Information			
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# Departmental Safety Inspection Checklists

Information
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### Δ

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# **Abrasive Wheel Machinery** and Tools

**Self Inspection Checklist** 

**Guidelines:** This checklist covers regulations issued by the U.S. Department of Labor, Occupational Safety and Health Administration (OSHA) under the general industry standards 29 CFR 1910.215 and 1910.243 and the construction standards 29 CFR 1926.303. It applies to fixed and portable abrasive wheel machinery. Natural sandstone wheels and metal, wooden, cloth, or paper discs, with a layer of abrasive on the surface are not covered by this checklist. **This checklist must be used in conjunction with the Machines--General Requirements checklist**. The regulations cited apply only to private employers and their employees, unless adopted by a State agency and applied to other groups such as public employees. An answer to a question indicates that this portion of the inspection complies with the OSHA or EPA standard, or with a nonregulatory recommendation. Definitions of terms in bold type are provided at the end of the checklist.

This checklist does not address extensive specifications for design of guards and flanges included in 29 CFR 1910.215. Consult the OSHA regulations for additional details.

		F	lea	se Cir	cle
Gener	ral Requirements				
1.	Do grinding wheels fit freely on the spindle? [29 CFR 1910.215(d)(2); 1910.243(c)(5)(ii) and 1926.303(c)(8)]	Y	N	N/A	??
2.	Is forcing the grinding wheel on the spindle prohibited? [29 CFR 1926.303(c)(8)]	Y	N	N/A	??
3.	Are all wheels closely inspected and sounded by the user ( <b>ring test</b> ) to make sure they have not been damaged before being mounted? [29 CFR 1910.215(d)(1); 1910.243(c)(5)(i) and 1926.303(c)(7)]	Y	N	N/A	??

**Note:** Before mounting the wheel, make sure the spindle speed of the machine does not exceed the maximum operating speed marked on the wheel.

4.	Is the spindle nut tightened only enough to hold the wheel in place? [29 CFR 1926.303(c)(8)]	Y	N	N/A	??
5.	Are all abrasive wheel operators required to use eye protection? [29 CFR 1926.303(c)(9)]	Y	N	N/A	??
6.	Are all grinding machines equipped with sufficient power to maintain the spindle speed at safe levels under all conditions of normal operation? [29 CFR 1926.303(a)]	Y	N	N/A	??
7.	Are all contact surfaces of the wheel, blotters, and flanges flat and free of foreign material? [29 CFR 1910.215(d)(3) and 1920.243(c)(5)(iii)]	Y	N	N/A	??
8.	When a bushing is used in the wheel hole, is it positioned so it does not exceed the width of the wheel nor make contact with the flange? [29 CFR 1910.215(d)(4)]	Y	N	N/A	??
Floor	and Bench-Grinding Machines				

Y N N/A ??

Y N N/A ??

10. Does the safety guard cover the spindle end, nut, and flange projections?

9. Are all floor- and bench-mounted abrasive wheels

[29 CFR 1910.215(a)(1) and 1926.303(a)]

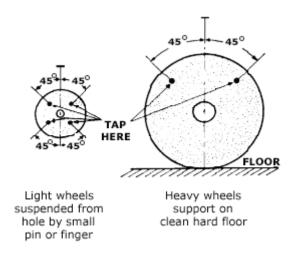
equipped with safety guards?

Y N N/A ?? 11. Is the maximum angular exposure of the grinding wheel and sides 90° or less? [29 CFR 1910.215(b)(3) and 1926.303(c)(1)] **EXCEPTION:** When work requires contact with the wheel below the horizontal plane of the spindle, the angular exposure shall not exceed 125°. In either case, the exposure shall begin at not more than 65° above the horizontal plane of the spindle. Y N N/A ?? 12. Are work rests provided that are rigidly supported and readily adjustable? [29 CFR 1910.215(a)(4) and 1926.303(c)(2)] Y N N/A ?? 13. Are work rests kept adjusted closely to the wheel with a maximum opening of 1/8 inch to prevent the work from being jammed between the wheel and the rest? [29 CFR 1910.215(a)(4) and 1926.303(c)(2)] **Portable and Other Abrasive Wheels** Y N N/A ?? 14. Do all machines with abrasive wheels greater than 2 inches in diameter have safety guards? [29 CFR 1910.243(c)(1)] **Note:** Some abrasive wheels may be equipped with flanges. Y N N/A ?? 15. Is the maximum exposure angle on all grinding wheels 180° or less? [29 CFR 1910.243(c)(3) and (4) and 1926.303(c)(5)] Y N N/A ?? 16. When in use, is the guard on right angle head or vertical portable grinders located between the operator and the wheel? [29 CFR 1910.243(c)(3)]

17. Is the guard on <b>right angle head or vertical portable grinders</b> adjusted so that pieces of a broken wheel will be deflected away from the operator? [29 CFR 1910.243(c)(3)]	Y	N	N/A	??
18. Is the top half of the wheel on other grinders always enclosed? [29 CFR 1910.243(c)(4)]	Y	N	N/A	??
General Requirements for Guards				
19. Are the guard and its fastenings strong enough to retain fragments of the wheel in case of breakage? [29 CFR 1926.303(c)(5)]	Y	N	N/A	??
20. Are guards mounted to maintain proper alignment with the wheel? [29 CFR 1910.243(c)(ii) and 1926.303(c)(5)]	Y	N	N/A	??
21. Are tongue guards at the top of the wheel of bench, floor stand, and cylindrical grinders adjusted to the decreasing diameter of the wheel so that the gap is never more than one-fourth (1/4) of an inch? [29 CFR 1910.215(b)(9)]	Y	N	N/A	??

### **Definitions:**

**Ring test:** The wheels should be tapped gently with a light nonmetallic implement, such as the handle of a screwdriver for light wheels, or a wooden mallet for heavier wheels. Tap wheels about 45° each side of the vertical centerline and about 1 or 2 inches from the periphery as indicated by the spots in the figures below. Then rotate the wheel 45° and repeat the test. A sound and undamaged wheel will give a clear metallic tone. If cracked, there will be a dead sound and not a clear "ring."



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# Access to Exposure and Medical Records Self-Inspection Checklist

**Guidelines:** This checklist covers most of the regulations issued by the U.S. Department of Labor, Occupational Safety and Health Administration (OSHA) under the general industry standard 29 CFR 1910.1020. It applies to airborne exposure records, medical records, material safety data sheets, and chemical inventory records. The regulations apply only to private employers and their employees, unless adopted or issued by a State agency and applied to other groups such as public employees. Definitions of terms in bold type are provided at the end of the checklist to help you understand some of the questions.

			Ple	ase Ci	rcle
1.	Are employees or their <b>designated representatives</b> provided, on request, <b>access</b> to personal <b>medical and exposure records</b> in a reasonable time, place, and manner? [29 CFR 1910.1020(e)]	Y	N	N/A	??
2.	Are employees informed of the existence, location, and availability of <b>medical and exposure records</b> ? [29 CFR 1910.1020(g)(1)(i)]	Y	N	N/A	??
3.	Are employees informed of the person responsible for maintaining and providing access to <b>medical and exposure records</b> ? [29 CFR 1910.1020(g)(1)(ii)]	Y	N	N/A	??
4.	Are employees informed of their rights to access medical and exposure records? [29 CFR 1910.1020(g)(1)(iii)]	Y	N	N/A	??
5.	Are all employees informed <b>annually</b> of the existence, location, and availability of <b>medical and exposure</b> records? [29 CFR 1910.1020(g)(1)]	Y	N	N/A	??
6.	Are all employees informed <b>annually</b> of the person responsible for maintaining and providing access to	Y	N	N/A	??

### medical and exposure records?

[29 CFR 1910.1020(g)(1)]

- Are all employees informed annually of their rights to access medical and exposure records?
   [29 CFR 1910.1020(g)(1)]
- Y N N/A ??
- 8. Is a copy of 29 CFR 1910.1020 and its appendixes available on request to any employee? [29 CFR 1910.1020(g)(2)]
- Y N N/A ??
- If an employee transfers to another school or job, are all medical and exposure records transferred with him or her? [29 CFR 1910.1020(h)(1)]
- Y N N/A ??
- 10. Are **medical and exposure records** maintained for at least 30 years? [29 CFR 1910.1020(d)(1)]
- Y N N/A ??

**Note:** Material safety data sheets and records concerning the identity of a substance or agent need not be retained for any specified period as long as some record of the identity (chemical name if known) of the substance or agent, where it was used, and when it was used is retained for a least thirty (30) years.

### **Definitions:**

Access: (1) a copy of the record is provided without cost, (2) the necessary printing facilities are made available without cost, or (3) the record is loaned for a reasonable time to enable a copy to be made. Access must be given in a reasonable time, place, and manner.

**Designated representative:** an individual or organization to whom an employee has given written authorization to exercise a right of access. For access to employee exposure records, a recognized collective bargaining agent is considered a designated representative and does not need written employee authorization. A recognized collective bargaining agent must still get written authorization from an employee for access to medical records.

**Exposure records:** (1) any record containing environmental monitoring or measuring of a toxic substance or harmful physical agent (2) material safety data sheets, a chemical inventory, or any other record that reveals where and when a toxic substance or harmful physical agent was used and its chemical identity.

**Medical records:** a record concerning the health status of a person that is made or maintained by a physician, nurse, or other health care personnel or technician. It includes medical histories or questionnaires; the results of medical examinations; medical opinions, diagnoses, and recommendations; first aid records; descriptions of treatments; and medical complaints.

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# Accident Prevention Signs and Tags Self-Inspection Checklist

**Guidelines:** This checklist covers the regulations issued by the U.S. Department of Labor - OSHA under the General Industry standards 29 CFR 1910.144 and 1910.145 and the Construction standards 1926.200. It applies to all safety signs except those designed for streets, highways, railroads and marine regulations. It does not apply to bulletin boards or safety posters. The regulations cited only apply to private employers and their employees, unless adopted by a state agency and applied to other groups such as public employees.

anu ap	plied to other groups such as public employees.				
			Ple	ase Ci	rcle
Safet	y Colors for Marking Physical Hazards				
1.	Are safety cans and other cans which contain flammable liquids painted red, with the contents labeled conspicuously in yellow? [29 CFR 1910.144(a)(1)(ii)]	Y	N	N/A	??
2.	Are all emergency stop bars and buttons and electrical switches marked with red paint? [29 CFR 1910.144(a)(1)(iii)]	Y	N	N/A	??
3.	Is yellow used to advise <b>caution</b> ? For example, against physical hazards such as stumbling, falling, tripping, striking against something or being caught in between two things? [29 CFR 1910.144(a)(3)]	Y	N	N/A	??
Class	ification of Signs According to Use				
4.	Are <b>danger signs</b> used only where an immediate hazard exists? [29 CFR 1910.145(c)(1)(ii) and 1926.200(b)(1)]	Y	N	N/A	??

5. Are caution signs used only where potential

	hazards or unsafe practices could exist? [29 CFR 1910.145(c)(2)(i) and 1926.200(c)(1)]	Y	N	N/A	??
6.	Have all students and teachers been instructed that <b>danger signs</b> indicate immediate danger, <b>caution signs</b> indicate a possible hazard, and preventative measures are advised whenever either sign is observed? [29 CFR 1910.145(c)(1)(ii) and (2)(ii)]	Y	N	N/A	??
7.	Are <b>safety instruction signs</b> used wherever safety instructions or reminders are needed? [29 CFR 1910.145(c)(3)]	Y	N	N/A	??
	<b>Note:</b> The entrance to all shops, laboratories, or other areas which require industrial quality eye protection must be posted with a sign indicating the requirement. In addition, machines, equipment, or process areas requiring operators to wear specific eye protection should be posted with warning signs.				
Sign I	Design				
8.	Do signs have rounded corners, free from sharp edges, burrs, splinters, or other sharp projections? [29 CFR 1910.145(d)(1)]	Y	N	N/A	??
9.	Are the ends or heads of bolts or other fastening devices attached in such a way that they do not constitute a hazard? [29 CFR 1910.145(d)(1)]	Y	N	N/A	??
10.	Are <b>danger signs</b> red, black, and white? [29 CFR 1910.144(a)(1)(ii), 1910.145(d)(2), and 1926.200(b)(2)]	Y	N	N/A	??
11.	Do <b>caution signs</b> have a yellow background (with black lettering) and a black panel (with yellow lettering)? [29 CFR 1910.145(d)(4) and 1926.200(c)(2)and(3)]	Y	N	N/A	??
12.	Do <b>safety instruction signs</b> have a white background (with black lettering) and a green panel (with white lettering)? [29 CFR 1910.145(d)(6) and 1926.200(e)]	Y	N	N/A	??
Accide	ent Prevention Tags				
	Are accident prevention tags used to alert people to hazards which are temporary, out of	Y	N	N/A	??

the ordinary, unexpected or not readily apparent? [29 CFR 1910.145(f)(3) and 1926.200(h)(1)]

14. Do required tags have a signal word of either Danger, Caution, Biological Hazard, BIOHAZARD, or the biological hazard symbol? [29 CFR 1910.145(f)(4)(i)(A)]	Y	N	N/A	??
15. Do required tags define the specific hazardous condition or the instruction to be communicated, either in words, or pictures, or both? [29 CFR 1910.145(f)(4)(i)(B) and (f)(4)(iii)]	Y	N	N/A	??
16. Are signal words readable from a distance of at least five feet, or further if the hazard warrants it? [29 CFR 1910.145(f)(4)(ii)]	Y	N	N/A	??
17. Is the tag's signal word and major message understandable to everyone who may be exposed to the hazard? [29 CFR 1910.145(f)(4)(iv)]	Y	N	N/A	??
18. Has everyone been told what various tags mean and what special precautions are necessary? [29 CFR 1910.145(f)(4)(v)]	Y	N	N/A	??
19. Are tags affixed as close as safely possible to their respective hazards and in a way that prevents their loss or unintentional removal ( for example, with string, wire, or adhesive? [29 CFR 1910.145(f)(4)(vi)]	Y	N	N/A	??
20. Are danger tags used only in situations where an immediate hazard presents a threat of death or serious injury? [29 CFR 1910.145(f)(5)]	Y	N	N/A	??
21. Are <b>caution tags</b> used only in situations where a non-immediate or potential hazard or unsafe practice presents a minor threat? [29 CFR 1910.145(f)(6)]	Y	N	N/A	??
<ul><li>22. Are warning tags used to represent a hazard level between caution and danger?</li><li>[29 CFR 1910.145(f)(7)]</li></ul>	Y	N	N/A	??
23. Are <b>biological hazard tags</b> used to identify equipment, containers, rooms, and experimental animals	Y	N	N/A	??

(or combinations thereof) that may include a hazardous biological agent?  $[29 \ \text{CFR } 1910.145(f)(8)(i)]$ 

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### **Air Pollution Control**

**Self Inspection Checklist** 

**Guidelines:** Federal air pollution control regulations are contained in Title 40 of the Code of Federal Regulations (40 CFR). These regulations are promulgated by the Environmental Protection Agency (EPA) and are based on the requirements of various parts of the Federal Clean Air Act. The goal of these regulations is to ensure that substances are not emitted into the air at concentrations that could cause air pollution. The major provisions of the air pollution regulations include procedures for obtaining air emission permits, regulation of maximum allowable emissions of certain gases and particulate matter, procedures for proper use of equipment that could cause the emission of pollutants into the air, and requirements for certain operations and chemicals known to be particularly capable of causing air pollution. Many EPA regulations apply only to major sources of substances and have requirements that are based on a source's potential to emit those substances. State air pollution control programs may incorporate many of these rules; however, other State-specific requirements, including the regulation and permitting of smaller sources, also apply. The user of this checklist should also be familiar with all applicable State and local rules and regulations.

### **Air Permits**

Operating permits are required under the provisions of Title V of the Clean Air Act of the Clean Air Act Amendments of 1990. Regulations covering Title V permits are found at 40 CFR 70. Operating permits are required for sources that are

- major sources of Ambient Air Quality Standard pollutants,
- a major source of a hazardous air pollutant,
- covered by the acid precipitation provisions of the Clean Air Act, and
- sources regulated under certain programs of a State implementation plan.

How much of a pollutant must be emitted to be a major source depends on the pollutant and on the air quality in your State. In most cases, schools will not emit large enough amounts to be considered a major source. Consult with your State air pollution control agency or EPA regional office.

In addition to the operating permit program, each State has its own air permit program for smaller sources of air pollution. You should be familiar with requirements for your State as well.

**Note:** This checklist does not include any regulations dealing with the regulation of emissions from industrial boilers or from power generation.

### **Ambient Air Quality Standards**

The EPA has maximum emission concentrations that must not be exceeded for suspended particulate matter, sulfur dioxide, carbon monoxide, ozone, lead, and nitrogen dioxide. These can be found in Title 40, Part 50 of the Code of Federal Regulations [40 CFR 50].

### **Hazardous Air Pollutants**

Title III of the Clean Air Act Amendments of 1990 [U.S.C. 7401 et seq.] contains a list of 189 hazardous air pollutants (HAPS). These substances require state-of-the-art emission-reduction systems because of their high toxicity, or other hazards associated with their use. In most cases, EPA considers an operation to be a major source of HAPS if it has the potential to emit 10 tons per year of any substance on that list. However, much lower emission concentrations may be required by State agencies. Your State may require registration or other actions, no matter how little is used in the school. Referral should be made to your State air pollution code. Two substances commonly used in Career-Technical schools that are on this list of toxic substances are trichloroethylene and tetrachloroethylene. For any hazardous or toxic material, the best solution is to substitute a less toxic substance whenever possible.

### **Operational Requirements**

Requirements for diesel- and gasoline-powered vehicles are contained in 40 CFR parts 85 and 86. Degreasing, spray booths, surface coating, graphic arts, and volatile organic compounds (VOC) dry cleaning requirements are contained in 40 CFR part 60. Requirements for processes using one or more of the HAPS, including dry cleaning and degreasing with halogenated solvents, are contained in 40 CFR part 83. Persons involved in these activities should review the regulations and contact their EPA regional office for clarification.

### **Enforcement and Penalties**

Violations of air pollution control regulations may involve civil or criminal penalties. Penalties for violations of any of the regulations are contained in Title VII of the Clean Air Act Amendments of 1990. Legal liability may also result from violations of applicable State air pollution regulations.



Questions marked with this symbol may require the help of an outside expert.

# Air Pollution Control Permits 1. Are air pollution permits on file for the equipment or operations permitted under State regulations? Y N N/A ?? Y N N/A ??

### **Requirements for Gasoline-Powered Engines**

3.	Is the removal of any emission control device from a gasoline-powered engine prohibited except during repairs or replacement activities? [Section 203 (a) of the Clean Air Act]	Υ	N	N/A	??
4.	When catalytic converters are replaced on automobiles, are they only replaced by the same type of converter as the original (i.e. oxidation, three-way, or three-way plus oxidation), and are they the same type of converter specified by the vehicle catalog?  [Section 203(a)(3)(B) of the Clean Air Act]	Υ	N	N/A	??
voc s	Surface Cleaners				
5.	Are all tanks that contain a VOC equipped with a lid to prevent evaporation or escape of vapors when the tank is not in use? (e.g., autobody shops, metalworking shops, etc)  Note: Questions 5B12 are based on EPA	Y	N	N/A	??
	Reasonably Available Control Technology (RACT) guidelines for solvent cleaners (Reference 1).				
6.	Do all unheated open-top <b>surface cleaners</b> with openings between 6 and 25 square feet ( <i>autobody shops</i> )	Y	N	N/A	??
	a. have a high liquid mark to prevent overfilling?				
	<ul> <li>b. have a wand that produces mist or droplets or delivers spray below 15 pounds per square inch (psi)?</li> </ul>				
	c. have a <b>freeboard ratio</b> of 0.5 or greater?				
7.	Do all unheated open-top <b>surface cleaners</b> with openings >25 square feet comply with question 6 a and b and have either (1) a <b>freeboard ratio</b> of 0.75 or greater, or (2) a <b>freeboard ratio</b> of 0.5 or greater and separation from windows, exhaust systems, and other sources of drafts?	Υ	N	N/A	??

### the following?

- a. a thermostat that automatically maintains temperature below the boiling point of the liquid,
- b. a cover that is kept closed except when processing parts,
- c. no agitating system that can cause splashing, and
- d. a freeboard ratio >0.75.
- 9. In addition to meeting the above conditions, do all conveyorized **surface cleaners** have (1) a condenser with heat removal capacity greater than the input into the bath, (2) a freeboard chiller or a vapor control system, (3) covers protecting the conveyor inlet, (4) outlet ports for reduction of losses when the cleaner is not in use, and (5) hanging flaps when the unit is in use?
- Y N N/A ??

Y N N/A ??

- 10. Do written standard operating procedures govern the proper use, inspection, and maintenance of all **surface cleaners**?
- Y N N/A ??
- 11. Have all persons using this equipment been trained in the standard operating procedures?

Y N N/A ??

12. Are copies of the standard operating procedures located at the cleaner?

prevent emissions of VOCs? (paint spray booths, graphic arts shops) [RACT Reference 2, RACT Reference 3]

### **Surface Coating and Graphic Arts**

13. Are all surface-coating operations done with controls to

Y N N/A ??

### **Dry Cleaning Operations**

↟

14. Are petroleum-using dry cleaning operations with a manufacturer's total dryer capacity equal to or greater than 84 pounds equipped with a cartridge filter? [40 CFR 60.620(a)]

Y N N/A ??

15. Are all solvent filtration systems operated so that cartridge filters are allowed to drain for 8 hours before removal? [ 40 CFR 60.623(b)]	Y	N	N/A	??
<ol> <li>Are all leaking washers, dryers, filters, etc. that could result in VOC emissions corrected immediately?</li> <li>[40 CFR 60.623(c)]</li> </ol>	Y	N	N/A	??
17. Is information about leak inspection and repair procedures clearly posted? [40 CFR 60.623(c)]	Y	N	N/A	??
Dry Cleaning Operations Using Perchloroethylene (CAS #127-18-	4)			
18. Are all dry cleaning machines connected to a properly operated and maintained air pollution control device? [40 CFR 63.322(a)]	Y	N	N/A	??
19. Are all transfer dry cleaning units operated in a room or enclosure that vents all solvent vapors to an air pollution control device? [40 CFR 63.322(a)(3)]	Y	N	N/A	??
20. Are policies in place to prevent the venting or release of perchloroethylene vapors at any time? [40 CFR 63.322(a)(1)]	Y	N	N/A	??
21. Is a complete check for leaks performed weekly? [40 CFR 63.322(k)]	Y	N	N/A	??
22. Are condenser controls devices operated at less than 45°F? [40 CFR 63.323(a)(1)]	Y	N	N/A	??
23. Are the exhaust emissions from carbon adsorbers checked	Y	N	N/A	??

### **Toxic Substances**

24. Do all cold-cleaning machines using toxic substances have a 1-inch layer of water on the solvent surface, or a freeboard ratio of 0.75 or more? [40 CFR 63.462 (c)(1)]	Y	N	N/A	??
25. Are all waste solvents stored in closed containers with pressure relief systems? [40 CFR 63.462 (c)(4)]	Y	N	N/A	??
26. Are all spills cleaned up immediately, and are the wipe rags stored in covered containers? [40 CFR 463 (c)(5)]	Y	N	N/A	??
27. Do all heated-vapor machines have a device to shut off the sump heater if the solvent levels drop to the heater coils? [ 40 CFR 63.463(a)(4)]	Y	N	N/A	??
28. Are all heated-vapor machines provided with a pollution control device designed to keep emissions below 0.045 lbs/hour? [ 40 CFR 63.463(b)(2)]	Y	N	N/A	??
29. Are standard operating procedures written for all open-top surface cleaners that contain toxic substances? [ 40 CFR 63.467(a)(1)]	Y	N	N/A	??
30. Do all persons using this equipment receive training in and adhere to the standard operating procedures? [ 40 CFR 63.468(f)(1)]	Y	N	N/A	??

Ambient air quality standard: a limit on the concentration of a contaminant in the general outdoor atmosphere. The standard cannot be exceeded without (1) causing or tending to cause injury to human health, welfare, animal or plant life, or property, or (2) unreasonably interfering with the enjoyment of life and property, excluding all aspects of employer-employee relationship as to health and safety hazards.

**Freeboard ratio:** a ratio of the freeboard height to the tank width or narrower dimension at the tank lip.

**Surface cleaner:** a device to remove unwanted foreign matter from the surfaces of materials by using VOC solvents in the liquid or vapor state.

Suspended particulate matter: any solid or liquid matter dispersed in the outdoor atmosphere.

### **References:**

U.S. EPA [1976]. Control technology guideline: control of volatile organic emissions from existing stationary sources. Volume I: Control methods for surface coating operations. U.S. Environmental Protection Agency, EPA-450/2-76-028, (Group I).

U.S. EPA [1977]. Control technology guideline: control of volatile organic emissions from solvent metal cleaning. U.S. Environmental Protection Agency, EPA-450/2-77-022, (Group I).

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Information					
Name of Location:					
Date of inspection:					
Career-Technical program/course/room:					
Signature of inspector:					

### **Air Compressor Tanks**

**Self Inspection Checklist** 

**Guidelines:** This checklist covers regulations issued by the U.S. Department of Labor, OSHA under General Industry standard 29 CFR 1910.169. It applies to air compressor tanks (compressed air receivers used to store compressed air generated by an air compressor), and other equipment used in providing and using compressed air for operations such as cleaning, drilling, hoisting, and chipping. The regulations cited apply only to private employers and their employees, unless adopted by a state agency and applied to other groups such as public employees.



Questions marked with this symbol may require the help of an outside expert.

### **Please Circle**



 Do all new and existing air compressor tanks installed after 1971 meet applicable design codes?
 [29 CFR 1910.169(a)(2)] Y N N/A ??

**Note:** Equipment purchased from reputable dealers can be assumed to meet applicable codes if the equipment was designed as an air receiver; otherwise, the product literature will have to be consulted. The tank should have an American Society of Mechanical Engineers (ASME) label.

Y N N/A ??

 Are air compressor tanks installed such that all drains, handholes, and manholes are easily accessible? [29 CFR 1910.169(b)(1)]

Y N N/A ??

 Are air compressor tanks installed above ground and in an accessible location? [29 CFR 1910.169(b)(1)]

4.	Is a drain pipe and valve installed at the lowest point of every air compressor tank so accumulated oil and water can be removed? [29 CFR 1910.169(b)(2)]	Y	N	N/A	??
5.	Is the air compressor tank drained frequently (either manually or by an automatic drain valve) to prevent the accumulation of excessive amounts of liquid in the tank? [29 CFR 1910.169(b)(2)]	Y	N	N/A	??
6.	Is every air compressor tank equipped with a readily visible pressure gauge and with one or more spring-loaded safety valves? [29 CFR 1910.169(b)(3)]	Y	N	N/A	??
	<b>Note:</b> The total relieving capacity of this safety valve shall be enough to prevent pressure in the receiver from exceeding the maximum allowable working pressure of the receiver by more than 10 percent.				
7.	Is the design such that no valve is located between the air compressor tank and the safety valve(s)? [29 CFR 1910.169(b)(3)(ii)]	Y	N	N/A	??
8.	Are safety valves located and installed so that they cannot easily be made inoperative by any means, including the elements? [29 CFR 1910.169(b)(3)(iii)]	Y	N	N/A	??
9.	Are safety valves tested frequently and at regular intervals to determine whether they are in good condition? [29 CFR 1910.169(b)(3)(iv)	Y	N	N/A	??

Information				
Name of Location:				
Date of inspection:				
Career-Technical program/course/room:				
Signature of inspector:				

# Alarm Systems and Evacuation Plans Self-Inspection Checklist

**Guidelines:** This checklist covers regulations issued by the U.S. Department of Labor, Occupational Safety and Health Administration (OSHA) under 29 CFR 1910.164, 1910.165 and 1910.38. It applies to fire detection and alarm systems and to fire and emergency action plans. The regulations cited apply only to private employers and their employees, unless adopted by a State agency and applied to other groups such as public employees. The OSHA code for emergency action and fire prevention plans under 1910.38 is comprehensive and covers emergencies other than fires. The ideal fire and emergency action plan, however, should include all the requirements. Fire alarm and detection systems installed in full compliance with existing building codes may not have to be upgraded to meet existing code regulations. Detailed annual testing requirements of automatic and manual fire alarm systems and fire detection systems have not be included in this checklist. Please consult 29 CFR 1910.164, 1910.165 and 5:18-3.4(c)6 and (c)8 for additional details.

		<b>Please Circle</b>			
1.	Is your school equipped with a manual fire alarm system? [recommended]	Y	N	N/A	??
2.	Is your school equipped with an automatic fire alarm system activated by fire or smoke detectors? [recommended]	Υ	N	N/A	??
3.	Are manual fire alarms provided in the natural path of escape for areas that serve 50 or more persons? [recommended]	Υ	N	N/A	??
4.	Is the distance to any manual fire alarm no more than 200 feet of unobstructed horizontal distance on the same floor? [recommended]	Y	N	N/A	??
5.	Is a smoke or heat detector located in each classroom? [recommended]	Υ	N	N/A	??
6.	Is the detector paint free, unobscured, and unobstructed? [recommended]	Y	N	N/A	??

7. Is disabling, tampering, or interfering with fire detectors and the fire alarm system prohibited? [recommended]	Y	N	N/A	??
8. Are fire drills conducted at least once a month? [recommended]	Y	N	N/A	??
<ol> <li>Are records maintained on each fire drill including the         <ul> <li>(a) date of the drill, (b) time of the drill, (c) weather conditions, (d) number of occupants evacuated, and (e) total time for evacuation? [recommended]</li> </ul> </li> </ol>	Y	N	N/A	??
10. Are all building occupants evacuated in each fire drill? [recommended]	Y	N	N/A	??
11. Are all alarm and fire-detection systems maintained in operating condition except when undergoing repair or maintenance? [29 CFR 1910.164(c)(1) and 1910.165(d)(1)]	Y	N	N/A	??
12. Is the servicing, maintenance, and testing of fire-detection systems (including cleaning and necessary sensitivity adjustments) performed only by people trained in the operation and function of the system? [29 CFR 1910.164(c)(4)]	Y	N	N/A	??
13. Are fire detectors cleaned of dirt, dust, or other particulates at regular periodic intervals? [29 CFR 1910.164(c)(5)]	Y	N	N/A	??
14. Are fire-detection systems that are installed outdoors or in corrosive atmospheres protected from corrosion? [29 CFR 1910.164(d)(1)]	Y	N	N/A	??
<b>Note:</b> A canopy, hood, or other suitable protection must be provided.				
15. Is fire-detection equipment protected from mechanical or physical impact that might render it inoperable? [29 CFR 1910.164(d)(2)]	Y	N	N/A	??
16. Has an approved fire safety plan been distributed to all building occupants? [recommended]	Y	N	N/A	??
17. Does the approved fire safety plan include (a) the location of the nearest exits and fire alarms, (b) the procedures to be followed when a smoke or fire alarm sounds, and (c) the procedures to be followed in the event of fire or smoke? [recommended]	Y	N	N/A	??

18. Is the evacuation plan conspicuously posted on every floor for the occupants' use? [recommended]	Y	N	N/A	??
19. Is the evacuation plan maintained to reflect changes in the use and arrangement of the building? [recommended]	Y	N	N/A	??
20. Are all teachers trained in the duties they are to perform under the evacuation plan? [recommended]	Y	N	N/A	??
21. Are all occupants familiar with the location of the nearest fire alarm manual pull station? [recommended]	Y	N	N/A	??
22. Can the alarm be perceived above ambient noise or light levels by everyone in the area? [29 CFR 1910.165(b)(2)]	Y	N	N/A	??
23. Are alarms distinctive and recognizable as a signal to evacuate the building or to perform actions designated under the emergency action plan? [29 CFR 1910.165(b)(3)]	Y	N	N/A	??
24. Are manually operated actuation devices that are used in conjunction with alarm systems unobstructed, conspicuous, and readily accessible? [29 CFR 1910.165(e)]	Y	N	N/A	??
25. Is a written fire prevention plan available that includes the following items? [29 CFR 1910.38(a)(2)]	Υ	N	N/A	??
<ul> <li>Emergency escape procedures, signals, and routes</li> </ul>				
<ul> <li>Procedures for designated employees who must remain in the facility to shut down equipment before they evacuate</li> </ul>				
<ul> <li>Procedures to account for all building occupants</li> </ul>				
Rescue and medical duties				
<ul> <li>Preferred mechanisms for building occupants to report emergencies</li> </ul>				
<ul> <li>Names and job titles of people who can be contacted for more information regarding evacuation plans</li> </ul>				
26. Is a written fire prevention plan available that includes the following items? [29 CFR 1910.38(b)(2)]	Y	N	N/A	??
<ul> <li>A list of major fire hazards and their proper handling and storage procedures</li> </ul>				
<ul> <li>Potential ignition sources (such as welding and smoking) and their control procedures</li> </ul>				

smoking) and their control procedures

- The type of fire protection equipment or systems that can control a fire
- The names and titles of personnel responsible for maintaining equipment and systems installed to prevent or control ignitions or fires
- The names and titles of personnel responsible for control of fuel-source hazards
- Housekeeping procedures as they relate to preventing the accumulation of flammable and combustible waste materials
- 27. Are the written emergency and fire prevention plans made available to building occupants for review? [29 CFR 1910.38(a)(5)(iii) and (b)(4)(ii)]

Y N N/A ??

28. Has training been provided to designated employees to help with the safe and orderly emergency evacuation of all building occupants? [29 CFR 1910.38(a)(5)(i)]

Y N N/A ??

29. Has the emergency and fire prevention plan been reviewed with all new and current building occupants? [29 CFR 1910.38(a)(5)(ii) and (b)(4)(ii)]

Y N N/A ??

**Comments/Corrective action:** 

Information
Name of Location:
Date of inspection:
Career-Technical program/course/room:
Signature of inspector:

# Asbestos During Brake and Clutch Service Work

**Self-Inspection Checklist** 

**Guidelines:** This checklist covers Occupational Safety and Health Administration (OSHA) asbestos regulations (29 CFR 1910.1001). It applies to school district employees and students who have potential exposure to asbestos fibers from **asbestos-containing materials**. This checklist focuses on the most common exposure situation in schools--brake and clutch service work on motor vehicles. Since asbestos can also be found in materials such as floor tiles, textured paint, soundproofing compound, insulation, joint compound, spackle, oven-door gaskets, lab bench tops, cement board (Transite), shingles, siding and heat- resistant gloves, the teacher should be constantly on guard against handling any **asbestos-containing materials**. The regulations cited apply only to private employers and their employees, unless adopted by a State agency and applied to other groups such as public employees. Definitions of terms in bold type are provided at the end of the checklist. This checklist does not cover asbestos abatement work, asbestos exposures other than encountered during brake and clutch service work, or the Asbestos Hazard Emergency Response Act (AHERA) regulations.

**Please Circle** 

### **Engineering Controls and Work Practices**

 Are one of the following methods used during automotive brake and clutch inspection, disassembly, repair, and assembly operations? [29 CFR 1910.1001(f)(3)] (see definitions for descriptions of methods)

Y N N/A ??

- a. Negative-pressure enclosure/HEPA vacuum system method [recommended method]
- b. Low-pressure/wet-cleaning method [recommended method]
- c. An equivalent method clearly documented to be as good as or better than the negative-pressure enclosure/HEPA vacuum system method for controlling asbestos exposure.

**Note:** OSHA has accepted the **solvent spray method** as an **equivalent method** that may be used when proper work practices are followed.

- d. **Wet method**, if no more than 5 pairs of brakes or 5 clutches are inspected, disassembled, reassembled, or repaired per week.
- Are hand-operated and power-operated tools that produce or release asbestos fibers, such as saws, abrasive wheels, and drills provided with local exhaust ventilation systems? [29 CFR 1910.1001(f)(1)(iv)and(v)]

Y N N/A ??

 Is compressed air prohibited for cleaning asbestos dust unless it is used in conjunction with a ventilation system that effectively captures the dust cloud created by the compressed air?
 [29 CFR 1910.1001(f)(1)(ix)]

Y N N/A ??

# **Protective Equipment**

4. If the possibility of eye irritation exists, are face shields, vented goggles, or other appropriate protective equipment provided? [29 CFR 1910.1001(h)(1)(iii)]

Y N N/A ??

5. Is the protective equipment cleaned, laundered, or repaired as necessary to maintain its effectiveness? [1901.1001(h)(3)(i)]

Y N N/A ??

 Is clean protective equipment provided at least weekly to each affected person? [1901.1001(h)(3)(i)]

Y N N/A ??

#### **Warning Labels**

 Are warning labels affixed to all raw materials, mixtures, scrap, waste, debris, and other products containing asbestos fibers, or to their containers?
 [29 CFR 1910.1001(j)(4)(i)]

Y N N/A ??

**Note:** Warning labels are not required if the manufacturer of an asbestos-containing product can demonstrate that no airborne concentrations of asbestos fibers will exceed the allowable limits during any reasonably foreseeable use, handling, storage, disposal, processing, or transportation.

8. Do warning labels include the following information? [29 CFR 1910.1001(j)(4)(ii)]

Y N N/A ??

DANGER
CONTAINS ASBESTOS FIBERS
AVOID CREATING DUST

#### **CANCER AND LUNG DISEASE HAZARD>**

# **Information and Training**

 Is training as required by the OSHA standard provided to employees who are exposed to airborne concentrations of asbestos at or above the permissible exposure limit and/or excursion limit?
 [29 CFR 1910.1001(j)(7)]

Y N N/A ??

**Note:** The training must be provided at the time of initial assignment and at least annually thereafter. The training must include information about the following:

- a. health effects of asbestos
- b. the relationship between smoking, asbestos, and increased risk of lung cancer
- how quantity, location, manner of use, release, and storage of asbestos could result in exposure to asbestos
- d. the engineering controls and work practices for reducing asbestos exposure
- e. the proper procedures to be followed to reduce the risk of exposure
- f. a description of the medical surveillance program
- g. the OSHA standard(h) asbestos labeling and posting requirements
- h. where to get additional information
- i. the proper use of respirators and protective clothing
- 10. Is asbestos awareness training provided at least once per year to people who do housekeeping operations in area(s) that have asbestos-containing material? [29 CFR 1910.1001(j)(7)(iv)]

Y N N/A ??

11. Does asbestos awareness training for people who do housekeeping operations in the areas(s) that have asbestos-containing material icnlude the following elements? [29 CFR 1910.1001(j)(7)(iv)]

Y N N/A ??

- health effects of asbestos
- 2. locations of asbestos-containing material in the facility
- 3. recognition of asbestos-containing material damage and deterioration
- requirements of the OSHA asbestos standard regarding housekeeping

- 5. proper response to fiber release episodes 12. Are the OSHA asbestos standard (29 CFR 1910.1001) and its appendixes made available to all affected employers? Y N N/A ?? [29 CFR 1910.1001(j)(7)(v)(A)] 13. Are all employees informed self-help smoking cessation program materials are available on request? N N/A ?? [29 CFR 1910.1001(j)(7)(v)(C)] Note: Materials such as NIH Publication No. 89-1647, or equivalent self-help materials must be provided on request. Housekeeping 14. Are all surfaces maintained as free as practicable of asbestos-containing material waste and debris and Y N N/A ?? accompanying dust? [29 CFR 1910.1001(k)(1)] 15. Are all spills and sudden releases of asbestos-containing material asbestos cleaned up as soon as possible? Y N N/A ?? [29 CFR 1910.1001(k)(2)] 16. Is HEPA-filtered vacuuming equipment used for vacuuming asbestos-containing waste and debris? Y N N/A ?? [29 CFR 1910.1001(k)(4)] **Note:** The equipment shall be used and emptied in a manner that minimizes the reentry of asbestos into the workplace. [29 CFR 1910.1001(k)(4)] 17. Is shoveling, dry sweeping, and dry cleanup of asbestos only permitted where vacuuming or wet cleaning are not Y N N/A ??
  - 18. Are waste, scrap, debris, bags, containers, equipment, and clothing contaminated with asbestos that is consigned for disposal, collected in sealed impermeable bags, or other closed, impermeable containers?

feasible? [29 CFR 1910.1001(k)(5)]

[29 CFR 1910.1001(k)(6)]

#### **Definitions:**

**Asbestos-containing materials:** any material that contains more than 1% asbestos. **Equivalent method:** one that has sufficient written detail so that it can be reproduced. Exposures resulting from the equivalent method must be equal to or less than the exposures that would result

from the use of the **negative-pressure enclosure/HEPA vacuum system method**. For purposes of making this comparison, the employer shall assume that exposures resulting from the use of the **negative-pressure enclosure/HEPA vacuum system method** shall not exceed 0.016 f/cc, as measured by the OSHA reference method and as averaged over at least 18 personal samples. The solvent spray method is an **equivalent method** that may be used when proper work practices are followed.

**HEPA:** a high-efficiency particulate air filter that is 99.97 percent efficient for 0.3 microns.

#### For low-pressure/wet-cleaning methods,

- 1. A catch basin shall be placed under the brake assembly, positioned to avoid splashes and spills.
- 2. The reservoir shall contain water with an organic solvent or wetting agent. The flow of liquid shall be controlled such that the brake assembly is gently flooded to prevent the asbestos?containing brake dust from becoming airborne.
- 3. The aqueous solution shall be allowed to flow between the brake drum and brake support before the drum is removed.
- 4. After removing the brake drum, the wheel hub and back of the brake assembly shall be thoroughly wetted to suppress dust.
- 5. The brake support plate, brake shoes, and brake components used to attach the brake shoes shall be thoroughly washed before removing the old shoes.
- 6. In systems using filters, the filters, when full, shall be first wetted with a fine mist of water, then removed and placed immediately in an impermeable container, labeled as asbestos waste, and disposed of according to regulations.
- Any spills of asbestos?containing aqueous solution or any asbestos?containing waste material shall be cleaned up immediately and disposed of according to regulations.
- 8. The use of dry brushing during low pressure/wet cleaning operations is prohibited.

### For the negative-pressure enclosure/HEPA vacuum system method,

- 1. The brake and clutch inspection, disassembly, repair, and assembly operations shall be enclosed to cover and contain the clutch or brake assembly and to prevent the release of asbestos fibers into the worker's breathing zone.
- 2. The enclosure shall be sealed tightly and thoroughly inspected for leaks before on brake and clutch inspection, disassembly, repair, and assembly.
- 3. The enclosure shall be such that the worker can clearly see the operation and shall provide impermeable sleeves through which the worker can handle the brake and clutch inspection, disassembly, repair, and assembly. The integrity of the sleeves and ports shall be examined before work begins.
- 4. A HEPA?filtered vacuum shall be employed to maintain the enclosure under negative pressure throughout the operation. Compressed?air may be used to remove asbestos fibers or particles from the enclosure.
- 5. The HEPA vacuum shall be used first to loosen the asbestos containing residue from the brake and clutch parts and then to evacuate the loosened asbestos

containing material from the enclosure and capture the material in the vacuum filter.

