinklers are impaired.
- In areas in close proximity to large quantities of stored combustible materials.
- In locations where the accumulation of dust is more than 1/16th of an inch within a 35 feet perimeter of the area where hot work is to be conducted. All dust accumulation must be cleared before welding or hot work begins.

If welding or cutting is performed in an area where fires might develop, or if any of the conditions listed above cannot be satisfied, a fire watch will be provided.

- The fire watch must be present during welding procedures and for at least 30 minutes (an half hour) after welding is completed.
- The fire watch must be properly trained in the use of fire extinguishers and must have knowledge of the facility's alarm system.
- The fire watch will have the appropriate fire extinguishers ready during the procedure.
- Appropriate fire extinguishers will be supplied and available for immediate use.
- Hot work permits must be obtained for all welding or cutting procedures performed outside designated welding areas.

Fire Prevention Measures

Designated welding areas will be established according to the following specifications:

- Fire extinguishers shall be made readily available at all times during welding & cutting operations.
- Floors must be swept and cleared of combustible materials within 35 feet of the work area.
- Flammable and combustible materials must be placed 35 feet or more from the designated work area.
- Adequate ventilation must be provided to supply 20 air changes per hour.
- At least one 10 lb. dry chemical fire extinguisher must be within reach of 35 feet of the work area.
- Welding curtains, noncombustible walls or other protective dividers will be supplied to confine slag and sparks to the combustible-free area.

Requirements for welding outside the designated area:

- A hot work permit must be obtained prior to beginning welding operations.
- Portable welding curtains or shields must be utilized for the protection of other workers in the welding area.
- Plastic materials must be protected by welding tarps during the welding operations.
- Respiratory protection must be used unless adequate airflow away from the welder and others present in the work area can be set up and maintained.
- A fire watch must be present during all hot work operations.

After the completion of welding operations, the welder must mark the metal as hot or warn other workers of the fact in some way.

Confined Space

- A space that is large enough that an employee can enter full-bodied into the area to perform the assigned work.
- Has limited means for entering and exiting the space (e.g., vessels, coolers, tanks, hoppers, storage bins, vaults and pits).
- Is not intended for continuous occupancy.

Refer to Acoustics Associates Confined Space Program before beginning any cutting, welding or brazing operations that meet the requirements of a confined space.

Adequate ventilation is required to work in a confined space.

When welding or cutting in a confined space, the gas cylinders and welding machines must be left outside the confined space. Prior to beginning work, heavy portable equipment on wheels must be stabilized to prevent accidental movement.

When welding operations are performed in a confined space that must be entered through a manhole or similar opening, a quick means of exit must be provided to protect the welder in case of an emergency.

· When using safety belts for this purpose, the belt must be attached to the welders body in such a way that it does not get jammed in the opening,

· An attendant will be stationed outside the opening to observe the welder and put the preplanned rescue procedures into effect, if needed.

When arc welding procedures cease for a substantial amount of time (e.g. during lunch or overnight), the electrodes must be removed from the holders. The holders must be carefully placed to avoid accident contact. The machine must be disconnected from its power source.

Improperly closed valves pose a risk of allowing the escape of gas through leaks. In order to eliminate this risk, when gas welding or cuffing ceases for a substantial period of time, torch valves must be closed; the torch's fuel-gas and oxygen supply must be shut off along some point outside the confined area. If possible, remove the torch and hose from the confined space.

When welding must be performed in an area with screens on all sides, the screens must be arranged to avoid restriction of ventilation. Preferably, screens should be mounted approximately two (2) feet above the floor unless the work is performed at a level so low that the screens must be lower in order to protect nearby workers. Fixed enclosures must have a top and at least two sides to surround the welding or cutting operations. A sufficient airflow must be in place to maintain a velocity away from the welder of 100 linear feet (30 m) per minute or greater.

When welding and cutting in confined spaces, adequate ventilation must be provided to avoid the accumulation of toxic materials and to avoid possible oxygen deficiencies. This is to protect the welder as well as helpers and other employees in the immediate area. When air is withdrawn, it will be replaced with clean air.

When circumstances will not allow for such ventilation, airline respirators or hose masks will be provided. These are approved for this purpose by the National Institute for Occupational Safety and Health (NIOSH). In areas where a threat to life is present, a positive pressure, full-face, self-contained breathing apparatus, or a combination of a full-face piece, positive pressure supplied-air respirator with an auxiliary, self-contained air supply approved by NIOSH must be used.

When welding operations are conducted in confined spaces where it is necessary for welders and their helpers to provide hose masks, hose masks with blowers or self-contained breathing apparatuses, an additional worker will be situated outside the confined space to monitor the safety of those in the confined work area.

