aXCON CORPORATION, INC.

HEALTH & SAFETY MANUAL

January 2022

Revision History

Revision	Date	Author	Revision Summary

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aXCON CORPORATION, INC.

01/01/2022

ACCIDENT/INCIDENT INVESTIGATION

PURPOSE

Accident/Incident prevention is the key to eliminating possibility of injury to employees and property loss. Learning from past accidents/incidents is one of the key elements in accident/incident prevention. This chapter addresses the procedures to be followed for all accidents/incidents resulting in employee injury or property damage.

RESPONSIBILITIES

Management

- Conduct accident/incident prevention and investigation training for
- supervisors. Ensure all accidents/incidents and injuries are investigated.
- Ensure immediate and long-term corrective actions are taken to prevent
- re-occurrence. Maintain Accident/Incident Reports on file for at least five years.
- Ensure proper entries are made on the OSHA 300 Log and First Report of
- Injury. Provide all necessary medical care for injured workers.

Employees

- Immediately report all accidents/incidents and injuries to their
- supervisor. Assist as requested in all accident/incident investigations.
- Report all hazardous conditions and near-misses.

SUPERVISOR INVOLVEMENT

In most cases, the area Supervisor conducts the investigation. Direct supervisors are familiar with employee s work environment & assigned tasks. The Supervisor is the person who must take the accident/incident situation under control and immediately eliminate or control hazards to others.

Immediate Steps

1. Provide first Aid for any injured persons.
2. Eliminate or control hazards.
3. Document accident/incident scene information to determine the cause.
4. Interview witness immediately.

ACCIDENT/INCIDENT PREVENTION

Accidents/Incidents are usually complex. An accident/incident may have 10 or more events that can be causes. A detailed analysis of an accident/incident will normally reveal three cause levels: basic, indirect, and direct. At the lowest level, an accident/incident results only when a person or object receives an amount of energy or hazardous material that cannot be absorbed safely. This energy or hazardous material is the DIRECT CAUSE of the accident/incident. The direct cause is usually the result of one or more unsafe acts or unsafe conditions, or both. Unsafe acts and conditions are the INDIRECT CAUSES or symptoms. In turn, indirect causes are usually traceable to poor management policies and decisions, or to personal or environmental factors. These are the BASIC CAUSES.

Despite their complexity, most accidents/incidents are preventable by eliminating one or more causes. Accident/incident investigations determine not only what happened, but also how and why. The information gained from these investigations can prevent recurrence of similar or perhaps more disastrous accidents/incidents.
Accident/incident investigators are interested in each event as well as in the sequence of events that led to an accident/incident. The accident/incident type is also important to the investigator. The recurrence of accidents/incidents of a particular type or those with common causes shows areas needing special accident/incident prevention emphasis.

INVESTIGATIVE PROCEDURES

The actual procedures used in an investigation depend on the nature and results of the accident/incident. The agency having jurisdiction over the location determines the administrative procedures. In general, responsible officials will appoint an individual to oversee the investigation. The investigator uses most of the following steps:

1. Define the scope of the investigation.

2. Select the investigators. Assign specific tasks to each (preferably in writing).

3. Present a preliminary briefing to the investigating team, including:

- Description of the accident/incident, with damage
- estimates. Normal operating procedures.
- Maps (local and general).
- Location of the
- accident/incident site. List of witnesses.
- Events that preceded the accident/incident

4. Visit the accident/incident site to get updated information.

5. Inspect the accident/incident site.

   - Secure the area. Do not disturb the scene unless a hazard exists.
   - Prepare the necessary sketches and photographs. Label each carefully and keep accurate records.

6. Interview each victim and witness. Also, interview those who were present before the accident/incident and those who arrived at the site shortly after the accident/incident. Keep accurate records of each interview. Use a tape recorder if desired and if approved.

7. Determine

   - What was not normal before the accident/incident
   - occurred? Where the abnormality occurred?
   - When it was first
   - noted? How it occurred?

8. Analyze the data obtained in step 7. Repeat any of the prior steps, if necessary.

9. Determine
   - Why the accident/incident occurred?
   - A likely sequence of events and probable causes (direct, indirect,
   - basic). Alternative sequences.

10. Check each sequence against the data from step 7.

11. Determine the most likely sequence of events and the most probable causes.

12. Conduct a post-investigation briefing.

13. Prepare a summary report, including the recommended actions to prevent a recurrence. Distribute the report according to applicable instructions. (Accident/Incident Investigation Report Form attached)

An investigation is not complete until all data are analyzed, and a final report is completed. In practice, the investigative work, data analysis, and report preparation proceed simultaneously over much of the time spent on the investigation.

FACT-FINDING

Gather evidence from many sources during an investigation. Get information from witnesses and reports as well as by observation. Interview witnesses as soon as possible after an accident/incident occurred. Inspect the accident/incident site before any changes occur. Take photographs and make sketches of the accident/incident scene. Record all pertinent data on maps. Get copies of all reports. Documents containing normal operating procedures, flow diagrams, maintenance charts, or reports of difficulties or abnormalities are particularly useful. Keep complete and accurate notes in a bound notebook. Record pre-accident/incident conditions, the accident/incident sequence, and post-accident/incident conditions. In addition, document the location of victims, witnesses, machinery, energy sources, and hazardous materials.

In some investigations, a physical or chemical law, principle, or property may explain a sequence of events. Include laws in the notes taken during the investigating or in the later analysis of data. In addition, gather data during the investigation that may lend itself to analysis by these laws, principles, or properties. An appendix in the final report can include an extended discussion.

INTERVIEWS

In general, experienced personnel should conduct interview. If possible, the team assigned to this task should include an individual with a legal background. In conducting interviews, the team should:

- Appoint a speaker for the group.
- Get preliminary statements as soon as possible from all witnesses.
- Locate the position of each witness on a master chart (including the direction
- of view). Arrange for a convenient time and place to talk to each witness.
- Explain the purpose of the investigation (accident/incident prevention) and put each witness at ease.
- Listen, let each witness speak freely, and be courteous and considerate.
- Take notes without distracting the witness. Use a tape recorder only with the consent of the witness.
- Uses sketches and diagrams to help the witness.
- Emphasize areas of direct observation. Label hearsay
- accordingly. Be sincere and do not argue with the witness.
- Record the exact words used by the witness to describe each observation. " Do not put words into a witness mouth.
- Word each question carefully and be sure the witness understands.

- Identify the qualifications of each witness (name, address, occupation, years of experience, etc.).
- Supply each witness with a copy of his or her statements. Signed statements are desirable.

After interviewing all witness, the team should analyze each witness statement. They may wish to re-interview one or more witnesses to confirm or clarify key points. While there may be inconsistencies in witness's statements, investigators should assemble the available testimony into a logical order. Analyze this information along with date from the accident/incident site.

Not all people react in the same manner to a stimulus. For example, a witness within close proximity to the accident/incident may have an entirely different story from one who saw it at a distance. Some witnesses may also change their stories after they have discussed it with others. The reason for the change may be additional clues.

A witness who has had a traumatic experience may not be able to recall the details of the accident/incident. A witness who has a vested interest in the results of the investigation may offer biased testimony. Finally, eyesight, hearing, reaction time, and the general condition of each witness may affect his or her powers of observation. A witness may omit entire sequences because of a failure to observe them or because their importance was not realized.

PROBLEM SOLVING TECHNIQUES

Accidents/incidents represent problems that must be solved through investigations. Several formal procedures solve problems of any degree of complexity. This section discusses two of the most common procedures: Change Analysis and Job Safety Analysis.

Change Analysis

As its name implies, this technique emphasizes change. To solve a problem, an investigator must look for deviations from the norm. Consider all problems to result from some unanticipated change. Make an analysis of the change to determine its causes. Use the following steps in this method:

- Define the problem (What happened?).
- Establish the norm (What should have happened?).
- Identify, locate, and describe the change (What, where, when to what
- extent?). Specify what was and what was not affected.
- Identify the distinctive features
- of change. List the possible causes.
- Select the most likely causes.

Job Safety Analysis

Job safety analysis (JSA) is part of many existing accident/incident prevention programs. In general, JSA breaks a job into basic steps, and identifies the hazards associated with each step. The JSA also prescribes controls for each hazard. A JSA is a chart listing these steps, hazards, and controls. Review the JSA during the investigation if a JSA has been conducted for the job involved in an accident/incident. Perform a JSA if one is not available. Perform a JSA as a part of the investigation to determine the events and conditions that led to the accident/incident.

INVESTIGATION REPORT

An accident/incident investigation is not complete until a report is prepared and submitted to proper authorities. An accident/incident report should be clear and concise. The purpose of the investigation is to prevent future accidents/incidents. The following outline has been found especially useful in developing the information to be included in the formal report:

- Background information
    - Where and when the accident/incident occurred
    - Who and what were involved
    - Operating personnel and other witnesses
- Account of the Accident/Incident (What happened?)
    - Sequence of events
    - Extent of damage
    - Accident/incident type
    - Agency or source (of energy or hazardous material)
- Discussion (Analysis of the Accident/Incident ~~t~~ **HOW; WHY**)
    - Direct causes (energy sources; hazardous materials)
    - Indirect causes (unsafe acts and conditions)
    - Basic causes (management policies; personal or environmental factors)
- Recommendations (to prevent a recurrence) for immediate and long-range action to remedy:
    - Basic causes
    - Indirect causes

- Direct cause (such as reduced quantities or protective equipment or structures)

POSSIBLE CAUSES

Obvious accident/incident causes are most probably symptoms of a root cause problem. Some examples of Unsafe Acts and Unsafe Conditions which may lead to accidents/incidents are:

UNSAFE ACTS

- Unauthorized operation of equipment
- Running Horse play not following procedures by-passing
- safety devices Not using protective equipment
- Under influence of drugs or alcohol

UNSAFE CONDITIONS

- Ergonomic hazards
- Environmental hazards inadequate housekeeping blocked
- walkways Improper or damaged PPE
- Inadequate machine guarding

RECOMMENDATIONS

As a result of the finding is there a need to make changes to:

- Employee
- training
- Work Stations Design Policies or Procedures

RECORDS

All accident/incident reports will be maintained on file for five years. They shall receive timely review by upper management to ensure proper corrective actions have been taken. (*Accident/Incident Report Form attached).*

The information in this report should be thoroughly discussed when the supervisor holds the weekly safety meeting with all employees. Corrective actions are to be

formulated, communicated to all employees, promptly implemented, and enforced.

First Report of Injury and OSHA 300 Log entries will be made within 24 hours of notification of injuries or illnesses.

aXCON CORPORATION, INC.

01/01/2022

ACCIDENT/INCIDENT INVESTIGATION REPORT

Company Name		Facility or Job		Name of Person(s) Involved	
Est. Age	Employee in Previous Accident ☐ Yes ☐ No	Occupation	Employment Date	Date and Time of Incident	☐ am ☐ pm

Exact Location _____

_____

Activity at time of incident/accident _____

_____

_____

Describe injury or damage _____

_____

_____

Was person(s) involved acting in regular line of duty? ☐ Yes ☐ No

If no, explain why _____

_____

_____

Witness(es) _____

UNSAFE ACT (WHAT HAPPENED)

- ☐ Operating without authority; failure to secure or warn
- ☐ Operating or working at unsafe speed
- ☐ Making safety devices inoperative
- ☐ Using unsafe equipment, hands instead of equipment, or equipment unsafely
- ☐ Failure to use safe attire or personal protective equipment
- ☐ **Improper**: ☐ turn ☐ lane usage ☐ backing ☐ interval ☐ signal ☐ judgment ☐ other
- ☐ Unsafe loading, placing, mixing, combining, etc.
- ☐ Taking unsafe position or posture
- ☐ Working on moving or dangerous equipment
- ☐ Distracting, teasing, abusing, startling, etc.
- ☐ Lack of job training or instruction

UNSAFE CONDITIONS

- ☐ Improper guarding (unguarded, inadequately guarded, guard removal, damaged guardrails)
- ☐ Defective substances or equipment (broken poorly designed, slippery etc.)
- ☐ Hazardous arrangement (unsafe piled material, poor layout, poor Housekeeping no aisle markings, etc.)
- ☐ Improper dress or apparel (goggles, gloves, shoes, masks, sleeves, etc.)
- ☐ **Defective**: ☐ brakes ☐ motor ☐ lights ☐ wipers ☐ steering ☐ wheels or rims ☐ other
- ☐ Improper illumination (none, glaring light, etc.)
- ☐ Improper ventilation (poor, dusty, gassy, high humidity, etc.
- ☐ Poor road or visibility conditions

STEPS TAKEN TO PREVENT A RECURRENCE

SAFETY ACTIONS TAKEN:

- ☐ Instructed employee
- ☐ Warned employees
- ☐ Other action _____
- ☐ Supplied safeguard
- ☐ Supplied pers. prot. equipment
- ☐ Eliminated condition
- ☐ Repaired condition
- ☐ Guarded machine
- ☐ Other action _____
- ☐ Reported condition to: _____

Supervisor's Signature	**Date**	**Manager's Signature**	**Date**
Employee's Signature	**Date**		

*** Completed form forwarded to Safety Manager** **Retain for 5 years**

BLOODBORNE PATHOGEN PROGRAM

PURPOSE

To protect the health and safety of its employees from all possible hazards that may be encountered in the workplace. Also, to eliminate or minimize

“

”

occupational exposure to Hepatitis B Virus (HBV), Human Immunodeficiency Virus (HIV) and other bloodborne pathogens. Bloodborne Pathogens are microorganisms present in the blood that can cause disease. An infection control plan must be prepared for all persons that handles, stores, uses, processes, or disposes of infectious medical wastes. This infection control plan complies with

OSHA requirement, 29 CFR 1910.1030, Bloodborne Pathogens. The plan includes requirements for personal protective equipment, housekeeping, training, and a procedure for reporting exposures.

RESPONSIBILITIES

- Axcon Corporation, Inc.
- Program Coordinator – Richard Seidel
- Management and Site Supervisors at each jobsite location will ensure that all affected employees are aware of the Bloodborne Pathogens Exposure Control Plan and are properly trained. Axcon will ensure proper conduct of the program periodic audit.

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DEFINITIONS

- **Biological Hazard:** The term biological hazard or biohazard is taken to mean any viable infectious agent that presents a risk, or a potential risk, to the well-being of humans.
- **Medical Wastes/Infectious Wastes:** All laboratory waste emanating from human or animal tissues, blood or blood products or fluids; all cultures of tissues or cells of human origin or cultures of etiologic agents; specimens of human or animal parts or tissues removed by surgery, autopsy, or necropsy.
- **Universal Precautions:** Universal precautions will be observed at all times in the office as well as the job site. Universal Precautions refers to a system of infectious disease control that assumes that every direct contact with body fluids is infectious and requires every employee exposed to be protected as though such body fluids were infected with bloodborne pathogens. All infectious/medical material must be handled according to Universal Precautions (OSHA
- Instruction CPL 2-2.44A).

REPORTING AND RECORDKEEPING

Any reports required by OSHA will be maintained by the Occupational Health Department. All reports (Training Record, Hepatitis B Vaccine/Vaccinations Waiver, and Exposure Incident Investigation Report) will be maintained for duration of employment plus 30 years.
Occupationally contracted HBV or HIV will be recorded on the OSHA 300 Log of Occupational Injuries and Illnesses as an Illness. Exposures to bloodborne pathogens from contact with sharps will be recorded on the OSHA 300 Log Occupational Injuries and Illnesses if treatment such as Gamma Globulin, Hepatitis B immune Globulin or Hepatitis B vaccine is prescribed by a Physician.

TRAINING

All new and current affected employees will be trained initially and annually thereafter. The content of the training program will include.

- Axcon's Policy
- Types and transmission of Bloodborne
- Pathogens General Safety Rules
- Universal Precautions
- Use of Personal Protective
- Equipment Medical Waste Disposal Procedures
- Post Exposure Treatment and
- Procedures HBV Vaccinations

Training records shall be maintained for three years of the date of training and become part of the employee s personnel file. Such records shall contain the following information: *Bloodborne Pathogen Training Record (Addendum A).*

- The names, last four digits of employee s Social Security Number, employee clock number and signature of the employee s attending the training session.
- The dates of the training session.
- An outline describing the material presented.
- The names and qualifications of persons conducting the training.

All employees not affected by this Program will receive an overview of the program requirements during scheduled department Safety Meetings with documentation by Safety Meeting Minutes Form.

HEPATITIS-B VIRUS (HBV) VACCINATIONS

Occupational Health Professionals and those required to provide patient care on a routine basis will be offered Hepatitis-B Virus (HBV) Vaccinations at Client's expense. Affected employees hired after March 1, 1992, will be offered HBV vaccinations at the time of hire. Current employees will be offered HBV Vaccinations when this program is implemented. Employees that transfer to a job or their job are reclassified to include exposure to bloodborne pathogens will be offered HBV vaccinations within 10 working days of the transfer or reclassification.

The choice for HBV vaccination is not mandatory. All employees that decline the Hepatitis B vaccination offer shall sign the required waiver form the *Hepatitis B Vaccine/Vaccination Waiver (Addendum B).*

POST EXPOSURE TREATMENT AND NOTIFICATION PROCEDURES

Should an affected employee or an employee acting "as a Good Samaritan" be occupationally exposed to HIV/HAV/HBV the affected employee will report the exposure Site Superintendent/Supervisor/Foreman. Client will provide for the employee to be tested for HIV/HAV/HBV at Clients expense. Following the initial blood test at time of exposure, seronegative employees will be retested at 6 weeks, 12 weeks and 6 months to determine if transmission has occurred. During this period, the employee will follow the recommendations provided by the Doctor or the U.S. Public Health Service.

"An occupational exposure" is defined as blood or body fluid contact from an injured or ill employee to the affected employee or injury by a contaminated sharp object.

Following the report of exposure, Client, will contact the exposure source and request that person be tested for HIV/HAV/HBV" at Client's expense. The request is not mandatory and if refused will not affect that employee's future employment.

During all phases of Post Exposure, the confidentiality of the affected employee and exposure source will be maintained on a "need" to know basis. Client will use the *Exposure Incident Investigation Form* (*Addendum C*) to document the exposure.

- Names of all first aid providers who rendered
- assistance. A description of the incident time and date.

- A determination whether, in addition to the presence of blood or OPIM (Other Potentially Infectious Materials), an exposure incident as defined by OSHA standard occurred.
- If an actual exposure incident occurred, the proper post-exposure evaluation, prophylaxis and follow-up procedures will be made available immediately to the employees.

Exposure incident is defined as specific eye, mouth, or other mucous membrane, non-intact skin or parenteral contact with blood or OPIM. Parenteral means piercing mucous membranes or the skin barrier through such events as needle sticks, human bites, cuts or abrasions.

GENERAL PROCEDURES

The following procedures must be followed by personnel when in medical rooms or laboratories.

All supervisors must ensure that their staff is trained in proper work practices, the concept of universal precautions, personal protective equipment, and in proper cleanup and disposal techniques.

Resuscitation equipment, pocket masks, resuscitation bags, or other ventilation equipment must be provided to eliminate the need for direct mouth to mouth contact in groups where resuscitation is a part of their responsibilities.

Eating, drinking, smoking, applying cosmetics or lip balm, and handling contact lenses are prohibited in work areas where there is a potential for exposure to any health hazard. Food and drink must not be stored in refrigerators, freezers, or cabinets where blood or other potentially infectious material is stored or in other areas of possible contamination.

According to the level of risk, wearing laboratory or protective clothing may be required for persons entering infectious disease laboratories. Likewise, showers with a germicidal soap may be required before exit.

Gowns, aprons, or lab coast must be worn whenever there is a possibility that body fluids could splash on skin or clothing.

Gloves must be made of appropriate disposable material, usually intact latex or vinyl. They must be used in the following circumstances:

- When the employee has cuts, abraded skin, chapped hands, dermatitis, or similar conditions.
- When examining abraded or non-intact skin of a patient with active
- bleeding. While handling blood or blood products or other body secretions during routine laboratory procedures.

Employees must wash their hands immediately, or as soon as possible, after removal of gloves or other personal protective equipment and after hand contact with blood or other potentially infectious materials. At a jobsite, immediate hand washing facilities may not be readily available. Should this condition occur, the antiseptic towelettes provided in the first aid kit will be used.

All personnel protective equipment must be removed immediately upon leaving the work area, and if this equipment is overtly contaminated, it must be placed in an appropriate area or container for storage, washing, decontamination, or disposal.

Contaminated clothing must **not** be worn in clean areas or outside the building.

All procedures involving blood or other potentially infectious agents must be performed in a manner that will minimize splashing, spraying and aerosolization.

MEDICAL WASTES

Medical/Infectious waste must be segregated from other waste at the point of origin. Medical/infectious waste, except for sharps (i.e. razor blades, broken glass, needles, etc.) capable of puncturing or cutting, must be contained in double disposable red bags conspicuously labeled with the words "INFECTIOUS WASTE and BIOHAZARD.

Used needles or other sharps (razor blades, broken glass, scalpels, etc.) must not be sheared, bent, broken, recapped, or reheated.

Infectious sharps must be contained for disposal in leak-proof, rigid puncture-resistant containers. Infectious waste contained as described above must be placed in reusable or disposable leak-proof bins or barrels that are conspicuously labeled with the words "INFECTIOUS WASTE AND BIOHAZARD". These waste barrels are picked up regularly by an outside company licensed to handle infectious wastes.

All infectious agents, equipment, or apparatus must be disinfected in an autoclave or otherwise disinfected before beginning washed or disposed of. Each individual working with infections bio- hazardous agent is responsible for disinfection and disposal of these agents.

Biological wastes that do not contain radioactive or hazardous substances may be disinfected by steam sterilization (autoclave) then disposed of in the regular trash.

Reusable glassware must be decontaminated in sodium hypo chlorite (household bleach) solution (1:9) prior rinsing and acid washing. The glassware must then be

sterilized in an autoclave.

To minimize the hazard to firefighters or emergency response personnel, at the close of each work day and before the building is closed, all infectious or toxic material must be placed in a refrigerator, placed in an incubator, or autoclaved or otherwise disinfected.

Infectious agents must not be placed in an autoclave and left overnight in anticipation of autoclaving the next day.

Floors, laboratory benches, and other surfaces in buildings where infectious agents are handled must be disinfected with a suitable germicide, such as (1:9) sodium hypo chlorite solution (household bleach) as often as necessary as determined by the supervisor.

The surroundings must be disinfected after completion of operations involving planting, pipetting, centrifuging, and similar procedures with infectious agents.

Infectious agents must not be dumped into the building drainage system without prior disinfection.

CUTS

If an employee has a needle stick, cut, or mucous membrane exposure to another person's body fluids he/she must report the incident immediately to Site Supervisor.

BLOOD EXPOSURE

All employees exposed to human blood and blood products must report to Site Supervisor for information and possible inclusion in the Hepatitis B Immunization Program.

INFECTION CONTROL PLAN

The purpose of the Infection Control Plan is to protect the health and safety of the person directly involved in handling the materials, Client personnel and the general public by ensuring the safe handling, storage, use, processing, and disposal of infectious medical waste. This plan complies with OSHA requirement proposed for 29 CFR 1910.1030, Bloodborne Pathogens.

Universal precautions: Refers to a system of infectious disease control which assumes that every direct contact with body fluids is infectious and requires every employee exposed to be protected as though such body fluids were infected with bloodborne pathogens. All infectious/medical material must be handled according to Universal Precautions (OSHA Instruction CPL 2-2.44A).

The following universal precautions must be taken with Axcon provided PPE which is available at each job site:

- Gloves must be made of appropriate disposable material, usually intact latex or vinyl. They must be used:
    - When the employee has cuts, abraded skin, clapped hands, dermatitis, or the like.
    - When examining abraded or non-intact skin of a patient with active bleeding.
    - While handling blood or blood products or other body secretions during routine procedures.
- Gowns, aprons, or lab coats must be worn when splashes of body fluid on skin or clothing are possible.
- Mask and eye protection are required when contact of mucosal membranes (eyes, mouth or nose) with body fluids is likely to occur (e.g. splashes or aerosolization).
- Resuscitation equipment, pocket masks, resuscitation bags, or other ventilation equipment must be provided to eliminate the need for direct mouth to mouth contact.

WASTE DISPOSAL PLAN

- Medical/Infectious waste must be segregated from other waste at the point of origin.
- Medical/infectious waste, except for sharps (e.g. razor blades, broken glass, needles, etc.) capable of puncturing or cutting must be contained in double disposable red bags conspicuously labeled with the words, "INFECTIOUS WASTE BIOHAZARD.
- Infectious sharps must be contained for disposal in leak-proof, rigid puncture resistant containers.
- Infectious waste thus contained as described in procedures 2 and 3 above must be placed in reusable or disposable leak-proof bins or barrels which must be conspicuously labeled with the words, "INFECTIOUS WASTE BIOHAZARD. These waste

barrels are being picked up regularly by an outside company licensed to handle infectious wastes.

- Spills/Disinfectants: a solution of sodium hypo chlorite (household bleach) diluted (1:9) with water must be used to disinfect, following initial cleanup of a spill with a chemical germicide approved as a hospital disinfectant. Spills must be cleaned up immediately.

- After removing gloves, and/or after contact with body fluids, hands and other skin surfaces must be washed thoroughly and immediately with soap or other disinfectant in hot water.

- Other biological wastes that do not contain radioactive or hazardous substances may be disinfected by steam sterilization (autoclave) and then disposed of in the regular trash.

- Liquid biohazard waste may be disposed of in the sewage system following chemical decontamination.

- Reusable glassware must be decontaminated in sodium hyper chlorite (household bleach) solution (1:9) prior to rinsing and acid washing. Then the glassware must be sterilized in an autoclave.

JOBSITE GUIDELINES

Personal Protective Equipment

- The site superintendent/supervisor/foreman will be responsible for insuring the first aid and biohazard kit is available and complete. If items are used, they will be replaced with new items to maintain the kits readiness.
- All contaminated items of personal protective equipment will be disposed of following an exposure incident. There will be no attempt to clean or launder.

Contaminated Equipment

- The site superintendent/supervisor/foreman will be responsible for ensuring that all equipment and items that may become contaminated from a first aid incident involving blood or OPIM are properly decontaminated prior to reuse or shipment using a solution of 50% bleach and 50% water.

Work Area Restrictions Housekeeping

- As there is no specific area designated as a first aid area, the need for work area restriction does not apply.

- Housekeeping is applicable only in the respect that if an incident occurs any contaminated area will be cleaned with a bleach solution (50% bleach 50% water).

Regulated Waste Labels and Signs

- Any contaminated items resulting from an exposure incident will be placed in proper RED biohazard bags and disposed of in accordance with applicable local regulations.

- The site superintendent/supervisor/foreman will be responsible for insuring the proper RED biohazard bags contained in the kits are used. (This is an acceptable alternative to labels.)

Needles Containers for Sharps

- There will be no required use of needles or other sharps on the jobsite by any employee.
- No containers for sharps will be needed.
- Employees using needles or sharps for personal medical reasons are responsible for the proper disposal of such items.

PERSONAL PROTRECTIVE EQUIPMENT FOR WORKER PROTECTION
AGAINST HIV AND HBV TRANSMISSION

TASK	GLOVES	APRON	MASK	EYEWEAR
Control of bleeding w/spurting blood	X	X	X	X
Bleeding control with minimal bleeding	X			
Emergency Child Birth	X	X	X	X
Blood Drawing	X			
Handling & Cleaning Instruments	X			
Cleaning Bio Spills	X			

Taking Temperature				
Giving Injection	X			
Measuring Blood Pressure				

The examples provided in this table are based on application of universal precautions. Universal precautions are intended to supplement rather than replace recommendation for routine infection control, such as hand washing and using gloves to prevent gross microbial contamination of hands (e.g., contact with urine or feces).

BLOODBORNE PATHOGEN CONTROL UNIVERSAL PRECAUTIONS AND GENERAL SAFETY RULES

FOR POSTING AT EACH JOB SITE

Exposure Control Plan: Client**,** and its Divisions and Subsidiaries will not perform invasive medical treatment or provide intravenous medication. Therefore, the exposure to Bloodborne Pathogens, as defined in item #3 below is determining to be from routine and emergency first aid treatment of common workplace injuries. The following Universal Precautions and General Safety Rules have been established to prevent the spread of viral and bacterial organisms (namely HIV/HAV/HBV). In all cases, the Universal Precautions and General Safety Rules should be followed:

- Before and immediately after providing patient care, wash exposed areas (hands, arms, etc.) with antibacterial soap.
- Do and use the required personal protective equipment for the medical care given as outlined in the Personal Protective Equipment for Worker Protection Poster.
- Treat all human body fluids and items soiled with human body fluids (blood, blood products, seamen, vaginal secretions, cerebrospinal fluid, synovial fluid, pleural fluid, peritoneal fluid, pericardial fluid, amniotic fluid, concentrated HIV/HAV/HBV, and saliva (in dental settings) as if contaminated with HIV/HAV/HBV. (Note: Feces, urine, nasal secretions, sputum, sweat, tears, or vomitus need not be treated as contaminated unless they contain visible blood).
- No smoking, eating, drinking or storage of food products are permitted in patient treatment areas. Non-medical items, such as clothing and personal effects, should not be stored in the treatment facility.
- Patient treatment areas will be maintained in a near sanitary condition at all times. Daily and at least once per shift, the Occupational Health Facility will be disinfected with anti-bacterial/viral solution (at least 10%

chlorine Bleach or equivalent). All medical and personal protective equipment contaminated with human body fluids will be disinfected before being returned for use again.

- To avoid special handling, all clothing contaminated with human body fluid will be presoaked (sprayed on the affected areas) with the antibacterial/viral solution before being sent to the laundry. (**NOTE**: Gloves and eye protection should be worn when handling contaminated clothing until presoaked for 10 minutes).
- Any spills of body fluid will be presoaked (sprayed on the affect area) with anti- bacterial viral solution for 10 minutes before being removed. (**NOTE:** Gloves and eye protection should be worn when handling spills of body fluids).
- Medical Wastes (those soiled with covered human body fluids) will be treated following the Medical Wastes Treatment and Disposal Procedures before being discarded as ordinary wastes.
- Any suspected exposure to HIV/HAV/HBV by human body fluid contact (via broken skin, human bites, needle sticks, etc.) should be reported to your Supervisor immediately.

CONTROL OF BLOODBORNE PATHOGENS PROGRAM MEDICAL WASTE TREATMENT AND DISPOSAL PROCEDURES

FOR POSTING AT EACH JOB SITE

All Medical Wastes (those soiled with covered human body fluids) will be placed in a red leak-proof container marked either *Biohazard or Medical Waste*. All other wastes will be discarded following customary procedures. (**NOTE:** Soiled feminine hygiene/sanitary napkins, soiled facial tissues, etc. are not considered a biohazard or medical waste. Pretreatment is not necessary; however, employees should wear personal protective equipment and wash hands with antibacterial soap afterwards).

Do and use the required personal protective equipment when handling medical wastes as outlined in the *Personal Protective Equipment for Worker Protection Poster*.

At the end of each shift, all accumulated medical wastes will be treated to remove biohazards using the following procedure:

- Prepare a solution of 10 percent chlorine bleach to water (approximately 2 cups chlorine bleach to 1 gallon of water).
- Pour solution over the medical wastes and thoroughly saturate Let
- stand for 10 minutes and then drain into sink
- Discard as ordinary wastes

CAUTION: Sharp objects (broken glass, hypodermic needles, etc.) should not be handled by hand to prevent accidental punctures and lacerations.

Rinse medical wastes container and return for use again. Wash

hands and exposed areas with antibacterial soap.

Addendum A

BLOODBORNE PATHOGENS TRAINING RECORD FORM

BLOODBORNE PATHOGENS TRAINING RECORD

Date of Training Session: ____

Outline of Presented Attached: _____

INSTRUCTORS QUALIFICATIONS

_____

_____

_____

ATTENDING EMPLOYEES

Name	Last Four Digits of SSN	Employee Clock #

Addendum B

HEPATITIS B VACCINE/VACCINATION WAIVER FORM

HEPATITIS B VACCINE/VACCINATION WAIVER

Date: _____

Name: _____

Last four digits of SSN: _____

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

_____ _____

Signature Date

_____ _____

Signature Date

Addendum C

EXPOSURE INCIDENT INVESTIGATION FORM

EXPOSURE INCIDENT INVESTIGATION FORM

Date of Incident: _____

Time of Incident: _____

Location: _____

Potentially Infectious Materials Involved:

Type: _____

Source: _____

Circumstances (work being performed, etc.):

_____

_____

_____

How incident was caused (accident, equipment malfunction, etc.):

_____

_____

_____

Personal Protective Equipment being used:

_____

_____

_____

Actions Taken (decontamination, clean-up report, etc.):

_____

_____

_____

Recommendations for Avoiding Repetition:

_____

_____

CRANE & HOIST SAFETY

PURPOSE

Many types of cranes, hoists, and rigging devices are used at Client for lifting and moving materials. Client s ̓policy is to maintain a safe workplace for its employees; therefore, it cannot be overemphasized that only qualified and licensed individuals shall operate these devices. The safety rules and guidance in this chapter apply to all operations at Client that involve the use of cranes and hoists installed in or attached to buildings and to all Client employees, supplemental labor, and subcontractor personnel who use such devices.

RESPONSIBILITIES

Supervisors are responsible for:

- Ensuring that employees under their supervision receive the required training and are certified and licensed to operate the cranes and hoists in their areas.
- Providing training for prospective crane and hoist operators. This training must be conducted by a qualified, designated instructor who is a licensed crane and hoist operator and a full-time Client employee.
- Evaluating crane and hoist trainees using the Crane Pre-Operation Checklist and submitting the Qualification Request Form to the Safety Office to obtain the operator's ̓ license.
- Ensuring that hoisting equipment is inspected and tested monthly by a responsible individual and that rigging equipment is inspected annually.

Crane and Hoist Operators are responsible for:

- Operating hoisting equipment safely.
- Conducting functional tests prior to using the equipment. Selecting
- and using rigging equipment appropriately.
- Having a valid operator s ̓license on their person while operating cranes or hoists.
- Participating in the medical certification program, as required.

Engineering/Maintenance/Operations Department is responsible for:

- Performing annual maintenance and inspection of all Client cranes and hoists that are not covered by a program with maintenance responsibility.
- The jobsite superintendent/foreman/supervisor is responsible for ensuring that annual inspection, reports are available for all cranes being used, whether borrowed, rented, owned, or assigned.
- Conducting periodic and special load tests of cranes and hoists.
- Maintaining written records of inspections and tests and providing copies of all inspections

and test results to facility manager and building coordinators who have cranes and hoists on file.

- Inspecting and load testing cranes and hoists following modification or extensive repairs (e.g., a replaced cable or hook, or structural modification.)
- Scheduling a non-destructive test and inspection for crane and hoist hooks at the time of the periodic load test, and testing and inspecting before use new replacement hooks and other hooks suspected of having been overloaded. The evaluation, inspection, and testing may include, but are not limited to visual, dye penetrant, and magnetic particle techniques referenced in ASME B30.10 (Hooks, Inspection and Testing.)
- No crane shall be placed back in service until deficiencies are evaluated and corrected by a qualified person.
- Crane headache balls and blocks shall be inspected on an annual basis. Maintaining
- all manuals for cranes and hoists in a central file for reference.

Safety Department is responsible for:

- Conducting training for all Crane & Hoist Operators
- Issuing licenses to Crane and Hoist Operators Periodically
- verifying monthly test and inspection reports Interpreting
- crane and hoist safety rules and standards

SAFE OPERATING REQUIREMENTS

All workers who use any Client crane or hoist shall have an operator s license. Client issues licenses for authorized employees who have been specifically trained in crane and hoist operations and equipment safety.

No one, other than the qualified/authorized personnel, shall operate mobile cranes, except for the following persons:

- Supervisors whose duties require them to do so
- Learners under the direct supervision of a qualified operator after they have completed a written and practical skills test
- Maintenance and testing personnel, when it becomes necessary in their duties
- Inspectors

The equipment operator is ultimately responsible for all operations. If there are any questions, doubts, or uncertainties about the equipment, rigging, equipment set up area, load chart interpretation, or the load; it is the operator s responsibility to halt proceedings until the appropriate authority source has been consulted.

At no time shall any mobile industrial equipment (crane) be engaged in operation unless appropriate load chart, operator s manual, and necessary decals are in place.

Crane and Hoist Operators

To be qualified as Crane and Hoist Operator, the candidate shall have received hand-on training from a licensed, qualified crane and hoist operator designated by the candidate s ' superintendent/foreman/supervisor. Upon successful completion of training, the licensed crane and hoist operator and the candidate s superintendent/foreman/supervisor will fill out and sign Qualification Request Form and the Crane Pre-Operation Checklist and send them to the Safety Office for approval. The candidate will be issued a license upon approval by the Safety Manager. Operator qualifications will be valid for one year only, wherefore the operator must re-qualify.

CRANE AND HOIST SAFETY DESIGN REQUIREMENTS

Following are the design requirements for cranes and hoist and their components:

- The design of all commercial cranes and hoists shall comply with the requirements of ASME/ANSI B30 standards and Crane Manufacturer s' Association of America standards (CMAA-70 and CMAA-74). Axcon's fabricated lifting equipment shall comply with the requirements in Chapter 2.2 (Lifting Equipment) of Mechanical Engineering Design Safety Standards (latest edition). All cranes shall be equipped with a functioning Anti Two Block
- device. " "
- All crane and hoist hooks shall have safety latches.
- Hooks shall not be painted (or re-painted) if the paint previously applied by the manufacturer is worn.
- A tag line shall be used on all suspended loads.
- Crane pendants shall have an electrical disconnect switch or button to open the main control circuit.
- Crane and hoists shall have a main electrical disconnect switch. This switch shall be in a separate box that is labeled with lockout capability.
- Crane bridges and hoist monorails shall be labeled on both sides with the maximum capacity.
- Each hoist-hook block shall be labeled with the maximum hoop capacity.
- Directional signs indicating N-W-S-E shall be displayed on the bridge underside, and a corresponding directional label shall be placed on the pendant.

A device such as an upper-limit switch or slip clutch shall be installed on all bu9lding cranes and hoists. A lower-limit switch may be required when there is insufficient hoist rope on the drum to reach the lowest point.

All cab and remotely operated bridge cranes shall have a motion alarm to signal bridge movement.

- All newly installed cranes and hoists, or those that have been extensively repaired or rebuilt structurally, shall be load tested at 125% capacity prior to being placed into service.
- If an overload device is installed, a load test to the adjusted setting is required.
- Personnel baskets and platforms suspended from any crane shall be designed in accordance with the specifications in 29 CFR 1926.550(g).

GENERAL SAFETY RULES

Operators shall comply with the following rules while operating the cranes and hoists:

- Do not engage in any practice that will divert your attention while operating the crane.
- Respond to signals only from the person who is directing the lift, or any appointed signal person. Obey a stop signal always, no matter who gives it.
- Do not move a load over people. People shall not be placed in jeopardy by being under a suspended load. Also, do not work under a suspended load unless the load is supported by blocks, jacks, or a solid footing that will safely support the entire weight. Have a crane or hoist operator remain at the controls or lock open and tag the main electrical disconnect switch.
- Ensure that the rated load capacity of a crane s bridge, individual hoist, or any sling or fitting is not exceeded. Know the weight of the object being lifted or use a dynamometer or load cell to determine the weight.
- Check that all controls are in the OFF position before closing the main-line disconnect switch.
- If spring-loaded reels are provided to lift pendants clear off the work area, ease the pendant up into the stop to prevent damaging the wire.
- Avoid side pulls. These can cause the hoist rope to slip out of the drum groove, damaging the rope or destabilizing the crane or hoist.
- To prevent shock loading, avoid sudden stops or starts. Shock loading can occur when a suspended load is accelerated or decelerated and can overload the crane or hoist. When completing an upward or downward motion, ease the load slowly to a stop.

OPERATION RULES

Pre-Operational Test

At the start of each work shift, operators shall do the following steps before making lifts with any crane or hoist:

- Test the upper-limit switch. Slowly raise the unloaded hook block until the limit switch trips.
- Visually inspect the hook, load lines, trolley, and bridge as much as possible from the operator s station; in most instances, this will be the floor of the building.
- If provided, test the lower-limit switch.
- Test all direction and speed controls for both bridge and trolley travel.
- Test all bridge and trolley limit switches, where provided, if operation will bring the equipment near the limit switches.
- Test the pendant emergency stop.
- Test the hoist brake to verify there is no drift without a load. If
- provided, test the bridge movement alarm.
- Lock out and tag for repair any crane or hoist that fails any of the above tests.

Moving a Load

- Center the hook over the load to keep the cables from slipping out of the drum grooves and

overlapping, and to prevent the load from swinging when it is lifted. Inspect the drum to verify that the cable is in the grooves.

- Use a tag line when loads must traverse long distances or must otherwise be controlled. Manila rope may be used for tag lines.
- Plan and check the travel path to avoid personnel and obstructions.
- Lift the load only high enough to clear the tallest obstruction in the travel path. Start
- and stop slowly.
- Land the load when the move is finished. Choose a safe landing.
- **Never** leave suspended load unattended. In an emergency where the crane or hoist has become inoperative, if a load must be left suspended, barricade and post signs in the surrounding area, under the load, and on all four sides. Lock open and tag the crane or hoist s ̓main electrical disconnect switch.

Parking a Crane or Hoist

- Remove all slings and accessories from the hook. Return the rigging device to the designated storage racks.
- Raise the hook at least 2.1 m (7ft.) above the floor.
- Store the pendant away from aisles and work areas or raise it at least 2.1 m (7ft.) above the floor.
- Place the emergency stop switch (or push button) in the OFF position.

RIGGING

General Rigging Safety Requirements

Only select rigging equipment that is in good condition. All rigging equipment shall be inspected annually; defective equipment is to be removed from service and destroyed to prevent inadvertent reuse. The load capacity limits shall be stamped or affixed to all rigging components.

Axcon's ̓policy requires a minimum safety factor of 5 to be maintained for wire rope slings. The following types of slings shall be rejected or destroyed:

- Nylon slings with abnormal wear. Torn stitching. Broken or cut fibers.
- Discoloration or deterioration.
- Wire-rope slings with kinking, crushing, bird-caging, or other distortions.
- Evidence of heat damage.
- Cracks, deformation, or worn end attachments.
- Six randomly broken wires in a single rope lay.
- Three broken wires in one strand of rope.
- Hooks opened more than 15% at the throat.
- Hooks twisted sideways more than 10deg. From the plane of the unbent hook.
- Alloy steel chain slings with cracked, bent, or elongated links or components.
- Cracked hooks.
- Shackles, eye bolts, turnbuckles, or other components that is damaged or

deformed.

Rigging a Load

Dos and Donts when rigging a load:

- Determine the weight of the load. Do not guess.
- Determine the proper size for slings and components.
- Stand clear while a sling is being drawn from beneath a load. Hooks and slings may catch and suddenly fly-free or tip the load.
- **Do not** use nylon slings to lift structural steel.

- **Do not** use nylon slings on hoist hooks that are gouged or nicked (there could be sharp edges that could cut the sling).
- **Do not** let the load lay directly on a sling wrapped around a load (lower the load on proper blocking).
- **Do not** use manila rope for rigging.
- Face the hook opening out and away from the sling pull when making choker hitches.
- **Do not** assume in a choker hitch that the hook is going to stay in place when the slack is being taken out the sling.
- **Do not** subject hooks or attachments to bending actions.
- Make sure that shackle pins and shouldered eye bolts are installed in accordance with the manufacturer s recommendations.
- Make certain that the bolt in a screw pin shackle turns easily, and then tighten it (use oil on the threads).
- **Do not** use any screw pin shackle where the bolt is very difficult to turn (the pin is either bent due to overload or the threads have been damaged).
- Use safety shackles wherever possible (they are safer).
- Use the largest bearing surface possible on the shackle pin. This will reduce the bending movement on the pin.
- **Do not** use a shackle unless you know its rated load capacity.
- **Do not** use round pin shackles, instead use safety shackles or screw pin shackles.
- Make sure that ordinary (shoulder less) eye bolts are threaded in at least 1.5 times the bolt diameter.
- Use Safety hoist rings (swivel eyes) as a preferred substitute for eye bolts where possible.
- Pad sharp edges to protect slings. Remember that machinery foundations or angle-iron edges may not feel sharp to the touch but could cut into rigging when under several tons of load. Wood, tire rubber, or other pliable materials may be suitable or padding.
- **Do not** use slings, eye bolts, shackles, or hooks that have been cut, welded, or brazed.
- Install wire-rope clips with the base only on the live end and the U-bolt only on the dead end. Follow the manufacturer s recommendations for the spacing for each specific wire size.

- Determine the center of gravity and balance the load before moving it.
- Initially lift the load only a few inches to test the rigging and balance. Give
- safety first consideration in the handling of materials
- Inspect the lifting equipment before and after it is used to make certain it is in good condition.
- Report any lifting equipment that appears to be unsafe before someone else uses it.

Report all accidents causing damage to lifting equipment, operating equipment, and products even if you feel there is no danger.

- **Do not** leave equipment where it can be accidentally damaged by bending cutting or crushing.
- **Do not** let anyone overrule the judgment of the operator. Higher authority should be considered.

CRANE OVERLOADING

Cranes or hoist shall not be loaded beyond their rated capacity for normal operations. Any crane or hoist suspected of having been overloaded shall be removed from service by locking open and tagging the main disconnect switch. Additionally, overloaded cranes shall be inspected, repaired, load tested, and approved for use before being returned to service.

WORKING AT HEIGHTS ON CRANES OR HOISTS

Anyone conducting maintenance or repair on cranes or hoists at heights greater than 1.8 m (6ft) shall use fall protection. Fall protection should also be considered for heights less than 1.8 m. Fall protection includes safety harnesses that are fitted with a lifetime and securely attached to a structural member of the crane or building or properly secured safety nets.

Use a crane as a work platform should only be considered when conventional means of reaching an elevated worksite are hazardous or not possible. Workers shall not ride a moving bridge crane without an approval from the Safety Office, which shall specify the following as a minimum:

- Personnel shall not board any bridge crane unless the main disconnect switch is locked and tagged open.
- Personnel shall not use bridge cranes without a permanent platform (catwalk) as work platforms. Bridge catwalks shall have a permanent ladder access.
- Personnel shall ride seated on the floor of a permanent platform with approved safety handrails, wear safety harnesses attached to designated anchors, and be in clear view of the crane operator at all times.
- Operators shall lock, and tag open the main (or power) disconnect switch on the bridge catwalk when the crane is parked.

HAND SIGNALS

Signals to the operator shall be in accordance with the standard hand signals unless voice communications equipment (telephone, radio, or equivalent) is used. Signals shall be discernible or audible always. Some special operations may require addition to or modification of the basic signals.

For all such cases, these specials signals shall be agreed upon and thoroughly understood by both the person giving the signals and the operator and shall not conflict with the standard signals.

INSPECTION, MAINTENANCE, AND TESTING

All tests and inspections shall be conducted in accordance with the manufacturer's recommendations.

Monthly Tests and Inspections

- All in-service cranes and hoist shall be inspected monthly and the results documented on the *Crane Pre-Operation Checklist* (attached).
- Defective cranes and hoists shall be locked and tagged out of service until all defects are corrected. The inspector shall initiate corrective action by notifying the facility manager or building coordinator.

Annual Inspections

Axcon shall schedule and supervise (or perform) annual preventive maintenance (PM) and annual inspections of all cranes and hoists. The annual PM and inspection shall cover:

- Hoisting and lowering mechanisms
- Trolley travel or monorail travel Bridge travel
- Limit switches and locking and safety devices Structural members
- Bolts or rivets Sheaves and drums
- Parts such as pins, bearings, shafts, gears, rollers, locking devices, and clamping devices
- Brake system parts, linings, pawls and ratchets
- Load, wind, and other indicators over their full range.
- Gasoline, diesel, electric, or other power plants Chain-drive sprockets
- Crane and hoist hooks
- Electrical apparatus such as controller contractors, limit switches, and push button stations
- Wire rope Hoist chains

Load Testing

Newly installed cranes and hoists shall be load tested at 125% of the rated cap designated personnel.

- Slings shall have appropriate test data when purchased. It is the responsibility of the purchaser to ensure that the appropriate test data are obtained and maintained.
- Re-rated cranes and hoists shall be load tested to 125% of the new capacity if the new rating is greater than the previous rated capacity.
- Fixed cranes or hoist that have had major modifications or repair shall be load tested to 125% of the rated capacity.
- Cranes and hoists that have been overloaded shall be inspected prior to being returned to service.
- Personnel platforms, baskets, and rigging suspended from a crane or hoist hook shall be load tested initially, then re-tested annually thereafter or at each new job site.
- All cranes and hoists with a capacity greater than 2722 kg (3 tongs) should be load tested every four years to 125% of the rated capacity. Cranes and hoists with a lesser capacity should be load tested every eight years to 125% of the rated capacity.
- All mobile hoists shall be load tested at intervals to be determined by Axcon.

RECORDS

Client shall maintain records for all cranes, hoist and rigging equipment.

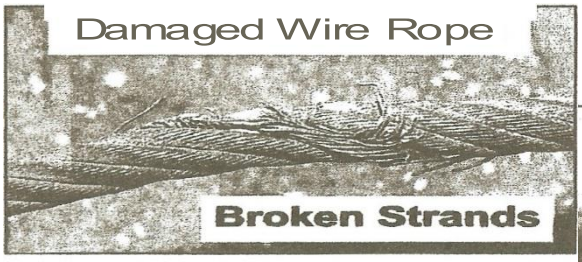
REFERENCES

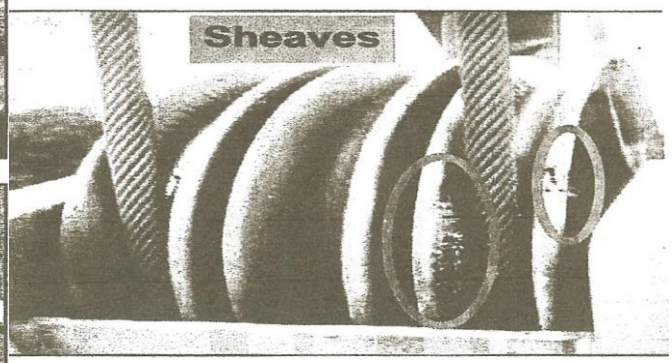
- ASME/ANSI B30.2, "Overhead and Gantry Cranes (Top Running Bridge, Single or Multiple Girder, Top Running Trolley Hoist)."
- ASME/ANSI B30.9, "Slings."
- ASME/ANSI B30.10, "Hooks."
- ASME/ANSI B30.11, "Monorails and Underhung Cranes."
- ASME/ANSI B30.16, "Overhead Hoists (Underhung)."
- ASME/ANSI B30.17, "Overhead and Gantry Cranes (Top Running Bridge, Single Girder, Underhung Hoist)."
- ASME/ANSI B30.20, "Below-the Hook Lifting Devices."
- ASME/ANSI B30.21, "Manually Lever Operated Hoists."
- *Code of Federal Regulation*, Title 29, part 1910. 179, "Overhead and Gantry Cranes."
- *Code of Federal Regulation*, Title 29, part 1910.184, "Slings."
- *Code of Federal Regulation*, Title 29, Part 1926.550, "Cranes and Derricks."
- Mechanical Engineering Department *Design Safety Standards*, Chapter 2.2, "Lifting equipment."
- CMAA Specification No. 70, *Specifications for Electric Overhead Traveling*
- *Cranes*. CMAA Specification No. 74, *Specifications for Top-Running and Under-running Single- girder electric Overhead Traveling Cranes Utilizing Under Running Trolley Hoist*.
- NFPA 70, Article 610, *Cranes and Hoists*.

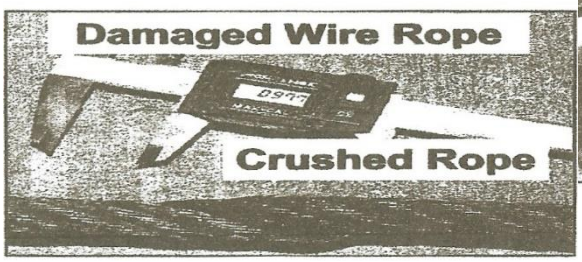
Types of Rigging Equipment Slings

Chain Wire Rope Metal Mesh Synthetic

Examples of Defects and Cause for Removal from Service



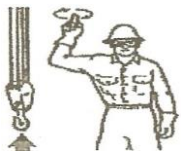


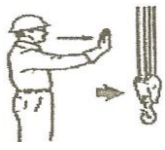


Damaged wire rope shall be removed from service immediately.

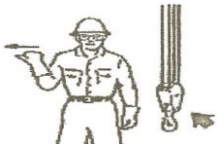
The grooves must be smooth and free from surface defects which could cause rope damage.

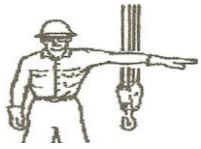
Basic Crane Hand Signals

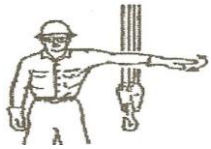




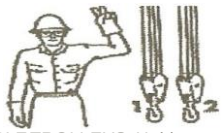
HOIST. With forearm vertical and forefinger pointing up, move hand in small horizontal circle.
LOWER. With arm extended downward, forefinger pointing down, move hand in a small horizontal circle.
BRIDGE TRAVEL. Arm extended forward, hand open and slightly raised, make pushing motion in direction of travel.







TROLLEY TRAVEL. Palm up, fingers closed, jerk horizontally.
STOP. Arm extended, palm down, hold position rigidly.
EMERGENCY STOP. Both arms extended, palms down, move arms back and forth horizontally.



MULTIPLE TROLLEYS. Hold up one finger MOVE SLOWLY. Use one hand to give any motion for- block marked •1• and two ftngers for block signal and place other hand motionless n front of marked -:Z-. Regular signals follow. hand giving the motion signal. *(Ho;st sfo11V/y* shown as example)

EMERGENCY STOP. Arm extendf.Ki, palmdown, move handrapidly rightand left.