- 6. The vacuum's filter, when full, shall be first wetted with a fine mist of water, then removed and placed immediately in an impermeable container, labeled as asbestos waste and disposed of according to regulations.
- 7. Any spills or releases of asbestos containing waste material from inside of the enclosure or vacuum hose or vacuum filter shall be immediately cleaned up and disposed of according to regulations.

For the **solvent spray method** (from OSHA Directive Number CPL 2-2.63 (REVISED), Inspection Procedures for Occupational Exposure to Asbestos Final Rule 29 CFR Parts 1910.1001, 1926.1101, and 1915.1001, November 3, 1995).

- 1. The solvent shall be used to first wet the brake and clutch parts.
- 2. The brake and clutch parts shall be wiped clean with a cloth.
- 3. The contaminated cloth shall be placed in an impermeable container, and then either disposed of properly or laundered in a way that prevents the release of asbestos fibers.
- 4. Any spilled solvent or dispersed asbestos shall be cleaned up immediately and not allowed to dry, either with a cloth or a HEPA vacuum.c
- 5. Dry brushing during solvent spray operations is prohibited.

#### For the **wet method**,

- A spray bottle, hose nozzle, or other implement capable of delivering a fine
  mist of water or amended water or other delivery system capable of delivering
  water at low pressure, shall be used to first thoroughly wet the brake and
  clutch parts. Brake and clutch components shall then be wiped clean with a
  cloth.
- 2. The cloth shall be placed in an impermeable container, labeled as asbestos waste and then disposed of according regulations, or the cloth shall be laundered in a way to prevent the release of asbestos fibers.
- 3. Any spills of solvent or any asbestos containing waste material shall be cleaned up immediately according to regulations.
- 4. The use of dry brushing during the wet method operations is prohibited.

**Excursion limit:** an airborne concentration of a substance of interest that allows a worker to be exposed to a concentration that exceeds the OSHA permissible exposure limit as averaged over a sampling period of 15-30 minutes (specified by each substance) but overall not exceeding the 8-hr TWA. Excursion limits are given when no short-term exposure limits are established. **Note:** The American Conference of Governmental Industrial Hygienists allows their excursion limits to be 3-5 times their 8-hr exposure limits (TLVs) for a total of 30 minutes a day but not exceeding the 8-hr TWA.

**Permissible exposure limit:** an employee's exposure limit to an airborne concentration of a substance that OSHA publishes and enforces. It is expressed as an 8-hr time-weighted average (TWA). Permissible exposure limits are protective limits that should not be exceeded.

mments/Correc	tive action:			

Information
Name of Location:
Date of inspection:
Career-Technical program/course/room:
Signature of inspector:

# **Bakery Equipment-General**Self-Inspection Checklist

**Guidelines:** This checklist covers regulations issued by the U.S. Department of Labor, OSHA under the General Industry standard 29 CFR 1910.263. The requirements of this checklist apply to the design, installation, operation, and maintenance of machinery and equipment such as horizontal dough mixers; vertical mixers; dividers; moulders; manually fed dough brakes; hand trucks, lift trucks, racks and air conditioning units; slicers and wrappers; and biscuit and cracker equipment such as cheese, fruit, and food cutters, and reversible dough brakes and box- and roll-type dough sheeters. The regulations cited apply only to private employers and their employees, unless adopted by a state agency and applied to other groups such as public employees.

This checklist does not address proof boxes; fermentation rooms; troughs; conveyors; ingredient premixers, emulsifiers, etc.; chain tackle; trough hoists, etc.; pan washing tanks; bread coolers, rack type; doughnut machines; open fat kettles; steam kettles; meal, peanut, and fig grinders; sugar and spice pulverizers; cross-roll brakes; rotary die machines, pretzel rolling, and pretzel-stick extruding machines; pan cooling towers; chocolate melting, refining, and mixing kettles; and peanut cooling trucks. See 29 CFR 1910.263 for regulations on these types of equipment.

			Ple	ase Ci	rcle
Gene	ral Machine Guarding				
1.	Are all gears completely enclosed regardless of location? [29 CFR 1910.263(c)(2)]	Y	N	N/A	??
2.	Are all sprockets and V-belt drives located within reach from platforms or passageways or within 8 feet 6 inches from the floor completely enclosed? [29 CFR 1910.263(c)(3)]	Y	N	N/A	??
3.	Is machinery that must be lubricated while in motion provided with stationary lubrication fittings inside the machine with extension piping so that it is not necessary to reach into any danger area when lubricating? [29 CFR 1910.263(c)(5)]	Y	N	N/A	??

4. Are all hot water and steam pipes covered with insulating material where necessary to keep them from student and Y N N/A ?? teacher contact? [29 CFR 1910.263(c)(8)] Mixers 5. Is each horizontal dough and vertical mixer equipped with an individual motor and control and with a Y N N/A ?? conveniently located manual switch to prevent the mixer from being started while the machine is being serviced and cleaned? [29 CFR 1910.263(e)(1)(iii) and (e)(2)(i)] 6. Are all electrical control stations on horizontal dough mixers located so that the operator must be in full view Y N N/A ?? of the bowl in its opened position? [29 CFR 1910.263(e)(1)(iv)] 7. Are all horizontal dough mixers with power and manual dumping arrangements provided with safety devices that Y N N/A ?? a. Engage both hands of the operator when the agitator is in motion under power and while the bowl is opened more than one-fifth of its total opening? [29 CFR 1910.263(e)(1)(v)(a)] b. Prevent the agitator from being started while the bowl is more than one-fifth open without engaging both hands of the operator? [29 CFR 1910.263(e)(1)(v)(b)] 8. Is every horizontal dough mixer equipped with a full enclosure over the bowl, which is closed at all times Y N N/A ?? while the agitator is in motion? [29 CFR 1910.263(e)(1)(viii)] Note: Only minor openings in this enclosure, such as ingredient doors, flour inlets, etc., each representing less than 1-1/2 square feet in area, shall be capable of being opened while the mixer is in operation. 9. Are all overhead covers or doors on horizontal dough or vertical mixers that are subject to accidental closure N N/A ?? (1) counter-balanced to remain open or (2) provided with means to hold them open until positively released by the operator? [29 CFR 1910.263(e)(1)(x) and (e)(2)(i)] 10. Do vertical mixers have positive bowl locking devices, which require an operator for unlocking? Y N N/A ?? [29 CFR 1910.263(e)(2)(iii)]

11. Do vertical mixers have devices for moving bowls weighing more than 80 pounds (with contents) into and out of the mixing position of the machine? [29 CFR 1910.263(e)(2)(iv)]	Y	N	N/A	??
Dividers				
12. Does the back of the divider have a complete cover to enclose all of the moving parts, or are they enclosed or guarded to remove the hazards? [29 CFR 1910.263(f)(3)]	Y	N	N/A	??
13. Does the rear cover have a limit switch that prevents the machine from operating when the cover is open? [29 CFR 1910.263(f)(3)]	Y	N	N/A	??
<ul><li>14. Is the guard on the back hinged so that it cannot be completely removed?</li><li>[29 CFR 1910.263(f)(3)]</li></ul>	Y	N	N/A	??
15. If a catch or brace holds the cover open, is it designed so that vibrations or minor bumping will not cause the cover to release and drop on a student/teacher? [29 CFR 1910.263(f)(3)]	Y	N	N/A	??
Moulders				
16. Do mechanical feed moulders have hoppers that are connected to the proofer and designed so that the operators' hands cannot get into the hopper and come into contact with the in-running rolls? [29 CFR 1910.263(g)(1)]	Y	N	N/A	??
17. Do hand fed molders have a belt-feed device, or is the hopper extended high enough so that the hands of the operator cannot get into the feed rolls? [29 CFR 1910.263(g)(2)]	Y	N	N/A	??
18. Is the top edge of the hopper well rounded to prevent injury when it is struck or bumped by the operator's hand? [29 CFR 1910.263(g)(2)]	Y	N	N/A	??
19. Is a stopping device within easy reach of the operator who feeds the molder and another stopping device within reach of the operator taking the dough away from the molder? [29 CFR 1910.263(g)(3)]	Y	N	N/A	??

20. Is the top roll of the manually fed dough brake protected by a heavy gage metal shield extending over the roll to go within 6 inches of the hopper bottom board? [29 CFR 1910.263(h)(1)]	Y	N	N/A	??
21. Is an emergency stop bar provided and located so that the body of the operator will press against the bar if the operator slips and falls toward the rolls, or if the operator gets his or her hand caught in the roll? [29 CFR 1910.263(h)(2)]	Υ	N	N/A	??
22. Does the bar apply the body pressure enough to open positively a circuit that will deenergize the drive motor? [29 CFR 1910.263(h)(2)]	Y	N	N/A	??
<b>Note:</b> The emergency stop bar shall be checked for proper operation every 30 days				
Miscellaneous Equipment				
23. Are casters set back far enough from corners of hand trucks to be out of the way of toes and heels, but not far enough back to cause the truck to be unstable? [29 CFR 1910.263(i)(4)(i)]	Y	N	N/A	??
24. Do hand or lift trucks have a lock or other device to hold the handle in vertical position when the truck is not in use? [29 CFR 1910.263(i)(4)(ii) and (i)(5)]	Y	N	N/A	??
25. Are racks equipped with handles located so that no part of the operator's hands extends beyond the outer edge of the frame when holding onto the handles? [29 CFR 1910.263(i)(6)(ii)]	Y	N	N/A	??
26. Are racks equipped with antifriction bearing casters to give the operator better control of the rack? [29 CFR 1910.263(i)(6)(iii)]	Y	N	N/A	??
27. Do large air-conditioning units equipped with doors have door locks operable from both inside and outside the units? [29 CFR 1910.263(i)(14)]	Y	N	N/A	??
Slicers and Wrappers				
28. Does the cover over the knife head of reciprocating-blade slicers have an interlocking arrangement so that the machine cannot operate unless the cover is in place? [29 CFR 1910.263(j)(1)(iii)]	Y	N	N/A	??

29. On slicers with endless band knives, is each motor equipped

with a magnet brake that operates whenever the motor is not energized? [29 CFR 1910.263(j)(1)(iv)]	Y	N	N/A	??
30. Is each door, panel, or other point of access to the cutting blades arranged, by means of mechanical or electrical interlocks, so that the motor will be deenergized if access doors, panels or access points are not closed?  [29 CFR 1910.263(j)(1)(iv)]	Y	N	N/A	??
31. When it is necessary to sharpen slicer blades on the machine, is a barrier provided leaving only sufficient opening for the sharpening stone to reach the knife blade? [29 CFR 1910.263(j)(1)(v)]	Y	N	N/A	??
Biscuit and Cracker Equipment				
32. Do cheese, fruit, and food cutting machines, when provided with a removable hopper, have an electric interlock so that the machine cannot be operated when the hopper is removed? [29 CFR 1910.263(k)(1)(i) and (3)]	Y	N	N/A	??
33. Are reversible dough brakes provided with guards or tripping mechanisms on each side of the rolls? [29 CFR 1910.263(k)(5)]	Y	N	N/A	??
34. Are hoppers for sheeters equipped with automatic stop bars or automatic stopping devices along the back edge of the hopper? [29 CFR 1910.263(k)(7)(ii)]	Y	N	N/A	??

**Comments/Corrective action:** 

Information
Name of Location:
Date of inspection:
Career-Technical program/course/room:
Signature of inspector:

# Bakery Flour-Handling Equipment and Ovens Self-Inspection Checklist

**Guidelines:** This checklist covers regulations issued by the U.S. Department of Labor, Occupational Safety and Health Administration (OSHA) under the general industry standard 29 CFR 1910.263. The requirements of this checklist apply to the design, installation, operation, and maintenance of machinery and equipment used in a bakery. Equipment covered in this checklist includes bag chutes and bag lifts, dumpbins and blenders, and ovens. The regulations cited apply only to private employers and their employees, unless adopted by a State agency and applied to other groups such as public employees.



Questions marked with this symbol may require the help of an outside expert.

This checklist does not address general requirements for flour handling [1910.263 (d)(1)], flour storage bins [1910.263 (d)(6)], flour screw conveyors [1910.263 (d)(7)], flour sifters [1910.263 (d)(8)], and flour scales [1910.263 (d)(9)]. Consult 29 CFR 1910.263 for the regulations dealing with such equipment.

**Please Circle** 

#### Flour-Handling Equipment

 Are bag chutes (gravity chutes for handling flour bags) designed so that the speed of flour bags is kept to a minimum? [29 CFR 1910.263(d)(2)(i)]

Y N N/A ??

**Note:** If the chute inclines more than 30 degrees from the horizontal, an upturn should be at the lower end of the chute to slow down the bags.

 Are dumpbin and blender hoods of sufficient capacity to prevent circulation of flour dust outside the hoods?
 [29 CFR 1910.263(d)(3)(v)]

Y N N/A ??

3. Are dumpbins high enough from the ground so the operator can dump the flour bags without causing undue strain

Y N N/A ??

or fatigue? [29 CFR 1910.263(d)(3)(vi)]

4.	If the edge of any bin is more than 24 inches above the floor, is a bag rest step provided? [29 CFR 1910.263(d)(3)(vi)]	Y	N	N/A	??
5.	Is a control device within the operator's reach to stop the dumpbin and blender? [29 CFR 1910.263(d)(3)(vii)]	Y	N	N/A	??
Oven	s				
6.	Are emergency stop buttons provided on mechanical ovens near where the operator is stationed? [29 CFR 1910.263(I)(3)(i)]	Y	N	N/A	??
7.	Is all piping at the oven tested to be gas tight? [29 CFR 1910.263(I)(3)(ii)]	Y	N	N/A	??
8.	Are main shutoff valves provided to turn off the fuel or steam in case of an emergency? Can they be operated separately from any automatic valve? [29 CFR 1910.263(I)(3)(iii)]	Y	N	N/A	??
9.	Is the main shutoff valve located where explosions, fire, etc. will not prevent access to this valve? [29 CFR 1910.263(I)(3)(iii)(a)]	Y	N	N/A	??
10	Is the main shutoff valve locked in the closed position when operators must enter the oven or when the oven is not in service? [29 CFR 1910.263(I)(3)(iii)(b)]	Y	N	N/A	??
11	. Is a main disconnect switch or circuit breaker provided for electrical heating equipment? [29 CFR 1910.263(I)(8)(iii)]	Y	N	N/A	??
12	. Is this switch or circuit breaker located where it can be reached quickly and safely? [29 CFR 1910.263(I)(8)(iii)]	Y	N	N/A	??
13	Does the main switch or circuit breaker have provisions for locking it in the open position if any work must be performed on the electrical equipment or inside the oven? [29 CFR 1910.263(I)(8)(iii)]	Y	N	N/A	??

14	in working order? [29 CFR 1910.263(I)(9)(i)]	Y	N	N/A	??
15	Are all safety devices on ovens inspected at least twice a month by an especially appointed, properly instructed person, and at least once a year by a qualified representative of an oven manufacturer?  [29 CFR 1910.263(I)(9)(ii)]	Y	N	N/A	??
16	Is protection of the gas pilot light provided when it is impracticable to protect the main flame of the burner and if the pilot flame cannot contact the flame electrode without being in the path of the main flame of the burner? [29 CFR 1910.263(I)(9)(iii)(a)]	Y	N	N/A	??
	<b>Note:</b> Failure of any gas pilot should automatically shutoff the fuel supply to the burner.				
17	Are ovens with multiple burners equipped with individual atmospheric pilot lights if sufficient secondary air is in the baking chamber where gas is available; or, is each burner equipped with an electric spark-type ignition device?	Y	N	N/A	??
	[29 CFR 1910.263(I)(9)(iii)(b)]				
18	When fuel is supplied and used at line pressure, are safety shutoff valves provided in the fuel line leading to the burner?  [29 CFR 1910.263(I)(9)(v)]	Y	N	N/A	??
19	When fuel is supplied in excess of line pressure, are safety shutoff valves provided in the fuel line leading to the burners? [29 CFR $1910.263(l)(9)(v)(a)$ ]	Y	N	N/A	??
	<b>Note:</b> The fuel supply lines may be equipped with other automatic valves that prevent the flow of fuel when the compressing equipment is stopped.				
20	Is the safety shutoff valve positively tight and tested at least twice monthly? [29 CFR 1910.263(I)(9)(v)(b)]	Y	N	N/A	??
21	Does the safety shutoff valve require manual operation for reopening after it has closed, or is the electric circuit arranged so that it requires a manual operation to reopen the safety shutoff valve?  [29 CFR 1910.263(I)(9)(v)(e)]	Y	N	N/A	??
22	Is the manual reset-type safety shutoff valve arranged so that it cannot be locked in an open position by external means?	Y	N	N/A	??

23.	If blowers are used for supplying the air for combustion, is the safety shutoff valve interlocked so that it will close in case of air failure? [29 CFR $1910.263(I)(9)(v)(g)$ ]	Y	N	N/A	??
24.	If gas or electric ignition is used, does the safety shutoff valve close in case of ignition failure? [29 CFR $1910.263(I)(9)(v)(h)$ ]	Y	N	N/A	??
25.	On burners equipped with combustion safeguards, does the valve close in case of burner flame failure? [29 CFR $1910.263(I)(9)(v)(h)$ ]	Y	N	N/A	??
26.	Is one main, manually operated, fuel shutoff valve provided on each oven and located closer to the source of the fuel than all other valves in the system?  [29 CFR 1910.263(I)(9)(vi)]	Y	N	N/A	??
27.	Is any space in an oven (except direct-fired ovens) that could be filled with an explosive mixture protected by explosion vents? [29 CFR 1910.263(I)(9)(viii)]	Y	N	N/A	??
28.	Are explosion doors that have substantial weight attached by chains or similar means to prevent flying parts from injuring people in case of an explosion? [29 CFR 1910.263(I)(9)(viii)(a)]	Υ	N	N/A	??
29.	If explosion vents are located so that flying parts or gas might endanger people on or near the oven, are heavily constructed shields or deflectors made from noncombustible material provided?  [29 CFR 1910.263(I)(9)(viii)(b)]	Y	N	N/A	??
30.	If the gas supply pressure is substantially higher than that at which the burner oven can operate, is a gas-pressure regulator used? [29 CFR 1910.263(I)(9)(xi)]	Y	N	N/A	??
31.	Is a relief valve placed on the outlet side of gas-pressure regulators where gas is supplied at high pressure? [29 CFR $1910.263(I)(9)(xi)(d)$ ]	Y	N	N/A	??
32.	Is the discharge from the relief valve piped to the outside of the building?	Y	N	N/A	??

[29 CFR 1910.263(I)(15)(iii)]

13	33. Are direct-fired ovens safeguarded against failure of fuel, air, or ignition? [29 CFR 1910.263(l)(10)(i)]	Y	N	N/A	??
	34. Is each circulating fan in direct recirculating ovens interconnected with the burner in such a manner that the fuel is shut off by a safety valve when the fan is not running? [29 CFR 1910.263(I)(11)(i)]	Y	N	N/A	??
3	35. Is the flame of the burner or burners in direct recirculating ovens protected by a quick-acting, flame-sensitive safeguard that will automatically shut off the fuel supply in case of burner failure? [29 CFR 1910.263(I)(11)(ii)]	Y	N	N/A	??
3	36. Are duct systems (in indirect recirculating ovens) operating under pressure tested for tightness in the initial starting of the oven and at intervals of six months or less?	Y	N	N/A	??



Information
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# **Bloodborne Pathogens**

**Self-Inspection Checklist** 

Guidelines: This checklist covers regulations issued by the U.S. Department of Labor, Occupational Safety and Health Administration (OSHA) under the general industry standard 29 CFR 1910.1030. It applies to work activities that may result in exposure to blood or other potentially infectious materials. Such activities might include students learning how to take blood tests or teachers who are trained in first aid and are required to render first aid in case of emergency. This checklist does not cover acts that result in exposure to blood or other potentially infectious materials when someone voluntarily helps others in an emergency. The regulations cited apply only to private employers and their employees, unless adopted by a State agency and applied to other groups such as public employees. A yes answer to a question indicates that this portion of the inspection complies with the OSHA or U.S. Environmental Protection Agency (EPA) standard, or with a nonregulatory recommendation. Definitions of underlined terms are provided at the end of the checklist to help you understand some of the questions.

**Please Circle** 

## **Exposure Control Plan**

 Has a written exposure control plan been developed? [29 CFR 1910.1030(c)(1)(i), (c)(1)(ii), and (c)(2)]

Y N N/A ??

Note: The exposure control plan must include
(a) a list of tasks identified as having a potential for
exposure to bloodborne pathogens; (b) methods
to protect students and employees; (c) dates and
procedures for providing hepatitis B vaccinations;
(d) procedures for post-exposure evaluation and
followup in case of exposure; (e) content and
methods for training students and employees;
and (f) procedures for maintaining records.

 Is the written exposure control plan available on request for examination or copying? [29 CFR 1910.1030(c)(1)(iii)]

Y N N/A ??

updated yearly? Y N N/A ?? [29 CFR 1910.1030(c)(1)(iv)] **Engineering and Work Practice Controls** 4. Do students and employees follow **universal precautions** to prevent contact with blood or Y N N/A ?? other potentially infectious materials? [29 CFR 1910.1030(d)(1)] 5. Are engineering and work practice controls implemented before personal protective Y N N/A ?? equipment is used? [29 CFR 1910.1030(d)(2)(i)] 6. Are **engineering controls** examined and maintained on a regular schedule to ensure Y N N/A ?? their effectiveness? [29 CFR 1910.1030(d)(2)(ii)] 7. Are handwashing facilities readily accessible? [29 CFR 1910.1030(d)(2)(iii),(iv)] Y N N/A ?? **Note:** If providing handwashing facilities is not possible, an appropriate antiseptic hand cleanser and clean cloth, paper towels, or antiseptic towelettes may be substituted. When antiseptic hand cleansers or towelettes are used, wash hands with soap and running water as soon as possible. 8. Do students and employees wash their hands immediately after removing gloves or other Y N N/A ?? personal protective equipment? [29 CFR 1910.1030(d)(2)(v)] 9. Do students and employees wash or flush hands or other skin areas with soap and Y N N/A ?? water after contact with blood or other potentially infectious materials? [29 CFR 1910.1030(d)(2)(vi)] 10. Is it prohibited to bend, recap, or remove contaminated needles or sharps except as Y N N/A ?? noted below? [29 CFR 1910.1030(d)(2)(vii)] **Note:** NIOSH recommends avoiding needle recapping.

**Note:** When no feasible alternatives are available, OSHA permits recapping or needle removal only

3. Is the written exposure control plan

through the use of a mechanical device or a one-handed technique. Such procedures could involve the one-handed "scoop" technique: using the needle itself to pick up the cap, and pushing cap and sharp together against a hard surface to ensure a tight fit. Or, the sharp might also be recapped by holding the cap with tongs or forceps to place it on the needle.

11. Can it be assured that the shearing and breaking
of contaminated needles does not occur?
[29 CFR 1910.1030(d)(2)(vii)]

Y N N/A ??

12. Is it prohibited to eat, drink, smoke, apply cosmetics, and handle contact lenses in work areas where the potential exists for exposure to **bloodborne pathogens**? [29 CFR 1910.1030(d)(2)(ix)]

Y N N/A ??

13. Are food and drink prohibited in refrigerators, freezers, shelves, cabinets, or on countertops or benchtops where blood or other potentially infectious materials are present? [29 CFR 1910.1030(d)(2)(x)]

Y N N/A ??

14. Are tasks involving blood or other **potentially infectious materials** performed in a way that minimizes splashing and generating droplets of these substances?
[29 CFR 1910.1030(d)(2)(xi)]

Y N N/A ??

15. Is mouth pipetting and suctioning of blood or other **potentially infectious agents** prohibited? [29 CFR 1910.1030(d)(2)(xii)]

Y N N/A ??

16. Are specimens of blood or other **potentially infectious materials** placed in an appropriate container that prevents leakage during collection, handling, processing, storage, or transport?

[29 CFR 1910.1030(d)(2)(xiii)]

Y N N/A ??

## **Personal Protective Equipment**

17. Is personal protective equipment such as gloves, gowns, laboratory coats, face shields or masks, and eye protection provided free to persons potentially exposed to bloodborne pathogens? [29 CFR 1910.1030(d)(3)(i)]

Y N N/A ??

18. Is personal protective equipment of appropriate sizes readily accessible or issued to all students and employees? [29 CFR 1910.1030(d)(3)(iii)]	Y	N	N/A	??
19. Are hypoallergenic gloves, glove liners, powderless gloves, or other similar alternatives readily accessible to those who are allergic to the gloves normally provided? [29 CFR 1910.1030(d)(3)(iii)]	Y	N	N/A	??
20. Is personal protective equipment repaired or replaced to maintain its effectiveness? [29 CFR 1910.1030(d)(3)(v)]	Y	N	N/A	??
21. Do students and employees immediately remove garments that have been penetrated by blood or other <b>potentially infectious materials</b> ? [29 CFR 1910.1030(d)(3)(vi)]	Y	N	N/A	??
<ul><li>22. Do students and employees remove all personal protective equipment before leaving the work area?</li><li>[29 CFR 1910.1030(d)(3)(vii)]</li></ul>	Y	N	N/A	??
23. Do students and employees use an appropriately designated area or container for storage, washing, decontamination, or disposal of personal protective equipment? [29 CFR 1910.1030(d)(3)(viii)]	Y	N	N/A	??
24. Do students and employees wear gloves whenever the possibility exists of hand contact with blood or other <b>potentially infectious materials</b> ? [29 CFR 1910.1030(d)(3)(ix)]	Y	N	N/A	??
<b>Note:</b> This includes touching contaminated items or surfaces and persons receiving phlebotomy training.				
25. Are disposable (single-use) gloves replaced as soon as they are contaminated, torn, punctured or cannot function as a barrier? [29 CFR 1910.1030(d)(3)(ix)(A)]	Y	N	N/A	??
26. Is it prohibited to re-use disposable (single-use) gloves? [29 CFR 1910.1030(d)(3)(ix)(B)]	Y	N	N/A	??

only if the integrity of the glove is not compromised? Y N N/A ?? [29 CFR 1910.1030(d)(3)(ix)(C)] 28. Do students and employees wear masks and eye protection devices (such as goggles or Y N N/A ?? glasses with solid side shields or chin-length face shields) whenever splashes or droplets of blood or other potentially infectious materials may be generated and eye, nose, or mouth contamination can be reasonably anticipated? [29 CFR 1910.1030(d)(3)(x)] 29. Are gowns, aprons, lab coats, clinic jackets, or similar outer garments worn whenever Y N N/A ?? exposure to blood or other potentially infectious materials is anticipated? [29 CFR 1910.1030(d)(3)(xi)] 30. Is there a written method of decontamination and schedule for cleaning of all areas and N N/A surfaces that may become contaminated ?? with blood or other potentially infectious materials? [29 CFR 1910.1030(d)(4)(i)] 31. Are all equipment and working surfaces cleaned and decontaminated immediately, Y N N/A or as soon as feasible, after contact with blood or other potentially infectious materials? [29 CFR 1910.1030(d)(4)(ii)] 32. Are protective covers used to cover equipment and surfaces removed and replaced as soon Y N N/A as feasible when they become overtly 22 contaminated? [29 CFR 1910.1030(d)(4)(ii)(B)] **Note:** Examples of protective coverings include: plastic wrap, aluminum foil, or absorbent paper backed with impervious material. 33. Are all reusable receptacles such as bins, pails and cans that are likely to become Y N N/A contaminated with blood or other potentially infectious materials inspected and decontaminated on a regular schedule? [29 CFR 1910.1030(d)(4)(ii)(C)]

27. Are utility gloves decontaminated and re-used

34. Are all reusable receptacles such as bins, pails and cans that are likely to become

contaminated with blood or <b>other potentially infectious materials</b> cleaned and decontaminated immediately, or as soon as feasible, upon visible contamination? [29 CFR 1910.1030(d)(4)(ii)(C)]	??	
35. Is picking up broken contaminated glassware with your hands prohibited? [29 CFR 1910.1030(d)(4)(ii)(D)]	Y N ??	N/A
36. Is broken contaminated glassware always cleaned up with mechanical means such as a brush and dust pan, tongs, or forceps? [29 CFR 1910.1030(d)(4)(ii)(D)]	Y N ??	N/A
37. Are contaminated sharps discarded immediately or as soon as feasible into containers? [29 CFR 1910.1030(d)(4)(iii)(A)(1)]	Y N ??	N/A
38. Are containers used for sharps disposal closable, puncture resistant, leakproof on sides and bottom, and labeled with a biohazard warning label or colored red? [29 CFR 1910.1030(d)(4)(iii)(A)(1)]	Y N ??	N/A
39. Are containers used for sharps disposal easily accessible and located in the area where sharps are used or can be reasonably anticipated to be found?  [29 CFR 1910.1030(d)(4)(iii)(A)(2)]	Y N ??	N/A
40. Are containers used for sharps disposal maintained upright throughout use? [29 CFR 1910.1030(d)(4)(iii)(A)(2)(i)]	Y N ??	N/A
41. Are containers used for sharps disposal replaced routinely and not allowed to overfill? [29 CFR 1910.1030(d)(4)(iii)(A)(2)(ii)]	Y N ??	N/A
42. Are sharps containers closed immediately prior to removal or replacement to prevent spillage or protrusion of contents during handling, storage, transport, or shipping?  [29 CFR 1910.1030(d)(4)(iii)(A)(3)(i)]	Y N ??	N/A
43. Are sharps containers placed in an appropriate secondary container if leakage is possible?	Y N ??	N/A

44. Are <b>reusable sharps</b> that are contaminated with blood or <b>other potentially infectious materials not</b> stored or processed in a manner that requires a person to reach by hand into the containers where these sharps have been placed?  [29 CFR 1910.1030(d)(4)(ii)(E)]	Y ??	N	N/A
45. Are <b>reusable</b> containers not opened, emptied, or cleaned manually or in any other manner which might expose a person to the risk of skin puncture?  [29 CFR 1910.1030(d)(4)(iii)(A)(4)]	Y ??	N	N/A
46. Is regulated waste, other than sharps, placed into containers which are: [29 CFR 1910.1030(d)(4)(iii)(B)(1)]	Y ??	N	N/A
a. closable?			
<ul> <li>constructed to contain all contents and prevent leakage of fluid during handling, storage, transport or shipping?</li> </ul>			
<ul><li>c. labeled with a biohazard warning label or colored red?</li></ul>			
d. closed prior to removal to prevent spillage or protrusion of contents during handling, storage, transport, or shipping?			
47. Are containers of regulated waste, other than sharps, that have become contaminated on the outside placed into appropriate secondary containers as defined in (17) above? [29 CFR 1910.1030(d)(4)(iii)(B)(2)]	Y ??	N	N/A
48. Is contaminated laundry handled as little as possible with a minimum of agitation or movement? [29 CFR 1910.1030(d)(4)(iv)(A)]	Y ??	N	N/A
<ul><li>49. Is contaminated laundry bagged or put into other containers at the location it is used?</li><li>[29 CFR 1910.1030(d)(4)(iv)(A)(1)]</li></ul>	Y ??	N	N/A
50. Is contaminated laundry placed and transported in bags or containers labeled with the biohazard	Y	N	N/A

	symbol or colored red? [29 CFR 1910.1030(d)(4)(iv)(A)(2)]	??		
51.	Is wet contaminated laundry placed and transported in bags or containers that will prevent soakthrough and/or leakage of fluids to the exterior? [29 CFR 1910.1030(d)(4)(iv)(A)(3)]	Y ??	N	N/A
52.	Do persons who handle contaminated laundry wear protective gloves and other appropriate personal protective equipment? [29 CFR 1910.1030(d)(4)(iv)(B)]	Y ??	N	N/A
53.	Are garments which have been penetrated by blood or <b>other potentially infectious materials</b> removed immediately or as soon as possible by the user? [29 CFR 1910.1030(d)(3)(vi)]	Y ??	N	N/A
54.	Is the hepatitis B vaccination series made available to all persons who are reasonably anticipated to come in contact with blood or <b>other potentially infectious materials</b> through the performance of their job duties? [29 CFR 1910.1030(f)(1)]	Y ??	N	N/A
55.	Is the hepatitis B vaccination series made available to persons who have received the required <b>bloodborne pathogen</b> training? [29 CFR 1910.1030(f)(2)]	Y ??	N	N/A
56.	Within 10 days of initial assignment, is the hepatitis B vaccination series made available to persons whose job is reasonably anticipated to have contact with blood or <b>other potentially infectious materials</b> ? [29 CFR 1910.1030(f)(2)(i)]	Y ??	N	N/A
57.	Have persons who refused to take the hepatitis B vaccination series signed a statement to that effect following the form prescribed by the OSHA standard? [29 CFR 1910.1030(f)(2)(iv)]	Y ??	N	N/A
58.	Is a confidential medical evaluation and follow-up made available to an exposed	Y	N	N/A

person following a report of an exposure incident?
[29 CFR 1910.1030(f)(3) and (5)]

Note: The medical evaluation and follow-up must include documentation of the route(s) of exposure and the circumstances under which the exposure incident occurred; identification and documentation of the source individual unless identification is infeasible or prohibited by state law; the HBV or HIV infectivity of the source individual if it can be legally determined; collection and testing of blood from the exposed individual for HBV and HIV serological status provided consent is given; post-exposure prophylaxis when medically indicated; counseling; evaluation of reported illnesses; and a written opinion from a healthcare professional.

59. Are containers of regulated waste labeled with a biohazard warning label? [29 CFR 1910.1030(g)(1)(i)]

Y N N/A ??

Note: Red bags or red containers may be substituted for a biohazard warning label. Containers include refrigerators and freezers containing blood or other potentially infectious materials, and other containers used to store, transport or ship blood or other potentially infectious materials.

60. Are individuals who are reasonably anticipated to have contact with blood or other potentially infectious materials in the course of their work or student activities provided training on bloodborne pathogens? [29 CFR 1910.1030(g)(2)]

Y N N/A

Note: The training must include an accessible copy of the OSHA standard; a general explanation of the epidemiology and symptoms of bloodborne diseases; an explanation of the modes of transmission of **bloodborne pathogens**; an explanation of the exposure control plan and how to obtain a copy; an explanation of how to recognize tasks and other activities that may involve exposure to blood and other other potentially infectious materials; an explanation of engineering controls, work practice controls and personal protective equipment; information on hepatitis B vaccine; emergency information and procedures; information on the post-exposure evaluation and follow-up; information on labels and

man a demonstration and a contract			
61. Is <b>bloodborne pathogen</b> training provided before or at the time of initial assignment where contact with blood or <b>other potentially infectious materials</b> is possible? [29 CFR 1910.1030(g)(2)(ii)(A)]	e Y ??	N	N/A
62. Is bloodborne pathogen refresher training provided at least annually? [29 CFR 1910.1030(g)(2)(ii)(C)]	Y ??	N	N/A
63. Is additional <b>bloodborne pathogen</b> training provided when changes are instituted that might affect exposure such as modification of tasks or procedures or adoption of new tasks or procedures?  [29 CFR 1910.1030(g)(2)(v)]	Y ??	N	N/A
64. Is the <b>bloodborne pathogen</b> training material appropriate in content and vocabulary to the educational level, literacy, and language of people to be trained? [29 CFR 1910.1030(g)(2)(vi)]	Y ??	N	N/A
65. Is the person(s) who conducts the <b>bloodborne pathogen</b> training knowledgeable in the subject matter? [29 CFR 1910.1030(g)(2)(viii)]	Y ??	N	N/A
66. Are accurate medical records maintained regarding hepatitis B vaccinations, examinations medical testing, follow-up procedures, and copies of written opinions given in response to exposure incidents? [29 CFR 1910.1030(h)(1)]	s, <b>Y</b> ??	N	N/A
Note: These records are confidential.			
67. Are records maintained of training that shows the dates of the training sessions, the contents of the training session, the names and qualifications of person conducting the training, and the names of the persons attending the training sessions? [29 CFR 1910.1030(h)(2)(i)]	Y ??	N	N/A
68. Are training records maintained for at least 3 years? [29 CFR 1910 1030(h)(2)(ii)]	Υ 22	N	N/A

??

[29 CFR 1910.1030(h)(2)(ii)]

color coding; and an opportunity for interactive questions and answers.

#### **Definitions:**

**Bloodborne pathogens:** pathogenic microorganisms that are present in human blood and cause disease in humans. These pathogens include hepatitis B virus (HBV) and human immunodeficiency virus (HIV).

**Engineering controls:** controls that isolate or remove the bloodborne pathogens hazard from the workplace (e.g., sharps disposal containers, self-sheathing needles).

**Potentially infectious materials:** include (a) the following human body fluids: blood, semen, vaginal secretions, cerebrospinal fluid, synovial fluid, pleural fluid, pericardial fluid, peritoneal fluid, amniotic fluid, and saliva in dental procedures; (b) any body fluid that is visibly contaminated with blood; (c) body fluids in situations in which it is difficult to differentiate between body fluids; (d) any unfixed tissue or organ (other than intact skin) from a human (living or dead); (e) HIV-containing cell or tissue cultures and organ cultures; (f) HIV- or HBV-containing culture medium or other solutions; and (g) blood, organs, or other tissues from experimental animals infected with HIV or HBV.

**Universal precautions:** an approach to infection control whereby all human blood and certain human body fluids are treated as if they were infectious for HIV, HBV, and other bloodborne pathogens.

**Work practice controls:** controls that reduce the likelihood of exposure by altering the manner in which a task is performed (e.g., prohibiting recapping of needles by a two-handed technique).

**Comments/Corrective action:** 



Information
Name of Location:
Date of inspection:
Career-Technical program/course/room:
Signature of inspector:

#### **Compressed Gases**

**Self Inspection Checklist** 

**Guidelines:** This checklist covers regulations issued by the U.S. Department of Labor, OSHA under the General Industry standard 29 CFR 1910.101. It applies to the handling, storage, and use of compressed gases in cylinders or portable tanks. The regulations cited apply only to private employers and their employees, unless adopted by a state agency and applied to other groups such as public employees.

The OSHA standard adopts by reference the Compressed Gas Association's (CGA) Pamphlets C-6-1986, C-8-1962, and P-1-1965. The following questions relate to the more common precautions to be taken in school environments. The checklist, however, is not all inclusive. The Compressed Gas Association has updated the three pamphlets cited by OSHA as C-6-1993, C-8-1997, and P-1-1999.

		P	lea	se Circ	cle
1.	Are cylinders stored in upright positions and immobilized by chains or other means to prevent them from being knocked over? [CGA 3.4.4 and 29 CFR 1910.101(b)]	Y	N	N/A	??
	<b>Note:</b> Tragic accidents have occurred when a cylinder was knocked over, damaging the cylinder and turning it into a rocket.				
2.	Are cylinders stored away from highly flammable substances such as oil, gasoline, or waste? [CGA 3.3.6]	Y	N	N/A	??
3.	Are cylinders stored away from electrical connections, gas flames or other sources of ignition, and substances such as flammable solvents and combustible waste material? [CGA 3.5.1]	Y	N	N/A	??

4.	Are flammable gases separated from oxidizing gases in storage areas? [CGA 3.3.3]  Note: Acetylene and propane cylinders should be separated from oxygen cylinders when not in use.	Y	N	N/A	??
5.	Are oxygen and fuel gas cylinders separated by a minimum of 20 feet when in storage? [CGA 3.5.3]  Note: A fire-resistant partition between the cylinders can also be used.	Y	N	N/A	??
6.	Are storage rooms for cylinders dry, cool, and well- ventilated? [CGA 3.3.5]  Note: The storage rooms should be fire resistant and the storage should not be in subsurface locations. Cylinders should be stored in secure areas at temperatures below 125°F, away from radiators or other sources of heat.	Y	N	N/A	??
7.	Are cylinders stored away from incompatibles, excessive heat, continuous dampness, salt or other corrosive chemicals, and any areas that may subject them to damage? [CGA 3.3.7 and 29 CFR 1910.101(b)]  Note: Rusting will damage the cylinder and may cause the valve protection cap to stick.	Y	N	N/A	??
8.	Is the storage area permanently posted with the names of the gases stored in the cylinders? [CGA 3.3.2 and 29 CFR 1910.101(b)]	Y	N	N/A	??
9.	Do all compressed gas cylinders have their contents and precautionary labeling clearly marked on their exteriors? [29 CFR 1910.101(b)]	Y	N	N/A	??
10.	Are all compressed gas cylinder valve covers in place when cylinders are not in use?	Y	N	N/A	??

11. Are all compressed gas cylinders stored so they do not interfere with exit paths? [29 CFR 1910.101(b)]	Y	N	N/A	??
<ul><li>12. Are all compressed gas cylinders subjected to periodic hydrostatic testing and interior inspection? [29 CFR 1910.101(a)]</li><li>Note: This is normally done by the supplier.</li></ul>	Y	N	N/A	??
13. Do all compressed gas cylinders have safety pressure relief valves? [29 CFR 1910.101(c)]	Y	N	N/A	??
<ul><li>14. Are cylinders always maintained at temperatures below 125°F? [CGA 3.1.12]</li><li>Note: A flame should never come in contact with any part of a compressed gas cylinder.</li></ul>	Y	N	N/A	??
15. Are safety relief devices in the valve or on the cylinder free from any indication of tampering? [CGA 3.1.14]	Υ	N	N/A	??
<ul> <li>16. Is repair or alteration to the cylinder, valve, or safety relief devices prohibited? [CGA 3.1.15]</li> <li>Note: All alterations and repairs to the cylinder and valve must be made by the compressed gas vendor. Modification of safety relief devices beyond the tank or regulator should only be made by a competent person appointed by management.</li> </ul>	Y	N	N/A	??
17. Is painting cylinders without authorization by the owner prohibited? [CGA 3.1.20]	Y	N	N/A	??

Note: Often color codes are used to help designate

18.	Are charged or full cylinders labeled and stored away from empty cylinders? [CGA 3.3.4 and 29 CFR 1910.101(b)]	Y	N	N/A	??
19.	Is the bottom of the cylinder protected from the ground to prevent rusting? [CGA 3.3.9]	Y	N	N/A	??
20.	Are all compressed gas cylinders regularly inspected for corrosion, pitting, cuts, gouges, digs, bulges, neck defects and general distortion? [29 CFR 1910.101(a)]	Y	N	N/A	??
21.	Are cylinder valves closed at all times, except when the valve is in use? [CGA 3.1.15]	Y	N	N/A	??
	<b>Note:</b> Regulator diaphragms have failed, and unwanted gas was delivered to an area or apparatus, causing safety and health problems.				
22.	Are compressed gas cylinders always moved, even short distances, by a suitable hand truck? [CGA 3.2.6]	Y	N	N/A	??
	<b>Note:</b> They must never be dragged across the floor. Serious accidents have occurred when a cylinder with a regulator in place was improperly moved. The cylinder fell, causing the regulator to shear off, and the cylinder rocketed through several brick walls.				
23.	Is using wrenches or other tools for opening and closing valves prohibited? [CGA 3.4.9]	Y	N	N/A	??
	<b>Note:</b> Hammering on valve wheels to open them should be strictly prohibited. For valves that are hard to open, contact the supplier for instruction.				
24	Are suitable pressure regulating devices in use whenever	Y	N	N/A	??