Fumes, Gases and Dust

Toxic fumes may be produced during some welding procedures; these fumes may require extraction. An assessment of the work to be conducted must be completed before beginning the work. Fumes usually contain small particles of the material being welded; these fumes can have a severe effect on the respiratory system.

Welding materials that have the potential to produce dangerous fumes require proper ventilation and/or the use of respiratory protection. This also applies when inert-gas metal-arc welding or oxygen-cutting stainless steel. These materials include:

- Lead base metals.
- Zinc.

- Mercury.
- Cadmium.
- Fluorides.
- Beryllium.
- Hexavalent Chromium.
- Exotic metals or paints not otherwise listed.

Employees must refer to Acoustics Associates Respiratory Protection Program to evaluate which type of respiratory protection should be used during welding procedures.

Welding and cutting operations must be adequately ventilated to avoid the accumulation of toxic materials for the safety of the welder, helpers, and other personnel in the work area.

Personal Protection

Helmets and hand shields must be made of a material that insulates from heat and electricity. Helmets, goggles, and shields must be capable of withstanding sterilization and should not be easily flammable. Helmets and hand shields must be in place to protect the face, ears and neck from direct radiant energy from the arc.

Helmets must have filter plates and cover plates that allow for easy removal. All parts must be constructed of materials that are not easily susceptible to corrosion and do not discolor the skin.

Goggles must be ventilated so as to avoid fogging of the lenses. All glass for goggle lenses must be tempered, free from scratches, waves, air bubbles and other imperfections. The front and rear surfaces of lenses and windows must be parallel and smooth; lenses used to provide vision corrections are the only exception to this. Lenses are required to have a permanent, distinct marking to easily identify their shade and source.

NOTE: When high yellow light is produced in gas welding or oxygen cutting procedures, it is preferable to use a filter or lens capable of absorbing the yellow or sodium line in the visible light. All plates and filter lenses must meet the ANSI Z87.1 – 1968 – American National standard for eye and face protection for transmission of radiant energy. Where it is practicable, welders working in these conditions should be enclosed in a booth painted with a low reflectivity finish (such as zinc oxide) and lamp black. Alternately, the welder may be enclosed with noncombustible screens painted in a similar fashion. Both booths and screens must allow air circulation at floor level. Persons near the welding areas must be protected from radiant energy via noncombustible or flameproof shields or screens, or will be required to wear protective eyewear.

Appropriate clothing and hand protection must be worn to protect the skin from welding hazards.

Cleaning Compounds

Because cleaning materials are often toxic or flammable, precautions must be taken and the manufacturer's instructions must be followed.

- Cleaning and degreasing that involves chlorinated hydrocarbons must be performed in locations where no vapors from these processes can reach or be drawn into the atmosphere surrounding the welding operations.
- Trichloroethylene and perchloroethylene must also be kept out of atmospheres that may be penetrated by UV radiation of gas-shielding welding procedures.

Mechanical ventilation must be used when oxygen cutting procedures using a chemical flux, iron powder or gas shielded arc cutting for stainless steel. This ventilation must adequately remove the fumes generated by these procedures.

Cylinders

DOT-approved compressed gas cylinders are clearly marked near the cylinder's shoulder and identifies the

chemical or trade name of the gas contained inside.

- Compressed gas cylinders must be ANSI B57.1-1965 compliant.
- Compressed gas cylinders must always be secured in an upright position except when it is not practicable, for short periods of time, when carrying or hoisting the cylinder.

Cylinders must be kept away from heat sources, radiators and piping systems used in grounding. Cylinders and their valves, including couplings and regulators, must be free from oily or greasy residue. Do not handle cylinders with gloves or rags that may contain oil or grease residue.

Stored oxygen cylinders must be located a minimum of 20 feet from fuel gas cylinders and other combustible materials, including grease and oil. Alternatively, stored oxygen cylinders may be separated from these hazards by a noncombustible barrier that is at least five (5) feet high and has a fire safety rating of at least 30 minutes. Valves on empty cylinders must be closed. Protective caps should always be placed on valves, hand-tight, except when the cylinder is connected for use.

Cylinders must never be kept in unventilated enclosures such as cupboards and lockers.

Storage of fuel gas cylinders inside buildings is limited to a total capacity of 2000 cubic feet (300 lbs.) of liquefied petroleum gas, except those cylinders in use or attached and ready for use.

Acetylene cylinders should be stored with the valve end up.

Appropriate storage spaces will be provided for cylinders to ensure they are not knocked over, damaged by falling objects or susceptible to tampering by unauthorized persons.

- Protection from back flow will be accomplished via an approved device that prevents fuel from flowing into the oxygen system and oxygen from flowing into the fuel-gas system.
- Flashback protection will be provided via an approved device that prevents flame from entering into the fuel-gas system.
- Backpressure protection will be provided via an approved pressure-relief device set at the recommended pressure.