CRANE PRE-OPERATION CHECKLIST

Date _____ Operator _____ Hours _____ Unit _____

Manufacturer _____ Model _____ Serial # _____

Project Number _____ Supervisor _____

IMPORTANT!
THIS CHECK MUST BE MADE BY THE OPERATOR AT THE START OF THE SHIFT!

Check the appropriate box: S= Satisfactory U=Unsatisfactory N/A= Not Applicable

Conditions	S	U	N/A	Explain any "U" Responses
Load block/Ball/Hook/Safety Latches				
Swivel/Rope Dead Ending/Clamps				
Extensions/Jibs/Pins/Keepers				
Boom Sections				
Carrier				
All Hydraulic Cylinders				
Boom Sections				
Tire Inflation/Condition				
Outriggers/Pads/Keepers				
Hydraulic Oil Level				
Crankcase Oil Level				
Coolant Level				
Fuel Level				
All Gauges Working				
Level Indicator				
Boom Angle Indicator				
Boom Length Indicator				
Anti Two-Block Device and Alarms				
Controls Functions				
Operations Manual				
Load Chart				
Fire Protection/10ABC minimum				
Cab Cleanliness/Glass Condition				
Service/Parking Brake				
Steering				
Back-up Alarm/Horn/Spooling				
Wire Rope Condition				
Hoses and Tubing				

Operator's Signature: _____

ELECTRICAL SAFETY

PURPOSE

The Electrical Safety program is designed to prevent electrically related injuries and property damage. This program also provides for proper training of maintenance employees to ensure they have the requisite knowledge and understanding of electrical work practices and procedures. Only employees qualified in this program may conduct adjustment, repair or replacement of electrical components or equipment. Electricity has long been recognized as a serious workplace hazard, exposing employees to such dangers as electric shock, electrocution, fires and explosions. All electrical work, installation, and wire capacities shall be in accordance with the provisions of the National Electrical Code, NFPA 70-1984, unless a special provision of an OSHA standard is provided for specific equipment.

RESPONSIBILITIES

Management

- Provide training for qualified and unqualified employees. Conduct
- inspections to identify electrical safety deficiencies. Guard and
- correct all electrical deficiencies promptly.
- Ensure all new electrical installations meet codes and regulations.

Employees

- Report electrical deficiencies immediately.
- Not work on electrical equipment unless authorized and trained.
- Properly inspect all electrical equipment prior to use.

Employers must not allow employees to work near live parts of electrical circuits, unless the employees are protected by one of the following means:

- De-energizing and grounding the parts. Guarding
- the part by insulation.
- Any other effective means.

HAZARD CONTROL

Engineering Controls

- All electrical distribution panels, breakers, disconnect, switches, junction boxes shall be completely enclosed.

- Water tight enclosure shall be used where there is possibility of moisture entry either from operations or weather exposure.
- Electrical distribution areas will be guarded against accidental damage by locating in specifically designed rooms, use of substantial guard posts and rails and other structural

means.

- A clear approach and 3-foot side clearance shall be maintained for all distribution panels.
- All conduits shall be fully supported throughout its length. A non-electrical attachment to conduit is prohibited.
- All non-rigid cords shall be provided strain relief where necessary.

Administrative Controls

- Only trained and authorized employees may conduct repairs to electrical equipment.
- Contractors performing electrical work must hold a license for the rated work.
- Areas under new installation or repair will be sufficiently guarded with physical barriers and warning signs to prevent unauthorized entry.
- Access to electrical distribution rooms is limited to those employees who have a need to enter.
- All electrical control devices shall be properly labeled.
- Work on energized circuits is prohibited unless specifically authorized by senior facility management.
- All qualified employees will follow established electrical safety procedures and precautions.

Each site will determine, designated, and document employees who, through documented training, work experience, or both, are qualified to work on the following voltages:

- Low voltage ~~u~~p to 120V
- Medium voltage ~~1~~21 to 599V
- High voltage ~~6~~00V and above

Protective Equipment

- Qualified employees will wear electrically rated safety shoe/boots. All
- tools used for electrical work shall be properly insulated.
- Electrical rated gloves shall be available for work on electrical equipment. Electrically
- rated matting will be installed in front of all distribution panels in electric utility rooms.

ELECTRICAL EQUIPMENT

Examination

Electrical equipment shall be free from recognized hazards that are likely to cause death or serious physical harm to employees. Safety of equipment shall be determined using the following considerations:

- Suitability for installation and use in conformity with the provision of this subpart
- Suitability of equipment for an identified purpose may be evidence by listing or labeling for that identified purpose
- Mechanical strength and durability, including, for parts designed to enclose and protect other equipment, the adequacy of the protection thus provided

- Electrical insulation
- Heating effects under conditions of use Arcing
- effects
- Classifications by type, size, voltage, current capacity, and specific use
- Other factors which contribute to the practical safeguarding of employees using or likely to come in contact with the equipment

IDENTIFICATION OF DISCONNECTING MEANS AND CIRCUITS

Each disconnecting means for motors and appliances shall be legibly marked to indicate its purpose. Each service, feeder, and branch circuit, at its disconnecting means or over current device, shall be legibly marked to indicate its purpose. These markings shall be of sufficient durability to withstand the environment involvement.

A disconnecting means is a switch that is used to disconnect the conductors of a circuit from the source of electric current. Disconnect switches are important because they enable a circuit to be opened, stopping the flow of electricity, and thus can effectively protect workers and equipment.

Each disconnect switch or over current device required for a service, feeder, or branch circuit must be clearly labeled to indicate the circuit s fůnction and the label or marking should be located at the point where the circuit originates. For example, on a panel that controls several motors or a motor control center, each disconnect must be clearly marked to indicate the motor to which each circuit is connected.

All labels and markings must be durable enough to withstand weather, chemicals, heat, corrosion, or any other environment to which they may be exposed.

DEFINITION OF TERMS

Qualified Worker:	An employee trained and authorized to conduct electrical work.
Unqualified Worker:	Employees who have not been trained or authorized by management to conduct electrical work.

TRAINING

Training for Unqualified Employees is general electrical safety precautions to provide an awareness and understanding of electrical hazards.

Electrical Safety Rules for Non-Qualified Workers

- Do not conduct any repairs to electrical equipment. Report
- all electrical deficiencies to your supervisor.
- Do not operate equipment if you suspect an electrical problem. Water
- and electricity do not mix.
- Even low voltages can kill or injure you.
- Do not use cords or plugs if the ground prong is missing.
-

Only double insulated extension cords are to be used.

- Do not overload electrical receptacles.
- Work shall not be permitted around an electrical power circuit where contact is possible unless de-energizing, grounding, or guarding by insulation provides protection against electrical shock.
- In work area where the exact location of underground power lines is unknown, ground probing will be conducted. If ground probing is not possible, employees using hand tools (jackhammers, bars, etc.) that may contact a power line are given insulated protective gloves.
- Barriers or other means of guarding shall ensure that workspace for electrical equipment will not be used as passageways when energized parts are exposed.
- Protective shields, protective barriers, or insulating material shall protect against inadvertent contact with exposed energized parts prior to entering a confined space.

Training for Qualified Employees

Training for Qualified employees includes specific equipment procedures and requirements of: Electrical Safety, 29 CFR 1910.331 to 1910.339 and shall be conducted annually to the general jobsite population.

Qualified employees should have the necessary skills and techniques to distinguish exposed live parts from the other parts of electrical equipment and to determine the nominal voltage of exposed live parts. When fuses are installed or removed with one or both terminals energized, specific tools insulated for that voltage should be used.

PERSONAL PROTECTIVE EQUIPMENT

Employees working in areas where the potential contact with exposed electrical sources is present and likely, will be provided and shall use Personal Protective Equipment (PPE). The following rules apply to the use and care of PPEs:

- PPEs shall be used where contact with exposed electrical sources are present and likely.
- PPEs shall be designed for the work being performed and environment in which it is used.
- PPEs shall be visually inspected and/or tested before use. Any defects or damage shall be replaced, repaired or discarded.
- In cases where the insulating capabilities of the PPEs may be damaged during the work, a protective outer cover, such as leather, must be used.
- Employees shall wear non-conductive head protection wherever there is a danger of injury from electrical burns or shock from contact with exposed energized parts.
- Employee shall wear protective eye/face equipment whenever there is a danger from electrical areas or flashes or from flying objects resulting from an electrical explosion.

Electrical PPE Inspection Schedule

Type of equipment	When to test

Rubber insulating line hose	Upon indication that insulating value is suspect.
Rubber insulating covers	Upon indication that insulating value is suspect.
Rubber insulating blankets	Before first issue and every 12 months
Rubber insulating gloves	Before first issue and every 6 months
Rubber insulating sleeves	Before first issue and every 12 months

ELECTRICAL LOCKOUT & TAGOUT REQUIREMENTS

Application of locks and tags

A lock and a tag shall be placed on each disconnecting means used to de-energize circuits and equipment on which work is to be performed, except as provided for below.

- The lock shall be attached to prevent persons from operating the disconnecting means unless they resort to undue force or the use of tools.

- Each tag shall contain a statement prohibiting unauthorized operation of the disconnecting means and removal of the tag.
- If a lock cannot be applied a tag may be used without a lock.
- A tag used without a lock must be supplemented by at least one additional safety measure that provides a level of safety equivalent to that obtained by use of a lock. Examples of additional safety measures include the removal of an isolating circuit element, blocking of a controlling switch, or opening of an extra disconnecting device.
- A lock may be placed without a tag only under the following conditions:
    - Only one circuit or piece of equipment is de-energized
    - The lockout period does not extend beyond the work shift
    - Employees exposed to the hazards associated with re-energizing the circuit or equipment is familiar with this procedure.

WORKING AT ELEVATED LOCATIONS

Any person working on electrical equipment on a crane or other elevated must take necessary precautions to prevent a fall from reaction to electrical shock or other causes. A second person, knowledgeable as a safety watch, must assume the best possible position to assist the worker in case of an accident. Portable ladders shall have non-conductive side rails if they are used where the employee or the ladder could contact exposed energized parts.

Axcon Corporation, Inc. does not have qualified electricians employed within the company. When an unqualified person is working in an elevated position near overhead lines, the location shall be such that the person and the longest conductive object being carried cannot come closer to any unguarded, energized overhead line than the following distances:

Minimum Nominal Voltage (kV)	**Minimum Required Clearance (feet)**
0 to50	10

51 to 75	11
76 to 100	12
101 to 125	13
126 to 200	15
201 to 300	19
301 to 400	22
401 to 500	25
501 to 700	32
701 to 1000	34

GENERAL PROTECTIVE EQUIPMENT AND TOOLS

General Protective Equipment and Tools shall be used when in the proximity of, or working on, exposed energized parts. The following rules apply:

- When working on or near exposed energized parts, qualified employees shall use insulated tools or handling equipment suitable for the voltage present and working environment. In case where the insulation may be damaged, a protective outer layer should be employed. Conductive apparel must not be worn unless it is rendered non-conductive by insulating means.
- Fuse handling equipment, insulated for the circuit voltage, shall be used to remove or install fuses when the terminal is energized.
- Ropes and other hand lines used near exposed energized equipment shall be non-conductive.

WARNINGS AND BARRICADES

Warnings and barricades shall be employed to alert unqualified employees of the present danger related to expose energized parts. The following rules apply:

- Safety signs, warning tags, etc., must be used to warn unqualified employees of the electrical hazards present, even temporarily, that may endanger them.
- Non-conductive barricades shall be used with safety signs to prevent unqualified employees access to exposed energized parts or area.
- Where barricades and warning signs do not provide adequate protection from electrical hazards, an attendant shall be stationed to warn and protect employees.

POWERED EQUIPMENT SAFETY RULES

Electrical equipment is defined as cord or plug-type electrical devices which include the use of flexible or extension cords. Examples of portable electrical equipment included powered hand tools, powered bench tools, fans, radios, etc. The following safety rules apply to portable electrical equipment (PEE):

- PEE shall be handled in such a manner as to not cause damage. Power cords may not be stapled or otherwise hung in a way that may cause damage to the outer jacket or insulation.

- PEE shall be visually inspected for damage, wear, cracked or split outer jackets or insulation, etc., before use or before each shift. PEE that remains connected once put in place need not be inspected until relocated. Any defects; such as cracked or split outer jackets or insulation must be repaired, replaced or placed out of service.

Always check the compatibility of cord sets and receptacles for proper use.

Ground type cord sets may only be used with ground type receptacles when used with equipment requiring a ground type conductor.

- Attachment plugs, and receptacle may not be altered or connected in a way that would prevent the proper continuity of the equipment grounding conductor. Adapters may not be used if they interrupt the continuity of the grounding conductor.
- Only portable electrical equipment that is double insulated or designed for use in areas that are wet or likely to contact conductive liquids may be used.
- Employees that are wet or have wet hands may not handle PEEs (plug-in, un-plug, etc.). Personal protective equipment must be used when handling PEEs that are wet or covered with a conductive liquid.
- Locking-type connectors shall be properly secured after connection to a power source.

ELECTRICAL CIRCUIT SAFETY PROCEDURES

Electrical power and lighting circuits are defined as devices specifically designed to connect, disconnect or reverse circuits under a power load condition. When these circuits are employed, the following rules apply:

- Cable connectors (not of load-break type) fuses, terminal plugs or cable splice connectors may not be used, unless an emergency, to connect, disconnect or reverse in place of proper electrical circuits.
- After a protective circuit is disconnected or opened, it may not be connected or closed until it has been determined that the equipment and circuit can be safely energized.
- Over current protectors of circuits or connected circuits may not be modified, even on a temporary basis, beyond the installation safety requirements.
- Only qualified employees may perform test on electrical circuits or equipment.
- Test equipment and all associated test leads, cables, power cords, probes and connectors shall be visually inspected for external damage before use.
- Test should be performed before equipment is used after an incident that can be reasonably suspected to have caused damage (i.e., cord set is run over).
- Any damage or defects shall be repaired before use or placed out of service.
- Test equipment shall be rated to meet or exceed the voltage being tested and fit for the environment in which is being used.
- Where flammable or ignitable materials are stored, even occasionally, electrical equipment capable of igniting them may not be used unless measures are taken to prevent hazardous conditions from developing

ELECTRICAL PRE-WORK PROCEDURE

Except in extreme cases, work on electrical equipment will be done with all electrical circuits in the work areas de-energized by following the Lockout/Tagout procedure. When working on or near energized electrical circuits with less than 30 volts to ground, the equipment need not be de-energized if there will be no increased exposure to electrical burns or to explosion from electric arcs.

To prepare for work on electrical systems or components, the following procedure applies:

Caution: Treat all electrical circuits as Live until they have been tagged and locked out and tested by the following procedures.

- Obtain permission from supervisor to conduct work. Lockout
- and Tagout all sources of electrical power.
- Verify de-energized condition before any circuits or equipment are considered and worked as de-energized.
    - A qualified person shall operate the equipment operating controls or otherwise verify that the equipment cannot be restarted.
    - Verify proper operation of the Voltmeter at a live electrical source of the same rated voltage as the circuit to be worked.
    - Using the Voltmeter, check all exposed circuits phase to phase and phase to ground for evidence of voltage/current in the circuit.
    - Conduct work on the circuit only after determining that there is no voltage in any of the exposed circuits
    - If voltage is detected in any exposed circuit, STOP, inform supervisor and determine source and procedure to eliminate voltage.
- Conduct work.
- Close all exposed circuits, boxes, controls and equipment. Remove
- Lockout/Tagout.
- Obtain supervisor permission to energize circuits.

WORKING ON OR NEAR EXPOSED ENERGIZED CIRCUITS

In the rare situation when energized equipment (or working in near proximity to energized equipment) cannot be de-energized, the following work practices must be used to provide protection:

Caution: Unqualified employees are prohibited from working on or near exposed energized circuits.

- Obtain permission from manager to work on or near energized electrical circuits. Lockout
- and Tagout all circuits possible.
- Treat all circuits as energized.
- Remove all conductive clothing and jewelry (rings, watches, wrist/neck chains, metal buttons, metal writing instruments, etc.).
- Use proper personal protective equipment, shields and/or barriers to provide effective electrical insulation from energized circuits. This may include electrically rated insulated

gloves, aprons, rubber soled shoes, insulated shields, insulated tools, etc.

- Provide adequate lighting. Do not enter areas with exposed energized parts unless illumination (lighting) is provided so that employee may work safely. Do not reach around obstructions of view or lighting (blindly) into areas where exposed energized parts are located.
- Employees entering a confined space with exposed energized parts must use protective barriers, shields, or equipment or insulated materials rated at or above the present voltage to avoid contact.
- Doors or other hinged panels shall be constructed and secured to prevent them from swinging into an employee and causing contact with exposed energized parts.
- Housekeeping in areas of exposed energized parts may not be completed in areas with close contact unless adequate safeguards (insulation equipment or barriers) are present. Conductive cleaning material (Steel Wool, Silicon Carbide, etc.) or liquids may not be used unless procedures (Lock and Tag out, etc.) are in place and followed.
- Station a safety observer outside work area. The sole function of this person is to quickly de-energize all source of power or pull worker free from electrical work area with a non-conductive safety rope if contact is made with an energized electrical circuit.
- A person qualified in CPR must be readily available to the scene.

RE-ENERGIZING ELECTRICAL CIRCUITS AFTER WORK COMPLETED

These requirements shall be met, in the order given, before circuits or equipment are re-energized, even temporarily.

- A qualified person shall conduct tests and visual inspections, as necessary, to verify that all tools, electrical jumpers, shorts, grounds, and other such devices have been removed, so that the circuits and equipment can be safely energized.
- Warn employees exposed to the hazards associated with re-energizing the circuit or equipment to stay clear or circuits and equipment.
- Remove each lock and tag. They shall be removed by the employee who applied it or under his or her direct supervision. However, if this employee is absent from the workplace, then the lock or tag may be removed by a qualified supervisor designated to perform this task provided that:
    - The supervisor ensures that the employee who applied the lock or tag is not available at the workplace.
    - The supervisor ensures that the employee is aware that the lock or tag has been removed before he or she resumes work at that workplace.

Conduct a visual determination that all employees are clear of the circuits and equipment.

ERGONOMICS PROGRAM

PURPOSE

The purpose of this program is to effectively eliminate or control Work-related Musculoskeletal Disorders (WMSD) and hazards by providing management leadership and employee involvement in the identification and resolution of hazards and by providing training, medical management and evaluation as an on-going process.

Ergonomics is the science of fitting jobs to people. Ergonomics encompasses the body of knowledge about physical abilities and limitations as well as other human characteristics that are relevant to job design. Ergonomic design is the application of this body of knowledge to the design of the workplace (i.e., work tasks, equipment, and environment) for safe and efficient use by workers. Good ergonomic design makes the most efficient use of worker capabilities while ensuring that job demands do not exceed those capabilities.

Ergonomics program is a systematic process for anticipating, identifying, analyzing and controlling WMSD hazards.

- A process is the activities, procedures, and practices that you set up to control WMSD hazards.
- Systematic means these actions are ongoing and conducted on some routine basis that is appropriate to the workplace conditions.

COVERED TASKS

This program covers all jobs involved in manufacturing and material handling and other jobs where there is work related musculoskeletal disorder hazards.

PROGRAM GOALS

The primary permanent goals of this program are:

- Reduction in injuries & illnesses
- Reduction in an absenteeism Reduction
- in employee turnover Increased
- productivity & quality

Short term goals may be established as a means of meeting the permanent goals.

PROGRAM ELEMENTS

- Management Leadership & Employee Participation Hazard
- Identification & Information
- Job Hazard Analysis & Control Training
- Medical Management
- Program Evaluation Records
-

ELEMENT 1: MANAGEMENT LEADERSHIP & EMPLOYEE INVOLVEMENT

Policy: Employees are highly encouraged to bring their concerns to supervisors and management. Feedback from employees in an important means of identifying ergonomic hazards. When a WMSD is identified, the Ergonomic Program Coordinator will provide a response and recommended action within 48 hours receiving notification of the hazards or condition.

Management will:

- Assign and communicate responsibilities for setting up and managing the ergonomics program so managers, supervisors and employees know what is expected of them and how they are held accountable for meeting those responsibilities. The assignments of specific responsibilities are published under a separate memorandum.
- Provide those persons with the authority, resources, information and training necessary to meet their responsibilities.
- Examine existing policies and practices to ensure they encourage reporting and do not discourage report.
- Identify at least one person to:
    - Receive and respond promptly to reports about signs and symptoms of WSDS, WMSD hazards and recommendations.
    - Take action, where required, to correct identified problems.
- Communicate regularly with employees about the program and their concerns about WSDS. This shall be accomplished through safety and health committees, postings on employee bulletin boards and routine safety training meetings.

Employee Participation: Employees (and their designated representative) will be provided:

- A way to report signs and symptoms of WSDS and WMSD hazards, and to make recommendations about appropriate ways to control them. Reporting procedures include notification of immediate supervisor, ergonomic suggestion forms and medical

  management forms. Any one of these methods constitutes a means of reporting and will required action on the part of the Program Administrator.
- Prompt responses to their reports and recommendations. 48-hour response will be provided for all reports of WSDS and WMSD hazards.
- Access to information about the ergonomics program. This program is available to all employees for review.
- Ways to become involved in developing, implementing and evaluating:

    - Job hazard analysis and control - This is accomplished by participation on safety & health committees, suggestions for supervisors & management, review and comment on existing job hazard analysis and other appropriate means of communication.
    - Training Feedback from employees on the quality and usefulness of ergonomic training will be reviewed by the program administrator to be used for training modifications to improve effectiveness.

- The effectiveness of the program and control measures. Safety & Health Committees are the primary means of employee involvement in this area. Additionally, all comments, recommendations and suggestions will be forwarded to the program administrator for action and response comment.

ELEMENT 2: HAZARD IDENTIFICATION & INFORMATION

Identification

Hazard identification is accomplished by:

- Reports (written or verbal) WMSD of signs, symptoms hazards or control recommendations from employees and supervisors.
- Review of existing safety & health records for WSDS and WMSD hazards. Routine
- facility safety & health inspections by management and supervisors.

Employee Information

For those current and new employees in manufacturing operations, manual handling operations, and other jobs with WSDS, the following information will be provided:

- How to recognize the signs and symptoms of WSDS, and the importance of early reporting of signs and symptoms.
- Hazards that are reasonable likely to be causing or contributing to WSDS. How to
- report signs and symptoms of WSDS and WMSD hazards and make recommendations.

Information Methods include, but are not limited to, information sheets, videotapes, or classes. Information will be provided in a way that employees are able to understand. Employees will be given an opportunity to ask questions, receive answers, and be provided information in the language's employees use and at levels they comprehend.

ELEMENT 3: JOB HAZARD ANALYSIS & CONTROL

Job Hazard Analysis

The purpose of Job Hazard Analysis is to identify WMSD hazard elements to provide information for effective control measure. When WMSD hazards are identified, a full JHA will be conducted and control measures implemented to eliminate or control the hazards to the extent feasible.

NOTE: The purpose of job hazard analysis is to pinpoint the cause of the problem. If the cause is obvious, you may move directly to controlling the WMSD hazards without conducting all the steps of job hazard analysis.

- Make a list of (or a representative sample of):
  - Employees in the problem job
  - Employees who perform the same physical work activities but in another job.

This is called a similar job. If employees in a similar job are exposed to the same WMSD hazards as employees in the problem job, the similar job also is a problem job. You must expand your ergonomics program to include that job and those employees.

- Ask those employees:
  - Whether they are experiencing signs or symptoms of WSDS
  - Whether they are having difficulties performing the physical work activities of the job
  - Which physical work activities they associate with the problem
- Observe employees performing the job to identify job factors that need to be evaluated
- Evaluate those job factors to determine which one is reasonable likely to be causing or contributing to the problem.

Control Measures

Successful control measure includes the following either separately or in combination.

NOTE: Where solutions are obvious, and the hazards may be eliminated quickly, implementation of controls is permitted without following all the steps of the control process. Interim control measures may be implemented, if practical, until permanent control measures are in place.

The Control Measure Process involves

- Identification, evaluation and implementation of feasible control measures (interim and permanent) to control the WMSD hazards. This includes prioritizing the control of WMSD hazards, where necessary.
- Tracking progress in controlling the WMSD hazards, particularly if prioritizing of control of the hazards is necessary.
- Communication of results of the job hazard analysis to other areas of the workplace (e.g., procurement, human resources, maintenance, design, and engineering) whose assistance may be needed to successfully control the WMSD hazard.
- Identification of hazards when equipment is changed re-designed or purchased and when change occurs in processes or facilities.

Control Methods

- **Engineering Controls** ~~w~~here feasible, are the preferred method for controlling WMSD hazards. Engineering controls are the physical changes to jobs that control exposure to WMSD hazards. Engineering controls act on the source of the hazard and control employee exposure to the hazard without relying on the employee to take self-protective action or intervention. Examples of engineering controls for WMSD hazards include changing, modifying or redesigning the following:
  - Workstations
  - Tools
  - Facilities
  - Equipment

- Materials
- Processes

- **Work Practice Controls** are controls that reduce the likelihood of exposure to WMSD hazards through alteration of the way a job or physical work activities are performed. Work practice controls also act on the source of the hazard. However, instead of physical changes to the workstation or equipment, the protection works practice controls provided is based upon the behavior of managers, supervisors and employees to follow proper work methods. Work practice controls include procedures for safe and proper work methods. Work practice controls include procedures for safe and proper work that are understood and followed by managers, supervisors and employees.
  Examples of work practice controls for WMSD hazards include:

  - Safe and proper work techniques and procedures that are understood and followed by managers, supervisors and employees.
  - Conditioning period for new or reassigned employees

  - Training in the recognition of MSS hazards and work techniques that can reduce exposure or ease task demands and burdens.

  Administrative Controls are procedures and methods, typically instituted by the employer, that significantly reduce daily exposure to WMSD hazards by altering the way in which work is performed. Examples of administrative controls for WMSD hazards include:

  - Employee rotation
  - Job task enlargement
  - Adjustment of work pace (e.g., slower pace)
  - Redesign of work methods
  - Alternative tasks
  - Rest breaks

- **Personal Protective Equipment (PPE)** may be used as an interim control but will not be used as a permanent control where other controls are feasible. PPE used for this purpose will provide it at no cost to employees.

Continuing Control Process

After implementation of feasible permanent controls, the possibility exists that WMSD may continue or re-occur. In these cases, the following steps will be taken.

- Promptly check out employee reports of signs and symptoms of WSDS to determine whether medical management is needed.
- Promptly identify and analyze the WMSD hazards and develop a plan for controlling them.
- Track progress in implementing the plan and measure success in eliminating or reducing WSDS further.
- Continue to look for solutions for the problem job and implement feasible ones as soon as possible.

ELEMENT 4: TRAINING

Training will be provided to:

- All employees in problem jobs, and all employees in similar jobs that have been identified as problem jobs
- Their supervisors
- All persons involved in setting up and managing the ergonomics program.

Training Topics

FOR	EMPLOYEES MUST UNDERSTAND
Employees in problem jobs, employees in similar jobs that are problem jobs, and their supervisors	• How to recognize WMSD signs and symptoms, and the importance of early reporting. • How to report WMSD signs, symptoms and hazards, and make recommendations. • WMSD hazards in their jobs and the general measures they must follow to control WMSD hazards. Job-specific controls and work practices that have been implemented in their jobs. • The ergonomics program and their role in it. • The requirements of this standard.
Persons involved in setting up and managing the ergonomics program	• The ergonomics program and their role in it. • How to identify and analyze WMSD hazards • How to identify, evaluate and implement measures to control WMSD hazards. • How to evaluate the effectiveness of ergonomics program.

Training Frequency

FOR	TRAINING WILL BE PROVIDED
Employees in problem jobs, employees, in similar jobs that are problem jobs, and their supervisors	• When the program is first set up in their jobs. • When they are initially assigned to problem jobs. • After control measures are implemented in their jobs. • Periodically as needed (i.e., significant changes to the job, new WSDS or WMSD hazards are identified in the job, unsafe work practices observed) and at least every 3 years.
Persons involved in setting up and managing the ergonomics program	• When they are initially assigned to setting up and managing the ergonomics program. • Periodically as needed (i.e., program deficiencies revealed in evaluation, significant changes in ergonomics program) and at least every 3 years.

ELEMENT 5: MEDICAL MANAGEMENT

Axcon will make available prompt and effective medical management whenever an employee has a WMSD. (This means that when an employee reports signs or symptoms of a WMSD. All reports will be processed to determine whether medical management is necessary). Medical management, including recommended work restrictions, will be provided at no cost to the

employee. Medical treatment protocols for WSDS will be established by the health care professions.

Reports of WSDS

- When reports of WSDS are made, employees will be provided with prompt access to health care professionals (HCPs) for effective evaluation, treatment and follow up.
- Information will be provided to HCPs to help ensure medical management is effective.
- Written medical opinion will be obtained from the HCP and the employee will be promptly provided a copy.

Information to be provided to the health care professional

- Descriptions of employee s job and hazards identified in the hazard analysis Descriptions
- of available changes to jobs or temporary alternative duty to fit the employee s capabilities during the recovery period.
- A copy of this program OSHA standard, with medical management requirements pointed out.
- Opportunities to conduct workplace walkthroughs.

Health care professional written opinion

- The HCP s written opinion must contain:
    - The work-related medical conditions related to the WMSD reported
    - Recommended work restrictions, where necessary, and follow-up for the employee during the recovery period.
    - A statement that the HCP has informed the employee about results of the evaluation and any medical conditions resulting from exposure to WMSD hazards that require further evaluation or treatment.
    - A statement that the HCP has informed the employee about other physical activities that could aggravate the WMSD during the recovery period.

- To the extent permitted and required by law, employee privacy and confidentiality will be maintained regarding medical conditions identified during the medical management process. HCPs will be instructed not to reveal in the written opinion or in any other communication with your specific findings, diagnoses or information that is not related to WMSD hazards in the employee s job.

Work Restriction Policy

- Work restrictions recommended for the employee will be provided during the recovery period.
- The employee s total normal earnings, seniority, rights and benefits will be maintained when work restrictions are prescribed or are voluntarily provided by Axcon.

Necessary periodic follow-ups with the HCP will be provided for the employee during the recovery period.

Continuance of Work Restrictions Policy

Employee s total normal earnings, seniority, rights and benefits will be maintained when work restrictions are recommended by the HCP or voluntarily provided by Axcon until the first of the following occurs:

- The employee is recovered and able to return to the job.
- Effective measures are implemented that control WSDS hazards to the extend the job does not pose risk of harm to the employee even during the recovery period
- There is a final medical determination that the employee is permanently unable to return to the job.
- 6 months have passed.

Compensation Policy

Direct compensation (total normal earnings, seniority, rights and benefits) may be reduced by the amount an employee receives during the work restriction period from any of the following:

- Worker s compensation payments for lost earnings
- Payments for lost earnings from a compensation or insurance program that is publicly -funded or funded by Axcon.
- Income from employment with another employer made possible by the work restrictions.

ELEMENT 6: PROGRAM EVALUATION

Evaluation of the ergonomics program and controls will be conducted periodically and at least every 3 years, to ensure effective administration and management and compliance with regulatory requirements.

Program Evaluation Process

The following procedures will be used to evaluate the effectiveness of the ergonomics program and control measures:

- Monitoring of program activities to ensure that all the elements of your ergonomics program are functioning.
- Selection and implementation of effectiveness measures, both activity and outcome measures, to evaluate the program and the controls to ensure that they are following regulatory requirements.

- Establishment of baseline measurements to provide a starting point for measuring the effectiveness of the program and the controls.

Program Evaluation Findings

All program deficiencies found will be corrected promptly.

EXAMPLES OF ACTIVITY MEASURES	EXAMPLES OF OUTCOME MEASURES
• Plan to implement ergonomics program has been developed. • Number of employee reports and recommendations. • Average time between employee reports and your response. Length of time since the last review of safety and health records. Number of hazards identified Number of employees who have received ergonomics information. Number of jobs analyzed. Number of jobs awaiting analysis. Number of employees interviewed for job analyses and remaining to be interviewed. Number of symptom surveys conducted. Number of jobs controlled. • Number of job changes made. • Number of employees trained and waiting to be trained. • Number of work hours devoted to the ergonomics program. • Annual expenditures on program and controls.	• Number of OSHA recordable SDS. • Reported symptoms of WSDS. • WMSD incidence rates per job title. • Number of workers compensation claims. • Number of lost-workdays WSDS. • Average lost workdays per WMSD. Severity rate of WSDS. Symptom survey results. Annual medical costs for WSDS. Average medical costs for per WMSD. Annual workers compensation costs. Average workers compensation costs per WMSD. Number of job transfer requests per job title. Employee absentee rates per job title. Annual employee turnover rates per job title.

ELEMENT 7: RECORDS

Written records of the program will be maintained if:

- There is more than one worksite or establishment in which this job is performed by employees.
- The job involves more than one level of supervision. The
- job involves shift work.

Records and Retention Requirements

The following table lists the required records and retention periods

Required Records	Retention Period
Employee reports and company responses	3 years
Results of job hazard analysis	3 years
Plan for controlling WMSD hazards	Or
Evaluation of program and controls	Until replaced by updated record

• Medical management records	The duration of the injured employees' employment plus 3 years ,

NOTE: Other regulatory requirements for record keeping of the Access to Employee Exposure and Medical Records Standard (29 CFR 1910.1020) will be followed in addition to the requirements of this program.

DEFINITION OF TERMS

Administrative controls are procedures and methods, typically instituted by the employer, that significantly reduce daily exposure to WMSD hazards by altering the way in which work is performed. Examples of administrative controls for WMSD hazards include:

- Employee rotation Job Task enlargement
- Adjustment of work pace (e.g., slower pace)

Redesign of work methods Alternative tasks
Rest breaks

Exercise programs (e.g., stretching) are not prohibited, but they are not administrative controls under the OSHA standard.

- **Effectiveness measures** are the indicators used to assess whether an ergonomics program and controls are successfully controlling WMSD hazards and reducing the number and severity of WSDS. Effectiveness measures include both activity and outcome measures.

- **Activity measures** are indicators used to measure interim accomplishments in building and maintaining an ergonomics program. These measures are used to assess the functioning of the various activities in your program (e.g., number of hazards identified, number of employees trained).
- **Outcome measures** are indicators used to quantitatively assess long-term success of the program and interventions that have been put into place (e.g., number of lost workdays, number of hazards controlled and severity of WSDS).

Engineering controls are physical changes to jobs that control exposure to WMSD hazards. Engineering controls act on the source of the hazard and control employee exposure to the hazard without relying on the employee to take self-protective action or intervention. Examples of engineering controls for WMSD hazards include changing, modifying or redesigning the following:

- Workstations
- Tools
- Facilities
- Equipment
- Materials

- Processes

- **Ergonomics** is the science of fitting jobs to people. Ergonomics encompasses the body of knowledge about physical abilities and limitations as well as other human characteristics that are relevant to job design. Ergonomic design is the application of this body of knowledge to the design of the workplace (i.e., work tasks, equipment, and environment) for safe and efficient use by workers. Good ergonomic design makes the most efficient use of worker capabilities while ensuring that job demands do not exceed those capabilities.

- **Ergonomics program** is a **systematic process** for anticipating, identifying, analyzing and controlling WMSD hazards.

    - **A process** is the activities, procedures, and practices that you set up to control WMSD hazards.
    - **Systematic** means these actions are ongoing and conducted on some routine basis that is appropriate to the conditions of your workplace.

Health care professionals are persons educated and trained in the delivery of health care services that are operating within the scope of their license, registration, certification, or legally authorized practice when they are performing the medical management requirements of this standard.

Job factors are workplace conditions and physical work activities that must be considered when conducting a job hazard analysis in order to determine whether WMSD hazards are present in a job. This standard covers the following job factors:

THIS PROGRAM COVERS THESE JOB FACTORS	INCLUDING THESE COMPONENTS OF JOB FACTORS
Physical demands of the work tasks or job	• Force • Repetition • Work postures • Duration • Local

THIS PROGRAM COVERS THESE JOB FACTORS	INCLUDING THESE COMPONENTS OF JOB FACTORS
Workstation layout and space	Work reaches Work heights Seating Floor surfaces Contact stress
Equipment used and objects handled	Size and shape • Weight and weight distribution Handles and grasp surfaces Vibration

Environmental conditions	• Cold and heat • Glare (as related to awkward postures)
Work organization	• Work-recovery cycles • Work rate • Task variability

- **Known hazard** means hazards in your workplace that you know are reasonably likely to cause or contribute to a WMSD. The following are known hazards covered by the OSHA ergonomic standard:

    - WMSD hazards identified in insurance reports.
    - WMSD hazards identified in consultant reports.
    - WMSD hazards identified in prior OSHA inspections.
    - WMSD hazards identified in self audits.
    - WMSD hazards identified and communicated to you by HCPs.
    - Accepted WMSD workers' compensation claims.

Manual handling operations are physical work activities meeting these criteria:

- They involve **lifting/lowering, pushing/pulling,** or **carrying**
- They involve exertion of considerable force because the particular load is heavy or the cumulative total of the loads during a workday is heavy (i.e., substantial loads)
  These manual handling work activities are a significant part of the employee's regular job duties.

Manufacturing operations cover a range of jobs that are directly involved in producing durable and non-durable goods. Manufacturing production jobs involve working supervisors and all non-supervisory employees who engage in fabricating, processing, assembling, and other services closely associated with manufacturing production. In this standard, manufacturing operations are limited to those that meet these criteria:

- They are performed in **manufacturing industries**
- They are **production jobs** performed by employees and their supervisors in those industries
- The production work activities are a significant part of the employee's regular job duties.

While each job must be considered based on its actual duties, the following table lists job categories that typically fall inside and outside this definition:

EXAMPLES OF MANUFACTURING PRODUCTION JOBS	EXAMPLES OF JOBS THAT TYPICALLY ARE NOT MANUFACTURING PRODUCTION JOBS

Assembly line jobs producing: - Products (durable and non-durable) - Subassemblies - Components and parts Pace assembly line jobs (assembling and disassembling) Piecework assembly jobs (assembling and disassembling) and other time critical assembly jobs Product inspection jobs (e.g., testers, weighters) Meat, poultry, and fish cutting and packing Binder jobs Machine operation Machine loading/unloading Apparel constructions jobs Food preparation assembly line jobs Commercial baking jobs Cabinetmaking • Tire building • Warehouse jobs in manufacturing facilities • Rework specialists • Maintenance personnel	Administrative personnel Clerical staff Supervisors and managers who do not perform production job Technical staff (e.g., engineering, product development) Analysts and programmers Sales and marketing Buyers/Procurement Customer service employees Mail room Security guards Cafeteria personnel Grounds personnel (gardeners, grounds keepers) Jobs in power plant in manufacturing facility Janitors

NOTE: Some jobs that are not manufacturing production jobs may still be manual handling jobs under this program or the OSHA standard.

- **Medical management** is the process for assuring that employees with WSDS are provided with the following at no cost to employees:
    - A mechanism for early reporting of signs and symptoms of WSDS
    - Early assessment of reports
    - Access to prompt and effective evaluation, treatment and follow-up by HCPs
    - Work restrictions recommended by HCPs

Medical management also includes the process of communicating with HCPs. Medical management does not include establishing specific medical treatments for WSDS. Medical treatment protocols and procedures are established by the health care professions.

- **Musculoskeletal disorders (SDS)** are injuries and disorders of the muscles, nerves, tendons, ligaments, joints, cartilage and spinal disks. Examples of SDS include:
    - Carpal tunnel syndrome

- Epicondylitis
- Synovitis
- Muscle strains
- Raynaud's phenomenon
- Sciatica
- Tendinitis
- Rotator cuff tendonitis
- De Quervains disease
- Carpet layers knee
- Trigger finger
- Low back pain

No cost to employees means that training, medical management and other requirements of this standard are provided to employees free of charge and while they are on "the clock."

Periodically means that a process or activity, such as records review or training, is performed on a **regular basis** which is appropriate for the conditions in the workplace. Periodically also means that the process or activity is conducted **as needed,** such as when significant changes are made in your workplace.

Personal protective equipment (PPE) is interim control devices worn or used while working to protect employees from exposure to WMSD hazards. In this standard, PPE includes items such as gloves and knee pads.

Physical work activities are the physical demands, exertions or functions of the task or job.

Problem job is any job in which you must set up a full ergonomics program, including job hazard analysis. The following are problem jobs in this standard:

- A manufacturing or manual handling job where a known hazard exists or a WMSD is reported
- Any other job in your workplace where a WMSD is reported

A similar job in which employees are exposed to the same WMSD hazard as employees in a problem job.

Representative sampling is a strategy to adequately characterize exposure of a group of employees (i.e., employees in a problem job) by analyzing the exposure of a subset of that group rather than all members of the group. The employees selected for representative sampling analysis must be those who are reasonably believed to have the greatest exposure to WMSD hazards in the problem job, including each work shift, to correctly characterize and not underestimate the exposure of any employee in the problem job.

Resources mean the provisions necessary to develop implement and maintain an effective ergonomics program. Resources include monetary provisions (e.g., equipment to perform job hazard analysis, training materials, controls) as well as other provisions (e.g., time to conduct job hazard analysis or review safety and health records).

Safety and health records are information generated at or for your workplace. Records include, for

example, OSHA 300 logs, workers compensation claims, WMSD-related medical reports and infirmary logs, employee reports of WSDS or WMSD hazards, and insurance or consultant reports prepared for your workplace.

- **Signs** (of WSDS) are objective physical finds that are the basis for an OSHA recordable MSD. Examples of signs of WSDS include:

  - Decreased range of motion
  - Decreased grip strength
  - Loss of function
  - Deformity
  - Swelling
  - Cramping
  - Redness/loss of color

Similar jobs that involve the same physical work activities as a problem job, even if they are not defined by the same title or classification.

- **Symptoms** (of WSDS) are physical indications that your employee may be developing a WMSD. Symptoms can vary in their severity depending on the amount of exposure the employee has had. Often symptoms appear gradually as muscle fatigue or pain at work that disappears during rest. Usually symptoms become more sever as exposure continues (e.g., tingling continues when your employee is at rest, numbness or pain make it difficult to perform the job, and finally pain is so severe that the employee is unable to perform physical work activities). Examples of symptoms WSDS include:

  - Numbness
  - Burning
  - Pain
  - Tingling ○ Aching ○ Stiffness

Temporary alternative duty jobs are assignments given to employees with WSDS during the recovery period until the health care provider releases the employee from work restrictions.

- **Work practice controls** are controls that reduce the likelihood of exposure to WMSD hazards through alteration of the manner in which a job or physical work activities are performed. Work practice controls also act on the source of the hazard. However, instead of physical changes to workstation or equipment, the protection work practice controls provide is based upon the behavior of managers, supervisors and employees to follow proper work methods. Work practice controls include procedures for safe and proper work that are understood and followed by manages, supervisors and employees. Examples of work practice controls for WMSD hazards include:

  - Safe and proper work techniques and procedures that are understood and followed by managers, supervisors and employees.

- Conditioning period for new or reassigned employees.
- Training in the recognition of MSD hazards and work techniques that can reduce exposure or ease task demands and burdens.

Work-related means the physical work activities or workplace conditions in the job are reasonably likely to be causing or contributing to a reported MSD. For this standard, an MSD is work-related if:

- **WMSD hazards** are present in a job where an MSD has been reported;
- The hazards are reasonably likely to cause or contribute to the **type** of MSD reported
- A **significant part** of the employee's **regular job duties** involves exposure to these WMSD hazards (i.e., not incidental exposure).

Work restrictions are any limitation placed on the manner in which an employee with a WMSD performs a job during the recovery period. Work restrictions include modifications and restrictions to the employee's current job, such as limiting or reducing the intensity or duration of exposure; and reassignment to temporary alternative duty jobs. Work restrictions also include complete removal from the workplace.

- **WMSD hazards** are workplace conditions or physical work activities that cause or are reasonable likely to cause or contribute to a WMSD.

FALL PROTECTION PROGRAM

PURPOSE

Axcon Corporation, Inc. is firmly committed to providing each of its employees a safe and healthy work environment. It is the policy of Client to ensure all personnel are protected from the hazards of falling from elevated walking/working surfaces over 6 feet. To attain this goal, all employees are required to protect themselves and their co-workers from fall hazards.

Program Coordinator, a qualified individual, will have the overall responsibility for the creation and coordination of the program for Axcon Corporation, Inc. and copies of this program will be in each employee's safety manual and at our corporate office.

The General Superintendent/Site Superintendent and designated Lead person will have the responsibility of conducting regular inspections of site to evaluate the fall protection systems to ensure proper installation, maintenance, and use.

Each employee of Axcon on site will be responsible for following the requirements of this program relative to the systems being used.

RESPONSIBILITIES

Axcon has taken the responsibility to initiate and maintain a Fall Protection Program. The program will provide for regular inspections of the jobsite to evaluate overall fall protection needs and areas of concern. This regular site inspection will evaluate all relevant types of fall protection systems; devices and equipment required by the program and OSHA standards to assure

their proper installation, maintenance and use. Ensure all accidents/incidents and injuries pertaining to a fall are investigated. **Axcon Corporation, Inc. does not use site specific fall protection plans.**

Any defective fall protection items found shall be immediately corrected and/or tagged out of service and removed from the site. Any damaged or inadequate systems, such as guardrails and covers, shall be immediately repaired or replaced. Employees will be removed from the area of the fall hazard if the corrections cannot be made immediately.

All employees including temporary employees will be appropriately informed and trained by a competent person on the requirements of these procedures and OSHA standards relating to fall protection. This training and instruction will enable employees to recognize potential fall hazards on the site and the procedures to be followed in order to prevent a fall.

Retraining shall reestablish employee proficiency and introduce new or revised control methods and procedures, as necessary. Retraining shall be provided for all authorized and affected employees whenever there is: An annual basis or a change in job assignment or Axcon Corporation, Inc. has reason to believe that there are deviations from or inadequacies in the employee's knowledge or use of fall restraint systems or procedures.

DEFINITIONS

- **Competent Person** An individual who exhibits the following:
  - Knowledge of fall protection equipment, including the manufacturer s ' recommendations and instructions for proper use, inspection, and maintenance.
  - Able to identify existing and potential fall hazards.
  - Authority to take corrective actions to eliminate hazards.
  - Knowledge of the rules contained in this section regarding the erection, use, inspection, and maintenance of all protection equipment and systems.

- **Drop Line** - An independent lifeline secured to an upper anchorage for attaching a lanyard or a fall protection device. This line must be at least a ¾ in. manila rope or ½ in. nylon rope.

- **Fall-Restraint System** An approved device and other necessary components that function together to prevent an employee from falling to a lower level. When standard guardrails are selected, compliance with applicable sections governing their construction and use shall constitute approval.

- **Fall Distance** The actual distance from the worker s 'support to the level where a fall would stop.

- **Hardware** - Snap hooks, D-rings, buckles carabineers, adjusters, and C-rings that are used to attach the components of a fall protection system together.

- **Lanyard** A flexible line of webbing, rope, or cable used to secure a harness to a lifeline or an anchorage point, usually 2, 4, or 6-ft. long.

- **Lifeline** A line from a fixed anchorage or between two anchorages or between two anchorages so that an employee is secured to prevent the worker from falling to a lower level.

- **Rope Grab** A fall arrester that is designed to move up or down a lifeline that is suspended from a fixed overhead or horizontal anchorage point or a lifeline which the belt or harness is attached. In the event of a fall, the rope grab locks onto the live line rope through compression to arrest the fall. The use of a grab device is restricted for fall restraint applications.

FALL PROTECTION EQUIPMENT, SYSTEMS, AND DEVICE TRAINING

TRAINING DOCUMENTATION

Axcon Corporation, Inc. documents all Fall Protection Training with the completion and filing of each employees annual training exam; located at the end of this section. Exams are stored in the Milton, FL office and or online in the company portal.

GUARDRAILS AND GUARDRAIL SYSTEMS

Guardrail system means a barrier erected to prevent employees from falling to lower levels. The top edge height of top rails must be 42 inches (plus or minus 3 inches) above the walking/working level. When employees are using stilts, the top edge height of the top rail must be increased an amount equal to the height of the stilts.

Top rails and mid-rails of guardrails systems must be at least one-quarter inch nominal diameter or thickness to prevent cuts and lacerations. If wire rope is used for top rails, it must be flagged at not more than 6 feet intervals with high-visibility material. Steel and plastic banding cannot be used as top rails or mid-rails. Manila, plastic, or synthetic rope used for top rails or mid-rails must be inspected frequently to ensure strength and stability. Use an inspection tag, sign and date your inspections. Attach tag at anchor point for referral.

Mid-rails, screens, mesh, intermediate vertical members, or equivalent structural members are installed between the top edge of guardrail systems and walking/working surface when there is no wall or parapet wall at least 21 inches high.

Mid-rails are installed midway between the top edge or guardrail system and the walking/working surface. Screens and mesh, when used, extend from the top rail to the walking/working level and along the entire opening between rail supports.

Guardrail systems must be capable of withstanding, without failure, a force of at least 200 pounds applied within 2 inches of the top edge, in any outward or downward direction, at any point. Mid-rails, screens, mesh, intermediate vertical members, solid panels, and equivalent structural members must be capable of withstanding, without failure, a force of at least 150 pounds applied in any downward or outward direction at any point.

Guardrail systems must be surfaced as to prevent injury from punctures or lacerations and snagging of clothing. If using steel cable, it must be smooth and free of broken wires.

Guardrails systems used at hoisting areas required a chain, gate or removable guardrail section

placed across the access opening between guardrail sections when hoisting operations are not taking place. Wire cable of no less than 3/8 diameter may be used with proper anchorage.

At holes, guardrail systems must be set up on all unprotected sides or edges. When holes are used for the passage of materials, the hole shall have not more than two sides with removable sections. When the hole is not in use, it must be covered or provided with guardrails along all unprotected sides or edges.

If guardrail systems are used around holes that are used access points (such as ladder-ways), gates must be used, or the point of access must be offset to prevent accidental walking into the hole.

If guardrails are used at unprotected sides or edges of ramps and runways, they must be erected on each unprotected side or edge.

PERSONAL FALL ARREST SYSTEMS

These consist of an anchorage, connectors, and a body belt or body harness and may include a deceleration device, lifeline, or suitable combinations. If a personal fall arrest system is used for fall protection, it must do the following:

- Limit maximum arresting force on an employee to 1,800 pounds when used with a body harness.
- Be rigged so employees can neither free fall more than 6 feet, nor contact any lower level.
- Bring an employee to a complete stop and limit maximum decelerations distance an employee travels to 3.5 feet.
- Have sufficient strength to withstand twice potential impact energy of an employee free falling a distance of 6 feet or the free fall distance permitted by the system, whichever is less.

Personal fall arrest systems must be inspected prior to each use for wear damage, and other deterioration. Defective components must be removed from service. Dee-rings and snap hooks must have a minimum tensile strength of 5,000 pounds.

Snap hooks shall be sized to be compatible with the member to which they will be connected or shall be of a locking configuration. Effective January 1, 1998, only locking type snap hooks is permissible. This means they must have a double action to be released.

On suspended scaffolds or similar work platforms with horizontal lifelines, which may become vertical lifelines, devices used to connect to horizontal lifeline must be capable of locking in both directions on the lifeline.

Horizontal lifelines will be designed, installed and used under the supervision of a qualified person, as part of a complete fall arrest system maintaining a safety factor of at least two. Lifelines shall be protected against being cut or abraded.

Self-retracting lifelines and lanyards that automatically limit free fall distance to 2 feet or less shall can sustain a minimum tensile load of 3,000 pounds applied to the device with the lifeline or lanyard in the fully extended position. Example: Mini-Lite Lanyard.

Self-retracting lifelines and lanyards that do not limit free fall distance to 2 feet or less, rip stitch lanyards, and tearing or deforming lanyards shall can sustain a minimum tensile load of 5,000 pounds applied to the device with the lifeline or lanyard in the fully extended position.

Anchorages shall be designed, installed, and used under the direct supervision of a qualified person, as part of a complete personal fall arrest system that maintains a safety factor of at least two, capable of supporting at least twice the weight expected to be imposed upon it.

Anchorages used to attach personal fall arrest system shall be independent of any anchorage being used to support or suspend platforms and must be capable of support at least 5,000 pounds per person attached.

Attachment point of a body harness will be in the center of the wearers back near shoulder level, or above the wearer s head.

Body harnesses and components will be used only for employee protection and not to hoist materials. Personal fall arrest systems and components subjected to impact loading will be immediately removed from service and not used again for employee protection.

Personal fall arrest systems may not be attached to guardrail systems. When a personal fall arrest system is used at hoist areas, it is rigged to allow movement of employees only as far as the edge of the walking/working surface.

Prompt rescue of employees will be provided in the event of a fall when they cannot rescue themselves. Consider the risk to yourself or others before attempting rescue. Notify emergency personnel immediately.

POSITIONING DEVICE SYSTEMS

Positioning devices must be rigged so an employee cannot free fall more than 2 feet. Body belts maybe used for positioning only and not as fall protection.

They shall be secured to an anchorage capable of supporting at least twice the potential impact load of an employees fall or 3,000 pounds, whichever is greater.

Requirements for snap hooks, d-rings and other connectors used with positioning devices systems must meet the same criteria as those for personal fall arrest systems.

CONTROLLED ACCESS ZONES

Controlled Access Zone (CAZ) means an area, which certain work (e.g., overhand bricklaying) may take place without the use of guardrail systems, personal fall arrest system, or safety net systems and access to the zone is controlled.

COVERS/HOLES

Hole means 2 inches or more in its least dimension, in a floor, roof, or other walking/working surface. Covers for holes in floors, roofs, and other walking/working surfaces will meet the following requirements:

- Covers located in roadways and vehicular aisles must can support, without failure, at least twice the maximum axle load of the largest vehicle expected to cross over the cover.
- All other coves must can support, without failure, at least twice the weight of employees, equipment, and materials that may be imposed.
- All covers will be secured when installed to prevent accidental displacement by wind, equipment, or employees.
- All covers will be color-coded or marked with the word HOLE or COVER to provide warning of the hazard.