24. Are suitable pressure regulating devices in use whenever

the gas is emitted to systems with pressure-rated limitations lower than the cylinder pressure? [CGA 3.4.5]

25. Are all compressed gas cylinder connections such as pressure regulators, manifolds, hoses, gauges, and relief valves checked for integrity and tightness?

[29 CFR 1910.101(a)]

Y N N/A ??

26. Are all compressed gas cylinders regularly subjected to leak detection using an approved leak detecting liquid? [29 CFR 1910.101(a)]

**Note:** Ordinary soap solution may contain oils that are unsafe when used with oxygen cylinders. Leak detection liquids are available from commercial welding supply houses.

Y N N/A ??

Y N N/A ??

27. Is an approved leak-detection liquid used to detect flammable gas leaks ? [CGA 3.5.2]

Note: A flame should never be used.

Y N N/A ??

28. Are procedures established for when a compressed gas cylinder leak cannot be remedied by simply tightening the valve? [CGA 3.1.6]

The procedures should include the following:

- a. Attach tag to the cylinder stating it is unserviceable.
- b. Remove cylinder to a well ventilated out of doors location.
- c. If the gas is flammable or toxic, place an appropriate sign at the cylinder warning of these hazards.
- d. Notify the gas supplier and follow his/her instructions as to the return of the cylinder.

Y N N/A ??

29. Are students/employees prohibited from using compressed gases (air) to clean clothing or work surfaces?
[29 CFR 1910.101(b)]

30.	Are con	npressed	gases o	nly	handled	by	experienced	and
	properl	y trained	people?	[C	GA 3.4.1	]		

#### Source of additional information:

Handbook of Compressed Gases, Compressed Gas Association, Arlington, VA, latest edition.

Information
Name of Location:
Date of inspection:
Career-Technical program/course/room:
Signature of inspector:

## Control of Hazardous Energy Sources Self Inspection Checklist

**Guidelines:** This checklist covers regulations issued by the U.S. Department of Labor, Occupational Safety and Health Administration (OSHA) as a general industry standard under 29 CFR 1910.147. Another name for **control of hazardous energy sources is lockout/tagout**. It covers the servicing and maintenance of machines and equipment in which the unexpected energization or startup of the machines or equipment, or release of stored energy could cause injury. The regulations cited apply only to private employers and their employees, unless adopted by a State agency and applied to other groups such as public employees. A **yes** answer to a question indicates that this portion of the inspection complies with the OSHA or EPA standard, or with a nonregulatory recommendation.

	F	Plea	se Cir	cle				
General Energy Control								
<ol> <li>Does the program require that all hazardous energy sources be isolated, locked or tagged, and otherwise disabled before anyone performs any activity where the unexpected energization, startup, or release of stored energy could occur and cause injury?</li> <li>[29 CFR 1910.147(c)(1)]</li> </ol>	Y	N	N/A	??				
<ol> <li>Have procedures been developed, documented, and implemented for the control of hazardous energy when working with such equipment?</li> <li>[29 CFR 1910.147(c)(4)]</li> </ol>	Υ	N	N/A	??				
<ol> <li>Do the procedures clearly outline the scope, purpose, responsibility, authorization, rules, and techniques to be applied to the control of hazardous energy, and measures to enforce compliance?</li> <li>[29 CFR 1910.147(c)(4)(ii)]</li> </ol>	Υ	N	N/A	??				
4. Do procedures exist for shutting down, isolating, blocking, and securing (locks and tags) energy?	Y	N	N/A	??				

5.	Do procedures exist and is someone assigned responsibility for removing and transferring locks and tags? [29 CFR 1910.147(c)(4)(ii)(C)]	Y	N	N/A	??
6.	Do requirements exist for testing a machine or equipment to determine and verify the effectiveness of lockout/tagout and other energy control measures? [29 CFR 1910.147(c)(4)(ii)(D)]	Y	N	N/A	??
Prote	ctive Materials and Hardware				
7.	Are locks, tags, chains, adapter pins, or other hardware available for securing or blocking energy sources? [29 CFR 1910.147(c)(5)(i)]	Y	N	N/A	??
8.	Are these devices durable and substantial? [29 CFR 1910.147(c)(5)(ii)(A)]	Y	N	N/A	??
9.	Are these devices standardized in either color, shape, size, or format? [29 CFR 1910.147(c)(5)(ii)(B)]	Y	N	N/A	??
10	Do these devices have a provision for identifying the person applying the device? [29 CFR 1910.147(c)(5)(ii)(D)]	Y	N	N/A	??
11	Do tagout devices or danger tags warn against hazardous conditions if the equipment is re-energized? [29 CFR 1910.147(c)(5)(iii)]	Y	N	N/A	??
	Note: Acceptable wording includes Do Not Open, Do Not Start, Do Not Close, and Do Not Energize.				
Inspe	ection				
12	Are inspections conducted at least annually by an authorized person (other than the ones using the energy control procedures) to ensure control procedures are being implemented?  [29 CFR 1910.147(c)(6)(i)(A)]	Y	N	N/A	??
13	Is each inspection certified by identifying the machine or equipment on which the energy control procedure was being used, the date of the inspection, the people included in the inspection, and the person performing the inspection?	Y	N	N/A	??

#### **Training and Communication**

- 14. Is training provided and documented to ensure that (a) the purpose and function of the energy control procedures are understood, and (b) the knowledge and skills required for the safe application and removal of energy controls are acquired?

  [29 CFR 1910.147(c)(7)(i)]
- Y N N/A ??

- 15. Is this training repeated periodically when changes or deviations occur in the energy control procedure? [29 CFR 1910.147(c)(7)(iii)]
- Y N N/A ??

#### **Energy-Isolating Devices**

- 16. Are all energy-isolating devices operated only by authorized persons or under the direct supervision of an authorized person?
  [29 CFR 1910.147(c)(8)]
- Y N N/A ??

#### **Notification of Employees**

- 17. Are all employees notified of the application and removal of lockout and tagout controls whenever such controls directly affect their work activities?

  [29 CFR 1910.147(c)(9)]
- Y N N/A ??

#### **Application of Control**

- 18. Does the application of energy control follow the sequence listed below?
  [29 CFR 1910.147(d)]
- Y N N/A ??
- a. Machine or equipment shutdown by authorized personnel
- Machine or equipment isolation: all energy-isolating devices that are needed shall be located and operated in a manner that isolates the machine or equipment from the energy source(s).
- c. Lockout and tagout device application:
  - Lockout devices shall be affixed in a manner that will hold the energy-isolating device in a safe or off position.
  - Tagout devices shall be affixed in a manner that clearly indicates that the operation or movement of energy isolating devices from the safe or off position is prohibited.

- 3. If a tag cannot be affixed directly to the energy isolating device, the tag shall be located as close as safely possible to the device, in a position that will be immediately obvious to anyone operating the device.
- d. Stored energy: following the application of lockout and tagout devices, all hazardous, stored, or residual energy shall be relieved, disconnected, restrained, or otherwise rendered safe.
- e. Verification of isolation: before starting work on the isolated equipment or process, an authorized person must verify that isolation and de-energization of the machine or equipment has been accomplished.
- 19. Has the work area been inspected before the removal of lockout and tagout devices?
  [29 CFR 1910.147(e)(1)]

Y N N/A ??

20. Has the lockout and tagout device been removed by the person who put it on?
[29 CFR 1910.147(e)(3)]

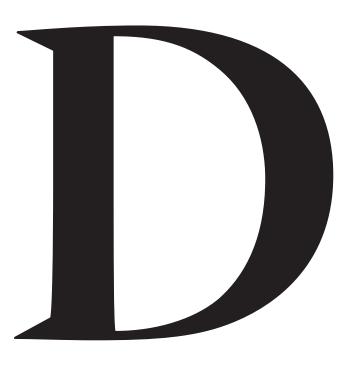
Y N N/A ??

Note: This rule has some limited exceptions.

21. Are outside servicing personnel informed of the lockout and tagout procedures before equipment is serviced?

[29 CFR 1910.147(f)(2)]

Y N N/A ??



Information
Name of Location:
Date of inspection:
Career-Technical program/course/room:
Signature of inspector:

# Dip Tanks Containing Flammable or Combustible Liquids

**Self-Inspection Checklist** 

Guidelines: This checklist covers regulations issued by the U.S. Department of Labor, Occupational Safety and Health Administration (OSHA) under the general industry standard 29 CFR 1910.124, 1910.125 and 1910.132. Also included are regulations from the Building Officials and Code Administrators (BOCA) National Fire Prevention Association (NFPA) Code/1999, Section F-1305.0, dip tanks. The checklist applies to dip tanks in educational buildings. It also applies to any vapor area containing dangerous quantities of flammable vapors in the vicinity of dip tanks, their drain boards, or associated drying, conveying, or other equipment during operation or shutdown periods. The regulations cited apply only to private employers and their employees, unless adopted by a State agency and applied to other groups such as public employees. A yes answer to a question indicates that this portion of the inspection complies with the OSHA or EPA standard, or with a nonregulatory recommendation. Definitions of terms in bold type have been included at the end of the checklist. This checklist must be used in conjunction with the checklist Flammable and Combustible Liquids.



Questions marked with this symbol may require the help of an outside expert.

This checklist does not address additional OSHA regulations covering hardening and tempering tanks; flow coating; roll coating, roll spreading, or roll impregnating; vapor- degreasing tanks; cyanide tanks; spray cleaning and spray degreasing tanks; and electrostatic paint detearing. Please consult 29 CFR 1910.126 and the BOCA National Fire Prevention Code/1999 for details.

**Please Circle** 

#### **General Requirements**

 Does the ventilation provided to the vapor area in the vicinity of a dip tank keep the airborne concentration of any substance below 25% of its lower flammable limit? [29 CFR 1910.124(b)(1)]

Y N N/A ??



2. Are **exhaust ventilation systems** well constructed and in good working order?

**Note:** OSHA incorporates the following design standards by reference: (a) ANSI Z9.2-1979, Fundamentals governing the design and operation of local exhaust systems; (b) NFPA 34-1995, Standard for dip tanks containing flammable or combustible liquids; (c) ACGIH's Industrial Ventilation, A Manual of Recommended Practice (22nd ed., 1995, or (d) ANSI Z9.1-1971, Practices for Ventilation and Operation of Open-Surface Tanks, and NFPA 34-1966, Standard for dip tanks containing flammable or combustible liquids.



- 3. Are **dip tank** operations controlled so exposures are maintained within required limits? [29 CFR 1910.124(b)(2)]
- Y N N/A ??
- 4. When two or more **dip tank** operations are ventilated by a common exhaust duct, is care taken to ensure that the mixture of contaminants generated does not present a fire, explosion, or chemical reaction hazard? [29 CFR 1910.124(b)(6)]
- Y N N/A ??
- 5. Are instructions given to all persons who work on or around dip tanks about hazards and applicable first aid procedures? Y N N/A ?? [29 CFR1910.124(f)]
- 6. Are protective equipment (including personal protective equipment for eyes, face, head, and extremities) protective clothing, and respiratory devices provided to all persons who use dip tanks? [29 CFR1910.132(a)]
- Y N N/A ??
- 7. Are deluge showers and eye wash stations provided near **dip** tank operations? [29 CFR1910.124(g)(2)]
- Y N N/A ??
- 8. Are washing facilities provided nearby for users of dip tanks? [29 CFR1910.124(g)(3)]
- Y N N/A ??
- 9. Is locker space or an equivalent clothing storage facility available to prevent contamination of street clothing? [29 CFR1910.124(g)(1)]
- Y N N/A ??
- 10. Are first aid supplies readily available and are they specific to the hazards associated with the **dip tanks** being used? [29 CFR1910.124(h)(3)]
- Y N N/A ??

designed for the purpose, protected with an approved automatic fire-suppression system, and separated vertically and horizontally from other areas as required by the building code?  [F-1305.2]	Y	N	N/A	??	
12. Are <b>dip tanks</b> , including any drainboards, constructed of noncombustible materials? [29 CFR1910.125(a) and F-1305.4]	Y	N	N/A	??	
13. For <b>dip tanks</b> over 150 gallons in capacity or 10 square feet in liquid surface area, does a properly trapped overflow pipe lead to a safe location outside the building? [29 CFR1910.125(b)(1) and F-1305.4.1]		N	N/A	??	
14. Is the overflow pipe at least 3 inches in diameter? [29 CFR1910.125(b)(2)(i)]	Y	N	N/A	??	
15. Are all piping connections on the <b>dip tank</b> easily accessible for inspection and cleaning? [29 CFR1910.125(b)(2)(ii)]	Y	N	N/A	??	
<ul><li>16. Is the bottom of the overflow connection at least 6 inches below the top of the dip tank?</li><li>[29 CFR 1910.125(b)(2)(iii) and F-1305.4.1]</li></ul>	Y	N	N/A	??	
17. If the <b>dip tank</b> is over 500 gallons in capacity, is it equipped with a bottom drain? [29 CFR1910.125(c)(1) and F-1305.4.2]	Y	N	N/A	??	
<b>Note:</b> Bottom drains are not required if (a) the dip tank is equipped with an automatic closing cover, or (b) the viscosity of the liquid at normal atmospheric temperature does not allow the liquid to flow or be pumped easily.					
18. Will the <b>required</b> bottom drain operate during a fire? [29 CFR1910.125(c)(2)(i)]	Y	N	N/A	??	
19. Is the <b>required</b> bottom drain properly trapped and discharged to a safe location outside? [29 CFR1910.125(c)(ii), (iii), (iv) and F-1305.4.3]	Y	N	N/A	??	
20. Are <b>required</b> bottom drains automatically and manually arranged to drain quickly in the event of fire unless the viscosity of the liquid at normal atmospheric temperature makes this impractical? [F-1305.4.2]	Y	N	N/A	??	

11. In educational buildings, are **dip tanks** used only in a room

	21. Is manual operation of <b>required</b> bottom drains available at a safely accessible location? [29 CFR1910.125(c)(3) and F-1305.4.2]	Y	N	N/A	??
	22. If <b>required</b> bottom drains do not operate by gravity flow, is an automatic pump provided? [29 CFR1910.125(c)(4) and F-1305.4.2]	Y	N	N/A	??
	If the <b>dip tank</b> is artificially heated, is it equipped with an alarm that will sound if the temperature comes within 50°F of the flashpoint of the liquid? [29 CFR1910.126(a)(2)]	Y	N	N/A	??
	24. Are open flames, spark-production devices, or heated surfaces hot enough to ignite vapors absent from the vapor area? [29 CFR1910.125(e)(1)(ii) and F-1305.6]	Y	N	N/A	??
<b>†</b>	25. In each vapor area and any adjacent area, does all electrical wiring and equipment conform to applicable hazardous (classified) area requirements? [29 CFR1910.125(e)(1)(i) and F-1305.6.1]	Y	N	N/A	??
	26. Are any portable containers used to add liquid to the tank electrically bonded to the tank and positively grounded to prevent static electrical sparks or arcs? [29 CFR 1910.125(e)(2)]	Y	N	N/A	??
<b>†</b>	27. Are heating systems used in drying operations installed in accordance with NFPA 86A-1969 and provided with mechanical ventilation before and during operation? [29 CFR 1910.125(e)(3)(i) and (ii)]	Y	N	N/A	??
	28. Do these heating systems shut down automatically if any ventilating fan fails to maintain adequate ventilation? [29 CFR 1910.125(e)(3)(iii)]	Y	N	N/A	??
	Operations and Maintenance				
	29. Are all vapor areas free of combustible debris and as free as possible of combustible stock? [29 CFR1910.125(e)(4)(i) and F-1305.7]	Y	N	N/A	??
	30. Are rags and other material contaminated with liquids or coating operations placed in approved waste cans immediately after use? [29 CFR1910.125(e)(4)(ii) and F-1305.7.1]	Y	N	N/A	??
	Note: Metal waste cans must have self-closing lids.				

31. Are the contents of these waste cans properly disposed of at the end of each shift? [29 CFR1910.125(e)(4)(iii) and F-1305.7.1]	Y	N	N/A	??
32. Are the <b>dip tank</b> facility and all its components inspected periodically? [29 CFR1910.124(j)(3)]	Y	N	N/A	??
33. Are defects promptly corrected? [29 CFR1910.124(j)(3)]	Y	N	N/A	??
34. Are "No Smoking" signs in large letters on a contrasting color background conspicuously posted in the vicinity of each dip tank? [29 CFR1910.125(e)(5)]	Y	N	N/A	??
FIre Extinguishers				
35. Are suitable manual and automatic fire extinguishers available for areas in the vicinity of dip tanks? [29CFR1910.125(f)(2)(i) and F-1305.8]	Y	N	N/A	??
<b>Note:</b> Consult you local fire official for assistance. The BOCA National Fire Prevention Code requires at least one portable fire extinguisher with a minimum 40-B:C rating located with 30 feet of travel distance from the dip tank.				
Dip Tank Covers				
36. If dip tank covers are arranged to close automatically in the event of a fire, are they actuated by approved automatic devices and arranged for manual actuation and operation? [F-1305.9]	Y	N	N/A	??
37. Are <b>dip tank</b> covers constructed of substantial noncombustible material or of the tin-clad type with enclosing metal applied with locked joints? [F-1305.9.1]	Y	N	N/A	??
38. Are covers kept closed when tanks are not used? [F-1305.9.3]	Y	N	N/A	??

**Combustible liquid:** any liquid with a flashpoint at or above 100°F (37.8°C), but below 200°F (93.3°C). Exception: any mixture having components with flashpoints of 200°F (93.3°C), or higher, the total volume of which makes up 99% or more of the total volume of the mixture.

**Dip tank:** a tank, vat, or container of flammable or combustible liquid in which articles or materials are immersed for the purpose of coating, finishing, treating, or similar processes.

**Explosion-proof:** enclosed in a case or pipe that (1) can withstand an explosion of a gas or vapor that may occur within it, (2) can prevent the ignition of a gas or vapor surrounding the enclosure by sparks, flashes, or explosion of the gas or vapor within, and (3) operates at such an external temperature that it will not ignite a surrounding flammable atmosphere.

**Flammable liquid:** any liquid having a flashpoint below 100°F (37.8°C), except any mixture having components with flashpoints of 100°F (37.8°C) or higher, the total of which makes up 99% or more of the total volume of the mixture.

**Vapor area:** any area containing dangerous quantities of flammable vapors in the vicinity of dip tanks, their drainboards or associated drying, conveying, or other equipment during operation or shutdown periods.

Information
Name of Location:
Date of inspection:
Career-Technical program/course/room:
Signature of inspector:

### **Electrical-General Requirements**Self-Inspection Checklist

**Guidelines:** This checklist covers regulations issued by the U.S. Department of Labor, Occupational Safety and Health Administration (OSHA) under the general industry standards subpart S-29 CFR 1910.303; 1910.305; and 1910.335 and the construction standards subpart K-29 CFR 1926.403 and 1926.405. It applies to all electrical use systems. This checklist does not cover installations in ships, watercraft, railway rolling stock, aircraft, or automotive vehicles other than mobile homes and recreational vehicles. The regulations cited apply only to private employers and their employees, unless adopted by a State agency and applied to other groups such as public employees. A **yes** answer to a question indicates that this portion of the inspection complies with the OSHA, and EPA standard, or with a non-regulatory recommendation. Definitions of terms in bold type are provided at the end of the checklist.

This checklist does not address voltages greater than 600 volts (nominal). For these voltages, consult the OSHA regulations.

**Please Circle** 

Y N N/A ??

#### **Examination, Installation, and Use of Equipment**

 Are only approved conductors and equipment used for electrical installations?

[29 CFR 1910.303(a) and 1926.403(a)]

**Note:** Conductors and equipment must be listed or labeled by a recognized testing laboratory, such as Factory Mutual. [29 CFR 1910.303(b)(2)]

- 2. Is equipment used and installed in accordance with instructions on the listing or label? [29 CFR 1910.303(b)(2) and 1926.403(b)(2)]
- 3. Is all electrical equipment free from recognized hazards that are likely to cause death or serious physical harm?

Y N N/A ??

#### [29 CFR 1910.303(b)(1) and 1926.403(b)(1)]

Note: Violations have included the following: male plugs with fiber insulators were not dead fronted; metal junction boxes were used on extension cords; metal junction boxes were used on the ends of pendants; receptacles were loose in their mountings; open light sockets exposed live parts; an electric outlet strip had an open neutral reading when tested with a circuit analyzer; on/off switch boxes for fans were not secured to the wall; heavy items were hanging from the lighting fixtures; floor mounted receptacles were loose in their mountings; receptacles were broken; and electric cords were frayed, loose, and had exposed wires.

#### **Splices**

- Are conductors spliced or joined by using suitable devices or by brazing, welding, or soldering with a fusible metal or alloy? [29 CFR 1910.303(c) and 1926.403(e)]
- 5. Are soldered splices first joined so as to be mechanically and electrically secure and then soldered?

  [29 CFR 1910.303(c) and 1926.403(e)]

  Y N N/A ??
- 6. Are all splices, joints, and free ends of conductors covered with adequate insulation? [29 CFR 1910.303(c) and YNN/A?? 1926.403(e)]

#### **Arcing Parts**

 Are all parts of electrical equipment that ordinarily produce arcs, sparks, flames, or molten metal enclosed or isolated from all combustible material?
 [29 CFR 1910.303(d) and 1926.403(f)]

#### Marking

- 8. Is all electrical equipment marked with the manufacturer's identity? [29 CFR 1910.303(e) and 1926.403(g)]
- Is all electrical equipment marked with the voltage, current, wattage or other ratings as necessary?
   [29 CFR 1910.303(e) and 1926.403(g)]

Y N N/A ??

Y N N/A ??

Y N N/A ??

- 10. Are these markings durable enough to withstand the working environment? [29 CFR 1910.303(e) and 1926.403(g)]
- Y N N/A ??

#### **Identification of Disconnecting Means and Circuits**

- 11. Is each **disconnecting means** for motors and appliances legibly marked to indicate its purpose, unless located and arranged so the purpose is evident?
  [29 CFR 1910.303(f) and 1926.403(h)]
- Y N N/A ??

12. Is each **service**, **feeder**, and **branch circuit** at its **disconnecting means** or overcurrent device legibly marked to indicate its purpose, unless located and arranged so the purpose is evident?
[29 CFR 1910.303(f) and 1926.403(h)]

Y N N/A ??

**Note:** Circuit breaker panels should be marked to clearly indicate the purpose of each circuit breaker.

### **600 Volts, Nominal, or Less Working Space About Electric Equipment**

13. Is access and working space around electrical equipment sufficient to provide ready and safe operation and maintenance? [29 CFR 1910.303(g)(1) and 1926.403(i)(1)]

Y N N/A ??

14. Are sufficient work clearances (see note) maintained around all equipment operating at 600 volts or less?
[29 CFR 1910.303(g)(1)(i) and 1926.403(i)(a)(i)]

Y N N/A ??

**Note:** Working distances around electrical equipment vary according to the nominal voltage to the ground, exposed live parts, and year equipment was installed. These distances vary from 2.5 to 4 feet. Consult the OSHA regulations for details.

15. Are **required** working spaces around electrical equipment kept free of stored materials? [29 CFR 1910.303(g)(1)(ii) and 1926.403(i)(1)(ii)]

Y N N/A ??

16. When live parts are normally exposed on the front of switchboards or motor control centers, is the working space in front of such equipment greater than or equal to 3 feet? [29 CFR 1910.303(g)(1)(iv) and 1926.403(i)(1)(iv)]

Y N N/A ??

17. Is illumination provided for all working spaces around service equipment, switchboards, panel boards, and motor control centers installed indoors?

18. Is a minimum headroom of 6 feet, 3 inches of working space maintained about service equipment, switchboards, panel boards, or control centers?

[29 CFR 1910.303(g)(1)(vi) and 1926.403(i)(1)(v)]

Y N N/A ??

#### 600 Volts, Nominal, or Less Guarding of Live Parts

Y N N/A ??

19. Are live parts of electrical equipment operating at 50 volts or more guarded against contact by **approved** cabinets or other forms of **approved** enclosures? [29 CFR 1910.303(g)(2)(i) and 1926.403(i)(2)(i)]

**Note:** All splices should be in junction boxes or other proper enclosures. The requirement to guard the live part is not applicable in the following situations:

- a. when the live part is located in a room, vault, or similar enclosure that is accessible only to qualified persons.
- b. when permanent, substantial partitions or screens are arranged so that only **qualified persons** have access to the space within reach of the live parts. Any openings in such partitions or screens shall be sized and located so that persons are not likely to come into accidental contact with the live parts or to bring conducting objects into contact with them.
- when the live part located in a suitable balcony, gallery, or platform elevated and arranged to exclude unqualified persons.
- d. when the live part is elevated 8 feet or more above the floor or other working surface.
- 20. In areas where electrical equipment may be exposed to physical damage, are the enclosures or guards arranged and of such strength to prevent such damage?

  [29 CFR 1910.303(g)(2)(ii) and 1926.403(i)(2)(ii)]

Y N N/A ??

**Note:** Incandescent and fluorescent light bulbs should be guarded if subject to physical damage. Light fixtures should have protective plates.

21. Are all entrances to rooms or other guarded locations containing exposed live parts marked with conspicuous warning signs forbidding unqualified persons to enter? [29 CFR 1910.303(g)(2)(iii) and 1926.403(i)(2)(iii)]

22. When normally enclosed live parts are exposed for maintenance and repair, are they guarded to protect unqualified persons from contact? [29 CFR 1910.335(a)(2)(ii)]	Y	N	N/A	??
23. Are safety signs, safety symbols, or accident prevention tags used where necessary to warn students and teachers about electrical hazards? [29 CFR 1910.335(b)(1)]	Y	N	N/A	??
Wiring MethodsGeneral Requirements				
24. Are all metal <b>raceways</b> , cable armor, and other metal enclosures for conductors metallically joined together into a continuous electric conductor (including connections to all boxes, fittings, and cabinets) to provide effective electrical continuity? [29 CFR 1910.305(a)(1)(i) and 1926.405(a)(1)(i)]	Y	N	N/A	??
25. Is wiring in ducts for transporting dust, flammable vapors and exhaust from commercial-type cooking equipment prohibited? [29 CFR 1910.305(a)(1)(ii) and 1926.405(a)(1)(ii)]	Y	N	N/A	??
Wiring MethodsCable Trays				
26. Are only acceptable types of cables used in cable trays? [29 CFR 1910.305(a)(3)(i)]	Y	N	N/A	??
<b>Note:</b> Consult 29 CFR 1910.305(a)(3)(i) for complete list of acceptable types of cables.				
27. Are cable tray systems prohibited in hoistways or where they are subjected to severe physical damage?	Y	N	N/A	??

#### **Definitions:**

**Approved:** acceptable to the authority enforcing this checklist.

[29 CFR 1910.305(a)(3)(ii)]

**Approved for the purpose:** determined by a nationally recognized testing laboratory, inspection agency or other organization concerned with the product evaluation as part of its listing and labeling program.

**Branch circuit:** the circuit conductors between the final overcurrent device protecting the circuit and the outlet(s).

**Disconnecting means:** a device, or group of devices, or other means by which the conductors of a circuit can be disconnected from their source of supply.

**Feeder:** all circuit conductors between the service equipment, or the generator switchboard of an isolated plant, and the final branch-circuit overcurrent device.

**Qualified person:** one familiar with the construction and operation of the equipment and the hazards involved. Whether an employee is considered to be a "qualified person" depends upon various circumstances in the workplace. It is possible and, in fact, likely for an individual to be considered "qualified" with regard to certain equipment in the workplace, but "unqualified" as to other equipment. A person 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 a qualified person for the performance of those duties.

Raceway: a channel designed expressly for holding wires, cables, or busbars, with additional functions as permitted. Raceways may be of metal or insulating materials, and the term includes rigid metal conduit, rigid nonmetallic conduit, intermediate metal conduit, liquidtight flexible metal conduit, flexible metallic tubing, flexible metal conduit, electrical metallic tubing, underfloor raceways, cellular concrete floor raceways, cellular metal floor raceways, surface raceways, wireways, and busways.

**Service:** the conductors and equipment for delivering energy from the electricity supply system to the wiring system of the premises served.

Information
Name of Location:
Date of inspection:
Career-Technical program/course/room:
Signature of inspector:

### **Electrical: Temporary Wiring**Self Inspection Checklist

**Guidelines:** This checklist covers regulations issued by the U.S. Department of Labor, Occupational Safety and Health Administration (OSHA) under the general industry standards subpart S 29 CFR 1910.305 and the construction standards 29 CFR 1926.405. It applies to allowed temporary wiring situations. This checklist does not cover installations in ships, watercraft, railway rolling stock, aircraft, or automotive vehicles other than mobile homes and recreational vehicles. This checklist also does not apply to conductors that are an integral part of factory assembled equipment. The regulations cited apply only to private employers and their employees, unless adopted by a State agency and applied to other groups such as public employees. Definitions of terms in bold type are provided at the end of the checklist.

**Please Circle** 1. Is temporary wiring for 600 volts, nominal or less, only permitted (a) for construction, remodeling, maintenance, N N/A ?? repair, or demolition of buildings, structures, or equipment, and similar activities; (b) for experimental or development work, and (c) for a period not to exceed 90 days for Christmas decorative lighting, carnivals, and similar purposes? [29 CFR 1910.305(a)(2)(i) and 1926.405(a)(2)(i)] **Note:** Examples of violations have included the following: extension cords were used instead of permanent wiring, adapters were used, and multi-outlets were used. 2. Are temporary wiring distribution centers for **feeders** approved for such use? Y N N/A ?? [29 CFR 1910.305(a)(2)(iii)(A) and 1926.405(a)(2)(ii)(A)] 3. Are **feeders** for temporary wiring run as multiconductor cord or cable assemblies, or, where not subject to N/A ?? physical damage, as open conductors on insulators not more than 10 feet apart? [29 CFR 1910.305(a)(2)(iii)(A) and 1926.405(a)(2)(ii)(A)]

N N/A ??

4. Are temporary wiring power outlets or **panelboards** for

branch circuits approved for such use?

5.	Are temporary wiring conductors for <b>branch circuits</b> run as multiconductor cord or cable assemblies or open conductors? [29 CFR 1910.305(a)(2)(iii)(B) and 1926.405(a)(2)(ii)(B)]	Y	N	N/A	??
6.	If open conductors are used for temporary wiring <b>branch circuits</b> , are conductors fastened at ceiling height every 10 feet? [29 CFR 1910.305(a)(2)(iii)(B) and 1926.405(a)(2)(ii)(B)]	Y	N	N/A	??
7.	Are temporary wiring <b>branch circuits</b> conductors prohibited from being laid on the floor? [29 CFR 1910.305(a)(2)(iii)(B) and 1926.405(a)(2)(ii)(B)]	Y	N	N/A	??
8.	If run as an open conductor, does each temporary wiring <b>branch circuits</b> that supplies receptacles or fixed equipment contain a separate equipment grounding conductor? [29 CFR 1910.305(a)(2)(iii)(B) and 1926.405(a)(2)(ii)(B)]	Y	N	N/A	??
9.	Are receptacles of the grounding type? [29 CFR 1910.305(a)(2)(iii)(C) and 1926.405(a)(2)(ii)(C)]	Y	N	N/A	??
10.	Unless installed in a complete metallic <b>raceway</b> , does each <b>branch circuits</b> have a separate equipment grounding conductor, and are all receptacles electrically connected to the grounding conductor? [29 CFR 1910.305(a)(2)(iii)(C) and 1926.405(a)(2)(ii)(C)]	Y	N	N/A	??
11.	Are earth returns prohibited for temporary wiring? [29 CFR 1910.305(a)(2)(iii)(D)]	Y	N	N/A	??
12.	Are bare conductors prohibited for temporary wiring? [29 CFR 1910.305(a)(2)(iii)(D)]	Y	N	N/A	??
13.	Are suitable disconnecting switches or plug connectors installed to permit the disconnection of all ungrounded conductors of each temporary circuit? [29 CFR 1910.305(a)(2)(iii)(E) and 1926.405(a)(2)(ii)(D)]	Y	N	N/A	??
14.	Are lamps for general illumination protected from accidental contact or breakage? [29 CFR 1910.305(a)(2)(iii)(F) and 1926.405(a)(2)(ii)(E)]	Y	N	N/A	??
15.	Are lamps for general illumination elevated at least 7 feet from normal working surfaces or protected by a suitable fixture or lampholder with a guard?	Y	N	N/A	??

16. Are flexible cords and cables protected from damage? [29 CFR 1910.305(a)(2)(iii)(G) and 1926.405(a)(2)(ii)(I)]

Y N N/A ??

**Note:** Avoid sharp corners and projections. Where passing through doorways or other pinch points, flexible cords and cables should be provided with protection to avoid damage.

#### **Definitions:**

**Branch circuit:** the circuit conductors between the final overcurrent device protecting the circuit and the outlet(s).

**Feeder:** all circuit conductors between the service equipment (or the generator switchboard of an isolated plant) and the final branch-circuit overcurrent device.

**Panelboard:** a single or group of panel units designed for assembly in the form of a single panel. The panelboard includes buses and automatic overcurrent devices, and may or may not have switches to control light, heat, or power circuits. It is designed to be placed in a cabinet or cutout box in or against a wall and accessible only from the front.

**Raceway:** a channel designed for holding wires, cables, or busbars, with additional functions as permitted. Raceways may be of metal or insulating materials, and the term includes rigid metal conduit, rigid nonmetallic conduit, intermediate metal conduit, liquid-tight flexible metal conduit, flexible metallic tubing, flexible metal conduit, electrical metallic tubing, underfloor raceways, cellular concrete floor raceways, cellular metal floor raceways, surface raceways, wireways, and busways.

Information
Name of Location:
Date of inspection:
Career-Technical program/course/room:
Signature of inspector:

### **Electrical Wiring Design and Protection Self-Inspection Checklist**

**Guidelines:** This checklist covers regulations issued by the U.S. Department of Labor, Occupational Safety and Health Administration (OSHA) under the general industry standards subpart S 29 CFR 1910.304 and 1910.307 and the construction standards subpart K CFR 1926.404 and 1926.407. It applies to all electrical use systems. This checklist does not cover installations in ships, watercrafts, railway rolling stock, aircrafts, or automotive vehicles other than mobile homes and recreational vehicles. The regulations cited apply only to private employers and their employees, unless adopted by a State agency and applied to other groups such as public employees. Definitions of terms in bold type are provided at the end of the checklist to help you understand some of the questions.



Questions marked with this symbol may require the help of an outside expert.

This checklist does not address regulations dealing with outside conductors, 600 volts, nominal, or less; services to buildings; overcurrent protection (fuses and circuit breakers) for over 600 volts, nominal; and grounding for over 1,000 volts. If any of these conditions are encountered, consult the OSHA regulations.

**Please Circle** 

### Use and Identification of *Grounded* and *Grounding Conductors*



 Are conductors used for grounding identified and distinguishable from all other conductors?
 [29 CFR 1910.304(a)(1) and 1926.404(a)(1)]

Y N N/A ??

**Note: Grounding conductors** should be colored white according to the National Electric Code.

 Have all grounded conductors maintained the designated polarity when attached to a terminal or lead?
 [29 CFR 1910.304(a)(2) and 1926.404(a)(2)]

Y N N/A ??

**Note:** Electrical outlets (receptacles), when tested with a circuit analyzer, should not show a reversed polarity, open neutral, or neutral reversed with any other line.

 Is the use of a grounding terminal or grounding-type device prohibited on a receptacle, cord connector, or plug attachment, except for the purpose of grounding? [29 CFR 1910.304(a)(3) and 1926.404(a)(3)]

Y N N/A ??

### Overcurrent Protection 600 Volts, Nominal, or Less

 Are conductors and equipment protected from overcurrent in accordance with their ability to conduct current safely? [29 CFR 1910.304(e)(1)(i) and 1926.404(e)(1)(i)]

Y N N/A ??

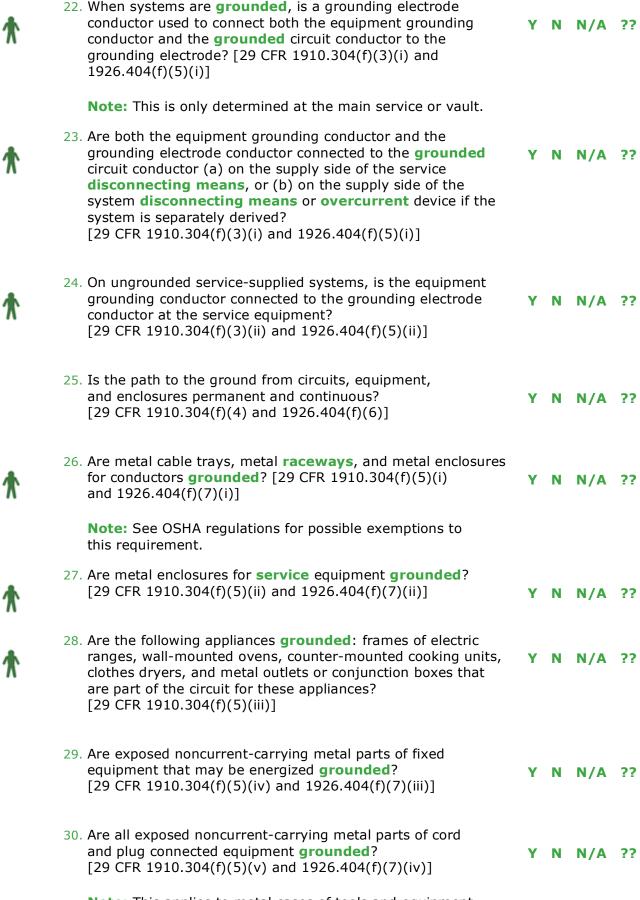


- 5. Are **overcurrent** devices (except for the motor running overload protection) designed so as to not interrupt the continuity of the **grounded** conductors unless all conductors of the circuit are opened simultaneously? [29 CFR 1910.304(e)(1)(ii) and 1926.404(e)(1)(ii)]
- Are disconnecting means provided for (a) all cartridge fuses (except for service fuses) that are accessible to other than qualified persons and (b) all fuses and thermal cutouts on circuits over 150 volts to the ground?
   [29 CFR 1910.304(e)(1)(iii) and 1926.404(e)(1)(iii)]

- 7. Is this **disconnecting means** installed so that the fuse or thermal cutout can be disconnected from its supply without disrupting service to the equipment and circuits unrelated to those protected by the **overcurrent** device?

  [29 CFR 1910.304(e)(1)(iii) and 1926.404(e)(1)(iii)]
- Y N N/A ??
- 8. Are **overcurrent** devices readily accessible to all authorized personnel? [29 CFR 1910.304(e)(1)(iv) and 1926.404(e)(1)(iv)]
- Y N N/A ??
- Are the overcurrent devices located so that they will not be exposed to physical damage nor located near easily ignitable material? [29 CFR 1910.304(e)(1)(iv) and 1926.404(e)(1)(iv)]
- Y N N/A ??
- 10. Are fuses and circuit breakers located or shielded so that people will not be burned or otherwise injured by their operation? [29 CFR 1910.304(e)(1)(v) and 1926.404(e)(1)(v)]
- Y N N/A ??
- 11. Are circuit breakers clearly indicated whether they are in the open (off) or closed (on) position? [29 CFR 1910.304(e)(1)(vi)(A) and 1926.404(e)(1)(vi)(A)]
- Y N N/A ??
- 12. When circuit breaker handles on switchboards are operated

vertically rather than horizontally or rotationally, is the up position the closed (on) position? [29 CFR 1910.304(e)(1)(vi)(B) and 1926.404(e)(1)(vi)(B)]	Y	N	N/A	??
13. On switches in 120-volt fluorescent lighting circuits, is the circuit breaker approved for this purpose and marked "SWD"? [29 CFR 1910.304(e)(1)(vi)(C) and 1926.404(e)(1)(vi)(C)]	Y	N	N/A	??
14. When installed within a six foot radius of sinks, are 125-volt, single-phase, 15- and 20-amp receptacles equipped with a ground-fault circuit interrupter? [recommended]	Y	N	N/A	??
15. When installed outdoors, are 125-volt, single-phase, 15- and 20-amp receptacles equipped with a ground-fault circuit interrupter? [recommended]	Y	N	N/A	??
16. Are all <b>overcurrent</b> devices legibly marked to indicate its purpose? [29 CFR 1910.303(f)]	Y	N	N/A	??
Grounding				
17. Are all neutral conductors <b>grounded</b> in all three-wire DC systems? [29 CFR 1910.304(f)(1)(i) and 1926.404(f)(1)(i)]	Y	N	N/A	??
18. Are all two-wire DC systems operating at 50 volts through 300 volts between conductors grounded? [29 CFR 1910.304(f)(1)(ii) and 1926.404(f)(1)(ii)]	Y	N	N/A	??
<b>Note:</b> Exceptions to this requirement are permitted when (a) they supply only industrial equipment in limited areas and are equipped with a ground detector; or (b) they are fire-protective signaling circuits having a maximum current of 0.030 amperes.				
19. Are all AC circuits of less than 50 volts <b>grounded</b> when (a) they are installed as overhead conductors outside a building, or (b) they are supplied by transformers, and the transformer's primary supply system is ungrounded or exceeds 150 volts to ground? [29 CFR 1910.304(f)(1)(iii) and 1926.404(f)(1)(iii)]	Y	N	N/A	??
20. Are all AC systems of 50 volts to 1,000 volts <b>grounded</b> ? [29 CFR 1910.304(f)(1)(iv) and 1926.404(f)(1)(iv)]	Y	N	N/A	??
<b>Note:</b> See OSHA regulations for possible exemptions to this requirement. Electrical outlet receptacles should not indicate an open ground when tested with a circuit analyzer.				
21. For AC premises wiring systems, is the identified conductor grounded? [29 CFR 1910.304(f)(2) and 1926.404(f)(4)]	Y	N	N/A	??



**Note:** This applies to metal cases of tools and equipment except those that are double insulated.



31. When required, are the noncurrent-carrying metal parts of fixed equipment **grounded** by an equipment grounding conductor contained in the same raceway, cable, or cord, or runs with or encloses the circuit conductors? [29 CFR 1910.304(f)(6)(i) and 1926.404(f)(8)(i)]

Y N N/A ??

Note: For DC circuits only, the equipment grounding conductor may be run separately from the circuit conductors.

#### **Hazardous Locations**

32. Are all equipment, wiring methods, and installations of equipment in **hazardous** (classified) locations intrinsically safe, approved for the hazardous location, or safe for the hazardous location? [29 CFR 1910.307(b) and 1926.407(b)]

Y N N/A ??

33. Is equipment approved not only for the class of location but also for the ignitable or combustible properties of the gas, vapor, dust, or fiber that will be present?

[29 CFR 1910.307(b)(2)(i) and 1926.407(b)(2)(i)]

Y N N/A ??

34. Is equipment in a hazardous location marked to show the class, group, and operating temperature? [29 CFR 1910.307(b)(2)(ii) and 1926.407(b)(2)(ii)]

Y N N/A ??

