

Occupational Safety and Health Standards Covering Hazards Observed During Inspection of Legislative Branch Facilities

The following is a brief description of the major safety and health standards referenced in this Report. The standards are published in Title 29 of the Code of Federal Regulations (“CFR”) and are summarized below. The CFR should be consulted for a complete explanation of the specific standards listed.

Statutory Requirement

29 U.S.C. 641(a)(1) General Duty Clause

- The OSH Act requires that every employer provide its employees with a safe and hazard-free workplace. The workplace must be “free from recognized hazards that are causing or are likely to cause death or serious physical harm” to the employees.

OSH Standard (29 CFR Section) Brief description/subject

EMERGENCY PREPAREDNESS, FIRE AND OTHER EMERGENCIES

1910.36

Safe Means of Egress from Fire and Other Emergencies

- Every building, new or old, shall have sufficient exits to permit the prompt escape of occupants in case of fire or other emergency.
- Emergency exits must be clearly visible and the routes to the exits conspicuously marked.
- There must be at least two exits, remote from each other, located in such a way to minimize the possibility that both will be blocked by fire or other emergency.

1910.37

Exit Routes and Signs

- Exits and the way of approach to, and travel from, exits shall be maintained so that they are unobstructed and are accessible at all times.
- Exit doors serving more than 50 people, or in high-hazard areas, must swing in the direction of exit travel.
- Exit doors and fire barriers must be maintained and in serviceable condition at all times.

- Exits must be readily visible with suitably illuminated exit signs. Exit signs shall be distinctive in color and provide contrast with the wall color and surroundings.
- Any door or stairway that is not an exit, but is likely to be mistaken for an exit, must be identified by a sign reading “Not an Exit” or similar designation.
- Exit stairwells that continue beyond the floor of discharge must be interrupted at that floor by a door or partition.
- Exits must be designed so that occupants are not required to travel towards high hazard areas in order to exit.
- All alarms and automatic sprinkler systems must be continuously maintained and tested. See also 1910.159 (automatic sprinkler systems) and 1910.165 (employee alarm systems).

1910.38

Employee emergency plans and fire prevention plans

- Each employer must prepare a written emergency action plan to ensure employee safety in the event of fire and other emergencies.
- The emergency action plan must include the following topics: escape procedures and routes; procedures for those employees who must remain behind temporarily to shut down critical equipment before they evacuate; procedures for accounting for all evacuated employees following an emergency evacuation; rescue and medical duties; means of reporting emergencies; and identification of persons to be contacted for information or clarification.

1910.120

Emergency response procedures - Chem/bio hazardous substances

- Employers are required to have emergency response procedures where hazardous substances are located in the workplace.
- Employers must develop an Emergency Response Plan for all employees who will respond to a hazardous substance emergency. The Plan must be made available to the employees, and must include, at minimum, the following items: pre-emergency planning and coordination with outside parties; personnel roles, lines of authority and communication; emergency recognition and prevention; safe distances and places of refuge; site security and control; evacuation routes and procedures; decontamination procedures; emergency medical treatment and first aid; emergency alerting and response procedures; personal protective and emergency equipment; and critique of actual response incidents and follow up.

1910.157

Portable Fire Extinguishers

- When the employer has provided portable fire extinguishers for employee use in the workplace (e.g., the employer expects certain employees to fight small fires rather than evacuate the building), the employer must also provide training to employees on proper use of fire extinguishers and the hazards involved with incipient-stage fire fighting.
- Portable fire extinguishers must be regularly maintained and inspected. They must also be properly located.

1910.159

Automatic Sprinkler Systems

- The minimum vertical clearance between sprinkler and the hazard being protected is eighteen inches.

1910.164

Fire Detection System

- Smoke detectors must be maintained and installed according to the manufacturer's recommendations.

1910.165

Employee alarm systems

- Alarms must be capable of being perceived above ambient noise or light levels in the affected portions of the workplace.
- Tactile alarms may be used to alert those employees who otherwise could not recognize the audible or visual alarm.
- Alarms must be properly maintained and regularly tested.