SAFETY NET SYSTEMS

Safety net systems shall be installed at close to the work surface as possible but in no case more than 30 feet below the surface. Safety nets are to be designed, installed and inspected by competent persons only.

Safety nets shall extend outward from the outer most projection as follows:

Vertical Distance from Working Level to Horizontal Plane of Net	Minimum Required Horizontal Distance Net Must Extend from Edge of Work Surface
Up to 5 ’	8 ’
More than 5 up to 10	10
More than 10	13

Safety nets shall be installed with sufficient clearance under them.

On the job testing, consisting of a 400 lb. bag of sand dropped from the highest walking/working surface into the net, must be done after initial installation, whenever relocated, after major repairs, and a six-month interval if left in place.

Nets must be inspected at least once a week and defective nets must be removed from service.

Debris shall be removed as soon as possible and at least before the next shift.

Maximum mesh size shall be 36 inches square (6 x 6).”

Net borders shall have a 5,000 lb. minimum breaking strength.

Connections between net panels shall be as strong as the integral net components and shall be

spaced not more than 6 inches apart.

INSPECTION

Prior issuance, a qualified person shall inspect all safety harnesses, lanyards, and lifelines. In addition, the personal fall arrest system shall be inspected on a quarterly basis following the initial inspection and prior to each use by the wearer. Both the initial and quarterly inspections must be documented. If the wearer feels the safety harness, lanyard, or lifeline is not in perfect condition, it shall be reported immediately for inspection. A visual inspection shall consist of the following:

- Harness
  - Stitching
  - Rivets
  - Buckles and buckle tabs
  - D rings
  - Rust and abrasion
  - Burns
  - General appearance

- Lanyards and Lifelines
  - Frayed strands
  - Broken strands
  - Rot
  - Burns
  - Corrosion
  - General appearance

_____ _____

Employee (Print Name) Date

_____

Employee (Signature)

FALL PROTECTION WRITTEN EXAM

1. A Fall Protection Program must have regular inspections to evaluate fall protection needs. What does this include?

   A. Safety devices and their proper use.
   B. Recognizing potential fall hazards.
   C. OSHA standards to assure proper installation, maintenance and use of fall protection systems.
   D. All of the above.

2. An Electrical Contractor working on the mezzanine cuts out the handrail to bring his

equipment up. It s in an area where you re working 50 away. He s not installing a guardrail and you don t have any material to erect a barrier. What should you do?

A. At 50 away there s no immediate danger, continue working.
B. Move out of the area and inform others of a possible hazard. Don t work in the area until the hazard has been corrected.
C. The Electrical contractor is responsible for removing the handrail and should install a guardrail.
D. All of the above.

3. How often do you need to inspect Personal Fall Arrest Systems?

A. Daily
B. Weekly
C. Annually
D. Before each use

4. What is the standard for Guardrail height above walking/working level?

A. 48 inches Top Rail
B. 36 inches plus or minus 3 ”
C. 42 inches Top Rail plus or minus 3 /Mid Rail 21 ”

5. There s a 2 hold in the floor where a pipe was removed. What should be done?

A. When it s in a walkway or work surface it must be marked with caution tape.
B. Cover the hole with a piece of wood and write HOLE on it.
C. Cover the hole with a material that will hold at least twice the weight of employees, equipment and materials that may be imposed, secure it firmly and mark it HOLE or COVER .

6. When must you consider using fall protection?

A. Any work which is 6 feet or more above a lower level.
B. Any work above 10 feet off the floor.
C. When using a ladder above operating machinery
D. B & C
E. A, B & C

7. You are working next to a floor opening from a 6 stepladder hanging a conveyor. The floor opening is guarded on all four sides. Is it necessary to wear a personal fall arrest device? Why?_____

_____

_____

_____

8. What is the anchorage point? _____
_____
_____

9. How much weight must an anchorage point be capable of supporting? _____
For two people? _____

10. Before using a personal fall arrest system a qualified person must do what?
Identify the _____
_____

11. Its Okay to use a positioning belt as long as it will support 3,000 pounds in a 6 fall.

True _____
False _____

FLAMMABLE LIQUIDS

PURPOSE

Proper storage and use of flammable liquids can significantly reduce the possibility of accidental fires and injury to employees. To minimize risk to life and properly, the requirements of NFPA 30 & 321 and OSHA Standard 1910.106 have been implemented. SDS for flammable liquids are kept in the Superintendent s office and each storage location.

RESPONSIBILITIES

Management

- Provide proper storage for flammable liquids
- Ensure proper training is provided to employees who work with flammable liquids
- Ensure containers are properly labeled

Supervisors

- Provide adequate training in the use and storage of flammable liquids
- Monitor for proper use and storage
- Keep only the minimum amount required on hand
- Ensure SDS are current for all flammable liquids

Employees

- Follow all storage and use requirements
- Report deficiencies in storage and use to supervisors
- Immediately report spills to supervisors

HAZARD CONTROL

Engineering Controls

- Properly designed flammable storage areas Ventilated
- Storage areas
- Grounding Straps on Drums and dispensing points

Administrative Controls

- Designated storage areas
- Limiting amount of flammable liquids in use and storage
- Employee Training

Limited & controlled access to bulk storage areas Posted
- Danger, Warning and Hazard Signs

DEFINITIONS

- **Flammable Liquid** ~~a~~ liquid with a flashpoint below 100ºF
    - Class IA ~~F~~lashpoint below 73ºF and boiling point below 100ºF
    - Class IB Flas~~h~~point below 73ºF and boiling point above 100ºF
    - Class IC Flash~~p~~oint at or above 73ºF and below 100ºF
- **Combustible Liquids** ~~A~~ liquid having a flash point at above 100ºF.
- **Class II Combustibles** F~~l~~ashpoint above 100ºF and below 140ºF.
- **Class III Combustibles** ~~F~~lashpoint at or above 140ºF.
    - Subclass IIIA ~~F~~lashpoint at or above 140ºF and below 200ºF
    - Subclass IIIB ~~F~~lashpoint at or above 200ºF

STORAGE & USAGE OF FLAMMABLE LIQUIDS

- Storage of flammable liquids shall be in NFPA approved flammable storage lockers or in low value structures at least 50 feet from any other structure. Do not store other combustible materials near flammable storage areas or lockers.
- Bulk drums of flammable liquids must be grounded and bonded to containers during dispensing.
- Portable containers of gasoline or diesel are not to exceed 5 gallons.
- Safety cans used for dispensing flammable or combustible liquids shall be kept at a point of use.
- Appropriate fire extinguishers are to be mounted within 75 feet of outside areas containing flammable liquids, and within 10 feet of any inside storage area for such materials.
- Storage rooms for flammable and combustible liquids must have explosion-proof light fixtures.

- Bulk storage of gasoline or diesel is kept in above ground tanks. Tank areas are diked to contain accidental spills. Tanks shall be labeled IAW NFPA guidelines. All tank areas shall be designated no smoking ~~no~~ hot work ~~no~~ open flame areas.
- No flames ~~hot~~ work or smoking is prohibited in flammable or combustible liquid storage areas.
- The maximum amount of flammable liquids that may be stored in a building are:
    - 20 gallons of Class IA liquids in containers
    - 100 gallons of Class IB, IC II, or III liquids in containers
    - 500 gallons of Class IB, IC, II or III liquids in a single portable tank.

- Flammable liquid transfer areas are to be separated from other operations by distance or by construction having proper fire resistance.
- When not in use flammable liquids shall be kept in covered containers.
- Class I liquids may be used only where there are no open flames or other sources of ignition within the possible path of vapor travel.
- Flammable or combustible liquids shall be drawn from or transferred into vessels, containers, or portable tanks within a building only through a closed piping system, from safety cans, by means of a device drawing through the top, or from a container or portable tanks by gravity through an approved self-closing valve. Transferring by means of air pressure on the container or portable tanks shall be prohibited.
- Maintenance and operating practices shall be in accordance with established procedures which will tend to control leakage and prevent the accident escape of flammable or combustible liquids. Spills shall be cleaned up promptly.
- Combustible waste material and residue in a building or unit operating area shall be kept to a minimum, stored in covered metal receptacles and disposed of daily.
- Rooms in which flammable or combustible liquids are stored or handled by pumps shall have exit facilities arranged to prevent occupants from being trapped in the event of fire.
- Inside areas in which Class I liquids are stored or handled shall be heated only by means not constituting a source of ignition, such as steam, hot water or forces central systems located away from the area.

Designated Flammable Storage Areas are:

- Flammable storage cabinets on the north warehouse.
- Flammable storage cabinets on the south warehouse.

FORK LIFT SAFETY

PURPOSE

Material handling is a significant safety concern. During the movement of products and materials there are numerous opportunities for personal injury and property damage if proper procedures and caution are not used. This chapter applies to all powered industrial tucks, hoist & lifting gear. The information in this chapter shall be used to train prospective industrial truck

operators and provide the basis for refresher and annual retraining. OSHA reference for Powered Industrial Trucks is 1910.178.

PRE-QUALIFICATIONS FOR POWERED INDUSTRIAL TRUCK (PIT) OPERATORS

All candidates for PIT operators must meet the following basic requirements prior to starting initial or annual training:

- Must have no adverse vision problems that cannot be corrected by glasses or contacts. No
- adverse hearing loss that cannot be corrected with hearing aids.
- No physical impairments that would impair safe operation of the PIT.
- No neurological disorders that affect balance or consciousness.
- Not taking any medication that affects perception, vision, or physical abilities.

TRAINING

Training for Powered Industrial Truck (PIT) Operators shall be conducted by an experienced operator, selected by management. All operational training shall be conducted under close supervision. All training and evaluation must be completed before an operator is permitted to use a Powered Industrial Truck (forklift, etc) without continual & close supervision. Training consists of:

Trainees may operate a powered industrial truck only:

- Under the direct supervision of persons, selected by management, who have the knowledge, training, and experience to train operators and evaluate their competence.
- Where such operation does not endanger the trainee or other employees.

Training Content

Training consists of a combination of formal instruction, practical training (demonstrations performed by the trainer and practical exercises performed by the trainee), and evaluation of the operator s ̓performance in the workplace.

Initial Training

Powered industrial truck operators shall receive initial training in the following topics:

Truck-related training topics:

- Operating instructions, warnings, and precautions for the types of truck the operator will be authorized to operate
- Differences between the truck and the automobile
- Truck controls and instrumentation: where they are located, what they do, and how they work

- Engine or motor operation
- Steering and maneuvering
- Visibility (including restrictions due to loading)
- Fork and attachment adaptation, operation, and use limitations
- Vehicle capacity
- Vehicle stability
- Any vehicle inspection and maintenance that the operator will be required to perform
- Refueling and/or charging and recharging of batteries
- Operating limitations
- Any other operating instructions, warnings, or precautions listed in the operator's manual for the types of vehicle that the employee is being trained to operate

Workplace-related topics:

- Surface conditions where the vehicle will be operated
- Composition of loads to be carried and load stability
- Load manipulation, stacking, and unstacking
- Pedestrian traffic in areas where the vehicle will be operated
- Narrow aisles and other restricted places where the vehicle will be operated
- Hazardous (classified) locations where the vehicle will be operated
- Ramps and other sloped surfaces that could affect the vehicle's stability
- Closed environments and other 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

Refresher training and evaluation

Refresher training, including an evaluation of the effectiveness of that training, shall be conducted to ensure that the operator has the knowledge and skills needed to operate the powered industrial truck safely. Refresher training in relevant topics shall be provided to the operator when:

- The operator has been observed to operate the vehicle in an unsafe manner
- The operator has been involved in an accident or near-miss incident
- The operator has received an evaluation that reveals that the operator is not operating the truck safely.
- The operator is assigned to drive a different type of truck
- A condition in the workplace changes in a manner that could affect safe operation of the truck
- Once every 3 years an evaluation will be conducted of each powered industrial truck operator's performance.

SAFE OPERATING PROCEDURES (SOP) & RULES

- Only authorized and trained personnel will operate PITs.
- All PITs will be equipped with a headache rack, fire extinguisher, rotating beacon, back-up

alarm and seat belts. Seat belts will be worn always by the Operator.

- The operator will perform daily pre- and post- trip inspections.
- Any safety defects (such as hydraulic fluid leaks; defective brakes, steering, lights, or horn; and/or missing fire extinguisher, lights, seat belt, or back-up alarm) will be reported for immediate repair or have the PIT taken "Out of Service."
- Operators will follow the proper recharging or refueling safety procedures.
- Loads will be tilted back and carried no more than 6 inches from the ground. Loads that restrict the operator's vision will be transported backwards.
- PITs will travel no faster than 5 mph or faster than a normal walk.
- Hard hats will be worn by PIT operators in high lift areas.
- Operator will sound horn and use extreme caution when meeting pedestrians, making turns and cornering.
- Passengers may not ride on any portion of a PIT. Only the operator will ride PITs. "NO PASSENGERS" decals will be affixed on all PITs.
- If PITs are used as a man lift, an appropriate man lift platform (cage with standard rails and toe-boards) will be used.
- Aisle will be maintained free from obstructions, marked and wide enough (six foot minimum) for vehicle operation.
- Lift capacity will be marked on all PITs. Operator will assure load does not exceed rated weight limits.
- When un-attended, PITs will be turned off, forks lowered to the ground and parking brake applied.
- All PITs (with exception of pallet jacks) will be equipped with a multi-purposed dry chemical fire extinguisher. (Minimum rating; 2A:10B:C)
- Operators are instructed to report all accidents, regardless of fault and severity, to management. Management will conduct an accident investigation.
- When loading rail cars and trailers, dock plates will be used. Operators will assure dock plates are in good condition and will store on edge when not in use.

- Rail cars and trailers will be parked squarely to the loading area and have wheels chocked in place. Operators will follow established Docking/Un-Docking Procedures.

CHANGING AND CHARGING STORAGE BATTERIES

- Battery charging installations shall be located in areas designated for that purpose. Facilities
- shall be provided for flushing and neutralizing spilled electrolyte, for fire protection, for protecting charging apparatus from damage by trucks, and for adequate ventilation for dispersal of fumes from gassing batteries.
- A conveyor, overhead hoist, or equivalent material handling equipment shall be provided for handling batteries.
- Reinstalled batteries shall be properly positioned and secured in the truck. A
- carboy tilter or siphon shall be provided for handling electrolyte.
- When charging batteries, acid shall be poured into water; water shall not be poured into acid.
- Trucks shall be properly positioned and brake applied before attempting to change or

charge batteries.

- Care shall be taken to assure that vent caps are functioning. The battery (or compartment) cover(s) shall be open to dissipate heat.
- Smoking is prohibited in the charging area.
- Precautions shall be taken to prevent open flames, sparks, or electric arcs in battery charging areas.
- Tools and other metallic objects shall be kept away from the top of uncovered batteries.

TRUCKS AND RAILROAD CARS

- The flooring of trucks, trailers, and railroad cars shall be checked for breaks and weakness before they are driven onto.
- The brakes of highway trucks shall be set and wheel chocks placed under the rear wheels to prevent the trucks from rolling while they are boarded with powered industrial trucks. Wheel
- stops or other recognized positive protection shall be provided to prevent railroad cars from moving during loading or unloading operations.
- Fixed jacks may be necessary to support a semi-trailer and prevent upending during the loading or unloading when the trailer is not coupled to a tractor.
- Positive protection shall be provided to prevent railroad cars from being moved while dockboards or bridgeplates are in position.

OPEATIONS

- If at any time a powered industrial truck is found to be in need of repair, defective, or in any way unsafe, the truck shall be taken out of service until it has been restored to safe operating condition.
- Trucks 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 truck, whether loaded or empty.
- Unauthorized personnel shall not be permitted to ride on powered industrial trucks. Arms
- or legs shall not be placed between the uprights of the mast or outside the running lines of the truck.
- When a powered industrial truck is left unattended, load engaging means shall be fully lowered, controls shall be neutralized, power shall be shut off, and brakes set. Wheels shall be blocked if the truck is parked on an incline.
- A safe distance shall be maintained from the edge of ramps or platforms while on any elevated dock, or platform or freight car. Trucks shall not be used for opening or closing freight doors.
- There shall be sufficient headroom under overhead installations, lights, pipes, sprinkler system, etc.
- An overhead guard shall be used as protection against falling objects. It should be noted than an overhead guard is intended to offer protection from the impact of small packages, boxes, bagged materials, etc., representative of the job application, but not to withstand the impact of a falling capacity load.
- A load backrest extension shall be used whenever necessary to minimize the possibility of

the load or part of it from falling rearward.

- Trucks shall not be parked so as to block fire aisles, access to stairways, or fire equipment.

TRAVELING

- All traffic regulations shall be observed, including authorized speed limits. A safe distance shall be maintained approximately three truck lengths from the truck ahead, and the truck shall be kept under control at all times.
- The right of way shall be yield to ambulances, fire trucks, or other vehicles in emergency situations.
- Other trucks traveling in the same direction at intersections, blind spots, or other dangerous locations shall not be passed.
- The driver shall be required to slow down and sound the horn at cross aisles and other locations where vision is obstructed. If the load being carried obstructs forward view, the driver shall be required to travel with the load trailing.
- Railroad tracks shall be crossed diagonally wherever possible. Parking closer than 8 feet from the center of railroad tracks is prohibited.
- The driver shall be required to look in the direction of, and keep a clear view of the path of travel.
- Grades shall be ascended or descended slowly. When ascending or descending grades in excess of 10 percent, loaded trucks shall be driven with the load upgrade. On all grades the load and load engaging means shall be tilted back if applicable, and raised only as far as necessary to clear the road surface.
- Under all travel conditions the truck shall be operated at a speed that will permit it to be brought to a stop in a safe manner.
- Stunt driving and horseplay shall not be permitted.
- The driver shall be required to slow down for wet and slippery floors.
- Dockboard or bridgeplates, shall be properly secured before they are driven over.
- Dockboard or birdgeplates shall be driven over carefully and slowly and their rated capacity never exceeded.
- Running over loose objects on the roadway surface shall be avoided.
- While negotiating turns, speed shall be reduced to a safe level by means of turning the hand steering wheel in a smooth, sweeping motion. Except when maneuvering at a very low speed, the hand steering wheel shall be turned at a moderate, even rate.

LOADING

- Only stable or safely arranged loads shall be handled. Caution shall be exercised when handling off-center loads which cannot be centered.
- Only loads within the rated capacity of the truck shall be handled.
- The long or high (including multiple-tiered) loads which may affect capacity shall be adjusted.
- Trucks equipped with attachments shall be operated as partially loaded trucks 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, particularly when high tiering. Tilting forward with load engaging means elevated shall be prohibited except to pick up a load. An elevated load shall be titled forward except when the load is in a deposit position over a rack or stack. When stacking or tiering, only enough backward tilt to stabilize the load shall be used.

FUELING SAFETY

- Fuel tanks shall not be filled while the engine is running. Spillage shall be avoided.
- Spillage of oil or fuel shall be carefully washed away or completely evaporated and the fuel tank cap replaced before restarting engine.
- No truck shall be operated with a leak in the fuel system until the leak has been corrected.

- Open flames shall not be used for checking electrolyte level in storage batteries or gasoline level in fuel tanks.

MAINTENANCE OF POWERED INDUSTRIAL TRUCKS

- Any power-operated industrial truck not in safe operating condition shall be removed from service. All repairs shall be made by authorized personnel.
- Those repairs to the fuel and ignition systems of industrial trucks which involve fire hazards shall be conducted only in locations designated for such repairs.
- Trucks in need of repairs to the electrical system shall have the batter disconnected prior to such repairs.
- All parts of any such industrial truck requiring replacement shall be replaced only by parts equivalent as to safety with those used in the original design.
- Industrial trucks shall not be altered so that the relative positions of the various parts are different from what they were when originally received from the manufacturer, not shall they be altered either by the addition of extra parts not provided by the manufacturer or by the elimination of any parts. Additional counter-weighting of fork trucks shall not be done unless approved by the truck manufacturer.
- Industrial trucks shall be examined before being placed in service and shall not be placed in service if the examination shows any condition adversely affecting the safety of the vehicle. Such examination shall be made at least daily. Where industrial trucks are used on a round-the-clock basis, they shall be examined prior to use each shift. Defects when found shall be immediately reported and corrected.
- When the temperature of any part of any truck is found to be more than its normal operating temperature, thus creating a hazardous condition, the vehicle shall be removed from service and not returned to service until the cause for such overheating has been eliminated.
- Industrial trucks 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 deg. F.) solvents shall not be used. High flash point (at or above 100 deg. F.) solvents may be used.

SAFE OPERATING PROCEDURE FOR CHARGING LPG TANK

- No Smoking
- Move LPG PIT outside for refueling. Turn
- off PIT.
- LPG tanks will be removed in the following order.

    - Shut off service valve
    - Disconnect tank from hose
    - Unbuckle and remove tank from bracket

LPG tanks will be replaced in to the following order:

- Place tank in bracket and re-buckle
- Reconnect hose to tank and tighten firmly
- Open valve slowly and assure proper seal

NOTE: Federal Law prohibits dispensing an improper fuel type into any vehicle or into a non-approved fuel container.

In Case of LPG Leaks or Tank Rupture

- DO NOT start or move the PIT.
- If fuel hose is leaking, close valve immediately and place PIT Out of Service until repaired.
- If tank ruptures, warn others immediately to leave the area (at least 50 feet) and notify management. Do not re-enter the area until cleared by management.

POWERED INDUSTRIAL TRUCK PRE-USE CHECKLIST

A check of the following items (as applicable) is to be conducted by the operator prior to use each shift. (*Inspection Checklist attached*).

- Lights Horn
- Brakes
- Leaks
- Warning Beacon Backup
- Warning Alarm Fire
- Extinguisher

If any deficiencies are noted, the unit is to be placed OUT OF SERVICE until the problem has been corrected. Additionally, it is the operators responsibility to notify the immediate supervisor and fill out a maintenance request.

INSPECTIONS

aXCON CORPORATION, INC.

01/01/2022

VISUAL CHECKS	OK	FAULT	COMMENTS
Tires, Wheels, Rims			
Forks, Backrest, Fork Lock			
Mast, Hoses, Cables			
Attachments			
Overhead Guard			
Leaks (Hydraulic, Brake)			
LPG Tank (Secured, Damage)			
LPG Connector (Secure, Leaks)			

OPERATIONAL CHECKS	OK	FAULT	COMMENTS
Fuel Gauge/Discharge Indicator			
Lights			
Back-up Alarm			
Horn			
Hydraulic functions (Raise, tilt, etc.) Attachments			
Brakes			
Steering			
Travel Speed			

Operator Signature _____ Date _____

Supervisors Signature _____ Date _____

GENERAL SAFETY RULES

PURPOSE

Axcon's primary objectives are to ensure the safety and health of our employees, and to protect Axcon's property. Our goal is to provide safe and healthful working conditions for all Axcon's employees.

Safety rules have been developed with input from supervision and employees. While held to a minimum, the rules address behaviors and work practices that can lead to accidents and injuries.

Each employee should become familiar with and follow general and departmental safety rules. Site Superintendent/Supervisors/Foreman must enforce safe work practices through strict adherence to safety rules.

Most accidents can be prevented if everyone uses assigned safety equipment and follows the established safety rules. To operate a safe and successful business, we must work as a team to

THINK SAFE, WORK SAFE AND BE SAFE COMMUNICATION OF SAFETY RULES

Communication of safety rules is accomplished by:

- Discussion during New Hire Orientation
- Published in the New Hire Orientation/Axcon's Handbook Posting
- throughout the facility
- Annual refresher training
- On-the-spot corrections and reinforcement by Site Superintendent/Supervisors/Foreman

ADDITIONAL OPERATING SAFETY RULES

Axcon has additional safety rules for specific operations and departments that apply to those engaged in hazardous work areas or operations. Examples of these rules are contained in other safety manual chapters and standard operating procedures such as those for:

- Lockout-Tagout Confined
- Space Entry Welding
- Safety Forklift Safety
-

POSTING OF GENERAL SAFETY RULES

General safety rules will be posted in conspicuous areas at all locations.

GENERAL SAFETY RULES

Report all work injuries and illnesses immediately

- Report all Unsafe Acts or Unsafe Conditions to your Site Superintendent/Supervisor/ Foreman
- Use seat belts when on Axcons business in any vehicles

- Firearms, weapons, or explosives are not permitted on Axcon's property. Use, possessions, sale or being under the influence of illegal drugs, misuse of prescription drugs and/or alcohol is not permitted on Axcon's property or while on duty.
- Only authorized and trained employees may repair or adjust machinery and equipment. Lock and Tag Out procedures must be followed before removing any machine guards or working on powered machinery and equipment. Replace all guards when the job is completed.
- Only qualified and trained employees may work on or near Exposed Energized Electrical Parts or Electrical Equipment. Follow Electrical Safety Rules when working with electrically powered machinery and equipment.
- Only authorized and trained employees may enter a posted confined space. All confined spaces will be posted **CONFINED SPACE PERMIT REQUIRED**. Entry is allowed only after permits are properly issued.
- Only authorized and trained employees may dispense or use chemicals. It is your responsibility to know where SDS s are located and that they are available for your use and review.
- Keep work areas clean and aisles clear. Do not block emergency equipment of exits. Wear and use the prescribed Personal Protective Safety Equipment. This includes foot protection, head protection gloves, etc.
- Smoking is permitted only in the designated S m o k i n g Areas.

Failure to follow the above rules may cause serious injury and/or illness. Disciplinary action, up to and including termination, will be used to assure rule enforcement. Please use common sense and think before you act. If you are not sure how to complete a job or task safely or have any questions, ask your supervisor.

SAFETY MEETINGS

The purpose of this procedure is to establish a schedule meeting process to keep all employees informed and trained on the pertinent safety information as required by Axcon the customer, state, and federal regulations. The management at each jobsite is responsible for this process.

Safety information will be distributed to all employees during a mandatory weekly safety meeting. Information on known hazards, potential problems, weekly topics and general safety awareness are some of the areas that will be covered. The meetings are for educational purposes, so keep them focused and positive.

Site Superintendents/Supervisors/Foreman shall conduct weekly safety meetings for continued safety education and safety awareness. Near miss incidents, accident investigations, corrective actions, and safety procedures should be discussed at this time. Supervisor should also conduct a daily toolbox safety meeting to discuss the hazards involved with the work activities being performed that day.

Employees should be involved and should present ways to recognize and eliminate hazards or unsafe work practices. These meetings should be positive and should emphasize improving and expanding the employee s safety knowledge, understanding, and awareness.

Documentation will be kept for all meetings. Subject matters along with the list of attendants and their signatures will be recorded and maintained on file.

HAZARD COMMUNICATION & CHEMICAL SAFETY

PURPOSE

This Document serves as Axcon's Hazard Communication Program. It provides detailed safety guidelines and instructions for receipt, use and storage of chemicals at our facility by employees and contractors. Reference: OSHA Standard 1910.1200

RESPONSIBILITIES

Management

- Ensure compliance with this program
- Conduct immediate corrective action for deficiencies found in the program
- Maintain an effective Hazard Communication training program
- Make this plan available to employees or their designated representative

Shipping & Receiving Manager

- Ensure all received containers are properly labeled and that labels are not removed or defaced
- Ensure all shipped containers are properly labeled
- Ensure shipping department employees are properly trained in spill response
- Ensure received Safety Data Sheets (SDS) are properly distributed

Purchasing Agent

- Obtain, from the manufacturer, SDS for chemicals purchased from retail sources

Safety Manager

- Maintain a list of hazardous chemicals using the identify that is referenced on the SDS
- Monitor the effectiveness of the program
- Conduct annual audit of the program
- Monitor employee training to ensure effectiveness
- Keep management informed of necessary changes
- Ensure SDS are available as required
- Monitor facility for proper use, storage and labeling of chemicals

Program Coordinator

Ensure SDS are available for emergency medical personnel when treating exposed

employees
- Provide information, as requested, concerning health effects and exposure symptoms listed on SDS

Supervisors

- Comply with all specific requirements of the program
- Provide specific chemical safety training for assigned employees Ensure
- chemicals are properly used stored and labeled
- Ensure only the minimum amount necessary is kept at work stations
- Ensure up to date SDS are readily accessible to all employees on all shifts

Employees

- Comply with chemical safety requirements of this program
- Report any problems with storage or use of chemicals
- Immediately report spills of suspected spills of chemicals
- Use only those chemicals for which they have been trained
- Use chemicals only for specific assigned tasks in the proper manner

Contractors

- Comply with all aspects of this program Coordinate
- information with the Safety Manager Ensure
- contractor employees are proper trained
- Notify the Safety Manager before bringing any chemicals into Axcon's property of facilities
- Monitor and ensure proper storage and use of chemicals by Contractor employees

GENERAL PROGRAM INFORMATION

This written Hazard Communication Plan (HAZCOM) has been developed based on OSHA Hazard Communication Standard and consists of the following elements:

- Identification of Hazardous Materials
- Product Warning Labels
- Safety Data Sheets (SDS) Written Hazard
- Communication Program Effective
- Employee Training

Some chemicals are explosive, corrosive, flammable, or toxic. Other chemicals are relatively safe to use and store but may become dangerous when they interact with other substances. To avoid injury and/or property damage, persons who handle chemicals in any area of Axcon must understand the hazardous properties of the chemicals. Before using a specific chemical, safe handling methods and health hazards must always be review ed. Site Superintendent/Supervisors/Foreman are responsible for ensuring that the equipment needed to work safely with chemicals is accessible and maintained for

all employees on all shifts.

EMPLOYEE TRAINING

Initial Orientation Training

All new employees shall receive safety orientation training covering the elements of the HAZCOM and Right to Know Program. This training will consist of general training covering:

- Location and availability of the written Hazard Communication Program Location
- and availability of the List of Chemicals used in the workplace
- Methods and observation used to detect the presence or release of a hazardous chemical in the workplace
- The specific physical and health hazard of all chemicals in the workplace Specific
- control measures for protection from physical or health hazards Explanation of
- the chemical labeling system
- Location and use of SDS

Job Specific Training

Employees will receive on the job training from their supervisor. This training will cover the proper use, inspection and storage of necessary personal protective equipment and chemical safety training for the specific chemicals they will be using or will be working around.

Annual Refresher Training

Annual Hazard Communication refresher training will be conducted as part of Axcons ċontinuing safety training program.

Immediate On-the-Spot Training

This training will be conducted by supervisors for any employee that requests additional information or exhibits a lack of understanding of the safety requirements.

NON-ROUTINE TASKS

Non-routine tasks are defined as working on, near, or with unlabeled piping, unlabeled containers of an unknown substance, confined space entry where a hazardous substance may be present and/or a one-time task using a hazardous substance differently than intended (example: using a solvent to remove stains from tile floors).

Steps for Non-Routine Tasks

Step 1: Hazard Determination
Step 2: Determine Precautions
Step 3: Specific Training and Documentation
Step 4: Perform Task

All non-routine tasks will be evaluated by the Supervisor and Safety Department before the task commences, to determine all hazards present. This determination will be conducted with quantitative/qualitative analysis (air sampling, substance identification/analysis, etc., as applicable).

Once the hazard determination is made, the Supervisor and Safety Department will determine the necessary precautions needed to either remove the hazard, change to a non-hazard, or protect from the hazard (use of personal protective equipment) to safeguard the Employees present. In addition, the Supervisor or Safety Department will provide specific safety training for Employees present or affected and will document the training using the *Chemical Safety Training Checklist* form which shall be marked **"Non-Routine Task Training".**

OFF-SITE USE OR TRANSPORTATION OF CHEMICALS

An SDS will be provided to employees for each chemical and each occurrence of use or transport away from Axcon s facilities. All State and Federal DOT Regulations will be followed including use of certified containers, labeling & marking, securing of containers and employee training.

GENERAL CHEMICAL SAFETY

Assume all chemicals are hazardous. The number of hazardous chemicals and the number of reactions between them is so large that prior knowledge of all potential hazards cannot be assumed. Use chemicals in as small quantities as possible to minimize exposure and reduce possible harmful effects.

The following general safety rules shall be observed when working with chemicals:

- Read and understand the Safety Data Sheets Keep the
- work area clean and orderly
- Use the necessary safety equipment

- Carefully label every container with the identity of its contents and appropriate hazard warnings.
- Store incompatible chemicals in separate areas
- Substitute less toxic materials whenever possible
- Limit the volume of volatile or flammable material to the minimum needed for short operation periods.
- Provide means of containing the material if equipment or containers should break or spill their contents

TASK EVALUATION

Each task that requires the use of chemicals should be evaluated to determine the potential hazards associated with the work. This hazard evaluation must include the chemical or combination of chemicals that will be used in the work, as well as other materials that will be used near the work. If a malfunction during the operation has the potential to cause serious injury or property damage, a Safe Operational Procedure (SOP) should be prepared and followed. Operations must be planned to minimize the generation of hazardous wastes.

CHEMICAL STORAGE

The separation of chemicals (solids or liquids) during storage is necessary to reduce the possibility of unwanted chemical reactions caused by accidental mixing. Explosives should be stored separately outdoors. Use either distance or barriers (e.g., trays) to isolate chemicals into the following groups:

- Flammable liquids: store in approved flammable storage lockers
- Acids: treat as flammable liquids
- Bases: do not store bases with acids or any other material
- Other liquids: ensure other liquids are not incompatible with any other chemical in the same storage location
- Lips, strips, or bars are to be installed across the width of storage shelves to restrain the chemicals in case of earthquake.
- Chemicals will not be stored in the same refrigerator used for food storage. Refrigerators used for storing chemicals must be appropriately identified by a label on the door.

CONTAINER LABELS

It is extremely important that all containers of chemicals are properly labeled. This includes every type of container from a 5000-gallon storage tank to a spray bottle of degreaser. The following requirements apply:

- All containers will have the appropriate label, tag or marking prominently displayed that indicates the identity, safety and health hazards.
- Portable containers which contain a small amount of chemical need not be labeled if they are used immediately that shift, but must be under the strict control of the employee using the product.

- All warning labels, tags, etc., must be maintained in a legible condition and not be defaced. Facility weekly supervisor inspections will check for compliance of this rule.
- Incoming chemicals are to be checked for proper labeling.

EMERGENCIES AND SPILLS

In case of an emergency, implement the proper Emergency Action Plan.

- Evacuate people from the area
- Isolate the area
- If the material is flammable, turn off ignition and heat sources
- Only personnel specifically trained in emergency response are permitted to participate in chemical emergency procedures beyond those required to evacuate the area
- Call for Emergency Response Team assistance if required

HOUSEKEEPING

- Maintain the smallest possible inventory of chemicals to meet immediate needs.
- Periodically review stock of chemicals on hand.
- Ensure that storage areas, or equipment containing large quantities of chemicals, are secure from accidental spills.
- Rinse emptied bottles that contain acids or inflammable solvents before disposal.
- Recycle unused laboratory chemicals wherever possible.
- **DO NOT** place hazardous chemicals in salvage or garbage receptacles.
- **DO NOT** pour chemicals onto the ground
- **DO NOT** dispose of chemicals through the storm drain system.
- **DO NOT** dispose of highly toxic, malodorous chemicals down sinks or sewer drains.

CONTRACTORS

All outside contractors working inside Axcon's facilities are required to follow the requirements of this program. Axcon will provide contractors information on:

Location of SDS

- Precautions to be taken to protect contractor employees
- Potential exposure to hazardous substances
- Chemicals used in or stored in areas where they will be working
- Location and availability of Safety Data Sheets Recommended
- Personal Protective Equipment
- Labeling system for chemicals

DEFINITIONS

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

- **Combustible liquid:** means any liquid having a flash point at or above 100 deg. F (37.8

deg. C), but below 200 deg. F (93.3 deg. C) except any mixture having components with flash points of 200 deg. F (93.3 deg. C), or higher, the total volume of which make up 99 percent or more of the total volume of the mixture.

- **Compressed gas:** any compound that exhibits:
    - A gas or mixture of gases having, in a container, an absolute pressure exceeding 40 psi at 70 deg. F.
    - A gas or mixture of gases having, in a container, an absolute pressure exceeding 104 psi at 130 deg. F. regardless of the pressure at 70 deg. F.
    - A liquid having a vapor pressure exceeding 40 psi at 100 deg. F.

- **Container:** any bag, barrel, bottle, box, can, cylinder, drum, reaction vessel, storage tank, or the like that contains a hazardous chemical. For purposes of this section, pipes or piping systems, and engines, fuel tanks, or other operating systems in a vehicle, are not considered to be containers.

- **Designated representative:** any individual or organization to whom an employee gives written authorization to exercise such employee's rights under this section. A recognized or certified collective bargaining agent shall be treated automatically as a designated representative without regard to written employee authorization.

- **Employee:** a worker who may be exposed to hazardous chemicals under normal operating conditions or in foreseeable emergencies. Workers such as office workers or bank tellers who encounter hazardous chemicals only in non-routine, isolated instances are not covered.

- **Employer:** a person engaged in a business where chemicals are either used, distributed, or are produced for use or distribution, including a contractor or subcontractor.

- **Explosive:** a chemical that causes a sudden, almost instantaneous release of pressure, gas, and heat when subjected to sudden shock, pressure, or high temperature.

- **Exposure or exposed:** an employee is subjected during employment to a chemical that is a physical or health hazard and includes potential (e.g. accidental or possible) exposure. Subjected in terms of health hazards includes any route of entry (e.g. inhalation, ingestion, skin contact or absorption).

- **Flammable:** a chemical that falls into one of the following categories:
    - "Aerosol, flammable" means an aerosol that yields a flame projection exceeding 18 inches at full valve opening, or a flashback (a flame extending back to the valve) at any degree of valve opening.
    - "Gas, flammable" means (A) A gas that, at ambient temperature and pressure, forms a flammable mixture with air at a concentration of thirteen (13) percent by volume or less; or (B) A gas that, at ambient temperature and pressure, forms a

range of flammable mixtures with air wider than twelve (12) percent by volume, regardless of the lower limit.

- Liquid, flammable means any liquid having a flash point below 100 deg. F., except any mixture having components with flash points of 100 deg. F. or higher, the total of which make up 99 percent or more of the total volume of the mixture.
- Solid, flammable means a solid, other than a blasting agent or explosive as defined in 1910.109(a), that is liable to cause fire through friction, absorption of moisture, spontaneous chemical change, or retained heat from manufacturing or processing, or which can be ignited readily and when ignited burns so vigorously and persistently as to create a serious hazard. A chemical shall be considered to be a flammable solid if it ignites and burns with a self-sustained flame at a rate greater than one-tenth of an inch per second along its major axis.

- **Flash point:** the minimum temperature at which a liquid gives off a vapor in sufficient concentration to ignite.

- **Hazardous chemical:** any chemical that is a physical hazard or a health hazard.

- **Hazard warning:** any words, pictures, symbols, or combination appearing on a label or other appropriate form of warning which convey the specific physical and health hazard(s), including target organ effects, of the chemical(s) in the container(s). (See the definitions for "physical hazard" and health hazard" to determine the hazards which must be covered.)

- **Health hazard:** a chemical for which there is evidence that acute or chronic health effects may occur in exposed employees. The term "health hazard" includes chemicals which are carcinogens, toxic or highly toxic agents, reproductive toxins, irritants, corrosives, sensitizers, hepatotoxins, nephrotoxins, neurotoxins, agents which act on the hematopoietic system and agents which damage the lungs, skin, eyes, or mucous membranes.

- **Identity:** any chemical or common name which is indicated on the Safety Data Sheet (SDS) for the chemical. The identity used shall permit cross-references to be made among the required list of hazardous chemicals, the label and the SDS.

- **Immediate use:** the hazardous 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.

- **Label:** any written, printed, or graphic material displayed on or affixed to containers of hazardous chemicals.

- **Safety Data Sheet (SDS):** written or printed material concerning a hazardous chemical which is prepared in accordance with OSHA Standard 1910.1200 requirements.

- **Mixture:** any combination of two or more chemicals if the combination is not, in whole or in part, the result of a chemical reaction.

- **Oxidizer:** a chemical other than a blasting agent or explosive as defined in 1910.109(a), which initiates or promotes combustion in other materials, thereby causing fire either of itself or through the release of oxygen or other gases.

- **Physical hazard:** a chemical that it is a combustible liquid, a compressed gas, explosive, flammable, an organic peroxide, an oxidizer, pyrophoric, unstable (reactive) or water-reactive.

- **Pyrophoric:** a chemical that will ignite spontaneously in air at a temperature of 130 deg. F. or below.

- **Specific chemical identity:** the chemical name, Chemical Abstracts Service (CAS) Registry Number, or any other information that reveals the precise chemical designation of the substance.

- **Unstable (reactive):** a chemical which in the pure state, or as produced or transported, will vigorously polymerize, decompose, condense, or will become self-reactive under conditions of shocks, pressure or temperature.

- **Use:** to package, handle, react, emit, extract, generate as a byproduct, or transfer.

- **Water-reactive:** a chemical that reacts with water to release a gas that is either flammable or presents a health hazard.

- **Work area:** a room or defined space in a workplace where hazardous chemicals are produced or used, and where employees are present.

- **Workplace:** an establishment, job site, or project, at one geographical location containing one or more work areas.

SDS INFORMATION

Safety Data Sheets are provided by the chemical manufacturer to provide additional information concerning safe use of the product. Each SDS provides:

- Common Name and Chemical Name of the material
- Name, address and phone number of the manufacturer
- Emergency phone numbers for immediate hazard information
- Date the SDS was last updated
- Listing of hazardous ingredients
- Chemical hazards of the material
- Information for identification of chemical and physical properties

Copies of SDS for all hazardous chemicals, that employees maybe exposed to, will be kept at the workplace.

INFORMATION CHEMICAL USERS MUST KNOW

Fire and/or Explosion Information

- Material Flash Point, auto-ignition temperature and upper/lower flammability limits
- Proper fire extinguishing agents to be used
- Firefighting techniques
- Any unusual fire or explosive hazards

Chemical Reaction Information

- Stability of Chemical
- Conditions and other materials which can cause reactions with the chemical
- Dangerous substances that can be produced when the chemical reacts.

Control Measures

Engineering Controls required for safe product use
Personal protective equipment required for use of product
Safe storage requirements and guidelines
Safe handling procedures

Health Hazards

Permissible Exposure Limit (PEL) and Threshold Limit Value (TLV)

- Acute or Chronic symptoms of exposures
- Main routes of entry into the body
- Medical conditions that can be made worse by exposure
- Cancer causing properties if any
- Emergency and First Aid treatments

Spill & Leak Procedures

- Clean up techniques
- Personal Protective Equipment to be used during cleanup
- Disposal of waste & cleanup material

EMPLOYEE USE OF SDS

For SDS use to be effective, employees must:

- Know the location of the SDS
- Understand the major points for each chemical
- Check SDS when more information is needed, or questions arise Be
- able to quickly locate the emergency information on the SDS Follow
- the safety practices provided on the SDS

LIST OF HAZARDOUS CHEMICALS

The following is a list of all known hazardous chemical used by Client's employees. Further

information on each noted chemical can be obtained by reviewing the SDS located in the jobsite office.

Hazardous Chemicals

Easy Bond Adhesive Touch up
paint and pens Kitz
LPS 1 Greaseless Lubricant
All surface enamel - Oil based & primer *Rector*

- Seal T Plus 2
- Rust preventative paints Glass
- Cleaner
- GOJO Lime Multi-Duty Hand Cleaner Greased
- Lighting All Purpose Cleaner Loctite Fast Orange
- Hand Cleaner Mechanix Orange
- Simple Green
- Acetylene, Ethyne, Ethine
- Keligrout
- Propane Gas & Oxygen
- MAPP (methyl acetylene-propadiene) Naphtha
- (mineral spirits)
- Reducer Oil Dodge (Mobile SHC 634)
- "44" Rosin Flux Cored Solder
- "331" Flux Cored Solder
- Welding Rods
- Gasoline & Diesel Fuel #2 Aluminum
- Oxide Grinding Wheels Summa Recip
- Valve Motor Oil Loctite Threadlocker
- Antifreeze
- Lead Acid Batteries
- Rubber Belting WD-40
- Dry Chemical Fire Extinguishers

HEARING CONSERVATION

PURPOSE

Conservation of hearing is an important preventative measure. To reduce occupational hearing loss, all employees, who work in potentially noisy areas, are provided hearing protection, training and annual hearing tests. OSHA s hearing conservation standard is covered in 29 CFR 1910.95.

Duration per day (hours)	Sound level (dBA slow response)
8	90
6	92
4	95
3	97
2	100
1.5	102
1	105
0.5	110
0.25 or less	115
Impact noise	140

When sound levels listed above are exceeded, feasible engineering or administrative controls shall be instituted. If the controls do not prove successful in reducing the levels to within those listed above or are not feasible, hearing protection shall be provided and used to reduce the sound levels to an acceptable level. In addition, OSHA requirements dictate that whenever employee noise exposures equal or exceed an 8-hour time-weighted average (TWA) of 85 dBA, slow response, a continuing effective hearing conservation program shall be incorporated. Employees will also receive hearing protection.

RESPONSIBILITIES

Management

- Use Engineering and Administrative controls to limit employee exposure
- Provide adequate hearing protection for employees
- Post signs and warnings for all high noise areas
- Conduct annual hearing tests for all employees for individuals exposed to noise equal to or greater than 85 dBA, 8-hour time-weighted average
- Establish a baseline audiogram within 6 months of exposure; but one needs 14 hours or more without exposure to workplace noise prior to establishing a baseline audiogram
- Conduct hearing conservation training for all new employees
- Conduct annual hearing conservation training for all employees
- Ensure hearing protection is evaluated for the specific noise environments in which the protector will be used
- Supervisor will ensure exposures to noise over 85dBA will be documented and records will be kept by Program Admisistrator

Employees

- Use Axcon provided hearing protection in designated high noise areas Request new hearing protection when needed
- Exercise proper care of issues hearing protection

TRAINING

At time of hire and annually thereafter, all affected Employees must attend Hearing Conservation Training. The initial training is conducted as part of the New Hire Orientation Program by the Site Supervisor and consists of:

- Rules and procedures
- Where hearing protection is required
- How to use and care for hearing protectors
- How noise affects hearing and hearing loss

ENGINEERING CONTROLS

After it is determined that noise exposure above 85 dB(A) are present, engineering controls should be evaluated and implemented to reduce the noise exposure before administrative controls are initiated. Some examples of engineering controls include: Noise reducing baffles & Compartmentalization.

ADMINISTRATIVE CONTROLS

After engineering controls are evaluated for effectiveness or feasibility, administrative controls should be considered to reduce noise exposure. Administrative controls include restricting

exposure time or using personal protective equipment (PPE).

Personal Protective Equipment, such as ear plugs or muffs, may be used to reduce the amount of noise exposure. Each plug or muff has as noise reductions factor (NR) as evaluated by ANSI Standards (S3.19 – 1974 or Z24.44 – 1957). For example, if a work area has an ambient noise exposure of 96 dB(A), the hearing protectors should be rated 6 NR or better to be effective.

According to OSHA Regulations, each location with noised exposures of 85 to 89 dB(A) will provide hearing protectors for the Employee's optional use. Noise exposures at 90 dB(A) or above require the mandatory use of hearing protection. Further, OSHA requires that a variety of hearing protectors be available for Employees to choose (both a variety of plug and muff type hearing protectors).

A Standard Threshold Shift, or STS, is defined in the occupational noise exposure standard at 29 CFR 1910.95(g)(10)(i) as a change in hearing threshold, relative to the baseline audiogram for that employee, of an average of 10 decibels (dB) or more at 2000, 3000, and 4000 hertz (Hz) in one or both ears. If this occurs, employees are notified in writing within 21 days and then get re-evaluated. **Hearing protection is re-evaluated in the event of a standard threshold shift.**

USE OF HEARING PROTECTORS

Management, Supervision and Employees shall properly wear the prescribed hearing protectors while working in or traveling through any section of a location that is designated a High Noise Area (excluding offices, breakrooms, and rest facilities). The following rules will be enforced:

- Personal music devices will not be permitted while working on any Axcon jobsite.
- Hearing protectors, at least two types of plugs and one type of muffs, will be provided and maintained by Axcon free of charge to employees.
- Hearing protectors will be properly worn at all times, except in offices, breakrooms and rest facilities.
- Plain cotton is not an acceptable protective device.

HOT WORK & WELDING SAFETY

PURPOSE

Welding and Hot Work, such as brazing or grinding present a significant opportunity for fire and injury. All precautions of this program must be applied prior to commencing any welding or hot work by Axcon's employee or contractors. Reference: OSHA 29 CFR 1910.252

DEFINITIONS

- **Welding/Hot Works Procedures:** Any activity which results in sparks, fire, molten slag, or hot material which has the potential to cause fires or explosions.

- **Examples of Hot Works:** Cutting, Brazing, Soldering, Thawing Pipes, Torch applied Roofing, Grinding and Welding.

- **Special Hazard Occupancies:** Any area containing Flammable Liquids, Dust Accumulation, Gases, Plastics, Rubber and Paper Products.

TRAINING

Training shall include:

- Review of requirements listed in OSHA 1910.252 Use
- of Hot Works Permit System
- Supervisor responsibilities Fire
- watch responsibilities Operator
- responsibilities Contractors
- responsibilities Documentation
- requirements Respirator usage
- requirements Fire extinguisher
- training

HOT WORK PROCEDURES

OSHA 29 CFR 1910.25 required fire prevention actions for welding/hot works.

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

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

- Where cutting or welding is done near walls, partitions, ceilings, or a roof of combustibles construction, fire-resistant shields or guards shall be provided to prevent ignition.

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

- Welding shall not be attempted on a metal partition, wall, ceiling or roof having a covering or on walls having combustible sandwich panel construction.

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

- In areas where there is dust accumulation of greater than 1/16 inch with 35 feet of the area where welding/hot works will be conducted. All dust accumulation should be cleaned up

following the housekeeping program of the facility before welding/hot works are permitted.

- Suitable extinguishers shall be provided and maintained ready for instance use.
- A fire watch person shall be provided during and for 2 hours past the completion of the welding project.
- A cutting/welding permit will be issued on all welding or cutting outside of the designated welding area.
- Cutting or welding shall not be permitted in the following situations:
    - In areas not authorized by management.
    - In sprinkled buildings while such protection is impaired.
    - In the presence of potentially explosive atmosphere, e.g. a flammable
    - In areas near the storage of large quantities of exposed, readily ignitable materials.
    - Shall not be performed in unsafe areas

SOP ELECTRIC WELDING

Perform safety check on all equipment

Ensure fire extinguisher is charged and available.
Ensure electrical cord, electrode holder and cables are free from defects (no cable splices are allowed within 10 feet of the electrode holder.

- Ensure PPE (welding hood, gloves, rubber boots/soled shoes, aprons) are available and have no defects.
- Ensure the welding unit is properly grounded.
- All defective equipment must be repaired or replaced before use

Remove flammables and combustibles

- No welding is permitted on or near containers of flammable material combustible material or unprotected flammable structures.
- Place welding screen or suitable barricade around work area to provide a fire safety zone and prevent injuries to passersby (Do not block emergency exits or restrict ventilation).

ENSURE ADEQUATE VENTILATION AND LIGHTING
EXECUTE HOT WORK PERMIT PROCEDURES

Set Voltage Regulator

No higher than the following for:

- Manual Alternating Current Welders – 80 volts
- Automatic Alternating Current Welders – 100 volts
- –

Manual or automatic Direct Current Welders 100 volts

Uncoil and spread out welding cable

To avoid overheating, ensure proper contact of work leads and connections, remove any metal fragments from magnetic work clamps (to avoid electric shock do not wrap welding cables around a body part and avoid welding in wet conditions).

Fire watch for 30 minutes after welding & until all welds has cooled.
Perform final fire watch and terminate permit.

Welding & hot work fire prevention measures

A designated welding area should be established to meet those following requirements:

Floors swept and clean of combustibles within 35 ft. of work area.
Flammable and combustible liquids and materials will be kept 35 ft. from work area.
Adequate ventilation providing 20 air changes per hour, such as a suction hood system should be provided to the work area.

- At least one 10 lb. dry chemical fire extinguisher should be within access of the 35 ft. of work area.
- Protective dividers such as welding curtains or non-combustible walls will be provided to contain sparks and slag to the combustible free area.

Requirements for welding conducted <u>outside</u> the designated welding area.

- Portable welding curtains or shields **must** be used to protect other workers in the welding area.
- A hot works permit **must** be completed and complied with prior to welding operation (*Hot Works Permit - attached*).
- Respiratory protection is mandatory unless an adequate monitored air flow away from the welder and others present can be established and maintained.
- Plastic materials **must** be covered with welding tarps during welding procedures.
- Fire watch **must** be provided for all hot work operations.

Welding Standard Operating Procedures

The following pages list the Welding Standard Operating Procedures (SOP) and are applicable for all electric and gas welding. These SOPs are to be posted at each designated welding & hot work area for quick reference and review.

SOP: GAS WELDING

Perform Safety Check on all equipment

Ensure tanks have gas and fittings are tight**.**

Ensure fire extinguisher is charged and available
Ensure hoses have no defects
Ensure PPE (welding hood, gloves, rubber boots/soled shoes, aprons) are available and have no defects.

- All defective equipment must be repaired or replace before uses

Remove flammables and combustibles

- No welding is permitted on or near containers of flammable material, combustible material or unprotected flammable structures.
- Place welding screen or suitable barricade around work area to provide a fire safety zone and prevent injuries to passerby (Do not block emergency exists or restrict ventilation).
- Use an authorized air filtering respirator, if required.
- Ensure adequate ventilation and lighting
- Execute Hot Work Permit procedures
- Open valves on oxygen and gas tanks to desire flow.
- Shut tank valves and relieve hose pressure. Store hoses
- Fire watch for 30 minutes after welding and until all welds has cooled.
- Perform final fire watch and terminate permit.

aXCON CORPORATION, INC.