35. Are all conduits threaded and made wrench-tight? [29 CFR 1910.307(c) and 1926.407(c)]

Y N N/A ??

#### **Definitions:**

**Disconnecting means:** a device, group of devices, or other means by which the conductors of a circuit can be disconnected from their source of supply.

**Ground-fault circuit interrupter:** interrupter: a fast-acting circuit breaker that senses small imbalances in the circuit caused by current leakage to ground and, in a fraction of a second, shuts off the electricity.

**Grounded:** connected to the earth or to a conducting body.

Grounded conductor: a system or circuit conductor that is intentionally grounded.

**Grounding conductor:** a conductor used to connect equipment or the grounded circuit of a wiring system to a grounding electrode or electrodes.

**Hazardous (classified) locations:** areas that have volatile flammable liquids or excessive dust that represent a significant fire or explosion hazard. Such locations are assigned six designations as follows: Class I, Division 1; Class I, Division 2; Class II, Division 1; Class III, Division 1; and Class III, Division 2.

**Overcurrent:** any current in excess of the rated current of equipment or the ampacity of a conductor. It may result from overload, short circuit, or ground fault. A current in excess of rating may be accommodated by certain equipment and conductors for a given set of conditions. Hence the rules for overcurrent protection are specific for particular situations.

**Overcurrent protection:** a device such as a fuse or circuit breaker used to prevent an overcurrent. **Raceway:** a channel designed for holding wires, cables, or busbars, with additional functions as permitted. Raceways may be of metal or insulating materials, and the term includes rigid metal

conduit, rigid nonmetallic conduit, intermediate metal conduit, liquid-tight flexible metal conduit, flexible metallic tubing, flexible metal conduit, electrical metallic tubing, underfloor raceways, cellular concrete floor raceways, cellular metal floor raceways, surface raceways, wireways, and busways. **Service:** the conductors and equipment for delivering energy from the electricity supply system to the wiring system of the premises served.

Information
Name of Location:
Date of inspection:
Career-Technical program/course/room:
Signature of inspector:

# For General Use Self-Inspection Checklist

**Guidelines:** This checklist covers regulations issued by the U.S. Department of Labor, Occupational Safety and Health Administration (OSHA) under the general industry standards subpart S 29 CFR 1910.305 and the construction standards 29 CFR 1926.405 and 1926.441. It applies to all electrical use systems. This checklist does not cover installations in ships, watercraft, railway rolling stock, aircraft, or automotive vehicles other than mobile homes and recreational vehicles. In addition, this checklist does not apply to conductors that are an integral part of factory assembled equipment. The regulations cited apply only to private employers and their employees, unless adopted by a State agency and applied to other groups such as public employees.



 $m{\pi}$  Questions marked with this symbol may require the help of an outside expert.

Definitions of terms in **bold type** are provided at the end of the checklist.

This checklist does not address regulations dealing with open wiring on insulators, pull and junction boxes for systems over 600 volts, portable cables over 600 volts, transformers, and capacitors. If these conditions are encountered, consult the OSHA regulations.

Cabinets, Boxes, and Fittings

1. Are conductors entering boxes, cabinets, or fittings protected from abrasion? [29 CFR 1910.305(b)(1) and 1926.405(b)(1)]

2. Are openings through which conductors enter effectively closed? [29 CFR 1910.305(b)(1) and 1926.405(b)(1)]

3. Are all unused openings in cabinets, junction boxes, and fittings effectively closed?

[29 CFR 1910.305(b)(1) and 1926.405(b)(1)]

Please Circle

Y N N/A

??

4.	Are all pull boxes, junction boxes, and fittings provided with covers approved for that purpose? [29 CFR 1910.305(b)(2) and 1926.405(b)(2)]	Y ??	N	N/A
5.	Are metal covers grounded? [29 CFR 1910.305(b)(2) and 1926.405(b)(2)]	Y ??	N	N/A
6.	Does each outlet box have a cover, faceplate, or fixture canopy? [29 CFR 1910.305(b)(2) and 1926.405(b)(2)]	Y ??	N	N/A
7.	Do covers of outlet boxes with holes for flexible cord pendants have (a) bushings designed for cords to pass through holes, or (b) smooth, well-rounded surfaces on which the cords may bare? [29 CFR 1910.305(b)(2) and 1926.405(b)(2)]	Y ??	N	N/A
8.	Are all electrical wall receptacles tight-fitting and in good condition? [recommended]	Y ??	N	N/A
Switc	hes			
9.	Are single-throw knife switches connected so that the blades are dead when the switch is in the open position? [29 CFR 1910.305(c)(1) and 1926.405(c)]	Y ??	N	N/A
	<b>Note:</b> These types of switches should be accessible only to qualified persons.			
10	Are single-throw knife switches placed so that gravity will not cause them to close? [29 CFR 1910.305(c)(1) and 1926.405(c)]	Y ??	N	N/A
11	Do single-throw knife switches approved for use in the inverted position have a locking device that will keep the blades in the open position when so set?  [29 CFR 1910.305(c)(1) and 1926.405(c)]	Y ??	N	N/A
12	Do flush snap switches that are mounted in ungrounded metal boxes and located within reach of conducting surfaces have face plates of nonconducting, noncombustible material?  [29 CFR 1910.305(c)(2)]	Y ??	N	N/A
	Note: Light switches need a cover plate.			

## **Switchboards and** *Panelboards*

13. Are **panelboards** mounted in cabinets, **cutout boxes**, or enclosures approved for the purpose and of the **dead front** 

Y N N/A

## **Enclosures for Damp Locations**

14. Are cabinets, <b>cutout boxes</b> , fittings, boxes, and <b>panelboard</b>
enclosures in damp locations installed so as to prevent
moisture from accumulating within the enclosures?
[29 CFR 1910.305(e)(1) and 1926.405(e)(1)]

Y N N/A

15. Are switches, circuit breakers, and switchboards installed in wet locations enclosed in weatherproof enclosures? [29 CFR 1910.305(e)(2) and 1926.405(e)(2)]

Y N N/A ??

16. Is water leakage into light receptacles or fixtures (which may cause a fire hazard) immediately repaired? [recommended] (Look for evidence of water leakage.)

Y N N/A

## **Conductors for General Wiring**

17. Are all conductors used for general wiring insulated? [29 CFR 1910.305(f) and 1926.405(f)]

Y N N/A

18. Is the insulation approved for the voltage, operating temperature, and location of use? [29 CFR 1910.305(f) and 1926.405(f)]

Y N N/A ??

19. Is the insulated conductor distinguished by color or other suitable means as being the grounded conductor, ungrounded conductor, or equipment grounding conductors?

[29 CFR 1910.305(f) and 1926.405(f)]

Y N N/A ??

#### Flexible Cords and Cables

20. Are flexible cords and cables prohibited from being used as a substitute for fixed wiring of a structure where they are (a) attached to building surfaces; (b) concealed; (c) run through holes in walls, ceilings, or floors; or (d) run through doorways, windows, or similar openings?

[29 CFR 1910.305(g)(1)(iii) and 1926.405(g)(1)(iii)]

Y N N/A

**Note:** Flexible cords and cables may be used only for the following: pendants; wiring of fixtures; connecting portable lamps or appliances; elevator cables; wiring cranes and hoists; connecting stationary equipment to facilitate their frequent interchange; preventing the transmission of noise or vibration; appliances that have fastening means and mechanical connections that can be removed for maintenance and repair; or data processing cables approved as a part

[25 CH 1510.105(g)(1)(1)			
<ul><li>21. Are flexible cords used only in continuous lengths without splices or tap?</li><li>[29 CFR 1910.305(g)(2)(ii) and 1926.405(g)(2)(iii)]</li></ul>	Y ??	N	N/A
22. Are flexible cords connected to devices and fittings so strain relief is provided to prevent pull from being directly transmitted to joints or terminal screws? [29 CFR 1910.305(g)(2)(iii) and 1926.405(g)(2)(iv)]	Y ??	N	N/A
23. Are all wires located away from walking areas to prevent a tripping hazard? [recommended]	Y ??	N	N/A
<b>Note:</b> Flexible cords used by labs or shops for portable equipment are recommended to be designed for hard or extra hard usage.			
Equipment for General Use: Lighting Fixtures, Lampholders, Lamps, and Receptacles			
24. Are fixtures, lamp holders, lamps, rosettes, and receptacles designed and maintained so that no live parts can expose students and teachers to contact? [29 CFR 1910.305(j)(1)(i) and 1926.405(j)(1)(i)]	Y ??	N	N/A
25. Are portable hand lamps supplied through flexible cords equipped with a handle of molded composition or other approved material and a substantial guard attached to the lamp holder or handle? [29 CFR 1910.305(j)(1)(ii) and 1926.405(j)(1)(iii)]	Y ??	N	N/A
26. Is the use of multiple plug receptacles prohibited? [recommended]	Y ??	N	N/A
Equipment for General Use: Receptacles, Cord Connectors, and Attachment Plugs (caps)			
27. Are receptacles, cord connectors, and attachment plugs constructed so that receptacles or cord connectors will accept only an attachment plug with a voltage or current rating for which the device is intended?  [29 CFR 1910.305(j)(2)(i) and 1926.405(j)(2)(i)]	Y ??	N	N/A
28. Are receptacles installed in damp locations suitable for that location? [29 CFR 1910.305(j)(2)(ii) and 1926.405(j)(2)(ii)]	Y ??	N	N/A
<b>Note:</b> Ground-fault circuit interrupters are recommended in these types of locations.			

of the data processing system. [29 CFR 1910.405(g)(1)(i)

## **Equipment for General Use: Appliances**

29. Are appliances designed and maintained so that they have no live parts normally exposed to student and teacher contact? [29 CFR 1910.305(j)(3)(i) and 1926.405(j)(3)(i)]	Y ??	N	N/A
30. Are means provided to disconnect each appliance? [29 CFR 1910.305(j)(3)(ii) and 1926.405(j)(3)(ii)]	Y ??	N	N/A
31. Is each appliance marked with its rating in volts and amperes or volts and watts? [29 CFR 1910.305(j)(3)(iii) and 1926.405(j)(3)(iii)]	Y ??	N	N/A
32. Are electrical appliances in good operational condition? [recommended]	Y ??	N	N/A
Equipment for General Use: Motors			
33. Is the disconnecting means within view from the controller? [29 CFR 1910.305(j)(4)(ii)(A) and 1926.405(j)(4)(ii)(A)]	Y ??	N	N/A
<b>Note:</b> If a motor and the driven machinery are not within view from the <b>controller</b> location, consult OSHA regulations.			
34. Does the disconnecting means disconnect the motor and the <b>controller</b> from all ungrounded supply conductors, and is it designed so that no pole can be operated independently? [29 CFR 1910.305(j)(4)(ii)(B) and 1926.405(j)(4)(ii)(B)]	Y ??	N	N/A
35. Are motors, motor control apparatus, and motor branch-circuit conductors protected against overheating from motor overload or failure to start, and against short-circuits or ground faults?  [29 CFR 1910.305(j)(4)(iii) and 1926.405(j)(4)(iii)]	Y ??	N	N/A
36. Are exposed live parts of motors and <b>controllers</b> operating at 50 volts or more between terminals guarded against contact? [29 CFR 1910.305(j)(4)(iv)(A) and 1926.405(j)(4)(iv)(A)]	Y ??	N	N/A
Storage Batteries			

37. Is sufficient diffusion and ventilation provided to storage batteries to prevent the accumulation of explosive mixtures?

[29 CFR 1910.305(j)(7) and 1926.441(a)(1)and(2)]

??

#### **Definitions:**

**Controller:** a device or group of devices that governs, in a predetermined manner, the electric power delivered to the apparatus to which it is connected.

**Cutout box:** an enclosure designed for surface mounting with swinging doors or covers secured directly to and telescoping with the walls of the box.

**Panelboard:** without live parts exposed to a person on the operating side of the equipment. **Panelboard:** a single or group of panel units designed for assembly in the form of a single panel. The panelboard includes buses and automatic overcurrent devices, and may or may not have switches to control light, heat, or power circuits. It is designed to be placed in a cabinet or **cutout box** in or against a wall and accessible only from the front.

Information
Name of Location:
Date of inspection:
Career-Technical program/course/room:
Signature of inspector:

## Electrical Safety Work Practices Self-Inspection Checklist

**Guidelines:** This checklist covers the regulations issued by the U.S. Department of Labor, Occupational Safety and Health Administration (OSHA) under the general industry standards 29 CFR 1910.331, 1910.332, and 1910.333. This checklist applies to persons who are at risk of electrical shock. It does not apply to **qualified persons** working on generation, transmission, and distribution installations; communications installations; installations in vehicles; and railway installations. Definitions of terms in bold type are provided at the end of the checklist. **Please review the Control of Hazardous Energy Sources checklist with this checklist.** The regulations cited apply only to private employers and their employees, unless adopted by a State agency and applied to other groups such as public employees. A **yes** answer to a question indicates that this portion of the inspection complies with the OSHA and EPA standard, or with a non-regulatory recommendation.

This checklist does not address work on or near energized overhead lines or work in confined or enclosed work spaces with energized lines. For these conditions, please consult 29 CFR 1910.333(c)(3) and 1910.333(c)(5) respectively.

**Please Circle** Training 1. Are students or employees who are at risk of electric shock trained in and familiar with the Y N N/A ?? safety-related work practices required by OSHA regulations 29 CFR 1910.331 through 1910.335? [29 CFR 1910.332(b)(1)] 2. Are qualified employees (those who are permitted to work on or near exposed energized parts) given Y N N/A ?? the following training? (a) The skills and techniques necessary to distinguish exposed live parts from other parts of electric equipment; (b) The skills and techniques necessary to determine the nominal voltage of exposed live parts; and (c) The clearance distances specified in Table 1 and the corresponding voltages to which the qualified person will be exposed.

Table 1: Minimuim Distance for Voltage Ranges				
Voltage range* (phase to phase)	Required minimum distance between workers and exposed, energized parts			
300V and less	Avoid contact			
>300V ≤750V >750V ≤2kV >2kV ≤15kV >15kV ≤37kV >37kV ≤87.5kV >87.5kV ≤121kV >121kV ≤140kV	1 ft. 0 in. (30.5 cm) 1 ft. 6 in. (46 cm) 2 ft. 0 in. (61 cm) 3 ft. 0 in. (91 cm) 3 ft. 6 in. (107 cm) 4 ft. 0 in. (122 cm) 4 ft. 6 in. (137 cm)			

<sup>\*</sup>Note: > is "greater than;" < is "less than or equal to"

3. Is the degree of training provided determined by the risk to the person?
[29 CFR 1910.332(c)]

## Y N N/A ??

#### **Work Practices**

4. Are all live parts deenergized before students or employees work on them, unless deenergizing increases hazards or is not possible because of equipment design or operational limitations? [29 CFR 1910.333(a)(1)]

Y N N/A ??

**Note:** Live parts that operate at less than 50 volts to ground need not be deenergized if they do not cause increased exposure to electrical burns or explosion due to electrical arcs.

5. If live parts are not deenergized, are other practices used to protect persons who may be exposed to electrical hazards?
[29 CFR 1910.333(a)(2)]

Y N N/A ??

6. Do these work practices protect the body against direct contact with energized parts and against indirect contact through a conductive object? [29 CFR 1910.333(a)(2)]

Y N N/A ??

## **Working On Or Near Exposed Deenergized Parts**

7. If an employee or student has contact with parts of fixed electrical equipment or circuits that have been deenergized, have the circuits energizing the parts been locked and/or tagged?

8.	Is a written copy of electrical safety procedures (including lockout and tagging) available for inspection? [29 CFR 1910.333(b)(2)(i)]	Y	N	N/A	??
9.	Are safe procedures determined before circuits or equipment are deenergized? [29 CFR 1910.333(b)(2)(ii)(A)]	Y	N	N/A	??
10.	Are the circuits and equipment to be worked on disconnected from all energy sources? [29 CFR 1910.333(b)(2)(ii)(B)]	Y	N	N/A	??
	<b>Note:</b> Control circuit devices, such as push buttons, selector switches, and interlocks may not be used as the sole means for deenergizing circuits or equipment. Interlocks for electric equipment may not be used as a substitute for lockout and tagging procedures.				
11.	Has stored, hazardous electric energy been released? [29 CFR 1910.333(b)(2)(ii)(C)]	Y	N	N/A	??
	<b>Note:</b> Capacitors shall be discharged. If the stored electric energy might endanger personnel, high capacitance elements shall be short-circuited and grounded.				
12.	Is stored nonelectrical energy in devices that could reenergize electric circuit parts blocked or relieved enough to prevent circuit parts from being accidentally energized by the device?  [29 CFR 1910.333(b)(2)(ii)(D)]	Y	N	N/A	??
13.	Is a lock and tag placed on each disconnecting means used to deenergize circuits and equipment? [29 CFR 1910.333(b)(2)(iii)(A)]	Y	N	N/A	??
14.	Is the lock attached so no one can operate the disconnecting means? [29 CFR 1910.333(b)(2)(iii)(A)]	Y	N	N/A	??
15.	Does each tag have a statement prohibiting unauthorized operation of the disconnecting means and removal of the tag? [29 CFR 1910.333(b)(2)(iii)(B)]	Y	N	N/A	??

**Note:** If a lock cannot be applied, or if the tagging procedures will provide a level of safety equivalent to that of a lock, a tag may be used without a lock.

16. When a tag is used without a lock, is at least one additional safety measure used that provides a level of safety equivalent to that obtained from a lock? [29 CFR 1910.333(b)(2)(iii)(D)]

Y N N/A ??

**Note:** Examples of additional safety measures include removing an isolating circuit element, blocking a controlling switch, or opening an extra disconnecting switch.

17. Is a lock placed without a tag only under all the following conditions?
[29 CFR 1910.333(b)(2)(iii)(E)]

Y N N/A ??

- a. Only one circuit or piece of equipment is deenergized.
- b. The lockout period does not extend beyond the school day.
- c. Students or employees exposed to the hazards associated with reenergizing the circuit or equipment are familiar with this procedure.
- 18. Are the requirements below met before any circuit or equipment can be considered deenergized? [29 CFR 1910.333(b)(2)(iv)]

- a. A qualified person verifies that the equipment cannot be restarted.
- b. A qualified person verifies that the circuit elements and electric parts of equipment to which students or employees will be exposed are deenergized. The qualified person must also determine whether any energized conditions exist as a result of inadvertently induced voltage or unrelated voltage feedback (even though parts of the circuit have been deenergized and presumed to be safe).
- 19. Are all of the following requirements met (in the order given) before circuits or equipment are reenergized, even temporarily?
  [29 CFR 1910.333(b)(2)(v)]
- Y N N/A ??
- a. A qualified person verifies that all tools, electrical jumpers, shorts, grounds, and other such devices have been removed so that the circuits and equipment can be safely energized.
- b. Persons exposed to the hazards associated with reenergizing the circuit or equipment

are warned to stay clear of circuits and equipment.

- c. Each lock and tag is removed by the person who applied it or under his or her direct supervision. However, if the person who applied the lock or tag is absent from the workplace, the lock or tag may be removed by a qualified person designated to perform this task provided that:
  - 1. The person who applied the lock or tag is not available at the school.
  - The person who applied the lock or tag is aware that the lock or tag has been removed before he or she resumes work.
- d. All persons are clear of the circuits and equipment.

## **Working On Or Near Exposed Energized Parts**

20. Are only qualified persons permitted to work on electric circuit parts or equipment that have not been deenergized?

[29 CFR 1910.333(c)(2)]

**Note:** This paragraph applies to work performed on exposed live parts (involving either direct contact or contact by means of tools or material) or near enough to them for persons to be exposed to hazards they present.

[29 CFR 1910.333(c)(1)]

- 21. Are students and employees restricted from entering spaces containing exposed energized parts, unless illumination is provided that enables them to perform the work safely?

  [29 CFR 1910.333(c)(4)(i)]
- 22. Are students and employees prevented from handling conductive materials and equipment that are in contact with the person's body that may contact exposed energized conductors or circuit parts? [29 CFR 1910.333(c)(6)]
- 23. If students or employees must handle long-dimensional conductive objects (such as ducts and pipes) in areas with exposed live parts, have work practices been instituted (such as the use of insulation, guarding,

Y N N/A ??

Y N N/A ??

Y N N/A ??

and material handling techniques) that will minimize the hazard?
[29 CFR 1910.333(c)(6)]

- 24. Do portable ladders have nonconducting siderails when they could contact exposed, energized parts?

  [29 CFR 1910.333(c)(7)]
- 25. Is the use of conductive articles of jewelry, clothing (such as watchbands, bracelets, rings, keychains, necklaces, metalized aprons, cloth with conductive threads, or metal head gear) prohibited for persons working with electricity?

  [29 CFR 1910.333(c)(8)]
- 26. Are students and employees prohibited from performing housekeeping duties where live parts y N N/A ?? present an electrical contact hazard due to housekeeping duties that must be performed near such parts? [29 CFR 1910.333(c)(9)]
- 27. If students or employees do conduct housekeeping duties near live electrical circuits, are adequate y N N/A ?? safeguards (such as insulating equipment or barriers) used?
  [29 CFR 1910.333(c)(9)]

#### **Definitions:**

**Qualified person:** one who is familiar with the construction and operation of the equipment and the hazards involved. A person is likely to be considered "qualified" with regard to certain equipment in the workplace, but "unqualified" as to other equipment. A person 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 a qualified person for those duties.

Information
Name of Location:
Date of inspection:
Career-Technical program/course/room:
Signature of inspector:

# **Electrical Work Practices for Construction**Self-Inspection Checklist

Guidelines: This checklist covers regulations issued by the U.S. Department of Labor, Occupational Safety and Health Administration (OSHA) under the construction standards 29 CFR 1926.404, 1926.405, 1926.416 and 1926.417. It applies to temporary worksites associated with construction, alteration, demolition, or repair work including painting and decorating. This section does not apply to existing permanent installations that were in place before the construction activity began. This checklist does not cover all of the regulations applicable to construction sites. Please use also the following checklists: Electrical-General Requirements, Electrical-Wiring Design and Protection, Electrical Components and Equipment for General Use, Use of Electrical Equipment, and Electrical-Temporary Wiring. Although not required, the following checklists are also beneficial: Electrical Safety Work Practices, Personal Protection for Electrical Work, and Control of Hazardous Energy Sources. The regulations cited apply only to private employers and their employees, unless adopted by a State agency and applied to other groups such as public employees. A yes answer to a question indicates that this portion of the inspection complies with the OSHA or U.S. Environmental Protection Agency (EPA) standard, or with a nonregulatory recommendation.

**Please Circle** 

#### **General Requirements**

 Is work prohibited near any part of an electric power circuit?
 [29 CFR 1926.416(a)(1)]

Y N N/A ??

Work may be performed **IF** protection is provided from electrical shock by (a) deenergizing the circuit and grounding it; or (b) guarding it effectively by insulation or other means. [29 CFR 1926.416(a)(1)]

2. Do students and employees have insulated protective gloves if they are using jack-hammers, bars, or other hand tools in an area where the exact location of underground electric power lines is unknown? [29 CFR 1926.416(a)(2)]

3. Before work begins, are energized electrical power circuits (exposed or concealed) checked to be sure that a person, tool, or machine will not come into contact with the electric power circuit? [29 CFR 1926.416(a)(3)]	Y	N	N/A	??
<ol> <li>Are warning signs posted where circuits exist that are identified in question #3?</li> <li>[29 CFR 1926.416(a)(3)]</li> </ol>	Y	N	N/A	??
<ol> <li>Do all students and employees know the location of such lines, the hazards involved, and the precautions to be taken?</li> <li>[29 CFR 1926.416(a)(3)]</li> </ol>	Y	N	N/A	??
6. Are barriers (or other means of guarding) provided to ensure that work space for electrical equipment is not used as a passageway when energized parts of electrical equipment are exposed? [29 CFR 1926.416(b)(1)]	Y	N	N/A	??
<ol> <li>Are all working spaces, walkways, and similar locations kept clear of cords so as not to create a hazard? [29 CFR 1926.416(b)(2)]</li> </ol>	Y	N	N/A	??
<ol> <li>In existing installations, is it prohibited to make changes in circuit protection so the load becomes greater than the load rating of the circuit wiring? [29 CFR 1926.416(c)]</li> </ol>	Y	N	N/A	??
<ol> <li>Are special insulated tools required when fuses are installed or removed with one or both terminals energized? [29 CFR 1926.416(d)]</li> </ol>	Y	N	N/A	??
10. Are frayed or worn electrical cords removed from service? [29 CFR 1926.416(e)(1)]	Y	N	N/A	??
<ol> <li>Are electric cords that are fastened with staples, hung from nails, or suspended by wire prohibited? [29 CFR 1926.416(e)(2)]</li> </ol>	Y	N	N/A	??
Lockout and Tagging of Circuits				
12. Are controls properly tagged if they are deactivated during work on energized or deenergized equipment or circuits? [29 CFR 1926.417(a)]	Y	N	N/A	??

13. Are all equipment and circuits that are deenergized

rendered inoperative with tags attached at all points where the equipment or circuit can be energized? [29 CFR 1926.417(b)]	Y	N	N/A	??
<ul><li>14. Are tags placed to identify plainly the equipment or circuits being worked on?</li><li>[29 CFR 1926.417(c)]</li></ul>	Y	N	N/A	??
Wiring Design and Protection				
15. Do all 120-volt, single-phase, 15- and 20-ampere receptacle outlets that are not a part of the permanent wiring of the building or structure have approved ground-fault circuit interrupters? [29 CFR 1926.404(b)(1)(ii)]	Y	N	N/A	??
Note: In place of ground-fault circuit interrupters, an assured equipment grounding conductor program can be established and implemented. The program must (a) be in writing; (b) be handled by a competent person; (c) include visual inspections each day of cord sets, attachment caps, plugs and receptacles of cord sets, and any equipment connected by cord and plug; and (d) include testing of wiring, cords, and equipment.  [29 CFR 1926.404(b)(1)(iii)]				
<ul><li>16. Are tools that are connected by cord and plug grounded or double insulated?</li><li>[29 CFR 1926.404(f)(7)(iv)]</li></ul>	Y	N	N/A	??
Wiring Methods, Components, and Equipment for General Use				
17. Is it prohibited to suspend temporary lights by their electric cords, unless cords and lights are designed for this? [29 CFR 1926.405(a)(2)(ii)(F)]	Y	N	N/A	??
18. Are extension cord sets that are used with portable electric tools and appliances of the three-wire type and designed for hard or extra-hard usage? [29 CFR 1926.405(a)(2)(ii)(J)]	Y	N	N/A	??
<b>Note:</b> Examples of hard service cords include type S, ST, SO, STO, SJ, SJO, SJT, and SJTO.				

Information
Name of Location:
Date of inspection:
Career-Technical program/course/room:
Signature of inspector:

# Environmental and Occupational Safety and Health Plan Self Inspection Checklist

**Guidelines:** This checklist covers the recommended general elements of an environmental and occupational safety and health plan that should be present in any school district. No Federal regulations or laws that require these elements. Individual States, however, may have regulations that apply. Additional written documentation may be needed for specific occupational safety and health areas (e.g., respiratory protection and hearing protection). Definitions of underlined terms are provided at the end of the checklist to help you understand some of the questions.

			P	Plea	se Circ	cle
1.	and oc	our school district have a written environmental cupational safety health <b>plan</b> adopted by the board of education, agency, or institution?	Y	N	N/A	??
2.	Does t	ne written <b>plan</b> include the following general elements:				
	a.	objectives?	Y	N	N/A	??
	b.	a statement of general policies?	Y	N	N/A	??
	c.	a defined organizational structure for <b>program</b> implementation?	Y	N	N/A	??
	d.	designated persons or groups with clear lines of responsibility?	Y	N	N/A	??
	e.	procedures to implement the <b>plan</b> ?	Y	N	N/A	??
	f.	a time table for <b>plan</b> implementation and periodic review?	Y	N	N/A	??
	g.	a mechanism to evaluate the effectiveness of the <b>plan</b> and the <b>program</b> ?	Y	N	N/A	??

3.	Does t	he written <b>plan</b> include the following more specific elements:				
			Y	N	N/A	??
	a.	a hazard analysis for each career-technical course?	Υ	NI	NI / A	22
	b.	environmental and occupational safety and health practices and precautions for each career-technical course?	ĭ	N	N/A	??
	C.	a plan and procedures for periodic inspections and maintenance of facilities and equipment, including personal protective equipment?	Y	N	N/A	??
	d.	a plan and procedures to eliminate hazards?	Y	N	N/A	??
	e.	emergency procedures?	Y	N	N/A	??
	f.	methods to provide environmental and safety and health education to pupils and teachers, including methods for incorporating the results of the hazard analysis?	Y	N	N/A	??
	g.	procedures and methods to document and assess pupils' and teachers' knowledge of environmental and occupational safety and health practices and procedures?	Y	N	N/A	??
	h.	a system (that may include disciplinary action and positive motivational actions) to ensure that pupils and teachers comply with environmental and occupational safety and health practices?	Y	N	N/A	??
	i.	procedures to ensure that all new staff and pupils receive initial environmental and occupational safety and health training before starting any course or program?	Y	N	N/A	??
	j.	procedures to ensure that all staff and pupils receive followup refresher environmental and occupational safety and health training when needed?	Y	N	N/A	??
		<b>Note:</b> Refresher training should be provided annually and whenever evidence shows that training is needed.				
	k.	procedures to report and investigate injuries and illnesses related to career-technical courses?				
			Y	N	N/A	??
4.		our school district have a designated person(s) who onsible for developing the <b>plan</b> and implementing the <b>am</b> ?	Y	N	N/A	??
5.	Has yo	ur school district implemented its <b>plan</b> ?	Y	N	N/A	??

6.	Does your district have a board-approved written curricula for all students that includes environmental and occupational safety and health?	Y	N	N/A	??
7.	Does your district perform an annual inspection of buildings to insure adherence to environmental and occupational safety and health laws?	Y	N	N/A	??
8.	Do written policies and procedures exist to cover		N		
	<ul> <li>a. notification of parents or guardians of students needing further immediate medical care?</li> </ul>	Y		N/A	??
	<ul> <li>b. safe and sanitary operation and maintenance of school buildings and grounds?</li> </ul>	Y	N	N/A	??
	c. supervision of pupil safety in the school district associated with safe storage and use of hazardous materials on school property?	Y	N	N/A	??
	d. supervision of pupil safety in the school district associated with preventing accidents, panic, and fire?	Y	N	N/A	??
	e. supervision of pupil safety in the school district associated with providing for and maintaining suitable and safe equipment?	Y	N	N/A	??
9.	Are all employees informed at the beginning of each school year of the environmental and occupational safety and	Y	N	N/A	??

## **Definitions:**

**Hazard analysis:** a method of reviewing career-technical program equipment, materials, and procedures to identify potential causes of injury or illness.

health policies and procedures?

**Plan:** a written document outlining how an environmental and occupational safety and health program will be implemented.

**Program:** the steps being implemented to ensure a safe and healthful workplace and environment.



Information
Name of Location:
Date of inspection:
Career-Technical program/course/room:
Signature of inspector:

# Fall Protection Part 1 Self-Inspection Checklist

Guidelines: This checklist covers regulations issued by the U.S. Department of Labor, Occupational Safety and Health Administration (OSHA) under the construction standards 29 CFR 1926.501 to 1926.503. It applies to temporary worksites associated with construction, alteration, demolition, and repair work including painting and decorating. In general, fall protection is required when employees work on walking or working surfaces that are 6 feet or more above lower levels. If guardrail systems, personal fall arrest systems, or warning line systems are used, this checklist should be used with the Fall Protection-Part 2 checklist. If controlled-access zones, safety monitoring systems, covers, protection from falling objects, or fall protection plans are used, this checklist should be used with the Fall Protection-Part 3 checklist. The regulations cited apply only to private employers and their employees, unless adopted by a State agency and applied to other groups such as public employees. A answer to a question indicates that this portion of the inspection complies with the OSHA or U.S. Environmental Protection Agency (EPA) standard, or with a nonregulatory recommendation. Definitions of terms in bold type are provided at the end of the checklist. These three checklists on fall protection do not address safety net systems or positioning device systems. In these situations, please consult the OSHA regulations.

			Ple	ase Ci	rcle
Gener	ral				
1.	Do walking and working surfaces have the strength and structural integrity to support people safely? [29 CFR 1926.501(a)(2)]	Y	N	N/A	??
2.	Are employees and students prohibited from working on walking and working surfaces that cannot support them safely? [29 CFR 1926.501(a)(2)]	Y	N	N/A	??
3.	If fall protection systems are required, are they installed before employees or students begin work?	Y	N	N/A	??
	Note: This requirement is not found in .502(a)(2)				

**Unprotected Sides and Edges** 

- 4. Do guardrail systems, safety net systems, or personal fall arrest systems protect employees and students when they work on unprotected sides and edges of walking and working surfaces that are 6 feet or more above a lower level? [29 CFR 1926.501(b)(1)]
- 5. Do guardrail systems, safety net systems, or personal fall arrest systems protect employees and students during construction of leading edges 6 feet or more above lower levels? [29 CFR 1926.501(b)(2)(i)]

**Note:** Exceptions are permitted if these systems are infeasible or create a greater hazard. However, a **fall protection plan** must still be developed and implemented.

#### **Hoist Areas**

- Do guardrail systems or personal personal fall arrest systems protect employees and students in a hoist area from falling 6 feet or more to lower levels?
   [29 CFR 1926.501(b)(3)]
- 7. Does a **personal fall arrest system** protect employees and students if guardrail systems are removed for hoisting operations, requiring employees to lean through the access opening or out over the edge of the access opening (e.g., to receive or guide equipment and materials)?

  [29 CFR 1926.501(b)(3)]

#### Holes

- 8. Do **personal fall arrest systems**, covers, or guardrail systems erected around **holes** protect employees and students on walking and working surfaces more than 6 feet above lower levels from falling through **holes** (including skylights)?

  [29 CFR 1926.501(b)(4)(i)]
- Do covers protect employees and students on a walking and working surface from tripping in or stepping into holes (including skylights)?
   [29 CFR 1926.501(b)(4)(ii)]
- 10. Do covers protect employees and students on a walking and working surface from objects falling through **holes** (including skylights)?

## Formwork and Reinforcing Steel

11. Do **personal fall arrest systems**, safety net systems, or **positioning device systems** protect employees and students on the face of formwork or reinforcing steel from falling 6 feet or more to lower levels?

[29 CFR 1926.501(b)(5)]

Y N N/A ??

## Ramps, Runways, and Other Walkways

12. Do guardrail systems protect employees and students on ramps, runways, and other walkways from falling 6 feet or more to lower levels? [29 CFR 1926.501(b)(6)]

Y N N/A ??

#### **Excavations**

13. Do guardrail systems, fences, or barricades protect employees and students from falling at the edge of an excavation 6 feet or more in depth when the excavation is blocked because of plant growth or other visual barrier?

[29 CFR 1926.501(b)(7)(i)]

Y N N/A ??

14. Do guardrail systems, fences, barricades, or covers protect employees and students from falling at the edge of a well, pit, shaft, and similar excavation 6 feet or more in depth? [29 CFR 1926.501(b)(7)(ii)]

Y N N/A ??

## **Dangerous Equipment**

15. Do guardrail systems or equipment guards protect employees and students from falling from less than 6 feet onto dangerous equipment? [29 CFR 1926.501(b)(8)(i)]

Y N N/A ??

16. Do guardrail systems, **personal fall arrest systems**, or safety net systems protect employees and students 6 feet or more above dangerous equipment from fall hazards? [29 CFR 1926.501(b)(8)(ii)]

Y N N/A ??

## **Overhand Bricklaying and Related Work**

17. Do guardrail systems, safety net systems, or **personal fall arrest systems** protect employees and students from falling while they perform

overhand bricklaying and related work 6 feet or more above lower levels? Or, are employees restricted to working in a **controlled-access zone**? [29 CFR 1926.501(b)(9)(i)]

Note: Exceptions are permitted if these systems are infeasible or create a greater hazard. However, a **fall protection plan** must still be developed and implemented.

18. Does a guardrail system, safety net system, or personal fall arrest system protect employees and students reaching more than 10 inches below the level of the walking and working surface? [29 CFR 1926.501(b)(9)(ii)]

Y N N/A ??

## **Roofing Work on Low-Slope Roofs**

19. Does one of the following systems protect employees and students from falling while they work on low-slope roofs with unprotected sides and edges 6 feet or more above lower levels? (a) guardrail systems, (b) safety net systems, (c) personal fall arrest systems, (c) a combination warning line system and safety net system, (d) warning line system and personal fall arrest system, or (e) warning line system and safety monitoring system.

[29 CFR 1926.501(b)(10)]

Y N N/A ??

Note: Exceptions are permitted if these systems are infeasible or create a greater hazard. However, a **fall protection plan** must still be developed and implemented. On roofs 50-feet or less in width, using a **safety-monitoring system** alone [i.e., without the **warning line system**] is also permitted. (See Appendix A to Subpart M--Determining Roof Widths of 29 CFR 1926 for help.)

## **Steep Roofs**

20. Do guardrail systems with toeboards, safety net systems, or **personal fall arrest systems** protect employees and students from falls off a steep roof with unprotected sides and edges 6 feet or more above lower levels?

[29 CFR 1926.501(b)(11)]

Y N N/A ??

## **Precast Concrete Erection**

21. Do guardrail systems, safety net systems, or **personal fall arrest systems** protect employees and students 6 feet or more above lower levels when they are engaged in erecting precast concrete members and related operations?

[29 CFR 1926.501(b)(12)]

Note: Exceptions are permitted if these systems are infeasible or create a greater hazard. However, a **fall protection plan** must still be developed and implemented.

#### **Residential Construction**

22. Do guardrail systems, safety net systems, or **personal fall arrest systems** protect employees and students who are engaged in residential construction activities 6 feet or more above lower levels?

[29 CFR 1926.501(b)(13)

Y N N/A ??

Note: Exceptions are permitted if these systems are infeasible or create a greater hazard. However, a **fall protection plan** must still be developed and implemented.

## **Wall Openings**

23. Are employees and students protected from falling by a guardrail system, a safety net system, or a **personal fall arrest system** if they are working on, at, above, or near wall **openings** (including those with chutes attached) where (a) the outside bottom edge of the wall **opening** is 6 feet or more above lower levels, and (b) the inside bottom edge of the wall **opening** is less than 39 inches above the walking and working surface?

[29 CFR 1926.501(b)(14)]

Y N N/A ??

### **Walking and Working Surfaces Not Otherwise Addressed**

24. Does a guardrail system, safety net system, or **personal fall arrest system** protect employees and students on a walking or working surface 6 feet or more above lower levels that have not been addressed as part of this checklist? [29 CFR 1926.501(b)(15)]

Y N N/A ??

## **Protection From Falling Objects**

25. When an employee or student is exposed to falling objects, are they required to wear a hard hat?
[29 CFR 1926.501(c)]

Y N N/A ??

26. When an employee or student is exposed to falling objects, is one of the following measures implemented?
[29 CFR 1926.501(c)]

- a. Erect toeboards, screens, or guardrail systems to prevent objects from falling from higher levels.
- b. Erect a canopy structure and keep potential fall objects far enough away from the edge of the higher level so that those objects would not go over the edge if they were displaced.
- c. Barricade the area to which objects could fall, prohibit employees and students from entering the barricaded area, and keep objects that may fall far enough away from the edge of a higher level so that those objects would not go over the edge if they were displaced.

## **Training**

aini	ng				
27.	Has a training program been provided to everyone who might be exposed to fall hazards? [29 CFR 1926.503(a)(1)]	Y	N	N/A	??
	Note: The training program must enable each employee or student to recognize the hazards of falling and know the procedures for minimizing these hazards.				
28.	Is the training program conducted by a <b>competent person</b> ? [29 CFR 1926.503(a)(2)]	Y	N	N/A	??
29.	Have individual certification records been prepared that contain the name or other identity of the person trained, the date(s) of the training, and the signature of the employer or person who conducted the training?  [29 CFR 1926.503(b)(1)]	Y	N	N/A	??
30.	Is the latest training certification for all persons trained available for inspection? [29 CFR 1926.503(b)(2)]	Y	N	N/A	??
31.	Is retraining conducted if a person can no longer recognize the hazards of falling or follow the proper procedures? [29 CFR 1926.503(c)]	Y	N	N/A	??
32.	Is retraining conducted when changes in the workplace render previous training obsolete? [29 CFR 1926.503(c)(1)]	Y	N	N/A	??

Y N N/A ??

33. Is retraining conducted when changes in the types of fall protection systems or equipment

render previous training obsolete? [29 CFR 1926.503(c)(2)]

34. Is retraining conducted if a person cannot use fall protection systems or equipment or has not retained the requisite understanding or skill? [29 CFR 1926.503(c)(3)]

Y N N/A ??

#### **Definitions:**

**Competent person:** one qualified in the following areas: (a) The nature of fall hazards in the work area; (b) The correct procedures for erecting, maintaining, disassembling, and inspecting the fall protection systems; (c) The use and operation of quardrail systems, personal fall arrest systems, safety net systems, warning line systems, safety monitoring systems, controlled-access zones, and other protection; (d) The role of each person in the safety monitoring system; (e) the limitations on the use of mechanical equipment during work on low-sloped roofs; (f) The correct procedures for handling and storing equipment and materials and erecting overhead protection; (q)The role of each person in fall protection plans; and (h) the OSHA fall protection standard. Controlled-access zone: an area in which certain work (e.g., overhand bricklaying) may take place without guardrail systems, personal fall arrest systems, or safety net systems. Access to the zone is controlled. (See the Fall Protection-Part 3 checklist for requirements.) Fall protection plan: an alternative plan available for protecting employees and students from falling hazards. The plan is available only to persons engaged in leading edge work, precast concrete erection work, or residential construction work and who can demonstrate that conventional fall protection equipment is infeasible or creates a greater hazard. (See the Fall Protection-Part 3 checklist for requirements.)

**Hole:** a gap or void 2 inches or more in its least dimension in a floor, roof, or other walking or working surface.

**Opening:** a gap or void 30 inches or more high and 18 inches or more wide, in a wall or partition, through which persons can fall to a lower level.

**Personal fall arrest system:** a system used to stop an employee's fall. It consists of an anchorage, connectors, a body belt, or body harness and may include a lanyard, deceleration device, lifeline, or combinations of these. (See the <u>Fall Protection-Part 2</u> checklist for requirements.) **Positioning device system:** a body belt or body harness system rigged to support an employee on an elevated vertical surface (such as a wall) and allow him or her to work with both hands free while leaning.

**Safety-monitoring system:** a safety system in which a competent person is responsible for recognizing and warning persons of fall hazards. (See the <u>Fall Protection-Part 3</u> checklist for requirements.)

**Warning line system:** a barrier erected on a roof that (a) warns employees and students that they are approaching an unprotected roof side or edge, and (b) designates an area in which roofing work may take place without a guardrail, body belt, or safety net system to protect persons in the area. (See the **Fall Protection-Part 2** checklist for requirements.)