FIRE HAZARDS

1910.106

Flammable and combustible liquids

- Inside storage rooms and outside storage areas must meet specified requirements to reduce hazards.
- Flammable liquids must be kept in covered containers or tanks when not actually in use.
- The quantity of flammable or combustible liquid that may be located in an inside storage room or storage cabinet must not exceed specified quantities.
- Storage must be in approved, specially designed containers.
- Storage tanks must have emergency venting and proper fire resistance.

1910.109

Hazardous Materials

- Surrounding areas must be kept clear of weeds and other brush.
- Electrical wiring and equipment must meet the hazardous location standards of the National Electrical Code.

- 1910.147** **Control of Hazardous Energy (Lockout/Tagout)**
– Whenever service or maintenance is performed on machines in which the unexpected re-energization might harm the employees, the work must be done with the machine stopped and isolated from all sources of energy. Employees involved in such energy control program must be trained, and the energy-isolating device must be locked out or tagged out.

ELECTRICAL HAZARDS

- 1910.303** **Electrical - General requirements**
– Electrical equipment shall be free from recognized hazards.
– Sufficient access and working space must be provided to permit ready and safe operation and maintenance of all electric equipment including electrical panel boxes.
- 1910.304** **Wiring design and protection**
– For a grounded system, a grounding electrode conductor must be used to connect both the equipment grounding conductor and the grounded circuit conductor to the grounding electrode.
- 1910.305** **Wiring methods, components, and equipment for general use**
– Flexible cords and cables must be protected from accidental damage. Unless specifically permitted, flexible cords and cables may not be used as a substitute for fixed wiring of a structure, where attached to building surfaces, where concealed or where run through holes in walls, ceilings or floors, or where run through doorways, windows or similar openings. Flexible cords must be connected to devices and fittings so that strain relief is provided that will prevent pull from being directly transmitted to joints or terminal screws.
– Unused openings in cabinets, boxes and fittings must be effectively closed.
– Electrical wall outlets, junction boxes and panel boxes must have approved covers.
- 1910.333** **Selection and use of work practices**
– Safety-related work practices must be used to prevent electric shock or other injuries resulting from either direct or indirect electrical contacts, when work is performed near or on equipment or circuits that are or may be energized.
– There must be a written lockout and/or tagout procedure.
- 1910.334** **Visual Inspection of Electrical Equipment**

- Electric plugs missing ground prongs must be removed from use, repaired or replaced.

OCCUPATIONAL HEALTH EXPOSURE

- 1910.95 Occupational noise exposure**
– Employees must be given protection against the effects of occupational noise exposure when the sound exceeds specified levels.
- 1910.132 Personal protective equipment**
– The employer must provide and maintain the proper type of personal protective equipment (“PPE”) where there is a hazard from processes or environments that may cause injury or illness to the employee.
– The employer must assess the workplace to determine if hazards are present, or likely to be present, which necessitate the use of PPE.
– The employer must train each employee who is required to use PPE. Employees must be trained to know at least the following: when PPE is necessary; what PPE is necessary; how to properly don, doff, adjust and wear PPE; the limitations of the PPE; and the proper care, maintenance, useful life, and disposal of PPE.
– See also 1910.133 (Eye and Face Protection), 1910.134 (Respiratory Protection), 1910.135 (Head Protection), and 1910.137 (Electrical Protective Equipment).
- 1910.134 Respiratory Protection**
– Each employee required to wear a tight-fitting respirator must receive annual training and annual FIT testing.
- 1910.151 Eyewash/Drench Shower**
– When employees are potentially exposed to harmful and corrosive materials, the employer must provide facilities for quick drenching or flushing of the eyes or body.
- 1910.1000 Air contaminants**
– Employers must keep employee exposure to specified contaminants within acceptable levels. Where feasible, employers shall achieve compliance through administrative or engineering controls. Where administrative or engineering controls are not feasible, employers shall achieve compliance by the use of PPE (such as respirators) or other technical protective measures.
- 1910.1001 Asbestos**

- Employers must demarcate those work areas in which airborne concentrations of asbestos exceed established limits, and must limit employee access to these areas.
- Employers must provide information and training to employees who are exposed to airborne asbestos at levels exceeding the established limits.
- Employers must establish a written compliance program and provide respirators, protective clothing and shower facilities for those employees who work in the demarcated area.
- See also 1926.1101 (asbestos standards for construction industry employees).

