Applicable OSHA Standard: 29 CFR 1910 Subpart I

1. Purpose & Scope

1.1. Personal Protective Equipment (PPE), including protection for eyes, face, head, and extremities, by use of protective clothing, respiratory devices, protective shields and barriers, will be provided, used, and maintained in a sanitary and reliable condition wherever it is necessary by reason of hazards of processes or environment, chemical hazards, radiological hazards, or mechanical irritants encountered in a manner capable of causing injury or impairment in the function of any part of the body through absorption, inhalation or physical contact.

1.2. This policy applies to all employees and subcontractors at work locations that are controlled by Cleveland Integrity Services Inc.

2. Application

2.1. PPE devices alone should not be relied on to provide protection against hazards, but should be used in conjunction with guards, engineering controls and responsible manufacturing practices.

2.2. The Company will provide employees with the proper PPE for use in their specific tasks.

2.3. This PPE includes, but is not limited to, protection for eyes, face, head, respiratory system, hearing, body and extremities.

2.4. The PPE will be maintained and stored in accordance with the manufacturer's recommendations.

3. Employee-Owned Equipment

3.1. Where employees provide their own protective equipment, the Site Supervisor will be responsible to assure its adequacy, including proper maintenance, and sanitation of such equipment.

4. Design

4.1. All PPE will meet OSHA/NIOSH standards and approval.

4.2. Where a standard may not apply, a competent person will analyze the equipment and give approval or disapproval for its use. The Company's *Certificate of Hazard Assessment* will be completed and utilized to make a determination if hazards are present, or likely to be present, at the jobsite which will require the use of PPE. The certifier's name, signature, dates and identification of assessment documents will be included.

5. Hazard Assessment And Selection

5.1. Selection of PPE will be based on Company supervision's written and signed assessment of the hazards associated with the job site and the recommendations included on the safe work permit provided by the host employer or general contractor.

5.2. Prior to the beginning of any job task, Company supervision will determine the PPE necessary to safeguard the employees assigned to do the work. When the job task is complicated in nature the Site Supervisor and the host employer or general contractor safety representative will be consulted for their expertise in determining the proper PPE for the task.

5.3. Company supervision will ensure that the PPE is available and is included on the work permit. The information on the permit will be discussed with the crew assigned to do the work.

5.4. When reviewing the scope of work prior to the commencement of the job, Company supervision will assess the hazards associated with the work and its environment. This assessment will be distributed to the Site Safety Supervisor/Representative to determine the needs of the job.

5.5. PPE determined for the job will be verbally communicated to the employees during a tool box safety meeting prior to the commencement of the job.

5.6. PPE selected will be of the types that will protect the affected employee from the hazards identified in the hazard assessment, fitted to the employee as needed to be effective, and with PPE ordered in various sizes and types to accommodate a variety of individuals who may be assigned work.

6. Defective And Damaged Equipment

6.1. Defective or damaged equipment will not be used.

6.2. When PPE is removed for disposal it will be tagged as such, if not disposed of immediately.

7. Training

7.1. The Company will provide training to each employee who is required to use PPE. Each such employee will be trained to know at least the following:

7.1.1. When PPE is necessary;

7.1.2. What PPE is necessary;

7.1.3. How to properly don, doff, adjust, and wear PPE;

7.1.4. The limitations of the PPE; and

7.1.5. The proper care, maintenance, useful life and disposal of the PPE.

7.2. Each affected employee will demonstrate an understanding of the training specified in 6.1, and the ability to use PPE properly, before being allowed to perform work requiring the use of PPE.

7.3. When Company supervision has reason to believe that any affected employee who has already been trained does not have the understanding and skill required, the employee will be retrained. Circumstances where retraining is required include, but are not limited to, situations where:

7.3.1. Changes in the workplace render previous training obsolete; or

7.3.2. Changes in the types of PPE to be used render previous training obsolete; or inadequacies in an affected employee's knowledge or use of assigned PPE indicate that the employee has not retained the requisite understanding or skill.

7.3.3. Company supervision will verify that each affected employee has received and understood the required training through a written certification that contains the name of each employee trained, the date(s) of training, and that identifies the subject of the certification.

8. Eye and Face Protection

8.1. The minimum eye protection allowed outside of an office area is ANSI (Z.87.1-1989) approved side shield safety glasses.

8.2. Employees WILL wear their eye protection to adequately protect themselves from hazards in the work area.

8.3. Contact lenses are not allowed at work areas unless approved in writing by management.

8.4. Supervisors and the host employer or general contractor will determine what tasks require other eye protection, such as chemical goggles and face shields.

8.5. Eye and face PPE will be distinctly marked to facilitate identification of the manufacturer.

8.6. Goggles that can be worn over corrective spectacles without disturbing the adjustment are acceptable.

8.7. Questions about eye protection should be brought to your supervisor and resolved before the job is started. Special protection concerns should also be discussed with your supervisor.