Information
Name of Location:
Date of inspection:
Career-Technical program/course/room:
Signature of inspector:

# Fall Protection Part 2 Self-Inspection Checklist

**Guidelines:** This checklist covers fall protection systems criteria and regulations for guardrail systems, **personal fall arrest systems**, and **warning line systems**. These regulations were issued by the U.S. Department of Labor, Occupational Safety and Health Administration (OSHA) under the construction standard 29 CFR 1926.502. This checklist applies to temporary worksites associated with construction, alteration, demolition, and repair work including painting and decorating. In general, fall protection is required where employees work on walking or working surfaces that are 6 feet or more above lower levels. This checklist should be used with the **Fall Protection-Part 1** and **Fall Protection-Part 3** checklists. The regulations cited apply only to private employers and their employees, unless adopted by a State agency and applied to other groups such as public employees. A **yes** answer to a question indicates that this portion of the inspection complies with the OSHA or U.S. Environmental Protection Agency (EPA) standard, or with a nonregulatory recommendation. Definitions of terms in bold type are provided at the end of the checklist. Safety net systems and positioning device systems have not been addressed as part of these fall protection checklists. In these situations, please consult the OSHA regulations.

**Please Circle** 

## **Guardrail Systems**

 Is the top edge height of top rails (or equivalent guardrail system members) 42 inches, plus or minus 3 inches above the walking or working level? [29 CFR 1926.502(b)(1)]

Y N N/A ??

**Note:** When necessary, the height of the top edge may exceed the 45\_inch height, if the guardrail system meets all other criteria. When employees are using stilts, the top edge height of the top rail (or equivalent member) shall be increased an amount equal to the height of the stilts.

 When no wall or parapet wall is at least 21 inches high, are the midrails, screens, mesh, or intermediate vertical members (or equivalent intermediate structural members) installed between the top edge of the

guardrail system and the walking or working surface? [29 CFR 1926.502(b)(2)]

along the midrail or other member?

[29 CFR 1926.502(b)(5)]

3.	Are midrails installed at a height midway between the top edge of the guardrail system and the walking or working level? [29 CFR 1926.502(b)(2)(i)]	Y	N	N/A	??
4.	Do screens and mesh extend from the top rail to the walking or working level and along the entire opening between top rail supports? [29 CFR 1926.502(b)(2)(ii)]	Y	N	N/A	??
5.	When used between posts, are intermediate members (such as balusters) 19 inches apart or less? [29 CFR 1926.502(b)(2)(iii)]	Y	N	N/A	??
6.	Are other structural members (such as additional midrails and architectural panels) installed so that openings in the guardrail system are 19 inches wide or less? [29 CFR 1926.502(b)(2)(iv)]	Y	N	N/A	??
7.	Can guardrail systems withstand (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 along the top edge? [29 CFR 1926.502(b)(3)]	Y	N	N/A	??
8.	When a 200 pound test load is applied in a downward direction to the top rail, does the top edge of the guardrail deflect to a height of 39 inches or more above the walking or working level? [29 CFR 1926.502(b)(4)]	Y	N	N/A	??
	<b>Note:</b> For specifications on selection and construction of guardrail systems, please refer to the OSHA guidelines in Appendix B of subpart Mguardrail systems.				
9.	Can midrails, screens, mesh, intermediate vertical members, solid panels, and equivalent structural members withstand (without failure) a force of at least 150 pounds applied in any downward or outward direction at any point along the midrail or other member?	Y	N	N/A	??

10. Are guardrail systems surfaced to prevent snagging of clothing and injury from punctures or lacerations? [29 CFR 1926.502(b)(6)]	Y	N	N/A	??
11. Is it prohibited for the ends of all top rails and midrails to overhang the terminal posts (unless overhang does not cause a hazard)? [29 CFR 1926.502(b)(7)]	Y	N	N/A	??
<ul><li>12. Is it prohibited to construct top rails or midrails of steel banding and plastic banding?</li><li>[29 CFR 1926.502(b)(8)]</li></ul>	Y	N	N/A	??
<ol> <li>Are top rails and midrails at least one-quarter inch nominal diameter or thickness?</li> <li>[29 CFR 1926.502(b)(9)]</li> </ol>	Y	N	N/A	??
Note: This is to prevent cuts and lacerations.  14. If wire rope is used for top rails, is it flagged at 6-foot intervals (or less) with high-visibility material? [29 CFR 1926.502(b)(9)]	Y	N	N/A	??
15. When guardrail systems are used to protect hoisting areas, is a chain, gate, or removable guardrail section placed across the access opening between guardrail sections when hoisting operations are not taking place? [29 CFR 1926.502(b)(10)]	Y	N	N/A	??
<ul><li>16. When guardrail systems are used at holes, are they erected on all unprotected sides or edges of the hole?</li><li>[29 CFR 1926.502(b)(11)]</li></ul>	Y	N	N/A	??
17. When guardrail systems are placed around holes, do only two (or fewer) sides have removable guardrail sections to allow the passage of materials? [29 CFR 1926.502(b)(12)]	Y	N	N/A	??
18. When a hole is not in use, is it closed over with a cover, or is a guardrail system provided along all unprotected sides or edges? [29 CFR 1926.502(b)(12)]	Y	N	N/A	??
19. Are guardrail systems equipped with a gate (or offset so that a person cannot walk directly into the hole) when they are placed around holes that	Y	N	N/A	??

are used as points of access (such as ladderways)? [29 CFR 1926.502(b)(13)]				
20. Are guardrail systems used on ramps and runways erected along each unprotected side or edge? [29 CFR 1926.502(b)(14)]	Y	N	N/A	??
21. Is manila, plastic, or synthetic rope that is used for top rails or midrails inspected frequently to ensure that it continues to meet the strength requirements indicated in Questions 7, 8, and 9? [29 CFR 1926.502(b)(15)]	Y	N	N/A	??
Personal Fall Arrest Systems				
22. Is the use of body belts as part of a <b>personal fall</b> arrest system prohibited? [29 CFR 1926.502(d)]	Y	N	N/A	??
23. Are connectors on <b>personal fall arrest systems</b> made of drop-forged, pressed, or formed steel; or of equivalent materials? [29 CFR 1926.502(d)(1)]	Y	N	N/A	??
24. Are connectors on <b>personal fall arrest systems</b> covered with a corrosion-resistant finish? Are all surfaces and edges smooth to prevent damage to interfacing parts of the system? [29 CFR 1926.502(d)(2)]	Y	N	N/A	??
25. Do dee-rings and snaphooks on <b>personal fall arrest systems</b> have a minimum tensile strength of 5,000 pounds? [29 CFR 1926.502(d)(3)]	Y	N	N/A	??
26. Have dee-rings and snaphooks on <b>personal fall arrest systems</b> been proof tested to a minimum tensile load of 3,600 pounds without cracking, breaking, or becoming deformed? [29 CFR 1926.502(d)(4)]	Y	N	N/A	??
27. Do locking snaphooks prevent disengagement of the snaphook if the connected member contacts the snaphook keeper? [29 CFR 1926.502(d)(5)]	Y	N	N/A	??
28. Are locking snaphooks prohibited for the following	V		NI / A	22

types of connections (unless designed for that purpose)? Y N N/A ??

[29 CFR 1926.502(d)(6)]

- a. directly to webbing, rope, or wire rope b. to each other c. to a dee-ring to which another snaphook or other connector is attached d. to a horizontal lifeline e. to any object that is incompatible with the snaphook such that unintentional disengagement could occur 29. Are horizontal lifelines designed, installed, and used (under the supervision of a qualified person) Y N N/A ?? as part of a complete **personal fall arrest system** that maintains a safety factor of at least two? [29 CFR 1926.502(d)(8)] 30. Do lanyards and vertical lifelines have a minimum breaking strength of 5,000 pounds? Y N N/A ?? [29 CFR 1926.502(d)(9)] 31. When vertical lifelines are used, is each person attached to a separate lifeline? N N/A ?? [29 CFR 1926.502(d)(i)] 32. Are lifelines protected against being cut or abraded [29 CFR 1926.502(d)(11)] N N/A ?? 33. Can self retracting lifelines and lanyards that automatically limit free-fall distance to 2 feet or Y N N/A ?? less sustain a tensile load of at least 3,000 pounds (applied to the device with the lifeline or lanvard fully extended)? [29 CFR 1926.502(d)(12)] 34. Can the following equipment sustain a tensile load of at least 5,000 pounds applied to the Y N N/A ?? device with the lifeline or lanyard fully extended? [29 CFR 1926.502(d)(13)]
  - a. self-retracting lifelines and lanyards that do not limit free-fall distance to 2 feet or less
  - b. ripstitch lanyards
  - c. tearing and deforming lanyards

- 35. Are only ropes and straps (webbing) made of synthetic fibers used in lanyards, lifelines, and strength components of body belts and body harnesses?

  [29 CFR 1926.502(d)(14)]
- 36. Are anchorages used to attach personal fall arrest equipment separate from any anchorage used to YNN/A?? support or suspend platforms? Can they support at least 5,000 pounds per person attached? [29 CFR 1926.502(d)(15)]

**Note:** As an alternative, anchorages may be designed, installed, and used as part of a complete **personal fall arrest system** that maintains a safety factor of at least two and is under the supervision of a qualified person.

- 37. When stopping a fall, do **personal fall arrest systems** limit the maximum arresting force on a person to YNN/A?? 1,800 pounds when used with a body harness? [29 CFR 1926.502(d)(16)(ii)]
- 38. When stopping a fall, are **personal fall arrest systems** rigged such that a person can neither free fall more YNN/A?? than 6 feet, nor contact any lower level? [29 CFR 1926.502(d)(16)(iii)]
- 39. When stopping a fall, do **personal fall arrest systems**bring a person to a complete stop and limit
  maximum deceleration distance to 3.5 feet?
  [29 CFR 1926.502(d)(16)(iv)]
- 40. When stopping a fall, can personal fall arrest systems withstand twice the potential impact energy of a person free falling a distance of 6 feet, or the free fall distance permitted by the system (whichever is less)?

  [29 CFR 1926.502(d)(16)(v)]

Note: The system is considered to be in compliance with the requirements outlined in Questions 37-40 if (a) the personal fall arrest system meets the criteria and protocols in Appendix C to subpart M, and (b) the system is used by an employee with a combined person and tool weight of less than 310 pounds (140 kg). If the system is used by an employee having a combined tool and body weight of 310 pounds (140 kg) or more, then the employer must modify the criteria and protocols of the Appendix to provide proper protection for such heavier weights, or the system will not comply with the OSHA

requirements.

41. Is the attachment point of the body harness located in the center of the wearer's back near shoulder level, or above the wearer's head? [29 CFR 1926.502(d)(17)]	Y	N	N/A	??
42. Are body harnesses and components used only for personal protection (as part of a <b>personal fall arrest systems</b> ) and not to hoist materials? [29 CFR 1926.502(d)(18)]	Y	N	N/A	??
43. Are <b>personal fall arrest systems</b> and components that are subjected to impact loading immediately removed from service and not used again for protection until inspected by a <b>competent person</b> and determined to be undamaged and suitable for reuse?  [29 CFR 1926.502(d)(19)]	Y	N	N/A	??
44. Are provisions made for prompt rescue in the event of a fall, or are employees able to rescue themselves? [29 CFR 1926.502(d)(20)]	Y	N	N/A	??
45. Are <b>personal fall arrest systems</b> inspected before each use for wear and damage? Are defective components removed from service? [29 CFR 1926.502(d)(21)]	Y	N	N/A	??
46. Is attaching <b>personal fall arrest systems</b> to guardrail systems or hoists prohibited? [29 CFR 1926.502(d)(23)]	Y	N	N/A	??
Note: OSHA regulations permit some exemptions.  47. When a <b>personal fall arrest system</b> is used at hoist areas, is it rigged to allow the movement of the person only as far as the edge of the walking or working surface?  [29 CFR 1926.502(d)(24)]	Υ	N	N/A	??
Warning Line Systems				
48. Is a <b>warning line</b> erected around all sides of the roof work area? [29 CFR 1926.502(f)(1)]	Y	N	N/A	??
49. When mechanical equipment is not used, is the warning line erected 6 feet or more from the roof edge?	Y	N	N/A	??

- 50. When mechanical equipment is used, is the warning line erected 6 feet or more from the Y N N/A ?? roof edge that is parallel to the direction of mechanical equipment operation, and 10 feet or more from the roof edge that is perpendicular to the direction of mechanical equipment operation? [29 CFR 1926.502(f)(1)(ii)] 51. Are points of access, materials handling areas, storage areas, and hoisting areas connected to Y N N/A ?? the work area by an access path formed by two warning lines? [29 CFR 1926.502(f)(1)(iii)] 52. When the path to a point of access is not in use, is a rope, wire, chain, or other barricade Y N N/A ?? (equivalent in strength and height to the warning line) placed across the path, or is the path offset such that a person cannot walk directly into the work area? [29 CFR 1926.502(f)(1)(iv)] **Note:** Place the barricade at the point where the path intersects the warning line erected around the work area. 53. Do warning lines consist of supporting stanchions and ropes, wires, or chains? Y N N/A ?? [29 CFR 1926.502(f)(2)] 54. Is the rope, wire, or chain flagged at 6-foot intervals (or less) with high-visibility material? Y N N/A ?? [29 CFR 1926.502(f)(2)(i)] 55. Is the rope, wire, or chain rigged and supported so that its lowest point (including sag) is 34 inches Y N N/A ?? or more from the walking or working surface, and its highest point is 39 inches or less from the walking or working surface? [29 CFR 1926.502(f)(2)(ii)] 56. After being erected (with the rope, wire, or chain attached), can stanchions resist (without tipping Y N N/A ?? over) a force that is
  - b. 30 inches above the walking or working surface,

a. at least 16 pounds applied horizontally against

the stanchion,

- c. perpendicular to the warning line, and
- d. in the direction of the floor, roof, or platform edge?

[29 CFR 1926.502(f)(2)(iii)]

57. Does the rope, wire, or chain have a minimum tensile strength of 500 pounds? After being attached to the stanchions, can it support (without breaking) the loads applied to the stanchions (as described in Question 56)?

[29 CFR 1926.502(f)(2)(iv)]

Y N N/A ??

58. Is the line attached at each stanchion so that pulling on one section of the line between stanchions will not result in slack being taken up in adjacent sections before the stanchion tips over?

[29 CFR 1926.502(f)(2)(v)]

Y N N/A ??

59. Are employees and students prohibited from entering the area between a roof edge and a **warning line** unless he or she is performing roofing work in that area?
[29 CFR 1926.502(f)(3)]

Y N N/A ??

60. Is mechanical equipment on roofs used or stored only in areas where employees and students are protected by a warning line system, guardrail system, or personal fall arrest system? [29 CFR 1926.502(f)(4)]

Y N N/A ??

#### **Definitions:**

Competent person: one qualified in the following areas: (a) The nature of fall hazards in the work area; (b) The correct procedures for erecting, maintaining, disassembling, and inspecting the fall protection systems; (c) The use and operation of guardrail systems, personal fall arrest systems, safety net systems, warning line systems, safety monitoring systems, controlled-access zones, and other protection; (d) The role of each person in the safety monitoring system; (e) the limitations on the use of mechanical equipment during work on low-sloped roofs; (f) The correct procedures for handling and storing equipment and materials and erecting overhead protection; (g)The role of each person in fall protection plans; and (h) the OSHA fall protection standard. Controlled-access zone: an area in which certain work (e.g., overhand bricklaying) may take place without guardrail systems, personal fall arrest systems, or safety net systems. Access to the zone is controlled. (See the Fall Protection-Part 3 checklist for requirements.)

Personal fall arrest system: a system used to stop an employee's fall. It consists of an anchorage, connectors, a body belt, or body harness and may include a lanyard, deceleration device, lifeline, or combinations of these. (See this checklist for the requirements.)

**Safety-monitoring system:** a safety system in which a competent person is responsible for recognizing and warning persons of fall hazards. (See the <u>Fall Protection-Part 3</u> checklist for requirements.)

**Warning line system:** a barrier erected on a roof that (a) warns employees and students that they are approaching an unprotected roof side or edge, and (b) designates an area in which roofing work may take place without a guardrail, body belt, or safety net system to protect persons in the area. (See this checklist for the requirements.)

Information
Name of Location:
Date of inspection:
Career-Technical program/course/room:
Signature of inspector:

# Fall Protection Part 3 Self-Inspection Checklist

**Guidelines:** This checklist covers fall protection systems criteria and practice regulations for **controlled-access zones**, **safety-monitoring systems**, covers, protection from falling objects, and the fall protection plan. These regulations were issued by the U.S. Department of Labor, Occupational Safety and Health Administration (OSHA) under the construction standard 29 CFR 1926.502. This checklist applies to temporary worksites associated with construction, alteration, demolition, or repair work including painting and decorating. In general, fall protection is required where employees work on walking/working surfaces that are 6 feet or more above lower levels. This checklist should be used in conjunction with the **Fall Protection-Part 1** and **Fall Protection-Part 2** checklists. The regulations cited apply only to private employers and their employees, unless adopted by a State agency and applied to other groups such as public employees. A **yes** answer to a question indicates that this portion of the inspection complies with the OSHA or U.S. Environmental Protection Agency (EPA) standard, or with a nonregulatory recommendation. Definitions of terms in bold type are provided at the end of the checklist to help you understand some of the terms. Safety net systems and positioning device systems have not been addressed as part of these fall protection checklists. For these situations, please consult the OSHA regulations.

	Please Circle				
Controlled-Access Zones					
<ol> <li>Are controlled-access zones where leading edge and other operations are taking place defined by a control line or by another means that restricts access?</li> <li>[29 CFR 1926.502(g)(1)]</li> </ol>	N	N/A	??		
When control lines are used, are they erected at least 6 but not more than 25 feet from the unprotected or leading edge, except when precast concrete members are erected? [29 CFR 1926.502(g)(1)(i)]	N	N/A	??		
3. When precast concrete members are erected, is the distance from the control line to the leading edge at least 6 but not more than 60 feet, or half the length of the member being erected (whichever is less)?	N	N/A	??		

4.	Does the control line extend along the entire length of the unprotected or <b>leading edge</b> ? Is the control line approximately parallel to the unprotected or <b>leading edge</b> ? [29 CFR 1926.502(g)(1)(iii)]	Y	N	N/A	??
5.	Is the control line connected on each side to a guardrail system or wall? [29 CFR 1926.502(g)(1)(iv)]	Y	N	N/A	??
6.	In areas where overhand bricklaying and related work are taking place, is the controlled-access zone defined by a control line erected at least 10 but not more than 15 feet from the working edge? [29 CFR 1926.502(g)(2)(i)]	Y	N	N/A	??
7.	In areas where overhand bricklaying and related work are taking place, does the controlled-access zone enclose all workers performing overhand bricklaying and related work at the working edge? Is the control line approximately parallel to the working edge?  [29 CFR 1926.502(g)(2)(ii)]	Y	N	N/A	??
8.	In areas where overhand bricklaying and related work are taking place, are additional control lines erected at each end to enclose the controlled-access zone? [29 CFR 1926.502(g)(2)(iii)]	Y	N	N/A	??
9.	In areas where overhand bricklaying and related work are taking place, are only employees engaged in overhand bricklaying or related work permitted in the controlled-access zone? [29 CFR 1926.502(g)(2)(iv)]	Y	N	N/A	??
10.	Do control lines consist of ropes, wires, tapes, or equivalent materials, and supporting stanchions? [29 CFR 1926.502(g)(3)]	Y	N	N/A	??
11.	Is each control line flagged or otherwise clearly marked at 6-foot intervals (or less) with high-visibility material? [29 CFR 1926.502(g)(3)(i)]	Y	N	N/A	??
12.	Is each control line rigged and supported so that its lowest point (including sag) is 39 inches (or more) from the walking/working surface, and its highest point is 45 inches (or less) from the walking/working surface?	Y	N	N/A	??

[29 CFR 1926.502(g)(3)(ii)]

**Note:** The highest point of the control line is 50 inches when overhand bricklaying operations are being performed.

13. Does each control line have a minimum breaking strength of 200 pounds?
[29 CFR 1926.502(g)(3)(iii)]

Y N N/A ??

14. On floors and roofs where guardrail systems are not in place before the beginning of overhand bricklaying operations, are controlled-access zones enlarged (as necessary) to enclose all points of access, material-handling areas, and storage areas?

[29 CFR 1926.502(g)(4)]

Y N N/A ??

15. If guardrail systems on floors and roofs must be removed for overhand bricklaying work or **leading edge** work, is only the portion of the guardrail removed that is necessary to accomplish the day's work?

[29 CFR 1926.502(g)(5)]

Y N N/A ??

### Safety-Monitoring Systems

16. Has a competent person been designated to monitor the safety of other workers? [29 CFR 1926.502(h)(1)]

Y N N/A ??

17. Does the safety monitor warn workers when they appear to be unaware of a fall hazard or act in an unsafe manner? [29 CFR 1926.502(h)(1)(ii)]

Y N N/A ??

18. Is the safety monitor on the same walking/working surface and within sighting distance of the workers being monitored? [29 CFR 1926.502(h)(1)(iii)]

Y N N/A ??

19. Is the safety monitor close enough to communicate with the workers being monitored? [29 CFR 1926.502(h)(1)(iv)]

Y N N/A ??

20. Is monitoring workers the only responsibility of the safety monitor? [29 CFR 1926.502(h)(1)(v)]

Y N N/A ??

21. Is mechanical equipment kept away from areas where safety-monitoring systems are used to monitor employees working on low-slope roofs?
[29 CFR 1926.502(h)(2)]

Y N N/A ??

employees covered by a fall protection plan, allowed in Y N N/A ?? an area where a safety-monitoring system is in place? [29 CFR 1926.502(h)(3)] 23. Do workers in a controlled-access zone comply promptly with fall hazard warnings from safety monitors? Y N N/A ?? [29 CFR 1926.502(h)(4)] Covers 24. Can covers located in roadways and vehicular aisles support (without failure) at least twice the maximum Y N N/A ?? axle load of the largest vehicle expected to cross over the cover? [29 CFR 1926.502(i)(1)] 25. Are all other covers capable of supporting (without failure) at least twice the weight of workers, equipment, Y N N/A ?? and materials that may be imposed on the cover at any one time? [29 CFR 1926.502(i)(2)] 26. Are all covers secured when installed to prevent displacement by the wind, equipment, or workers? Y N N/A ?? [29 CFR 1926.502(i)(3)] 27. Are covers color coded, or are they marked with the word **HOLE** or **COVER** to warn of the hazard? Y N N/A ?? [29 CFR 1926.502(h)(i)(4)] **Note:** This provision does not apply to cast iron manhole covers or steel grates used on streets or roadways. **Protection From Falling Objects** 28. When used as falling-object protection, are toeboards erected along the edge of the overhead walking/working Y N N/A ?? surface for a distance sufficient to protect workers below? [29 CFR 1926.502(j)(1)] 29. Can toeboards withstand (without failure) a force of at least 50 pounds applied in any downward or outward Y N N/A ?? direction at any point along the toeboard? [29 CFR 1926.502(j)(2)] 30. Are toeboards a minimum of 3-1/2 inches in vertical height from their top edge to the level of the Y N N/A ?? walking/working surface?

22. Are only employees working on low-sloped roofs, or

31.	Do toeboards have 1/4 inch clearance (or less) above the walking/working surface? [29 CFR 1926.502(j)(3)]	Y	N	N/A	??
32.	Are toeboards solid, or do they have openings 1 inch (or less) in greatest dimension? [29 CFR 1926.502(j)(3)]	Y	N	N/A	??
33.	Where tools, equipment, or materials are piled higher than the top edge of a toeboard, is paneling or screening erected from the walking/working surface or toeboard to the top of a guardrail system's top rail or midrail?  [29 CFR 1926.502(j)(4)]	Y	N	N/A	??
	<b>Note:</b> The paneling or screening must extend for a distance sufficient to protect workers below.				
34.	When guardrail systems are used as falling-object protection, are openings small enough to prevent falling objects from passing through? [29 CFR 1926.502(j)(5)]	Y	N	N/A	??
35.	During overhand bricklaying and related work, are materials or equipment (except masonry and mortar) stored at least 4 feet from the working edge? [29 CFR 1926.502(j)(6)(i)]	Y	N	N/A	??
36.	During overhand bricklaying and related work, are excess mortar, broken or scattered masonry units, and all other materials and debris kept clear from the work area by removal at regular intervals? [29 CFR 1926.502(j)(6)(ii)]	Y	N	N/A	??
37.	During roofing work, are materials and equipment stored at least 6 feet from a roof edge, unless guardrails are erected at the edge? [29 CFR 1926.502(j)(7)(i)]	Y	N	N/A	??
38.	During roofing work, are materials that are piled, grouped, or stacked near a roof edge stable and self-supporting? [29 CFR 1926.502(j)(7)(ii)]	Y	N	N/A	??
39.	When used as falling-object protection, are canopies strong enough to prevent collapse and to prevent objects from falling through?	Y	N	N/A	??

### **Fall Protection Plan**

40.	Was the fall protection plan prepared by a qualified person? [29 CFR 1926.502(k)(1)]	Y	N	N/A	??
	Note: The fall protection plan option is available only to employees engaged in leading-edge work, precast concrete erection work, or residential construction work who can demonstrate that it is infeasible or it creates a greater hazard to use conventional fall protection equipment.				
41.	Is the fall protection plan developed specifically for the site where the <b>leading-edge</b> work, precast concrete work, or residential construction work is being performed?  [29 CFR 1926.502(k)(1)]	Y	N	N/A	??
42.	Is the fall protection plan up to date? [29 CFR 1926.502(k)(1)]	Y	N	N/A	??
43.	Does a qualified person approve all changes to the fall protection plan? [29 CFR 1926.502(k)(2)]	Y	N	N/A	??
44.	Is a copy of the fall protection plan, with all approved changes, maintained at the job site? [29 CFR 1926.502(k)(3)]	Y	N	N/A	??
45.	Does a <b>competent person</b> supervise the implementation of the fall protection plan? [29 CFR 1926.502(k)(4)]	Y	N	N/A	??
46.	Does the fall protection plan document why conventional fall protection systems are infeasible or why their use would create a greater hazard? [29 CFR 1926.502(k)(5)]	Y	N	N/A	??
	<b>Note:</b> Conventional systems include guardrail systems, personal fall arrest systems, or safety nets systems.				
47.	Does the fall protection plan include other written measures that will be taken to reduce or eliminate the fall hazard for workers who are not protected by the conventional fall protection systems?  [29 CFR 1926.502(k)(6)]	Y	N	N/A	??

Note: For example, the employer could discuss the

extent to which scaffolds, ladders, or vehicle-mounted work platforms can provide a safer working surface and reduce the hazard of falling.

48. Does the fall protection plan identify each location where conventional fall protection methods cannot be used?
[29 CFR 1926.502(k)(7)]

Y N N/A ??

49. Are locations classified as controlled-access zones if conventional fall protection methods cannot be used?
[29 CFR 1926.502(k)(7)]

Y N N/A ??

50. Where no alternative measure has been implemented, has a safety-monitoring system been implemented? [29 CFR 1926.502(k)(8)]

Y N N/A ??

51. Does the fall protection plan include a statement that identifies each student or employee who is designated to work in controlled-access zones? [29 CFR 1926.502(k)(9)]

Y N N/A ??

**Note:** No other employees may enter controlled-access zones.

52. If a fall or other serious incident occurs, are circumstances investigated to determine whether changes need to be implemented in the fall protection plan (e.g., new practices, procedures, or training)?
[29 CFR 1926.502(k)(10)]

Y N N/A ??

#### **Definitions:**

Competent person: one qualified in the following areas: (a) The nature of fall hazards in the work area; (b) The correct procedures for erecting, maintaining, disassembling, and inspecting the fall protection systems; (c) The use and operation of guardrail systems, personal fall arrest systems, safety net systems, warning line systems, safety monitoring systems, controlled-access zones, and other protection; (d) The role of each person in the safety monitoring system; (e) the limitations on the use of mechanical equipment during work on low-sloped roofs; (f) The correct procedures for handling and storing equipment and materials and erecting overhead protection; (g)The role of each person in fall protection plans; and (h) the OSHA fall protection standard. Controlled-access zone: an area in which certain work (e.g., overhand bricklaying) may take place without guardrail systems, personal fall arrest systems, or safety net systems. Access to the zone is controlled. (See this checklist for the requirements.)

**Leading edge:** the edge of a floor, roof, or formwork for a floor or other walking/working surface (such as the deck) that changes location as additional floor, roof, decking, or formwork sections are placed, formed, or constructed. A leading edge is considered to be an "unprotected side and edge" during periods when it is not actively and continuously under construction.

Personal fall arrest system: a system used to stop an employee's fall. It consists of an anchorage, connectors, a body belt, or body harness and may include a lanyard, deceleration device, lifeline, or combinations of these. (See the <a href="Fall Protection-Part 2">Fall Protection-Part 2</a> checklist for requirements.)

Safety-monitoring system: a safety system in which a competent person is responsible for recognizing and warning persons of fall hazards. (See this checklist for the requirements.)

Warning line system: a barrier erected on a roof that (a) warns employees and students that they are approaching an unprotected roof side or edge, and (b) designates an area in which roofing work may take place without a guardrail, body belt, or safety net system to protect persons in the area. (See the <a href="Fall Protection-Part 2">Fall Protection-Part 2</a> checklist for requirements.)

Information
Name of Location:
Date of inspection:
Career-Technical program/course/room:
Signature of inspector:

## Fire Protection and Prevention for Construction

**Self-Inspection Checklist** 

**Guidelines:** This checklist covers selected construction regulations issued by the U.S. Department of Labor, Occupational Safety and Health Administration (OSHA) under 29 CFR 1926. It applies to temporary worksites associated with construction, alteration, demolition, and repair including painting and decorating. Fixed facilities, such as Career-Technical educational classrooms, are not covered by the construction regulations. This checklist covers fire protection and prevention for construction sites. The regulations cited apply only to private employers and their employees, unless adopted by a State agency and applied to other groups such as public employees. A **yes** answer to a question indicates that this portion of the inspection complies with the OSHA or U.S. Environmental Protection Agency (EPA) standard, or with a nonregulatory recommendation.

			Ple	ase Ci	rcle
Gene	ral Requirements				
1.	Is access to firefighting equipment maintained at all times at construction sites? [29 CFR 1926.150(a)(2)]	Y	N	N/A	??
2.	Is firefighting equipment conspicuously located at construction sites? [29 CFR 1926.150(a)(3)]	Y	N	N/A	??
3.	Is firefighting equipment periodically inspected and maintained in operating condition at construction sites? [29 CFR 1926.150(a)(4)]	Y	N	N/A	??
4.	Is a fire extinguisher, rated not less than 2A, <b>or</b> a 55-gallon open drum of water with two fire pails provided for each 3,000 square feet of protected building area? [29 CFR 1926.150(c)(1)(i) and (ii)]	Y	N	N/A	??

5. Is the travel distance to the fire extinguisher or drum of water 100 feet or less? Y N N/A ?? [29 CFR 1926.150(c)(1)(i)] Note: A 1/2-inch diameter garden-type hose line (100 feet in length or less and equipped with a nozzle) may be substituted for a 2A-rated fire extinguisher, provided it can discharge at least 5 gallons per minute with a minimum hose stream range of 30 feet horizontally. The garden-type hose lines must be mounted on conventional racks or reels and must be able to reach all points in the area. [29 CFR 1926.150(c)(1)(iii)] 6. Are one or more fire extinguishers, rated not less than 2A, provided on each floor? Y N N/A ?? [29 CFR 1926.150(c)(1)(iv)] 7. At construction sites involving multistory buildings, is at least one fire extinguisher located Y N N/A ?? adjacent to the stairway? [29 CFR 1926.150(c)(1)(iv)] 8. Are fire extinguishers and water drums protected from freezing? Y N N/A ?? [29 CFR 1926.150(c)(1)(v)] 9. If more than 5 gallons of flammable or combustible liquids or 5 pounds of flammable Y N N/A ?? gas are present, is a fire extinguisher, rated not less than 10B, provided within 50 feet? [29 CFR 1926.150(c)(1)(vi)] Note: This requirement does not apply to the integral fuel tanks of motor vehicles. 10. Are portable fire extinguishers selected according to the classes of anticipated fires Y N N/A ?? and size and degree of hazards? [29 CFR 1926.150(c)(1)(x) and N.J.A.C. 5:18-3.4(f)1] **Fire Prevention** 11. Is internal-combustion-engine-powered equipment located so that the exhausts are well away Y N N/A ?? from combustible materials? [29 CFR 1926.151(a)(2)] 12. When internal combustion engine exhausts are piped outside the building under construction, Y N N/A ?? is a clearance of at least 6 inches maintained

between such piping and combustible material?

13	Is stability maintained when combustible materials are piled? Are piles lower than 20 feet? [29 CFR 1926.151(c)(1)]	Y	N	N/A	??
14	Are weeds and grass kept down and a regular procedure provided for the periodic cleanup of the entire area? [29 CFR 1926.151(c)(3)]	Y	N	N/A	??
15	Are outdoor combustible materials stored more than 10 feet from a building or structure? [29 CFR 1926.151(c)(5)]	Y	N	N/A	??
16	Are indoor materials stored so that they do not obstruct or adversely affect the means of exit? [29 CFR 1926.151(d)(1)]	Y	N	N/A	??
17	Are indoor materials stored, handled, and piled to minimize the spread of fire and permit convenient access for firefighting? [29 CFR 1926.151(d)(2),(3),(4)]	Y	N	N/A	??
18	Are indoor materials stored so that a clearance of at least 36 inches is maintained between the top level of stored materials and the sprinkler deflectors? [29 CFR 1926.151(d)(5)]	Y	N	N/A	??
19	Is proper clearance maintained around lights and heating units to prevent ignition of combustible materials? [29 CFR 1926.151 (d)(6)]	Y	N	N/A	??
20	Is a clearance of at least 24 inches maintained around the path of travel of fire doors, unless a barricade is provided? [29 CFR 1926.151 (d)(7)]	Y	N	N/A	??
21	Are materials stored more than 36 inches away from a fire door opening? [29 CFR 1926.151(d)(7)]	Y	N	N/A	??
Temp	orary Heating Devices				
	And become now, beating day, itt				

22. Are temporary heating devices stored away from

Y N N/A ??

flammable and combustible materials?

Information
Name of Location:
Date of inspection:
Career-Technical program/course/room:
Signature of inspector:

# Fire Protection for Cooking Areas Self-Inspection Checklist

**Guidelines:** This checklist covers selected regulations from the U.S. Department of Labor, Occupational Safety and Health Administration (OSHA) General Industry standards 29 CFR 1910.160. The regulations cited apply only to private employers and their employees, unless adopted by a State agency and applied to other groups such as public employees. Recommendations from the National Fire Protection Agency (NFPA) standards have also been included. A **yes** answer to a question indicates that this portion of the inspection complies with the OSHA and U.S. Environmental Protection Agency (EPA) standard, or with a non regulatory recommendation.

			Ple	ase Ci	rcle
1.	Is cooking equipment that produces smoke or grease-laden vapors equipped with an exhaust system? [NFPA 96]	Y	N	N/A	??
2.	Is the exhaust system in operation during all periods of cooking? [NFPA 1]	Y	N	N/A	??
3.	Are all interior surfaces of the exhaust system reasonably accessible for cleaning and inspection? [NFPA 96]	Y	N	N/A	??
4.	Are kitchen exhaust systems cleaned to bare metal at frequent intervals to prevent surfaces from becoming heavily contaminated with grease or oily sludge? [NFPA 96]	Y	N	N/A	??
	<b>Note:</b> Thorough cleaning of ducts, hoods, and fans shall require scraping, brushing, or other positive cleaning methods.				
5.	Is an approved fixed automatic fire suppression system installed in all hoods and connecting hood and duct systems? Does it provide surface protection for all cooking appliances and equipment that may be a source of ignition in or under the hood? [NFPA 1 and 96]	Y	N	N/A	??

6. Is the fixed automatic fire suppression system inspected at least annually and whenever the system is inoperative? Y N N/A ?? [29 CFR 1910.160(b)(2) and (b)(6)] 7. Are fixed automatic fire suppression system inspections made only by properly trained and qualified personnel? Y N N/A ?? [29 CFR 1910.160(b)(2) and (b)(6)] 8. Are all fusible links and fusible link sprinkler heads replaced annually? [NFPA 1] N N/A ?? 9. Is at least one manual station provided for the discharge activation of each fixed extinguishing system? N N/A ?? [29 CFR 1910.160(b)(15) 10. Does the extinguishing system automatically shut off all sources of fuels and heat to all equipment requiring N N/A ?? protection by that extinguishing system? [NFPA 1] 11. Does the activation of an automatic extinguishing system activate an audible alarm or visual indicator that shows N N/A ?? that the system has been activated? [NFPA 96] 12. Are instructions for manually operating the extinguishing system posted conspicuously in the kitchen and reviewed N N/A ?? periodically with the employees? [NFPA 1] 13. Is operation of cooking equipment prohibited when the extinguishing system or exhaust system is non operational Y N N/A ?? or otherwise impaired? [NFPA 1] 14. Is at least one portable fire extinguisher available with a minimum of a 40-B rated sodium bicarbonate or Y N N/A ?? potassium bicarbonate dry-chemical extinguisher or a K-type fire extinguisher? [NFPA 10] 15. Is the portable fire extinguisher located not more than 30 feet from the cooking area? [NFPA 10] Y N N/A ??

Information
Name of Location:
Date of inspection:
Career-Technical program/course/room:
Signature of inspector:

### **Fixed Ladders**Self-Inspection Checklist

**Guidelines:** This checklist covers regulations issued by the U.S. Department of Labor, Occupational Safety and Health Administration (OSHA) under the general industry standard 29 CFR 1910.27. It applies to fixed ladders between the pitch range of 60E to 90E of the horizontal. Fixed ladders in the range of 75Eto 90Eof the horizontal are preferred. The regulations cited apply only to private employers and their employees, unless adopted by a State agency and applied to other groups such as public employees.

This checklist does not address fixed ladders with cages, baskets, wells, hatch covers, landing platforms, or ladders exceeding 20 feet in height (see 29 CFR 1910.27). It also does not address fixed ladders associated with construction sites (see 29 CFR 1926.1051 and 1926.1053). Consult the OSHA regulations for requirements in these situations.

						_
			Ple	ase Ci	rcle	
1.	Is the distance between rungs 12 inches or less and uniform throughout the length of the ladder? [29 CFR 1910.27(b)(1)(ii)]	Y	N	N/A	??	
2.	Is the minimum clear length of rungs or cleats at least 16 inches? [29 CFR 1910.27(b)(1)(iii)]	Y	N	N/A	??	
3.	Are the rungs, cleats, and steps free of splinters, sharp edges, burrs, or other projections that are hazards? [29 CFR 1910.27(b)(1)(iv)]	Y	N	N/A	??	
4.	Are the rungs of ladders designed so that the foot cannot slip off the end? [29 CFR 1910.27(b)(1)(v)]	Y	N	N/A	??	
5.	Are the rungs of metal ladders at least three-fourths of one inch in diameter? [29 CFR 1910.27(b)(1)(i)]	Y	N	N/A	??	
	Note: If the ladder is embedded in concrete and serves as an access to pits or other atmospheres that cause corrosion					

and rusting, the rungs must be at least one inch in diameter or be painted or treated to resist corrosion and rusting. [29 CFR 1910.27(b)(7)(i)]

- 6. Are the rungs of wood ladders at least 1-1/8 inches in diameter? [29 CFR 1910.27(b)(1)(i)]

  Y N N/A ??
- Do siderails that might be used as a climbing aid provide adequate gripping surface without sharp edges, splinters, or burrs? [29 CFR 1910.27(b)(2)]
- Are metal ladders painted or treated to protect them from corrosion and rusting when location demands?
   Y N N/A ??
   [29 CFR 1910.27(b)(7)(i)]
- 9. Are wood ladders treated with a nonirritating preservative when used under conditions that may cause decay?

  [29 CFR 1910.27(b)(7)(ii)]
- 10. Is the perpendicular distance from the center line of the rungs to the nearest permanent object on the climbing side Y N N/A ?? of the ladder 36 inches for a pitch of 76° and 30 inches for a pitch of 90°? [29 CFR 1910.27(c)(1)]

Note: The intent of this provision is to prevent the climber from bumping his or her head or shoulder on an object while climbing or descending the ladder.

11. Is the distance from the center line of the rung, cleat, or step to the nearest permanent object behind the ladder at least 7 inches? [29 CFR 1910.27(c)(4)]

Note: The purpose of this provision is to give adequate clearance so that the climber's foot does not strike an object between the wall and the ladder and cause a fall.

12. Is the distance from the center line of the grab bar to the nearest permanent object behind the grab bar at least YNN/A?? 4 inches? [29 CFR 1910.27(c)(5)]

Note: The purpose of this provision is to ensure that the climber can grab the bar quickly and easily.

13. Is the step-across distance from the nearest edge of the ladder to the nearest edge of the equipment or structure not more than 12 inches and not less than 2-1/2 inches? [29 CFR 1910.27(c)(6)]

Note: If the step-across distance is greater than 12 inches, a landing platform of at least 24 inches wide and 30 inches long must be provided with standard railings and toeboards. Consult the OSHA regulations 29 CFR 1910.27(d)(2)(ii) for requirements.

Y N N/A ??

14. Are the siderails of ladders extended at least 3-1/2 feet above the landing? [29 CFR 1910.27(d)(3)]

Y N N/A ??

Note: The purpose of this standard is to give the climber something to hold onto while getting off and onto the ladder.

15. Are all ladders inspected regularly and maintained in a safe condition? [29 CFR 1910.27(f)]

Y N N/A ??

Information
Name of Location:
Date of inspection:
Career-Technical program/course/room:
Signature of inspector:

### Fixed Stairs Self-Inspection Checklist

**Guidelines:** This checklist covers regulations issued by the U.S. Department of Labor, Occupational Safety and Health Administration (OSHA) under the general industry standard 29 CFR 1910.24. It applies to interior and exterior stairs around machinery, tanks, and other equipment, and stairs leading to or from floors, platforms, or pits. It does not apply to stairs used for fire exit purposes. It also does not address fixed stairs associated with construction sites. Consult the OSHA regulations 29 CFR 1926.1051 and 1926.1052 for construction site requirements. The regulations cited apply only to private employers and their employees, unless adopted by a State agency and applied to other groups such as public employees.

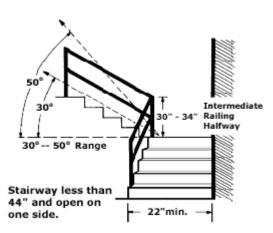
**Please Circle** 

1. Are fixed stairs (rather than ladders or other means of access) provided where access to elevation is necessary on a daily or regular basis? [29 CFR 1910.24(b)]

Y N N/A ??

2. Do fixed stairs have a minimum width of 22 inches? [29 CFR 1910.24(d)] (see Figure)

Y N N/A ??