01/01/2022

HOT WORKS PERMIT

Date: _____ Location: _____

Work to be done: _____

_____

Time Started: a.m. p.m.

_____ _____ _____

THE FOLLOWING PRECAUTIONS HAVE BEEN OBSERVED

_____ Appropriated portable extinguishers at work site.

_____ Sprinkler protection in service.

_____ Flammable materials moved at least 25 feet from area.

_____ Immediate area isolated with non-combustible tarps.

_____ Floor and wall openings within 25 feet covered.

_____ Cutting and welding equipment is in good condition.

_____ Fire watch provided.

PROVIDE A FIRE WATCH
FOR 30 MINUTES AFTER COMPLETION

Location of nearest telephone: _____

_____

Project Manager/TCE Supervisor: _____

Person performing work: _____

Time work completed: _____

30 Minute fire watch done by: _____

Area inspection after completion by: _____

EMERGENCY DIAL: _____

LADDER SAFETY

PURPOSE

Ladders present unique opportunities for unsafe acts and unsafe conditions. Employees who use ladders must be trained in proper selection, inspection, use and storage. Improper use of ladders has cause a large percentage of accidents in the workplace are of accidents. Use caution on ladders. OSHA reference: (29 CFR 1910.25 and 1910.27). All ladders used by Axcon Corporation, Inc. must meet OSHA/ANSI standards.

LADDER HAZARDS

Falls from ladders can result in broken bone and death. Ladder safety is a lifesaving program at Client locations.

Hazards include:

- Ladders with missing or broken parts Using a
- ladder with too low a weight rating Using a
- ladder that is too short for purpose Using
- metal ladders near electrical wires Using
- ladders as a working platform Objects falling
- from ladders

LADDER INSPECTION

Inspect ladders before each use.

- All rungs and steps are free of oil, grease, dirt, etc. All
- fittings are tight
- Spreaders or other locking devices are in place
- Non-skid safety feet are in place
- No structural defects, all support braces intact

Do not use broken ladders. Most ladders cannot be repaired to manufacturer specifications, so we don't tag broken ladders, Axcon throws away all broken ladders.

LADDER STORAGE

Store ladders on sturdy hooks in areas where they cannot be damaged. The purpose for storing ladders is to prevent warping or sagging. Do not hang anything on ladders that are in a stored condition.

LADDER RATINGS AND LIMITS

Ladder weight ratings; don't exceed

- I-A 300 pounds (heavy duty) I
- 250 pounds (heavy duty)
- II 225 pounds (medium duty) III
- 200 pounds (light duty)

Limits on ladder length; don't exceed

- A stepladder should be no more than 20 feet high.
- A one-section ladder should be no more than 30 feet.
- An extension ladder can go to 60 feet, but the sections must overlap.

LADDER SETUP

The following procedure must be followed to prevent ladder accidents:

- Place ladder on a clean slip free level surface.
- The area around the top and bottom of the ladder must be kept clear. Extend
- the ladder to have about 4 feet above the top support or work area. Anchor the
- top and bottom of the ladder.
- Place the ladder base ¼ the height, of the ladder, from the wall when using an extension ladder.
- Never allow more than one person on a ladder.
- Use carriers and tool belts to carry objects up a ladder. Do
- not lean out from the ladder in any direction.
- If you have a fear of heights – don't climb a ladder.
- Do not allow others to work under a ladder in use.
- The top or top step of a stepladder must not be used as a step.

LADDER MAINTENANCE

- Keep ladders clean and inspect annually
- Never replace broken parts unless provided by the original manufacturer. Do
- not attempt to repair broken side rails.
- Keep all threaded fasteners properly adjusted. Replace
- worn steps with parts from manufacturer.

LOCKOUT-TAGOUTPROGRAM

PURPOSE

Control of Hazardous energy is the purpose of the Lockout-Tagout Program. This program establishes the requirements for isolation of both kinetic and potential electrical, chemical, thermal, hydraulic and pneumatic and gravitational energy prior to equipment repair, adjustment or removal. Reference: OSHA Standard 29 CFR 1910.147, the control of hazardous energy. The

program will be inspected annually.

RESPONSIBILITIES

- **Site Superintendent /Supervisor/Foreman** are responsible for assuring that this procedure is implemented consistently throughout the job site. The supervisors will also assure that each affected employee is properly trained and efficient in applying these procedures, will ensure that periodic reviews are made to evaluate the energy-isolation programs, and will communicate any deficiencies in the application to the customer and safety personnel.

- **Employees** who work under energy-isolation controls are responsible for ensuring that all required energy-isolation devices are properly applied and maintained throughout the task being performed. They are also responsible for the removal of the device and for communicating the removal of the device to their supervisors/foreman.

- Employees that are members of a **work crew** that perform work under group lock out are responsible for reviewing and understanding the energy-isolation process. When the energy sources have been identified to be de-energized by work crews, they will place their locks on the lock box and sign the log in sheet. Once their portion of the task is complete, the work crew members will sign off the log and remove their locks from the lock box.

All individual locks or tags used by Axcon will contain Axcon's name and the employees' name that applies the lock.

DEFINITIONS

- **Authorized (Qualified) Employees** are the only ones certified to lock and tagout equipment or machinery. Whether an employee is considered to be qualified will depend upon various circumstances in the workplace. It is likely for an individual to be considered "qualified" with regard to certain equipment in the workplace, but "unqualified" as to other equipment. An employee who is undergoing on-the-job training and who, in the course of such training, has demonstrated an ability to perform duties safely at his or her level of training and who is under the direct supervision of a qualified person, is considered to be "qualified" for the performance of those duties.

- **Affected Employees** are those employees who operate machinery or equipment upon which lockout or tagging out is required under this program. Training of these individuals will be less stringent in that it will include the purpose and use of the lockout procedures.

- **Other Employees** are identified as those that do not fall into the authorized, affected or qualified employee category. Essentially, it will include all other employees. These employees will be provided instruction in what the program is and not to touch any machine or equipment when they see that it has been locked or tagged out.

TRAINING

Authorized Employees Training

All Site Superintendents, Supervisors, Foreman, Maintenance Employees and Janitorial employees will be trained to use the Lock and Tagout Procedures. The training will be conducted by the Maintenance Supervisor or Safety Coordinator at time of initial hire. Retraining shall be held at least annually. The training will consist of the following:

- Review of General Procedures
- Review of Specific Procedures for machinery, equipment and processes
- Location and use of Specific Procedures
- Procedures when questions arise

Affected Employee Training

- Only trained and authorized Employees will repair, replace or adjust machinery, equipment or processes.
- Affected Employees may not remove locks, locking devices or tags from machinery, equipment or circuits.
- Purpose and use of the lockout procedures.

Other Employee Training

- Only trained and authorized Employees will repair, replace or adjust machinery or equipment.
- Other employees may not remove locks, locking devices or tags from machinery, equipment or circuits.

PREPARATION FOR LOCK AND TAGOUT PROCEDURES

A Lockout-Tagout survey has been conducted to locate and identify all energy sources to verify which switches or valves supply energy to machinery and equipment. Dual or redundant controls have been removed.

A Tagout schedule has been developed for each piece of equipment and machinery. This schedule describes the energy sources, location of disconnects, type of disconnect, special hazards and special safety procedures. The schedule will be reviewed each time to ensure employees properly lock and tag out equipment and machinery. If a Tagout schedule does not exist for a particular piece of equipment, machinery and process, one must be developed prior to conducting a Lockout Tagout. As repairs and/or renovations of existing electrical systems are made, standardized controls will be used.

ROUTINE MAINTENANCE & MACHINE ADJUSTMENTS

Lock and Tagout procedures are not required if equipment must be operating for proper adjustment. This rare exception may be used only by trained and authorized employees when specific procedures have been developed to safely avoid hazards with proper training. All

consideration shall be made to prevent the need for an employee to break the plane of a normally guarded area of the equipment by use of tools and other devices.

LOCKS, HASPS AND TAGS

All Site Superintendents, Supervisors, Foreman and Qualified Maintenance personnel will be assigned a lock with one key, hasp and tag. All locks will be keyed differently, except when a specific individual is issues a series of locks for complex lockout-tagout tasks. In some cases, more than one lock, hasp and tag are needed to completely de-energize equipment and machinery. Additional locks may be checked out from the Department or Maintenance Supervisor on a shift-by-shift basis. All locks and hasps shall be uniquely identifiable to a specific employee.

SOP: GENERAL LOCK AND TAG OUT PROCEDURES

Before working on, repairing, adjusting or replacing machinery and equipment, the following procedures will be utilized to place the machinery and equipment in a neutral or zero mechanical state.

Preparation for Shutdown

- Before authorized or affected employees turn off a machine or piece of equipment, the authorized employee will have knowledge of the type and magnitude of the energy, the hazards of the energy to be controlled, and the means to control the energy.
- Notify affected Employees that the machinery, equipment or process will be out of service.

Machine or Equipment Shutdown

The machine or equipment will be turned or shut down using the specific procedures for that specific machine. An orderly shutdown will be utilized to avoid any additional or increased hazards to employees as a result of equipment de-energized.

- If the machinery, equipment or process is in operation, follow normal stopping procedures (depress stop button, open toggle switch, etc.).
- Move switch or panel arms to "Off" or "Open" positions and close all valves or other energy isolating devices so that the energy source(s) is disconnected or isolated from the machinery or equipment.

Machine or Equipment Isolation

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

Lockout or Tagout Device Application

- Lockout or tagout devises will be affixed to energy isolating devices by authorized employees. Lockout devices will be affixed in a manner that will hold the energy isolating devices from the "safe" or "off" position.

- Where tagout devices are used they will be affixed in such a manner that will clearly state that the operation or the movement of energy isolating devices from the "safe" or "off" positions is prohibited.
- The tagout devices will be attached to the same point a lock would be attached. If the tag cannot be affixed at that point, the tag will be located as close as possible to the device in a position that will be immediately obvious to anyone attempting to operate the device.
- Lock and tag out all energy devices by use of hasps, chains and valve covers with an assigned individual locks.

Stored Energy

- Following the application of the lockout or tagout devices to the energy isolating devices, all potential or residual energy will be relieved, disconnected, restrained, and otherwise rendered safe.
- Where the re-accumulation of stored energy to a hazardous energy level is possible, verification of isolation will be continued until the maintenance or servicing is complete.
- Release stored energy (capacitors, springs, elevated members, rotating fly wheels, and hydraulic/air/gas/steam systems) must be relieved or restrained by grounding, repositioning, blocking and/or bleeding the system.

Verification of Isolation

Prior to starting work on machines or equipment that have been locked or tagged out, the authorized employees will verify that isolation or de-energizing of the machine or equipment have been accomplished.
After assuring that no employee will be placed in danger, test all lock and tagouts by following the normal start up procedures (depress start button, etc.).

CAUTION: After test, place controls in neutral position.

Extended Lockout – Tagout

- Should the shift change before machinery or equipment can be restored to service, the lock and tagout must remain. If the task is reassigned to the next shift, those employees must lock and tagout before the previous shift may remove their lock and tag. **The Axcon Corporation, Inc. supervisor in charge of the current shif will coordinate the lock/tag exchange with the new shift supervisor, prior to leaving site.**

SOP: RELEASE FROM LOCKOUT/TAGOUT

Before lockout or tagout devices are removed and the energy restored to the machine or equipment, the following actions will be taken:

- The work area will be thoroughly inspected to ensure that nonessential items have been removed and that machine or equipment components are operational.
- The work area will be checked to ensure that all employees have been safely positioned or removed. Before the lockout or tagout devices are removed, the affected employees will

be notified that the lockout or tagout devices are being removed.

- Each lockout or tagout device will be removed from any energy isolating device by the employee who applied the device.

SOP: LOCKOUT/TAGOUT PROCEDURE FOR ELECTRICAL PLUG-TYPE EQUIPMENT

This procedure covers all Electrical Plug-Type Equipment such as Battery Chargers, some Product Pumps, Office Equipment, Powered Hand Tools, Powered Bench Tools, Lathes, Fans, etc.

When working on, repairing, or adjusting the above equipment, the following procedures must be utilized to prevent accidental or sudden startup:

- Unplug Electrical Equipment from wall socket or in-line socket.
- Attached "Do Not Operate"Tag and Plug Box & Lock on end of power cord.
- An exception is granted to not lock & tag the plug is the cord and plug remain in the exclusive control of the employee working on, adjusting or inspecting the equipment.

- Test equipment to assure power source has been removed by depressing the Start or "On" switch.
- Perform required operations.
- Replace all guards removed.
- Remove Lock & Plug Box and Tag.
- Inspect power cord and socket before plugging equipment into power source. Any defects must be repaired before placing the equipment back in service.

NOTE: Occasionally used equipment may be unplugged from power source when not in use.

SOP: LOCKOUT/TAGOUT PROCEDURES INVOLVING MORE THAN ONE EMPLOYEE

In the preceding SOPs, if more than one employee is assigned to a task requiring a lock and tag out, each must also place his or her own lock and tag on the energy isolating device(s).

SOP: MANAGEMENT S REMOVAL OF LOCK AND TAG OUT

Only the employee that locks and tags out machinery, equipment or processes may remove his/her lock and tag. However, should the employee leave the facility before removing his/her locks and tags, the Maintenance Manager may remove the lock and tag. The Maintenance Manager must be assured that all tools have been removed, all guards have been replaced and all employees are free from any hazard before the lock and tag are removed and the machinery, equipment or process are returned to service. Notification of the employee who placed the lock is required prior to lock removal.

LOCKOUT/TAGOUT PROGRAM
SIGN OFF

I,___have been instructed on the Axcon's lockout program and safety procedures. I also understand that if I should ever disregard any of the safety procedures I may be subject to **termination**.

1. Axcon's Policy
2. Outside and subcontractors
3. General lockout/tagout instructions
4. Cord plug or pneumatic quick disconnect procedure
5. Permanently connected equipment procedure
6. Multiple service personnel
7. Change of personnel during a lockout
8. Removal of locks

LOCK #_____

Employee Name (Please print or type) _____

Employee Signature _____

Sub/Temp/Other (Name) _____

Company Name _____

Signature _____

Supervisor(s)/Instructor(s) Signature_____Date _____
_____Date _____

Safety Director's Signature_____Date _____

MACHINE GUARD PROGRAM

PURPOSE

The Machine Guard Program is designed to protect employees from hazards of moving machinery. All hazardous areas of a machine shall be guarded to prevent accidental caught in " situations. References: **General Requirements for all Machines** (29 CFR 1910.212), **Woodworking Machinery** (29 CFR 11910.213), **Abrasive Wheels** (29 CFR 1910.215), **Power Presses** (29 CFR 1910.217), **Power Transmission** (29 CFR 1910.219).

RESPONSIBILITIES

Management

- Ensure all Machinery is properly guarded
- Provide training to employees on machine guard rules
- Ensure new purchased equipment meets the machine guard requirements prior to use.

Supervisors

- Train assigned employees on the specific machine guard rules in their areas Monitor
- and inspect to ensure machine guards remain in place and functional Immediately
- correct machine guard deficiencies

Employees

- Do not remove machine guard unless equipment is locked and tagged Replace
- machine guards properly
- Report machine guard problems to supervisors immediately
- Do not operate equipment unless guards are in place and functional
- Only trained and authorized employees may remove machine guards

DEFINITION OF TERMS

- **Guards:** Barriers that prevent employees from contact with moving portions or parts of exposed machinery or equipment which could cause physical harm to the employees.
- **Enclosures:** Mounted physical barriers which prevent access to moving parts of machinery or equipment.
- **Point-of-Operation:** The area on a machine or item of equipment, where work is being done and material is positioned for processing or change by the machine.

Power Transmission: Any mechanical parts which transmit energy and motion from a power source to the point-of-operation. Example: Gear and chain drives cams, shafts, belt and pulley and drives and rods. **NOTE:** Components which are (7) feet or less from the floor or working platform shall be guarded.

Nip Points: In running machine or equipment parts, which rotate towards each other, or where one part rotates toward stationery object.

- **Shear Points:** The reciprocal (back and forth) movement of a mechanical part past a fixed point on a machine.
- **Rotating Motions:** An exposed mechanism is dangerous unless guarded. Even a smooth, slowly rotating shaft or coupling can grasp clothing or hair upon contact with skin and force an arm or hand into a dangerous position. Affixed or hinged guard enclosure protects against this exposure.
- **Reciprocating:** Reciprocating motions are produced by the back and forth movements of certain machine or equipment parts. This motion is hazardous, when exposed, offering pinch or shear points to an employee. A fixed enclosure such as a barrier guard is an effective method against this exposure.
- **Transverse Motions:** Transverse motions are hazardous due to straight line action and in running nip points. Pinch and shear points also are created with exposed machinery and equipment parts operating between a fixed or other moving object. A fixed or hinged guard enclosure provides protection against this exposure.
- **Cutting Actions:** Cutting action results when rotating, reciprocating, or transverse motion is imparted to a tool so that material being removed is in the form of chips. Exposed points of operation must be guarded to protect the operator from contact with cutting hazards, being caught between the operating parts and from flying particles and sparks.
- **Shearing Action:** The danger of this type of action lies at the point of operation where materials are actually inserted, maintained and withdrawn. Guarding is accomplished through fixed barriers, interlocks, remote control placement (2 hand controls), feeding or ejection.

MACHINE GUARDING REQUIREMENTS

- Guards shall be affixed to the machine where possible and secured.
- A guard shall not offer an accident hazard in itself.
- The point-of-operation of machine whose operation exposes an employee to injury shall be guarded.
- Revolving drums, barrels and containers shall be guarded by an enclosure which is interlocked with the drive mechanism.
- When periphery of fan blades are less than 7 feet above the floor or working level the blades shall be guarded with a guard having openings no larger than ½ inch.
- Machines designed for a fixed location shall be securely anchored to prevent walking or moving. For example; Drill Presses, Bench Grinders, etc.

GENERAL REQUIREMENTS FOR MACHINE GUARDS

- Guards must prevent hands, arms or any part of an employee's body from making contact with hazardous moving parts. A good safeguarding system eliminates the possibility of the operator or other employees from placing parts of their bodies near hazardous moving parts.
- Employees should not be able to easily remove or tamper with guards. Guards and safety devices should be made of durable material that will withstand the conditions of normal use and must be firmly secured to the machine.
- Guard should ensure that no objects can fall into moving parts. An example would be a

small tool which is dropped into a cycling machine could easily become a projectile that could and injure others.

- Guard edges should be rolled or bolted in such a way to eliminate sharp or jagged edges.
- Guard should not create interference which would hamper employees from performing their assigned tasks quickly and comfortably.
- Lubrication points and feeds should be placed outside the guarded area to eliminate the need for guard removal.

TRAINING

All employees shall be provided training in the hazards of machines and the importance of proper machine guards. Machine safety and machine guarding rules will be thoroughly explained as part of the new hire orientation program and annually as refresher safety training.

OFFICE SAFETY

PURPOSE

The Office Safety Program has many of the same elements found in other non-office environments; however, different potentials for personal injury and property damage are present. The office has relatively few hazardous chemical and no heavy or moving machinery. Like their production counterparts, office employees should know what to do in case of an emergency, be provided with a safe and efficient work station, and have periodic safety training.

RESPONSIBILITIES

Staff Managers (managers with assigned office staff and/or clerical assistants) shall:

- Manager all aspects of the Office Safety Program for their assigned personnel Provide
- monthly safety training

HAZARD COMMUNICATION PROGRAM

Each office employee must be made aware of all hazardous materials they may contact in their work area. The **Hazard Communication Program** includes:

- Written Program
- Safety Data Sheets for each hazardous substance used Specific safe
- handling, use and disposal
- Employee Training

EMERGENCY ACTION PLANS

Emergency Action Plans are designed to control events and minimize the effects. Through careful pre-planning, establishment of Emergency Action Teams, training and drills, employees can be

safeguarded and potential for damage to Axcon's assets minimized. (Instructions attached)

Emergency Action Plans include:

- Exits routes, meeting areas and employee accounting
- Emergency evacuation, incident command and notification to emergency services
- Personal injury and property damage
- Protection of Axcon's information, both hard copy and electronic media Bomb
- threats and facility security
- First Aid Response
- Use of fire extinguishers

Emergency action team members (for example, Supervisors, Receptionist/Telephone Operators, and key assigned members) should be trained with quarterly reviews and drills. Semiannual drills with all employees should be conducted to assure effectiveness. First Aid Kits or First Aid supplies should be available with trained First Aid Providers available.

HOUSEKEEPING AND MATERIAL STORAGE

A critical aspect of the Office Safety Program, the housekeeping and storage of office materials and supplies are addressed for convenience, efficiency, and to reduce fire and personal injury hazards. Housekeeping Programs cover:

- Trash removal, recycling
- Destruction of discarded sensitive information
- Office maintenance
- Office Storage
- Removal of ice/snow during inclement weather

Material Storage Programs are established to maintain office materials for the convenience of the users, purchasing efficiency and fire prevention. The following general procedures are to be followed:

- Shelf storage should be used for office supplies
- Paper products and flammable materials should not be stored in HVAC closets or electrical rooms
- Materials should not be stored within three feet of exits/emergency equipment or within 18 inches of ceilings/sprinkler heads

Heavy items, such as, cartons of office supplies and boxes of paper should be broken-down to individual reams and stored at waist level. Commonly used items, like pens, paper clips and staples are stored at chest to eye level. Proper step-stools or ladders should be provided to reach items stored overhead or out of reach. Materials should not be stored on a bare floor, within 18 inches of the wall/sprinkler heads or block any isles or exits.

For convenience and safe handling, material should be stored near areas of use. For example,

computer paper and supplies need to be store near the computer center. Training should include asking for assistance when lifting bulky/heavy items, using hand carts or dollies when possible. Employees should be trained to lift with their legs keeping a straight back while holding bundles close to their center of gravity. Carrying small loads close to the body and below chest level will reduce chances of slips and falls. New materials should be properly stored as soon as possible after arrival. This will avoid creating trip hazards and clutter.

Clean, well-lighted and maintained storage areas will prevent serious injury and costly property damage. Employee training and periodic inspections will ensure that safe material handling and storage is maintained.

Receiving areas for office supplies should be designed to allow placement of goods from shippers on a low counter or table. From this area they may be unpacked and re-distributed in smaller, lighter parcels. This also prevents bending to lift objects off the floor.

ELECTRICAL SAFETY AND RELATED WORK PRACTICES

Today's office utilizes numerous electronic equipment; i.e., lamps personal computers, printers, typewriters, space heaters, etc. A common occurrence is that some offices work areas have only one or two poorly placed outlets. The result is overloaded circuits and use of extension cords. Hazards in this situation would include fire, electric shocks, trips and falls.

Solutions include:

- Efficient work station design
- Adding convenient outlets
- Use of fixed power strips with ground fault circuit and circuit overload interrupters in place of extension cords
- Replacing worn or broken power cords
- Never running power cords under carpet or chair pads
- Providing operation manuals and training for exposed-not qualified employees under the **Electrical Safety Program**

Office employees should be trained to never operate or repair electrical equipment unless they have read and understood the directions and to always un-plug the equipment before attempting any adjustments or repairs.

ENVIRONMENTAL COTNROL AND QUALITY

Environmental Control and Quality Programs are designed for employee comfort and removal of indoor air pollutants. When the office environment becomes too cold or too hot and the air is fouled by cigarette smoke, dusts, odors and stagnation, it places physical and psychological stress on the employee which reduces efficiency. Other problems associated with poor climate and air quality control include illness, increased turnover and employee complaints. Symptoms of poor Environmental Control and Quality are:

- Stuffiness
- Dizziness

- Headaches
- Hot flashes/chills
- Upper respiratory irritation
- Fatigue
- Itches/rashes

Other buildings will have problems with environmental control and newer, high energy efficient; buildings may suffer air quality problems. Maintaining an environment near 75 degrees Fahrenheit year-round is comfortable for most employees. Employees should be instructed to add or remove outer layers of clothing for their personal comfort. Air quality can be controlled with good ventilation. High energy efficient buildings are designed to keep outside air out, inside air in and do not have much fresh air exchange.

Some sources of indoor air pollution include:

- Cigarette smoke
- Carbon monoxide from: furnaces, fueled heaters, parking lots
- Fibers from fire retardant and insulation
- Formaldehyde from: carpet adhesives, furniture bindings, construction material
- Radon gas through bricks and cement
- Organic chemicals from: copier fluids, paints, inks, paper
- Microorganisms from: people, plants, condensed water in air conditioners
- Pollens, allergens and dusts

The first priority is to gather as much information as possible and then combat the problem.

The best solution to indoor air pollution is increased fresh air. Areas with nonsmokers should have 5 cubic feet or fresh air introduced per minute per person. Areas with smokers should have 20 cubic feet of fresh air per minute per person introduced. Other solutions include removal of the offending problem or increasing ventilation around them. Monthly, air filters on climate control systems should be replaced and ducts checked and cleaned when necessary.

ERGONOMICS

Also known as human factors engineering, ergonomics is used to fit machine to man. Lately, much concern has been placed on Visual Display Terminals (VDTs) and use of Personal Computers (PCs). Other area where Ergonomics is concerned is work station design and layout.

Ergonomic design is used to remove some of the stress that is placed on the body. Use of VDTs and PCs stress the body in the eyes, head, neck, shoulders, arms, hands, and back. The root of the problem is that the work causes the body to move in uncommon motions. VDT and PC use strains the eyes when glare from artificial and natural light is reflected off of the screen.

High and low color contrast of print versus background also causes the eyes to work overtime. Color monitors or amber print over a brown background reduces eye strain and the monitor should be positioned away from windows and direct lighting to remove glare. Employees should have annual eye examinations and may be required to wear special glasses designed for VDT/PC use.

The neck, back, shoulders, arm and hands are affected by the position of the work station and office machines relative to the body. The key board should be at waist level, the monitor at eye level or lower and the chair adjust so that the employee s feet rest flat on the ground and back support is maintained. Used of under-desk foot rests are also recommended to allow the employee to shift their posture during a work a cycle. Chairs should be so designed that the knees are not below the hip joint. This prevents stress to the lower back and eliminates excessive pressure on the lower thigh behind the knee which can reduce blood flow to the lower leg. Adjustable VDT/PC desks and monitor stands, and training should be provided for employees. To relieve mental and physical fatigue, periodic breaks and rest periods or job rotation would be appropriate.

Other ergonomic designs may be used to remove physical stresses. Bringing the work closer to the employee and reducing the amount of reaching, bending, and routine hand/wrist movements will remove problems with fatigue and musculo-skeletal strains.

STRESS MANAGEMENT

In addition to environmental and work station stresses, employees may also suffer emotional stresses. The emotional stresses are caused by undefined work goals and ambiguity about what is required on the job. Emotional stress will affect employee performance and efficiency.

Stress Management elements are:

- Clearly written policies and procedures
- Thorough initial and follow-up training in work assignments
- Employee participation in decisions that will affect them
- Fair and objective written performance appraisal guides
- Established career paths that define opportunity for advancement
- Conducting time management workshops
- Conducting stress management workshops

Opening lines of communication is an important first step to solve emotional stress and provide a healthier work environment.

EMERGENCY ACTION PLANS INSTRUCTIONS (OFFICE)

MEDICAL RESPONSES

- When a medical emergency arises notify a manager/supervisor.
- Page for assistance by pressing the Page Sets button on any telephone. **Calmly** announce the incident location and type of injury. (i.e.: consciousness, bleeding, etc.)
- First Aid kits are located outside the rear door (leading to the warehouse) of the smoking breakroom. Personal protective equipment is provided in these kits for your protection.
- Follow Bloodborne Pathogen procedures, if necessary.

FIRE RESPONSES

- Page for assistance. Announce the location of the fire.
- Activate a "PULL" station.
- Evacuate the building.

NOTE: Fire extinguishers, emergency lighting and exit door hardware are inspected monthly.

- A knox box is available to the local fire department for emergency entrance if needed.

EVACUATION RESPONSE

- Exit the building at the nearest exit.
- Reassemble in the parking lot at the NE corner and **DO NOT** leave the area until instructed to do so.
- Notify the other company(s) in the building to evacuate.

POWER OUTAGE

- In the event of a power outage, remain at your work station unless otherwise instructed. Emergency lighting will provide adequate lighting for normal movement.
- The phone system will not work during a power outage.

" "

TORNADO RESPONSES

- In the event of a possible tornado or severe weather alert, a weather band radio will be activated. Assigned person(s) will monitor the information and if the event will affect our location, the appropriate announcements, via the phone paging system, will be made.
- If you are on the 2nd floor or in the warehouse at the time of the announcement move to the designated tornado shelters – breakrooms – restrooms – adjacent offices and hallway.
- Refer to the evacuation map in the breakrooms for the exact location of the tornado shelters, fire extinguisher, emergency exists, evacuation routes and assembly areas.

SAFETY AUDITS & INSPECTIONS

PURPOSE

Inspection of work areas and audits of safety programs are tools that can be used to identify problems and hazards before these conditions result in accidents or injuries. Audits also help to identify the effectiveness of safety program management and can be used as a guide to assure regulatory compliance and a safe workplace.

RESPONSIBILITIES

Management

- Design complete audit and inspection procedure for all work areas, processes and procedures.
- Conduct routine audits and inspections.

- Ensure audits are conducted by employees who understand the various safety programs and policies.

Supervisors

- Conduct informal daily safety inspections and ensure all unsafe conditions are corrected.
- Conduct documented weekly inspections and ensure all unsafe conditions are corrected.

CORRECTIONS

All safety deficiencies found during audits and inspections should be corrected as soon as possible. Documentation of corrections should be made on the audit or inspection sheet. And conditions that present a hazard are to be corrected or controlled immediately. (*Workplace Safety Inspection Sheet- attached*).

TYPES OF INSPECTIONS

- **Supervisor & Management Daily Walk-through** is an undocumented inspection that is made daily prior to startup and shift change to ensure the facility and equipment are in safe conditions for employees. All noted unsafe areas are placed in a safe condition prior to employees working in the area.

- **Weekly Supervisor Inspections** are conducted and recorded with an employee. This documented inspection provides a focus to ensure current hazard controls are still effective, equipment is in safe condition and safe work practices are in use. Discrepancies are listed on the inspection sheet, recorded on work orders for correction.

  The inspection sheet is forwarded to the Safety Manager for review and logging to track discrepancy correction.

- **Monthly Safety Committee Inspections** are conducted by a tour of the entire facility with members of the Safety Committee and the Safety Manager. This tour is to ensure Safety Committee Members are familiar with all areas of the operation. Record of problem areas, committee recommendations and deficiencies will be recorded and provided to management.

- **Noise Surveys** are conducted at least annually, or whenever facility modifications are made that impact the ambient noise levels in any area of the facility.

- **Hygiene Surveys** such as air monitoring and inspection of Health Care and Dinning Facilities will be conducted on a periodic basis subject to regulatory requirements and need to ensure environmental conditions remain safe and healthful.

- **Equipment Inspections** are conducted to ensure specific safety equipment is in good working order and will function when needed. Examples and frequencies are:

- Sprinkler Inspection – Monthly
- Boiler Checks – Weekly
- Emergency Lighting Test – Monthly
- Fire Extinguisher Inspections – Monthly
- Safety Equipment Inventories – Monthly
- Boiler Tests – Monthly
- Emergency Lighting 90 Min. Test – Semiannually
- Respirator Inspections – Before/After Use (Monthly at a minimum)
- Boiler Internal Inspections – Annually (by qualified inspector)

- **Program Audits** are conducted to check the administration of specific safety and health programs. Examples are:

  - Lockout-Tagout
  - SDS
  - PPE Assessments
  - Confined Space Assessments

Records of audits and inspection will be maintained in accordance with the requirements of the specific programs. As a minimum, the last two program audits will be kept on record and inspection records will be maintained on a most current basis. Records of deficiency corrections will be maintained for one calendar year from date of correction.

aXCON CORPORATION, INC.

01/01/2022

WORKPLACE SAFETY INSPECTION

Company Name _____

_____ Address _____

_____ City

_____ State _____ Zip Code _____

Telephone _____ Department _____

POTENTIAL HAZARDS - √Indicates Attention Required

MATERIAL HANDLING		ENVIRONMENTAL		WORK AREAS	
Lifting	1 ☐	Heat/cold	10 ☐	Material Storage	19 ☐
Trucks/Tow Motors	2 ☐	Noise	11 ☐	Aisles/Stairwells Clear	20 ☐
Pallet Jacks/Carts	3 ☐	Vapors/Fumes	12 ☐	Floor Dry/Wet	21 ☐
Conveyors	4 ☐	Dust	13 ☐	Ladders/Scaffold	22 ☐
Hoists/Cranes	5	Vibration	14	Exits Clear	23
CHEMICAL/FLAMMABLES		**MACHINERY**		**CONTROLS**	
Acids/Caustics	6 ☐	Bolts, Gears, Etc.	15 ☐	Guards	24 ☐
Flammables	7 ☐	Guards, Point of Op.	16 ☐	Training	25 ☐
Toxics	8 ☐	Cleaning and Adjust.	17 ☐	Procedures	26 ☐
Carcinogens	9	Lockout/Tagout	18	Local Exhaust System	27

UNSAFE BEHAVIOR

Horseplay Improper Tools

Lifting Improper Clothing

Lack of Protective Equipment

SAFETY EQUIPMENT

Gloves, Hard Hats, Harness

Boots/Safety Shoes

Eye Protection/Face Shields

First Aid

Respiratory Protection

Emergency Eye Wash

Emergency Shower

Fire Extinguisher

HOURS	PRIORITY RATING	UNSAFE CONDITIONS/ PROCEDURES/BEHAVIOR	CORRECTIVE ACTION	TARGET DATE	COMPLETION DATE

NOTE: All hazardous situations should be corrected as soon as possible. The priority system is a suggested guideline to the more serious situations first. **Hazard priority: (1) Serious; (2) Moderate; (3) Minor.**

Conducted by _____ Title _____ Date _____

Conducted by _____ Title _____ Date _____

*Completed form forwarded to Safety Manager

SAFETY TRAINING

PURPOSE

Training is one of the most important elements of any safety & health program. Training is designed to enable employees to learn their job properly, reinforce safety policies and procedures. Safety Training also provides an opportunity to communicate safety principles and commitment of

management to a safe work place.

NEW EMPLOYEE SAFETY ORIENTATION

A New Employee Safety Orientation class is a part of the overall orientation program that all new hires must attend. This orientation is conducted by the Safety Manager. The safety training in these classes consists of the below listed topics (as applicable):

- General Safety Rules & Polices
- Hazard Communication & Chemical Safety Procedures
- Hearing Conservation
- Control of bloodborne pathogens
- Electrical Safety & Lockout/Tagout
- Emergency Plans: Routes & Assembly Locations
- Procedures for safety violations, accidents, near-miss
- Proper lifting & ergonomic techniques
- Job hardening/warmup exercise
- Equipment Safety
- Process Safety Management Awareness

After completion of Safety Orientation Class, the new hire's supervisor will provide additional specific safety training applicable to the assigned tasks. This training will consist of:

- Emergency plans, evacuation routes, assembly locations and emergency actions
- Rules for reporting safety violations, accidents, and near-misses
- Safe Operating Procedures
- Location & use of Emergency Eye Wash & Shower Stations
- Location and use of Fire Alarm Pull Boxes
- Use of tools & equipment, lifting & material handling equipment
- Machine & Tool Guards, Emergency Stop Control Locations & Use
- Proper Ergonomic procedures & lifting techniques for the tasks assigned
- Safety equipment & personal protective equipment
- Hazard Communication: Specific hazards for work area chemicals

Record of this training will be recorded on the **Safety Meeting/Training Report.** This record will be filled out by the employee's immediate supervisor and filed in the Employee's Personnel Record. (Attached)

ANNUAL TRAINING TOPICS

The list below details areas that may require annual retraining for Employees, Maintenance Personnel & Supervisors and Special Employees:

Topics

- Annual Review of Safety Policies and Rules Ergonomics
- Hazard Communication/Chemical Safety
- Emergency Action Procedures (including evacuation)
- Electrical Safe Work Practices Confined
- Space Entry & Rescue
- Respiratory Protection
- Powered Industrial Truck Operation
- Bloodborne Pathogens
- Lockout/Tagout Procedures & Machine Guarding
- Aerial Lifts
- Assured Equipment Grounding Program (GFCI)
- Confined Space
- Disciplinary Program
- Fire Protection/Extinguishers
- First Aid
- General Waste Management
- Personal Protective Equipment (PPE)
- Rigging Material Handling
- Scaffolds
- Spill Prevention/Response
- Hearing Conservation

aXCON CORPORATION, INC.

01/01/2022

SAFETY MEETING/TRAINING REPORT

Company Name_____ Date_____
Address _____
City_____ State_____ Zip Code_____
Telephone _____

Topic_____ Video Shown: Yes☐ No☐
Comments _____
_____
_____
_____

Supervisor_____

Management Representative_____

Employee Name	Dept.

Number of Accidents/Incidents Past Period _____
Number of Accidents/Incidents This Period _____
New procedures discussed _____
_____

TOOL SAFETY PROGRAM

PURPOSE

Use of tools makes many tasks easier. However, the same tools that assist us can, if improperly used or maintained, can create significant hazards in our work areas. Employees who use tools must be properly trained to use, adjust, store and maintain tools properly. This program covers hand, electrical pneumatic, powder driven, and hydraulic tool safety.

RESPONSIBILITY

Management

- Provide correct tools for assigned tasks Ensure
- tools are maintained and stored safely Provide
- employee training
- Provide for equipment repair
- Remove defective tools from service

Employees

- Follow proper tool safety guidelines Report
- tool deficiencies and malfunctions
- Properly store tools when work is completed

HAZARD CONTROL

Engineering

- Properly designed tools Guards
- and safety devices

Administrative

- Tools sharpening program Use
- of PPE
- Control of tool issue Employee
- Training
- Controlled access to equipment and tool areas

GENERAL SAFETY PRECAUTIONS

Employees who use hand and power tools and who are exposed to the hazards of falling, flying, abrasive and splashing objects, or exposed to harmful dusts, fumes, mists, vapors, or gases must be provided with the particular personal equipment necessary to protect them from the hazard.

All hazards involved in the use of tools can be prevented by following five basic safety rules:

- Keep all tools in good condition with regular maintenance.
- Use the right tool for the job.
- Examine each tool for damage before use.
- Operate according to the manufacturer's instructions.
- Provided and use the proper protective equipment.

HAND TOOLS

Hand tools are non-powered. They include anything from axes to wrenches. The greatest hazards posed by hand tools result from misuse and improper maintenance.

Some examples:

- Using a screwdriver as a chisel may cause the tip of the screwdriver to break and fly, hitting the user or other employees.
- If a wooden handle on a tool such as a hammer or an axe is loose, splintered, or cracked, the head of the tool may fly off and strike the user or another worker.
- A wrench must not be used if its jaws are sprung, because it might slip.
- Impact tools such as chisels, wedges, or drift pins are unsafe if they have mushroomed heads. The heads might shatter on impact, sending sharp fragments flying.

Appropriate personal protective equipment, e.g., safety goggles, gloves, etc., should be worn due to hazards that may be encountered while using portable power tools and hand tools.

Floors shall be kept as clean and dry as possible to prevent accidental slips with or around dangerous hand tools.

Around flammable substances, sparks produced by iron and steel hand tools can be a dangerous ignition source. Where this hazard exists, spark-resistant tools made from brass, plastic, aluminum, or wood will provide for safety.

POWER TOOL PRECAUTIONS

Power tools can be hazardous when improperly used. There are several types of power tools, based on the power source they use: electric, pneumatic, liquid fuel, hydraulic, and powder-actuated.

The following general precautions should be observed by power tools users:

- Never carry a tool by the cord or hose.
- Never yank the cord or the hose to disconnect it from the receptacle.
- Keep cords and hoses away from heat, oil, and sharp edges.
- Disconnect tools when not in use, before servicing, and when changing accessories such as

blades, bits and cutters.

- All observers should be kept at a safe distance away from the work area.
- Secure work with clamps or a vise, freeing both hands to operate the tool.
- Avoid accidental starting. The worker should not hold a finger on the switch button while carrying a plugged-in tool.
- Tools should be maintained with care. They should be kept sharp and clean for the best performance. Follow instruction in the user's manual for lubricating and changing accessories.
- Be sure to keep good footing and maintain good balance.
- The proper apparel should be worn. Loose clothing, ties, or jewelry can become caught in moving parts.
- All portable electric tools that are damaged shall be removed from use and tagged "DO NOT USE."

GUARDS

Hazardous moving parts of a power tool need to be safeguarded. For example, belts, gears, shafts, pulleys, sprockets, spindles, drums, fly wheels, chains, or other reciprocating, rotating, or moving parts of equipment must be guarded.

Guards, as necessary, should be provided to protect the operator and others from the following:

- Point of operation
- In-running nip points
- Rotating parts
- Flying chips and sparks

Safety guards must never be removed when a tool is being used. For example, portable circular saws must be equipped with guards. An upper guard must cover the entire blade of the saw. A retractable lower guard must cover the teeth of the saw, except when it makes contact with the work material. The lower guard must automatically return to the covering position when the tool is withdrawn from the work.

SAFETY SWITCHES

The following hand-held powered tools are to be equipped with a momentary contact "on-off" control switch: drills, tapers, fastener drivers, horizontal, vertical and angle grinders with wheels larger than 2 inches in diameter, disc and belt sanders, reciprocating saws, saber saws, and other similar tools. These tools also may be equipped with a lock-on control provided that turnoff can be accomplished by a single motion of the same finger or fingers that turn it on.

The following hand-held powered tools may be equipped with only a positive "on-off" control switch: platen sanders, disc sanders with discs 2 inches or less in diameter; grinders with wheels 2 inches or less in diameter; routers, planers, laminate trimmers, nibblers, shears, scroll saws and jigsaws with blade shanks ¼-inch wide or less.

Other hand-held powered tools such as circular saws having a blade diameter greater than 2 inches, chain saws, and percussion tools without positive accessory holding means must be equipped with a constant pressure switch that will shut off the power when the pressure is released.

ELECTRICAL SAFETY

Among the chief hazards of electric-powered tools are burns and slight shocks which can lead to injuries or even heart failure. Under certain conditions, even a small amount of current can result in severe injury and eventual death. A shock also can cause the user to fall off a ladder or other elevated work surface.

To protect the user from shock, tools must either have a three-wire cord with ground, be grounded, be double insulated, or be powered by a low-voltage isolation transformer. Three-wire cords contain two current-carrying conductors and a grounding conductor. One end of the grounding conductor connects to the tool's metal housing. The other end is grounded through a prong on the plug. Anytime an adapter is used to accommodate a two-hole receptacle, the adapter wire must be attached to a known ground. The third prong should never be removed from the plug.

Double insulation is more convenient. The user and the tools are protected in two ways: by normal insulation on the wires inside, and by a housing that cannot conduct electricity to the operator in the event of a malfunction.

Electric Power Tool General Safety Practices:

- Electric tools should be operated within their design limitations.
- Gloves and safety footwear are recommended during use of electric tools.
- When not in use, tools should be stored in a dry place.
- Electric tools should not be used in damp or wet location.
- Work areas should be well lighted.

POWERED ABRASIVE WHEEL TOOLS

Powered abrasive grinding, cutting, polishing, and wire buffing wheels create special safety problems because they may throw off flying fragments.

Before an abrasive wheel is mounted, it should be inspected closely and sound or ring tested to be sure that it is free from cracks or defects. To test, wheels should be tapped gently with a light non-metallic instrument. If they sound cracked or dead, they could fly apart in operation and so must not be used. A sound and undamaged wheel will give a clear metallic tone or "ring."

To prevent the wheel from cracking, the user should be sure it fits freely on the spindle. The spindle nut must be tightened enough to hold the wheel in place, without distorting the flange. Follow the manufacturer's recommendations. Care must be taken to assure that the spindle wheel will not exceed the abrasive wheel specifications.

Due to the possibility of a wheel disintegrating (exploding) during start-up, the employee should never stand directly in front of the wheel as it accelerates to full operating speed.

Portable grinding tools need to be equipped with safety guards to protect workers not only from the moving wheel surface, but also from flying fragments in case of breakage.

Powered Grinder Safety Precautions

- Always use eye protection.
- Turn off the power when not in use. Never
- clamp a hand-held grinder in a vise.

PNEUMATIC TOOLS

Pneumatic tools are powered by compressed air and include chippers, drills, hammers, and sanders. There are several dangers encountered in the use of pneumatic tools. The main one is the danger of getting hit by one of the tool's attachments or by some kind of fastener the worker is using with the tool. Eye protection is required, and face protection is recommended for employees working with pneumatic tools. Working with noisy tools such as jackhammers requires proper, effective use of hearing protection.

A safety clip or retainer must be installed to prevent attachments, such as chisels on a chipping hammer, from being unintentionally shot from the barrel.

Screens must be set up to protect nearby workers from being struck by flying fragments around chippers, riveting guns, staplers, or air drills.

Compressed air guns should never by pointed toward anyone. Users should never dead-end it against themselves or anyone else.

POWDER-ACTUATED TOOLS

Powder-actuated tools operate like a loaded gun and should be treated with the same respect and precautions. In fact, they are so dangerous that they must be operated only by specially trained employees.

Powder-Actuated Tool Safety:

- These tools should not be used in an explosive or flammable atmosphere.
- Before using the tool, the worker should inspect it to determine that it is clean, that all moving parts operate freely, and that the barrel is free from obstructions.
- The tool should never be pointed at anybody.
- The tool should not be loaded unless it is to be used immediately. A loaded tool should not be left unattended, especially where it would be available to unauthorized persons.
- Hands should be kept clear of the barrel end. To prevent the tool from firing accidentally, two separate motions are required for firing: one to bring the tool into

position, and another to pull the trigger. The tools must not be able to operate until they are pressed against the work surface with a force of at least 5 pounds greater than the total weight of the tool.

If a powder-actuated tool misfires, the employees should wait at least 30 seconds, and then try firing it again. If it still will not fire, the user should wait another 30 seconds so that the faulty cartridge is less likely to explode, than carefully remove the load. The bad cartridge should be put in water.

Suitable eye and face protection are essential when using a powder-actuated tool.

The muzzle end of the tool must have a protective shield or guard centered perpendicularly on the barrel to confine any flying fragments or particles that might otherwise create a hazard when the tool is fired. The tool must be designed so that it will not fire unless it has this kind of safety device.

All powder-actuated tools must be designed for varying powder charges so that they user can select a powder level necessary to do the work without excessive force.

If the tool develops a defect during use it should be tagged and taken out of service immediately until it is properly repaired.

Powder-Actuated Tool Fasteners

When using powder-actuated tools to apply fasteners, there are some precautions to consider. Fasteners must not be fired into material that would let them pass through to the other side. The fastener must not be driven into materials like brick or concrete any closer than 3 inches to an edge or corner. In steel, the fastener must not come any closer than one-half inch from a corner or edge. Fasteners must not be driven into very hard or brittle materials which might chip or splatter or make the fastener ricochet.

An alignment guide must be used when shooting a fastener into an existing hole. A fastener must not be driven into a spalled area caused by an unsatisfactory fastening.

HYDRAULIC POWER TOOLS

The fluid used in hydraulic power tools must be an approved fire-resistant fluid and must retain its operating characteristics at the most extreme temperatures to which it will be exposed. The manufacturer's recommended safe operating pressure for hoses, valves, pipes, filters, and other fittings must not be exceeded.

Jacks

All jacks– lever and ratchet jacks, screw jacks, and hydraulic jacks– must have a device that stops them from jacking up too high. Also, the manufacturer's load limit must be permanently marked in a prominent place on the jack and should not be exceeded.

A jack should never be used to support a lifted load. Once the load has been lifted, it must immediately be blocked up.

Used wooden blocking under the base if necessary to make the jack level and secure. If the lift surface is metal, place a 1-inch-thick hardwood block or equivalent between it and the metal jack head to reduce the danger of slippage.

To set up a jack, make certain of the following:

- The base rests on a firm level surface The
- jack is correctly centered
- The jack head bears against a level surface The
- lift force is applied evenly

Proper maintenance of jacks is essential for safety. All jacks must be inspected before each use and lubricated regularly. If a jack is subjected to an abnormal load or shock, it should be thoroughly examined to make sure it has not been damaged.

Hydraulic jacks exposed to freezing temperatures must be filled with adequate antifreeze liquid.

VEHICLE FUELING SAFETY PROCEDURES

PURPOSE

The Fueling Safety Procedures has been established to prevent personal injuries and accidental spills of fuel at Non-Owned Fueling Islands.

PREVENTION PLAN FOR FUELING ISLANDS

- **NO SMOKING** within 50 feet of the fueling island.
- As you approach the fueling island, note overhead and side clearances. Park vehicle as close to the fueling island as possible; however, no closer than 3 feet. Vehicles with one fuel tank should park with the fueling side toward the fueling island.
- **TURN OFF ENGINE**, remove the keys from the ignition and place the keys in your pocket. It is suggested that you wear work gloves while fueling.
- Select the proper fuel and grade to be dispensed. Remove fuel nozzle from the cradle and visually inspect the nozzle and hose for any defects. If defects (cracks, leaks, etc.) are noted, **DO NOT USE** and report defects to the Location Manager or Station Manager immediately.
- Open fuel port and insert nozzle. Activate fuel pump by moving the lever to the "On" position. Begin fueling by squeezing the lever on the nozzle. You may use the "hands free catch bar" to regulate fuel flow; however, keep one hand on the fuel nozzle at all times. **NEVER** leave a vehicle unattended while fueling and pay close attention to prevent over-filling.

- After fueling is complete, lightly tap the end of the nozzle in the fuel port to remove any drops and replace fuel port cap. If fueling the saddle tank on the other sides of a vehicle, place the nozzle on the back deck, walk around to the other side, pull nozzle/hose across neck and repeat step 5. To avoid damage to the nozzle/hose and avoid accidental spills, **DO NOT** throw nozzle over or under the vehicle.
- Turn off the pump and replace nozzle. Complete the required fueling tickets and note the vehicle number, vehicle mileage, number of gallons pumped and your name.

IN CASE OF FUEL SPILLS OR FIRES

- Locate Emergency Stop Panic Button and Class B Fire Extinguisher.
- Depress Emergency Stop Panic Button and report the emergency to the Location Manager or Station Manager immediately. **DO NOT** start or move the vehicle.
- If a small fire is ignited, obtain and activate the Fire Extinguisher. Direct the discharge to the base of the fire in a sweeping motion. If the fire cannot be controlled within a few seconds, leave the area immediately and report to the Location Manager or Station Manager.

NOTE: Federal Law Prohibits dispensing an improper fuel type into any vehicle or into a non-approved fuel container.

VEHICLE ACCIDENTS AND TANK RUPTURES

In order to prevent personal injuries and control spills of fuel following a vehicle accident, tank rupture or fuel system failure, the Fuel Spill Procedure has been established as follows:

- **NO SMOKING** within 50 feet of the fuel spill. Warn others in the area to extinguish all smoking or flame producing materials.
- As soon as a fuel spill is discovered, immediately close tank valve. **DO NOT** start or move any vehicles.
- Set-up Emergency Triangles per DOT regulations to warn others of the hazard and to avoid additional accidents.
- Retrieve Fuel Spill Containment Kit and Fire Extinguisher from vehicle and move to the spill area.
- Overlap and tie together socks and place ahead of the leading edge of the spill. Apply loose gravel or soil from the area to anchor and dam the outside edge.
- If fuel is leaking, attempt to stop the leak by applying the Epoxy over the rupture or by placing an object in the hole and place absorbent pads under the leak.
- Apply absorbent pads to soak-up the spilled fuel. Leave pads in place.
- Immediately notify your Supervisor and Highway Patrol.

AERIAL LIFT SAFETY

MECHANICAL REQUIREMENTS

- All aerial lifts must be equipped with a manufacturer's model specific operating manual.
- Aerial lifts shall be equipped with a 2 1/2 pound or greater dry chemical fire extinguisher which is accessible from the ground.
- Each aerial lift shall be conspicuously identified with the following information:
    - Make
    - Model
    - Insulated or non-insulated
    - Qualification voltage and date of test (if insulated)
    - Serial number
    - Rated load capacity of boom and basket
    - Maximum working height
    - Aerial device system pressure or aerial device system voltage, or both
    - Each control shall be marked as to its function

USE REQUIREMENTS

- Never operate an aerial lift unless properly trained.
- Run the aerial lift through its normal operating positions using ground controls prior to lifting personnel.
- Inspect the aerial lift thoroughly prior to use.
- Do not use an aerial lift on soft or uneven surfaces without proper padding and cribbing to provide necessary stability to the lift.
- Keep platforms clean and free of slippery substances.
- Secure loose tools and objects.
- Never exceed boom and bucket load limits specified by the manufacturer.
- Never alter the insulated portion of an aerial lift.
- Prior to moving the unit into work position, check all controls.
- Never move an aerial lift when the boom is elevated or personnel are in the basket.
- Do not refuel with the engine running, when personnel are in the basket or when using the lift in 161kV or 500kV switchyards.
- Wear a hard hat and proper fall protection when working from an aerial lift. If a safety lanyard greater than two (2) feet in length is required, it shall be a decelerating or self-retractable type.
- Maintain a 10' distance to power lines
- Do not anchor fall protection to other structures or equipment unless entering or exiting the lift.

- Entry and exit into the lift at heights above 6 feet is permitted when fall protection such as guard rails or a fall arrest system is used while the worker moves between the lift and the working surface. The fall arrest system must provide 100% fall protection during this move.
- Do not use cell phones while operating an aerial lift. This includes talking, texting, or use of any applications on the device.
- Never sit on or climb onto the lip, the mid or top rail of the basket, or use planks, ladders, etc., in the basket for a work position. Stand on the basket/bucket floor.
- Do not wear pole climbers while performing work from an aerial lift bucket truck.
- If the aerial lift has outriggers, operate the lift with the outriggers extended and firmly set for stability.
- Chock the wheels of aerial lifts while in use according to manufacturer instructions.
- When an employee is in the basket, do not operate ground level lift controls on aerial lifts with upper controls unless there is an emergency.
- Never use an aerial lift to lift personnel in high winds or adverse weather conditions such as ice, approaching thunderstorms or lighting. Reference the equipment owner's manual for specific wind speed limitations.
- Properly stow arms, booms and outriggers before driving an aerial lift.