1910.1030

Blood Borne Pathogens

- Employers with employees who have reasonably anticipated skin, eye, mucous membrane, or parenteral contact with blood or potentially infectious materials must have a written exposure control plan to minimize exposure to blood borne pathogens.
- The employer must provide appropriate antiseptic hand cleaner if hand washing facilities are not readily accessible.
- The exposure control plan must reflect changes in technology.

1910.1200

Hazard communication

- Employers must develop, implement and maintain a written hazard communication program giving information about the relevant chemical hazards.
- Employers must have a material safety data sheet (“MSDS”) for each hazardous chemical they use and must ensure that these are readily accessible to employees during their work shift.
- See also 1910.1052 (Methylene Chloride).

1926.62

Lead

- Employees engaged in construction work must be protected from levels of lead exposure that exceed specified limits.
- In instances where there is potential lead exposure, the employer must monitor the area, and must provide employees with PPE and medical monitoring.
- See also 1910.1025 (lead standards for occupations other than construction or agriculture).

EQUIPMENT

- 1910.178** **Powered Industrial Trucks – Battery Charging and Recharging**
– Batteries must be charged only in designated areas and precautions must be taken at the time of charging or recharging. Signs must be posted and the area kept clear of other combustibles.
- 1910.212** **Machinery and Machine Guarding – General requirements**
– Where the periphery of the blades of a fan is less than 7 feet above the floor or working level, the blades must be guarded. The guard must have openings no larger than ½ inch.
– All hazards such as points of operation must be protected to prevent injury.
- 1910.213** **Woodworking machinery requirements**
– All woodworking machinery—such as table saws, swing saws, radial saws, band saws, joiners, tenoning machines, boring and mortising machines, shapers, planers, lathes, sanders, veneer cutters, and other miscellaneous woodworking machinery—must be enclosed or guarded (except that part of the blade doing the actual cutting) to protect the operator and other employees from hazards inherent to the operation.
- 1910.219** **Mechanical power-transmission apparatus – Belt drives**
– Belt drives must have appropriate guards to prevent injury from contact with moving machinery.
- 1910.242** **Hand and portable powered tools and equipment, general**
– The employer is responsible for the safe condition of all tools and equipment used by employees.
– Compressed air used for cleaning purposes must not exceed 30 pounds per square inch when the nozzle end is obstructed or dead-ended, and then only with effective chip guarding and PPE.
- 1910.253** **Compressed Gas Cylinders**
– Cylinders must be properly stored and valve covers must be used where applicable.
– See also 1910.101 (general requirements for compressed gases).

OTHER SAFETY HAZARDS

- 1910.22** **Walking–Working Surfaces -- General Requirements**
– All places of employment, passageways, storerooms, and service rooms must be kept clean and orderly and in a sanitary condition.
– Covers and/or guardrails must be provided to protect personnel from the hazards of open pits, tanks, vats, ditches, etc.
– Floor loading standards must be followed as defined by the building owner or structural engineer.
- 1910.23** **Guarding floor and wall openings and holes**
– Every stairway and ladderway floor opening must be guarded by standard railings with standard toeboards on all exposed sides except at the entrance.
– Every floor opening or hole into which a person can accidentally walk or fall must be appropriately guarded.
- 1910.24** **Fixed industrial stairs**
– Every flight of stairs having four or more risers must be provided with a standard railing on all open sides. Handrails must be provided on at least one side of closed stairways, preferably on the right side descending.
- 1910.141** **Sanitation**
– All places of employment must be kept clean, with appropriate housekeeping, waste disposal, and control of vermin.
- 1910.146** **Permit-required Confined Spaces**
– The employer must post warning signs about certain confined spaces and must develop a written safety plan for employees who are required to work in permit-required confined spaces.
- 1910.176** **Handling Materials – general**
– Storage of material must not create a hazard.
– All stored materials stacked in tiers must be stacked, blocked, interlocked, and limited in height so that they are secure against sliding or collapse.
– Storage areas must be kept free from accumulation of materials that constitute hazards from tripping, fire, explosion or pest harborage.