3. Are fixed stairs installed at angles to the horizontal between 30° and 50°? [29 CFR 1910.24(e)] (see previous Figure)

Y N N/A ??

4. Are all treads reasonably slip-resistant with the front

	protruding edge of the tread of a nonslip finish? [29 CFR 1910.24(f)]	Y	N	N/A	??
5.	Do fixed stairs have a uniform rise height and tread width throughout the flight of stairs? [29 CFR 1910.24(f)]	Y	N	N/A	??
6.	Are stairway landing platforms no less than the width of the stairway and a minimum of 30 inches long measured in the direction of travel? [29 CFR 1910.24(g)]	Y	N	N/A	??
7.	Are standard railings provided on all open sides of exposed stairways and stair platforms? [29 CFR 1910.24(h)] (see checklist <b>Guarding Floors, Stairs, and Other Openings</b> )	Y	N	N/A	??
8.	Is a vertical clearance above the stair tread to an overhead obstruction that is at least 7 feet measured from the leading edge of the tread? [29 CFR 1910.24(i)]	Y	N	N/A	??

Information
Name of Location:
Date of inspection:
Career-Technical program/course/room:
Signature of inspector:

## Flammable and Combustible Liquids

**Self Inspection Checklist** 

**Guidelines:** This checklist covers the storage and use of **flammable** or **combustible liquids** in drums or other containers not exceeding 60 gallons individual capacity. **Class I** or **Class II liquids** in fuel tanks, as well as transient inventories of paints and varnishes, and storages exceeding 60 gallons are covered in other checklists.



Questions marked with this symbol may require the help of an outside expert.

Dispensing and Use		PI	ease (	Circle
<ol> <li>Are only approved pumps, drawing from the top of the storage containers, used to transfer flammable liquids? [29 CFR 1910.106(e)(2)(iv)(d) and 29 CFR 1926.152(e)(3 &amp; 5)]</li> </ol>	Y	N	N/A	??
<ol> <li>Are only approved self-closing valves or faucets used in gravity transfer of flammable liquids from storage containers? [29 CFR 1910.106(e)(2)(iv)(d) and 29 CFR 1926.152(e)(3)]</li> </ol>	Y	N	N/A	??
<ol> <li>Is air or gas pressure prohibited for transfer of flammable or combustible liquids unless the tank, drum or containers has been approved as a pressure vessel?</li> <li>[29 CFR 1910.106(e)(2)(iv)(d) and NFPA 30]</li> </ol>	Y	N	N/A	??

4.	Are containers and portable tanks used for <b>flammable liquids</b> electrically bonded or grounded during transfers? [29 CFR 1926.152(e)(2) and 29 CFR1910.106(e)(3)(vi)]	Y	N	N/A	??
5.	Are leaks and spills of <b>flammable</b> or <b>combustible liquids</b> disposed of promptly and safely? [29 CFR 1926.152(f)(2)]	Y	N	N/A	??
6.	Are spills of <b>flammable</b> or <b>combustible liquids</b> cleaned up promptly? [29 CFR 1910.106(e)(9)(i)]	Y	N	N/A	??
7.	Is the use of flames or sources of ignition prohibited in areas where flammable vapors may be present? [NFPA 30]  Note: 29 CFR 1926.152(f)(3) requires a distance of at least 50 feet between any source of ignition and flammable liquids.	Y	N	N/A	??
Stora	ge and Use Quantities				
8.	Is storage of <b>flammable</b> and <b>combustible liquids</b> limited to that required for current activities and maintenance? [NFPA 30]	Y	N	N/A	??
9.	Outside of <b>approved</b> cabinets or storage rooms, are containers of <b>Class I liquids</b> limited to a capacity of one gallon, or two gallons, if safety cans are used? [NFPA 30: 4-5.5.2]	Y	N	N/A	??
10	. Are fewer than 10 gallons of <b>Class I</b> and <b>Class II liquids</b> stored outside of an <b>approved</b> storage cabinet or interior storage room (except in safety cans)? [NFPA 30 4-5.5.3]	Y	N	N/A	??

11. Are fewer than 25 gallons of **flammable liquids** stored in safety cans outside of an **approved** storage cabinet or interior storage room?
[NFPA 30: 4-5.5.4 and 29 CFR 1926.152(b)(1)]

Y N N/A ??

12. Are fewer than 60 gallons of **Class IIIA liquids** stored outside of an **approved** storage cabinet or interior storage room? [NFPA 30 4-5.5.5]

**Note:** OSHA under 29 CFR 1926.152(b)(1) does not permit more than 25 gallons of **combustible liquids** stored outside of an **approved** storage cabinet or interior storage room.

### **Design and Capacity of Containers**

Y N N/A ??

13. Are only **approved** containers used for storing **flammable** or **combustible liquids**?
[29 CFR 1910.106(d)(2)(i)]

Note: All gasoline must be stored in approved containers.

Y N N/A ??

14. Are **flammable** and **combustible liquid** containers stored in accordance with the requirements of Table 1? [29 CFR 1910.106(d)(2)(iii)]

Table 1: Maximum Allowable Size of Containers and Portable Tanks									
Container Type*	Flan	nmable Liq	Combustible liquid						
	Class IA	Class IB	Class IC	Class II	Class III				
Glass or approved plastic Metal (other than DOT drums) Safety cans Metal drums (DOT specifications) Approved portable tanks	1 pt 1 gal 2 gal 60 gal 660 gal	1 pt 5 gal 5 gal 60 gal 660 gal	1 gal 5 gal 5 gal 60 gal 660 gal	1 gal 5 gal 5 gal 60 gal 660 gal	1 gal 5 gal 5 gal 60 gal 660 gal				

<sup>\*</sup>Note: Container exemptions: medicines, beverages, foodstuffs, cosmetics, and other common consumer items, when packaged according to commonly accepted practices.

### of Storage Cabinets

15.	Is storage in cabinets restricted to not more than 60 gallons of <b>Class I</b> or <b>Class II liquids</b> and not more than 120 gallons of <b>Class III liquids</b> ? [29 CFR 1910.106(d)(3)(i) and 29 CFR 1926.152(b)(3)]	Y	N	N/A	??
16.	Are all cabinets labeled in conspicuous lettering:  "FLAMMABLE-KEEP FIRE AWAY"?  [29 CFR 1910.106(d)(3)(ii) and 29 CFR 1926.152(b)(2)(iii)]	Y	N	N/A	??
17.	Are metal cabinets constructed so that the top, sides and door are at least #18 gauge sheet iron and double spaced wall with 1-1/2 inch air space? [29 CFR 1910.106(d)(3)(ii)(a)]	Y	N	N/A	??
18.	Is the door provided with a three point lock and a sill raised at least 2 inches above the bottom of the cabinet? [29 CFR 1910.106(d)(3)(ii)(a)]	Y	N	N/A	??
19.	Are wooden cabinets constructed so that the bottom, sides and top are of <b>approved</b> grade plywood at least 1 inch thick? [29 CFR 1910.106(d)(3)(ii)(b) and 29 CFR 1926.152(b)(2)(I)]	Y	N	N/A	??
20.	Are all wooden cabinet joints rabbetted and fastened in two directions with flat head wood screws? [29 CFR 1910.106(d)(3)(ii)(b) and 29 CFR 1926.152(b)(2)(I)]	Y	N	N/A	??
21.	When more than one door is used on wooden cabinets, is there a rabbetted overlap of not less than 1 inch? [29 CFR 1910.106(d)(3)(ii)(b) and 29 CFR 1926.152(b)(2)(I)]	Y	N	N/A	??

22. Are no more than three (3) cabinets located in one fire area? [NFPA 30]

Y N N/A ??

23. Are cabinet vents sealed unless vented to the outdoors? [NFPA 30]

### **Design and Construction of Inside Storage Rooms**

Y N N/A ??

24. Are openings to other rooms or buildings from **flammable/combustible liquids** storage rooms provided with a noncombustible liquid-tight raised sill or ramp at least 4 inches in height?
[29 CFR 1910.106(d)(4)(i) and 29 CFR 1926.152(b)(4)(ii)]

**Note:** Alternatively, the floor of the storage area shall be at least 4 inches below the surrounding floor.

Y N N/A ??

25. Are openings to storage rooms provided with **approved** self-closing fire doors? [29 CFR 1910.106(d)(4)(i) and 29 CFR 1926.152(b)(4)(ii)]

Y N N/A ??



26. Does storage in inside rooms comply with the requirements of Table 2? [29 CFR 1910.106(d)(4)(ii) and 29 CFR 1926.152(b)(4)(iv)]

Table 2: Storage in Inside Rooms								
Fire Protection	Fire	Maximum	Total Allowable					
Provided <sup>1</sup>	Resistance	Size	Quantities <sup>2</sup>					
Yes	2 hours	500 sq. ft.	10					
No	2 hours	500 sq. ft.	5					
Yes	1 hour	150 sq. ft.	4					
No	1 hour	150 sq. ft.	2					

<sup>&</sup>lt;sup>1</sup>Fire protection system shall be sprinkler, water spray, carbon dioxide, or other system.

<sup>&</sup>lt;sup>2</sup>(gals/sq. ft/floor area)

27. Is the room liquid tight where the wall joins the floor? [29 CFR 1910.106(d)(4)(i) and 29 CFR 1926.152(b)(4)(ii)]

Note: A permissible alternative to the sill or ramp is an open-grated trench inside the room which drains to a safe location.

28. Is the electrical wiring and equipment located inside the storage room especially designed to prevent possible ignition of any released flammable vapors? [29 CFR 1910.106(d)(4)(iii) and 29 CFR 1926.152(d)(d)(v)

Note: Anything which looks like normal household wiring including switches, plugs, lighting or any normal equipment such as radios are not permitted.

29. Is every inside storage room provided with either a gravity or mechanical exhaust ventilation system? [29 CFR 1910.106(d)(4)(iv) and 29 CFR 1926.152(b)(4)(vi)]

30. Does the ventilation system have an exhaust not more than 12 inches off the floor? [29 CFR 1926.152(b)(4)(vi)]

31. Does the ventilation system provide for a complete change of air within the room at least six times per hour? [29 CFR 1910.106(d)(4)(iv) and 29 CFR 1926.152(b)(4)(vi)]

32. If a mechanical exhaust system is used, is the switch located outside of the door? [29 CFR 1910.106(d)(4)(iv) and 29 CFR 1926.152(b)(4)(vi)]

Y N N/A ??

Y N N/A ??

33. Are ventilation equipment and the lighting fixtures operated by the same switch?

34. When gravity ventilation is provided, are the fresh air intake as well as the exhaust outlet from the room located on the exterior of the building in which the room is located?  [29 CFR 1910.106(d)(4)(iv) and 29 CFR 1926.152(b)(4)(vi)]	Y	N	N/A	??
35. Is there a 3 foot wide clearance in the aisle in every storage room? [29 CFR 1910.106(d)(4)(v)]	Y	N	N/A	??
36. Is stacking of 30 gallon capacity containers prohibited? [29 CFR 1910.106(d)(4)(v)]	Y	N	N/A	??
General Storage Inside and Outside Buildings				
37. Is the storage of <b>flammable</b> or <b>combustible liquids</b> prohibited near exits, stairways, or areas normally used for the safe exit of people? [29 CFR 1910.106(d)(5)(I)]	Y	N	N/A	??
38. Is the storage of <b>flammable</b> or <b>combustible liquids</b> prohibited in office areas except that required for maintenance and operation of building and operation of equipment? [29 CFR 1910.106(d)(5)(iii)] Note: Permitted materials shall be stored in safety cans, in closed metal containers inside storage cabinets, or	Y	N	N/A	??
in an inside storage room that does not open into public areas of the building.				
39. Are portable fire extinguishers available at locations where <b>flammable</b> or <b>combustible liquids</b> are stored? [29 CFR 1910.106(d)(7) and 29 CFR 1926.152(d)(1)]	Y	N	N/A	??

**Note:** OSHA requires that at least one portable fire extinguisher having a rating of not less than 20-B units be located not less than 25 feet, nor more than 75 feet, from any **flammable liquid** storage area located outside.

( 	Are containers of <b>flammable</b> and <b>combustible liquids</b> closed when not in use? [29 CFR 1910.106(e)(2)(ii) and 29 CFR 1926.152(f)(1)]	Y	N	N/A	??
1	Are combustible waste materials and residues kept to a minimum, stored in covered metal receptacles, and disposed of daily? [29 CFR 1910.106(e)(9)(iii)]	Y	N	N/A	??
(	Are <b>flammable</b> and <b>combustible liquids</b> stored in their original container or in an <b>approved</b> safety can? [NFPA 30]	Y	N	N/A	??
1	Unless the original container is designed to be used, are flammable or combustible liquids transferred to an approved safety can prior to use? [NFPA 30]	Y	N	N/A	??
	Are open flames and smoking prohibited in <b>flammable</b> or <b>combustible liquids</b> storage areas? [29 CFR 1910.106(d)(7)(iii)]	Y	N	N/A	??
I	Are storage areas for <b>flammable</b> or <b>combustible liquids</b> kept free from combustible materials? [29 CFR 1910.106(d)(iv)]	Y	N	N/A	??

## **Definitions:**

**Approved:** approved or listed by a nationally recognized testing laboratory.

Class I liquids: flammable liquids (see definition of flammable liquids).

**Class I liquids:** flammable liquids having a **flash point** below 73°F and a boiling point below 100°F. Typical Class IA liquids include: acetaldehyde, ethyl ether, methyl ethyl ether, pentane, and petroleum ether.

**Class IB liquids:** flammable liquids having a **flash point** below 73°F and having boiling points at or above 100°F. Typical Class IB liquids include: acetone, benzene, butyl acetate, denatured alcohol, ethyl alcohol, gasoline, gin (ethyl alcohol and water), heptane, hexane, isopropyl alcohol, methyl alcohol, methyl ethyl ketone, toluene, and jet fuels.

Class IC liquids: flammable liquids having flash points at or above 73°F and below 100°F. Typical Class IC liquids include: banana oil (isoamyl acetate), butyl alcohol, propyl alcohol, styrene, turpentine, and xylene.

Class II liquids: flammable liquids with flash points at or above 100°F and below 140°F. Typical Class II liquids include: diesel fuel, fuel oils, kerosene, Stoddard solvent, Anchor type car wash, and mineral spirits.

Class III liquids: flammable liquids with flash points at or above 140°F. Class III liquids are subdivided into two subclasses: Class IIIA liquids include those with flashpoints at or above 140°F and below 200°F, except any mixture having components with flashpoints of 200°F, or higher, the total volume of which make up 99% of more of the total volume of the mixture. Class IIIB liquids include those with flashpoints at or above 200°F. This section does not cover Class IIIB liquids.

Class IIIA liquids: flammable liquids with flash points at or above 140°F.

**Combustible liquid:** any liquid having a **flash point** at or above 100°F. Combustible liquids are known as Class II and Class III liquids.

**Flammable liquid:** any liquid having a **flash point** below 100°F, and have a vapor pressure not exceeding 40 psia (pounds per square inch absolute) at 100°F. Flammable liquids are known as Class I liquids and can be divided into Class IA, IB and IC.

**Flash point:** the minimum temperature in degrees Fahrenheit at which a flammable liquid will give off sufficient vapors to form an ignitable mixture with air near the surface or in the container, but will not sustain combustion.

Information
Name of Location:
Date of inspection:
Career-Technical program/course/room:
Signature of inspector:

# Food Preparation and Service--Part 1 Self-Inspection Checklist

**Guidelines:** Food preparation and service regulations are issued by State health departments and vary from State to State. This checklist uses the New Jersey Department of Health regulations as a model for assessing food preparation and service areas. Please consult your own State health department for the regulations that apply in your State. The U.S. Food and Drug Administration (FDA) also publishes a model Food Code that has been adopted by some States. The FDA Food Code might also serve as an additional reference. This checklist applies to school cafeterias and, in general, any area or operation that prepares or serves food to the public with or without charge. Although not directly applicable to general classroom activities, this checklist will be helpful in reviewing general food safety practices. Definitions of terms in bold type are provided at the end of the checklist.

	Please Circle
Food Supplies: Source, Protection, Wholesomeness, and Misbranding	
<ol> <li>Is all food in a public food preparation or service area from a source that complies with applicable State and local regulations?</li> </ol>	Y N N/A ??
<ol><li>Is all food protected against contamination and spoilage during handing, packaging, and storage and while in transit?</li></ol>	Y N N/A ??
3. Is food prepared at home prohibited in a public food preparation or service area?	Y N N/A ??
4. Is food inspected before use to ensure it is clean, wholesome, free from spoilage, free from adulteration and misbranding, and safe for human consumption?	Y N N/A ??
<ol><li>Does all hermetically sealed food (such as a sealed baby food jar) in a public food preparation or service area come</li></ol>	Y N N/A ??

only from approved food processing establishments?

6. Are all fluid milk; fluid milk products; frozen milk products; liquid, frozen, and dry eggs; and egg products pasteurized?

Y N N/A ??

7. Are pasteurized fluid milk and fluid milk products in a public food preparation and service area from a source that is in compliance with applicable State and local regulations?

Y N N/A ??

8. Are reconstituted dry milk and dry milk products only used in instant desserts and whipped products, or for cooking and baking purposes?

Y N N/A ??

9. When nondairy creaming, whitening, or whipping agents are reconstituted,

Y N N/A ??

- a. Has the storage container be sanitized?
- b. Is the storage container covered?
- c. Is the storage container one gallon or less in capacity?
- d. Has the reconstituted product been cooled throughout to 45°F or below within four hours of preparation?

- Y N N/A ??
- 10. Are all milk, milk products, and milk substitutes used for drinking purposes served from their original containers or from an approved bulk milk dispenser?
- Y N N/A ??
- 11. If multi-use pitchers are used to serve milk, milk products or substitutes,
  - a. Is their use restricted to service in beverages such as coffee, tea, cocoa, and in other items such as cereals and fruits?
  - b. Are the unused portions discarded after their use?
  - c. Is adding fresh product to the pitchers or the mixing of previously served product prohibited?
  - d. Is the milk, fluid milk products, or substitutes kept at 45°F or below while in the pitchers?

#### **Frozen Desserts**

12. Is a license obtained from the State health department for serving frozen desserts such as ice cream, soft frozen

13. Are frozen desserts such as ice cream, soft frozen desserts, ice milk, sherbets, ices, and mix in compliance with all applicable State and local laws and regulations?	Y	N	N/A	??
Shellfish				
14. Does all shellfish come from a State department of health or U.S. FDA currently certified dealer? (Names, addresses, and certification numbers should be confirmed with your local health authority).	Y	N	N/A	??
15. Does each container of unshucked or shucked shellfish have a tag that includes the dealer certification number, name of dealer, address of dealer, harvest site or bed number, harvest date, type of shellfish and quantity in package?	Y	N	N/A	??
16. Are fresh and frozen shucked oysters, clams, and mussels packed in nonreturnable containers?	Y	N	N/A	??
17. Are packages of fresh and frozen shucked oysters, clams, and mussels permanently marked with the name of the certified packer and the abbreviated name of the State?	Y	N	N/A	??
18. Are shellstock and shucked shellfish stored in the container in which they are received until the container is empty?	Y	N	N/A	??
19. Are required tags or stubs left on the shellfish container until the container is emptied?	Y	N	N/A	??
20. Are required tags or stubs on shellfish containers immediately marked with the date of receipt?	Y	N	N/A	??
21. Are required tags or stubs from shellfish containers kept on file for not less than 90 days? (to track possible occurrences of shellfish hepatitis)	Y	N	N/A	??
Eggs				
22. Are eggs clean, with shell intact and without cracks or excessive checks?	Y	N	N/A	??
23. Is blending or mixing of shell and liquid contents of the egg prohibited?	Υ	N	N/A	??

24. Are **pooled eggs** cooked immediately? Y N N/A ?? 25. Is the use of raw eggs prohibited as a major component in the preparation of uncooked or undercooked Y N N/A ?? ready-to-eat foods? **Emergencies** 26. If an emergency has occurred, has the person in charge kept **potentially hazardous food** from being held outside Y N N/A ?? of the safe temperature range? Food Preparation--General 27. Have precautions been taken to prevent food contamination from dust, flies, rodents, and other vermin; unclean utensils Y N N/A ?? and work surfaces; unnecessary handling; coughs and sneezes; flooding, drainage, and overhead leakage; poisonous and toxic materials; and any other source? 28. Are refrigeration, hot food storage, and display facilities located to assure required temperatures during storage, Y N N/A ?? preparation, transportation, display, and service? 29. Does each refrigerator have an **indicating thermometer** accurate to  $\pm$ /- 3°F? Y N N/A ?? 30. Does the refrigerator thermometer provide the true air temperature (not the blower temperature)? Y N N/A ?? 31. Does each hot food facility storing potentially hazardous **food** have an **indicating thermometer** accurate to  $\pm$  4 3°F? Y N N/A ?? 32. If the hot food thermometer is not built in, is a **product** thermometer readily available? Y N N/A ?? 33. If a **stem-type thermometer** is used, is it first sanitized to prevent contamination? (An example of contamination Y N N/A ?? is when a thermometer is removed from a pocket or drawer and is put directly into the product without being sanitized) 34. Has a **stem-type thermometer** been used to monitor the proper internal cooking, cooling, reheating, hot holding, Y N N/A ?? or cold holding temperatures of all hazardous foods? All stages must be monitored to prevent foodborne illness.

35.	Is perishable food maintained at temperatures low enough to prevent spoilage?	Y	N	N/A	??
36.	Is <b>potentially hazardous food</b> kept at 45°F or below or 140°F or above?	Y	N	N/A	??
37.	Has frozen food been maintained in its frozen state (0°F or below) until removed from storage for preparation?	Y	N	N/A	??
38.	Are large quantities of <b>potentially hazardous food</b> that are to be refrigerated after preparation rapidly cooled (120°F to 70°F within two hours) using one of the following methods?	Y	N	N/A	??
	a. Shallow pans that are 4 inches deep or less.				
	b. Quick-chilling refrigeration equipment.				
	c. External water circulation to the food container.				
39.	Has <b>potentially hazardous food</b> during the cooling process been covered or the containers stacked?	Y	N	N/A	??
40.	Has the temperature of any working container of mayonnaise or salad dressing been kept at 45°F or below? (If no, then discard after three hours.)	Y	N	N/A	??
41.	When <b>potentially hazardous food</b> is served hot and is placed on display, except for rare roast beef, is the display temperature at 140°F or above?	Y	N	N/A	??
42.	When rapidly prechilled food is put on display, is the temperature maintained below 45°F, or between 45°F and 55°F for no more than four hours?	Y	N	N/A	??
43.	If hollandaise and other sauces are held at temperatures between 45°F and 140°F, are the ingredients fresh and is the sauce discarded after three hours?	Y	N	N/A	??
44.	Is frozen food defrosted using one of the following procedures?	Y	N	N/A	??
	<ul> <li>In refrigerated units at a temperature below 45°F</li> </ul>				
	<ul> <li>b. Under potable running water of a temperature of 70°F or below</li> </ul>				
	To a make manage and a				

c. In a microwave oven

d. As part of the conventional cooking process

#### **Definitions:**

**Indicating thermometer:** a thermometer that can reveal temperature by one or two degrees, as opposed to a a thermometer that reads "safe" or "danger zone."

Pooled eggs: more than one egg mixed together in one container.

**Stem-type, product thermometer:** a thermometer with a dial that reveals temperature by one or two degrees. The shaft on the thermometer can enter the product to ascertain temperature. **Potentially hazardous food:** any food that consists in whole or in part of milk or milk products, eggs, meat, poultry, fish, shellfish, edible crustacea, or other ingredients (including synthetic ingredients) in a form capable of supporting rapid and progressive growth of infectious or toxigenic microorganisms. The term does not include clean, whole, uncracked, odor-free shell eggs or foods that have a pH level of 4.6 or below or a water activity (a<sub>w</sub>) value of 0.85 or less.

Information
Name of Location:
Date of inspection:
Career-Technical program/course/room:
Signature of inspector:

# Food Preparation and Service--Part 2 Self-Inspection Checklist

**Guidelines:** : Food preparation and service regulations are issued by State health departments and vary from State to State. This checklist uses the New Jersey Department of Health regulations as a model for assessing food preparation and service areas. Please consult your own State health department for the regulations that are applicable in your State. This checklist applies to school cafeterias and, in general, any area or operation that prepares or serves food to the public with or without charge. Although not directly applicable to general classroom activities, this checklist will be helpful in reviewing general food safety practices. Definitions of terms in bold type are provided at the end of the checklist.

			Ple	ase Ci	rcle
Food	Preparation				
1.	Have all equipment and surfaces been washed and sanitized after contact with raw meat, poultry, and unpasteurized liquid eggs and fish?	Y	N	N/A	??
2.	Have hands been carefully washed after contact with any raw meat, poultry, and unpasteurized liquid eggs and fish?	Y	N	N/A	??
3.	Has proper equipment been provided to minimize direct manual contact with food?	Y	N	N/A	??
4.	Have all raw fruits and raw vegetables been thoroughly washed before being mixed with other ingredients? (Raw fruits and vegetables come in contact with soil that may have contained bacteria, spores, or been chemically treated.)	Y	N	N/A	??
5.	Except for poultry, stuffing with meat, pork, and rare whole roast beef, is <b>potentially hazardous food</b> cooked to heat all parts of the food to a temperature of at least 140°F?	Y	N	N/A	??

**Note:** Eggs prepared for individual service for immediate consumption may be served raw or cooked to a product temperature of less than 140°F.

- 6. When cooking poultry, is stuffing prohibited when the weight of the poultry exceeds two pounds before cooking? Y N N/A ?? 7. When cooking poultry and stuffing with meat, have all the parts of the food reached at least 165°F with NO Y N N/A ?? interruption of the **initial** cooking process? 8. When cooking pork, have all the parts of the food been heated to at least 150°F in a conventional oven or to at Y N N/A ?? least 170°F in a microwave oven? 9. Has the internal temperature been taken of the rare whole roast beef with a sanitized stem-type thermometer to Y N N/A ?? determine if it has reached 130°F or above? 10. If food is reheated, has it been done rapidly and within two hours to 165°F or higher throughout before being served? Y N N/A ?? 11. Are steam tables, bainmaries, warmers, and similar hot food holding facilities prohibited for the rapid reheating Y N N/A ?? of potentially hazardous foods? 12. Are all utensils, equipment, and surfaces thoroughly cleaned and sanitized before use? Y N N/A ??
- 13. Are custards, cream fillings, and similar products kept at or below 45°F, or above 140°F except during necessary periods of preparation and service?
  Y N N/A ??
- 14. Are custards, cream fillings, and similar products rapidly cooled to 45°F or below promptly after preparation?

  Y N N/A ??
- 15. Are food containers stored six inches off of the floor (except for cased food) packaged in waterproof containers, not exposed to moisture, and on movable dollies, pallets, or skids?

Y N N/A ??

#### **Food Storage**

16. Have measures been taken to avoid cross contamination from food that requires no further washing or cooking with food that requires washing or cooking? (For example, separate purchased prepared salad from raw fruits

17. Is the wet storage of shellfish prohibited?	Y	N	N/A	??
Food Display and Service				
18. Is prepared, unwrapped food on display protected by cleanable counters, service line or salad bar protector devices, cabinets, sneeze guards, display cases, containers, or similar types of protective equipment?	Y	N	N/A	??
19. Is food, once served to a customer, not served again?	Y	N	N/A	??
20. Is wrapped food (other than <b>potentially hazardous food</b> ) that has been unwrapped or become unwholesome discarded?	Y	N	N/A	??
21. Is <b>potentially hazardous food</b> in temporary buffets, smorgasbords, or salad bars held at safe temperatures?	Y	N	N/A	??
22. Is the quantity of food in temporary buffets, smorgasbords, or salad bars limited to allow a fast turnover?	Y	N	N/A	??
23. Are fresh supplies of food to temporary buffets, smorgasbords, or salad bars provided to ensure proper food rotation?	Y	N	N/A	??
24. Are unwrapped bulk foods in self-service containers easily cleanable, covered, 18 inches or less in depth, and at least 30 inches off the floor?	Y	N	N/A	??
25. Are tongs, forks, spoons, and other proper utensils provided for service to ensure minimum contact with food by customers and employees?	Y	N	N/A	??
26. Does each container of <b>potentially hazardous food</b> have its own dispensing utensil?	Y	N	N/A	??
27. Is <b>potentially hazardous food</b> displayed in such a way as to prevent cross contamination between raw and ready-to-eat products?	Y	N	N/A	??
28. If food dispensing is interrupted, are service utensils stored in the food with the dispensing utensil handle extended out of the food, stored clean and dry, or stored in running water?	Y	N	N/A	??

29. Are sugar, condiments, seasonings, and dressings provided only in <b>sanitary dispensers</b> or in individual single service packages?	Y	N	N/A	??
Food Transportation				
30. Is all <b>potentially hazardous food</b> maintained at or below 45°F <b>OR</b> at or above 140°F during transport, except if food is to be consumed within one-half hour of plating?	Y	N	N/A	??
31. Is all frozen food kept at a temperature low enough to remain frozen during transportation?	Y	N	N/A	??
32. Is all food transported in covered containers or completely wrapped, except for hanging meats and raw agricultural products that will be prepared for consumption later?	Y	N	N/A	??
33. Is the transportation vehicle clean, free of vermin, and in good condition? For example, no holes are in the floor that may allow exterior contaminates (e.g., mud) to enter the vehicle.	Y	N	N/A	??
Toxic Materials				
34. Is the storage of toxic materials in food areas limited to only those materials used to maintain sanitary conditions?	Y	N	N/A	??
35. Are toxic materials (e.g., pesticide) stored in a designated and identified separate area (such as a cabinet) and away from food?	Y	N	N/A	??
36. Are poisonous polishing materials prohibited?	Y	N	N/A	??
37. Are containers of toxic materials prominently and distinctively marked or labeled for easy identification as to contents?	Y	N	N/A	??
38. Are bactericides and cleaning compounds used in such a manner as to prevent toxic residue on food contact surfaces?	Y	N	N/A	??
39. Are toxic compounds (such as rodenticide) in powdered form distinctively colored so it is not mistaken for food or food condiments?	Y	N	N/A	??
40. Are insecticides or rodenticides applied only by State-certified applicators and in full compliance with	Y	N	N/A	??

the manufacturer's labeling?

**Note:** Often a vermin problem is incorrectly treated by the owner or another person. The law prohibits a noncertified person to treat for vermin infestation within a food preparation or service area.

#### **Definitions:**

Rinse: clear water that fulfills specified heat requirements.

**Sanitary dispenser:** a container that, when used with condiments, does not contaminate remaining products when condiment is dispensed.

**Stem-type, product thermometer:** a thermometer with a dial that reveals temperature by one or two degrees. The shaft on the thermometer can enter the product to ascertain temperature. **Potentially hazardous food:** any food that consists in whole or in part of milk or milk products, eggs, meat, poultry, fish, shellfish, edible crustacea, or other ingredients (including synthetic ingredients) in a form capable of supporting rapid and progressive growth of infectious or toxigenic microorganisms. The term does not include clean, whole, uncracked, odor-free shell eggs or foods that have a pH level of 4.6 or below or a water activity (a<sub>w</sub>) value of 0.85 or less.

Information
Name of Location:
Date of inspection:
Career-Technical program/course/room:
Signature of inspector:

# Food Preparation and Service--Part 3 Self-Inspection Checklist

**Guidelines:** Food preparation and service regulations are issued by State health departments and vary from State to State. This checklist uses the New Jersey Department of Health regulations as a model for assessing food preparation and service areas. Please consult your own State health department for the regulations that are applicable in your State. This checklist applies to school cafeterias and, in general, any area or operation that prepares or serves food to the public with or without charge. Although not directly applicable to general classroom activities, this checklist will be helpful in reviewing general food safety practices. Definitions of terms in bold type are provided at the end of the checklist.



 $m{\eta}$  Questions marked with this symbol may require the help of an outside expert.

**Please Circle** 

#### **Health and Disease Controls Food Service Personnel**

 Are persons affected with any communicable disease, boils, infected wounds, sores, acute respiratory infection, nausea, vomiting, and diarrhea prevented from working in food areas or with other food workers?

Y N N/A ??

#### **Hygiene Practices Food Service Personnel**

2. Is personal jewelry prohibited where it could contaminate or become incorporated into food?

Y N N/A ??

3. Is the use of tobacco products by food handlers and dishwashers prohibited?

Y N N/A ??

#### **Handwashing Food Service Personnel**

4. Are separate handwashing facilities provided at convenient

	locations away from food preparation areas?	Y	N	N/A	??
5.	Do employees and students wash their hands and exposed arms with soap and warm water before starting work; during work as necessary; and after smoking, eating, drinking, visiting the toilet, or handling raw food of animal origin?	Y	N	N/A	??
6.	Are employees' fingernails clean and neatly trimmed?	Y	N	N/A	??
Clothi	ng				
7.	Is clean clothing worn by all persons, including dishwashers?	Y	N	N/A	??
8.	Are extra, clean uniforms or clothing available if clothing becomes soiled?	Y	N	N/A	??
9.	Are effective hair restraints properly used to prevent contamination? For example, a hat must be sitting on the back of the head, and hair must not hang out loosely.	Y	N	N/A	??
10	Are single-use gloves used for only one task and discarded when damaged, soiled, or when interruptions occur in the operation?	Y	N	N/A	??
11	If slash-resistant gloves or cloth gloves are used, do they only come in contact with food that is subsequently cooked?	Y	N	N/A	??
12	Note: Slash-resistant gloves may be used with ready-to-eat food if the gloves have a smooth, durable, and nonabsorbent outer surface; or if the gloves are covered with a smooth, durable, nonabsorbent glove, or a single-use glove.  Are multi-use equipment and utensils made with materials that are safe, corrosion-resistant, nonabsorbent, smooth, easily cleaned, durable, dent resistant, and sturdy?	Y	N	N/A	??
_	n, Construction and Materials Food Equipment, tensils				
13	Is equipment inspected periodically and replaced, if necessary, with safe materials?	Y	N	N/A	??
14	Are food-contact surfaces of equipment and utensils (e.g., plastic mixing bowls) smooth; free of breaks, open seams, cracks and pits; easily accessible for cleaning; and in good condition?	Y	N	N/A	??

15. Are cutting boards easily cleaned and removable, nontoxic, nonabsorbent, smooth, and free of cracks, crevices, and open seams? Cutting boards need to be washed, rinsed, and sanitized since they come into direct contact with potentially hazardous foods and raw fruits and vegetables.	Y	N	N/A	??
16. Is the filter of the ventilation hood readily removable for cleaning and replacement?	Y	N	N/A	??
17. Are shelves that are not intended for food contact free of unnecessary ledges, projections, or crevices? Some shelves are elaborately designed, very deep within a cabinet, or screwed or nailed into place (rather than sealed). The above conditions make housekeeping difficult.	Y	N	N/A	??
18. Are all food-contact surfaces that are <b>NOT</b> intended for in- place cleaning readily accessible for manual cleaning and inspection?	Y	N	N/A	??
19. Are sinks and drain boards self-draining? Self-draining may occur by pitching it toward one of the sink compartments.	Y	N	N/A	??
Equipment installation and Location				
20. Is equipment (including ice makers and ice storage equipment) located away from underexposed or unprotected sewer lines, leaking water lines, or open stairwells that may cross-contaminate equipment or ice?	Y	N	N/A	??
21. Is nonportable equipment placed on tables sealed to the table or elevated by at least four inches?	Y	N	N/A	??
22. Is floor-mounted equipment sealed to the floor, or is the clearance between floor and equipment at least 6 inches?	Y	N	N/A	??
Equipment and Utensil Cleanliness				
23. After each use, is all tableware thoroughly cleaned to sight and touch?	Y	N	N/A	??
24. After each use, are all kitchenware and food-contact surfaces used in the preparation, serving, display, or storage of food thoroughly cleaned to sight and touch?	Y	N	N/A	??
25. Have all nonfood contact surfaces been thoroughly cleaned as necessary to be free of dirt and in sanitary	Y	N	N/A	??

26. Are cloths used for wiping food contact surfaces only used for that purpose to prevent cross-contamination?	Y	N	N/A	??
Equipment and Utensil Sanitation				
27. After each use, has all tableware been sanitized?	Y	N	N/A	??
28. If a spoon or other utensil has been used for tasting, is it sanitized before being used again?	Y	N	N/A	??
29. Have all kitchenware and surfaces that come in contact with <b>potentially hazardous food</b> or raw fruits or vegetables been sanitized after use or when operations are interrupted? For example, is a slicer or frozen dessert machine sanitized after the operation is closed and the next day <b>before</b> use?	Y	N	N/A	??
Methods and Facilities for Manual and Machine Washing and Sanitizing				
30. Before washing, have all equipment and utensils been flushed, scraped, or when necessary, soaked?	Y	N	N/A	??
31. Are dish tables, drainboards, or racks of adequate size to handle soiled items?	Y	N	N/A	??
32. Do dish tables, drainboards, or racks provide adequate space and distance to avoid interference of soiled items with clean items?	Y	N	N/A	??
33. Does washing remove foreign matter?	Y	N	N/A	??
34. Has the rinsing process effectively removed detergent solution and foreign matter?	Y	N	N/A	??
35. Are cleaned equipment and utensils properly sanitized?	Y	N	N/A	??
36. Have all sanitized utensils or food contact surfaces been allowed to air dry?	Y	N	N/A	??

# Methods and Facilities for Manual Washing and Sanitizing

37. For manual washing, are three sinks provided for the

wash- <b>rinse</b> -sanitize cycle?	Y	N	N/A	??
38. Are sink compartments large enough to permit <b>complete</b> immersion of the equipment and utensils intended to be cleaned?	Y	N	N/A	??
39. Do all sink compartments have provided at convenient locations a supply of hot <b>and</b> cold potable running water?	Y	N	N/A	??
40. Have all sinks been cleaned before use?	Y	N	N/A	??
41. Have equipment and utensils been thoroughly <b>rinsed</b> free of detergent and abrasives with <b>clean</b> water in the second compartment?	Y	N	N/A	??
42. Have equipment and utensils been thoroughly sanitized in the third sink?	Y	N	N/A	??
43. If using hot water (heat) as a sanitizer, is the water maintained at or above 170°F and tested periodically with a thermometer?	Y	N	N/A	??
44. If hot water is used as a sanitizer, have equipment and utensils to be sanitized been allowed to be completely immersed for at least 30 seconds in water that is 170°F?	Y	N	N/A	??
45. If chlorine is used as sanitizer, does the solution contain at least 50 parts per million of available chlorine as a hypochlorite and at a temperature of at least 75°F?	Y	N	N/A	??
46. If iodine is used as sanitizer, does the solution contain at least 12.5 parts per million available iodine, a pH not higher than 5.0 and at a temperature of at least 75°F?	Y	N	N/A	??
47. If chlorine or iodine is used as a sanitizer, are equipment and utensils immersed for at least one minute?	Y	N	N/A	??
<b>Note:</b> Other approved sanitizers are acceptable. Consult the regulations for requirements.				
48. Is a test kit or other device available that accurately measures the parts per million concentration of the sanitizer?	Y	N	N/A	??
<b>Note:</b> Sanitizers are often available in tablet form. When released in the water the water turns color. The color can then be matched against a chart.				

#### **Definitions:**

Rinse: clear water that fulfills specified heat requirements.

**Potentially hazardous food:** any food that consists in whole or in part of milk or milk products, eggs, meat, poultry, fish, shellfish, edible crustacea, or other ingredients (including synthetic ingredients) in a form capable of supporting rapid and progressive growth of infectious or toxigenic microorganisms. The term does not include clean, whole, uncracked, odor-free shell eggs or foods that have a pH level of 4.6 or below or a water activity ( $a_w$ ) value of 0.85 or less.

Information
Name of Location:
Date of inspection:
Career-Technical program/course/room:
Signature of inspector:

## Food Preparation and Service--Part 4 Self-Inspection Checklist

**Guidelines:** Food preparation and service regulations are issued by State health departments and vary from State to State. This checklist uses the New Jersey Department of Health regulations as a model for assessing food preparation and service areas. Please consult your own State health department for the regulations that are applicable in your State. This checklist applies to school cafeterias and, in general, any area or operation that prepares or serves food to the public with or without charge. A yes answer to a question indicates that this portion of the inspection complies with the OSHA and EPA standard, or with a non-regulatory recommendation. Although not directly applicable to general classroom activities, this checklist will be helpful in reviewing general food safety practices. Definitions of terms in bold type are provided at the end of the checklist.

Please Circle **Methods and Facilities for Washing and Sanitizing Machine Washing and Sanitizing** 1. When spray-type dishwashing machines are used and the machine does not perform prewashing, are equipment Y N N/A ?? and utensils flushed or scraped? 2. When spray-type dishwashing machines are used, are equipment and utensils placed in racks Y N N/A ?? or in trays to permit unobstructed application of detergent wash and clean rinse water and free draining? 3. Is the washing machine working properly, including jets, nozzles, and soap dispensers? N N/A ?? **Note:** Check flow pressure gauges and final cleanliness, and periodically have the machine serviced. 4. When hot water is used as the sanitizing agent, does the final rinse reach 160°F at the plate? N N/A ??

**Note:** Acceptable wash and finalrinse temperatures

		vary with the type of machine. Consult the regulations for more details. To ensure proper sanitization, the temperature at the final <b>rinse</b> is the most important. Other approved sanitizing agents are acceptable. Consult the regulations for requirements.				
	5.	Are thermometers located at each cycle, in good repair, and accurate to $\pm$ - 3°F?	Y	N	N/A	??
	6.	Is the dishwashing machine cleaned <b>thoroughly</b> at least once a day?	Y	N	N/A	??
Sto	orag	ge and Handling of Cleaned Equipment and Utensils				
	7.	Are food contact surfaces of equipment and utensils handled in such a manner as to prevent contamination?	Y	N	N/A	??
		<b>Note:</b> For example, food contact surfaces should not be stored on lower racks or shelves where they are subjected to floor moisture and dust.				
	8.	Are clean spoons, knives, and forks touched only by the handles to prevent cross-contamination?	Y	N	N/A	??
	9.	Are clean bowls, cups, and glasses handled so that fingers and thumbs do not contact interior surfaces or rims?	Y	N	N/A	??
	10.	Are sanitized equipment and utensils stored at least six inches from the floor and in a clean, dry place?	Y	N	N/A	??
	11.	Are sanitized equipment and utensils or <b>single-service articles</b> prohibited from storage in toilet rooms, toilet vestibules, or garbage or mechanical rooms?	Y	N	N/A	??
Sin	ıgle	-Service Articles				
	12.	Are <b>single-service articles</b> made from clean, sanitary, nontoxic, safe materials?	Y	N	N/A	??
	13.	Are <b>single-service articles</b> free of odor, color, taste, or other contamination that could be imparted to the food?	Y	N	N/A	??
	14.	Are <b>single-service articles</b> stored at least six inches above the floor on pallets, dollies, or racks, and in closed cartons or containers?	Y	N	N/A	??
	15.	Are <b>single-service articles</b> stored away from overhead sewer lines or water lines?	Y	N	N/A	??