ANNUAL TRAINING

Note to Supervisors: Read and prepare. Your objective is to demonstrate and prepare a scissor lift for the meeting to identify the hazards of an aerial lift. You must make sure your employees are trained and aware of any hazards before they can use an aerial lift.

The US Bureau of Labor Statistics reports that more than 25 construction workers die each year using aerial lifts. Approximately 70 percent involve boom lifts such as bucket trucks, while 25 percent of the deaths involve scissor lifts. Many aerial lifts deaths occur when the machines tip over while navigating uneven surfaces.

Other tip-over occurs when the lift is extended more than 15 feet (4.5 meters). Frequently operators lack the training to know they are creating safety hazards. Not only that, it's critical to plan ahead in order to identify the hazards of an aerial lift job.

To prevent tip-over, aerial lift operators are not to exceed reach/load limits. Pre-start inspections are also important in identifying and controlling hazards, particularly with rented lifts. The foreman should ensure that employees are qualified to operate aerial lifts and that a pre-inspection have been performed prior to each job. Check all labels and warning signs. Do not operate the machine with a hydraulic oil or air leak. An air leak or hydraulic leak can penetrate and burn your skin.

Always use the lift according to the manufacturer recommendations. Do not try to turn on the machine if you do not have the key that belongs to that particular lift. Inserting a bad key on the

machine can break the key- switch cylinder creating a short circuit on the controls. This can cause the machine to move on its own exposing every employee on the area to a crushing hazard. Keep in mind that when you are working on or near a lift, you should be extremely careful with your surroundings as hazards are always present.

The following are common hazards when operating aerial lifts:

- No training
- Inexperience
- Operating on uneven surfaces
- Overloading the lift

- Encountering pot-holes and debris
- Uncorrected mechanical defects
- Climbing above or leaning over rails

Safe operating Tips Include:

- Use the operator's manual
- Only authorized persons are allowed to operate the equipment
- Equipment will have a working back-up alarm, or a spotter will be used when backing
- Modifications to the equipment shall not be made without written approval from the manufacturer
- Do not exceed manufacturer's load capacity limits
- Lift controls and equipment are tested or inspected each day
- Do not modify an aerial lift without written permission from the manufacturer
- An approved fall restraint system shall be worn while working from an aerial lift
- The fall restraint system must be attached to the boom or basket
- Always closed lift platform doors or chains
- Employees shall stand firmly on the floor and shall not climb on the rails or the edge of the basket
- Always inspect the area for possible hazards
- Do not pull or push anything with the machine
- Avoid running thru extension cords, water hoses, electrical wires or any object that can cause the machine to lose its balance
- Most important stay away from the power lines (10 feet)

Aerial Lift

Pre-Start & Workplace Inspection Form

AERIAL LIFT INFORMATION		
MAKE	MODEL	S/N
LOCATION WHERE LIFT WILL BE USED:		
TYPE OF WORK:		

Pre-Start Inspection	***OK***	***NOT OK***	***N/A***
Operating Controls			
Emergency Controls			
Safety Devices			
Personal Protective Devices			
Pneumatic, Hydraulic and Fuel System (leaks)			
Cables			
Wiring harness			
Loose/missing parts			
Tires/Wheels			
Placards and Warnings			
Operational Manual			
Outriggers/Stabilizers			
Guardrail system and locking gate			
Additional Comments			
Workplace Inspection	***OK***	***NOT OK***	***N/A***
Drop-offs or holes			
Slopes			
Bumps and floor obstructions			
Debris			
Overhead obstructions and high voltage conductors			
Hazardous locations and atmospheres			
Tools and other equipment			
Inadequate surface and support to withstand all load forces imposed by the aerial lift platform			
Wind & Weather Conditions **NOTE: Operation of aerial lifts outdoors is prohibited when wind speeds reach 28 mph, when there is a wind warning in effect of 28 mph or more, when lightening is visible, or when thunder storm warnings are in effect.**			
Presence of unauthorized people			
Other possible unsafe conditions			
Additional Comments:			

Inspected By:_____ Date:_____

GROUND FAULT CIRCUIT INTERRUPTER – (GFCI) PROGRAM

Axcon Corporation, Inc.
Assured Equipment Grounding Conductor Plan

Plan last updated: 04/11/2018

Scope

This Assured Equipment Grounding Conductor (AEGC) Plan (Plan) covers all work areas where electrical outlets are not equipped with ground-fault circuit interrupters (GFCIs) and where any employee is exposed to potential electrical hazards from cord sets, receptacles not part of permanent wiring, and equipment connected by cord or plug.

This Plan is in compliance with federal rules for wiring design and protection at construction sites (29 CFR 1926.404(b)(1)).

Authorization

This Plan is authorized by **Richard Seidel.**

Signature: _____*Richard M. Seidel*_____

Policy

Axcon Corporation, Inc. will ensure the safety of its employees from potential electrical hazards caused by cord sets, receptacles which are not a part of the permanent wiring of the building or structure, and equipment connected by cord and plug which are available for use or used by employees and not equipped with GFCIs.

Plan Administration

Competent person. The following personnel are designated as competent to implement all procedures in this Plan:

Competent Person Name	Department	Phone
Richard Seidel	Safety Program Manager	484-256-4911
Brian Pedicord	Owner/HR Manager	850-261-3904

Plan Review and Update

This Plan will be periodically reviewed and updated when:

- New types of electrical utilization systems or equipment are introduced into the workplace.
- Evaluations of workplace hazards, injuries, and near misses demonstrate that the current Plan is outdated or not effective.
- Regulatory or applicable national consensus standards change that require this Plan to be updated.

Definitions

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

Ground-fault circuit interrupter (GFCI) means a safety device designed to sense electrical leakage to ground and to quickly shut off the circuit to prevent electric shock.

Qualified person means an employee familiar with the construction and operation of equipment and the hazards involved.

Equipment Use Prohibited

Employees must use a temporary electrical supply source or receptacle equipped only with a GFCI which meets the equipment grounding requirements of this Plan. All employees are prohibited from using any temporary electrical supply sources or receptacles that do not meet these requirements.

Electrical supply sources or receptacles found damaged or defective or that fail any of the inspections or tests prescribed by this Plan will not be used until repaired or replaced.

Equipment Visual Inspection

The following equipment will be visually inspected before each day's use for external defects (e.g., deformed or missing pins or insulation damage) and for indication of possible internal damage:

- Cord sets
- Attachment caps
- Plug and receptacle of cord sets
- Any equipment connected by cord and plug except cord sets and receptacles that are fixed and not exposed to damage

Equipment Test

- Continuity Test
- Grounding conductors on the following equipment must be tested for continuity and must be electrically continuous:
    - All cord sets
    - Receptacles that are not a part of the permanent wiring of the building or structure
    - All plug-connected equipment required to be grounded

Ground Conductor Test

All cord sets, receptacles that are not a part of the permanent wiring of the building or structure, and all plug-connected equipment required to be grounded must be tested for correct attachment of the equipment-grounding conductor. The equipment-grounding conductor must be connected to its proper terminal.

The results of equipment tests will be recorded on the attached *Assured Equipment Grounding Conductor Test Form*.

Test Schedule

All required tests will be performed:

- Before the first use daily
- Before equipment is returned to service following any repairs
- Before equipment is used after any incident that can be reasonably suspected to have caused damage, such as when a cord set is run over
- Every 3 months
- Every 6 months for cord sets and receptacles that are fixed and not exposed to damage

Training

All employees or other personnel authorized to repair or replace temporary power supplies or receptacles will be trained and qualified to perform such operations.

Employees who use temporary power supplies and receptacles for portable power tools will be instructed in the safe use of such equipment and how to recognize and avoid unsafe conditions or equipment.

Inspection and Test Records

All inspections and tests will be documented to identify each receptacle, cord set, and cord- and plug-connected equipment that passed the inspection or test, the date of inspection or test, and the individual responsible for the inspection or test.

The test records will be kept by means of logs and will be maintained until replaced by a more current record. The record is available on the jobsite for inspection by agency representatives and any affected employee.

Attachments

Assured Equipment Grounding Conductor Test Form

aXCON CORPORATION, INC.

01/01/2022

ASSURED EQUIPMENT GROUNDING CONDUCTOR TEST FORM

Worksite/Location

Equipment Tested	Date Tested	Action (if any)	Reason	Signature of Tester

Reason for test:
A — Before the first use of equipment
B — Before the equipment is returned to service following any repairs
C — Before equipment is used after an incident that might have caused damage to the equipment
D — Within 3 months of the last test for temporary cord sets and receptacles that may be exposed to damage
E — Within 6 months for fixed cord sets or receptacles that are not exposed to potential damage

Authorized Signature
Name: ..... Signature: ..... Date: / /

Confined Space / Permit Confined Space

Purpose

The purpose of this written Permit-Required Confined Space Program is to protect the health and safety of **Axcon Corporation, Inc.** employees who must enter into and/or work in close proximity to a permit-required confined space. This document provides practices and procedures must be followed when entering a permit-required confined space. This program is intended to be in compliance with the requirements of OSHA Subpart AA -- 29 CFR 1926.1200.

Policy

Axcon Corporation, Inc. policy prohibits entry into permit-required confined spaces without first identifying and, if necessary, eliminating or isolating all potential hazards. Before workers enter a permit-required confined space, **Axcon Corporation, Inc.** will make every effort to eliminate or isolate all existing or potential hazards in order to reclassify the confined space using alternative procedures establish by OSHA regulations or to classify the space as a non-permit-required confined space as permitted by OSHA regulations. The procedures set forth in this program must be followed by all employees prior to entering into a confined space of any type, shape, configuration, or classification.

Controlling Contractor

The controlling contractor is the employer who has the overall responsibility for construction at the work site. If Axcon Corporation, Inc. is the controlling contractor at a jobsite, our company's designated competent person is responsible for identifying all confined spaces before the start of work. The competent person must notify all employers who have workers onsite that a permit-required confined space is present on the site, its location, and any hazards it poses.

Entry Employer

The entry employer is any company that employs or directs employees who will enter into confined spaces. As an entry employer, Axcon Corporation, Inc. is responsible for the safety of all employees assigned to work inside or around confined spaces.

If it is necessary for employees of this company to enter a permit-required confined space the competent person and entry supervisor must ensure that a copy of the Confined Space Entry Program is available at the construction site and that it is implemented whenever employees are directed to enter a confined space. The written program must be made available prior to and during entry operations to employees and their authorized representatives.

Program Administrator

The Confined Space Entry Program will be administered by the safety department. The administrator will ensure all project managers, superintendents, supervisors, foremen, and crew leaders are aware of the content of the Confined Space Entry Program and of their responsibilities to implement the program at their jobsites.
The program administrator will ensure a copy of the confined space entry program is available on all jobsites where a confined space is known to exist or may exist as the construction work progresses.

Confined Space Definition

A confined space means a space that: **1)** is large enough and so configured that an employee can bodily enter and perform assigned work, **2)** has limited or restricted means for entry or exit, and **3)** is not designed for continuous human occupancy. Examples of confined spaces include but are not limited to manholes, sewers, storm drains, water mains, pipelines, drilled shafts, enclosed beams, digesters, lift stations, underground utility vaults, tunnels, wind turbines, concrete pier towers, transformer vaults, tanks, process vessels, bins, pits, silos, boilers, incinerators, ventilation or exhaust ducts, pipe chassis, crawl spaces, and attics.

A permit-required confined space means a confined space that either **1)** contains or has the potential to contain a hazardous atmosphere, **2)** contains a material that has the potential for engulfing an entrant, **3)** has an internal configuration such that an entrant could be trapped or asphyxiated by inwardly converging walls or by a floor which slopes downward and tapers to a smaller cross-section, or **4)** contains any other serious safety or health hazard.

Note: All confined spaces are considered to be a permit-required confined space until the space is tested and evaluated by the Entry Supervisor who must determine if the confined space may be reclassified as an alternative entry or non-permit required confined space. An attendant is always stationed outside a confined space while it is occupied by workers.

Duties and Responsibilities

Entry Employer Safety Department

The safety department shall be responsible for the development, documentation, and administration of Axcon Corporation, Inc.'s Confined Space Entry Program. In fulfilling these responsibilities, the safety department shall carry out the following tasks:

1) Develop the written Confined Space Entry Program and revise the program as necessary.
2) Maintain records of employee training.
3) Provide guidance for the proper selection and use of appropriate gas monitoring equipment, respiratory protection, and personal protective equipment to meet the requirements of this program.
4) Annually audit work operations and documentation using canceled permits to evaluate the overall effectiveness of the Confined Space Entry Program and ensure that employees participating in entry operations are protected from permit space hazards.
5) Assist each manager/supervisor in identifying confined spaces encountered by his/her employees.

6) Provide guidance for the proper selection and use of appropriate safety and rescue equipment to meet the requirements of the Confined Space Entry Program.

Duties of Entry Supervisors:

Supervisors shall identify and report all job areas and locations that are or may be confined spaces. A list of confined spaces that are identified shall be submitted to the Safety Department and the Controlling Contractor.

An Entry Supervisor is a qualified person, such as a foreman or crew leader, who is responsible for classifying the confined space, determining if acceptable entry conditions are present at a permit-required confined space,
for authorizing entry, and overseeing entry operations. An entry supervisor may serve as an attendant or entrant if that individual is trained and equipped to perform the task.

The designated Entry Supervisors shall carry out the following tasks:

1) Identify and evaluate the hazards of permit spaces before employees enter them.
2) Classify confined spaces as “permit required”, “alternate procedure”, or "non-permit required.” Utilize a confined space entry checklist (see attached Confined Space Entry Checklist) to assess the confined space(s).
3) Take the necessary measures to prevent unauthorized entry into confined spaces by posting danger signs, notifying other employers and employees onsite or their authorized representative of the existence, location, and hazards of the confined spaces.
4) Check that the permit has been completed properly and that gas monitoring and other tests have been conducted before permitting entry and signing the permit.
5) Identify personnel who are authorized to enter the confined space(s).
6) Identify the employees under their supervision who are required to wear respirators.
7) Implement isolation/lockout program procedures for the confined space hazards.
8) Verify all permit-required and alternative entry confined spaces are continuously monitoring utilizing a gas monitor.
9) Verify forced air ventilation is continuously used in all permit-required and alternative entry confined spaces.
10) Provide instructions and necessary additional training to employees who may enter confined spaces if conditions or hazards exist for which employees have not been trained.
11) Provide instruction to personnel on the proper use of equipment required for confined space entry.
12) Inform personnel about respiratory hazards in confined spaces.
13) Verify a rescue plan has been prepared and rescue services are available for all permit-required confined space(s).
14) Conduct a pre-entry briefing to inform attendants and entrants of possible hazards that may be encountered.
15) Maintain equipment that is used to enter confined spaces.
16) Maintain records of equipment maintenance and employee training.
17) Conduct work site inspections to verify compliance with confined space entry procedures.
18) Removes unauthorized individuals who enter or attempt to enter the confined space.
19) Issue and cancel entry permits.

Duties of Attendants:

An Attendant is the individual stationed outside the permit-required confined space and has the following knowledge and responsibilities:

1) Is familiar with and understands the hazards that may be faced during entry into the confined space.
2) Is aware of possible behavioral changes and effects of hazard exposures to entrants.
3) Continuously maintains an accurate count of entrants.
4) Remains outside the space until relieved by another attendant or all entrants have exited the confined space.
5) Assists and communicates with entrants.
6) Assesses activities inside and outside the space to determine if it is safe for entrants to remain in the space.
7) Alerts entrants of the need to evacuate the space.
8) Summons rescue and other emergency services as soon as the attendant determines that the entrants may need assistants to escape the confined space.
9) Performs non-entry rescue when possible using the tripod and retrieval systems.
10) Prevents unauthorized entry into the confined space while entry is underway.
11) Performs no duties that might interfere with the attendant's primary duty to assess and protect the entrants.
12) Under no circumstances enter into a confined space to perform a rescue unless properly trained to perform confined space rescue and until properly relieved by another authorized attendant.
13) Performs non-entry rescue of entrants from the confined space using the confined space retrieval system.

Duties of Entrants:

Entrants are the individuals who enter into a confined space to perform assigned tasks. Entrants must:

1) Be familiar with and understand the hazards they may face during entry into a confined space.
2) Know how to properly use the safety equipment provided for entry into the space.
3) Communicate with the attendant on a regular and as needed basis to allow the attendant to assess the entrant's status and to alert the entrant of the need to evacuate the space if needed.
4) Alert the attendant of any hazardous conditions or situations identified within the space.
5) Evacuate the space immediately when ordered by the attendant or entry supervisor, or if the entrant detects a prohibited condition.
6) Report any deficiencies or malfunctions of equipment to the attendant or entry supervisor.
7) Understand emergency procedures in case of an accident in a confined space.

Procedures for Entering a Permit-Required Confined Space

The Competent Person and/or Entry Supervisor will identify and classify every confined space as a permit-required confined space, alternate procedure confined space, or non-permit confined space.

When permit-required confined spaces are identified, supervisors will also be responsible for the following:

Preventing Unauthorized Entry
To prevent unauthorized entry into permit-required confined spaces, Supervisors must post warning signs, erect barriers as needed, and notify the controlling contractor and other onsite employers of the location(s) and dangers posed by each permit-required confined space.

Identifying Permit Space Hazards
Competent Person or Entry Supervisor will identify and evaluate the hazards in confined spaces before classifying the confined space. All confined spaces must be classified before allowing employee(s) to enter into the confined space.

The following hazards shall be identified prior to entry into a confined space:

- Atmospheric hazards
  - Oxygen deficient or enriched
  - Flammable atmospheres
  -Toxic atmospheres
- Electrical hazards
- Mechanical hazards
- Engulfment hazards
- Physical hazards (falls, debris, slipping hazards)
- Danger of unexpected movement of machinery
- Pneumatic or hydraulic hazards
- Burn hazards
- Heat stress hazards
- Noise hazards
- Other known hazards

Safe Entry Practices

The Entry supervisor will utilize the entry permit to implement procedures and practices necessary for safe permit space entry operations. These include, but are not limited to:

- Designating Attendants and Entrants who have been trained and authorized to enter into permit-required confined spaces.
- Contact the host/owner to determine if there are any known or potential confined space hazards.
- Specify acceptable entry conditions and test the confined space with a gas monitor to determine if acceptable entry conditions exist before changes to the natural ventilation are made.
  - Where possible test the atmosphere in the space with a gas monitor before removing the cover
- Eliminate any conditions that could make it unsafe to remove an entrance cover.
- Provide employees and their representatives the opportunity to observe monitoring and testing of the space; provide them with the results. Provide employees with the pre-entry atmospheric

test results and continuous monitoring results.

- Eliminate or isolate the permit space and any physical hazards within the permit space.
- Purge, flush, and/or ventilate the permit space as necessary to eliminate or control atmospheric hazards.
- Alert workers of any atmosphere changes and/or if the ventilation system stops working.
- Provide pedestrian, vehicle, or other barriers as necessary to protect workers from external hazards.
- Hold pre-entry briefings to inform all employees who will work in or around the confined space of the hazards and safety conditions of the particular job.
- Verify that conditions in the permit space are acceptable to enter by testing with a gas monitor and through visual observations prior to allowing entry into the confined space.

Controlling Hazards

Hazards shall be controlled by the following mechanisms:

- Eliminate or isolate physical hazards and energy sources (lockout, tagout, disconnect, linkage, etc.).
- Provide appropriate personal protective equipment (PPE).
- Continuously monitor the atmospheric conditions in the confined space with a gas monitor for the duration of entry operations. Employees, or their representatives, are entitled to request additional monitoring at any time. Employees and their representatives will have the opportunity to observe monitoring, testing and results. Employees or their representatives can request additional monitoring at any time.
- Continuously ventilate the confined space for the duration of entry operations.
- Provide an early-warning system that continuously monitors for non-isolated engulfment hazards (such as a flash flood).
- Assign an attendant outside all permit-required confined spaces for the duration of entry operations.
- **Axcon Corporation, Inc. does NOT allow for a single attendant to monitor multiple confined spaces.**
- **Operations must be coordinated when multiple employers are working in the same confined space.**

Equipment Requirements

Supervisors must have the following equipment available and provided where necessary:

- Gas monitors and other test equipment must be provided, properly calibrated, used, and maintained.
- Ventilation equipment of the proper size and type must be available, used, and maintained.
- Where necessary, electronic communications equipment must be available, used, and maintained.
- Personal protective equipment (PPE) must be provided and used by employees.
- Lighting must enable employees to see well enough to work and exit safely. If the space has the potential to contain a flammable or combustible atmosphere, intrinsically safe lighting must be provided.
- Barriers must be provided to guard the opening to the space.
- Barriers to guard, cover, or make safe any exposed hazards the employee may contact within the space must be erected.
- Ladder or other safe means for entering and exiting the space must be on hand.
- Non-entry rescue equipment, such as a tripod, mechanical retrieval equipment, and body

harness for non-entry rescue must be present.

Written Permit System

A permit system must be used for entry into permit-required spaces. Permits must be completed by the Entry Supervisor. All confined space entry permits shall include the date, location, and name and signature of the entry supervisor before entry begins. Nobody enters a permit-confined space without a completed permit.

The completed entry permit must be available to entrants or their authorized representative at the time of entry. This may be accomplished by posting the permit at the portal or by any other equally effective means. The duration of the permit may not exceed the time required to complete the assigned task or job identified on the permit. The entry supervisor must

- Terminate entry and cancel the permit when the work is complete.
- Suspend or cancel the entry permit and reassess the confined space if an unacceptable entry condition is encountered.
- Cancel the entry permit if a condition that is not allowed arises in or near the confined space. Each canceled entry permit shall be retained for at least one year to facilitate the review of the permit-required confined space program. Any problems encountered during an entry operation shall be noted on the pertinent permit so that appropriate revisions to the permit space program can be made.

Training

All employees involved in confined space (any classification) entry operations must receive confined space entry training to ensure they possess the understanding, knowledge, and skills necessary for the safe performance of their assigned duties. Confined space entry training must be provided for all employees who will be assigned as competent persons, entry supervisors, attendants, and entrants.

Confined space entry training must be provided to each affected employee. The training shall be provided:

- In both a language and vocabulary, the employee can understand.
- Before the employee is assigned duties.
- Before there is a change in assigned duties.
- Whenever there is a change in permit space operations that presents a hazard for which an employee has not previously been trained.
- Whenever there is reason to believe either that there are deviations from the permit space entry procedures or that there are inadequacies in the employee's knowledge or use of these procedures.
- The training shall establish that the employee understands the hazards, methods, means, and procedures necessary to protect him/herself from the hazards. The employee must also understand his/her assigned duties as listed under Duties and Responsibilities and any other duties they will be expected to perform, such as rescue. However, employees not authorized to perform rescue operations must be informed of the dangers of attempting rescue.
- The safety department shall certify that the training has been accomplished. Training records shall contain each employee's name, the name of the trainer, and the dates of training. The documentation shall be available for inspection by employees and their authorized representatives.

- Only trained competent persons, entry supervisors, attendants, and authorized entrants shall be authorized to work in and around a permit-required confined space or any other confined space.

Rescue and Emergency Services

Where ever possible, the use of non-entry rescue systems or methods shall be used.

Where non-entry rescue is not possible, the safety department must be notified and will coordinate rescue and emergency services with designated providers. The rescuer service(s) will be invited to the jobsite and made aware of the hazards they may confront when called on to perform rescues. The rescuers shall be responsible to equip, train, and conduct rescue. The Competent Person or Entry Supervisor will provide the rescue service with access to all permit spaces from which rescue may be necessary so that they can develop appropriate rescue plans and practice rescue operations.

Non-Entry Rescue

- Non-entry rescue is the preferred method for rescue of employee(s) from a permit-required confined space. Employees shall not enter a permit space to attempt rescue unless they have been specifically trained and equipped for confined space rescue operations.
- To facilitate non-entry rescue, retrieval systems or methods shall be used whenever an authorized entrant enters a permit space, unless the retrieval equipment would increase the overall risk of entry or would not contribute to the rescue of the entrant.
- Non-entry rescue retrieval systems shall meet the following requirements:

1) Each authorized entrant shall use a chest or full body harness, with a retrieval line attached at the center of the entrant's back near shoulder level or other appropriate attachment point.
2) The other end of the retrieval line shall be attached to a mechanical retrieval system or fixed point outside the permit space in such a manner that rescue can begin as soon as the rescuer becomes aware that rescue is necessary. A mechanical device shall be available to retrieve personnel from vertical type permit spaces more than 5-feet deep.
3) The entry supervisor will designate and confirm, prior to entry, that emergency assistance would be available in the event non-entry rescue fails.
4) Contact information for emergency rescue services shall be listed on the confined space permit.
5) If the injured entrant is exposed to any substance with a required SDS or similar document, that SDS or document will be made available to the medical provider treating the entrant(s).

- If rescue becomes necessary, the entry supervisor or attendant shall:
  1) Notify and summon the rescues team/service
  2) Attempt non-entry rescue procedures utilizing the mechanical retrieval system
  3) Continue to ventilate the confined space
  4) Monitor the situation and be prepared to provide the rescuers with the following information:
     a. Number of victims
     b. The status of victims
     c. The time the incident occurred
     d. Existing or potential hazards
     e. Gas monitor readings
     f. What the victim was doing
     g. Names of chemicals that were being used
     h. Other applicable information

On Site Rescue Services

Axcon Corporation, Inc. does not work in confined spaces where IDLH conditions are present, and therefore, on site rescue services are not part of our program.

Alternate Procedures Confined Space

Every confined space is considered to be a permit-required confined space until it is reclassified by the Competent Person or Entry Supervisor. Prior to reclassifying a confined space, the hazards must be evaluated and the atmosphere within the space must be tested with a gas monitor by the Competent Person or Entry Supervisor. Before a space can be reclassified and downgraded to an alternate procedure or non-permit confined space, it must comply with the following:

Reclassification to an Alternative Procedure Confined Space

Employees who enter a confined space need not comply with the permit-required confined space procedures set forth in the permit-required confined space entry program provided that:

a. It can be demonstrated that all physical hazards in the space are eliminated or isolated through engineering controls so the only hazard posed by the permit space is an actual or potential hazardous atmosphere.
b. It can be demonstrated that continuous forced air ventilation alone is sufficient to maintain the permit space safe for entry and that, in the event the ventilation stops working, entrants can exit the space safely.
c. Monitoring and inspection data are developed that support the previous conclusions.
d. If an initial entry of the permit space is necessary to obtain the data required, the entry is performed according to the procedures set forth in this document concerning entry into a permit-required confined space.
e. The determinations and supporting data required are documented and certified by the Entry Supervisor including the date, location and supervisor's name and signature.

Employees who enter into confined spaces using the alternative entry methods must implement and comply with the alternative entry procedures established by this Confined Space Entry Program.

The alternative entry certification (see attached Confined Space Entry Checklist) shall be made available for review by each employee who enters the space.

Alternative Entry Procedures

The following requirements apply to entry into permit spaces that meet the conditions set forth in the requirements for Reclassification to Alternate Entry.

- Any condition making it unsafe to remove the entrance cover must be eliminated before the cover is removed
- The opening to the confined space must be immediately guarded by a railing, temporary cover, or other temporary barrier
- The atmosphere in the confined space must be tested and continuously monitored for the

duration of entry operations
- No hazardous atmosphere is permitted within the confined space whenever an employee is inside the space
- Continuous forced air ventilation must be provided and directed to areas where the employee is performing entry operations
- If a hazard is detected the employee must leave the space immediately and the space must be evaluated to determine how the hazard developed
- Measures must be implemented to protect employees from the hazard(s) before reentering the space
- A safe method for entering and exiting the space must be provided such as a ladder or approved hoisting and retrieval system
- Where changes in the use or configuration of the space may increase the hazards the space must be reevaluated by a competent person.

Reclassification to a Non-Permit Confined Space

Employees who enter a confined space need not comply with the permit-required or alternative entry procedures set forth in the program provided that:

a. It can be demonstrated that the space poses no actual or potential atmospheric hazards and all potential physical hazards within the space are eliminated without entry into the space, the permit space may be reclassified as a non-permit confined space for as long as the non-atmospheric hazards remain eliminated.
b. If it is necessary to enter the permit space to eliminate hazards, such entry shall be performed by following the permit-required confined space procedures. If testing and inspection during that entry demonstrate that the hazards within the permit space have been eliminated or isolated, the permit space may be reclassified as a non-permit confined space for as long as the hazards remain eliminated or isolated.
c. The basis for determining that all hazards in a permit space have been eliminated or isolated has been documented.
d. If hazards arise within a permit space that has been declassified to a non-permit confined space under this section, each employee in the space shall exit the space. The confined space shall then be reevaluated by the Competent Person and Entry Supervisors to determine whether it must be reclassified as a permit space or alternative entry.

Note: Control of atmospheric hazards through forced air ventilation does not constitute elimination of the atmospheric hazards.

Employees who enter into confined spaces that have been reclassified as non-permit entry need not implement and comply with the permit-required or alternative entry procedures established by this Confined Space Entry Program.

The non-permit certification (see attached Confined Space Entry Checklist) shall be made available to each employee who enters the space.

Concluding Entry Operations – Terminating and Closing Permit

The Competent Person or Entry Supervisor will determine when the entry operations have been

completed. The permit space will be checked to verify all workers have exited the confined space and the space shall be closed. If the confined space was permit-required the entry supervisor will cancel the permit with the date, time, and signature at the bottom of the Confined Space Permit.

Spaces that have been classified alternative entry or non-permit will also be checked to verify all workers have exited the space and the space shall be closed. A notation shall be made on the certification that the space was closed along with the date, time, and signature of the supervisor.

Program Review and Revision

The safety department will review entry operations and revise the procedures to correct any deficiencies before subsequent entries are authorized.

The safety department will also review the program annually to determine if the program can be improved.

Appendix A

Definitions

Acceptable entry conditions: the conditions in a permit space to allow entry and to ensure that employees involved with a permit-required confined space entry can safely enter into and work within the space.

Alternate Procedures Confined Space: a confined space where any actual or potential hazardous atmosphere can be controlled by continuous forced air ventilation, and where all physical hazards have been eliminated or isolated to ensure the confined space is safe to enter.

Alternate entry procedures: procedures that may be used when the only hazard of a confined space, based upon monitoring and inspection data, is actual or potential hazardous atmosphere in which continuous forced air ventilation alone is all that is needed to maintain the permit required confined space for safe entry.

Attendant: the individual stationed outside one or more permit spaces who monitors the authorized entrants and who performs all attendant's duties assigned in the employer's permit space program.

Authorized entrant: means an employee who is authorized by the employer to enter a permit required confined space.

Barrier: a physical obstruction that blocks or limits access to a confined space.

Blanking or blinding: the absolute closure of a pipe, line, or duct by the fastening of a solid plate (such as a spectacle blind or a skillet blind) that completely covers the bore and that is capable of withstanding the maximum pressure of the pipe, line, or duct with no leakage beyond the plate.

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

Confined space: a space that:

1) Is large enough and so configured that an employee can bodily enter and perform assigned work, and
2) Has limited or restricted means for entry or exit, including, but not limited to, tanks vessels, silos, storage bins, hoppers, vaults, and pits, and
3) Is not designed for continuous employee occupancy.

Control: the action taken to reduce the level of any hazard inside a confined space using engineering methods (for example, by ventilation), and then using these methods to maintain the reduced hazard level. Control also refers to the engineering methods used for this purpose. Personal protective equipment is not a control.

Controlling contractor: the employer that has overall responsibility for construction at the worksite.

Double block and bleed: the closure of a line, duct, or pipe by closing and locking or tagging two in-line valves and by opening and locking or tagging a drain or vent valve in the line between the two closed valves.

Early-warning system: the method used to alert authorized entrants and attendants that an engulfment hazard

may be developing. Examples of early-warning systems include, but are not limited to, alarms activated by remote sensors and lookouts with equipment for immediate communication with the authorized entrants and attendants.

Emergency: any occurrence (including any failure of hazard control or monitoring equipment) or event(s), internal or external to the confined space, that could endanger entrants.

Engulfment: the surrounding and effective capture of a person by a liquid or finely divided (flowable) solid substance that can be aspirated to cause death by filling or plugging the respiratory system or that can exert enough force on the body to cause death by strangulation, constriction, or crushing.

Entry: the action by which a person passes through an opening into a permit required confined space. Entry includes ensuing work activities in that space and begins as soon as any part of the entrant's body breaks the plane of the space opening.

Entry employer: any employer who decides that an employee it directs will enter a permit space.

Entry permit: the written or printed document provided by the employer who designated the space a permit space to allow and control entry into a permit space.

Entry permit system: the employer's written procedures for preparing and issuing permits for entry and returning the permit space to service following termination of entry and designates, by name or title, the individuals who may authorize entry.

Entry rescue: occurs when a rescue service enters a permit space to rescue one or more employees.

Entry supervisor: the qualified person (such as the employer, foreman, or crew chief) responsible for determining if acceptable entry conditions are present at a permit space where entry is planned, for authorizing entry and overseeing entry operations, and for terminating entry as required by the standard. An entry supervisor may also serve as an attendant or entrant if properly trained and equipped.

Hazard: a physical hazard or hazardous atmosphere.

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

1) Flammable gas, vapor, or mist in excess of 10 percent of its lower flammable limit (LFL),
2) Airborne combustible dust at a concentration that meets or exceeds its LFL,
   Note: This concentration may be approximated as a condition in which the dust obscures vision at a distance of 5 feet (1.52 m) or less.
3) Atmospheric oxygen concentration below 19.5 percent or above 23.5 percent,
4) Atmospheric concentration of any substance that may exceed a permissible exposure limit.
   Note: An airborne concentration of a substance that isn't capable of causing death, incapacitation, impairment of ability to self-rescue, injury, or acute illness due to it health effects isn't covered by this definition.
5) Any other atmospheric condition that is immediately dangerous to life or health.
   Note: For air contaminants that OSHA has not determined a dose or permissible exposure limit, other sources of information, such as Safety Data Sheets that comply with the Hazard Communication Standard,
   1910.1200, published information, and internal documents can provide guidance in establishing acceptable atmospheric conditions.

Host employer: the employer that owns or manages the property where the construction work is taking place.

Hot work: operations capable of providing a source of ignition (for example riveting, welding, cutting, burning, and heating).

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

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

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

to be "immediately" dangerous to life or health.

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

Isolate or isolation: the process by which employees in a confined space are completely protected against the release of energy and material into the space, and contact with a physical hazard, by such means as blanking or blinding; misaligning or removing sections of lines, pipes, or ducts; a double block and bleed system; lockout or tagout of all sources of energy; blocking or disconnecting all mechanical linkages, or placement of barriers to eliminate the potential for employee contact with a physical hazard.

Limited or restricted means for entry or exit: a condition that has a potential to impede an employee's movement into or out of a confined space. Such conditions include, but are not limited to, trip hazards, poor illumination, slippery floors, inclining surfaces, and ladders.

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

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

Lower flammable limit (LFL) or lower explosive limit (LEL): the minimum concentration of a substance in the air needed for an ignition source to cause a flame or explosion.

Monitor or monitoring: the process used to identify and evaluate the hazards after an authorized entrant enters the space. This is a process of checking for changes and is performed in a periodic or continuous manner after the completion of the initial testing or evaluation of the space.

Non-entry rescue: occurs when a rescue service, usually the attendant, retrieves employees in a permit space without entering the permit space. No existing hazards.

Non-permit confined space: a confined space that meets the definition of a confined space but does not meet the requirements for a permit-required confined space.

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

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

Permit required confined space: (permit space) a confined space that has one or more of the following characteristics:
1) Contains or has a potential to contain a hazardous atmosphere,

2) Contains a material that has the potential for engulfment of an entrant,
3) Has an internal configuration such that an entrant could be trapped or asphyxiated by inwardly converging walls, or a floor which slopes downward and tapers to a smaller cross-section, or
4) Contains any other recognized serious safety or health hazard.

Permit Required Confined Space Program: the employer's overall program for controlling, and, where appropriate, for protecting employees from permit space hazards and for regulating employee entry into permit spaces.

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

Physical hazards: an existing or potential hazard that can cause death or serious physical damage. Examples include, but are not limited to, explosives; mechanical, electrical, hydraulic and pneumatic energy; radiation; temperature extremes; engulfment; noise; and inwardly converging surfaces. Physical hazard also includes chemicals that can cause death or serious physical damage through skin or eye contact (rather than through inhalation).

Prohibited condition: any condition in a permit space that is not allowed by the permit during the period when entry is authorized. A hazardous atmosphere is a prohibited condition unless the employer can demonstrate that personal protective equipment (e.g., respirators) will provide effective protection for each employee in the permit space and provides the appropriate PPE to each employee.

Qualified person: an individual who, by possession of a recognized degree, certificate, or professional standing, or who by extensive knowledge, training, and experience, has successfully demonstrated his ability to solve or resolve problems relating to the subject matter, the work, or the project.

Representative permit spaces: a mock-up of a confined space that has entrance openings that are similar to, and of similar size, configuration, and accessibility as the permit space that authorized entrants enter.

Rescue service: the personnel designated to rescue employees from permit spaces.

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

Serious physical damage: an impairment or illness in which a body is made functionally useless or is
substantially reduced in efficiency. Such impairment or illness may be permanent or temporary and include, but not limited to, loss of consciousness, disorientation, or other immediate and substantial reduction in mental efficiency. Injuries involving such impairment would usually require treatment by a physician or other licensed health–care professional.

Tagout:
1) Placement of a tagout device on a circuit or equipment that has been de-energized, in accordance with an established procedure, to indicate that the circuit or equipment being controlled may not be operated until the tagout device is removed and

2) The employer ensures that
    a. Tagout provides equivalent protection to lockout or
    b. Lockout is infeasible and the employer has relieved, disconnected, restrained and otherwise rendered safe stored (residual) energy.

Test or testing: the process by which the hazards that may confront entrants of a permit space are identified and evaluated. Testing includes specifying the tests that are to be performed in the permit space. Testing enable employers both to devise and implement adequate control measures for the protection of authorized entrants and to determine if acceptable entry conditions are present immediately prior to and during entry.

Ventilate or ventilation: controlling a hazardous atmosphere using continuous forced-air mechanical systems.

aXCON CORPORATION, INC.

01/01/2022

Confined Space Pre-Entry Checklist and Certification

This form is intended to determine if a confined space is a permit-required, alternative procedure required confined space, or non-permit confined space. This evaluation must be performed by the *Entry Supervisor* who is knowledgeable about safe entry into confined spaces.

Work Location: _____ Date: _____ Time: _____

Purpose of Entry _____

Atmosphere tested with (identify gas monitor) _____
Data: Oxygen: _____% Flammable _____%LEL
H_2S _____PPM CO _____PPM Other: _____PPM

1. Identify any physical hazards:

a. Electrical	___	i. Chemical	___
b. Mechanical	___	j. Pipelines	___
c. Hydraulic	___	k. Welding/cutting	___
d. Pneumatic	___	l. Falls	___
e. Radiation	___	m. Obstructions	___
f. Temperature extremes	___	n. Converging surfaces	___
g. Engulfment	___	o. Other: _____	___
h. Noise	___	p. Other: _____	___

	YES	NO
2. Have all physical hazards been eliminated, isolated, or locked or blocked out?	___	___
3. Are there any existing or potential atmospheric hazards?	___	___
4. If #3 is YES, will forced-air ventilation control the hazard?	___	___
5. Has the weather been checked for possible flash flooding?	___	___

Atmosphere tested after isolation and ventilation
Data: Oxygen: _____% Flammable _____%LEL
H_2S _____PPM CO _____PPM Other: _____PPM

For the purpose of this entry <u>this confined space is</u>: ***Select one:***

Permit-required -- the full permitting process must be implemented. _____

Alternate-procedure – continuous ventilation and gas monitoring must be used, and all physical hazards must be eliminated or isolated. _____

Non-permit – does not meet the requirements for permit-required. _____

Entry Supervisor: Print name: _____Signature: _____

National Utility Contractors Association

CONFINED SPACE ENTRY PERMIT

INSTRUCTIONS (** Nobody will enter a confined space until permit is complete.)

1) Complete permit before entry begins. 2) Post permit at entrance to confined space until work in the confined space is complete. 3) Send permit to safety coordinator for review within 24 hours of completion of the work in the confined space.

GENERAL INFORMATION

JOBSITE:

PERMIT BEGINS: Date: _____ Time: _____ AM / PM PERMIT EXPIRES: Date: _____ Time _____ AM / PM

LOCATION & DESCRIPTION OF CONFINED SPACE:

PURPOSE OF ENTRY:

NAMES OF AUTHORIZED INDIVIDUALS (Please print.)

AUTHORIZED ENTRY SUPERVISOR: WILL HE/SHE SUPERVISE ENTRY: YES NO

AUTHORIZED ATTENDANTS	AUTHORIZED ENTRANTS
1)	1)
2)	2)
3)	3)
4)	4)

METHOD OF COMMUNICATION

DESCRIBE:

EQUIPMENT REQUIRED FOR ENTRY

Hard Hats	YES	NO
Coveralls	YES	NO
Boots	YES	NO
Safety Glasses	YES	NO
Safety Goggles	YES	NO
Face Shield	YES	NO
Ear Protection	YES	NO
Encapsulated Suit	YES	NO
Gloves	YES	NO
Safety Lights	YES	NO
Lockout Devices	YES	NO
Warning Signs	YES	NO
Fire Extinguisher	YES	NO
Ventilator/Blower	YES	NO
Non-Spark Tools	YES	NO
Rescue Equipment	YES	NO
Other: _____	YES	NO
Other: _____	YES	NO

RESPIRATORS REQUIRED FOR ENTRY

ARE RESPIRATORS REQUIRED? YES NO IF YES, WHAT TYPE:

AIR-PURIFYING: Half-Mask _____ Full-Face _____

Type Of Filters: _____

AIR-SUPPLIED: _____ and/or _____ and/or _____
Air Bottles Compressor Egress Bottles

SELF-CONTAINED BREATHING APPARATUS (SCBA): _____

*** NOTE: *Air-supplied respirators with egress bottle or SCBA respirators are required for atmospheres that are Immediately Dangerous To Life Or Health (IDLH).*

RESCUE EQUIPMENT REQUIRED FOR ENTRY

SCBA	YES	NO
Harness/Lifeline	YES	NO
Wristlets	YES	NO
Tripod/Manlift	YES	NO
Winch	YES	NO
First-Aid Kit	YES	NO
Stretcher	YES	NO

EMERGENCY SERVICES:

_____
Identify

_____
Method of Communication

_____
Phone Number

ISOLATION REQUIREMENTS (Please circle appropriate method, check YES or NO, and initial.)

	YES	NO	COMPLETED BY:
Electrical: DISCONNECT – LOCKOUT – TAGGED – Other:_____	___	___	_____
Mechanical Moving Parts: LATCH – CHAIN – CHOCK – BLOCK – Other:_____	___	___	_____
Hydraulics: BLANKED – BLEED – DISCONNECT – Other:_____	___	___	_____
Pipelines: BLANKED – BLEED – DISCONNECT – Other:_____	___	___	_____
Valves: LOCKOUT – DISCONNECT – TAG – Other:_____	___	___	_____
Belt Drives: DISCONNECT – TAG – Other:_____	___	___	_____
Chain Drives: DISCONNECT – TAG – Other:_____	___	___	_____
Shaft Drives: DISCONNECT – TAG – Other:_____	___	___	_____
Space Purged: INERT GAS – WATER – Other:_____	___	___	_____
Other: _____	___	___	_____
Other: _____	___	___	_____

ACCEPTABLE ENTRY CONDITIONS		
OXYGEN: _____%	FLAMMABLE/COMBUSTIBLES: _____% LEL	OTHER: _____
HYDROGEN SULFIDE: _____ PPM	CARBON MONOXIDE: _____ PPM	OTHER: _____

TESTING AND MONITORING CHECKLIST

MAKE, MODEL & SERIAL # OF TESTING EQUIPMENT:

DATE EQUIPMENT CALIBRATED: | PERIODIC TESTING: | CONTINUOUS MONITORING:

	TEST 1	TEST 2	TEST 3	TEST 4	TEST 5	TEST 6	TEST 7	TEST 8
Date:								
Time:	AM / PM	AM / PM	AM / PM	AM / PM	AM / PM	AM / PM	AM / PM	AM / PM
Oxygen:	%	%	%	%	%	%	%	%
LEL:	%	%	%	%	%	%	%	%
CO:	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM
H_2S:	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM
Tox:								
Tested by: (initials)								

CONFINED SPACE HAZARDS CHECKLIST (Please check YES or NO.)

	YES	NO	IF YES, HOW IS HAZARD CONTROLLED:
Oxygen Deficiency (<19.5%)			
Oxygen Enriched (>22%)			
Toxic Atmosphere			
Flammable/Combustible Atmosphere			
Electrical			
Mechanical			
Entrapment			
Pipelines			
Bacteria/Infectious			
Insects/Rodents			
Temperature			
Falls			
Other: _____			
Other: _____			

HOT WORK PERMIT

IS A HOT WORK PERMIT REQUIRED? YES NO | IF YES, IS IT ATTACHED TO THIS PERMIT? YES NO

SIGNATURE OF ATTENDANTS AND ENTRANTS

The confined space job and it's safety aspects have been explained to us, and we have read and understand the above permit. We consider it safe to proceed with the confined space entry work. (Please sign, date and initial below.)

ATTENDANTS			ENTRANTS		
1)	Date:	Initials:	1)	Date:	Initials:
2)	Date:	Initials:	2)	Date:	Initials:
3)	Date:	Initials:	3)	Date:	Initials:
4)	Date:	Initials:	4)	Date:	Initials:

SIGNATURE OF ENTRY SUPERVISOR

SIGNATURE:	DATE:	TIME: AM / PM

CANCELLATION OF PERMIT

DATE CANCELED:	TIME CANCELED: AM / PM	CANCELED BY: (Signature)
REASON PERMIT WAS CANCELED:		

EVALUATION (Review within 24 hours of completion of the work in the confined space.)

EVALUATED BY: (Signature)	DATE:	TIME: AM / PM

Appendix D-1 Confined Space Entry Permit

Date and Time Issued: _____ Date and Time Expires: _____
Job site/Space I.D.: _____ Job Supervisor: _____
Equipment to be worked on: _____ Work to be performed: _____
Stand-by personnel: _____ _____ _____

1. Atmospheric Checks: Time _____
   Oxygen _____%
   Explosive_____% L.F.L.
   Toxic _____PPM
2. Tester's signature: _____

3. Source isolation (No Entry):	N/A	Yes	No
Pumps or lines blinded,	( )	( )	( )
disconnected, or blocked	( )	( )	( )

4. Ventilation Modification:	N/A	Yes	No
Mechanical	( )	( )	( )
Natural Ventilation only	( )	( )	( )

5. Atmospheric check after isolation and Ventilation:
   Oxygen _____% >19.5 %
   Explosive _____% L.F.L<10 %
   Toxic _____PPM <10 PPM H(2)S
   Time _____
   Testers signature: _____

6. Communication procedures: _____
   _____

7. Rescue procedures: _____
   _____
   _____
   _____
   _____
   _____
   _____
   _____

8. Entry, standby, and back up persons:	Yes	No
Successfully completed required training?		
Is it current?	( )	( )

9. Equipment:	N/A	Yes	No
Direct reading gas monitor - tested?	( )	( )	( )
Safety harnesses and lifelines for entry and standby persons?	( )	( )	( )
Hoisting equipment?	( )	( )	( )
Powered communications?	( )	( )	( )
SCBA's for entry and standby persons ?	( )	( )	( )
Protective Clothing?	( )	( )	( )
All electric equipment listed Class I, Division I, Group D and Non-sparking tools ?	( )	( )	( )

10. Periodic atmospheric tests:

Oxygen ____	%Time ____	Oxygen ____	%Time_____
Oxygen ____	%Time____	Oxygen ____	%Time_____
Explosive____	%Time____	Explosive___	%Time _____
Explosive____	%Time ___	Explosive___	%Time _____
Toxic _____	%Time ____	Toxic_____	% Time_____
Toxic _____	%Time____	Toxic_____	%Time_____

We have reviewed the work authorized by this permit and the information contained here-in. Written instructions and safety procedures have been received and are understood. Entry cannot be approved if any squares are marked in the "No" column. This permit is not valid unless all appropriate items are completed.

Permit Prepared By: (Supervisor)_____ _____

Approved By: (Unit Supervisor)_____ _____

Reviewed By (Cs Operations Personnel)_____ _____
(printed name) (signature)

This permit to be kept at job site. Return job site copy to Safety Office following job completion.
Copies: White Original (Safety Office) Yellow (Unit Supervisor) Hard (Job site)

Disciplinary Program

Purpose

The purpose of this program is to establish a firm but fair disciplinary action policy to enforce the safety system.

Scope
This document is applicable to all employees.

Responsibilities
It is the responsibility of every person employed by Axcon Corporation, Inc to work in a safe and efficient manner. The safety system provides guidelines and procedures to help insure that safe work practices are observed. If any employee violates provisions of the Axcon Corporation, Inc safety system or works in a manner that threatens his own health and safety or the health and safety of the employees around him or her, he/she will be subject to disciplinary action, up to and including termination of employment.

The program coordinator, managers, supervisors and foremen hold positions responsible for enforcing the safety system and for issuing disciplinary action as required by this section of the safety manual.

Axcon Corporation, Inc is committed to safety and senior management holds all supervisory staff responsible and accountable for safety within their respective areas.

Physical inspections by Axcon Corporation, Inc officials or insurance representatives that indicate violations showing overall lack of commitment to Axcon Corporation, Inc safety goals shall be under the same level of disciplinary actions.

Requirements
Safety is a core value and a condition of employment at Axcon Corporation, Inc. The following actions constitute a safety violation:

- Not following verbal or written safety procedures, guideline or rules of Axcon Corporation, Inc or our clients
- Horse play, failure to wear required PPE, and or abuse of PPE
- Being under the influence of drugs or alcohol during work
- Bringing weapons on the job site
- Failure to report incidents or injuries
- Attempted or actual physical force to cause injury, threatening statements or other actions to cause an employee to feel they are at risk of injury.
-

Procedure

The following procedures will be followed after issuing a safety violation notice:

- The first offense will result in a verbal warning. The employee will be met with and informed that he or she is being issued a verbal warning and informed of the infraction, rule or procedure that was violated and the corrective action to be taken. Proper procedure will be discussed to clarify the situation and allow the employee to correct his behavior. The person making this

verbal warning will inform the leadership team that this warning has been issued so the operations manager may make a written record of the warning.

- The second offense will result in a written reprimand and additional training. The reprimand will be written on the standard Safety Reprimand form (see below) and will describe the unsafe activity or behavior that needs correction. Refer to the section of the safety program that was violated (when applicable). The employee receiving the reprimand has the right to submit a written rebuttal to the reprimand. The employee must sign the reprimand. The reprimand and any rebuttal will become a part of the employee's employment records.
- The third offense will result in another written reprimand (using the standard form) and punitive layoff, the duration of which will be decided at the time of the disciplinary action and is to be weighed by the severity of the offense. Again, the employee may submit a written rebuttal to the reprimand. The employee must sign the reprimand. The reprimand and any rebuttal will become a part of the employee's employment records.
- The fourth offense may result in the termination of the offending employee.

The above actions are to be placed against a sliding twelve-month scale. If an employee receives a reprimand on January 1 and commits his fourth offense on or before December 31st of the same year, he is terminated. The employee does not have to commit the same violation each time to receive further reprimands. He could receive a verbal reprimand for smoking in a no smoking area on his first offense and get a written reprimand for his second offense which might be a forklift violation and yet another for failing to use proper personal protective equipment. He will be terminated upon his fourth offense in the last twelve months.

In the case of serious safety violations such as by-passing guarding or other unsafe activities that put the violator or other employees at serious risk of injury, the manager may move the violator directly to the second or third warning level. If the violator’s actions put him or others at risk of death or dismemberment the manager has the option to terminate him with no further warning.

Safety Reprimand Form

Date: _____ Reprimand # ____

Issued To: _____

Signature: _____

Issued By: _____

Signature: _____

Violation (Describe in Detail):

Follow up Training: _____

Presented by: _____

Date of Training: _____

Trainee Signature: _____

Fire Protection / Extinguishers

Purpose

The purpose of this program is to provide fire extinguisher procedures to ensure equipment is operable and employees have the knowledge to safely operate in case of a fire incident.

Scope

Applies to all AXCON CORPORATION, INC employees and all AXCON CORPORATION, INC locations.

Responsibilities

The Safety Manager is responsible for developing procedures for the use and care of fire extinguishers and for developing a training program for the proper use of these devices. The Manager is responsible for implementing fire extinguisher training at his location. The shop foremen are responsible for enforcing the provisions of this section of the safety manual. All employees are responsible for following these provisions.

Procedure

Selection and Distribution

Portable fire extinguishers shall be provided for employee use and selected and distributed based on the classes of anticipated workplace fires and on the size and degree of the hazard which would affect their use. Fire extinguishers used by this Axcon Corporation, Incare for four classes of fires:

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

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

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

- Class D Fire Extinguishers. Use on combustible metals, such as magnesium, titanium, potassium and sodium. Travel distance from the combustible metal working area to any extinguishing agent is 75 feet (22.9 m) or less.

Labelling Of Fire Extinguishers

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

in the way of a fire extinguisher.
Each fire extinguisher will be assigned a unique number.