8.8. All face and eye protection equipment will be kept clean and in good repair.

8.9. Full-face shields are required to be worn over side shield safety glasses or chemical goggles for grinding, chipping and any other designated assignment.

9. Head Protection

9.1.1. Approved hard hats (ANSI-Z89.1-1986) in good condition are required when working in the yard and process areas. Protective helmets designed to reduce electrical shock hazard will be worn by each affected employee when near exposed electrical conductors which could contact the head (ANSI -Z89.2-1971). Metal hard hats will not be worn.

9.1.2. Hard hats will be worn in work areas where there is a potential for injury to the head from falling or flying objects.

10. Hand Protection

10.1.1. Cleveland Integrity Services Inc. will select and require employees to use appropriate hand protection when employee's hands are exposed to hazards such as those from skin absorption of harmful substances, severe cuts or lacerations, severe abrasions, punctures, chemical burns, thermal burns, and harmful temperature extremes.

10.1.2. The selection of the appropriate hand protection will be based on an evaluation of the performance characteristics of the hand protection relative to the task(s) to be performed, conditions present, duration of use and the hazards and potential hazards identified.

10.1.3. All employees should obtain protective gloves suitable for the work they will perform. Gloves will be worn when required.

11. Foot Protection

11.1. Each affected employee will wear protective footwear when working in areas where there is a danger of foot injuries due to falling and rolling objects, or objects piercing the sole and where such employee's feet are exposed to electrical hazards.

11.2. Protective footwear need comply with (ANSI Z41-1991). Steel-toed shoes are required on most job sites. The Company requires the wearing of steel-toed shoes for anyone in the field with the exception of office personnel who are restricted to operations off of job sites.

12. Assessment Guidelines

12.1. The on-site Supervisor or Safety Representative will conduct a walk-through survey of the areas in question. The purpose of the survey is to identify sources of hazards to workers and co-workers. Consideration should be given to the following basic hazard categories: Impact, Penetration, Compression (roll-over), Chemical Exposure, Heat and Cold; Harmful dust; and Light (optical radiation).

12.2. During the walk-through survey the Site Supervisor should observe:

12.2.1. Sources of motion (i.e., machinery or processes where movement of tools, machine elements or particles could exist), or movement of personnel that could result in collision with stationary objects;

12.2.2. Sources of high temperatures that could result in burns, eye injury or ignition of protective equipment, etc.;

12.2.3. Types of chemical exposures;

12.2.4. Sources of harmful dust;

12.2.5. Sources of light radiation (i.e., welding, brazing, cutting, furnaces, heat treating, high intensity lights, etc.);

12.2.6. Sources of falling objects or potential for dropping objects;

12.2.7. Sources of sharp objects which might pierce the feet or cut the hands;

12.2.8. Sources of rolling or pinching objects which could crush the feet;

12.2.9. Layout of workplace and location of co-workers; and

12.2.10. Any electrical hazards.

12.3. In addition, injury/accident data should be reviewed to help identify problem areas.

12.4. Following the walk-through survey, it is necessary to organize the data and information for use in the assessment of hazards. The objective is to prepare for an analysis of the hazards in the environment to enable proper selection of protective equipment.

12.5. Having gathered and organized data on a workplace, an estimate of the potential for injuries should be made. Each of the basic hazards should be reviewed and a determination made as to the type, level of risk, and seriousness of potential injury from each of the hazards found in the area. The possibility of exposure to several hazards simultaneously should be considered.

13. Selection Guidelines

13.1. After completion of the hazard assessment (see 11 above), the general procedure for selection of protective equipment is to:

13.1.1. Become familiar 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.

13.1.2. Compare the hazards associated with the environment; i.e., impact velocities, masses, projectile shape, radiation intensities, with the capabilities of the available protective equipment.

13.1.3. Select the protective equipment which ensures a level of protection greater than the minimum required to protect employees from the hazards.

13.1.4. Fit the user with the protective device and give instructions on care and use of the PPE. It is very important that end users be made aware of all warning labels for and limitations of their PPE.

14. Selection Chart Guidelines For Eye and Face Protection

14.1. Work inside of the plant, including process areas and the yard, require eye protection. The following chart provides general guidance for the proper selection of eye and face protection to protect against hazards associated with the listed hazard "source" operations.

