

Shop/Maintenance Checklist

These are reminders from 29 CFR Part 1910 that would be applicable to a fixed and or mobile facility. This may not be an inclusive list applicable to your location and or every thing listed may not be applicable to your operation.

- .22(a) All floors, storerooms, etc shall be kept clean, orderly and in a sanitary manner.
- (b) Aisles and passageways shall be kept clear (28" min) and in good repair.
- (c) Covers and or guardrails shall be provided for open pits, tanks, vats, etc.
- (d) Floor loading shall be placarded and approved by building official.

- .23(c) Open sided floors shall have a standard guard rail which consists of Top rail (42"), mid-rail (21"), and a toe board (if small items are stored overhead and persons are working below).
- (d) All stairs have to have a handrail at least on right hand descending side. If both sides are open, then have on both sides.

- .24(b) Have to have access to another level if employees use daily, on each shift, or equipment requires routine maintenance.
- (e) Angle of stair has to be from 30-50 degrees.
- (f) Riser height and tread width shall be uniform through out stairs (<1/4")
- (h) Hand rails are required from 34"max to 30" min measured from leading edge of tread.
- (i) Vertical clearance above stair tread shall be 7' measured from overhead obstruction.

- .26 Ladders must be inspected, used in proper manner, and set up properly.

- .36(b) Each building has to have an approved exit (side hinged door).
- (d) Every exit has to be maintained free of all obstructions to full instant use. All emergency equipment has to be maintained in continuous operating condition.

- .37(q) All side hinged doors will be labeled as to its use, i.e. Exit, Storage, etc., or Not an Exit.

- .38(a) All buildings will have an emergency action plan IAW (a)(2).

- .101(b) All compressed gas cylinders shall be handled according to Compressed Gas Association Pamphlet P-1-1965 which states that all cylinders will be secured from being knocked over. All flammable gases (acetylene) and accelerants (oxygen) shall be separated by 20' and or a 5' high fire wall equal to 1.5 hours (8"block wall, 2x4 wall with sheet rock on both sides, etc).

.106 Flammables have to be stored IAW the appropriate charts based on quantity. Fixed gas pumps need the proper electrical wiring for a classified location, fire extinguisher within 15- 25', and No Smoking signs posted.

.110(b) LP tanks shall have no combustible material within 10' of tank to include grass. Tanks exceeding 500 Gallons can be no closer than 10' from any part of the building. Have to be protected from vehicular traffic unless protected by location.

.132(a) Protective equipment, including personal protective equipment for head, eyes, face, and extremities, protective clothing, respiratory devices, protective shields/barriers, shall be provided, used, and maintained in a sanitary and reliable condition.

(d) Employer shall accomplish a hazard assessment annually.

(f) Employer shall train employees in proper care, maintenance, useful life and when PPE is necessary.

.141(a)(5) Every workplace shall prevent the entrance or harborage of rodents, insects, and other vermin.

.141(b) Potable water has to be supplied and individual drinking containers provided.

(c) Each place of employment has to have toilet facilities.

(d) Washing facilities shall be maintained in a sanitary condition and have tepid water.

.145(a) Use safety tags to define specific hazards that may lead to injury to employees.

.147(d) Specific procedures for LOTO if applicable.

.151(b/c) Need first aid kit and eye wash/shower (requires weekly check) if corrosive materials are used.

.157(c) shall have approved and mounted fire extinguishers for incipient staged fires.

(e) Annual maintenance check and a monthly visual check.

(g) Train employees how to use extinguisher.

.176(b) Storage of material/equipment/supplies shall not create a hazard and shall be stacked, blocked, and limited in height so that they are stable and secure against sliding or collapse.

.177(c) Employer shall provide a training program for employees who service rim wheels.

(d) Employer shall furnish and require use of a restraining device when servicing multi-piece rims. Employer shall provide a restraining device for wheel inflation on single piece rims unless the wheel is inflated on the vehicle and or equipment used to change the tire.

.178-181 Cranes/electric hoists/chain falls(see CSB for difference and requirements)

.212(a)(3) Point of operation guarding for machines is required unless required by another SUBPART.

(b) Fixed machinery shall be securely anchored to prevent walking or moving. (Drill presses for example)

.215(a)(4) Work rest on Bench grinder not at 1/8" or less.

(b)(9) Tongue guard not installed or exceeds 1/4".

.219 All belts, sprockets, wheels, chain drives, drive shafts, etc. below 7' have to be guarded.

Rule of thumb: If it moves, rotates, spins, etc., guard it

.242(a) All tools whether furnished by employer or employee has to maintained in safe condition. That is to say it can not be modified, altered, etc.