Maintenance

All fire extinguishers shall be mounted no higher and no lower than four (4) feet from the floor. All fire extinguishers shall be maintained as follows:

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

Inspection, Maintenance and Testing

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

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

Use

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

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

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

Training and Education

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

On even numbered years this training will be conducted by a member of the local fire department (where possible) and will include "live fire" hands on use of the extinguisher. On odd number years this training will be conducted by the Safety Manager and will include a demonstration of the use of a fire extinguisher, without actually discharging the unit.

New employees will be given the odd number year training upon hire.

Initial Training Outline

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

Retraining

Retraining shall reestablish employee proficiency and introduce new or revised control methods and procedures, as necessary. Retraining shall be provided for all authorized and affected employees whenever there is:

- An annual basis or
- A change in job assignment or
- AXCON CORPORATION, INChas reason to believe that there are deviations from or inadequacies in the employee's knowledge or use of fire extinguishers or fire prevention procedures.

Training Documentation

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

First Aid Program Purpose

Axcon Corporation, Inc. is dedicated to the protection of its employees from on-the-job injuries and illnesses. However, when injuries or illnesses do occur, we are prepared to immediately respond to the needs of the injured or ill. This written First Aid Program is intended to ensure that Axcon Corporation, Inc. meets the requirements of 29 CFR 1910.151, Medical Services and First Aid. First Aid Personnel The National EMS Education and Practice Blueprint lists the following first aid designations:

- First aid provider: Occupationally required to be trained in first aid even though they may not be specifically obligated by law to perform first aid. Responds as a "Good Samaritan." Uses a limited amount of equipment to perform initial assessment and provide immediate life support and care while awaiting arrival of emergency medical services (EMS). First aid providers are certified by the Red Cross or equivelant.
- First responder: Uses a limited amount of equipment to perform initial assessment and intervention and is trained to assist other EMS.
- Emergency Medical Technician (EMT)-Basic: The 2nd level of professional emergency medical care provider. Qualified to function as the minimum staff for an ambulance.
- EMT-Intermediate: The 3rd level of professional emergency medical care provider. Can perform essential advanced techniques and administer a limited number of medications.
- Paramedic: The 4th level of professional emergency medical care provider. Can administer additional interventions and medications.

Our company does not have a designated first aid provider, or first responder. This program is a matter of general information stating that we will endeavor to provide first aid to all employees injured on the job site.

Hazard and Medical Services Assessment

We have assessed Our Company for hazards to determine whether any pose the risk of a life-threatening or permanently disabling injury or illness. It was determined that multiple types of injuries can occur on a construction site, with many of them being life threatening.

The nearest hospital, clinic, or infirmary will be determined prior to any job starting. The location of the nearest medical facility will be posted in the job site trailer/office, and the foreman or superintendent will have knowledge of these facilities.

First Aid Supplies and Equipment

It is important that our first aid supplies and equipment meet the specific needs of our job-sites. Supplies provided in our first aid kits comply with the following: ANSI Z308.1 Minimum Requirements for Workplace First Aid Kits Applicable regulations: 1910.151 1926.50 This American National Standard provides minimum requirements for workplace first aid kits. It provides information on:

- Standard sizes of cases,
- Unit packaging, and specifications for the most commonly used items, and

§ Arrangement of first aid materials for easy identification, removal, and replacement. The standard classifies kits as Type I, Type II, or Type II, depending on whether they are fixed, portable, or portable for outdoor use.

Under this standard, the following are the minimum acceptable contents of firstaid kits:

- ♣ Absorbent compress
- ♣ Adhesive bandages
- ♣ Adhesive tape
- ♣ Antiseptic applications
- ♣ Burn treatment applications
- ♣ Sterile pads
- ♣ Medical exam gloves
- ♣ Triangular bandage

The standard gives specific dimensions, details, number of units, etc., of the minimum acceptable contents listed above. The standard also requires the kit to be marked with the ANSI designation and it recommends regular inspection of first aid kit contents and that one worker in each work location be trained. First Aid Page: 2 Rev. 04/13 ANSI standards become mandatory OSHA standards only when, and if, they are adopted by OSHA; ANSI Z308.1, Minimum Requirements for Workplace First Aid Kits, was not adopted by OSHA. However, ANSI Z308.1 provides detailed information regarding the requirements for first aid kits; OSHA has often referred employers to ANSI Z308.1 as a source of guidance for the minimum requirements for first aid kits.

- (16) 1" x 3" Adhesive Strips
- (8) Premium Fabric Knuckle Bandages
- (10) Premium Fabric Fingertip Bandages
- (6) Premium Fabric X-Large Strips
- (1) Hema-Seal Major Wound Bandage & Compress (with gloves)
- (4) 3" Gauze Pads
- (2) Adhesive Tape
- (1) Eye Flush, Pads & Strips
- (12) First Aid/Burn Cream Packets
- (10) Antiseptic Wipes
- (1) 40" Triangular Bandage
- (4) Exam Gloves
- (1) First Aid Instructions

We provide these supplies in our first aid kits. These kits are located in our gang boxes, foreman's truck, or job trailer (if provided). An outside service may check the first aid supplies on a monthly basis, or as requested. Supplies are inspected monthly by Supervisors and replaced promptly when expended. Because it is reasonably anticipated that employees will be exposed to blood or other potentially infectious materials while rendering first aid, we provide a blood borne pathogen kit at every jobsite. (See Blood Borne Pathogen section of this safety

program).

Transportation of Injured Employee

All seriously injured employees will be transported by certified medical personnel that respond via a call to 911. (EMR – Ambulance service). Other employees that are not seriously injured will be taken to the nearest medical facility by another employee. The injured employee will not be allowed to transport themselves for medical attention. The nearest medical facility is posted at each jobsite and was included in the list from information gathered in the pre-construction meeting.

Training

Training is the heart of our First Aid Program. Employees should NOT attempt to rescue or treat an injured or ill employee unless they are qualified to do so. Instead, they should contact someone who is qualified locally if possible. For all serious injuries, 911 must be called immediately. Employees who are qualified to render first aid and have completed a certified first aid training program may render first aid, at their discretion. Accident Reporting After the immediate needs of an injury or illness emergency have been met, we require our employees to report the event to their supervisor. Extremely minor injuries, like a small bruise, do not need to be reported. However, those injuries and illnesses involving professional treatment, time away from work, or a near miss of a more serious accident, must be reported to an employee's supervisor. Even injuries that do not become apparent until after the cause must be reported. For example, back pain that develops over a period of time must be reported. Please see the accident reporting and investigation section of this manual for our company procedures.

Recordkeeping

The Safety Coordinator is responsible for maintaining the records and documentation relating to first aid, injuries, illnesses, and accidents. This includes all accident investigation forms, those required for insurance purposes, and the OSHA log.

GENERAL WASTE MANAGEMENT

Purpose

The purpose of this waste management strategy was developed to provide guidance and requirements necessary for efficient, effective and compliant waste management during construction and operations.

Scope

This procedure applies to all AXCON CORPORATION, INC. employees. When work is performed on a non-owned or operated site, the operator's program shall take precedence, however, this document covers AXCON CORPORATION, INC. employees and contractors and shall be used on owned premises, or when an operator's program doesn't exist or is less stringent.

Procedure

The AXCON CORPORATION, INC. Safety Coordinator or other designated person in his or her absence is accountable for managing waste and disposition of wastes generated at the work site.

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 will utilize the following for planning of dumpster scheduling and total non-hazardous dry waste material. These figures do not include neither recycling nor waste minimization efforts and reflect no use of an incinerator. Dumpster figures are based on a 40 yard container and can be modified if another size is used 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

AXCON CORPORATION, INC. must coordinate with the project site or owner to ensure proper disposal of wastes or scrap materials.

AXCON CORPORATION, INC. must ensure the owner client is aware of whether wastes and scrap materials will be taken off site by AXCON CORPORATION, INC. or will be disposed of on the owner client's site.

Waste Segregation

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

Recycling

Wastes should be recycled whenever practicable. AXCON CORPORATION, INC. will encourage proper segregation of 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. Bins of sufficient size must be lined with a plastic bag and clearly labeled for use. Posters from AXCON CORPORATION, INC. will be posted throughout the work site to encourage recycling. Collection bins will also be placed in administrative areas will follow the following color guiding:

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

Cardboard will be flattened, staples and excess shipping tape removed. No cardboard shall be placed in the dumpster used for the landfill.

Waste Handling Matrix

Each work site will develop a Waste Handling Matrix (sample shown) 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. Waste materials shall be properly stored and handled to minimize the potential for a spill or impact to the environment. During outdoor activities receptacles must be covered to prevent dispersion of waste materials and to control the potential for runoff.

Waste Stream	Location	Activity Generating Waste	Hazardous/Non Hazardous	Safe Storage Practice	Disposal Method	PPE or Other Precautions
Aerosol Cans	Various Locations	Painting, lubricants, cleaning	Non-Hazardous if aerosol can is punctured and drained	Place punctured aerosol can in RAA storage drum	Crush RAA storage drum and place in the scrap metal dumpster from client.	See "Scrap Metal" for waste stream management
Batteries (Alkaline)	Various Locations	Battery Failures	Universal Waste	Place in the UWAA	"D" cell and below are acceptable in the Non-Burnable Waste Dumpster	Ship to designated site for recycling or disposal
Batteries (NiCad)	Various Locations	Battery Failures	Universal Waste	UWAA in the equipment repair shop.	Ship to assigned site for recycling or disposal	Cell phones, radios
Butane Torch Bottle	Various Locations	Mechanic activities	Excluded Hazardous if recycled	Place drained Butane Torch Bottles in RAA storage drum	Crush RAA storage drum and place in the scrap metal dumpster	Prosolv Butane Bottle processor l
Cardboard/Office Paper	Parts Department & Offices	Shipping Boxes & Office Activities	Non-Hazardous	Place in RAA	Place on pallet in RAA and band for shipment to assigned site for recycling.	
Computers Discarded	Parts Department & Offices	Replacement	Non-Hazardous	Place in RAA	Ship to assigned site for recycling or disposal	
Diesel Filters-Used	Equipment Repair Shop and Fab Shop	Filter Changes	Non-Hazardous	RAA for drained and crushed used filters	Drain for 12 hrs., crush and incinerate in Smart Ash unit	Place metal in recycle metal du mpster
Diesel Rags	Various Locations	Mechanic activities	Non-Hazardous	Oily waste rag in clear bags w/yellow stripes.	Incinerated in Smart Ash unit	See "Ash" for management and disposal
Drained Diesel	Equipment Repair and Fab Shop	Draining diesel fuel and filters	Non-Hazardous when burned as off-Spec fuel	Place in "used oil" tank in the equipment repair shop and fab shop.	Burned for energy recovery in clean burn multi-oil heating system.	
Empty Paint Cans	Various Locations	Painting activities	Non-Hazardous	No storage allowed	Ship to assigned site for recycling or disposal	Paint cans must be RCRA empty.
Fluorescent Light Ballast	Various Locations	Failure	Non-Hazardous unless they contain PCB's or DEHP	None	Place in Non-Burnable Dumpster	Ballast will say on the label if it contains PCB's

Waste Stream	Location	Activity Generating Waste	Hazardous/Non Hazardous	Safe Storage Practice	Disposal Method	PPE or Other Precautions
Fluorescent Light Bulbs	Shops, Office Areas	Bulb replacement	Universal Waste	Place bulbs in their original container in the RAA in the shop area	Ship to assigned site for recycling or disposal	Label bulbs "Used Bulb" when put into RAA.
Glass	Various Locations	Replacement	Non-Hazardous	None	Place in Non-Burnable Dumpster	Ensure glass containers are empty.
Grinding Wheels	Various Locations	Grinding activities	Non-Hazardous	None	Place in Non-Burnable Dumpster	
Hoses & Belts	Equipment Repair Shop and Fab Shop	Replacement	Non-Hazardous	Place in Non-Burnable Dumpster	Place in Non-Burnable Dumpster	Drain all fluids from hoses
Metal Shavings/Cuttings	Equipment Repair Shop and Fab Shop	Fabricating activities	Excluded Hazardous if recycled	Placed in recycle metal dumpster or metal only RAA's	Place in recycle metal dumpster	Ensure there are no free flowing cutting fluids present before disposal.
Oil-Used	Equipment Repair Shop, Fab Shop, Service Trucks	Draining oil and filters	Excluded Hazardous if burned for energy recovery	Receiving sumps are located in the Equipment Repair Shop and Fab Shop	Burned for energy recovery in clean burn multi-oil heating system.	Keep lids on receiving sumps at all times. DO NOT PUT SOLVENTS INTO USED OIL
Oily Waste (rags, absorbents)	Various Locations	Mechanic activities, equipment drips and leaks	Non-Hazardous	Oily waste rag WAA's lined w/clear bags w/yellow stripes.	Incinerated in Smart Ash unit	Collected daily. See "Ash" for management and disposal
Paint Waste (rags, rollers, brushes, etc.)	Various Locations	Painting activities	Determine on per occurrence basis. Use SDS or testing	If hazardous, store in the assigned area. If non-hazardous, no storage is required.	If hazardous, ship to assigned site for disposal. If non-hazardous, place in burnable waste dumpster.	Need to review SDS, do analytical test, or use generator knowledge to make waste determinations.
Scrap Metal	Various Locations	Fabrication activities & house cleaning	Excluded Hazardous if recycled	Placed in recycle metal dumpster or metal only RAA's	Place in recycle metal dumpster	Eye Protection Gloves
Tires	Various Locations	Replacement	Non-Hazardous	None	Place tires up to 20" rim diameter into dumpster.	
Toner Cartridges	Offices	Copiers, printers, fax machines	Non-Hazardous	Placed in original container in RAA	Ship to assigned site for recycling or disposal	Verify toner is expended before disposal.
Welding Rods	Various Locations	Welding activities	Excluded Hazardous	Placed in recycle metal dumpster or metal only RAA's	Ship to assigned site for recycling or disposal	See "Scrap Metal" for waste stream management

Waste Stream	Location	Activity Generating Waste	Hazardous/Non Hazardous	Safe Storage Practice	Disposal Method	PPE or Other Precautions
Wood Waste	Various Locations	Various activities and shipping pallets	Non-Hazardous	Store on the far back corner of the pad or in the dump truck box if available.	Place in recycle wood dumpster	Pallets are refurbished and recycled when possible

Storage Requirements

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

PPE

For each site waste management plan AXCON CORPORATION, INC. shall determine a PPE matrix that includes gloves, hand protection, eye and face protection and/or other necessary PPE.

Education and Training

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

- Instruction on the proper handling, storage and disposal of wastes and depending on the waste generated at the site to also include general instruction on disposal of non-hazardous wastes, trash or scrap materials. If wastes generated are classified as hazardous then employees shall be trained to ensure proper disposal and compliance with regulations.
- Minimization methods to reduce waste.
- Recycling methods and proper PPE to be utilized.

Purpose

The purpose of the Personal Protective Equipment (PPE) Program is to develop and implement the procedures for the identification, use, care and maintenance of PPE required to be used by employees for the prevention of illness and injury.

All employees are required to follow the minimum procedures outlined in this program. Any deviations from this program must be immediately brought to the attention of the Program Administrator.

Scope

This policy applies to the use of PPE at Axcon Corporation, Inc. and related facilities and operations. This program is integrated into our organization's written safety and health program and is a collaborative effort that includes all employees. The Program Administrator is responsible for the program's implementation, management, training and recordkeeping requirements.

Program Responsibilities

Management

The management of Axcon Corporation, Inc. is committed to the safety and health of its workers. Management supports the efforts of the PPE Program Administrator by pledging financial and leadership support for the identification of hazards and implementation of appropriate PPE for those hazards. Management will regularly communicate with employees about this program.

Program Coordinator

The Program Coordinator reports directly to upper management and is responsible for the hazard assessments, implementation, training and administration of the PPE program. The Program Coordinator will monitor the results of the program to determine additional areas of focus as needed. The Program Coordinator will also:

- Conduct workplace hazard assessments to determine the presence of hazards that require the use of PPE (*PPE hazard assessment instructions are included in **Appendix A***)
- Select and purchase PPE
- Review, update and conduct PPE hazard assessments whenever:
  - A job or process changes
  - New equipment is used or added
  - There has been an accident
  - A supervisor or employee requests it
- Maintain records on hazard assessments
- Maintain records on PPE assignments and training

- Provide training, guidance, and assistance to supervisors and employees on the proper use, care and cleaning of approved PPE
- Periodically re-evaluate the suitability of previously-selected PPE
- Review, update and evaluate the overall effectiveness of PPE use, training, policies and program

Supervisors

Supervisors have the primary responsibility for implementing and enforcing PPE use in their work area, including, but not limited to:

- Providing appropriate PPE and making it available to employees
- Ensuring that employees are trained on the proper use, care, storage and cleaning of PPE
- Ensuring that PPE training certification and evaluation forms are signed and in the employee's file
- Ensuring that employees properly use and maintain their PPE
- Notifying the Program Administrator when new hazards are introduced or when processes are added or changed
- Ensuring that defective or damaged PPE is immediately disposed of and replaced

Employees

The PPE user is responsible for following the requirements of the PPE program, including, but not limited to:

- Properly wearing PPE as required
- Attending required training sessions
- Properly caring for, cleaning, storing, maintaining and inspecting PPE as required
- Following program policies and rules
- Informing the supervisor of the need to repair or replace PPE

Employees who repeatedly disregard and do not follow PPE procedures and rules will face disciplinary action up to and including termination.

General Requirements

Appropriate PPE is required to be worn <u>at all times</u> when employees are exposed to hazards that cannot be eliminated through the use of preferred elimination, substitution, engineering or administrative controls.

***Axcon Corporation, Inc. does not allow employees to provide their own PPE.**

The workplace will be evaluated and all uncontrolled hazards will be identified at least two times a year based on changes to the workforce and workplace operations. Assessments will include, but are not limited to, the following items:

- Torso and abdominal protection

- Eye and face protection
- Head protection
- Foot protection
- Leg protection
- Hand protection
- Hearing protection (Separate written program)
- Respiratory protection (Separate written program)
- Fall protection (Separate written program)

*PPE hazard assessment instructions are located in **Appendix A.***

*Hazard assessment forms are included in **Appendix B.***

PPE appropriate for the identified hazards will be identified, purchased and provided to all employees exposed to those hazards. All PPE will be properly fit and sized to each employee before relying on it as a protective measure.

Employees will be continually trained, formally and informally, on the types of PPE necessary for the workplace hazards and its limitations. Training will also include the proper way to wear, use and maintain the PPE.

PPE Program Implementation

The following implementation steps will be used for this program:

- Conduct and document PPE assessment for each work task, assignment or location (see form in **Appendix B**)
- Select appropriate PPE based on hazard assessment
- Communicate PPE selection decisions to employees
- Provide PPE free of charge to all affected employees (obtain, purchase, rent, etc.)
- Train each affected employee
- Test employee understanding*
- Document training and employee testing results
- Retrain as necessary
- Enforce PPE requirements

*Essential functions for all tasks/assignments where PPE is required.

General Training

Before any employee is allowed to perform work in areas requiring PPE, they must first receive training in the proper use and care of the PPE they will be using. Periodic retraining will be offered to PPE users as identified by the lack of knowledge or the improper use of PPE, after changes in work tasks or at the supervisor's request. The training will include, at a minimum, the following subjects:

- Axcon Corporation, Inc. requirement that PPE be worn at all times during identified tasks or in areas requiring PPE
- When it is necessary to wear PPE
- What PPE is necessary
- How to properly put on, take off, adjust and wear PPE
- The limitations of the PPE
- The proper care, maintenance, useful life and disposal of the PPE

Eye and Face Protection

Each affected employee will:

- Use appropriate eye and face protection equipment when exposed to hazards from flying objects or particles, molten metal, fumes, chemical liquids, gases, vapors, dusts, acids, caustics, and other potentially injurious chemical or physical hazards.
- Use appropriate eye protection equipment with filter lenses that have a shade number appropriate for the work being performed when exposed to an eye hazard from potentially injurious light radiation.
- When wearing prescription lenses while engaged in operations that involve eye hazards, wear eye protection that incorporates the prescription in its design, or wear eye protection that can be worn over the prescription lenses without disturbing the prescription lenses or the protective lenses.

Foot Protection

Each affected employee will wear protective footwear when working in areas where there is danger of objects falling on or rolling across the foot, piercing the sole, and where the feet are exposed to electrical or chemical hazards. Foot protection will comply with appropriate ANSI standards.

Hand and Body Protection

The Program Administrator will select and require employees to use appropriate hand protection when employees' hands are exposed to hazards from cuts, abrasions, punctures, chemical or thermal burns, harmful temperature extremes, vibration and skin absorption of harmful substances.

Head Protection

Each affected employee will wear appropriate protective head gear (hard hats, bump caps, etc.) when working in areas where there is a potential for injury to the head from falling objects, impact hazards, extreme temperatures or high UV levels.

Hearing Protection
The Program Administrator will select and require employees to wear appropriate hearing protection in environments where noise levels equal or exceed the OSHA Occupational Noise Exposure Standard (OSHA 29 CFR 1910.95) 8-hour time weighted average (TWA) of 85 dBA. See Hearing Protection Program for details.

Respiratory Protection
Each affected employee will wear respiratory protective equipment (respirators) when working in areas where respiratory hazards exist. All respirators will be in compliance with the OSHA 29 CFR 1910.134. See Respiratory Protection Program for details.

After training, employees will demonstrate that they understand how to use PPE properly. If they cannot demonstrate a sufficient understanding, they will be retrained.

Training of each employee will be documented using the Employee Training Record (**Appendix D**) and kept on file. The PPE Training Quiz (**Appendix E**) will be used to evaluate employees' understanding and will be kept

in the employee training records. The Record documents that the employee has received and understands the required training on the specific PPE he/she will be using.

Retraining
The need for retraining will be indicated when:

- An employee's work habits or knowledge indicate a lack of necessary understanding, motivation or skills required to properly use the PPE
- New equipment is installed that requires new or different PPE
- Changes in the workplace make previous training obsolete
- Changes in the types of PPE to be used make previous training obsolete
- Upon supervisor requests

Periodic Program Review

At least annually, the Program Administrator will conduct a program review to assess the progress and success of the program. The review will consider the following:

- Evaluation of all training programs and records
- The need for retraining of managers, supervisors and employees
- The jobs, processes or areas that have produced a high incidence rate of injuries or illnesses
- The Program's success will be determined and reported to senior management based upon comparison to previous years, using the following criteria:
    - Cost and frequency of workers' compensation cases
    - Employee and supervisor feedback through direct interviews and questionnaires

Annual reviews will be documented with the form shown in **Appendix C**.

Outside Contractors

Whenever outside personnel are contracted to work on-site, the Program Administrator or location management will communicate all necessary PPE safety requirements to the contractor before any work commences.

Record Retention

Written records will be kept which include trainee names, the type of training provided and the dates when training occurred. The Program Administrator will maintain these training records for 3 years.

The Program Administrator will maintain the Hazard Assessment Form for each work site evaluated for 5 years.

Appendix A – PPE Hazard Assessments

Survey

The Program Administrator will conduct a walk-through survey of the workplace at least two times a year. The survey is to identify sources of hazards to employees. The following hazard categories will be examined in each area and for each person and their tasks:

- Impact
- Penetration
- Compression
- Chemical/Gasses
- Heat/Cold
- Harmful dust
- Light (Optical) radiation
- Noise
- Falling objects
- Vibration
- Electrical shock

Hazard Sources

During the walk-through survey, the Program Administrator will observe:

- Sources of motion; i.e., machinery or processes where any movement of tools, machine elements or particles could exist, or movement of personnel that could result in collision with stationary objects
- Sources of high temperatures that could result in burns, eye injury, ignition of protective equipment, etc.
- Types of chemical exposures
- Sources of harmful dust
- Sources of light radiation, i.e., welding, brazing, cutting, furnaces, heat treating, high-intensity lights, etc.

- Sources of falling objects or potential for dropping objects
- Sources of sharp objects which might pierce the feet or cut the hands
- Sources of rolling or pinching objects which could crush the feet
- Layout of workplace and location of coworkers
- Any electrical hazards

Injury and accident data will also be reviewed to help identify problem areas.

Results

Following the walk-through survey, the data and information will be organized by work area and job description. An estimate of the potential for injuries will be made. Each of the basic hazards will be reviewed and a determination made as to type, level of risk, and severity of potential injury from each of the hazards identified. The possibility of exposure to multiple hazards simultaneously will be considered.

Strategies for elimination, substitution, engineering and administrative controls will be identified and implemented for all possible identified hazards. After applying all appropriate reduction and elimination technique, the remaining hazards will be analyzed and the proper PPE to reduce the hazards will be selected.

PPE will be identified for hazards that are in the process of being reduced or eliminated and/or when hazard-reduction efforts are not 100% effective in eliminating the hazards.

Job Task: _____

Does the job task present an occupational exposure to:

Eye Hazards	Yes	No	Hazard Description	Recommended PPE
Chemicals				
Dust				
Heat				
Cold				
Impact				
Light/Radiation				
Face Hazards	Yes	No	Hazard Description	Recommended PPE
Chemicals				
Impact				
Heat				
Cold				
Light/Radiation				
Head Hazards	Yes	No	Hazard Description	Recommended PPE
Chemicals				
Impact				
Heat				
Cold				
Light/Radiation				
Electrical Shock				
Hand Hazards	Yes	No	Hazard Description	Recommended PPE
Chemicals				
Impact/ Punctures				
Heat				
Cold				
Vibration				
Electrical Shock				
Cuts/Abrasions				
Foot Hazards	Yes	No	Hazard Description	Recommended PPE
Chemicals				
Impact/ Punctures				
Heat				
Cold				
Vibration				
Electrical Shock				
Compression				
Electrostatic Build-up				
Respiratory Hazards	Yes	No	Hazard Description	Recommended PPE
Fumes				
Mists				
Dusts				
Vapors				
Lack of Oxygen				
Particles				
Heat/Cold				
Noise Hazards	Yes	No	Hazard Description	Recommended PPE
Impact Noise >140 dBA				
Continuous Noise >85 dBA				

Date of evaluation:	**Evaluated by (list all present):**
Written program reviewed: Yes No	
Detailed description of the procedures reviewed:	
Describe any procedure modifications:	
Have any new procedures been added?	
A review of the log of occupational injuries and illnesses (OSHA Form 300 or equivalent) and the associated accident reports and injury and illness reports was made: Yes No	
The following injuries resulted from failure to use the correct PPE:	
Any actions needed or taken to ensure PPE use:	
Comments:	

Appendix D – Employee Training Record

The following individuals received training on Axcon Corporation, Inc. Personal Protective Equipment Program.

Print Name	Sign Name	PPE

The undersigned conducted training in accordance with this Personal Protective Equipment Program.

Print Instructor's Name	
Instructor's Signature	
Instructor's Title	
Date of Training	

Hazard Identification/PPE Selection

- Familiarize the employees with the potential hazards and the type of protective equipment that is available, and what it can do, i.e.; splash protection, impact protection, etc.
- Compare the hazards associated with the environment; i.e., impact velocities, projectile shape of masses, radiation intensities, with the capabilities of the available protective equipment.
- Identify the selected protective equipment which is at a level of protection greater than the minimum required to protect the employee from the hazards.
- Fit the user with the protective device and give instructions on care and use of the PPE.
- Ensure that employees are made aware of all warning labels and limitations of their PPE.

Fitting the Device

Each employee will be fitted with appropriate PPE. PPE that fits poorly may not afford the necessary protection. Protective devices are generally available in a variety of sizes. Care should be taken to ensure that the right size is selected. Continued wearing of the device is more likely if it fits the wearer comfortably.

Hazard Changes

It is the responsibility of supervisors and employees to inform the Program Administrator if they identify a change in the workplace hazard situation.

Guidelines

Training will cover the company requirement of PPE usage. Each type of PPE provided will be reviewed as to its purpose and function in the work environment. As required, the following types of PPE must be covered:

- Eye and face protection
- Head protection
- Foot protection
- Hand protection
- Hearing protection
- Respiratory protection

Cleaning and Maintenance

It is important that all PPE be kept clean and properly maintained. Cleaning is particularly important for eye and face protection where dirty or fogged lenses could impair vision. It is also important to ensure that contaminated PPE which cannot be decontaminated is disposed of in a manner that protects employees from exposure to hazards

Personal Protective Equipment Training Quiz

The following quiz will be used to determine if an employee has understood the training and can demonstrate the proper use and care of personal protective equipment (PPE). This form will be kept in the employee's file along with any PPE Certification Forms.

1. What are the limitations of PPE?

2. List the types of personal protective equipment you must use when doing your work/tasks.

3. What are the hazards in your job that require PPE, and when must you use your PPE?

4. What are the procedures for the proper use, care and maintenance of your PPE?

5. What should you look for to determine that your PPE is in good working condition?

6. What do you do when your PPE is no longer useable?

Trainer/Supervisor: Instruct the employee to demonstrate putting on, wearing and adjusting, and taking off each piece of PPE properly. Also, have employee demonstrate how to clean and disinfect each PPE.

Has employee demonstrated proper use and care of each PPE?

PPE #1: _____ Yes _____ No _____
PPE #2: _____ Yes _____ No _____
PPE #3: _____ Yes _____ No _____
PPE #4: _____ Yes _____ No _____

The employee has answered all the questions adequately and has demonstrated the ability to properly use and care for the PPE needed to do his/her job.

_____

Trainer's/Supervisor's signature Date

_____

Employee's signature Date

RESPIRATORY PROTECTION PROGRAM

PURPOSE

The purpose of this respirator program is to establish standard operating procedures to ensure the protection of all employees from respiratory hazards through proper selection and use of respirators. This program applies to all employees who are required to wear respirators during normal operations, non-routine tasks, or emergency operations such as a spill of a hazardous substance.

RESPONSIBILITIES

Program Administrator Duties

This company has designated Richard Seidel as the program administrator to oversee the respiratory protection program. Duties of the program administrator include:

- Identifying work areas, processes or tasks that require workers to wear respirators, and evaluating hazards
- Selection of respiratory protection options
- Monitoring respirator use to ensure that respirators are used in accordance with their certifications
- Arranging for and/or conducting training
- Ensuring proper storage and maintenance of respiratory protection equipment
- Conducting or arranging for fit testing
- Administering the medical surveillance program
- Maintaining records required by the program
- Evaluating the program
- Updating written program as needed

Supervisors Duties

Supervisors are responsible for ensuring that the respiratory protection program is implemented in their particular areas. In addition to being knowledgeable about the program requirements for their own protection, supervisors must also ensure that the program is understood and followed by the employees under their charge. Duties of the supervisor

include:

- Ensuring that employees under their supervision (including new hires) have received appropriate training, fit testing, and medical evaluation
- Ensuring the availability of appropriate respirators and accessories
- Being aware of tasks requiring the use of respiratory protection
- Enforcing the proper use of respiratory protection when necessary
- Ensuring that respirators are properly cleaned, maintained, and stored according to the respiratory protection plan
- Ensuring that respirators fit well and do not cause discomfort
- Continually monitoring work areas and operations to identify respiratory hazards
- Coordinating with the program administrator on how to address respiratory hazards or other concerns regarding the program

Employees Duties

Each employee has the responsibility to wear his or her respirator when and where required and in the manner in which they were trained. Employees must also:

- Care for and maintain their respirators as instructed and store them in a clean sanitary location
- Inform their supervisor if the respirator no longer fits well, and request a new one that fits properly
- Inform their supervisor or the Program administrator of any respiratory hazards that they feel may not be adequately addressed in the workplace and of any other concerns that they have regarding the program

PROGRAM ELEMENTS

Respirator Selection

Respirators are selected on the basis of the hazards to which the employees are exposed and in accordance with OSHA requirements. Only NIOSH certified respirators will be selected and used.

The Program Administrator will conduct a hazard evaluation for each operation process, or work area where airborne contaminants may be present in routine operations or during an

emergency. ***The hazard evaluation will include***:

- Identification of the hazardous substances used in the workplace, department or work process;

- Review of work processes to determine where potential exposures to these hazardous substances may occur; and

- Exposure monitoring to quantify potential hazardous exposures.

The results of the hazard evaluation are located in the Milton office _____ for employee review.

The program administrator will revise and update the hazard assessment as needed (i.e., any time work process changes which may potentially affect exposure).

General requirements

- The employer shall select and provide an appropriate respirator based on the respiratory hazard(s) to which the worker is exposed and workplace and user factors that affect respirator performance and reliability.

- The employer shall select a NIOSH-certified respirator. The respirator shall be used in compliance with the conditions of its certification.

- The employer shall identify and evaluate the respiratory hazard(s) in the workplace; this evaluation shall include a reasonable estimate of employee exposures to respiratory hazard(s) and an identification of the contaminant's chemical state and physical form. Where the employer cannot identify or reasonably estimate the employee exposure, the employer shall consider the atmosphere to be IDLH.

- The employer shall select respirators from a sufficient number of respirator models and sizes so that the respirator is acceptable to, and correctly fits, the user.

Respirators for Immediately Dangerous to Life and Health (IDLH) atmospheres

- The employer shall provide the following respirators for employee use in IDLH atmospheres:

    - A full facepiece pressure demand SCBA certified by NIOSH for a minimum service life of thirty minutes, or

    - A combination full facepiece pressure demand supplied-air respirator (SAR) with auxiliary self-contained air supply.

- Respirators provided only for escape from IDLH atmospheres shall be NIOSH-certified for escape from the atmosphere in which they will be used.

- All oxygen-deficient atmospheres shall be considered IDLH. Exception: If the employer demonstrates that, under all foreseeable conditions, the oxygen concentration can be maintained within the ranges specified in Table II of this section [29 CFR 1910.134(d), i.e., for the altitudes set out in the table], then any atmosphere-supplying respirator may be used.

Respirators for atmospheres that are not IDLH

- The employer shall provide a respirator that is adequate to protect the health of the employee and ensure compliance with all other OSHA statutory and regulatory requirements, under routine and reasonably foreseeable emergency situations.

NIOSH Certification

All respirators must be certified by the National Institute for Occupational Safety and Health (NIOSH) and shall be used in accordance with the terms of that certification. Also, all filters, cartridges, and canisters must be labeled with the appropriate NIOSH approval label. The label must not be removed or defaced while it is in use.

Required Respirator Usage

Axcon Corporation, Inc. will provide respirators to employees for required usage for the following work processes:

- Particulate Respirators – Sweeping warehouse floors / dusty environments
- Half Facepiece Respirators – Painting Steel & Drilling holes in concrete for anchors

The Program Administrator will provide all employees with respirators to wear either of the above respirators with a copy of Appendix D of the standard. (Appendix D details the requirements for required use of respirators by employees.) Employees that wear a half facepiece air purifying respirators (APR) must comply with the procedures for medical evaluation, respirator use, and cleaning, maintenance and storage.

The Program Administrator shall authorize use of respiratory protective equipment as requested by all other workers on a case-by-case basis, depending on specific workplace conditions and the results of the medical evaluations.

Respirator Filter & Canister Replacement/Change Schedule

An important part of the Respiratory Protection Program includes identifying the useful life of canisters and filters used on air purifying respirators. Each filter and canister shall be equipped with an end-of-service-life indicator (ESLI) certified by NIOSH for the contaminant; or

If there is no ESLI appropriate for conditions a change schedule for canisters and cartridges that is based on objective information or data that will ensure that canisters and cartridges are changed before the end of their service life.

Cartridges/Filters shall be changed based on the most limiting factor below:

- Prior to expiration date
- Manufacturer's recommendations for use and environment
- After each use
- When requested by employee
- When restriction to air flow has occurred as evidenced by increased effort by user to breathe normally

Medical Evaluation

Employees who are required to wear respirators must be medically evaluated before being permitted to wear a respirator on the job. Employees are not permitted to wear respirators until a physician has determined that they are medically able to do so. This is not applicable to Axcon as no employees are in positions where they are required to wear respirators.

Fit Testing Procedures

Site Supervisor will ensure that fit-test will be administered using an OSHA-accepted qualitative fit test (QLFT) or quantitative fit test (QNFT) protocol. The OSHA-accepted QLFT and QNFT protocols are contained in Appendix A of the Respiratory Standard (1910.134).

Axcon Corporation, Inc. requires employees to be fit tested with the same make, model, style, and size of respirator that they will be using.

- Before being allowed to wear any respirator with a tight-fitting facepiece and at least annually thereafter;

- Whenever a different respirator facepiece (size, style, model, or make) is used;

- Whenever visual observations of changes in the employee's physical condition that could affect respirator fit. Such conditions include, but are not limited to, facial scarring, dental changes, cosmetic surgery, or an obvious change in body weight; and

- Upon employee notification that the fit of the respirator is unacceptable.

The company has established a record of the fit tests administered to employees including:

- The name or identification of the employee tested;
- Type of fit test performed;
- Specific make, model, style, and size of respirator tested;
- Date of test; and
- The pass/fail results

General Use Procedures

Employees will use their respirators under conditions specified by this program, and in accordance with the training they receive on the use of each particular model. In addition, the respirator shall not be used in a manner for which it is not certified by NIOSH or its manufacturer.

All employees shall conduct user seal checks each time that they wear their respirator. Employees shall use either the positive or negative pressure check (depending on which test works best for them) specified in Appendix B-1 of the Respiratory Protection Standard.

All employees shall be permitted to leave the work are to maintain their respirator for the following reasons: to clean their respirator if the respirator is impeding their ability to work, change filters or cartridges, replace parts, or to inspect respirator if it stops functioning as intended. Employees should notify their supervisor before leaving the area.

Employees are not permitted to wear tight fitting respirators if they have any condition, such as facial hair, facial scars, or missing dentures that prevents them from achieving a good seal. Employees are not permitted to wear headphones, jewelry, or other articles that may interfere with the facepiece to face seal.

Emergency Procedures

The following work areas have been identified as having foreseeable emergencies:

- Painting
- Welding
- Drilling Concrete Anchor Holes

Emergency escape respirators are located: N/A

Immediately Dangerous to Life or Health (IDLH) Procedures

The Program Administrator has identified the following area(s) as presenting the potential for IDLH conditions:

- None
-

Respirator Malfunction

For any malfunction of a respirator (e.g., such a breakthrough, facepiece leakage, or improperly working valve), the respirator wearer should inform his or her supervisor that the respirator no longer functions as intended, and go to a safe area to maintain the respirator. The supervisor must ensure that the employee receives the needed parts to repair the respirator, or is provided with a new respirator.

Maintenance and Care Procedures

In order to ensure continuing protection from the respirators being use, it is necessary to establish and implement proper maintenance and care procedures and schedules. A lax attitude toward maintenance and care will negate successful selection and fit because the devices will not deliver the assumed protection unless they are kept in good working order.

Cleaning & Disinfecting

Our company provides each respirator user with a respirator that is clean, sanitary, and in good working order. We ensure that respirators are cleaned and as often as necessary to be maintained in a sanitary condition. Respirators are cleaned and disinfected using the procedures specified in Appendix B-2 of the standard or manufacturer's recommendations.

Respirators are cleaned and disinfected:

- As often as necessary when issued for the exclusive use of one employee;
- Before being worn by different individuals;
- After each use for emergency use respirators; and
- After each use for respirators used for fit testing and training.

Storage

Storage of respirators must be done properly to ensure that the equipment is protected and not subject to environmental conditions that may cause deterioration. We ensure that respirators are stored to protect them from damage, contamination, dust, sunlight, extreme temperatures, excessive moisture,, and damaging chemicals. They are packed and stored in accordance with any applicable manufacturer's instructions.

Emergency respirators are stored:

- To be accessible to the work area;
- In compartments marked as such; and
- In accordance with manufacturer's recommendations.

Respirator Inspection

All respirators will be inspected after each use and at least monthly. Should any defects be noted, the respirators will be taken to the program administrator or supervisor. Damaged respirators will be either repaired or replaced.

Respirators shall be inspected as follows:

- All respirators used in routine situations shall be inspected before each use and during cleaning;

- All respirators maintained for use in emergency situations shall be inspected at least monthly and in accordance with manufacturer's recommendations, and shall be checked for proper function before and after each use; and

- Emergency escape-only respirators shall be inspected before being carried into the workplace for use.

Respirator inspections shall include the following:

- A check of respirator function, tightness of connections, and the condition of the various parts including, but not limited to, the facepiece, head straps, valves, connecting tube, and cartridges, canisters or filters; and

- Check of elastomeric parts for pliability and signs of deterioration**.**

The following checklist will be used when inspecting respirators:

- Facepiece:
  - cracks, tears, or holes
  - facemask distortion
  - cracked or loose lenses/faceshield

- Headstraps:
  - breaks or tears
  - broken buckles

- Valves:
  - residue or dirt
  - cracks or tears in valve material

- Filters/Cartridges:
  - approval designation
  - gaskets
  - cracks or dents in housing
  - proper cartridge for hazard

- Air Supply Systems:
  - breathing air quality/grade
  - condition of supply hoses
  - hose connections
  - settings on regulators and valves

Training

Site Supervisor will be responsible to provide training to respirator training to respirator users or their supervisors on the contents of the Respiratory Protection Program and their

responsibilities under it, and on the OSHA Respiratory Protection Standard. Workers will be trained prior to using a respirator in the workplace. Supervisors will also be trained prior to using a respirator in the workplace or prior to supervision of employees that must wear respirators.

The training will cover the following topics:

- The Axcon Corporation, Inc. Respiratory Protection Program
- The OSHA Respiratory Protection Standard
- Respiratory hazards encountered and their health effects
- Proper selection and use of respirators
- Limitations of respirators
- Respirator donning and user seal (fit) checks
- Fit testing
- Emergency use procedures
- Maintenance and storage
- Medical signs and symptoms limiting the effective use of respirators

Employees will be retrained annually or as needed (e.g., if they need to use a different respirator). Employees must demonstrate their understanding of the topics covered in the training utilizing a hands-on exercise and a written test. Respirator training will be documented by the Program Administrator and the documentation will include the type, model, and size of respirator for which each employee has been trained and fit tested.

Program Evaluation

The program administrator will conduct periodic evaluations of the workplace to ensure that the provisions of this program are being implemented. The evaluation will include regular consultations with employees who use respirators and their supervisors, site inspections, air monitoring and review of records.

Identified problems will be noted and addressed by the Program Administrator. These findings will be reported to management, and the report will list plans to correct deficiencies in the respirator program and target dates for the implementations of those corrections.

Documentation and Recordkeeping

A written copy of this program and the OSHA standard is kept in the Program Administrator's office and is available to all employees who wish to review it.

Also maintained in the Program Administrator's office are copies of training and fit test records. These records will be updated as new employees are trained, as existing employees receive refresher training, and as new fit tests are conducted.

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REQUIRED RESPIRATOR USE	
RESPIRATOR	**DEPARTMENT/PROCESS**
Filtering facepiece (dust mask)	*Required use for installation workers sweeping floors in the warehouse*
Example: Half-facepiece APR or PAPR with P100 filter	*Required use for installation workers when spray painting touch-up paint on steel.*
Example: Half-facepiece APR or PAPR with P100 filter	*Required use for installation workers when drilling holes for concrete anchors.*

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HAZARD ASSESSMENT

_____

(Date)

Department	Contaminants	Exposure	PEL	Controls

		Level (8 hrs TWA)		
[Example: e.g., Prep: sanding]	*wood dust*	*2.5 - 7.0 mg/m^3*	*5 mg/m^3 (TLV = 1 mg/m^3)*	*Local exhaust ventilation for sanders, Half-facepiece APR with P100 filter.*
[Example: e.g., Prep: cleaning]	*methylene chloride* *methanol* *acetone*	*70 ppm* *150 ppm* *400 ppm*	*25 ppm* *125 ppm (STEL)* *200 ppm* *1,000 ppm*	*Local exhaust ventilation (LEV) to be installed for cleaning stations. Continuous flow SAR hood until then needed for respiratory protection. Will reevaluate after LEV installation.*

HOISTING AND RIGGING PLAN

PURPOSE

This Hoisting and Rigging Program is for use by Axcon Corporation, Inc. hereafter referred to as "the Company". The purpose of this Hoisting and Rigging Program is to establish safe working procedures and practices for employees involved in the rigging and transporting of materials. It will provide involved supervisors and workers with awareness of the potential hazards associated with crane and hoist operations and provide procedures to address related hazards.

POLICY STATEMENT

Each employee involved in crane or hoisting operations, including operators, signal persons, riggers, and spotters, are to be trained to perform their required tasks. Only authorized persons designated by the company are permitted to perform rigging and hoisting procedures.

SCOPE

This program applies to power-operated equipment used for construction work that can hoist, lower, and horizontally move a suspended load. Equipment that is most commonly used on the construction site is included in this program including company-owned and leased equipment.

Covered Equipment:

- Mobile cranes, including crawler, truck mount, and boom truck cranes.
- Tower and articulating boom cranes.
- Multi-purpose machines, if configured to hoist and lower a suspended load.
- Certain attachments including hooks, personnel platforms, etc.
- Cranes may be company-owned, rented, or leased.

Excluded Equipment:

- Power shovels, excavators, loaders, etc. This equipment is also excluded when used with slings or other rigging to lift and transport loads.
- Machinery that hoists by using a chain fall or com-a-long.
- Powered industrial trucks (forklifts) **except** when configured to raise and lower (by means of a winch or hook) and horizontally move a suspended load.
- Crane(s) with a lifting capacity of less than 2,000 pounds.
- Industrial shop cranes and hoists.
- In addition, there are rules and regulations regarding certain equipment that delivers material to the site and **does not** place or transfer the material onto the structure. The competent person shall determine the necessary procedures to be followed.

DEFINITIONS

- **Anchorage -** A secure point of attachment to be used with personal fall protection equipment.

- **Certified** – One who meets recognized certification applicable to the task being performed.

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

- **Controlling Entity -** An employer that is a prime or general contractor, construction manager, or other legal entity which has the overall responsibility for the project, its planning, quality, and completion.

- **Crane** – Equipment that can hoist, lower, and horizontally move a suspended load.

- **Critical Lift** – Lift that exceeds 75% of the rated capacity of the crane or requires the use of more than one crane. (For additional critical lift criteria, see the Critical Lift section of this plan.)

- **Dedicated Spotter** – Must meet requirements of the signal person qualification with sole responsibility to watch the separation distance between the power line and equipment, load line, and load (including rigging), and ensure through communication with the operator that the applicable approach distance is not breached.

- **Hoisting** – The act of raising, lowering, or moving a load in the air with equipment covered by this program.

- **Load** – Object being hoisted plus rigging and other connecting devices. Or, the weight of the object being hoisted.

- **Operator (Certified)** – An individual who possesses a valid certification issued by an accredited crane operator testing organization. The operator's certificate must state the type/capacity of equipment for which the operator is certified.

- **OSHA** – The Federal Occupational Safety and Health Administration. Certain States may have a state-equivalent agency.

- **Power Lines** – Electric transmission and distribution lines.

- **Qualified Person** – An individual who, by possession of degree, certificate, professional standing, or who by extensive knowledge, training, and experience, has successfully demonstrated the ability to solve/resolve problems relating to the subject matter, the work, or the project.

- **Rated Capacity** – Maximum working load permitted by the manufacturer under specified conditions.

- **Rigger (Qualified)** – Must meet the criteria of a qualified person and be evaluated by the employer as demonstrating the ability to perform and resolve problems related to the specific type of rigging expected to be performed for each job/task.

- **Signal Person (Qualified) –** A person that has received and demonstrated required training and understanding of the qualifications and skills necessary to perform signaling procedures.

- **Tag Line** – Rope or other non-conductive lead attached to a suspended load for purposes of controlling the load during material transporting operations.

RESPONSIBILITIES/SUPPORT OF THE PROGRAM

Employer:

Levels of management will participate and support the hoisting and rigging program and the necessary training of supervisors and workers involved in hoisting operations. Management will also identify the need to implement steps as the Controlling Entity (as discussed under Crane Use Procedures).

Competent Person:

The designated competent person(s) will have the responsibility for oversight and implementation of the program on the worksite. The competent person will be familiar with related regulations including, but not limited to, 29 CFR 1926.1400, or State equivalent. A competent person must conduct shift and monthly inspections of all equipment. In general, a qualified crane operator who has the authority to take corrective measures will be a competent person under this program.

Employees:

Each employee shall receive the appropriate training relative to their involvement in the hoisting and rigging plan, and understand their role in the hoisting operation.

Operators:

Operators are to be recognized by an accepted organization as certified to operate the hoisting equipment under their control, and/or possess a license, as required, by the State or local jurisdiction.

Qualified Person:

The designated qualified person(s) will have the responsibility for oversight and implementation of the program on a company-wide basis. Numerous duties under the program must be carried out by a person who meets this definition. These include conducting annual/comprehensive inspections of applicable equipment as well as inspections of modified equipment. A qualified person also is

responsible for duties under various provisions of the program including those dealing with determining the weight of the load, wire rope safety, fall protection, maintenance and repair, multiple crane/derrick lifts, equipment modifications, and, if applicable, hoisting of personnel, developing assembly/disassembly procedures, tower cranes, derricks, and floating cranes/derricks.

GENERAL RIGGING PRACTICES

All persons involved in the Hoisting and Rigging Plan are to be familiar with the following requirements:

- Inspect applicable rigging and hoisting equipment prior to use and during use to ensure proper condition.

- Remove from use immediately (and tag or destroy) any damaged or defective rigging equipment.

- Store rigging out of the weather when not in use.

- All rigging equipment is to be equipped with legible tagging to identify the rigging capacities, configurations, and other required information. Capacities shall not be exceeded.

- Use the appropriate type of rigging that is compatible with the material to be lifted.

- During pre-lift planning, determine the weight of the load to verify it is within the rated capacity of the rigging being used.

- Complete a pre-lift checklist for the various types of material and/or rigging to be utilized.

- Rigging equipment, when not in use, shall be removed from the immediate work area so as not to present a hazard to employees.

RIGGING TYPES – INSPECTION PROCEDURES

All rigging and related equipment shall be inspected, stored, and maintained per the manufacturer's recommendations and requirements.

Competent persons shall ensure that rigging equipment:

- Has permanently affixed and legible identification markings as prescribed by the manufacturer that indicate the recommended safe working load;
- Not be loaded in excess of its recommended safe working load as prescribed on the identification markings by the manufacturer; and

The following types of rigging are to be used for material hoisting and transporting. Noted are possible conditions that may require rigging to be removed from service:

- **Wire Rope Slings**
  - Corrosion
  - Kinking, bird caging, or distortion
  - Bent hooks
  - Broken wires
  - Evidence of heat damage (burns)

- **Chains**
  - Corrosion
  - Elongation of links
  - Dented or bent links
  - Missing or illegible tag

- **Synthetic Web or Round Slings**
  - Burns or similar damage
  - Tears, cuts beyond permitted by manufacturer
  - Brittle or warn stitches and edges
  - Torn stitching

- **Safety Latch**
  - Damaged
  - Missing
  - Inoperable

- **Shackles / Hooks / Eye Bolts / Other Connecting Devices**
  - Corrosion
  - Dents or deformation
  - Incorrect pin
  - Pin thread damage
  - No capacity markings

All rigging is to be inspected for proper condition as noted below:

- Visual Inspection - prior to each use (all types)
- Chains must be inspected, recertified and properly documented annually.
- Follow manufacturers recommendations for regular inspections
- Inspections are to be documented and maintained for each piece of rigging and related equipment.

RIGGING TRAINING

Each person designated by the company to perform crane rigging procedures must meet the requirements noted below:

- Have an understanding of the basics of the operation of the equipment being used, such as the possible dynamics and limitations involved in the swinging, hoisting and stopping of a load by the equipment; and

- Employer has determined and evaluated that the person meets all qualification requirements to perform operations particular to the rigging level required.

NOTE: Each load that requires rigging has unique properties that can range from the simple to the complex. For example, a rigger may have extensive experience in rigging structural components and other equipment to support specific construction activities. Such experience may have been gained over many years. However, this experience does not automatically qualify the rigger to rig unstable, unusually heavy, or eccentric loads that may require a tandem lift, multiple-lifts, or use of custom rigging equipment. In essence, the Company will make sure the person can do the rigging work needed for the exact types of loads and lifts for a particular job with the equipment and rigging that will be used for that job.

SIGNALING TRAINING

Each person designated by the company to perform crane signaling procedures must meet the requirements noted below:

- Be competent in the use of basic signals (voice, verbal, audible) to direct crane movement;

- Have an understanding of the basics of the operation of the equipment being used, such as the possible dynamics and limitations involved in the swinging, hoisting and stopping of a load by the equipment;

- Knows and understands the relevant signal person qualification requirements specified in OSHA standard subpart CC (1926.1419-1926.1422; 1926.1428), and

- Employer has determined and evaluated that the person meets all qualification requirements to perform such operations.

Documentation of the signal person's qualifications will be available at the worksite, either in paper form or electronically. The documentation must specify each type of signaling (e.g., hand signals, radio signals, etc.) for which the signal person is qualified under the requirements of the OSHA standard.

RIGGING AND HOISTING THE LOAD

The person designated as the *qualified rigger* must have the ability to properly rig the load for a particular job. It does not mean that a rigger must be qualified to do every type of rigging job.

It is imperative that good rigging practices are utilized for each type of load to be hoisted. The following procedures are to be followed when material is to be hoisted:

- Select the proper type and sized rigging for each particular load.
- Verify the weight of the load prior to lifting.
- Ensure the load is level and secure.
- Tag lines are recommended to be used to control a load unless their use creates an unsafe condition.
- Loads should not be moved or suspended above workers at any time. CHECK STANDARD…
- A warning horn shall be sounded to alert workers when a load approaches the work area.
- Material/loads are recommended to be landed on dunnage to avoid damage to landing surfaces and rigging. Dragging rigging from under the load by force of the crane is prohibited.
- Special precautions may be required during adverse weather or wind conditions. The site competent person/supervisor shall give direction during such conditions.
- Rigging shall be protected from damage by sharp edges of the load.