16. Unless prewrapped, are bulk single-service articles offered with food contact surfaces inserted into holders?	Y	N	N/A	??
Sanitary Facilities and Controls				
17. Is the water supply from a potable public or private water supply system?	Y	N	N/A	??
18. Are hot and cold water under pressure offered in all areas where food is prepared and where equipment, utensils, or containers are washed?	Y	N	N/A	??
Ice				
19. Is ice made from potable water?	Y	N	N/A	??
20. Once ice is made, is it handled, transported, and stored in a sanitary manner so it is protected against contamination?	Y	N	N/A	??
21. Are ice crushers covered when not in use?	Y	N	N/A	??
22. Are sanitary containers and utensils provided for ice storage and dispensing?	Y	N	N/A	??
23. Is ice for cooling food and food containers used only for that purpose and not human consumption?	Y	N	N/A	??
Size, Installation, and Maintenance of Plumbing				
24. Does plumbing properly convey sewage and liquid wastes from the establishment to the sewerage or sewage disposal system?	Y	N	N/A	??
25. Is plumbing installed to preclude the possibility of backflow and backsiphonage?	Y	N	N/A	??
Drains				
26. Do refrigerators drains (including floor drains of walk-in refrigerators), ice storage bins, and ice machines have air gaps or air breaks between them and the drainage system to prevent backflow?	Y	N	N/A	??
Note: Direct connection is prohibited.				
27. Do drain lines of equipment discharge properly and without flooding?	Y	N	N/A	??

### **Toliet Facilities**

28. Are toilet facilities adequate (enough water closets), conveniently located, and accessible to the students and employees all the time?	Y	N	N/A	??
29. Are doors to toilet rooms tight fitting and self closing?	Y	N	N/A	??
<b>Note:</b> If vermin such as flies enter an establishment, they can be mechanical vectors. Cross-contamination can occur if flies come in contact with body fluids and then with clean equipment, food contact surfaces, or food.				
30. Are toilet facilities (including toilet rooms and fixtures) clean, in good repair, and free of objectionable odors?	Y	N	N/A	??
31. Is toilet tissue supplied at each toilet <b>ALL THE TIME</b> ?	Y	N	N/A	??
32. Are signs posted to remind staff to wash their hands before returning to work?	Y	N	N/A	??
Handwashing Facilities				
33. Are handwashing facilities of adequate size, in good repair, and conveniently located?	Y	N	N/A	??
34. Is a handwashing sink in the food preparation area?	Υ	N	N/A	??
35. Is water available between 90°F and 105°F?	Y	N	N/A	??
36. Is an adequate supply of hand cleansing soap or detergent available, as well as sanitary towels or another approved hand-drying device?	Y	N	N/A	??
37. Is a waste receptacle provided?	Y	N	N/A	??

## **Definitions:**

**Rinse:** clear water that fulfills specified heat requirements. **Single service articles:** cups, containers, lids or closures, plates, knives, forks, spoons, stirrers, paddles, straws, place mats, napkins, doilies, wrapping materials, and all similar articles that are

intended by the manufacturers and generally recognized by the public to be for one usage only and then discarded.

Information
Name of Location:
Date of inspection:
Career-Technical program/course/room:
Signature of inspector:

# **Food Preparation and** Service--Part 5 **Self-Inspection Checklist**

Guidelines: : Food preparation and service regulations are issued by State health departments and vary from State to State. This checklist uses the New Jersey Department of Health regulations as a model for assessing food preparation and service areas. Please consult your own State health department for the regulations that are applicable in your State. This checklist applies to school cafeterias and, in general, any area or operation that prepares or serves food to the public with or without charge. Although not directly applicable to general classroom activities, this checklist will be helpful in reviewing general food safety practices. A yes answer to a question indicates that this portion of the inspection complies with the Occupational Safety and Health Administration (OSHA) and U.S. Environmental Protection Agency (EPA) standard, or with a non regulatory recommendation. Definitions of terms in bold type are provided at the end of the checklist.



 $lack {f \Gamma}$  Questions marked with this symbol may require the help of an outside expert.

			Ple	ase Ci	rcle
Garba	age and Rubbish Disposal Facilities				
1.	Are all garbage and rubbish containers leak proof, non- absorbent, and constructed of durable metal or other approved material?	Y	N	N/A	??
2.	Are waste containers, while being stored, covered with tight-fitting lids?	Y	N	N/A	??
3.	Are kitchen waste containers emptied daily?	Y	N	N/A	??
4.	Are waste containers cleaned on the outside and inside?	Y	N	N/A	??
5.	Are cleaning supplies and an appropriate worksite located away from the food preparation areasprovided	Y	N	N/A	??

to clean garbage and rubbish containers?

6.	Are sufficient numbers of containers available to hold all garbage and rubbish containing food waste?	Y	N	N/A	??		
	Note: Plastic bags should not be used.						
7.	Are waste containers inaccessible to vermin?	Y	N	N/A	??		
8.	Are exterior storage area enclosures large enough and kept clean?	Y	N	N/A	??		
9.	Is the surface area under the outside waste containers smooth and nonabsorbent (e.g., concrete)?	Y	N	N/A	??		
10	. Is the frequency of waste disposal daily or often enough so a health nuisance is not created?	Y	N	N/A	??		
Vermin Control							
11	. Are effective control measures used to minimize and eliminate the presence of vermin?	Y	N	N/A	??		
	Note: This would include professional extermination.						
12	Are all openings to the outside air effectively protected against the entrance of insects by self-closing doors, closed windows, screening, controlled air currents, or other means?	Y	N	N/A	??		
13	. Are openings to the exterior, such as those caused by electrical wiring and plumbing, effectively protected against the entrance of rodents?	Y	N	N/A	??		
Floors, Walls, and Ceilings							
14	. Are floors, walls, and ceilings in good repair?	Y	N	N/A	??		
15	Are floors in kitchens, stock rooms, restrooms, and other places where foods are stored or prepared made of nonabsorbent materials and easily cleanable?	Y	N	N/A	??		
16	. If provided, are floor drains sealed, pitched, and installed so they function properly?	Y	N	N/A	??		
17	. If carpeting is used, is it closely woven (not shag), properly installed (sealed at seams), and kept clean	Y	N	N/A	??		

and in good repair?

**Note:** Carpeting is not recommended in food preparation, equipment-washing, and utensil-washing areas (where it would be exposed to large amounts of grease and water), in food storage areas, and toilet room areas.

- 18. Are walking and driving surfaces clean, free of debris, and properly graded and drained?
- Y N N/A ??
- 19. Are walking and driving surfaces provided with concrete, asphalt, gravel, or similar materials to minimize dust?
- Y N N/A ??
- 20. Are concave juncture tiles installed between the floor and wall or baseboard to facilitate housekeeping?
- Y N N/A ??
- 21. Are walls in food preparation, utensil-washing, and handwashing areas of light color, smooth, and easily cleanable?
- Y N N/A ??

## Lighting

- 22. Are 30 **footcandles** of light provided on all food preparation surfaces and at work levels?
- Y N N/A ??

**Note:** Inadequate lighting has been associated with poor housekeeping and mixing toxic substances into foodstuff.

- 23. Are 20 **footcandles** of light provided in storage and lavatory areas?
- Y N N/A ??
- 24. Are 10 **footcandles** of light provided in all other areas?
- Y N N/A ??

#### **Ventilation**

- 25. Is sufficient ventilation provided to keep rooms free of excessive heat, steam, grease, condensation, vapors, obnoxious odors, smoke, and fumes?
- Y N N/A ??
- 26. Are all exhaust ducts in hoods provided with filters that are easily removable for cleaning and replacement?
- Y N N/A ??

#### Housekeeping

- 27. Are employees' clothing and personal belongings stored and maintained in an orderly manner?
- Y N N/A ??

28. Are laundered cloths and napkins stored in a clean, protected place until used?	Y	N	N/A	??		
29. Are nonabsorbent containers or laundry bags used to store soiled or damp linen or clothing?	Y	N	N/A	??		
30. Are only items necessary for the operation of the establishment kept on the premises?	Y	N	N/A	??		
Live Birds and Animals						
31. Are guide dogs accompanying a blind or deaf person the only animals permitted in food storage, preparation, or serving areas?	Y	N	N/A	??		
<b>Enforcement Provisions</b>						
32. Is a food inspection conducted at least once a year by a local board of health?	Y	N	N/A	??		
33. After an inspection by a licensed official, are evaluation placards immediately posted near the entrance of the establishment?	Y	N	N/A	??		
34. Are inspection reports provided to the public on request and maintained for 2 years?	Y	N	N/A	??		
Food Manager Certification						
35. Has at least one supervisory person completed a certified food safety and sanitation course?	Y	N	N/A	??		

## **Definitions:**

Footcandle: a unit of measure of the intensity of light falling on a surface.



Information
Name of Location:
Date of inspection:
Career-Technical program/course/room:
Signature of inspector:

# **General Classroom Conditions**Self-Inspection Checklist

**Guidelines:** This checklist covers regulations issued by the U.S. Department of Labor, Occupational Safety and Health Administration (OSHA) general industry standards (29 CFR 1910.22, 1910.141 and 1910.176). These regulations apply only to private employers and their employees, unless adopted by a State agency and applied to other groups such as public employees. In addition, two questions were included that address recommended practices.

		Please Circle			rcle
1.	Are all changes in classroom use and alterations, repairs, construction, or installation of new equipment reviewed with the appropriate State and local agency that has jurisdiction over school modifications? [recommended]	Y	N	N/A	??
2.	Is an electric solenoid key-operated gas shut-off switch installed on each gas supply line to your shop, lab or instructional area? [recommended]	Y	N	N/A	??
3.	Are classrooms kept clean and free from debris to the greatest extent practical given the types of activities being performed? [29 CFR 1910.141(a)(3)(i)]	Y	N	N/A	??
4.	Are waste materials that are prone to rotting placed in leakproof receptacles with tight fitting covers and removed daily for disposal? [29 CFR 1910.141(a)(4) and (g)(3)]	Y	N	N/A	??
5.	Are classrooms maintained, as far as reasonably practicable, to prevent the entrance or harborage of rodents, insects, and other vermin? [29 CFR 1910.141(a)(5)]	Y	N	N/A	??
6.	Is water available that is suitable for drinking, personal hygiene, food preparation or cleaning? [29 CFR 1910.141(b)(1)(i)]	Y	N	N/A	??

7.	Are all nondrinkable water outlets clearly marked as such? [29 CFR 1910.141(b)(2)(i)]	Y	N	N/A	??
8.	Are lavatories equipped with hot and cold running water, hand soap, and towels or driers? [29 CFR 1910.141(d)(2)(ii),(iii),(iv)]	Y	N	N/A	??
9.	Where showers are required, are soap, hot and cold running water through a common discharge line, and individual towels provided? [29 CFR 1910.141(d)(3)(iii),(iv),(v)]	Y	N	N/A	??
10.	Is the consumption of food and beverages prohibited in or near toilet rooms or areas containing toxic materials? [29 CFR 1910.141(g)(2)]	Y	N	N/A	??
11.	Is storage of food or beverages prohibited in toilet rooms or in an area exposed to a toxic material? [29 CFR 1910.141(g)(4)]	Y	N	N/A	??
12.	Where employees are required to wear protective clothing, are change rooms provided with storage facilities for street clothes and separate storage facilities for the protective clothing? [29 CFR 1910.141(e)]	Y	N	N/A	??
13.	Is material stored so as not to create a hazard? [29 CFR 1910.176(b)]	Υ	N	N/A	??
	<b>Note:</b> Bags, containers, bundles, etc., stored in tiers must be stacked, blocked, interlocked, and limited in height so that they are stable and secured against sliding and collapse.				
14.	Are storage areas kept free from hazards that may cause tripping, fire, explosion, or pest harborage? [29 CFR 1910.176(c)]	Y	N	N/A	??
15.	Is sufficient safe clearance available through aisles, loading docks, turns, or doorways when mechanical handling equipment is used? [29 CFR 1910.176(a)]	Y	N	N/A	??
16.	Are head clearance warning signs provided where needed? [29 CFR 1910.176(e)]	Y	N	N/A	??
17.	Are all passageways, work areas, storerooms, and washing facilities kept orderly and sanitary? [29 CFR 1910.22(a)(1)]	Y	N	N/A	??
	<b>Note:</b> Examples of violations include floor areas strewn with lumber, tires, books, and boxes.				

18. Are all floors kept clean and as far as possible dry?

[29 CFR 1910.22(a)(2)]	Y	N	N/A	??
19. If floors are likely to get wet (such as in food preparation), are platforms, mats, or other dry standing places provided where practicable? [29 CFR 1910.22(a)(2)]	Y	N	N/A	??
20. Are all floors kept free of protruding nails, splinters, holes, or loose boards? [29 CFR 1910.22(a)(3) and 1910.141(a)(3)(iii)]	Y	N	N/A	??
21. Are aisles and passageways kept clear and in good repair, with no obstructions that could create a hazard? [29 CFR 1910.22(b)(1)]	Y	N	N/A	??
22. Are covers and/or guardrails provided to protect people from falling into pits, tanks, vats, ditches, etc.? [29 CFR 1910.22(c)] (see checklist Guarding Floor, Stairs, and Other Openings)	Y	N	N/A	??
23. Are areas used for storage of materials marked with conspicuous signs that indicate the load-bearing capacity of the floor? [29 CFR 1910.22(d)(1)]	Y	N	N/A	??
24. Is the weight of stored materials assessed to ensure that it is below the load-bearing capacity of the floor? [29 CFR 1910.22(d)(2)]	Y	N	N/A	??

**Comments/Corrective action:** 

Information
Name of Location:
Date of inspection:
Career-Technical program/course/room:
Signature of inspector:

# **General Fire Requirements**Self-Inspection Checklist

**Guidelines:** This checklist covers regulations from the U.S. Department of Labor, Occupational Safety and Health Administration (OSHA), general industry standards 29 CFR 1910.36, 1910.38, and 1910.159. The regulations cited apply only to private employers and their employees, unless adopted by a State agency and applied to other groups such as public employees. Recommendations from the National Fire Protection Association (NFPA) standards have also been included.

			Ple	ase C	ircle
1.	Are exit facilities inspected daily to make sure that all stairways, doors, and other exits are in proper working condition? [NFPA 1]	Y	N	N/A	??
2.	Are all exit paths free and unobstructed? [29 CFR 1910.36(b)(4)]	Y	N	N/A	??
	<b>Note:</b> Exit doors must not be locked, barred, or blocked in such a way as to prevent exit from the building.				
3.	Are wedges or devices holding exit doors open prohibited? [NFPA 101]	Y	N	N/A	??
4.	Are all fire escapes, stairs, passageways, doors, and windows free of obstructions that would interfere with the evacuation of the building or the operation of the fire department? [29 CFR $1910.36(d)(1)$ ]	Y	N	N/A	??
5.	Are all fire doors tight fitting and in good operational condition? [NFPA 80]	Y	N	N/A	??
6.	Are all classroom doors self closing? [NFPA 101]	Y	N	N/A	??
7.	Are openings in the walls, floors, or ceilings that would contribute to the spread of fire from one room to another	Y	N	N/A	??

8.	Is the vertical clearance between sprinklers and material below (such as head deflectors) at least 18 inches? [29 CFR 1910.159(c)(10)]	Y	N	N/A	??
9.	Are accumulations of flammable or combustible waste materials and residues removed so that they will not contribute to a fire? [29 CFR 1910.38(b)(3)]	Y	N	N/A	??
	<b>Note:</b> Examples of violations include open boxes of papers stored under the stairs and stored empty cardboard boxes.				
10	Is adequate clearance maintained between stored materials and light fixtures to prevent possible ignition? [NFPA 231]	Y	N	N/A	??
11	Is the clearance between stored materials and unit heaters, radiant space heaters, furnace ducts, and flues not less than three feet in all directions or in accordance with the clearances shown on the approval agency label? [NFPA 231]	Y	N	N/A	??
12	Are furnishings or decorations of an explosive or highly flammable character prohibited? [NFPA 101]	Y	N	N/A	??
13	Are decorative materials such as curtains, draperies, streamers, and fabrics flame resistant? [NFPA 101]	Y	N	N/A	??
14	Do teaching materials and children's artwork cover 20% or less of the wall area? [NFPA 1]	Y	N	N/A	??

**Comments/Corrective action:** 

Information
Name of Location:
Date of inspection:
Career-Technical program/course/room:
Signature of inspector:

# **General Safety and Health Provisions for Construction**

**Self-Inspection Checklist** 

**Guidelines:** This checklist covers selected construction regulations issued by the U.S. Department of Labor, Occupational Safety and Health Administration (OSHA) under 29 CFR 1926. It applies to temporary worksites associated with construction, alteration, demolition, or repair work, including painting and decorating. Fixed facilities, such as Career-Technical educational classrooms, are not covered by these regulations. The regulations cited apply only to private employers and their employees, unless adopted by a State agency and applied to other groups such as public employees. A **yes** answer to a question indicates that this portion of the inspection complies with the OSHA or U.S. Environmental Protection Agency (EPA) standard, or with a nonregulatory recommendation. Definitions of terms in bold type are provided at the end of the checklist.

The following construction regulations have not been covered in a checklist: asbestos (29 CFR 1926.58); hazard communication (29 CFR 1926.59); battery locations and battery charging (29 CFR 1926.441); cranes, derricks, elevators, and conveyors (subpart N - 29 CFR 1926.550 to 1926.556); motor vehicles, mechanized equipment, and marine operations (subpart O - 29 CFR 1926.600 to 1926.606); excavations (subpart P - 29 CFR 1926.650 to 1926.652); concrete and masonry construction (subpart Q - 29 CFR 1926.700 to 1926.706); steel erection (subpart R - 29 CFR 1926.750 to 1926.752); underground construction, caissons, cofferdams, and compressed air (subpart S - 29 CFR 1926.800 to 1926.804); demolition (subpart T - 29 CFR 1926.850 to 1926.860); blasting and use of explosives (subpart U - 29 CFR 1926.900 to 1926.914); power transmission and distribution (subpart V - 29 CFR 1926.950 to 1926.960); and rollover protective structures and overhead protection (subpart W - 29 CFR 1926.1000 to 1926.1003). Please consult the OSHA regulations for these situations.

Is an injury prevention program established for construction worksites?
[29 CFR 1926.20(b)(1)]
 Does the program include frequent regular inspections by a designated competent person of the worksite, materials, and equipment?
[29 CFR 1926.20(b)(2)]

are identified as unsafe, is one of these Y N N/A ?? procedures followed? a. they are tagged b. the controls are locked to render them inoperable; or c. they are immediately removed from the work area? [29 CFR 1926.20(b)(3)] 4. Are only qualified employees (by training or experience) permitted to operate machinery? Y N N/A ?? [29 CFR 1926.20(b)(4)] 5. Are all employees and students trained to recognize and avoid unsafe conditions? Do Y N N/A ?? they know the regulations applicable to the work environment? [29 CFR 1926.21(b)(2)] 6. Have employees and students been instructed regarding the safe handling and use of poisons, Y N N/A ?? caustics, and other harmful substances? Are they aware of the hazards, personal hygiene, and personal protective measures required? [29 CFR 1926.21(b)(3)] 7. In areas where harmful plants or animals may be present, have employees and students been Y N N/A ?? instructed regarding the hazards, how to avoid injury, and first aid procedures to be used in the event of injury? [29 CFR 1926.21(b)(4)] 8. Have employees and students who are required to handle or use flammable liquids, gases, or toxic Y N N/A ?? materials been instructed in the safe handling and use of these materials? [29 CFR 1926.21(b)(5)] 9. Have all employees and students who are required to enter confined or enclosed spaces Y N N/A ?? been instructed in the nature of the hazards involved, the necessary precautions to take, and the use of protective and emergency equipment required? [29 CFR 1926.21(b)(6)(i)]

3. When machines, tools, materials, or equipment

<ul><li>10. Are medical personnel available for advice and consultation?</li><li>[29 CFR 1926.23 and 1926.50(a)]</li></ul>	Y	N	N/A	??
11. Are provisions made in advance of any project for prompt medical attention in case of serious injury? [29 CFR 1926.50(b)]	Y	N	N/A	??
12. If emergency medical care is not readily available, is a <b>certified person</b> available to render first aid? [29 CFR 1926.50(c)]	Y	N	N/A	??
13. Are first-aid supplies readily available at the worksite? [29 CFR 1926.50(d)(1)]	Y	N	N/A	??
14. Are first-aid supplies at the worksite in a weatherproof container with individual sealed packages for each type of item? [29 CFR 1926.50(d)(2)]	Y	N	N/A	??
15. Are first-aid supplies checked to replace expended items each time they are sent to the worksite and at least weekly if left at the worksite? [29 CFR 1926.50(d)(2)]	Y	N	N/A	??
16. Is transportation available for taking an injured person to medical care, or is a communication system available for contacting an ambulance service? [29 CFR 1926.50(e)]	Y	N	N/A	??
17. Are telephone numbers of physicians, hospitals, or ambulances conspicuously posted at the worksite? [29 CFR 1926.50(f)]	Y	N	N/A	??
<ul><li>18. Is an adequate supply of drinking water at or near the worksite?</li><li>[29 CFR 1926.51(a)(1)]</li></ul>	Y	N	N/A	??
19. If portable drinking water containers are used at the worksite, can they be tightly closed and are they equipped with a tap? [29 CFR 1926.51(a)(2)]	Y	N	N/A	??
20. Is dipping water from a drinking water container and use of a common drinking cup prohibited?	Y	N	N/A	??

21. Are washing facilities at or near the worksite for employees and students who handle paints, coatings, Y N N/A ?? pesticides, or other harmful contaminants? [29 CFR 1926.51(f)] 22. Has an effective fire protection and prevention program been established at the worksite through Y N N/A ?? all phases of construction, repair, or alteration? [29 CFR 1926.24] 23. Has all form and scrap lumber with protruding nails, and all other debris been cleared from work Y N N/A ?? areas, passageways, and stairs in and around buildings or other structures? [29 CFR 1926.25(a)] 24. Is combustible scrap and debris removed from the work area at regular intervals during the Y N N/A ?? course of construction? [29 CFR 1926.25 (b) and 1926.252(c)] 25. Are containers provided for the collection and separation of waste, trash, oily and used rags, Y N N/A ?? and other refuse? [29 CFR 1926.25(c)] 26. Are all solvent wastes, oily rags, and flammable liquids kept in fire-resistant, covered containers Y N N/A ?? until removed from the work area? [29 CFR 1926.252(e)] 27. Are all construction areas, aisles, stairs, ramps, runways, corridors, offices, labs, shops, and storage Y N N/A ?? areas where work is in progress well lighted? [29 CFR 1926.26 and 1926.56] 28. Is appropriate personal protective equipment used in all operations where hazardous Y N N/A ?? conditions exist? [29 CFR 1926.28]

### **Material Handling and Storage**

29. Are all materials that are stored in tiers stacked, racked, blocked, interlocked, or otherwise secured to prevent sliding, falling, or collapse?

Y N N/A ??

30. Is the minimum safe load limit of floors within buildings and structures, in pounds per square foot, conspicuously posted in all storage areas? [29 CFR 1926.250(a)(2)]	Y	N	N/A	??
31. Are maximum safe loads always maintained? [29 CFR 1926.250(a)(2)]	Y	N	N/A	??
32. Are aisles and passageways kept clear to provide for the free and safe movement of material-handling equipment and people? [29 CFR 1926.250(a)(3)]	Y	N	N/A	??
33. Are such areas kept in good repair? [29 CFR 1926.250(a)(3)]	Y	N	N/A	??
34. Where a difference in road or working level exists, are means such as ramps, blocking, or grading provided to ensure the safe movement of vehicles between two levels?  [29 CFR 1926.250(a)(4)]	Y	N	N/A	??
35. Is material stored inside buildings under construction placed more than 6 feet away from any hoistway or inside floor openings, or more than 10 feet away from an exterior wall? [29 CFR 1926.250(b)(1)]	Y	N	N/A	??
<b>Note:</b> The exterior wall must not extend beyond the top of the material stored.				
36. Are noncompatible materials segregated in storage? [29 CFR 1926.250(b)(3)]	Y	N	N/A	??
37. Are bagged materials stacked by stepping back the layers and cross-keying the stack at least every 10 bags? [29 CFR 1926.250(b)(4)]	Y	N	N/A	??
38. Is it prohibited to store more material on scaffolds or runways than needed for the immediate operation? [29 CFR 1926.250(b)(5)]	Y	N	N/A	??
39. Are brick stacks limited to 7 feet in height? [29 CFR 1926.250(b)(6)]	Y	N	N/A	??

a height of 4 feet, it must be tapered back 2 inches on every foot of height above the 4 foot level. 40. When masonry blocks are stacked higher than 6 feet, is the stack tapered back one Y N N/A ?? half block per tier above the 6-foot level? [29 CFR 1926.250(b)(7)] 41. Are all nails withdrawn from lumber before lumber is stacked? Y N N/A ?? [29 CFR 1926.250(b)(8)(i)] 42. Is lumber stacked on level and solidly supported sills? [29 CFR 1926.250(b)(8)(ii)] Y N N/A ?? 43. Is lumber stacked in a stable, self-supporting manner? [29 CFR 1926.250(b)(8)(iii)] Y N N/A ?? 44. Are all lumber piles 20 feet or less in height? [29 CFR 1926.250(b)(8)(iv)] Y N N/A ?? 45. Are lumber piles to be handled manually stacked a height of 16 feet or less? Y N N/A ?? [29 CFR 1926.250(b)(8)(iv)] 46. Are all structural steel, poles, pipe, bar stock and other cylindrical material (unless racked) stacked Y N N/A ?? and blocked to prevent spreading or tilting? [29 CFR 1926.250(b)(9)] 47. Are all masonry walls over 8 feet in height braced to prevent overturning? Y N N/A ??

**Note:** When a loose brick stack reaches

#### **Definitions:**

[29 CFR 1926.706(b)]

**Certified person:** a person who has a valid certificate in first-aid training from the U.S. Bureau of Mines, the American Red Cross, or equivalent training that can be verified by documentary evidence. [29 CFR 1910.50(c)]

**Confined or enclosed spaces:** any space having a limited means of egress, which is subject to the accumulation of toxic or flammable contaminants or has an oxygen-deficient atmosphere. Confined or enclosed spaces include, but are not limited to, storage tanks, process vessels, bins, boilers, ventilation or exhaust ducts, sewers, underground utility vaults, tunnels, pipelines, and open top spaces more than 4 feet in depth such as pits, tubs, vaults, and vessels.

mments/Corrective ac	tion:		

Information
Name of Location:
Date of inspection:
Career-Technical program/course/room:
Signature of inspector:

## Guarding Floors, Stairs, and Other Openings Self Inspection Checklist

**Guidelines:** This checklist covers regulations issued by the U.S. Department of Labor, Occupational Safety and Health Administration (OSHA) under the general industry standard 29 CFR 1910.23. It applies to classrooms with **permanent and temporary** floor holes and openings greater than 1 inch in its least dimension, floor drains, manholes, hatchways, ladder openings, or pits; and raised opensided floors, platforms, runways, or storage areas. For construction sites, please use the checklist **Guardrails, Handrails, and Covers for Construction Part 1**, **Part 2**, and **Part 3**. The regulations cited apply only to private employers and their employees, unless adopted by a State agency and applied to other groups such as public employees. Definitions of terms in bold type are provided at the end of the checklist.

		F	lea	se Cir	cle
1.	Is every skylight <b>floor opening</b> and <b>hole</b> guarded by a standard skylight screen or a fixed standard railing on all exposed sides? [29 CFR 1910.23(a)(4)]	Y	N	N/A	??
2.	Are all <b>floor openings</b> to stairways, ladderways, hatchways, chutes, or manholes guarded by a standard railing and toeboards (on all sides except the entrance) or other protective cover? [29 CFR 1910.23(a)(1), (2), (3), (5), and (6)]	Y	N	N/A	??
3.	Is every temporary <b>floor opening</b> guarded by a standard railing or constantly attended by someone? [29 CFR 1910.23(a)(7)]	Y	N	N/A	??
4.	Is every <b>floor hole</b> into which a person could fall guarded	Y	N	N/A	??

5.	Is every <b>floor hole</b> into which a person could not fall (because of fixed machinery, equipment, or walls) protected by a cover that leaves no openings more than 1 inch wide? [29 CFR 1910.23(a)(9)] <b>Note:</b> The cover must be securely held in place to prevent tools or materials from falling through.	Y	N	N/A	??
6.	Where doors or gates open directly onto a stairway, does a platform allow an effective width of at least 20 inches when the door swings open? [29 CFR 1910.23(a)(10)]	Y	N	N/A	??
7.	Is every open-sided floor or platform that is 4 feet or more above the adjacent floor ground level guarded by a standard railing on all open sides? [29 CFR 1910.23(c)(1)]	Υ	N	N/A	??
8.	Is every <b>runway</b> guarded by a standard railing on all open sides that are 4 feet or more above the floor or ground level? [29 CFR 1910.23(c)(2)]	Y	N	N/A	??
9.	Regardless of height, are all open-sided floors, walkways, platforms, or <b>runways</b> guarded with a standard railing and toeboard if they are above or adjacent to any dangerous equipment or operation? [29 CFR 1910.23(c)(3)]	Y	N	N/A	??
10.	Is every open-sided floor or platform that is 4 feet or more above the adjacent floor ground level guarded by a toeboard if, beneath the open sides, (a) persons can pass, (b) machinery is moving, or (c) equipment could create a hazard of falling materials? [29 CFR 1910.23(c)(1)]	Y	N	N/A	??
11.	Is every <b>wall opening</b> from which the drop is more than four feet guarded with a standard railing or other barrier? [29 CFR 1910.23(b)(1), (2) and (4)]	Y	N	N/A	??

12. Is every window **wall opening** guarded by slats, grill work, or standard railing if (a) it is at a stairway landing, floor, platform, or balcony from which the drop is more than 4 feet, and (b) the bottom of the opening is less than 3 feet above the platform or landing?

[29 CFR 1910.23(b)(3)]

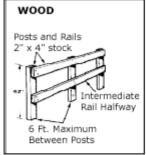
Y N N/A ??

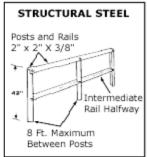
- 13. Is every flight of stairs with four or more risers equipped with standard stair railings or standard handrails as specified below? [29 CFR 1910.23(d)(1)]
  - a. On stairways less than 44 inches wide with both sides enclosed, at least one handrail is required, preferably on the right hand side descending.
  - b. On stairways less than 44 inches wide with one open side, at least one stair railing must be on the open side.
  - c. On stairways less than 44 inches wide with both sides open, one stair railing is required on each side.
  - d. On stairways more than 44 inches wide but less than 88 inches wide, one handrail on each enclosed side and one stair railing on each open side is required.
  - e. On stairways 88 or more inches wide, one handrai on each enclosed side, one stair railing on each open side, and one intermediate stair railing located approximately midway of the width is required.

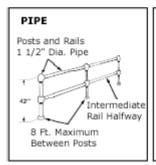
Y N N/A ??

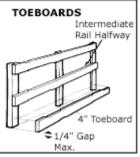
14. Where standard railings are provided, do they meet the specifications shown in figure below? [29 CFR 1910.23(e)(1)]

**Note:** The rail must consist of a top rail at a height of 42 inches and a midrail at approximately 21 inches. The top rail must be smooth surfaced throughout the length of the railing.









Proper construction and specifications for guardrails

- 15. Are all stair railings between 30 and 34 inches from the top of the rail to the surface of the tread in line with the face of the riser at forward edge of tread? [29 CFR 1910.23(e)(2).
- Y N N/A ??

16. If wooden railings are used for guardrails, are the posts at least 2 inches by 4 inches and spaced less than 6 feet apart? [29 CFR 1910.23(e)(3)(I)]

Y N N/A ??

**Note:** The top rail and intermediate rails must also be at least 2 inches by 4 inches stock.

- Y N N/A ??
- 17. If pipe railings are used, are posts and top and intermediate rails at least 1-1/2 inches nominal diameter with posts spaced less than 8 feet on centers? [29 CFR 1910.23(e)(3)(ii)]
- Y N N/A ??
- 18. If structural steel is used for guardrails, are the posts and top and intermediate rails (a) at least 2 inches by 2 inches by 3/8 inch angle irons, or (b) other metal shapes of equivalent bending strength with posts spaced not more than 8 feet on centers? [29 CFR 1910.23(e)(3)(iii)]

capable of withstanding a load of at least 200 pounds applied in any direction at any point on the top rail? [29 CFR 1910.23(e)(3)(iv)]

Y N N/A ?? 20. Are standard toeboards at least 4 inches in height provided at the floor of the guardrail? [29 CFR 1910.23(e)(4)] Y N N/A ?? 21. Are handrails constructed so that they can be easily grasped (i.e. rounded)? [29 CFR 1910.23(e)(5)] Y N N/A ?? 22. Are all handrails and railings provided with a clearance of at least 3 inches between the handrail or railing and any other object? [29 CFR 1910.23(e)(6)] Note: A distance less than this would make it difficult to get a good grasp in an emergency. Y N N/A ?? 23. Are skylight screens constructed so that they are capable of withstanding a load of at least 200 pounds applied perpendicularly to any area on the screen? [29 CFR 1910.23(e)(8)] Note: Sometimes people get on the roof and fall through skylight screens that are not designed to prevent this type of fall. Y N N/A ?? 24. Are wall opening barriers (rails, rollers, picket fences, and half doors) constructed and mounted so that the barrier is capable of withstanding a load of at least 200 pounds applied in any direction (except upward) at any point on the top rail

#### **Definitions:**

**Floor hole:** an opening measuring between 1 and 12 inches in its least dimension in any floor, platform, pavement, or yard through which materials but not persons may fall.

Oor corresponding member? [29 CFR 1910.23(e)(9)]

**Floor opening:** an opening measuring 12 inches or more in its least dimension in any floor, platform, pavement, or yard through which persons may fall.

**Runway:** a passageway for persons, elevated above the surrounding floor or ground level, such as a footwalk along shafting or a walkway between buildings.

**Wall opening:** an opening at least 30 inches high and 18 inches wide in any wall or partition through which persons may fall (such as a chute opening).

**Comments/Corrective action:** 

Information
Name of Location:
Date of inspection:
Career-Technical program/course/room:
Signature of inspector:

# **Guarding of Farm Equipment**Self-Inspection Checklist

**Guidelines:** This checklist covers regulations issued by the U.S. Department of Labor, Occupational Safety and Health Administration (OSHA) under the agricultural standard 29 CFR 1928.57. It applies to hazards associated with moving machinery parts of **farm field equipment** and **farmstead equipment**. The regulations cited apply only to private employers and their employees, unless adopted by a State agency and applied to other groups such as public employees. Definitions of terms in bold type are provided at the end of the checklist. This checklist does not address the regulations dealing with cotton gins. If cotton gins are encountered, consult 29 CFR 1928.57.

**Please Circle** 

 Have operating instructions been provided at the time of initial assignment and at least annually thereafter to all who come in contact with covered equipment? Do instructions discuss the safe operation and servicing of all farm equipment and include at least the following practices?
 [29 CFR 1928.57 (a)(6)]

Y N N/A ??

- a. Keep all guards in place when the machine is in operation.
- b. Permit no riders on **farm field equipment** other than those required for instruction or assistance in machine operation.
- c. Stop engine, disconnect the power source, and wait for all machine movement to stop before servicing, adjusting, cleaning, or unclogging the equipment. If the machine must be running to be properly serviced or maintained, the teacher should instruct the students as to all steps and procedures that are necessary to service and maintain the equipment safely.
- d. Make sure everyone is clear of machinery before starting the engine, engaging power, or operating the machine.
- Lock out electrical power before performing maintenance or service work on farmstead

#### equipment.

Note: Many injuries occur while machinery is cleaned, repaired, and adjusted. The service person must make sure that the equipment is shut off with the key removed or the power locked out, and that the machinery or components (such as headers or buckets) cannot come down on him or her. On hydraulically raised equipment, use the manufacturer's hydraulic cylinder safety stops if they were provided. If cylinders stops are not available, use solid blocking. Once cylinders are blocked, the engine is shut off, and the key is removed, rock the hydraulic control levers to relieve the pressure for the hydraulic cylinders. Sufficient pressure can be stored in the hydraulic system to inject fluid under the skin of a worker attempting to service the system, causing severe infection or injury.

If jacks are needed, place them on firm, level surfaces, but use solid blocks to hold the machine in position. Do not rely on jacks or hydraulic for support; these can slip or develop leaks and the service person can be crushed.

Trying to stop rotating machinery with a piece of wood or metal can draw the service person into the machine, or cause injury with flying pieces. Always service rotating machinery according to manufacturers specifications. For example, observe the manufacturer's torque specifications when replacing a knife, blade, or rotating equipment. At the speeds farm equipment rotates, a loose nut, bolt, or part can become a lethal projectile.

- Have all students and teachers been protected against contact with the hazards created by moving machine parts by either of the following methods?
   [29 CFR 1928.57(a)(7)]
  - a. Through the installation and use of a guard or shield or **guarding by location**.
  - b. By a guardrail or fence whenever a guard or shield or **guarding by location** is not possible.

**Note:** The clothing worn while working around moving machine parts can also help prevent entanglement. Work clothing should be well-fitting, zippered or buttoned, and not open. Frayed clothes, jackets, and sweatshirts with drawstrings, and boots or shoes with long shoelaces should be avoided. A shoelace or loose string, thread, flap of cloth, or the corner of a jacket can become easily entangled. Long hair can be a hazard when working with farm machinery; it can be easily entangled.

3. When guards are used to provide protection required by this section, are they designed and located to protect against contact with the hazard being guarded? [29 CFR 1928.57(a)(8)] Y N N/A ??

Y N N/A ??

4. Unless otherwise specified, is each quard and its support capable of withstanding the force that a 250-pound person, Y N N/A ?? leaning on or falling against the guard, would exert on that guard? [29 CFR 1928.57(a)(8)(ii)] 5. Are all guards free from burrs, sharp edges, and sharp corners, and securely fastened to the equipment or Y N N/A ?? building? [29 CFR 1928.57(a)(8)(iii)] 6. Whenever a moving machinery part presents a hazard during servicing or maintenance, is the engine stopped, Y N N/A ?? the power source disconnected, and all machine movement stopped before servicing or maintenance is performed? [29 CFR 1928.57(a)(11)] **Note:** Exceptions to this requirement are as follows: (a) the equipment must be running to be properly serviced or maintained; (b) the equipment cannot be serviced or maintained while a guard or guards required by this standard are in place; and (c) the servicing or maintenance can be safely performed. **Farm Field Equipment** 7. Are all power takeoff shafts, including rear-, mid-, or sidemounted shafts, guarded either by a master shield or by Y N N/A ?? other protective guarding? [29 CFR 1928.57(b)(1)(i)] 8. Are all tractors equipped with an agricultural tractor master shield on the rear power take-off, except when the design Y N N/A ?? of the power take-off driven equipment requires removal of the shield? [29 CFR 1928.57(b)(1)(ii)] 9. Does the master shield have sufficient strength to prevent permanent deformation of the shield when a 250-pound Y N N/A ?? operator mounts or dismounts the tractor using the shield as a step? [29 CFR 1928.57(b)(1)(ii)] 10. Is power takeoff-driven equipment guarded to protect against employee contact with positively driven rotating Y N N/A ?? members of the power-drive system, including the portion of the tractor power takeoff shaft that protrudes from the tractor if the master shield is removed? [29 CFR 1928.57(b)(1)(iii)] 11. Do signs placed at prominent locations on tractors and power takeoff-driven equipment specify that power

Y N N/A ??

12. Is the mesh or nip points of all power-driven gears, belts,

takeoff-driven system safety shields must be kept in

place? [29 CFR 1928.57(b)(1)(iv)]

chains, sheaves, pulleys, sprockets, and idlers guarded? [29 CFR 1928.57(c)(2)(i) and 29 CFR 1928.57(b)(2)(i)]	Y	N	N/A	??
13. Are all revolving shafts, including projections such as bolts, keys, or set screws guarded, except smooth shaft ends protruding less than one-half the outside diameter of the shaft and its locking means? [29 CFR 1928.57(b)(2)(ii)]	Y	N	N/A	??
14. Are ground driven components guarded? [29 CFR 1928.57(b)(2)(iii)]	Y	N	N/A	??
15. Are the following components, which must be exposed for proper function, guarded as much as possible in a manner that will not interfere with normal functioning of the component: choppers, snapping or husking rolls, straw spreaders and choppers, cutterbars, flair rotors, rotary beaters, mixing augers, feed rolls, conveying augers, rotary tillers, rotary beaters, mixing augers, feed rolls, conveying augers, grain spreaders, stirring augers, sweep augers, and feed augers?  [29 CFR 1928.57(b)(3) and 29 CFR 1928.57(c)(3)(i)]	Y	N	N/A	??
16. Are guards, shields, and access doors in place when equipment is in operation? [29 CFR 1928.57(b)(4)(i)]	Y	N	N/A	??
17. If removal of a guard or access door will expose a person to any component that continues to rotate after the power is disengaged, has the teacher provided, in the immediate area, the following? [29 CFR 1928.57(b)(4)(ii)]	Y	N	N/A	??
a. A readily visible or audible warning of rotation				
b. A safety sign warning the student to				
$_{\circ}$ look and listen for evidence of rotation, and				
<ul> <li>do not remove the guard or access door until all components have stopped.</li> </ul>				
Farmstead Equipment				
18. Are all power take-off shafts including rear, mid-, or side-mounted shafts, guarded either by a master shield or other protective guarding? [29 CFR 1928.57(c)(1)(i)]	Y	N	N/A	??
19. Is power takeoff-driven equipment guarded to protect against contact with positively driven rotating members of the power- drive system? [29 CFR 1928.57(c)(1)(ii)]	Y	N	N/A	??

20. If power takeoff-driven equipment is of a design requiring

removal of the tractor master shield, does the equipment also include protection for that portion of the tractor takeoff shaft that protrudes from the tractor? [29 CFR 1928.57(c)(1)(ii)]	Y	N	N/A	??
21. Are signs placed at prominent locations on power takeoff-driven equipment specifying that power driven system safety shields must be kept in place? [29 CFR 1928.57(c)(1)(iii)]	Y	N	N/A	??
22. Are all revolving shafts, including projections such as bolts, keys, or set screws, guarded? [29 CFR 1928.57(c)(2)(ii)]	Υ	N	N/A	??
<b>Note:</b> Exceptions to this requirement include (a) smooth shafts and shaft ends (without any projecting bolts, keys, or set screws) revolving at less than 10 rpm on feed hadling equipment used on the top surface of material in bulk storage facilities; and (b) smooth shaft ends protruding less than one-half the outside diameter of the shaft and its locking means.				
23. Are sweep-arm material-gathering mechanisms used on top surfaces of materials within silo structures guarded? [29 CFR 1928.57(c)(3)(ii)]	Y	N	N/A	??
24. Is the lower or leading edge of the guard located no more than 12 inches above the material surface and no less than 6 inches in front of the leading edge of a rotating member of the gathering mechanism? [29 CFR 1928.57(c)(3)(ii)]	Y	N	N/A	??
25. Is the guard parallel to, and extended to the fullest practical length of, the material-gathering mechanism? [29 CFR 1928.57(c)(3)(ii)]	Y	N	N/A	??
26. Is exposed auger flighting on portable grain augers guarded with either grating type guards or solid baffle-style covers as follows? [29 CFR 1928.57(c)(3)(iii)]	Y	N	N/A	??
a. The largest dimension or opening in grating-type guards through which materials are required to flow shall be 4-3/4 inches. The area of each opening shall be no larger than 10 square inches. The opening shall be located no closer to the rotating flighting than 2-1/2 inches.				
<ul> <li>Slotted openings in solid baffle-style covers shall be no wider than 1-1/2 inches or closer than 3-1/2 inches to the exposed flighting.</li> </ul>				

28. Is the application of electrical power from a location not under the immediate and exclusive control of the person maintaining or servicing the equipment prevented by one of the following methods?