The transportation of gas cylinders must follow these requirements:

- Valve caps must be installed.
- Cylinders must be secured.
- Cylinders must not be lifted by the valve protection caps. The regulators must be removed.
- Cylinders should not be dropped or otherwise allowed to strike each other.
- Regulators that are removed must be carried in the vehicle's cab.
- Cylinders are not to be tampered with, nor should any person attempt to repair a cylinder.
- Cylinders must be carefully handled at all times. Knocks, falls or rough handling may damage the cylinder, its valve or safety device, resulting in leakage.

Safety devices must never be tampered with.

Arc Welding and Cutting

Personnel are required to be qualified or trained prior to operating, maintaining or installing welding equipment.

- All workers instructed to operate or perform maintenance on equipment must be familiar with the following Requirement for Electric Arc Welding Standards:
    - 29 CFR 1910.254
    - 29 CFR 1910.252 (a) (b) (c)
    - American Welding Society Standard A6-1-1966 if gas shield arc welding is performed.
- Electrical welding equipment will be selected for safe operation that comply with the above standards.
- Arc welding equipment must be able to withstand exposure to corrosive fumes, excessive oil vapor and humidity, flammable gases, unusual vibration or shock, excessive dust and seacoast or shipboard conditions.
- Arc welding equipment must be operated at the voltage recommended in the manufacturer's recommendations.
- Leads must be inspected regularly and replaced if splices are unprotected or if insulation is broken.
- Electrical tape cannot be used to repair leads.
- When using an arc welder, all ground connections must be checked to ensure the mechanical strength and electrical capabilities are adequate for the required current.

A disconnecting switch or controller and overcurrent protection will be provided near each welding machine.

Direct current machines are required to be connected with the same polarity. Alternating current machines must be connected to the same phase and polarity of the supply circuit.

- Electrode holders must be located to avoid contact with persons, conducting objects or fuel from compressed gas tanks.
- Cables with splices within 10 feet of the holder must not be used.

If objects to be cut or welded are immovable and if all the present fire hazards cannot be cleared, guards must be used to restrain the heat, slag and sparks, and to protect the immovable fire hazards.

Resistance Welding

Only personnel trained in the operation, maintenance and installation of welding equipment may do so.

- Shields, guarding, grounding, voltage and interlocks must conform to the manufacturer's recommendations.
- Protective measures such as ventilation, shields and flash guarding must be provided to control metal fumes, flashes and toxic elements.
- If the object to be welded or cut is immovable, all fire hazards should be moved.

Transmission Pipeline

Arc welding in wet or high humidity conditions requires special protection against electric shock and will beprovided.

Pressure testing:

- Workers and the public must be protected against injury from the blowing out of closures or other pressure restraining devices when pipelines are being pressure tested.
- Protection will be provided against the discharge of loose dirt that may have become trapped in the pipe.

Welding construction of transmission pipelines must be performed according to the Standard for Welding Pipelines and Related Facilities, API St. 1104-1998.

Oxygen Fuel Gas Welding and Cutting:

Only approved implements such as regulators, torches, setting generators, pressure-reducing valves and manifolds will be used:

- Mixtures of oxygen or air and fuel gases may be explosive and should be avoided whenever possible.
- Hoses and their connections must adhere to the applicable standards of the Compressed Gas Association and Rubber Manufacturer's Association.
- Workers overseeing the oxygen or fuel-gas supply equipment and generators must be trained and deemed competent before left in a supervisory position.

If the object to be welded is immovable, all fire hazards must be removed from the work area.

Fire Watch Requirements

A fire watch will be provided under the following conditions when welding, soldering, cutting or brazing is conducted near combustible materials or locations where fire hazards may develop:

- Areas where fires that are not minor may develop.
- Combustible materials are within 35 feet or less of the area where hot work is conducted.
- Combustibles are 35 feet or more from the work area but are easily set aflame.
- Wall or floor openings are present within 35 feet or less of exposed combustible materials.
- Combustible materials are next to the opposite side of metal roofs, ceilings or partitions.

Fire watch personnel must stay at least 30 minutes after welding or cutting operations have ceased. All fire watchers must have fire extinguishers ready.

First Aid Equipment

First aid equipment will be provided and available at all times. Injuries must be reported as soon as possible in order to seek medical attention. First aid will be performed until medical attention can be provided.

Training

Training for welders, supervisors & fire watch must include:

- Responsibilities of the employee's position.
- Safe operation of the equipment to be used in the performance of their job duties.
- Fire watch responsibilities to include:
  - Knowing that fire watching is the ONLY duty of the fire watch.
  - When the watch may be terminated.
  - How to use fire extinguishers.

- Familiarity with the facilities and how to activate the fire alarm, if needed.
- Contractor responsibilities.
- Operator responsibilities.
- Requirements for documentation.
- Requirements for the use of respiratory equipment.