CRANE SIGNALING AND COMMUNICATION

A signal person is required when:

- The point of operation is not in full view of the operator (1926.1419(a)).
- The operator's view is obstructed in the direction the equipment is traveling.
- Either the operator or the person handling the load determines that a signal person is needed because of site-specific safety concerns.

Proper communication between the signal person and operator is required at all times to ensure the safe hoisting and movement of material. Below are preferred best practices to be used on projects.

- Only persons designated by the company are permitted to perform rigging and signaling operations.
- Signal persons shall be trained in proper signaling and radio communication direction established by the company and per OSHA requirements.
- Operators and signal persons shall discuss, and agree upon, the signals to be used.
- A designated spotter is required to direct crane movement when a load is not visible to the operator (blind pick).
- A dedicated spotter shall be assigned to observe and direct crane operations when it is difficult for the operator to determine load clearance from potential obstructions or overhead power lines.
- When hand signals are not practical, audible/voice communication is to be utilized.

CRANE USE PROCEDURES

Prior to the use of a crane for hoisting, there are several procedures to be considered. A good method to ensure adequate steps are reviewed is to utilize a job hazard analysis (JHA). See Appendix for an example of a JHA for hoisting.

The following pertains to the use of mobile cranes for the hoisting of material:

- The operator is to perform a general inspection of the crane and components to verify proper usable condition.
- All safety and limiting devices are to be functional at all times during crane use.
- Cranes are to be assembled/disassembled in accordance with manufacturer specifications.
- Ground conditions must be firm and free of underground voids such as electrical vaults, manholes, etc.
- Crane must be setup in a stable manner within 1% of level.
- Set up crane in an area that permits full extension of outriggers.
- Install adequate and recommended support mats under each outrigger pad to prohibit settlement.

- Erect swing radius barricades to prohibit unauthorized persons from entering “struck by” zone of crane.

- Loads to be lifted are to be “freely suspended” to prohibit side loading of the boom.

CONTROLLING ENTITY

If the Company is identified as the controlling entity on a project, the following steps, at a minimum, will be addressed in the lift planning process:

- Ensure that the ground conditions are adequate to support the equipment.

- Inform the user and the operator of the equipment of the location of hazards beneath the equipment set-up area (such as voids, tanks, utilities) if those hazards are identified in documents (such as site drawings, as-built drawings, and soil analyses) in the possession of the controlling entity (whether at the site or off-site) or of any other hazards known to the controlling entity.

- Establish a system to coordinate the operations of two or more cranes that operate within each other's working radius.

POWER LINE SAFETY

Power lines present an extreme hazard potential during the hoisting of material. It is mandatory that the following procedures and encroachment distances are followed at all times.

- The requirements of the Company’s Power Line Safety Program requires that no part of the crane, load, or rigging is permitted within 20 feet of an energized overhead power source.

- If it is determined that the 20 foot rule cannot be obtained, precautionary measures are required by OSHA.

The use of the following is required at any time the established minimum clearances cannot be maintained:

A dedicated spotter shall be present to provide direction to the operator(s) whenever the crane or load is to be in close proximity to an overhead power source.

- In addition, the following minimum distances shall be maintained based on the voltage rating of the power line(s).

TABLE A	
VOLTAGE (Nominal KV)	**MINIMUM CLEARANCE (FEET)**
Up to 50	**10**
Over 50 to 200	**15**
Over 200 to 350	**20**
Over 350 to 500	**25**
Over 500 to 750	**35**
Over 750 to 1,000	**45**
Over 1,000	**As established by the utility owner or professional engineer qualified in power transmission.**

NOTE: All overhead lines are to be presumed energized unless the utility owner confirms the power line(s) are de-energized.

CRITICAL LIFTS

Critical lifts present "non-routine" hazards and shall be identified in the project pre-planning phase and proper precautions should be implemented.

OSHA defines a critical lift as a lift that exceeds 75% of the rated capacity of the crane or requires the use of more than one crane.

Other possible conditions that may be considered a critical lift include:

- Loads that could become unstable due to shape and/or dimension;
- Loads encroaching areas of the public, roadways, above occupied structures, railroads, and/or chemical processing safety systems;
- A non-routine lift and/or load that may require the use of additional precautions or procedures;

- A "blind lift" whereby the operator and signal person do not have direct "eye contact", or where visibility and / or communication is limited due to on-site conditions;

- Any load of substantial weight as determined by the competent person,

- A project with limited lead time which may affect project coordination,

- A load with high dollar value , and

- Personnel lifting (when permitted).

The competent person should consult with management to determine conditions that may result in a load to be classified as a critical lift.

Material/equipment that is determined to be a critical lift requires that all involved parties attend a pre-lift meeting. This includes operators, supervisors, riggers, and signal persons. Potential concerns and any precautionary measures that may be required are to be addressed. A competent person shall be present at the time of the lift to ensure the discussed procedures are followed. In addition, a rigging inspection form and critical lift information form should be completed prior to the lift.

Only authorized persons are permitted within areas of the lift. Areas below a suspended load (often referred to as the "fall zone") should be cleared of personnel not involved in the operation.

Special Rules for Articulating /Knuckle Boom Cranes Used to Deliver Material to a Construction Site

It is common for material to be delivered to and unloaded on a construction site using a truck on which is mounted an articulating/knuckle-boom crane. Such equipment is covered by the standard when used in construction work.

When such equipment delivers materials by placing them on the ground without arranging them in a particular sequence for hoisting, the activity is not considered construction work and is not covered under the standard. This exclusion applies regardless of the type of material being delivered.

However, when the delivery equipment is used to transfer the materials onto a structure, the activity is considered construction work. Nevertheless, the activity is excluded from the standard if **all** of the following conditions are met:

- The materials are sheet goods (such as sheet rock, plywood, or sheets of roofing shingles) or packaged goods (such as roofing shingles, bags of cement, or rolls of roofing felt).
- The equipment uses a fork/cradle at the end of the boom to deliver the materials.
- The equipment is not used to hold, support, or stabilize the material to facilitate a construction activity, such as holding material in place while it is attached to the structure.
- The equipment is equipped with a properly functioning automatic overload prevention device.

This exception, as noted, is limited to delivery of sheet goods and packaged goods. It does **not** apply to delivery

of prefabricated components or building sections, such as roof trusses and wall panels. It also does **not** apply to delivery of structural steel members or components of a systems-engineered metal building.

FALL PROTECTION

There may be instances when the use of Personal Fall Protection may be required. Below are examples of when fall protection is necessary.

- Any time a fall hazard exists of more than 6 feet to a lower level or area.
- Assembly and disassembly of the crane or rigging.
- Loading/landing material on an unprotected building perimeter.
- Landing material at or in proximity to an unprotected floor opening.
- While accessing an area on a crane that may not provide adequate guardrail protection.
- Lifting of personnel (basket).

In situations as noted above, the use of a full-body harness, lanyard, SRL, etc., is required. It is the responsibility of the designated competent person to ensure that the required method of fall protection is implemented.

HOISTING OF PERSONNEL

The use of equipment to hoist employees is prohibited except where the erection, use, and dismantling of conventional means of reaching the work area, such as a personnel hoist, ladder, stairway, aerial lift, elevating work platform, or scaffold, would be more hazardous, or is not possible because of the project's structural design or worksite conditions.

Should the project include requirements for hoisting of personnel, it is important that appropriate planning and precautions are implemented prior to such considerations. The competent person, in conjunction with management review and approval, will make all decisions regarding hoisting personnel.

OSHA standards regarding the hoisting of personnel are very stringent and require that recognized hazards be significantly reduced or eliminated. The use of personnel platforms to hoist workers is considered a critical lift and all requirements of the company critical lift program are to be followed.

aXCON CORPORATION, INC.

01/01/2022

CRANE CRITICAL LIFT FORM

Project: _____ **Date:** _____

Company Performing Lift: _____

Supervisor: _____

Operator's Name_____

Designated Riggers: _____

_____

Designated Signal Person(s):

_____

_____

Competent Person: _____

Crane Type: _____

Material to be Lifted: _____
(Description of the load)

Verified Weight of Load: _____**lbs**

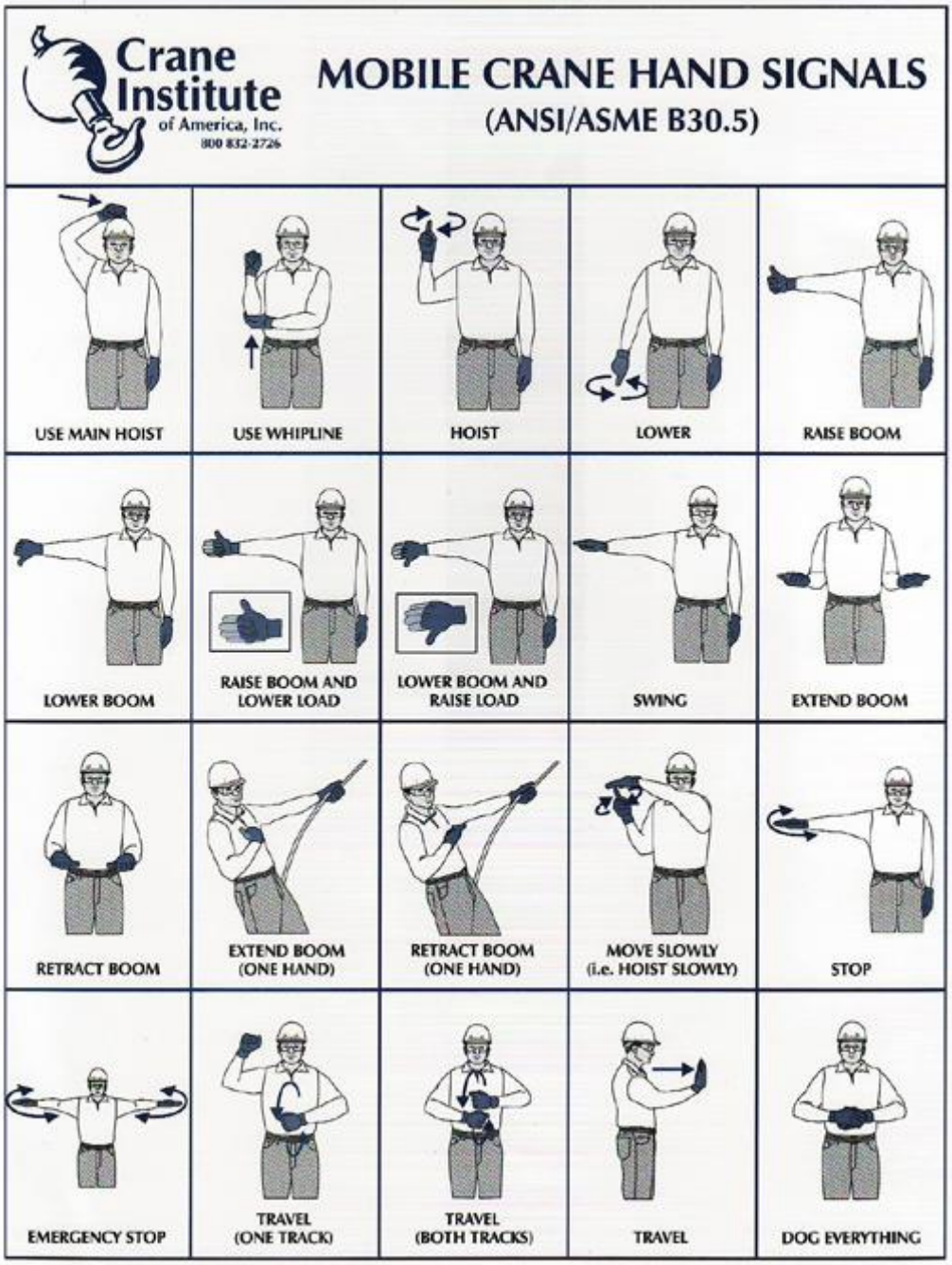
Type/Size of Rigging: _____

Communication Method: Hand Signal ☐ Radio ☐ Other ☐

Power Lines/Obstructions/Additional Comments: _____

Completed by: _____ **Date:** _____
(Signature)

Pre-lift meeting and rigging inspection checklist is to be completed <u>prior</u> to performing a critical lift.


Crane Institute of America, Inc.
800 832-2726
MOBILE CRANE HAND SIGNALS
(ANSI/ASME B30.5)
USE MAIN HOIST
USE WHIPLINE
HOIST
LOWER
RAISE BOOM
LOWER BOOM
RAISE BOOM AND LOWER LOAD
LOWER BOOM AND RAISE LOAD
SWING
EXTEND BOOM
RETRACT BOOM
EXTEND BOOM (ONE HAND)
RETRACT BOOM (ONE HAND)
MOVE SLOWLY (i.e. HOIST SLOWLY)
STOP
EMERGENCY STOP
TRAVEL (ONE TRACK)
TRAVEL (BOTH TRACKS)
TRAVEL
DOG EVERYTHING

CRANE USE
PRE-TASK PLAN

Project: _____

Date: _____

Supervisor: _____

Signal Person(s):

_____

_____

_____

Rigger(s): _____

_____

_____

Work Activity and Location: _____

Potential Hazards:

- _____
- _____
- _____

Precautions – Remedial Measures:

- _____
- _____
- _____

Special Considerations/Comments: _____

Remove rigging/slings from service if any of the following conditions are present:

Wire Rope Slings:

- ☐ Kinking, crushing, bird caging, or any other damage resulting in distortion
- ☐ Evidence of heat damage
- ☐ End attachments that are cracked, deformed, or worn
- ☐ Corrosion of the wire rope or end attachments

Synthetic Web Slings:

- ☐ Acid or caustic burns
- ☐ Melting or charring to any part of the surface
- ☐ Snags, punctures, tears, or cuts
- ☐ Broken or worn stitches
- ☐ Missing or illegible capacity tag

Chain Slings:

- ☐ Stretched, cracks, or heat damage in any link
- ☐ Missing or non-functional hook safety latch
- ☐ Missing or illegible capacity tag

Comalong:

- ☐ Broken or missing safety latch
- ☐ Excessive wire damage, kinks
- ☐ Posi-latch (brake) defective

Shackle:

- ☐ Deformation/bent
- ☐ Loose pin
- ☐ No capacity marking

Signature: _____ Date: _____

aXCON CORPORATION, INC.

01/01/2022

MOBILE CRANE INSPECTION CHECKLIST

Crane Type	Manufacturer	Capacity

OK = proper condition NR = needs repair

Item	OK	NR
Engine oil level		
Belts and hoses		
Tires and tracks		
Reverse alarm, if applicable		
Fire extinguisher		
Engine coolant levels		
Jib lacing/boom – welds, dents, etc.		
Break operation		
All lights and signals		
Operator cab windows		
All control mechanisms		
Ground conditions		
Hydraulic oil levels		
Visual inspection of hooks, latches, for deformation and wear		
Load indicating and anti-two block warning device		
Book angle or radius indicator		
Wire ropes – kinking, crushing, or corrosion		
Operator's manual and load chart		
Outriggers – pads, full extension permitted		

Comments:

Equipment has been deemed safe to operate.

Signature: _____ **Date**: _____

SCAFFOLDS

Scope:

This policy establishes health and safety requirements for the proper construction, inspection, maintenance, operation, and use of scaffolds used in the alteration, construction, and demolition of equipment encountered at Axcon Corporation, Inc. job sites. The scaffold policy shall, when applicable, reference the Axcon Corporation, Inc. Fall Protection Policy. For additional Fall Protection requirements, see the Fall Protection Policy. The Axcon Fall Protection and Scaffold Policy shall be included as part of the Axcon Corporation, Inc. Policy on Environmental Health and Safety.

Purpose:

The scaffold policy shall establish performance objectives in compliance with the requirements of the Occupational Health and Safety Administration (OSHA) 29 CFR 1910.28 Safety Requirements for Scaffolding and the American National Standards Institute (ANSI) A10.8 Scaffolding Safety Requirements as it pertains to Axcon employees working with scaffolding. This policy shall provide the necessary information and training to protect the health and safety of our employees.

Application:

This policy (including fall protection) and Training shall apply to every Axcon employee regardless of department that shall be constructing, maintaining, operating, or using scaffolds.
Outside Contractors shall have their own policy on Fall protection and Scaffolding which cannot be less stringent than our Axcon policy. If they do not have a policy, they shall comply with the provisions of this policy for the safety of our faculty, staff, and students.

Training:

Scaffolds shall be used when work cannot be done safely from the ground or from safe, solid construction.
Exceptions are as follows:

1. This policy does not address permanently installed suspended scaffolding systems or aerial platforms.
2. This policy, for safety reasons, does not address the following types of scaffolding which shall not be used at Axcon Corporation, Inc.without written specifications and a set of approved plans from a registered professional engineer:
    1. needle beam scaffolds
    2. interior hung scaffolds
    3. float scaffolds
    4. catenary scaffolds
    5. boatswain chair (powered)

Definitions

Bearer: A horizontal member of the scaffolding that is used to support the platform unit and that might be supported by runners.

Body Belt: A safety belt which is a strap or belt worn around the waist that provides the wearer with the ability to secure it to a lanyard, lifeline, or deceleration device called fall protection. **The use of body belts for fall arrest is prohibited.**
Body Harness: Straps which may be secured around the employee in a manner that will distribute the fall arrest forces over at least the thighs, pelvis, waist, chest, and shoulders with a means for attaching it to other components of a personal fall arrest system.
Controlled Access Zone (CAZ): An area in which certain work may take place without the use of guardrail systems, personal fall systems, or safety net systems, and access to the zone is controlled.

Coupler: A device that locks together parts of the tube and coupler scaffold.
Cross Braces: These are two diagonal scaffold members joined at their center to form an "X" and are used between frames and uprights, or both.

Dangerous Equipment: Machinery, electrical equipment, and other units which may be hazardous to employees who fall onto or into such equipment.
Deceleration Device: Mechanisms such as rope grab, ripstitch lanyard, specially woven lanyard, tearing or deforming lanyards,or automatic self-retracting lifelines/lanyards which serve to dissipate a substantial amount of energy during a fall arrest, or otherwise limit the energy imposed on an employee during a fall arrest.
Drop Line: A vertical line from a fixed anchorage which is independent of the work platform and its rigging and to which a lanyard is affixed. Drop lines are also called lifelines, safety lines, and other related terms.
Guardrail System: A rail system erected along the open sides and ends of platforms. The rail system consists of a top and midrail and their supports.
Horse Scaffold: A scaffold for light and medium duty that is composed of sawhorses supporting a platform.
Ladder Jack Scaffold: A light-duty scaffold consisting of a platform supported by brackets attached to a single or extension ladder.
Lanyard: A flexible line to secure the wearer if a body harness to a drop line/fixed anchor is used.
Leading Edge: The edge of a roof or formwork for a floor or other walking/working surface, such as a deck, which changes location as additional floors, roof decking, or formwork sections are placed, formed, or constructed. Leading edge also refers to an unprotected side or edge during periods when there is not active and continuous construction.
Lifeline: This is a flexible line for connection to an anchorage at both ends. The lifeline stretches horizontally and serves as a means of connection for other components of a personal fall system to the anchorage.
Low Slope Roof: A roof having a slope of less than or equal to 4 in 12.
Manually Propelled Mobile Scaffold: A scaffold which can be moved manually on casters.
Mechanical Equipment: Human or motor-propelled wheeled equipment used for roofing work. This does not include wheelbarrows or mopcarts.
Midrail: A rail placed halfway between the platform and the top rail of a guardrail system.

Outrigger Scaffold: A scaffold supported by outriggers or thrustouts projecting beyond the wall or face of a building or structure. The inboard ends of the outriggers or thrustouts are secured inside of the building or structure.
Overhand Bricklaying: A process of laying bricks or similar material such that the surface of the wall to be jointed is on the opposite side of the wall from the mason which requires the mason to lean over the wall to complete the work.
Personal Fall Arrest System: A system used to arrest an employee in a fall from a working level. The system consists of anchorage, connectors, and a body harness and may include a lanyard, deceleration device, lifeline, or suitable combination of these.
Positioning Device System: Body harness system rigged to allow an employee to be supported on an elevated vertical surface, such as a wall, and work with both hands free while leaning.
Qualified Person: A person who by recognized degree, certificate, or professional standing, or who by extensive knowledge, training, and experience has the ability to solve or resolve problems relating to the scaffolding or related work.
Safety Screen: A barrier mounted between the top rail and the platform.

Safety Monitoring System: A competent person who can recognize and warn employees of fall hazards.
Scaffold Access: A separate, attachable, or built-in means of access to and from a scaffold work unit.
Safety Net: A net which shall meet the requirements of an approved testing agency for the intended use. It shall be installed as close as practical under the walkway or working surface but cannot be more than 30' below the work surface.

Vertical distance from working level to horizontal plane of net	Minimum required horizontal distance of outer edge of net from the edge of the working surface
Up to 5 feet	8 feet
> 5 feet; < 10 feet	10 feet
> 10 feet	13 feet

Self-Retracting Lifeline: A deceleration device containing a drum woundline which can be slowly extracted or retracted onto the drum under slight tension during normal employee movement and which will automatically lock the drum should the employee fall.
Steep Roof: A roof which has a slope greater than 4 in 12.
Tieback: An attachment from a structural member of a supporting device.
Toeboard: A barrier along the sides and ends of a platform unit to guard against the falling of materials, tools, or other loose objects.
Toprail: The upermost horizontal rail of a guardrail system.
Warning Line System: A barrier erected **on a roof** to warn employees that they are

approaching an unprotected roof side or edge and which designates an area in which roofing work may take place without the use of a guardrail, body harness, or safety net system to protect employees in that area.

General Training Requirements

1. **Employees will be trained by a qualified or competent Axcon Corporation, Inc. employee. Retraining will occur every 3 years or as directed by the Axcon certified/competent trainer.**
2. **Scaffolds** shall be furnished, erected, or used when persons are engaged in work that cannot be performed safely from the ground or from solid construction. Scaffolds must be inspected by a competent person prior to use. Weak or defective equipment must be removed from service and tagged.
2. **Load scaffold**s shall be designed and erected to safely support the design load.
3. **Footing** for scaffolds shall be sound, rigid, and capable of carrying the maximum intended load. Barrels, boxes, brick, concrete block, and other unstable objects shall **not** be used to support scaffolds or planks. *Screw jack*s are the most common means of scaffold leveling on a sound, rigid surface. Not more than 12 inches of the screw jack shall extend below the bottom of the nut/top of caster.
4. **Anchorage**, guying, tying off, or bracing of scaffolds shall be affixed to substantial and structurally sound structures, or the equivalent, using anchor bolts or equivalent.
5. **Guardrails** (including toeboards and top rails) shall be installed on all open sides and ends of platforms more than 6 feet above the ground or floor or other platform. Exceptions to this include the following:
    1. during erection or dismantling of the scaffolding
    2. if the walls of a room completely surround the scaffolding
    3. when the *ladder jack scaffold* is 10 or more feet above the ground or floor, then the drop lines and body harness shall be used
    4. not required when the building side of the working platform if the platform is less than 16" from the building
        - If materials are piled higher than the toeboards and are in areas where persons are required to pass beneath the scaffold, the scaffolds shall be provided with a wire mesh or suitable alternative between the toeboard and the top rail extending along the entire opening.
        - If the wire mesh or alternative is used, the midrail can be eliminated.
6. **Maximum Intended Load** scaffolds shall be capable of supporting, without failure, their own weight and at least 4 times the maximum intended load.
7. **Scaffold Access** is an access ladder or equivalent which shall be provided (except during erecting or dismantling) by one of the following:
    1. **Portable ladder** - wood metal or fiberglass
    2. **Scaffold frame** with a maximum spacing between the climbing surfaces of the frame not to exceed 16.5" and the length of the climbing surface shall not be less than 10"
    3. **Hook-on attachment ladders** specifically designed for its intended purpose
    4. **Step or stair-type access** specifically designed for its intended purpose
    5. **Direct access** of adjacent structure or personnel hoist
        1. **Ladders** should be positioned so that the scaffold cannot be tipped. Persons

climbing or descending scaffold ladders shall have both hands free for climbing.

2. **Cross braces** shall **not** be used as a means of access or degrees.

8. **Platforms** are working surfaces which shall be fully planked or decked. The planks shall be laid with their edges close together so that the platform will be tight with no spaces through which tools or fragments of material can fall.
    1. **Spaces** cannot be more than 1" wide except around uprights.
    2. **Plank lapping** - the plank shall lap its end supports at least 12" but not more than 18". Where the ends of the planks form a flush floor, the butt joint shall be at the centerline of a pole and the butt ends shall rest on separate bearers. When 2 or more scaffolds are used on a building or structure, they shall not be bridged to one another but shall be maintained at even height with platforms butting. Intermediate beams shall be provided where necessary to prevent dislodgment of planks due to deflection and the ends shall be nailed or cleated to prevent dislodgment.
    3. **Platform movement** - when moving platforms to the next level, the old platforms shall be left undisturbed until the new bearers have been set in place, ready to receive the platform planks.
        1. If the platform cannot be fully planked or decked with standard units, the platform shall be planked as fully as possible. However, the remaining open space between the platform and guardrail shall not exceed 9.5".
9. **Set-up** - the poles, legs, and uprights of the scaffold shall be plumb and be securely and rigidly braced to prevent swaying and displacement.
    1. **Restrictions**
        1. Only certified erectors shall climb the scaffold framing while set-up is in progress.
        2. Once the fourth level of set-up has completed, connections to the building shall be made immediately.
    2. **Wood** - all load carrying wood members of the scaffold, except the planks, shall be at minimum, **#1 southern pine grade, #1 Douglas fir,** or the equivalent.
        1. The wood used can be used and reused provided the use has not damaged the lumber. New or used lumber that has been damaged or has deteriorated due to insects, decay, or chemical attack shall **not**be used.
    3. **Scaffold enclosures** - when partially or fully enclosed, precautions should be taken to assure the adequacy of the number, placement, and strength of ties attaching the scaffolding to the building because of the possibility of increased load conditions resulting from effects of weather and wind.
    4. **Hazards Scaffolds** - shall **not** be set up or used in the vicinity of power or other electrical lines or electrical conductors until such are insulated, de-energized (lock-out/tag-out) or otherwise rendered safe against electrical contact.
    5. **Surface Hazards** - all exposed surfaces shall be free of sharp edges, burrs, nails, or similar safety hazards.
    6. **Vehicle Hazards** - where moving vehicles are present, the scaffold area shall be marked with warning such as, but not limited to, flags, roped-off areas, barricades, fences, or a combination thereof.
    7. **Securing Scaffolds** - scaffolds shall be secured to a building or structure at intervals

not
8. exceeding 30' horizontally and 26' vertically

10. **Workers**
    1. **Overhead Protection** - When persons are working on the scaffold and an overhead hazard exists, overhead protection shall be provided to the user and shall be positioned not more than 9' above the working platform of the scaffold.
        1. Snow and ice on the scaffold must be removed and the planking sanded before the scaffold is to be used.
        2. Tools, materials, and debris shall not be allowed to accumulate so as to create a hazard on scaffold platforms.
    2. **Fall Protection** - is not required when employees are inspecting, investigating, or assessing workplace conditions prior to the start of work or after work is completed.
        1. **Floor openings**, including openings in the scaffold planking, 6' or more above the ground or floor shall be protected with a guardrail or safety net system. Personal Fall Arrest can be used as an alternative or in combination. For safety net requirements please see the definition section of this policy.
    3. **Dangerous equipment** located below or in close proximity to a scaffolding system shall be protected or guardrails shall be installed at the opening.
    4. **Building side scaffolds** - guardrails which are not required on the building side of a scaffold when the platform is less than 16" from the building itself.
    5. **Controlled Access Zone (CAZ)** - In areas where fall protection is not feasible or in areas where scaffolds make the work more dangerous (i.e. bricklaying), when reaching less than or equal to 10" below the working surface, the CAZ line prevents non-overhand bricklayers from inadvertently entering the area immediately adjacent to the fall hazard. The CAZ designates the area where overhand bricklaying may be performed without the use of guardrails, safety nets, or personal fall arrest systems as fall protection.
        1. If the overhand bricklayers must reach more than 10" below the working scaffold surface, the bricklayer must be protected by a guardrail, safety net, or other type of fall protection system.
    6. **Safety Nets** - if safety nets are selected as a means of fall protection, they shall be installed directly beneath the walk or working surfaces but shall **not** be greater than 30' below said walking or working area of the scaffold.
        1. Area requirements for safety nets are outlined in the definition section.
        2. The nets shall be installed so as to provide sufficient clearance beneath them to prevent
        3. contact with a surface or structure below if a fall occurs.
    7. **Personal Fall Arrest Systems** - Anchorage devices, connectors, or body harnesses which may include a lanyard, deceleration device, lifeline, or suitable combination of these. The personal fall arrest system:
        1. shall be inspected prior to use
        2. shall not be attached to a guardrail system
        3. shall not be attached to hoisting equipment unless the system prevents the employee from walking off the work surface
    8. **Positioning Devices** - devices that shall prohibit an employee from free-falling more

than 2 feet.

9. **Worker Safety** - Each worker shall be protected by a safety harness attached to a lifeline. The lifeline shall be securely attached to substantial members of the structure - not the scaffold - or to closely rigged lines which will safely suspend the worker in case of a fall.

Additional Requirements For Specific Types of Scaffolds

Tube and Coupler Scaffolds

1. shall be erected by a competent and experienced person
2. posts must be accurately spaced and erected on a suitable base and maintained plumb
3. runners shall be erected along the length of the scaffold and shall be located on the inside and outside posts at even heights
    - runners must be interlocked to form continuous lengths and must be coupled to each post
    - bottom runners shall be located as close to the base as possible
    - runners shall not be placed more than 6 ½' vertically on center
    - runners can be used as guardrails and vice-versa
4. *bearers* shall be installed transversely between posts and shall be securely coupled to the posts with the inboard coupler bearing on the running coupler
    - bearers shall not be placed more than 6 ½' vertically on center
5. *bracing* across the width of the scaffold shall be installed at the ends of the scaffold at least at every 4th level vertically and repeated every 3rd set of posts horizontally
    - the bracing shall extend diagonally from the outer posts or runner at this level upward to the inner post or runner at the next level and building ties shall be installed adjacent to bracing
6. *secured scaffold* - the running scaffold shall be secured to the wall or structure when the height exceeds 4 times the minimum scaffold base dimension - the 30' horizontal and 26' vertical rule shall apply

FABRICATED TUBULAR FRAME SCAFFOLDS

1. tubular frame scaffolds including components such as braces, brackets, trusses, screw legs, ladders, etc. shall be designed to support their own weight and at least 4 times the maximum intended load
2. frames or panels shall be properly braced by cross bracing or diagonal braces or both for securing vertical members together laterally and the cross braces shall be of sufficient length as to square and align vertical members - all brace connections shall be made secure
3. Panel or frame legs shall be set on adjustable bases or plain bases on mud sills or other foundations adequate to support the maximum intended load and the scaffold must be plumb and leve
4. tubular frame scaffolds over 125' must be designed by a licensed professional engineer

MANUALLY PROPELLED MOBILE SCAFFOLDS

1. the height shall not exceed 4 times the minimum base dimension
2. scaffolds shall be braced by cross, horizontal, or diagonal braces, by restrained platforms, or by other equivalent means - the erected scaffold must be level, square, and plumb

3. the working platform must be fully decked
4. casters shall have rubber or similar resilient tires with wheels having a minimum diameter of 5"
5. all scaffold casters shall have a positive wheel lock or equivalent means to prevent movement and rotation while the scaffold is in place
6. the lock must be engaged whenever there is a person on the scaffold
7. caster stems must be secured in place to prevent them from falling out
8. persons are not permitted to ride on the scaffolds while they are being moved/relocated
9. all tools and materials must be secured before the scaffold is moved/relocated

OUTRIGGER SCAFFOLDS

1. shall extend not more than 6' beyond the face of the building
2. the inboard end of the outrigger beams (measured from fulcrum point to the extreme point of support) shall be not less than 1.5 times the outboard end in length
3. the sides shall be plumb
4. the outrigger scaffold shall be prevented from tipping using the necessary ties and bracing
5. outrigger scaffolds shall be designed by a professional registered engineer

LADDER TYPE SCAFFOLDS OR PLATFORMS

1. the weight of the workers, planks, platforms, and other support equipment cannot exceed the sum of the rated capacity of the ladders
2. the maximum height of a working platform for ladder scaffolds using ladder jacks shall not be more than 20' above the base of the ladder
    - the maximum height of the working surface, if not using the ladder jacks shall not be greater than 4 times the outside base width of the ladder unless guyed, tied off, or braced
3. the foundation on which the ladders sit must be free of debris, water, or other slippery surface
4. planks must be securely fastened to the supporting members to prevent tipping
5. ladder jack scaffolds shall be limited to only one person

HORSE SCAFFOLDS

1. cannot be more than 2 tiers or 10' in height
2. horses shall not be spaced more than 5' apart
3. weak and defective equipment must be removed from service

01/01/2022

Spill Prevention / Response

Name of Business Axcon Corporation, Inc._____
Address 6373 Simpson Dr. _____

Facility Phone (850) 564-1272

Types of Work or **Hazardous Substances Used:** Cleaning fluids, diesel fuel

_____
_____
_____
_____

This spill plan is designed to handle the requirements for this system and associated hazardous substances. The spill plan should be updated if the hazardous substance inventory changes.

Spill Prevention

The following are general requirements for any hazardous substances stored or used at this facility.

General Requirements

- Ensure all hazardous substances are properly labeled.
- Store, dispense, and/or use hazardous substances in a way that prevents releases.
- Provide secondary containment when storing hazardous substances in bulk quantities (~55 g).
- Maintain good housekeeping practices for all chemical materials at the facility.
- Routine/Daily checks in the hazardous substance storage area to be performed by Site Supervisors

  _____
- Monthly inspections of the hazardous substance storage area, secondary containment, and annular space (interior cavity of double wall tank) on any Above-ground Storage Tanks (AST) or Underground Storage Tanks (UST) need to be logged in this plan. See Appendix A - Inspection Log.

Facility Specific Requirements

- N/A – All work locations are different

  _____
-

  _____

Spill Containment

The general spill response procedure at this facility is to stop the source of the spill, contain any spilled material and clean up the spill in a timely manner to prevent accidental injury or other damage.

Small spills will be contained by site personnel if they are able to do so without risking injury. Spill kit is of adequate size for anticipated spills and are located at the following location(s).

Main Office kitchen area under sink

_____

Emergency Procedures:

- Immediately call **911** in the event of injury, fire or potential fire, or spill of a hazardous substance that gives rise to an emergency situation.
- If a spill has occurred, contact the following persons immediately:

Rich Seidel	(Primary)	484-256-4911
Brian Pedicord	(Secondary)	850-261-3904
Rich Seidel	(After Hours Emergency Contact)	484-256-4911

- **In the event of a large spill, a properly trained employee should**:
  - Assess the area for any immediate dangers to health or safety (i.e. a wrecked car on fire). If any dangers are present, move away from the area, **call 911**.
  - Notify the primary and/or secondary contact from the list above and then continue your spill response. The primary contact should assess additional notification requirements.
  - Retrieve the spill kit from the closest location.
  - Assess the size of the leak and any immediate threat of the spill reaching the floor/storm drains or permeable surfaces in the area. If there is an immediate threat and there are no safety concerns, then attempt to block the spill from coming in contact with the floor/storm drain or permeable surface. If no drain covers are available, then try to use absorbent (cat litter) and/or sock booms or rags to stop the spill from getting into the drains or to any permeable surfaces.
  - If the spill can be contained with absorbent booms, deploy them around the spill. Use the booms to direct the spill away from any immediate hazards (i.e. a wrecked car).
  - If there is no immediate threat to the floor/storm drains or permeable surfaces, or after controlling the spill, try to plug or stop the leak, if possible. If applicable, put on protective gear (gloves, goggles, protective clothing, etc.) and plug the leak.
  - Once the spill has been contained and any immediate threat to storm drains or permeable surfaces has been minimized, contact the spill cleanup contractor and dispatch them to clean up the spill or commence spill cleanup procedures.

  Spill cleanup for large spills should be handled by the Spill Cleanup Contractor

  Company Name: Hulcher Services 24-Hour Phone 800-637-5471

Spill Reporting

If a hazardous substance spill exceeds 25 gallons or if any amount has been released to soil, surface water, or storm drains, notify the following agencies:

National Response Center (NRC) (800) 424-8802

Florida State Warning Point (SWP) (800) 320-0519

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01/01/2022

Hazardous Substance Inventory

Major Groups Only

Hazardous Substance	Manufacturer	Quantity/Unit of Issue

Plan Management

The primary contact or designee shall administer this plan and will be responsible for updating and including any required documentation.

Training

All personnel who may respond to any spill, need to be trained on the contents and procedures in this plan. Trained personnel will add their names and dates of training to the Training Log (see Appendix D). Only persons trained on this plan shall respond to a spill. If you are not trained and witness a spill, call or notify the primary and secondary contacts listed on Page 2 of this plan.

Spill Tracking

Any spills must be entered into the Spill Log (see Appendix C). If a large catastrophic spill occurs, attach additional pages to describe the event. Include known or possible causes, areas affected, and effectiveness of the cleanup. Include a review of the cleanup contractor and their procedures. For small spills, it is enough to fill out the Spill Log, and to take measures to prevent a repeat occurrence.

Facility Inspections

Routine inspections will be conducted daily during regular business hours. Daily inspections will include, at a minimum, a visual inspection of the hazardous substance's containers and the area immediately adjacent to it for signs of a spill or leak. These inspections do not need to be logged unless a spill or leak is detected. Ideally, these inspections will be conducted by a manager or by regular employees.

Full site inspections will be conducted monthly by the primary contact or designee and, at a minimum, will include those items on the inspection form in Appendix B. If any item on the inspection form is found unacceptable, the inspection form will be attached to this plan. If all items are deemed acceptable; it is sufficient for the inspector to log only the inspection and the results in the Inspection Log (Appendix A).

Appendix A - Inspection Log

A = Acceptable U = Unacceptable If any items are unacceptable attach Inspection Form with details.

Inspection Month	Year	Inspector Initials	Lids and Labels?	Evidence Of Spills?	Alarms or Sensor?	New Product?	Spill Kit Complete?	Storm Drains?	Items Fixed?
January									
February									
March									
April									
May									
June									
July									
August									
September									
October									
November									
December									
January									
February									
March									
April									
May									
June									
July									
August									
September									
October									
November									
December									
January									
February									
March									
April									
May									
June									
July									
August									
September									
October									
November									
December									

Appendix B Inspection Form

Acceptable	Unacceptable	
❒	❒	**Lids and Labels?** Have all lids and caps been returned to their proper place? Do all the containers still have labels?
❒	❒	**Evidence of Spills?** Is there any indication that a spill might have occurred? If so, was the spill properly cleaned up? Was there any spill kit materials used? Was the Spill Log filled out for that incident? Any housekeeping issues?
❒	❒	**For Tanks w/alarm systems only Any Alarms or Sensor issues?** Have there been any alarm conditions in the past month? If alarms have occurred, has the monitoring system been serviced by the manufacturer or an authorized service company? Is the system up and working at this time? Is the sensor working? Did you conduct a test of the alarm and the sensor? When was the last time the sensor was serviced?
❒	❒	**New Hazardous Substances?** Have any new chemical products been purchased? Do you have the SDS for new products? Have you assessed how to store and handle this new product safely? Have you added the new hazardous substance to the inventory sheet in this plan? Is the container properly labeled?
❒	❒	**Spill Kit Complete?** Have any items been used from the spill kit? If items are missing, is there an associated entry in the Spill Log? Are there any items missing that are currently on order? Is the spill kit stored where it is supposed to be stored? Is there a sufficient supply of daily cleanup materials?
❒	❒	**Storm Drains?** Is there a buildup of sediment in the drain traps? Is there any evidence of drain clogging? Are the drain filters still intact? Any need replacing? Have they been replaced?
❒	❒	**Items Fixed?** Have all deficiencies previously noted been fixed or made acceptable?

List any issues, deficiencies, or failures in detail:

_____

_____

_____

_____

Appendix C – Spill Log

Date of Spill	Location of Spill	Size of Spill (~ gal)	Prevention Measures Taken?	Spill Kit Materials Reordered?	Was the Spill Kit Adequate? (List any deficiencies, i.e. missing equipment, etc.)

Appendix D – Training Log

Employee's Printed Name	Signature	Date Completed

Site Map

Map to be specific to each job site; hand sketch is adequate.

Purpose

The purpose of this safety policy and procedure is to establish procedures for the protection of Axcon Corporation, Inc. employees working with or on compressed air equipment. Air compressors and air piping are used for a variety of applications in Distribution Centers. Air compressor storage tanks store excess air that is generated from the compressor, providing a convenient and readily accessible air source. Because of the air pressure within these storage tanks, potential dangers can develop if certain practices and precautions are not followed.

This safety policy and program provides guidelines for the safe use of air compressor storage tanks. It lists training requirements, guidelines for locating drains and traps, and requirements for gauges and valves.

Supervisors:

- Ensure that only those employees who have been trained to work with air compressor storage tanks are allowed to operate such equipment
- Ensure that equipment needed to work on the system is available and is in good working condition
- Ensure damaged equipment is removed from service until repaired and tested
- Ensure that air compressor storage tanks are inspected at each site
- Provide employees with Personal Protective Equipment (PPE) necessary for their job.
- Employees Inspect air compressor storage tanks prior to use and note any damage or defects
- Inspect all hoses and equipment before connecting to any compressed air system
- Immediately report any damages or defects to their supervisors
- Empty manual drains and taps on a regularly scheduled basis
- Safety Manager Provide prompt assistance to managers, supervisors, or others on any matter concerning this safety policy and procedure.

Definitions:

- Definitions Air Compressor Storage Tank - Pressurized vessel that stores air generated from an air compressor
- Drain Valve - A valve that is installed at the lowest point of an air compressor storage tank to provide for the removal of accumulated oil and water
- Trap - A device which uses venting head pressure to purge the tank from condensed water
- Training All affected employees will be trained in:
    - The purpose of air compressor storage tanks
    - The basic operation of air compressor storage tanks Maintenance requirements of drains and traps

- Reading gauges and operating valves Identifying damage and defects in the storage tanks, hoses or air driven equipment

This training must be performed upon initial employment and/or job reassignment. Periodic refresher training shall also be conducted at the discretion of the supervisor or Safety Department.

Equipment

- Drain valves are installed at the lowest point of an air compressor storage tank to provide for the removal of accumulated oil and water.
- Drain valves must be opened once a week to purge water build-up unless they are automatically operated traps.
- Drain Traps are devices, installed on the lowest point of a storage tank, which use venting head pressure to automatically purge the tank from condensed water.
- Gauges and Valves - All air compressor storage tanks/receivers must be equipped with a least one safety valve and pressure gauge. Gauges and safety valves will be tested at least every six months while on site to ensure proper operation. No valve of any type shall be placed between the air receiver and its safety valve.

Accessibility

Air compressor storage tanks must be installed such that all drains, handholes, and manholes are easily accessible. Air compressor storage tanks shall never be buried underground or located in an inaccessible place.

Air Powered Equipment

Equipment and tools that use compressed air must be inspected before each use. This includes all hoses and connections. Only approved snaptype connectors are permitted on hoses. Use of hose clamps to connect fittings to hoses is not permitted. All hoses must be connected only to approved supply valve locations. Air power equipment must not be connected to any air supply unless the design pressure of the equipment meets or exceeds the supply air pressure. Temporary reducers may not be installed in any compressed air supply system without approval by the Safety Department. All air-lance/wand equipment must have an automatic hand closure valve that is positioned such that the employee holds the valve open while using the lance/wand. Maximum air pressure for blowdown and cleanup is not to exceed 30 PSI. Goggles are required during air cleaning of facilities or equipment. Other PPE may be required based on the task and tools used.

Storage Tank / Receiver Safety Checks

- All compressed air cylinders must be visually checked
- All drains, handles, and manholes must be easily accessible
- Drain pipe and valve is installed on the lowest point of the air compressor storage tank
- Drain valve is opened and frequently drained to prevent the accumulation of excessive amounts of liquids
- Air compressor storage tanks have a pressure gauge
- Safety valves operate to prevent the internal tank pressure from exceeding 10% above the maximum allowable working pressure of the air compressor tank

Summary

It is the policy of **Axcon Corporation, Inc.** that our passenger vehicles (including vans and light-duty trucks) will be used only for company business and will be operated only by authorized persons who meet the driver criteria in our vehicle safety program.

This policy applies to our company-owned vehicles and private or rental vehicles authorized for use on company business.

All employees must comply with federal, state and local laws and policies and be "job-ready" when they are on company business. Job-ready means that employees must be physically and mentally able to do their jobs. Employees must not use intoxicants, drugs or medications that could impair their judgment or ability to drive. Managers and supervisors have the right to determine an employee's job readiness.

Employees who drive on company business must have a valid drivers license and a satisfactory driving record.

Violations of this policy may result in revocation or restriction of employee authorization to drive a company-owned or private vehicle on company business, reassignment, demotion, suspension or dismissal.

All employees must sign a statement stating that they have read and understand this policy and the consequences for violating it.

Employee responsibilities

Supervisors are responsible for ensuring that employees under their direction comply with all elements of this policy.

The Supervisor must verify, that employees have valid drivers' licenses and are qualified to operate company vehicles before they begin driving on company business.

Employees who drive on company business must follow all parts of this policy. They must do a walk around inspection of any vehicle before driving it and they must not use a company vehicle for personal business unless it is approved, in writing by the Supervisor.

When operating company vehicles, employees should remember that their driving habits reflect on all company employees. Company vehicles must be used legally, courteously and safely.

Employees are strongly encouraged to plan mini-breaks every two hours during long periods of driving and to allow for no more than 10 hours driving per day in good driving conditions.

Employees must use and require seat belts to be worn by their passengers.

Smoking is not permitted in company vehicles.

Employees are responsible for the care of vehicles assigned to them and may be held liable for improper care and abuse of the vehicle. Misconduct could lead to withdrawal of driving privileges and/or disciplinary actions, up to and including dismissal.

The company will investigate any incident that involves a company vehicle. The purpose of the investigation is to identify the cause of an incident and to determine how it could have been prevented – not to assess fault.

Employees must ensure cargo is adequately secured.

Employees must ensure vehicles are of the correct size and designed for intended use.

Requirements for new employees

The site supervisor will review this vehicle safety policy with each new employee who drives on company business.

Requirements for drivers under 21

Drivers under the age of 21 are prohibited from operating vehicles or trucks that transport hazardous materials.

Licensing

Employees who drive on company business must have a current, valid license for the vehicles they drive. Licenses will be photocopied and kept in employees' files.

Use of personal vehicles for company business

The Supervisor must review and approve use of a personal vehicle for company business.

Employees who drive personal vehicles on company business must provide evidence of automobile liability insurance as required by the state of their legal residence.

This company does not provide liability insurance for employees who use their own vehicles on company business. Employees who use their personal vehicles on company business are responsible for all liability resulting from use of their vehicles.

Any employee who drives a personal vehicle on company business and who does not maintain insurance coverage on that vehicle will be reassigned to a non-driving position or, if a non-driving position is not available, will be terminated.

Reporting incidents involving motor vehicles

An incident report packet is located in the glove box of each company vehicle. The packet contains instructions on what to do in case of an incident. Drivers should become familiar with the instructions before using vehicles.

Employees or their supervisors are responsible for completing and filing all necessary reports within the time periods required by this policy. Failure to file a report may cause the loss of the employee's license, driving privileges, and liability insurance coverage.

Employees must immediately notify their supervisor of any accident, collision or vandalism.

Employees or their supervisors must immediately report to the Safety Coordinator all collisions, accidents, or vandalism involving vehicles they use on company business.

If the incident results in injuries or fatalities, employees or their supervisors must report them to the Safety Coordinator immediately after ensuring the injured have or will receive necessary medical treatment.

Employees or their supervisors, must forward copies of all vehicle accident forms to the Safety Coordinator.

Employees involved in vehicle crashes should discuss details of the incident *only* with police officers, appropriate state officials, or representative of the company insurance carrier. Drivers are prohibited from signing or making any statements regarding responsibility for vehicle crashes.

Drug testing after incidents involving vehicles

After each incident, regardless of who is at fault, the Supervisor will require a drug test within eight hours.

Pre-trip walk-around inspections

Employees are responsible for conducting walk-around inspections of their vehicles before driving each day or shift and note any defects or damage. Employees must also note defects or damage to seats, seat belts, interior lights, engine warning lights, rearview mirrors, and emergency equipment.

Employees must report defects or damage to their Supervisor immediately. The Supervisor will evaluate the report and ensure that all hazards are repaired promptly. Vehicles that are unsafe to drive must be placed out of service immediately.

Vehicle service and maintenance intervals

Vehicle service and maintenance intervals are determined by the vehicle manufacturer. Maintenance will be performed by a qualified auto or truck mechanic. A signed and dated record of all maintenance work must be kept in the vehicle file. Vehicles that are unsafe to drive must be placed out of service until repairs are completed. Vehicles will be maintained to be maintained so they are in safe working order.

Records kept on company vehicles

This company keeps the following records on each company-owned vehicle:

- *Vehicle history report.* Provides a complete history of the costs of maintenance, parts, and labor associated with the vehicles.

All company reports and records are confidential and must not be released to third parties without the consent of Brian Pedicord and the company's attorney.

Definitions of terms used in this policy

Accident. An unplanned or unintended incident involving a motor vehicle that results in injury, death, or damage.

Collision. An unplanned or unintended incident in which a motor vehicle contacts another vehicle, person, or object.

Crash. An incident involving one or more vehicles in motion.

Incident. An event that resulted – or could have resulted – in personal harm or property damage.

Injury. Physical harm or damage to a person.

Motor vehicle. Any licensed mechanically or electrically powered device designed to be operated on public roads and streets.

Passenger. Any person in a vehicle other than the driver.

Preventable incident. One in which the driver failed to do everything that could have been done to avoid it.

Remedial training. Training required following an incident to upgrade and renew skills and demonstrate proficiency.

Mobile phone use agreement

Employees who use a mobile phone in a company vehicle should remember that their number one priority is obeying the rules of the road. Axcon Corporation, Inc. requires that you do the following when you use a mobile phone when you are driving a company vehicle:

- Find a safe place to pull off of the road and place your call.
- If you receive a call while driving, let the call go to the voice mail and answer when it is safe to do so.
- Employees who use hands-free devices may accept calls while driving but must find a safe place to pull off of the road to place calls.

I have read and will comply with this mobile phone use agreement.

Employee's signature and date: _____

CORPORATION, INC.

01/01/2022

Vehicle use agreement

Employee Name: **License number:** **State issued:**

Using company-owned vehicles

- Employees and passengers must wear seat belts while the vehicle is in motion.
- The vehicle must be maintained in accord with **Axcon Corporation, Inc.'s** maintenance requirements. Employees must report all mechanical problems to their supervisors immediately.
- Employees must report any motor vehicle incident that results in damage, injury, or a citation to their supervisors immediately.
- Employees must have a valid driver's license for the vehicles they will operate, must follow all license restrictions, and must have their license in their possession when they are driving. A driver whose license is suspended, revoked or terminated will notify the company immediately.
- Employees' spouses and children are not allowed to operate company vehicles.
- Hitchhikers are not permitted in company vehicles.
- Employees are responsible for all traffic and parking violations they receive when using company vehicles.
- Modifying or adding accessories to a company vehicle is prohibited.
- Radar detectors are prohibited.
- Employees are not allowed to operate vehicles at any time while under the influence of alcohol or drugs.

Using personal vehicles for company business

Authorization to use a personally owned vehicle for company business is permitted under the following conditions:

- Employees and passengers must wear seat belts while the vehicle is in motion.
- Employees must have the appropriate license to operate their vehicles.
- Employees must provide proof of insurance upon hire and each time their policy is renewed or updated.
- Employees must provide a copy of their insurance certificates to their supervisors.
- Employees must notify this company of all vehicle accidents or violations involving vehicles driven on company business.
- This company is authorized to review the driver's MVR annually as long as the driver is a company employee.
- The vehicle owner is responsible for mechanical repairs.
- Employees are not allowed to operate vehicles while under the influence of alcohol, drugs, or other medications that could impair their ability to drive safely.
- Employees must comply with all state and federal laws and regulations at all times.

I have read, understand, and agree to comply with this Vehicle Use agreement.

Employee's signature and date: _____

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01/01/2022

Vehicle accident report

This report must be completed by a supervisor or manager.

Company name: Today's Date:

Driver Information:

Driver's name:

License number:

Date of birth:

Length of employment:

Address:

City: State: Zip: County:

Phone: Cell:

Job title:

Reason vehicle was used:

Used with permission from:

Vehicle 1 Information (Insured Driver)

VIN: Year: Make: Model:

Insurance company: Policy number:

Does the vehicle require towing? Yes ☐ No ☐

Description of damage:

Vehicle 2 Information

VIN: Year: Make: Model:

Insurance company: Policy number:

Does the vehicle require towing? Yes ☐ No ☐

Description of damage:

Vehicle 3 Information

VIN: Year: Make: Model:

Insurance company: Policy number:

Does the vehicle require towing? Yes ☐ No ☐

Description of damage:

Vehicle 4 Information

VIN: Year: Make: Model:

Insurance company: Policy number:

Does the vehicle require towing? Yes ☐ No ☐

Description of damage:

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01/01/2022

Accident Information

Accident Date (MM/DD/YY): Time of accident: AM ☐ PM ☐

Accident location: City: State: Zip: County:

Purpose of trip

Pick-up: ☐

Driving to job site: ☐

Returning from job site: ☐

Delivery: ☐

Personal Time: ☐

Other, please explain:

Weather

Clear: ☐

Cloudy: ☐

Rain: ☐

Snow: ☐

Fog: ☐

Sleet: ☐

Other:

Condition of road surface

Wet: ☐

Dry: ☐

Ice: ☐

Concrete: ☐

Asphalt: ☐

Gravel: ☐

Uneven: ☐

Other:

Lanes divided? Yes: ☐ No: ☐

Traffic control device? Yes: ☐ No: ☐

Number of hours on duty at time of accident:

Number of driving hours:

Describe how the accident happened:

Use a separate page if you need to draw a diagram of accident.