Rule of thumb: If you can't buy the tool in that condition, don't use it. If you can't purchase the correct tool.

.242(b) Compressed air used for cleaning must be reduced below 30 PSI. Also suggest safety nozzle for blow down. No radiator clamps on pneumatic lines.

.243 Most hand held power tools require a constant pressure power switch, some exceptions.

(c)(3) Portable grinders must have 180 guard on located between the operator and the work.

.244 Jacks must be capable of the lift, inspected at least every 6 months, have a rated load legibly and permanently marked in a prominent place on the jack.

.252(a)(2) Welding special precautions-- Always have a fire watch with a readily available fire extinguisher when welding if there are any combustibles in the area. PPE is covered under.132. Use screens to prevent flash blindness of fellow employees.

.253(a) General-- Use approved devices for mixing flammable gases. Don't use acetylene in excess of 15 psig. All cylinders with a water weight of 30 pounds have to have a collar, means of attaching a valve protection cap, and or a recess to protect the valve. Each cylinder shall have a fixed hand wheel, or have a key, handle, or nonadjustable wrench on the valve stem when in use. Cylinders will be

in use (on cart with regulators installed) and or in proper storage. Never lay an acetylene cylinder down on its side.

.254 Arc welding-- No splices, mars, or open conductors within 10' of electrode holder. Joining lengths of work/cables shall be via approved means (vise grips are not acceptable). Lugs shall be covered via a door, guard, and or lug covers. Operators shall inspect and report any defects or safety hazards to the supervisor and discontinue the use of equipment until repairs are made by a qualified person.

.303(b)(1) Electrical equipment shall be free from recognized hazards.

(2) All electrical devices shall be used and installed with their listing and labeling from manufacture.

(c) All splices shall be covered with and insulation equivalent to that of the conductor-- No electrical tape.

(e) Electrical equipment must have the manufactures name, trademark, or other descriptive marking on the product.

(f) Each service, feeder, and its branch circuit must be legibly marked at its disconnecting means.

(g)(1) A clear working space of 3' must be available in front of all electrical equipment, i.e. panel boxes, disconnects, etc.

(g)(2) Live parts of electrical equipment operating at 50 Volts or more shall be guarded via a cabinet, room, vault, or similar enclosure, 8' above working surface.

.304(e)(iv) Overcurrent devices shall be readily accessible to all employees and or authorized building management personnel.

(e)(vi) Circuit breakers shall clearly indicate whether they are in the open/closed position, i.e. no tape over breakers.

(f)(4) The path to ground from circuits, equipment, and enclosures shall be permanent and continuous.

(f)(v) Equipment connected by cord and plug have to be grounded if in hazardous locations, operated at 150 Volts to ground, refrigerators, appliances, hand held motor operated tools, portable hand lamps, and any tools likely to be used in a wet/damp location. Note: Tools need not be grounded if supplied through and isolating transformer with an ungrounded secondary of not over 50 Volts or by an approved system of double insulation.(Tool must have marking that stipulates double insulation.)

.305(b)(1) Conductors entering boxes, cabinets, or fittings shall be protected from abrasions and the holes shall be effectively closed. (Use grommets and or Romex connectors). All unused openings will be effectively closed (use metal or plastic pop-ins for holes in cabinets and boxes and blanker plates in panel boxes).

(b)(2) All pull boxes, junction boxes, and fittings shall have a cover installed approved for the purpose.(Should not see any wires or wire nuts). Panel boxes

must have a dead front installed. Light switches and receptacles must have a cover/face plate.

(e)(2) Switches, circuit breakers, and switchboards installed in wet/damp locations must be enclosed in weatherproof enclosures, i.e. must be installed such that moisture or water can not enter and accumulate.

(g)(1) Flexible cords can not be used:

- as a substitute for fixed wiring.
- Run through holes in walls, ceilings and floors, doorways, windows and other similar openings.
- Attached to building structures.
- Or concealed behind floors, ceilings, or walls.

(g)(2) Flexible cords can not be spliced or tapped.

(g)(3) Flexible cords must have strain relief.

.307(b) Equipment, wiring methods, and installations of equipment in Hazardous (classified) locations shall be intrinsically safe, approved for the location, or safe for the location.

Note: In a shop, the area within 18" of the floor and any pit or painting area will be a classified location. Therefore, if the mechanics are breaking down gasoline engines and or using a creeper to go under vehicles, they need a classified trouble light.

.1200 HAZCOM - Need same program as for other employees and follow sample in booklet.