Eye and Face Protection Selection Chart

Source	Assessment of Hazard	Protection
IMPACT - Chipping, grinding machining, masonry work, woodworking, sawing, drilling, chiseling, powered fastening, riveting, and sanding.	Flying fragments, objects, large chips, particles sand, dirt, etc.	Spectacles with side protection goggles, face shields. For severe exposure, use face shield.
HEAT-Furnace operations, pouring, casting, hot dipping, and welding.	Hot sparks Splash from molten metals High temperature exposure	Face shields, goggles, spectacles with side protection For severe exposure use face shield. Face shields worn over goggles. Screen face shields, reflective face shields.
CHEMICALS-Acid and chemicals handling, degreasing plating.	Splash Irritating mists	Goggles, eyecup and cover types. For severe exposure, use face shield. Special-purpose goggles.
DUST - Woodworking, buffing, general dusty conditions.	Nuisance dust	Goggles, eyecup and cover types.
LIGHT and/or RADIATION - Welding: Electric arc	Optical radiation	Welding helmets or welding shields. Typical shades: 10-14.
Welding: Gas	Optical radiation	Welding goggles or welding face shield. Typical shades: gas welding 4-8, cutting 3-6, brazing 3-4.
Cutting, Torch brazing, Torch soldering	Optical radiation	Spectacles or welding face-shield. shades, 1.5-3.

Glare	Poor vision	Spectacles with shaded or special-purpose lenses, as suitable.

15. Selection Guideline For Head Protection

15.1. All head protection (helmets) is designed to provide protection from impact and penetration hazards caused by falling objects. Head protection is also available which provides protection from electric shock and burn. When selecting head protection, knowledge of potential electrical hazards is important.

15.2. Class A helmets, in addition to impact and penetration resistance, provide electrical protection from low-voltage conductors (they are proof tested to 2,200 volts).

15.3. Class B helmets, in addition to impact and penetration resistance, provide electrical protection from high-voltage conductors (they are proof tested to 20,000 volts).

15.4. Class C helmets provide impact and penetration resistance (they are usually made of aluminum which conducts electricity), and should not be used around electrical hazards.

15.5. Where falling object hazards are present, helmets must be worn. Some examples include: working below other workers who are using tools and materials which could fall; working around or under conveyor belts which are carrying parts or materials; working below machinery or processes which might cause material or objects to fall; and working on exposed energized conductors.

16. Selection Guidelines For Foot Protection

16.1. Safety shoes and boots which meet the ANSI Z41-1991 Standard provide both impact and compression protection. Where necessary, safety shoes can be obtained which provide puncture protection. In some work situations, metatarsal protection should be provided, and in other special situations electrical conductive or insulating safety shoes would be appropriate.

16.2. Safety shoes or boots with impact protection would be required for carrying or handling materials such as lumber, metal construction components and parts, or heavy tools -- any of which could be dropped; and for other activities in which objects might fall onto the feet.

16.3. Safety shoes or boots with compression protection would be required for work activities involving skid trucks (manual material handling carts) around bulk rolls (such as felt rolls) and around heavy pipes on a job site, all of which could potentially roll over an employee's feet.

16.4. Safety shoes or boots with puncture protection would be required where sharp objects such as nails, wire, tacks, screws, large staples, scrap metal, etc., could be stepped on by employees causing a foot injury.

17. Selection Guidelines For Hand Protection

17.1. Gloves are often relied upon to prevent cuts, abrasions, burns, and skin contact with chemicals that are capable of causing local or systemic effects following dermal exposure. OSHA is unaware of any gloves that provide protection against all potential hand hazards, and commonly available glove materials provide only limited protection against many chemicals. Therefore, it is important to select the most appropriate glove for a particular application and to determine how long it can be worn, and whether it can be reused.

17.2. It also is important to know the performance characteristics of gloves relative to the specific hazard anticipated; e.g., chemical hazards, cut hazards, flame hazards, etc. These performance characteristics should be assessed by using standard test procedures.

17.3. Before purchasing gloves, the Supervisor or person ordering should request documentation from the manufacturer that the gloves meet the appropriate test standard(s) for the hazard(s) anticipated. Other factors to be considered for glove selection in general include:

17.3.1. As long as the performance characteristics are acceptable, in certain circumstances, it may be more cost effective to regularly change cheaper gloves than to reuse more expensive types; and,

17.3.2. The work activities of the employee should be studied to determine the degree of dexterity required, the duration, frequency, and degree of exposure of the hazard, and the physical stresses that will be applied.

17.3.3. With respect to selection of gloves for protection against chemical hazards:

17.3.3.1. The toxic properties of the chemical(s) must be determined; in particular, the ability of the chemical to cause local effects on the skin and/or to pass through the skin and cause systemic effects;

17.3.3.2. Generally, any "chemical resistant" glove can be used for dry powders;

17.3.3.3. For mixtures and formulated products (unless specific test data are available), a glove should be selected on the basis of the chemical component with the shortest breakthrough time, since it is possible for solvents to carry active ingredients through polymeric materials; and,

17.3.3.4. Employees must be able to remove the gloves in such a manner as to prevent skin contamination.