Were there any injuries? Yes: ☐ No: ☐

1. Name of first injured party: Telephone Number:

Were injuries fatal? Yes: ☐ No: ☐

Do injuries require treatment away from accident scene? Yes: ☐ No: ☐

Injured party's address: City: State: Zip: County:

What vehicle was injured person in?

Vehicle 1: ☐

Vehicle 2: ☐

Vehicle 3: ☐

Vehicle 4: ☐

Other: : ☐

If other, please explain:

Was injured party taken to the hospital? Yes: ☐ No: ☐

Name of hospital:

Give brief description of injuries:

2. Name of second injured party: Telephone Number:

Were injuries fatal? Yes: ☐ No: ☐

Do injuries require treatment away from accident scene? Yes: ☐ No: ☐

Injured party's address: City: State: Zip: County:

What vehicle was injured person in?

Vehicle 1: ☐

Vehicle 2: ☐

Vehicle 3: ☐

Vehicle 4: ☐

Other: : ☐

If other, please explain:

Was injured party taken to the hospital? Yes: ☐ No: ☐

Name of hospital:

Give brief description of injuries:

3. Name of third injured party: Telephone Number:

Were injuries fatal? Yes: ☐ No: ☐

Do injuries require treatment away from accident scene? Yes: ☐ No: ☐

Injured party's address: City: State: Zip: County:

What vehicle was injured person in?

Vehicle 1: ☐

Vehicle 2: ☐

Vehicle 3: ☐

Vehicle 4: ☐

Other: : ☐

If other, please explain:

Was injured party taken to the hospital? Yes: ☐ No: ☐

Name of hospital:

Give brief description of injuries:

Other Information

Was there any property damage? Yes: ☐ No: ☐ If yes, give brief description:

Property damage address: City: State: Zip: County:

Were the police called? Yes: ☐ No: ☐ Did the police respond? Yes: ☐ No: ☐

Police report #: Officer:

Was a citation issued? Yes: ☐ No: ☐ If yes, to whom?

Citation Description:

Was drug testing administered? Yes: ☐ No: ☐ Was alcohol testing administered? Yes: ☐ No: ☐

Chain of Custody No.:

Witnesses

1. First witness name:

Address: City: State: Zip: County:

Home Phone: Work Phone: Cell Phone:

2. Second witness name:

Address: City: State: Zip: County:

Home Phone: Work Phone: Cell Phone:

3. Third witness name:

Address: City: State: Zip: County:

Home Phone: Work Phone: Cell Phone:

Person completing form

Name:

Date:

Injury/Illness Record Keeping

Purpose

The purpose of this program is to define the requirements for recording job related injuries and illnesses for AXCON CORPORATION, INC.

Scope

This policy shall cover all Axcon Corporation, Inc. operations within the United States.

Key Responsibilities

Safety Manager

- Shall ensure all job-related injuries and illness are recorded properly in accordance with OSHA requirements.
- Shall ensure all required posting are conducted in accordance with recordkeeping guidelines
- Shall maintain all required records.
- Shall determine the proper classification of job related injuries or illnesses based on OSHA recordkeeping guidelines.
- Supervisors shall ensure that all job-related injuries and illness are reported promptly to the Axcon Corporation, Inc. Safety Manager.

Employees

- Shall promptly report any actual or suspected job-related injury or illness.

Procedure

If Axcon Corporation, Inc. is required to keep records of fatalities, injuries, and illnesses it must record each

- fatality, injury and illness that:
- work-related; and
- is a new case; and
- meets one or more of the general recording criteria.

Axcon Corporation, Inc. must enter each recordable injury or illness on an OSHA 300 Log and 301 Incident Report, or other equivalent form, within seven (7) calendar days of receiving information that a recordable injury or illness has occurred. Fatalities must be reported within eight (8) hours of the event.

An Axcon Corporation, Inc. executive must certify via signature that he or she has examined the OSHA 300 Log and that he or she reasonably believes, based on his or her knowledge of the process by which the information was recorded, and that the annual summary is correct and complete.

Posting

Axcon Corporation, Inc. must post a copy of the annual summary in each establishment in a conspicuous place or places where notices to employees are customarily posted. Axcon Corporation, Inc. must ensure that the posted annual summary is not altered, defaced or covered by other material. The annual summary must be posted no later than February 1st of the year following the year covered by the records and the posting kept in place until April 30th. Axcon Corporation, Inc. must save the OSHA 300 Log, the privacy case list (if one exists), the annual summary and the OSHA 301 Incident Report forms for five (5) years following the end of the calendar year that these records cover.

Subcontractor Management Plan

General Requirements

1. All tier subcontractors wishing to perform work for Axcon Corporation, Inc. are required to be pre-qualified prior to bid award and requalify every three years thereafter. The pre-qualification/requalification process is performed by Axcon Corporation, Inc. utilizing data provided directly to Axcon Corporation, Inc. by the subcontractors.

   Subcontractors will submit the required documents to the appropriate Axcon Corporation, Inc. contact(s) as instructed. Axcon Corporation, Inc's Safety Director will evaluate submitted documents and notify the subcontractor of the results. The following documentation will be required to be submitted by each contractor for the pre-qualification/requalification process:

   - Experience Modification Rate (EMR) letter from their insurance carrier for the last three years.
   - Last three years OSHA 300 and 300A logs.
   - Copy of their company Health and Safety Program.
   - Current copy of Certificate of Insurance.

2. Axcon Corporation, Inc. recognizes that there may some variability in the recording of OSHA related injuries by contractors. As such, Experience Modification Rate (EMR) will be given more weight with regard to statistical qualification. A subcontractor with an EMR below 1.05 will be allowed to bid on Axcon Corporation, Inc projects. If the contractor's EMR is above 1.05, but below 1.25, bidding is allowed provided that OSHA Recordable Rate and OSHA Days Away from Work Rate are below 125% of the national averages, and both the EMR and OSHA rates show an improving trend over the last three years. A subcontractor not meeting the statistical limits may submit a written action plan as to how their organization plans to improve safety and performance. That plan must be reviewed by the Axcon Corporation, Inc Safety Director. A subcontractor with OSHA or equivalent ratings at or below the National Average will be considered to have an acceptable safety performance.

3. Every subcontractor shall submit a copy of their health and safety program for review. The program shall include:

   a. New Employee Orientation

b. Fall Protection

c. Employee Discipline and Management Commitment to Safety

4. Axcon Corporation, Inc shall determine that selected bidders are qualified. A pre-construction meeting shall be held for every project. Subcontractors awarded the work will be required to have their Project Manager and/or Supervisor attend the preconstruction meeting. The subcontractor shall present their site-specific safety plan, job hazard analysis (JHA), and site logistics plan for the project at this meeting. The meeting shall be held prior to the start of the project when feasible at the job site location. A review of project guidelines shall be performed at this meeting along with specific project related requirements.

5. All subcontractors shall incorporate a written Job Hazard Analysis (JHA) process. The JHA process shall address all anticipated or scheduled work activities anticipating potential hazards and unsafe conditions BEFORE THE WORK BEGINS, and will develop, communicate and implement appropriate precautions that could prevent accidents and avoid injuries.

6. All subcontractors are required to attend Axcon Corporation, Inc safety orientation prior to working on the project. Axcon Corporation, Inc client may require an additional orientation. Safety orientation shall be scheduled through Axcon Corporation, Inc. Site Supervisor.

7. All subcontractors shall be required to conduct toolbox talks on a weekly basis on a topic specific to work activities. All subcontractors are also required to conduct document audits of the project on a daily basis and provide the results of those audits to Axcon Corporation, Inc Site Supervisor by the end of each day. Included in the audit shall be specific measures instituted to remedy any safety violation. Site safety walks are required periodically throughout the day.

8. Axcon Corporation, Inc shall complete a subcontractor evaluation scorecard for each subcontractor when the subcontractor has completed their work on the project. The evaluation will assist Axcon Corporation, Inc to determine future subcontractor and/or employee work on Axcon Corporation, Inc projects.

Respirable Crystalline Silica Program

PURPOSE

This Respirable Crystalline Silica Program was developed to prevent employee exposure to hazardous levels of Respirable Crystalline Silica that could result through construction activities or nearby construction activities occurring on worksites. Respirable Crystalline Silica exposure at hazardous levels can lead to lung cancer, silicosis, chronic obstructive pulmonary disease, and kidney disease. It is intended to meet the requirements of the Respirable Crystalline Silica Construction Standard (29 CFR 1926.1153) established by the Occupational Safety and Health Administration (OSHA).

All work involving chipping, cutting, drilling, grinding, or similar activities on materials containing Crystalline Silica can lead to the release of respirable-sized particles of Crystalline Silica (i.e. Respirable Crystalline Silica). Crystalline Silica is a basic component of soil, sand, granite and many other minerals. Quartz is the most common form of Crystalline Silica. Many materials found on constructions sites include Crystalline Silica; including but not limited to – cement, concrete, asphalt, pre-formed structures (inlets, pipe, etc.) and others. Consequently, this program has been developed to address and control these potential exposures to prevent our employees from experiencing the effects of occupational illnesses related to Respirable Crystalline Silica exposure.

SCOPE

This Respirable Crystalline Silica Program applies to all employees who have the potential to be exposed to Respirable Crystalline Silica when covered by the OSHA Standard. The OSHA Respirable Crystalline Silica Construction Standard applies to all occupational exposures to Respirable Crystalline Silica in construction work, except where employee exposure will remain below 25 micrograms of Respirable Crystalline Silica per cubic meter of air (25 $\mu g/m^3$) as an 8-hour time-weighted average (TWA) under any foreseeable conditions.

RESPONSIBILITIES

Axcon Corporation, Inc. firmly believes protecting the health and safety of our employees is everyone's responsibility. This responsibility begins with upper management providing the necessary support to properly implement this program. However, all levels of the organization assume some level of responsibility for this

program including the following positions.

Upper Management and or Axcon Site Supervisors:

- Conduct job site assessments for Silica containing materials and perform employee Respirable Crystalline Silica hazard assessments in order to determine if an employee's exposure will be above 25 μg/m^3 as an 8-hour TWA under any foreseeable conditions

- Select and implement into the project's ECP the appropriate control measures in accordance with the Construction Tasks identified in OSHA's Construction Standard Table 1; and potentially including (but not limited to) - a written Exposure Control Plan (ECP), exposure monitoring, Hazard Communication training, medical surveillance, housekeeping and others.

NOTE: OSHA's Construction Standard Table 1 is a list of 18 common construction tasks along with acceptable exposure control methods and work practices that limit exposure for those tasks.

- Ensure that the materials, tools, equipment, personal protective equipment (PPE), and other resources (such as worker training) required to fully implement and maintain this Respirable Crystalline Silica Program are in place and readily available if needed.

- Ensure that Project Managers, Site Supervisors, Competent Persons, and employees are educated in the hazards of Silica exposure and trained to work safely with Silica in accordance with OSHA's Respirable Crystalline Silica Construction Standard and OSHA's Hazard Communication Standard. Managers and Competent Persons may receive more advanced training than other employees.

- Maintain written records of training (for example, proper use of respirators), ECPs, inspections (for equipment, PPE, and work methods/practices), medical surveillance (under lock and key), respirator medical clearances (under lock and key) and fit-test results.

- Conduct an annual review (or more often if conditions change) of the effectiveness of this program and any active project ECP's that extend beyond a year. This includes a review of available dust control technologies to ensure these are selected and used when practical.

- Coordinate work with other employers and contractors to ensure a safe work environment relative to Silica exposure.

Site Supervisors:

- Ensure all applicable elements of this Respirable Crystalline Silica Program are implemented on the project including the selection of a Competent Person.

- Assist Upper Management in conducting job site assessments for Silica containing materials and perform employee Respirable Crystalline Silica hazard assessments to determine if an ECP, exposure monitoring, and medical surveillance is necessary.

- Assist in the selection and implementation of the appropriate control measures in accordance with the Construction Tasks identified in OSHA's Construction Standard Table 1; and potentially including (but not limited to) - a written Exposure Control Plan (ECP), exposure monitoring, Hazard Communication training, medical surveillance, housekeeping and others.

- Ensure that employees using respirators have been properly trained, medically cleared, and fit-tested in accordance with the company's Respiratory Protection Program. This process will be documented.

- Ensure that work is conducted in a manner that minimizes and adequately controls the risk to workers and others. This includes ensuring that workers use appropriate engineering controls, work practices, and wear the necessary PPE.

- Where there is risk of exposure to Silica dust, verify employees are properly trained on the applicable contents of this program, the project-specific ECP, and the applicable OSHA Standards (such as Hazard Communication). Ensure employees are provided appropriate PPE when conducting such work.

Competent Person and/or Site Supervisor:

- Make frequent and regular inspections of job sites, materials, and equipment to implement the written ECP.

- Identify existing and foreseeable Respirable Crystalline Silica hazards in the workplace and take prompt corrective measures to eliminate or minimize them.

- Notify Upper Management of any deficiencies identified during inspections to coordinate and facilitate prompt corrective action.

- Assist the Upper Management in conducting job site assessments for Silica containing materials and perform employee Respirable Crystalline Silica hazard assessments to determine if an ECP, exposure monitoring, and medical surveillance is necessary.

Employees:

- Follow recognized work procedures (such as the Construction Tasks identified in OSHA's Construction Standard Table 1) as established in the project's ECP and this program.

- Use the assigned PPE in an effective and safe manner.

- Participate in Respirable Crystalline Silica exposure monitoring and the medical surveillance program.

- Report any unsafe conditions or acts to the Site Manager and/or Competent Person.

- Report any exposure incidents or any signs or symptoms of Silica illness.

DEFINITIONS

If a definition is not listed in this section, please contact your supervisor. If your supervisor is unaware of what the term means, please contact the Competent Person or your Safety Department.

- Action Level means a concentration of airborne Respirable Crystalline Silica of 25 $\mu g/m^3$, calculated as an 8-hour TWA.

- Competent Person means an individual who is capable of identifying existing and foreseeable Respirable Crystalline Silica hazards in the workplace and who has authorization to take prompt corrective measures to eliminate or minimize them.

- Employee Exposure means the exposure to airborne Respirable Crystalline Silica that would occur if the employee were not using a respirator.

- High-Efficiency Particulate Air (HEPA) Filter means a filter that is at least 99.97 percent efficient in removing monodispersed particles of 0.3 micrometers in diameter.

- Objective Data means information, such as air monitoring data from industry-wide surveys or calculations based on the composition of a substance, demonstrating employee exposure to Respirable Crystalline Silica associated with a particular product or material or a specific process, task, or activity. The data must reflect workplace conditions closely resembling or with a higher exposure potential than the processes, types of material, control methods, work practices, and environmental conditions in the employer's current operations.

- Permissible Exposure Limit (PEL) means the employer shall ensure that no employee is exposed to an airborne concentration of Respirable Crystalline Silica in excess of 50 $\mu g/m^3$, calculated as an 8-hour TWA.

- Physician or Other Licensed Health Care Professional (PLHCP) means an individual whose legally permitted scope of practice (i.e., license, registration, or certification) allows him or her to independently provide or be delegated the responsibility to provide some or all of the particular health care services required by the Medical Surveillance Section of the OSHA Respirable Crystalline Silica Standard.

- Respirable Crystalline Silica means Quartz, Cristobalite, and/or Tridymite contained in airborne particles that are determined to be respirable by a sampling device designed to meet the characteristics for respirable-particle size-selective samplers specified in the International Organization for Standardization (ISO) 7708:1995: Air Quality-Particle Size Fraction Definitions for Health-Related Sampling.

- Specialist means an American Board Certified Specialist in Pulmonary Disease or an American Board Certified Specialist in Occupational Medicine.

Specified Exposure Control Methods

When applicable, Axcon Corporation, Inc. will conduct activities with potential Silica exposure to be consistent with OSHA's Construction Standard Table 1. Supervisors will ensure each employee under their supervision and engaged in a task identified on OSHA's Construction Standard Table 1 have fully and properly implemented with the.

The task(s) being performed by Axcon Corporation, Inc. identified on OSHA's Construction Standard Table 1 is/are:

Table 1: Specified Exposure Control Methods When Working With Materials Containing Crystalline Silica

Construction Task or Equipment Operation		Engineering and Work Practice Control Methods	Required Respiratory Protection	
			≤ 4 hours/shift	>4 hours/shift
2a	Handheld power saws (any blade diameter) when used outdoors	• Use saw equipped with integrated water delivery system that continuously feeds water to the blade. • Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions.	None	N95 (or Greater Efficiency) Filtering Facepiece or Half Mask
2b	Handheld power saws (any blade diameter) when used indoors or in an enclosed area	• Use saw equipped with integrated water delivery system that continuously feeds water to the blade. • Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions.	N95 (or Greater Efficiency) Filtering Facepiece or Half Mask	N95 (or Greater Efficiency) Filtering Facepiece or Half Mask
4b	Walk-behind saws when used indoors or in an enclosed area	• Use saw equipped with integrated water delivery system that continuously feeds water to the blade. • Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions.	N95 (or Greater Efficiency) Filtering Facepiece or Half Mask	N95 (or Greater Efficiency) Filtering Facepiece or Half Mask
6	Rig-mounted core saws or drills	• Use tool equipped with integrated water delivery system that supplies water to cutting surface. • Operate and maintain tool in accordance with	None	None

Construction Task or Equipment Operation		Engineering and Work Practice Control Methods	Required Respiratory Protection	
			≤ 4 hours/shift	>4 hours/shift
		manufacturer's instructions to minimize dust emissions.		
7	Handheld and stand-mounted drills (including impact and rotary hammer drills)	• Use drill equipped with commercially available shroud or cowling with dust collection system. • Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions. • Dust collector must provide the air flow recommended by the tool manufacturer, or greater, and have a filter with 99% or greater efficiency and a filter-cleaning mechanism. • Use a HEPA-filtered vacuum when cleaning holes.	None	None
12c	Handheld grinders for uses other than mortar removal when used indoors or in an enclosed area	• Use grinder equipped with commercially available shroud and dust collection system. • Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions. • Dust collector must provide 25 cubic feet per minute (cfm) or greater of airflow per inch of wheel diameter and have a filter with 99% or greater efficiency and a cyclonic pre-separator or filter-cleaning mechanism.	None	N95 (or Greater Efficiency) Filtering Facepiece or Half Mask

When implementing the control measures specified in Table 1, Axcon Corporation, Inc. shall:

- For tasks performed indoors or in enclosed areas, provide a means of exhaust as needed to minimize the accumulation of visible airborne dust;

- For tasks performed using wet methods, apply water at flow rates sufficient to minimize release of visible dust;

- For measures implemented that include an enclosed cab or booth, ensure that the enclosed cab or booth:

  - N/A

- Where an employee performs more than one task included on OSHA's Construction Standard Table 1 during a shift, and the total duration of all tasks combined is more than four hours, the required respiratory protection for each task is the respiratory protection specified for more than four hours per shift. If the total duration of all tasks on Table 1 combined is less than four hours, the required respiratory protection for each task is the respiratory protection specified for less than four hours per shift.

Control Methods

Axcon Corporation, Inc. will provide control methods that are consistent with Table 1.

Respiratory Protection

Where respiratory protection is required by this program, Axcon Corporation, Inc. will provide each employee an appropriate respirator that complies with the requirements of the company's Respiratory Protection Program and the OSHA Respiratory Protection Standard (29 CFR 1910.134).

Respiratory protection is required where specified by the OSHA Construction Standard Table 1. Tasks not listed in Table 1 are not to be performed and Upper Management should be consulted. At no time shall an Axcon Corporation Inc. employee perform a task that exceeds limits/definitions in Table 1.

Housekeeping

Axcon Corporation, Inc. does not allow dry sweeping or dry brushing where such activity could contribute to employee exposure to Respirable Crystalline Silica unless wet sweeping, HEPA-filtered vacuuming, or other methods that minimize the likelihood of exposure are not feasible.

Axcon Corporation, Inc. does not allow compressed air to be used to clean clothing or surfaces where such activity could contribute to employee exposure to Respirable Crystalline Silica unless:

- The compressed air is used in conjunction with a ventilation system that effectively captures the dust cloud created by the compressed air; or
- No alternative method is feasible.

Written Exposure Control Plan

When employee exposure on a construction project is expected to be at or above the Action Level, a Written Exposure Control Plan (ECP) will be established and implemented. This ECP will contain at least the following elements:

- A description of the tasks in the workplace that involve exposure to Respirable Crystalline Silica;
- A description of the engineering controls, work practices, and respiratory protection used to limit employee exposure to Respirable Crystalline Silica for each task;
- A description of the housekeeping measures used to limit employee exposure to Respirable Crystalline Silica; and
- A description of the procedures used to restrict access to work areas, when necessary, to minimize the number of employees exposed to Respirable Crystalline Silica and their level of exposure, including exposures generated by other employers or sole proprietors.

The written ECP will designate a Competent Person to make frequent and regular inspections of job sites, materials, and equipment to ensure the ECP is implemented.

The written ECP will be reviewed at least annually to evaluate the effectiveness of it and update it as necessary. Having said this, ECP's are project specific and most project durations do not exceed a year. The written ECP will be readily available for examination and copying, upon request, to each employee covered by this program and/or ECP, their designated representatives, and OSHA.

Medical Surveillance

Medical surveillance will be made available for each employee who will be required to use a respirator for 30 or more days per year due to their Respirable Crystalline Silica

exposure. Medical surveillance (i.e. medical examinations and procedures) will be performed by a PLHCP and provided at no cost to the employee at a reasonable time and place.

Axcon Corporation, Inc. will make available an initial (baseline) medical examination within 30 days after initial assignment, unless the employee has received a medical examination that meets the requirements of the OSHA Respirable Crystalline Silica Construction Standard within the last three years. The examination shall consist of:

- A medical and work history, with emphasis on past, present, and anticipated exposure to Respirable Crystalline Silica, dust, and other agents affecting the respiratory system in addition to any history of respiratory system dysfunction, including signs and symptoms of respiratory disease (e.g., shortness of breath, cough, wheezing), history of tuberculosis, and smoking status and history;

- A physical examination with special emphasis on the respiratory system;

- A chest X-ray (a single postero-anterior radiographic projection or radiograph of the chest at full inspiration recorded on either film [no less than 14 x 17 inches and no more than 16 x 17 inches] or digital radiography systems) interpreted and classified according to the International Labour Office (ILO) International Classification of Radiographs of Pneumoconiosis by a NIOSH-certified B Reader;

- A pulmonary function test to include forced vital capacity (FVC) and forced expiratory volume in one second (FEV1) and FEV1/FVC ratio, administered by a spirometry technician with a current certificate from a NIOSH-approved spirometry course;

- Testing for latent tuberculosis infection; and

- Any other tests deemed appropriate by the PLHCP.

Axcon Corporation, Inc. will make available medical examinations that include the aforementioned procedures (except testing for latent tuberculosis infection) at least every three years. If recommended by the PLHCP, periodic examinations can be more frequently than every three years.

Axcon Corporation, Inc. will ensure that the examining PLHCP has a copy of the OSHA Respirable Crystalline Silica Construction Standard, this program, and the following information:

- A description of the employee's former, current, and anticipated duties as they relate to the employee's occupational exposure to Respirable Crystalline Silica;
- The employee's former, current, and anticipated levels of occupational exposure to Respirable Crystalline Silica;
- A description of any personal protective equipment (PPE) used or to be used by the employee, including when and for how long the employee has used or will use that equipment; and
- Information from records of employment-related medical examinations previously provided to the employee and currently within the control of Axcon Corporation, Inc.

Axcon Corporation, Inc. will ensure that the PLHCP explains to the employee the results of the medical examination and provides each employee with a written medical report within 30 days of each medical examination performed. The written report shall contain:

- A statement indicating the results of the medical examination, including any medical condition(s) that would place the employee at increased risk of material impairment to health from exposure to Respirable Crystalline Silica and any medical conditions that require further evaluation or treatment;
- Any recommended limitations on the employee's use of respirators;
- Any recommended limitations on the employee's exposure to Respirable Crystalline Silica; and;
- A statement that the employee should be examined by a Specialist if the chest X-ray is classified as 1/0 or higher by the B Reader, or if referral to a Specialist is otherwise deemed appropriate by the PLHCP.

Axcon Corporation, Inc. will also obtain a written medical opinion from the PLHCP within 30 days of the medical examination. The written opinion shall contain only the following in order to protect the employee’s privacy:

- The date of the examination;

- A statement that the examination has met the requirements of the OSHA Respirable Crystalline Silica Construction Standard; and

- Any recommended limitations on the employee's use of respirators.

If the employee provides written authorization, the written opinion shall also contain either or both of the following:

- Any recommended limitations on the employee's exposure to Respirable Crystalline Silica; and/or

- A statement that the employee should be examined by a Specialist if the chest X-ray is classified as 1/0 or higher by the B Reader, or if referral to a Specialist is otherwise deemed appropriate by the PLHCP.

If the PLHCP's written medical opinion indicates that an employee should be examined by a Specialist, Axcon Corporation, Inc. will make available a medical examination by a Specialist within 30 days after receiving the PLHCP's written opinion. Axcon Corporation, Inc. will ensure that the examining Specialist is provided with all of the information that the employer is obligated to provide to the PLHCP.

Axcon Corporation, Inc. will ensure that the Specialist explains to the employee the results of the medical examination and provides each employee with a written medical report within 30 days of the examination. The written report will contain:

- A statement indicating the results of the medical examination, including any medical condition(s) that would place the employee at increased risk of material impairment to health from exposure to Respirable Crystalline Silica and any medical conditions that require further evaluation or treatment;

- Any recommended limitations on the employee's use of respirators; and

- Any recommended limitations on the employee's exposure to respirable crystalline Silica.

In addition, Axcon Corporation, Inc. will obtain a written opinion from the Specialist within 30 days of the medical examination. The written opinion shall contain the following:

- The date of the examination;

- Any recommended limitations on the employee's use of respirators; and

- If the employee provides written authorization, the written opinion shall also contain any recommended limitations on the employee's exposure to Respirable Crystalline Silica.

Hazard Communication

Axcon Corporation, Inc. will include Respirable Crystalline Silica in the company's Hazard Communication Program established to comply with the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Axcon Corporation, Inc. will ensure that each employee has access to labels on containers of Crystalline Silica and those containers respective Safety Data Sheets (SDS's).

All employees will be trained in accordance with the provisions of the OSHA Hazard Communication Standard and the Training Section of this program. This training will cover concerns relating to cancer, lung effects, immune system effects, and kidney effects.

Axcon Corporation, Inc. will ensure that each employee with the potential to be exposed at or above the Action Level for Respirable Crystalline Silica can demonstrate knowledge and understanding of at least the following:

- The health hazards associated with exposure to Respirable Crystalline Silica;

- Specific tasks in the workplace that could result in exposure to Respirable Crystalline Silica;

- Specific measures Axcon Corporation, Inc. has implemented to protect employees from exposure to Respirable Crystalline Silica, including engineering controls, work practices, and respirators to be used;

- The contents of the OSHA Respirable Crystalline Silica Construction Standard;

- The identity of the Competent Person designated by Axcon Corporation, Inc.; and

- The purpose and a description of the company's Medical Surveillance Program.

Axcon Corporation, Inc. will make a copy of the OSHA Respirable Crystalline Silica Construction Standard readily available without cost to any employee who requests it.

Recordkeeping

Axcon Corporation, Inc. will make and maintain an accurate record of all exposure measurements taken to assess employee exposure to Respirable Crystalline Silica. This record will include at least the following information:

- The date of measurement for each sample taken;
- The task monitored;
- Sampling and analytical methods used;
- Number, duration, and results of samples taken;
- Identity of the laboratory that performed the analysis;
- Type of personal protective equipment (PPE), such as respirators, worn by the employees monitored; and
- Name, social security number, and job classification of all employees represented by the monitoring, indicating which employees were actually monitored.

Axcon Corporation, Inc. will ensure that exposure records are maintained and made available in accordance with 29 CFR 1910.1020. Exposure records will be kept for at least 30 years.

The employer shall make and maintain an accurate record of all objective data relied upon to comply with the requirements of the OSHA Respirable Crystalline Silica Construction Standard. This record shall include at least the following information:

- The Crystalline Silica-containing material in question;
- The source of the objective data;
- The testing protocol and results of testing;

- A description of the process, task, or activity on which the objective data were based; and

- Other data relevant to the process, task, activity, material, or exposures on which the objective data were based.

Axcon Corporation, Inc. will ensure that objective data are maintained and made available in accordance with 29 CFR 1910.1020. Objective data records will be kept for at least 30 years.

Axcon Corporation, Inc. will make and maintain an accurate record for each employee enrolled in the Medical Surveillance portion of this program. The record shall include the following information about the employee:

- Name and social security number;

- A copy of the PLHCPs' and/or Specialists' written medical opinions; and

- A copy of the information provided to the PLHCPs and Specialists.

Axcon Corporation, Inc. will ensure that medical records are maintained and made available in accordance with 29 CFR 1910.1020. Medical records will be kept under lock and key for at least the duration of employment plus 30 years. It is necessary to keep these records for extended periods because Silica-related diseases such as cancer often cannot be detected until several decades after exposure. However, if an employee works for an employer for less than one year, the employer does not have to keep the medical records after employment ends, as long as the employer gives those records to the employee.

PROGRAM EVALUATION

This program will be reviewed and evaluated on an annual basis by Upper Management unless changes to operations, the OSHA Respirable Crystalline Silica Construction Standard (29 CFR 1926.1153), or another applicable OSHA Standard require an immediate re-validation of this program.

APPLICABLE FORMS

The following lists applicable forms relating to this program.

APPENDICES

APPENDIX A - Written Exposure Control Plan (ECP) template

Silica ECP:

Company: Axcon Corporation, Inc.

Person Completing the Plan/Title: Safety Manager or Axcon Supervisor

Jobsite/Project: Any

Description of Work: Drill concrete floor to insert anchor bolts.

Competent Person: Axcon Supervisor

Material: Concrete
Task: Drilling/coring
Equipment and Control(s): Hand-Held Drill with Vacuum (Table 1 Entry)
Task/Control Description:
Drilling concrete floor to insert anchor bolts.

Material: Concrete
Task: Grinding
Equipment and Control(s): Hand-Held Grinder with Vacuum (Table 1 Entry)
Task/Control Description:
Grinding old anchor bolts flush with concrete floor.

Material: Concrete
Task: Sweeping/cleaning up
Equipment and Control(s): Vacuum - 150 CFM Task/Control Description:
Using vacuum to remove concrete drilling dust.

Safety of Others:
Safety tape will be surrounding the work area to eliminate exposure to all people except the technician drilling the holes.

Worker Training:
Reference the RESPIRABLE CRYSTALLINE SILICA PROGRAM in the Axcon Corporation, Inc. Health and Safety Manual.

Housekeeping:
HEPA vacuum shall be used for all concrete drilling.

Medical Surveillance:
Medical surveillance will be made available for each employee who will be required to use a respirator for 30 or more days per year due to their Respirable Crystalline Silica exposure. Medical surveillance (i.e. medical examinations and procedures) will be performed by a PLHCP and provided at no cost to the employee at a reasonable time and place.

Employee & Subcontractor Signoff Sheets

AXCON
EMPLOYEE ACKNOWLEDGEMENT
HEALTH & SAFETY REGULATIONS
(Worker Safety Orientation)

Date: _____ **Jobsite ID:** _____

Employee Name: _____
(Please Print)

I have received a copy of the Axcon Health & Safety Rules. The information and principles outlined in this document were reviewed and discussed with me. I also understand the contents of this document and that I shall work in a safe manner and comply the written procedures and policies as prescribed in this document and in the Occupational Safety & Health Act for Construction.

Employee Signature: _____

Site Supervisor Name: _____
(Please Print)

Site Supervisor Signature: _____

This completed form must be removed from this book and returned to the Axcon Quality/Safety Representative.

_____
(Date)

AXCON
SUBCONTRACTOR
EMPLOYEE ACKNOWLEDGEMENT
HEALTH & SAFETY REGULATIONS
(Worker Safety Orientation)

Date: _____ **Jobsite ID:** _____

Subcontractor Employee Name: _____
(Please Print)

Subcontractor Company Name: _____
(Please Print)

Subcontractor Representative: _____
(Please Print)

I have received a copy of the Axcon Health & Safety Rules. The information and principles outlined in this document were reviewed and discussed with me. I also understand the contents of this document and that I shall work in a safe manner and comply the written procedures and policies as prescribed in this document and in the Occupational Safety & Health Act for Construction.

Subcontractor Employee Signature: _____

Subcontractor Representative Signature: _____
(Please Print)

Axcon Site Supervisor Name: _____
(Please Print)

Axcon Site Supervisor Signature: _____
(Please Print)

This completed form must be removed from this book and returned to the Axcon Quality/Safety Representative.

_____
(Date)

Lead Awareness

Lead is a naturally occurring, heavy, bluish metal that has been used for centuries in manufactured products. Lead is nearly indestructible and is non-biodegradable. No known technology will destroy or render lead harmless. Lead is mined as ore in many countries throughout the world and refined for use in the following products:

- paint
- batteries
- gasoline
- glazing
- pottery glaze
- **solder**
- water and sewer piping

As of 2008, residential paint can only contain a maximum of .009% lead.

Training?

Axcon Corporation, Inc. has incorporated Lead Awareness into its corporate Safety Manual, which is reviewed by employees annually. Lead Awareness Training is also incorporated into our Toolbox Talks.

What is a lead-based paint?

Any paint or other surface coatings that contain lead equal to or in excess of 0.5% by weight or 1.0 mg/cm² using an XRF direct reading instrument. This includes varnishes and stains.

What's the problem?

Disturbing Lead If lead is present on or in a surface being disturbed by sanding, scraping, or welding, persons performing the work, as well as occupants of the surrounding area, may be exposed to lead. **Never disturb lead containing material. Contact your supervisor if you suspect the presence of lead.**

Where is it?

The activities that present the greatest risk for lead exposure include:

- **demolition**
- renovation
- painting projects (interior and exterior)
- **plumbing and soldering**
- firing range activities
- window glazing

What are the health effects?

Lead is recognized as a serious health hazard for anyone who inhales or ingests it. Small lead particles that enter the lungs or digestive tract will be absorbed into the blood stream where the lead becomes a poison. Disturbed lead particles may also settle on your skin, hair, and clothing. Eating, drinking, or smoking without first washing your hands after exposure can deliver additional lead into your system. Once inside your body, lead interferes with the brain, nerves, kidneys and bloodforming systems. When lead levels become high

enough, lead can be stored in the bone marrow, where it may be released into the body at a later time. Damage from chronic lead poisoning may be irreversible and acute exposures can be fatal. In adults, symptoms of lead poisoning include:

- abdominal pain
- digestive problems
- headaches
- high blood pressure
- impotence
- kidney damage
- memory and concentration problems
- muscle pain
- sleep disturbances

Developing fetuses and young children under the age of six are most susceptible to lead exposure. Lead has no biological value to the body and will replace calcium in children. Relatively low levels of lead can inhibit growth in developing fetuses. In young children, lead may cause irreversible damage to the developing nervous system, resulting in behavioral and learning problems. Slowed growth, hearing problems, and kidney damage are also possible effects.

Lead Detection – How do we know?

The presence of lead is most commonly identified through these two methods:

- Laboratory Analysis - A small sample of paint chips (5 grams) is collected to represent a cross section of paint down to the substrate. This method is extremely accurate however, it is destructive and results often take one to two weeks.
- XRF Testing - An x-ray Fluorescence (XRF) device uses a radioactive source to excite lead molecules present in materials. XRF allows for nondestructive testing of materials with substrate correction..Environmental Health and Safety (EH&S) maintains an XRF testing device that is used for testing materials that you suspect may contain lead. Specialized training is required for users.

How do we minimize exposure?

In order to minimize exposure to the individual conducting the work and others in the area, and to avoid contamination of customer property, a number of procedures are recommended. Most of the procedures reflect common sense approaches and can be accomplished with minimal effort. Lead safe work practices include:

- **High Efficiency Particulate Air (HEPA) filtered ventilation for tools.**
- **Use HEPA filtered vacuum cleaners for any cleanup.**
- Use a drop cloth to collect debris. Do not leave lead dust/debris.
- Work involving lead materials should be conducted when areas are unoccupied.
- Heat guns, if required, operating below 700 degrees Fahrenheit
- Use chemical solvents or pastes.
- Wet sanding, scraping, and sawing.
- **On-site washing facilities and following good hygiene practices.**
- Avoid methods with high exposure potential. Do NOT use:
    - heat guns operating above 700 degrees F
    - unshrouded and non-HEPA filtered tools
    - welders on painted surfaces

- uncontained hydro-blasting or high-pressure wash
- chemical strippers containing methylene chloride

What personal protective equipment (PPE) and personal hygiene methods should we use?

Since inhalation is the primary route of exposure to lead dust for adults, the first line of defense is respiratory protection. Avoid breathing any dust that you suspect may contain lead particles:

- If monitoring indicates that the work you are conducting exceeds the OSHA Permissible Exposure Limit (PEL), use a half- face respirator with HEPA (P100) filters.
- Use gloves to minimize contamination to your hands.
- Wear disposable protective coveralls.
- **Wash your hands and face before eating, drinking, or smoking.**

Housekeeping

Use HEPA filtered vacuums and/or wet wiping when cleaning surfaces painted with lead paint. Wet wiping should be accomplished with wipes soaked with a detergent solution. Never use compressed air to clean up lead contaminated dust.

01/01/2022

Pandemic Preparedness - US

Axcon Corporation, Inc. is concerned about the developments surrounding the novel coronavirus (COVID-19). We are working hard to ensure that the health and safety of our employees, subcontractors and clients is our core focus while also delivering on project needs and expectations of our clients. This program will stand for all Pandemics but is specific to the Pandemic at hand in certain locations of the text. This document is to me maintained and distributed by the Axcon Safety Director.

PURPOSE

This Pandemic Preparedness Program - US was developed to prevent employee exposure to potential virus that could result through construction activities or nearby construction activities occurring on worksites. A pandemic is a global disease outbreak and can be caused by a variety of agents, including influenza and coronaviruses. During a pandemic, transmission can be anticipated in the workplace not only from patients to workers in healthcare settings, but also among co-workers and between members of the general public and workers in other types of workplaces. Consequently, this program has been developed to address and control these potential exposures to prevent our employees from experiencing the effects of falling ill to a designated pandemic virus.

PERSONELL

All office staff that can work remote may be asked to work remote until the conditions of the Pandemic lessens. All business functions will remain open and supported through a Pandemic if the government allows us to remain in business. Job sites are controlled by the General Contractor's who are ultimately responsible for Safety for the entire job site. The General Contractor's take direction from local State Officials regarding closure, depending on whether they are deemed essential. If an Axcon associate has an immediate family member that has fallen ill from a Pandemic, he/she may take time away from work to care for that loved one and be compensated in accordance with the State of Florida Labor Laws.

RESPONSIBILITIES

Axcon Corporation, Inc. firmly believes protecting the health and safety of our employees is everyone's responsibility. This responsibility begins with upper management providing the necessary support to properly implement this program. However, all levels of the organization assume some level of responsibility for this program including the following positions.

Upper Management and or Axcon Site Supervisors:

- Provide adequate PPE to workers
    - As designated by the CDC, the General Contractor who oversees site safety and or Federal and State officials.
    - Hand washing stations.
    - Porta-Potty's.
    - Hand sanitizer.
    - Cleaning supplies/disinfectants.
    - Antiseptic hand cleansers/towelettes.
    - Necessary immunizations.

- Ensure that the materials, tools, equipment, personal protective equipment (PPE), and other resources (such as worker training) required to fully implement and maintain this Pandemic Preparedness Program are in place and readily available if needed.

- Ensure that Project Managers, Site Supervisors, Competent Persons, and employees are educated on current Pandemics and trained to work safely within General Contractor mandated safety programs, Center for Disease Control guidelines and Federal/State mandates.

- Maintain written records of training.

- Conduct an annual program review (or more often if conditions change) of the effectiveness of this program and any active project that extend beyond a year. Throughout the year and during the annual review, changes are to be added to keep Axcon's Pandemic Preparedness Program – US current with CDC and OSHA guidelines and pertinent feedback from company employees via lessons learned. Updates to Axcon Corporation's Health and Safety Manual will be released as changes are made, annually and Pandemic Preparedness will be discussed periodically throughout the year through job site toolbox talks, where topics rotate weekly.

    - Following a Pandemic, the Safety Committee will review pertinent lessons learned throughout the crisis and any changes the CDC made throughout the Pandemic. Updates will be made to the Axcon Corporation, Inc. Safety Manual following the review and the document will be released on the company portal for employee review.

- Coordinate work with other employers and contractors to ensure a safe work environment relative to an active Pandemic.

- If a large percentage of workers become ill on a job site, Axcon will determine if other contractors are experiencing the same sick rate. If they are, Axcon will decide if the company's employees will remain on site. If Axcon remains on site, replacement employees will be sent to bring the workforce to correct numbers. If it is decided to depart the job site, Axcon will ensure the departure of the remaining employees expeditiously.

- Toolbox Talk / Training: The spread of infectious disease/viruses reviewed at least once a quarter.

    - Differences between seasonal epidemics and worldwide pandemic disease outbreaks
    - Which job activities may put them at risk for exposure to sources of infection
    - What options may be available for working remotely, or utilizing an employer's flexible leave policy when they are sick
    - Social distancing strategies, including avoiding close physical contact (e.g., shaking hands) and large gatherings of people
    - Good hygiene and appropriate disinfection procedures
    - What personal protective equipment (PPE) is available, and how to wear, use, clean and store it properly
    - What medical services (e.g., vaccination, postexposure medication) may be available to them
    - How supervisors will provide updated pandemic-related communications, and where to direct their questions

Site Supervisors:

- Ensure all applicable elements of this Pandemic Preparedness Program are implemented on the project including the selection of a Competent Person.

- Assist Upper Management in conducting job site assessments to determine if changes are required relative to this Pandemic Preparedness Program.

Competent Person and/or Site Supervisor:

- Make frequent and regular inspections of job sites, materials, and equipment to implement the written program.
- Notify Upper Management of any deficiencies identified during inspections to coordinate and facilitate prompt corrective action.
- Assist the Upper Management in conducting job site assessments for material deficiencies, and employee adherence to the site Safety Program and corporate written program.

Employees:

- Follow recognized procedures specific to the Pandemic at hand.
- Use any assigned PPE or guidelines in an effective and safe manner.
- Report any unsafe conditions or acts to the Site Manager and/or Competent Person.
- Report any exposure incidents or any signs or symptoms.

Communication:

Internal:

- Axcon Management will notify Supervisors of the baseline safety measures that must be followed per site and per Pandemic.
- It is up to the Site Supervisors to notify Axcon Management if there are deficiencies or changes that need to be made to our company preparedness and or processes relative to a specific job site.
- Axcon Management will either make the necessary modifications or shut the job site down.

External:

- Axcon Management will follow Pandemic safety precaution instruction from a site's General Contractor or what is being advised from the state government where the project site is located if no General Contractor is present on site.
- If Axcon needs to adjust work schedule, or stop work all together, communication will occur between Axcon and a Customer directly if no General Contractor is present on site.

COVID-19 GUIDELINES

If you are showing any published signs of COVID-19 which include, fever, coughing, respiratory difficulty, or you do not feel well, seek medical attention and notify your supervisor. If you are diagnosed with COVID-19, you will be required to stay home and not return to work until you have received a doctor's release. Any person who have been in contact with a confirmed COVID-19 person will be required to self-quarantine for 14 days.

Maintain proper hygiene practices. This includes washing hands often with soap and water when available. Using an alcohol-based hand sanitizer with a minimum of 60% alcohol. Coughing into your elbow, avoiding

personal contact customary to personal greetings, i.e. handshakes and hugs.

- COVID-19
  - Any person with a positive COVID-19 diagnosis will not be allowed to enter a jobsite until they are cleared by a doctor.
  - Any person that has had close contact with a confirmed COVID-19 patient ("Close contact" is defined as being within 6 feet of a person with a confirmed case of COVID-19 for a prolonged period of time) will not be allowed to enter a jobsite for 14-days starting from the day they last interacted with the person with COVID-19.
  - If you are experiencing symptoms such as fever, cough or shortness of breath, please go home and let the Superintendent know immediately. Once you have been cleared by a doctor you may return to the jobsite
- Any Pandemic:
  - Avoid close contact with people who are sick.
  - Cover your cough or sneeze with a tissue, then throw the tissue in the trash.
  - Clean and disinfect frequently touched objects and surfaces frequently and depending upon frequency of use.
  - Avoid touching your eyes, nose and mouth.
  - Stay home when you are sick expect to get medical care.
  - Wash your hands often with soap and water for at least 20 seconds. If soap and water isn't available, use hand sanitizer with at least 60% alcohol.
  - Stay at least 6 feet away from others where possible. Don't work near others in more than groups of 10 people. Limit large or crowded gatherings of personnel if an outbreak or increased level of disease is in progress.

DEFINITIONS

If a definition is not listed in this section, please contact your supervisor. If your supervisor is unaware of what the term means, please contact the Competent Person or your Safety Department.

- Competent Person means an individual who can identify existing Pandemic hazards in the workplace and who has authorization to take prompt corrective measures to eliminate or minimize them.

- Employee Exposure means the exposure to viruses defined in the current Pandemic that would occur if the employee were not following prescribed guidelines.

- Center for Disease Control (CDC) The Centers for Disease Control and Prevention is the leading national public health institute of the United States. It is a United States federal agency, under the Department of Health and Human Services, and is headquartered in Atlanta, Georgia.

- (Specific Current Pandemic COVID-19) Coronavirus disease (COVID-19) is an infectious disease caused by a new virus. The disease causes respiratory illness (like the flu) with symptoms such as a cough, fever, and in more severe cases, difficulty breathing.

WELDING & HEXAVALENT CHROMIUM

Axcon Corporation Inc. believes and operates on the premise that safety always comes first. Protecting yourself when performing welding operations depends on your understanding of the hazards involved and the proper way to control them. Control of welding hazards include avoiding eye injury, respiratory protection, ventilation of the work area, protective clothing and having safe equipment to use.

Eye hazards include exposure to ultraviolet and infrared light. Welders and their helpers should wear filter glasses with shades ranging from 2 to 14, depending on the type of welding being done, to protect their eyes. Unless a welding arc is behind a screen, not only the welder, but also people nearby may need eye protection. Other workers should be excluded within a 30 foot radius from gas or low powered arc welding, or also be protected with appropriate filter lenses. Heavy welding requires a 100 foot radius. Inert gas welding produces 5 to 30 times as much ultraviolet light as arc welding and requires shielding for even greater distances. Keep in mind that ordinary untreated plastic lenses absorb ultraviolet light very poorly and should not be relied on for protection. Virtually all welding processes generate gases, fume and dusts. Gases generated include carbon monoxide, carbon dioxide, ozone, and nitrous gases. Other gases may also be formed in the presence of chemicals which may be on the material being welded. For example 1,1,1 Trichloroethane generates phosgene gas when exposed to the heat of welding. Welding and cutting can also generate fumes from cadmium, lead, cyanide, beryllium, arsenic, fluorides, nickel, cyanide, and other materials when can be hazardous if inhaled. Proper respiratory protection should always be worn when cutting or welding. The best type of protection to use can be determined by reading the Material Safety Data Sheet for the material being welded, or the manufacturer of the rod or flux being used.

Mechanical ventilation at the rate of 2,000 cubic feet per minute per welder is required if the area is more crowded than 10,000 cubic feet per welder; has a ceiling height of less than 16 feet; or in confined spaces where structural barriers significantly obstruct cross ventilation. Additional specific ventilation requirements are necessary for fluorine compounds, zinc, lead, beryllium, cadmium, mercury, and for stainless steel (produces Hexavalent Chromium) that is oxygen cut using either a chemical flux or iron powder or gas shielded arc cutting. Where it is not possible to provide this ventilation, airline respirators, hose masks, or self-contained units must be used. Oxygen should never be used for ventilation.

Hexavalent chromium in welding fumes

It appears that Chromium 6 is not only to be found in paints and coatings but also in certain types of welding fumes. This means that the health risks could be much greater than previously thought.

The last few years, more and more information about the dangers of hexavalent chromium (Chromium 6) in welding fumes has surfaced. It targets the respiratory system, liver, kidneys, skin, nose, and eyes, and is known to cause cancer and COPD[1]. Approximately 400,000 workers[2] in the Netherlands regularly work in circumstances with welding fumes.

What is Chromium 6 (hexavalent chromium)?

There are various ways to describe the substance. It is often called Chrome 6 or Chromium 6, chromium VI or short Cr(VI). The longer version is hexavalent chromium. The name chromium is derived from the Greek word ‘chroma’ which means colour. In its mineral form, it has been used as a paint pigment since the 18th century.

There are differences between the various forms of chromium. Three forms are the most common ones. Most people will know chromium metal, or Cr(0), from coatings on faucets in bathrooms and the likes, or classic vehicles, and in various alloys.

Cr(III) or trivalent chromium is a natural element found in rocks, animals, and plants. In small doses, it is actually an essential nutrient for the metabolism of carbohydrates and lipids.

Cr(VI) or hexavalent chromium is the hazardous form of chromium. It can be inhaled or swallowed, but it can also penetrate your skin and cause diseases.

Serious consequences: autoimmune diseases and cancer

When hexavalent chromium oxide is dissolved in water, it changes into trivalent chromium. This takes place inside the human body. The harmfulness of this process is determined by its location: inside or outside a cell.

When conversion to trivalent chromium takes place inside a cell, the cell can be harmed, which can lead to a wide variety of health issues. These risks include DNA damage, resulting in autoimmune diseases and cancer.

If the conversion takes place outside a cell, for example in sweat or stomach acid, the process is harmless. However, if there are more hexavalent chromium oxides in the working place, there is a greater chance of hexavalent chromium entering cells and damaging them. So, the more exposure to it, the bigger the chance you may become a victim of Chromium 6.

Where do we find hexavalent chromium?

Exposure to hexavalent chromium in welding fumes is primarily associated with welding stainless steel. That doesn't mean it is limited to this material. Usually, chromium is not added to other types of steel, but it can be around at low levels, due to the use of scrap steel in the production process. You will find exposure to welding fumes in multiple sectors. Workers in the metal industry, shipyards, construction work, and transportation sector are the possible prime victims.

Welders are not the only ones affected by the hazards of hexavalent chromium. Various other workers in the sectors mentioned above are at risk as well.

Where else is hexavalent chromium being used?

Paint with chromium VI has been used widely to protect military equipment. In recent years, the Dutch Department of Defense reported many incidents related to the workers' use of hexavalent chromium. When hexavalent chromium is detected while working on equipment or buildings, reports must be filed, and adequate measures must be taken. All reports and measures are made public on a website created by the department.

The dangerous substance can also affect infrastructure projects. A large repair project on a highway bridge in the Netherlands is taking much longer and has more impact on traffic than planned. You can blame this on the hexavalent chromium that was discovered in the paint and the necessary protection measures that had to be taken for both workers and passing traffic.

Appropriate protection against Chromium 6 hazards

The NIOSH recommends that airborne exposure to all Cr(VI) compounds be limited to a concentration of 0.2 µg Cr(VI)/m^3 for an 8-hr TWA exposure during a 40-hr workweek[3].

To make sure your workers aren't exposed to large amounts of hazardous substances, you must use adequate exhaust ventilation and filtration in your workspace. This does not only apply to welders, but also to workers

who have other tasks like cutting, grinding and sanding, or even forklift drivers, maintenance workers and team leaders.

Please see to it that for all welding, cutting, grinding and sanding activities. workers use personal protection equipment (PPE), like welding helmets.

When it comes to applying paint and coatings, it is best to avoid working with hexavalent chromium. In some areas of work, you have no option but to use it. It is strongly advised to take proper exposure measurements and make sure every worker has the necessary means - ventilation and PPE - to protect themselves and minimize any health risks.

Reduce exposure to welding fumes

There are international standards for the preferred order to in which welding fumes must be captured. First reduction or avoidance of the production of welding fumes. Secondly at-source capture of welding fumes. Then separation of the source and human by automation and e.g. an extraction hood over the welding robot. When the previous is not possible or insufficient, e.g. because of very large work pieces, general ventilation and personal protection is recommended.

But equally important is the correct use of these extraction equipment by the workers and the maintenance of the system by the employer to keep the extraction as effective as anticipated.

All parts of the body should be protected from radiant energy, sparks, and molten metal splashes. Clothing made from wool, or wool blends, is generally better than cotton. Some cutting operations such as inert-gas metal arc welding will cause exposed cotton clothing to rapidly deteriorate. Leather capes, jackets, leggings, and aprons provide additional protection especially in vertical, or overhead operations. Use of dark clothing will help reduce reflected light.
All welding equipment should be inspected each day prior to use. Report any defects found in regulators, torches or electrical components to a person that is qualified to make the necessary repairs.

WORKING ALONE

The major aspect that must be considered when lone working is becoming injured or sick and being unable to summon help.
You are permitted to work alone when it is necessary. However, when you are working alone, the consequences of an accident could be more serious because there is nobody present to help you. Whenever possible, it is better to avoid working alone.

- Time your tasks carefully to coincide with when others are present
- Seek assistance from persons nearby or from your supervisor or manager
- When you have to work alone, take extra care to ensure that you do not put yourself in any unnecessary danger.
- If you have any doubt about your ability to undertake a task safely, do not start the task. Seek advice from your supervisor or manager.
- The tasks which must never be undertaken while working alone are those which involve any form of entry into a confined space, and (even if you are qualified to do so) any form of work involving live electrical conductors
- Tasks which could involve risks and which are best avoided when working alone if this is possible, include:
    - Welding, burning and other hot work
    - Handling or use of corrosive or otherwise dangerous substances
    - Working at height
    - Work involving excessive manual handling, and
    - Working under vehicles or heavy plant.

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