[29 CFR 1928.57(c)(5)(i)]

Y N N/A ??

- a. Providing an exclusive, positive locking means on the main switch that can be operated only by the student or students performing the maintenance or servicing.
- b. In the case of material handling equipment located in a bulk storage structure, by physically locating on the equipment an electrical or mechanical means to disconnect the power.
- 29. Are all circuit protection devices (including those that are an integral part of a motor) of the manual reset type, except in the following cases? [29 CFR 1928.57(c)(5)(ii)]

Y N N/A ??

- a. The teacher can establish that because of the nature of the operation, distances involved, and the amount of time normally spent by students in the area of the affected equipment, use of the manual reset device would not be possible.
- b. An electrical disconnect switch is available to students within 15 feet of the equipment on which maintenance or service is being performed.
- c. A sign is prominently posted near each hazardous component warning the student that unless the electrical disconnect switch is used, the motor could automatically reset while the student is working on the hazardous component.

#### **Definitions:**

**Farm field equipment:** tractors, implements (including self-propelled implements), or any combination thereof used in agricultural operations.

**Farmstead equipment:** agricultural equipment normally used in a stationary manner. This includes materials handling equipment and accessories for such equipment, whether or not the equipment is an integral part of a building.

**Guarding by location:** a situation when, because of its location, no employee can come into contact with a hazard during operation, maintenance, or servicing.

### **Comments/Corrective action:**

Information
Name of Location:
Date of inspection:
Career-Technical program/course/room:
Signature of inspector:

# Hazard Communication Self-Inspection Checklist

**Guidelines:** This checklist covers hazard communication regulations (29 CFR 1910.1200) issued by the U.S. Department of Labor, Occupational Safety and Health Administration (OSHA). The purpose of these regulations is to ensure that health and safety information about **hazardous chemicals** is transmitted to affected employees. These regulations are applicable to any work site where employees may be exposed to **hazardous chemicals** under normal conditions of use or in an emergency. The following chemicals or items are not covered by this regulation: hazardous waste, tobacco, tobacco products, wood, wood products, manufactured **articles**, foods, alcoholic beverages, drugs, cosmetics, consumer products, nuisance particulates, ionizing radiation, nonionizing radiation, and biological hazards. The regulations cited apply only to private employers and their employees, unless adopted by a State agency and applied to other groups such as public employees. Definitions of terms in bold type are provided at the end of the checklist.

**Please Circle Hazard Communication Program** 1. Has a written hazard communication program been developed, implemented, and maintained at your worksite? N N/A ?? [29 CFR 1910.1200(e)(1)] 2. Has a list of known hazardous chemicals at your facility been prepared? [29 CFR 1910.1200(e)(1)(i)] N N/A ?? 3. Have methods been developed to inform employees of the hazards of nonroutine tasks? [29 CFR 1910.1200(e)(1)(ii)] Y N N/A ?? **Note:** Such tasks may include emergency response or equipment repair. 4. Are methods developed for communicating hazards to outside contractors or vendors who may be exposed to Y N N/A ?? hazardous chemicals at your worksite? [29 CFR 1910.1200(e)(2)]

- 5. Are all containers of **hazardous chemicals** in the workplace labeled, tagged, or marked with the following information? [29 CFR 1910.1200(f)(1)]
- Y N N/A ??
- The identity of the hazardous chemical(s)
- The appropriate warnings
- The name and address of the chemical manufacturer, importer, or other responsible party

**Note:** Labels must be affixed to all containers of **hazardous chemicals** when they are shipped by a manufacturer or supplier. If the container is received without a hazard warning label, you must make a good faith effort to obtain the missing information from the manufacturer or supplier. The following **hazardous chemicals** are exempt from this labeling requirement, although subject to other labeling requirements: pesticides, foods, food additives, color additives, drugs, cosmetics, medical devices, alcoholic beverages, consumer products, hazardous waste, tobacco products, and wood products.

 Is removal or defacing of labels on incoming containers of hazardous chemicals prohibited? [29 CFR 1910.1200(f)(8)]

Y N N/A ??

7. Are labels or other forms of warnings legible, in English, and prominently displayed? [29 CFR 1910.1200(f)(9)]

Y N N/A ??

### **Material Safety Data Sheets**

8. Are material safety data sheets on hand for each **hazardous chemicals** used and identified on the **hazardous chemicals** list? [29 CFR 1910.1200(g)(1)]

Y N N/A ??

 If a hazardous chemical has no material safety data sheet, are attempts made to obtain one from the chemical manufacturer or importer as soon as possible? [29 CFR 1910.1200(g)(6)(iii)]

Y N N/A ??

10. Are material safety data sheets for the **hazardous chemicals** kept in the facility and made readily accessible to employees? [29 CFR 1910.1200(g)(10)]

Y N N/A ??

#### **Information and Training**

11. Is information and training on **hazardous chemicals** in the worksite provided on initial assignment and whenever new **physical hazards** or **health hazards** are introduced into the

Y N N/A ??

12. Does the information provided include the requirements of this standard, as well as the following? [29 CFR 1910.1200(h)(2)]

Y N N/A ??

- The operations at the worksite where hazardous chemicals are present
- The location and availability of the written hazard communication program, including the list of hazardous chemicals and material safety data sheets
- 13. Does the training provided include information about the following? [29 CFR 1910.1200(h)(3)]

Y N N/A ??

- Methods and observations that may be used to detect the presence or release of a hazardous chemicals in the work area (such as monitoring conducted by the employer, continuous monitoring devices, visual appearance or odor of hazardous chemicals when being released, etc)
- The physical hazards and health hazards of the chemicals in the work area
- The measures employees can take to protect themselves from these hazards, including procedures the employer has implemented to protect employees from exposures to hazardous chemicals (appropriate work practices, emergency procedures, and personal protective equipment)
- The details of the hazard communication program developed by the employer, including explanations of the labeling system, material safety data sheets, and how employees can obtain and use the appropriate hazard information.

#### **Definitions:**

**Article:** a manufactured item other than a fluid or particle that (a) is formed to a shape or design during manufacture, (b) has end use function(s) dependent in whole or in part on its shape or design during end use, and (c) under normal conditions of use does not release more than very small quantities, e.g., minute or trace amounts of a **hazardous chemical**, and does not pose a **physical hazard** or health risk to employees.

**Hazardous chemical:** any chemical that is a **physical hazard** or a **health hazard**. **Health hazard:** a chemical for which statistically significant evidence exists that acute or chronic health effects may occur in exposed employees. This evidence must be based on at least one study conducted in accordance with established scientific principles. The term includes chemicals that are carcinogens, toxic or highly toxic agents, reproductive toxins, irritants, corrosive, sensitizers,

hepatotoxins, nephrotoxins, neurotoxins, agents that act on the hematopoietic system, and agents which damage the lungs, skin, eyes, or mucous membranes.

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

**Comments/Corrective action:** 

Information
Name of Location:
Date of inspection:
Career-Technical program/course/room:
Signature of inspector:

### **Hazardous Waste**

**Self-Inspection Checklist** 

**Guidelines:** This checklists covers regulations issued by the United States Environmental Protection Agency (EPA) regarding the generation, management, and disposal of hazardous wastes. Most states enforce these regulations as well as some of their own.

It is important to know that you may not be covered by federal or state regulations. Only specific waste materials, generated at one facility in specific quantities, are regulated. Lists of regulated materials, found in 40 CFR 261.31, 261.32, and 261.33, are available from your state environmental agency. Contact them for complete information for your facility.

If, after reviewing the listed sources identified above, you are unable to identify your waste, you must then determine if your waste may still be classified as hazardous waste by the Hazardous Waste Identification Questionnaire below. If you determine that you have hazardous waste, you must then determine if, as a facility, you have a regulated quantity of waste. If in a calendar month you generate or accumulate more than 100 kg (220 lb) of a hazardous waste or more than 1 kg (2.2 lb) of an acutely hazardous waste, you are a regulated generator and must obtain an EPA ID number (Form 8700-12) from the EPA.

### **Hazardous Waste Identification Questionnaire**

Is the waste ignitable?

- The waste must be a liquid with a flash point below 140°F.
- The waste is capable of causing fire through friction, absorption, moisture or spontaneous chemical changes.
- The waste is an ignitable compressed gas.
- The waste is classified as an oxidizer by the United States Department of Transportation.

Is the waste corrosive?

• The waste must be a liquid with a pH less than or equal to 2 or has a pH greater than or equal to 12.6.

Is the waste reactive?

- The waste is unstable and readily undergoes violent reaction without detonation.
- The waste reacts violently with water.
- The waste, when mixed with water, forms potentially explosive mixtures.
- The waste, when mixed with water, forms toxic gases or fumes.
- The waste contains cyanide or sulfides which generate toxic gases when exposed to a pH less than or equal to 2 or greater than or equal to 12.5.

Is the waste toxic?

Does the waste contain leachable levels of certain metals or chemical contaminants? This is typically determined by performing a Toxicity Characteristic Leaching Procedure or TCLP test.

#### WASTE HANDLING PROCEDURES

While waste is being held for disposal, it must be managed in accordance with state and federal regulations. It is strongly recommended that you set up a disposal procedure that takes advantage of satellite rules, since regulations governing satellite accumulations are much less burdensome. Satellite rules apply to "active drums" that are used to accumulate hazardous waste. Satellite rules can be followed as long as filled drums are transferred to an authorized accumulation area within three days. A second drum can be utilized as a satellite drum until the original drum is moved to an authorized storage area. This checklist does not address hazardous waste stored in tanks and treatment, storage and disposal (TSD) facilities.



lack Questions marked with this symbol may require the help of an outside expert.

Please Circle

#### **Generators of Regulated Amounts of Hazardous Waste**



 Does the container storing hazardous waste meet US Department of Transportation container requirements? [40 CFR 262.30]

Y N N/A ??

 Is the container storing hazardous waste in good condition?
 [40 CFR 265.171]

Y N N/A ??

3. Is the container storing hazardous waste compatible with the waste material? (For instance, solvents and

	paint waste should be placed in steel drums, but acidic or alkaline waste should not be placed in steel drums.) [40 CFR 265.172]	Y N N/A ??
4.	Is the container storing hazardous waste kept securely closed when not in use? [40 CFR 265.173a]	Y N N/A ??
5.	Is the container storing hazardous waste at or near the point of generation and under the operator's control? [40 CFR 262.34(c)(1)]	Y N N/A ??
6.	Is the container storing hazardous waste marked with the words "Hazardous Waste"? [40 CFR 262.34(a)(3)]	Y N N/A ??
7.	If the container is being shipped for disposal, have arrangements been made for a Licensed Treatment, Storage, and Disposal (TSD) facility to accept your hazardous wastes? [40 CFR 265.20]	Y N N/A ??
	<b>Note:</b> Although the school is responsible for completing manifest forms, the TSD facility handling your waste should be consulted about completing the paperwork necessary to ship hazardous waste.  [40 CFR 262.20]	
8.	If the container is being shipped for disposal, have arrangements with a registered Hazardous Waste Hauler been made for transport of wastes to the TSD facility?	Y N N/A ??
	[40 CFR 262.20]	
9.	Have Hazardous waste manifests been completed for all shipments of hazardous wastes within your state (or other State's Manifest for shipments to other States)? [40 CFR 262.20]	Y N N/A ??
10	Has a copy of the manifest with the signature of the initial transporter and date of shipment been retained by the school?  [40 CFR 262.23(a)]	Y N N/A ??
11	Has the Hauler been supplied with all remaining copies of the manifest? [40 CFR 262.23(b)]	Y N N/A ??
12	. Have Land Ban forms been completed prohibiting land disposal of affected wastes unless treated below	Y N

<b>†</b>	regulatory levels? [40 CFR 268.7]	N/A ??
<b>†</b>	13. Have appropriate markings and labels been affixed to containers prior to shipment? [40 CFR 262.31 and 262.32]	Y N N/A ??
	14. Has the Hauler's vehicle been inspected by the generator (or his/her designee) to ensure proper placarding before leaving the generators premises? [40 CFR 262.33]	Y N N/A ??
	15. Has the school kept a copy of each signed manifest for at least three years, or until a copy if received from the owner and operator of the facility which received the waste for at least three years? [40 CFR 262.40(a)]	Y N N/A ??
	16. Has the school prepared and submitted a copy of a Biennial Report to the EPA Regional Administrator by March 1 of each even numbered year for all hazardous waste shipped off-site for treatment, storage or disposal? [40 CFR 262.41]	Y N N/A ??
	Satellite Accumulation Sites	
	<ul><li>17. Is the quantity of waste less than 55 gallons or less than 1 quart for acutely toxic waste?</li><li>[40 CFR 262.34(c)(1)]</li></ul>	Y N N/A ??
	18. If the quantities of hazardous waste exceed the amounts in question 17, are the containers moved within three days to a less than 90-day accumulation area or off site to an authorized facility? [40 CFR 262.34(c)(1)]	Y N N/A ??
	Small Quantity Generator (Generate between 100 and 1000 Kilograms of Hazardous Waste Per Month	
	19. Have hazardous waste containers been accumulated at your facility for 180 days or less? [40 CFR 262.34(f)]	Y N N/A ??
	<b>Note:</b> If you store hazardous waste for more than 180 days, additional regulations apply which are not covered in this checklist. Contact your state environmental agency for additional information. The quantity of waste accumulated on-site may never exceed 6000 kilograms. Wastes may be stored longer than 180 days for certain situations.	

20. Are containers marked with accumulation start date? [40 CFR 262.34(a)(2)]	Y N N/A ??
21. Are container labels visible? [40 CFR 262.34(a)(2)]	Y N N/A ??
22. Are containers segregated according to waste type? [40 CFR 265.177]	Y N N/A ??
23. Are the containers inspected weekly? [40 CFR 265.174]	Y N N/A ??
24. Is there adequate aisle space between container rows?	Y N N/A ??
<b>Note:</b> 18 inches between single stacked drums and 30 inches between double or triple stacked drums [40 CFR 265.35]	
25. Is there immediate access to communication or alarm systems whenever hazardous waste is poured, mixed or handled? [40 CFR 265.32 and 265.34(a)(b)]	Y N N/A ??
26. Is there an adequate supply of fire extinguishers and spill control equipment in the accumulation area? [40 CFR 265.32(c)]	Y N N/A ??
27. Is there adequate water pressure to supply fire hoses? [40 CFR 265.32(d)]	Y N N/A ??
28. Is the fire fighting equipment, communications and alarm equipment, and decontamination equipment, spill control and water supply tested and maintained? [40 CFR 265.33]	Y N N/A ??
29. Have the police, fire department and emergency response teams been familiarized with the layout of the facility? [40 CFR 265.37(a)(1)]	Y N N/A ??
30. Are there written agreements with emergency response contractors and equipment suppliers? [40 CFR 265.37(a)(2)and(3)]	Y N N/A ??
31. Have arrangements been made with the local hospitals to familiarize them with the properties of the hazardous waste handled at your facility	Y N N/A ??

and the types of injuries which may result from contact with these wastes? (This is usually a letter to the local hospitals identifying the wastes generated and the types of injuries that result from contact with the waste.)

[40 CFR 265.37(a)(4)]

32. Is there an emergency coordinator on-site or on call who is available to respond to an emergency? [40 CFR 262.34(d)(5)(i)]

Y N N/A ??

**Note:** The emergency coordinator or his designee must respond to any emergencies that arise.

33. Is the following information posted next to the telephone: the name and telephone number of the emergency coordinator; the location of fire extinguishers and spill control material, and, if present, fire alarm; and the telephone number of the fire department, unless the facility has a direct alarm? [40 CFR 262.34(d)(5)(ii)]

Y N N/A ??

**Note:** In the event of a fire, explosion or other release which could threaten human health outside the facility or when the generator has knowledge that a spill has reached surface water, the generator must immediately notify the National Response Center (using their 24-hour toll free number 800-424-8802. [40 CFR 262.34(d)(5)(iv)(c)]

34. Are all employees thoroughly familiar with proper waste handling and emergency procedures, relevant to their responsibilities during normal facility operations and emergencies?
[40 CFR 262.34(d)(5)(iii)]

Y N N/A ??

35. Has the school notified the EPA Regional Administrator of any manifests which were not received for shipments made to a designated facility within 60 days?
[40 CFR 262.42(b)]

Y N N/A ??

## Large Quantity Generator (Generate More Than 1000 Kilograms of Hazardous Waste Per Month

36. Have hazardous waste containers been accumulated at your facility for 90 days or less? [40 CFR 262.34(g)]

Y N N/A ??

**Note:** If you store hazardous waste for more than 90 days, additional regulations apply which are not covered in this checklist. Contact your state environmental agency for additional information.

37. Are containers marked with accumulation start date? [40 CFR 262.34(q)(4)(iii)]	Y N N/A ??
38. Are container labels visible? [40 CFR 262.34(q)]	Y N N/A ??
39. Are containers segregated according to waste type? [40 CFR 265.177)(a)and(c)]	Y N N/A ??
40. Are the containers inspected weekly? [40 CFR 265.174]	Y N N/A ??
41. Are containers of ignitable and reactive wastes located greater than 50 feet from the facility's property line? [40 CFR 265.176]	Y N N/A ??
42. Is there adequate aisle space between container rows? [40 CFR 265.35]	Y N N/A ??
43. Is there immediate access to communication or alarm systems whenever hazardous waste is poured, mixed or handled? [40 CFR 265.32 and 265.34(a)(1)]	Y N N/A ??
44. Is there an adequate supply of fire extinguishers and spill control equipment in the accumulation area? [40 CFR 265.32(c)]	Y N N/A ??
45. Is there adequate water pressure to supply fire hoses? [40 CFR 265.32(a)(1)]	Y N N/A ??
46. Is the fire fighting equipment, spill control and water supply tested and maintained? [40 CFR 265.33(a)(2)and(3)]	Y N N/A ??
47. Have the police, fire department and emergency response teams been familiarized with the layout of the facility? [40 CFR 265.37(a)(1)]	Y N N/A ??
48. Are there written agreements with emergency response contractors and equipment suppliers? [40 CFR 265.37(a)(2)and(3)]	Y N N/A ??

49. Have arrangements been made with the local

	hospitals to familiarize them with the properties of the hazardous waste handled at your facility and the types of injuries which may result from contact with these wastes? (This is usually a letter to the local hospitals identifying the wastes generated and the types of injuries that result from contact with the waste.) [40 CFR 265.37(a)(4)]	Y N N/A ??
50	D. Has a contingency plan been developed describing the actions to be taken by facility personnel in the event of a fire, explosion or hazardous materials release?  [40 CFR 265.51]	Y N N/A ??
51	Does the plan describe arrangements with local authorities including fire police, and emergency medical services personnel, for handling such emergencies?  [40 CFR 265.52(c)]	Y N N/A ??
52	2. Does the plan list telephone numbers for the emergency coordinator and alternates? [40 CFR 265.52(c)]	Y N N/A ??
53	3. Does the plan list the locations and capabilities of emergency equipment kept at the school including fire extinguishers, spill control equipment and communications and alarm systems and decontamination systems? [40 CFR 265.52(e)]	Y N N/A ??
54	1. Does the plan include primary and alternate evacuation routes for students and faculty? [40 CFR 265.52(f)]	Y N N/A ??
55	5. Is a copy of the plan available at the school for inspection? [40 CFR 265.53(a)]	Y N N/A ??
56	6. Has a copy of the plan been forwarded to local emergency agencies including police, fire, emergency medical, the local emergency planning committee, and any emergency response contractors who may be called upon during an incident?  [40 CFR 265.53(b)]	Y N N/A ??

57. Are there provisions for updating the Contingency Plan as operations and/or personnel change?

	[40 C	rk 203.34]	N/A ff
58.	traine	training program directed by a person d in hazardous waste management procedures? FR 264.16(a)(2)]	Y N N/A ??
59.	perso	training program designed to ensure that nnel are able to respond effectively? FR 264.16(a)(3)]	Y N N/A ??
60.	[40 Cl (i) Pro emerg (ii) Ke (iii) Cl (iv) R (v) Re	the training program include: FR 264.16(a)(3) Decedures for using, inspecting, repairing, and replacing facility gency and monitoring equipment; By parameters for automatic waste feed cut-off systems; Dommunications or alarm systems; Desponse to fires or explosions; Desponse to ground-water contamination incidents; and hutdown of operations.]	Y N N/A ??
	a.	The use of personnel safety equipment?	
	b.	Procedures for using facility emergency and monitoring equipment?	
	C.	Procedures for utilizing communications or alarm systems?	
	d.	Response procedures for fires and explosions?	
	e.	Ground water contamination response procedures?	
61.	of em involv	ning provided within 6 months of the date ployment or assignment to an area ing the handling of hazardous waste? FR 264.16(b)]	Y N N/A ??
62.		ning reviewed annually? FR 264.16(c)]	Y N N/A ??
63.	inform the na 2) A w of the of act	ning documented with the following nation: 1) Job title for each position and ame of the person filling each job; vritten job description; 3) A description training given; and 4) Documentation ual training? FR 264.16(d)]	Y N N/A ??
64.	Are tr	aining records maintained for at least	

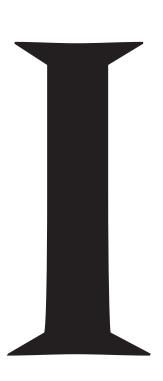
N/A ??

Y N

[40 CFR 265.54]

three (3) years?

[40 CFR 264.16(e)]	N/A ??
65. Has the school contacted the transporter and/or owner or operator of the designated facility of any manifests which were not received for shipments made to a designated facility within 35 days? [40 CFR 262.42(a)(2)]	Y N N/A ??
66. Has an Exception Report been submitted to the EPA regional Administrator if the generator has not received a copy of the manifest within 45 days? [40 CFR 262.42(a)(2)]	Y N N/A ??
<b>Note:</b> Efforts to obtain the manifest must be documented.	
67. Are Biennial Reports and Exception reports kept on file for 3 years? [40 CFR 262.40(b)]	Y N N/A ??



Information
Name of Location:
Date of inspection:
Career-Technical program/course/room:
Signature of inspector:

# **Indoor Air Quality** Self-Inspection Checklist

**Guidelines:** This checklist covers general recommendations for addressing indoor air quality issues in school districts. No Federal regulations or laws require these recommendations. States, however, may have additional regulations that apply.



TQuestions marked with this symbol may require the help of an outside expert.

			Ple	ase Ci	rcle	
Gene	ral					
1.	Is someone designated to develop and implement an indoor air quality management plan for your school district?	Y	N	N/A	??	
2.	Does your district have an indoor air quality management plan that includes steps for preventing and resolving indoor air quality problems?	Y	N	N/A	??	
3.	Has your school district been tested for radon, and have radon-mitigation systems installed where needed?	Y	N	N/A	??	
4.	Does your school district use <b>integrated pest</b> management principles in all areas?	Y	N	N/A	??	
5.	Is spot-treatment of pesticides used to control infested areas?	Y	N	N/A	??	
6.	Are all pesticide applicators trained in the safe use of pesticides?	Y	N	N/A	??	

7.	Have painted surfaces in your district been tested for lead-based paint, and has a lead control or removal program been implemented?	Y	N	N/A	??
8.	Are school buildings inspected once or twice each year for conditions that may lead to indoor air quality problems?	Y	N	N/A	??
9.	Is a preventive maintenance schedule established and in operation for the heating, ventilation, and air conditioning (HVAC) system? Is the schedule in accordance with the manufacturer's recommendations or accepted practice for the HVAC system?	Y	N	N/A	??
10.	Does the HVAC preventive maintenance schedule include the following?: checking and/or changing air filters and belts, lubricating equipment parts, checking the motors, and confirming that all equipment is in operating order.	Y	N	N/A	??
11.	Are damaged or inoperable components of the HVAC system replaced or repaired as appropriate?	Y	N	N/A	??
12.	Are reservoirs or parts of the HVAC system with standing water checked visually for microbial growth?	Y	N	N/A	??
13.	Are water leaks that could promote growth of biologic agents promptly repaired?	Y	N	N/A	??
14.	Are damp or wet materials that could promote growth of biologic agents promptly dried, replaced, removed, or cleaned?	Y	N	N/A	??
15.	Are microbial contaminants removed from ductwork, humidifiers, other HVAC and <b>building system</b> components, and from building surfaces such as carpeting and ceiling tiles when found during regular or emergency maintenance activities or visual inspection?	Y	N	N/A	??
16.	Is general or local exhaust ventilation used where housekeeping and maintenance activities could reasonably be expected to result in exposure to hazardous substances above applicable exposure limits?	Y	N	N/A	??
17.	When point sources generate airborne concentrations of contaminants above applicable limits, are local exhaust ventilation or substitution used to reduce the exposure concentrations to below the limits?	Y	N	N/A	??



- 18. When the carbon dioxide level exceeds 1,000 parts per million, is the HVAC system checked and repaired as Y N N/A ?? necessary to ensure the system is operating properly? 19. When the temperature is outside of the range of 68 to 79°F, is the HVAC system checked and repaired as Y N N/A ?? necessary to ensure the system is operating properly? 20. Are humidity levels maintained between 30% to 60% relative humidity? N N/A ?? 21. When a contaminant is identified in the make-up air supply, is the source of the contaminant eliminated, or are the N N/A ?? make-up inlets or exhaust air outlets relocated to avoid entry of the contaminant into the air system? 22. If buildings do not have mechanical ventilation, are windows, doors, vents, stacks, and other portals used for natural Y N N/A ?? ventilation operating properly? 23. Are complaints promptly investigated that may involve a building-related illness? Y N N/A ?? **Smoking** Y N N/A ?? 24. Is smoking in school buildings prohibited except as part of a classroom instruction or a theatrical production? 25. Do written district board of education policies and procedures prohibit smoking in school buildings? Y N N/A ?? **Renovations and Remodeling** N N/A ?? 26. During renovation work or new construction, are local ventilation or other protective devices used to safeguard employees and students from dust, stones, other small particles, and toxic gases, which may be harmful in certain quantities? 27. Are renovation areas in occupied buildings isolated so that dust and debris is confined to the renovation or construction area? Y N N/A ??
  - 28. Are precautions implemented in case lead-based paint is

disturbed during renovation or new construction?	Y	N	N/A	??
29. When renovating or during new construction, are product labels checked, or is information obtained on whether paints, adhesives, sealants, solvents, insulation, particle board, plywood, floor coverings, carpet backing, textiles or other materials contain volatile organic compounds that could be emitted during regular use?	Y	N	N/A	??
30. Is the information referred to in Question 29 used to select products and to determine necessary measures to be taken to comply with indoor air quality regulations?	Y	N	N/A	??
31. Are employees notified at least 24 hours in advance, or promptly in emergency situations, of work to be performed on the building that may introduce air contaminants into their work area?	Y	N	N/A	??
Recordkeeping				
32. Is the maintenance schedule updated to show all maintenance performed on the <b>building systems</b> ?	Y	N	N/A	??
33. Does the maintenance schedule include the dates that the building systems maintenance was performed and the names of the persons or companies performing the work?	Y	N	N/A	??
34. Are maintenance schedules retained for at least three years?	Y	N	N/A	??

#### **Definitions:**

**Building systems** includes the heating, ventilation and air-conditioning (HVAC) system, the energy management system, and all other systems in a facility that may impact indoor air quality. **Integrated pest management** is a sustainable approach to controlling pests by using biological, mechanical, physical, and chemical means in ways that minimize health risks, environmental risks, and cost.

#### **Additional Information:**

For additional information and resources for addressing indoor air quality issues in schools, contact the Environmental Protection Agency (EPA) Indoor Air Quality Information Clearinghouse at 1-800-438-4318 or the Web site <a href="http://www.epa.gov/iag/schools/index.html">http://www.epa.gov/iag/schools/index.html</a>.



Information
Name of Location:
Date of inspection:
Career-Technical program/course/room:
Signature of inspector:

# Jacks and Hoists Self Inspection Checklist

**Guidelines:** This checklist covers regulations issued by the U.S. Department of Labor, Occupational Safety and Health Administration (OSHA) under general industry standards 29 CFR 1910.244 and 1910.308 and the construction standards 29 CFR 1926.305 and 1926.554. These regulations cover jacks, overhead hoists, and monorail hoists. The regulations cited apply only to private employers and their employees, unless adopted by a state agency and applied to other groups such as public employees. A **yes** answer to a question indicates that this portion of the inspection complies with the OSHA or EPA standard, or with a nonregulatory recommendation. Definitions of terms in bold type are provided at the end of the checklist.

			Plea	ase Cir	rcle
Jacks					
1.	Do jacks in use have a rating sufficient to lift and sustain the loads? [29 CFR 1910.244(a)(1)(i)]	Y	N	N/A	??
2.	Is the rated load legibly and permanently marked in a prominent location on the jack by casting, stamping, or other suitable means? [29 CFR 1910.244(a)(1)(ii) and 1926.305(a)(1)]	Y	N	N/A	??
3.	In the absence of a firm foundation, is the base of the jack blocked or cribbed? [29 CFR 1910.244(a)(2)(i) and 1926.305(c)]	Y	N	N/A	??
4.	If the cap could slip, is a block placed between the cap and the load? [29 CFR 1910.244(a)(2)(i) and 1926.305(c)]	Y	N	N/A	??
5.	Do all jacks have a positive stop to prevent over-travel? [29 CFR 1926.305(a)(2)]	Y	N	N/A	??

6. Are operators instructed to watch the stop

indicator (which must be kept clean) in order to determine the limit of travel? [29 CFR 1910.244(a)(2)(ii)]	Y	N	N/A	??
<ol> <li>After the load has been raised, is it required to be cribbed, blocked, or otherwise secured at once? [29 CFR 1910.244(a)(2)(iii) and 1926.305(d)(1)(i)]</li> </ol>	Y	N	N/A	??
<ol> <li>Are hydraulic jacks that are exposed to freezing temperatures supplied with adequate antifreeze liquid? [29 CFR 1910.244(a)(2)(iv) and 1926.305(d)(1)(ii)]</li> </ol>	Y	N	N/A	??
<ol> <li>Are all jacks properly lubricated at regular intervals?</li> <li>[29 CFR 1910.244(a)(2)(v) and 1926.305(d)(1)(iii)]</li> </ol>	Y	N	N/A	??
<ul><li>10. Is each jack thoroughly inspected?</li><li>[29 CFR 1910.244(a)(2)(vi) and 1926.305(d)(1)(iv)]</li></ul>	Y	N	N/A	??
11. Are jacks that are used constantly or intermittently at one locality thoroughly inspected at least every six months? [29 CFR 1910.244(a)(2)(vi)(a) and 1926.305(d)(1)(iv)(a)]	Y	N	N/A	??
<ul><li>12. Are jacks that are sent out thoroughly inspected when they are returned?</li><li>[29 CFR 1910.244(a)(2)(vi)(b) and 1926.305(d)(1)(iv)(b)]</li></ul>	Y	N	N/A	??
13. Are jacks that are subjected to abnormal load or shock thoroughly inspected immediately before and immediately after use? [29 CFR 1910.244(a)(2)(vi)(c) and 1926.305(d)(1)(iv)(c)]	Y	N	N/A	??
14. Are repair or replacement parts examined for defects? [29 CFR 1910.244(a)(2)(vii) and 1926.305(d)(1)(v)]	Y	N	N/A	??
<ul><li>15. Are repairs made on disabled jacks before they are used again?</li><li>[29 CFR 1910.244(a)(2)(viii) and 1926.305(d)(1)(vi)]</li></ul>	Y	N	N/A	??
Electric Monorail Hoists				
16. On an electric monorail hoist, is a readily accessible disconnecting means provided between the runway contact conductors and the power supply? [29 CFR 1910.306(b)(1)(i)]	Y	N	N/A	??

17. On an electric monorail hoist, is another disconnecting

means (capable of being locked in the open position) provided in the lead from the runway contact conductors or other power supply? [29 CFR 1910.306(b)(1)(ii)]	Y	N	N/A	??
<b>Note:</b> See 29 CFR 1910.306(b)(1)(ii)(B)(1 to 3) for exceptions.				
18. If the additional disconnecting means required in question 17 is not readily accessible from the crane or monorail hoist operating station, is a means provided at the operating station to open the power circuit to all motors of the crane or monorail hoist? [29 CFR 1910.306(b)(1)(ii)(A)]	Y	N	N/A	??
19. On an electric hoist, is a minimum of 2 feet 6 inches of working space provided in the direction of access to live parts for examination, adjustment, servicing, or maintenance? [29 CFR 1910.306(b)(3)]	Y	N	N/A	??
20. On an electric hoist where controls are enclosed in cabinets, are door(s) removable or capable of opening at least 90 degrees? [29 CFR 1910.306(b)(3)]	Y	N	N/A	??
21. Is a limit switch or other device provided to prevent the load block from passing the safe upper limit of travel of any hoisting mechanism? [29 CFR 1910.306(b)(2)]	Y	N	N/A	??
22. Is the safe working load of an overhead hoist, as determined by the manufacturer, indicated on the hoist? [29 CFR 1926.554(a)(1)]	Y	N	N/A	??
<ul><li>23. Is the weight of the load maintained at or below the safe working load?</li><li>[29 CFR 1926.554(a)(1)]</li></ul>	Y	N	N/A	??
24. Does the supporting structure to which an overhead hoist is attached have a safe working load at least equal to that of the hoist? [29 CFR 1926.554(a)(2)]	Y	N	N/A	??
25. Does the support for an overhead hoist allow free movement of the hoist so that the hoist can line itself up with the load? [29 CFR 1926.554(a)(3)]	Y	N	N/A	??

26. Is the overhead hoist installed only in locations that will permit the operator to stand clear of the load at all times? [29 CFR 1926.554(a)(4)]	Y	N	N/A	??
27. Are air hoists connected to an air supply of sufficient capacity and pressure to operate the hoist safely? [29 CFR 1926.554(a)(5)]	Y	N	N/A	??
28. Are air hoses supplying air to air hoists connected by a positive method to prevent their becoming disconnected during use? [29 CFR 1926.554.(a)(5)]	Y	N	N/A	??
29. Do overhead hoists meet the applicable requirements for construction, design, installation, testing, inspection, maintenance, and operation as prescribed by the manufacturer? [29 CFR 1926.554(a)(6)]	Y	N	N/A	??
30. Are overhead hoist hooks equipped with a hook-latch safety device? [recommended]	Y	N	N/A	??

#### **Definitions:**

**Disconnecting means:** a device, group of devices, or other means by which the conductors of a circuit can be disconnected from their source of supply.



Information
Name of Location:
Date of inspection:
Career-Technical program/course/room:
Signature of inspector:

# Machines General Requirements

**Self-Inspection Checklist** 

**Guidelines:** This checklist covers machines which require guards to protect the operators and others near the machines from hazards such as those created by point of operation, ingoing nip points, rotating parts, flying chips and sparks. Examples of guarding methods are barrier guards, two-hand tripping devices, and electronic safety devices.



Questions marked with this symbol may require the help of an outside expert.

#### **Please Circle**

- Are all machines guarded to protect the operator and other people in the machine area from hazards such as those created by point of operation, ingoing nip points, rotating parts, flying chips, and sparks?
   [29 CFR 1910.212(a)(1)]
- Y N N/A ??

2. Is the point of operation guarded, in conformity with appropriate standards, if operation of machinery exposes individuals to injury?
[29 CFR 1910.212(a)(3)(ii)]

Y N N/A ??

**Note:** In the absence of applicable specific standards, guarding shall be so designed and constructed as to prevent the operator from having any part of his/her body in the danger zone during the operating cycle. Examples of cited violations include: paper cutters had no finger guards, a radial arm saw's blade protruded beyond the edge of the cutting table during its operating cycle, bench and pedestal drills had no bit guards, and lathes had no shields.

3. Are guards attached to the machine when possible, and if that is not possible, attached elsewhere?

4.	If hand tools are used for placing or removing material, are they designed to be easily handled without a need to place hands in a danger zone? [29 CFR 1910.212(a)(3)(iii)]	Y	N	N/A	??
	<b>Note:</b> Such tools are not a substitute for guarding. They can only be used as supplemental protection.				
5.	Are revolving drums, barrels and containers guarded by an enclosure that is interlocked so that containers cannot revolve unless the enclosure is in place? [29 CFR 1910.212(a)(4)]	Y	N	N/A	??
6.	Are all fans less than 7 feet from the floor equipped with guards that have openings no larger than one-half (1/2) inch? [29 CFR 1910.212(a)(5)]	Y	N	N/A	??
	<b>Note:</b> Examples of cited violations include: exhaust fan blades and floor fans were not provided with protective guards, a portable table fan had a blade guard whose openings were approximately one inch in width, and a guard was broken creating a hole approximately 4" x 2."				
7.	Is all machinery designed for a fixed location securely anchored to prevent "walking" or "moving?" [29 CFR 1910.212(b)]	Y	N	N/A	??
8.	Are all machines constructed, installed and maintained as to be free from excessive vibration or play? [Recommended]	Y	N	N/A	??
9.	Are all machines and equipment requiring the presence of an operator not left unattended while in operation or still in motion? [Recommended]	Y	N	N/A	??
10	Are all machines provided with a power cut off switch that can be reached from the operating position? [Recommended]	Y	N	N/A	??
11.	Is all fixed motorized machinery equipped with a magnetic-type switch designed to prevent automatic restarting of machinery when power is restored after a power failure or electrical cutoff? [29 CFR 1910.213(b)(3)]	Y	N	N/A	??

12. Are all machine operating controls easily reachable

	from the standard operating position and away from any hazardous point of operation? [29 CFR 1910.213(b)(4)]	Y	N	N/A	??
13	Are all electrically powered machines provided with a positive means for rendering the motor starting controls inoperative while repairs or tool changes are being made?  [29 CFR 1910.213(b)(5)]	Y	N	N/A	??
14	Is your shop or lab equipped with two or more push-type emergency cut-out switches, provided at appropriate locations for each (maximum) 1000 square feet of shop floor area, for de-energizing the electrical supply to nonportable machinery. [Recommended]	Y	N	N/A	??
	<b>Note:</b> The switch must have a clear unobstructed access of at least 36 inches. In addition, the reset of the switch must be key operated.				
15	Are all power tools and machines which generate dust connected to a dust collection system? [Recommended]	Y	N	N/A	??
16	If required in your state, are dust collections systems permitted by the appropriate state agency? [see the Air Pollution Control checklist]	Υ	N	N/A	??



[see the **Air Pollution Control** checklist]

Information
Name of Location:
Date of inspection:
Career-Technical program/course/room:
Signature of inspector:

### Means of Egress/Escape Self-Inspection Checklist

**Guidelines:** This checklist covers regulations issued by the U.S. Department of Labor, Occupational Safety and Health Administration (OSHA) under 29 CFR 1910.36 and 1910.37. These regulations apply only to private employers and their employees, unless adopted by a State agency and applied to other groups such as public employees.

**Please Circle** General Y N N/A ?? 1. Are exits provided to permit the prompt escape of occupants in case of fire or other emergency? [29 CFR 1910.36 (b)(1)] 2. Is every exit, way of approach, and way to travel from the exit to the street continuously maintained free of all Y N N/A ?? obstructions or impediments? [29 CFR 1910.36(d)(1) and 1910.37(l)(1)] Note: The following items, if they block fire exits, are examples of violations: boxes of light tubes, empty boxes, a cart, metal fence posts, lawnmowers, steel racks, wood, tools, scales, ballracks, soccer balls, stored equipment, machines on the floor, and tripping hazards such as electric cords, tools, lumber, and hoses. 3. Are exits maintained so as to provide free and unobstructed egress or escape when the room is occupied? Y N N/A ?? [29 CFR 1910.36(b)(4)] Note: No locks, chains, or fastenings to prevent free escape from the inside are permitted. 4. Does every building or area have two exits if one exit could be blocked because of a fire, smoke, or other emergency? Y N N/A ?? [29 CFR 1910.36(b)(8)]

5. Do exits discharge directly onto a street, yard, court, or other open space that gives safe access to a public way? Y N N/A ?? [29 CFR 1910.37(h)(1)] 6. Do exit doors swing in the direction of travel when an area is occupied by more than 50 people or where hazardous Y N N/A ?? operations are conducted? [29 CFR 1910.37(f)(2)] 7. Are all exit doors and paths of exit 28 inches or more in width? [29 CFR 1910.37(f)(6)] Y N N/A ?? Note: Examples of violations include a stack of wood restricting the exit to 14 inches, a space of only 17 inches between the desk and the wall, and a space of only 14 inches between desks. 8. Are means of egress or exit designed and maintained to provide adequate head room, with the ceiling height at least Y N N/A ?? 7-1/2 feet and any projection from the ceiling more than 6 feet 8 inches from the floor? [29 CFR 1910.37(i)] 9. Is every exit clearly visible and the route to it conspicuously indicated so everyone readily knows the direction of Y N N/A ?? escape from any point? [29 CFR 1910.36(b)(5) and 29 CFR 1910.37(f)(4) and (l)(1)] **Note:** Draperies or similar decorative hangings must not obstruct the view of, nor access through, any element of a means of egress or escape. Mirrors shall not be placed in or adjacent to a means of egress in any manner that may confuse the direction of egress. Exit doors must not be decorated in any way that would obscure or confuse the purpose of the door. 10. In areas equipped for artificial illumination, do all exit paths have adequate and reliable illumination? Y N N/A ?? [29 CFR 1910.36(b)(6)] 11. Are exits prohibited through bathrooms or other rooms subject to locking? N N/A ?? 12. Is storage of flammable or combustible materials in exit corridors prohibited? [recommended] Y N N/A ?? 13. Is the use of highly flammable furnishings or decorations prohibited? [29 CFR 1910.37(I)(2)] Y N N/A ??

Information
Name of Location:
Date of inspection:
Career-Technical program/course/room:
Signature of inspector:

# Mechanical Power-Transmission Apparatus Self Inspection Checklist

**Guidelines:** This checklist covers regulations issued by the U.S. Department of Labor, Occupational Safety and Health Administration (OSHA) under the general industry standard 29 CFR 1910.219. The regulations cited apply only to private employers and their employees, unless adopted by a State agency and applied to other groups such as public employees. A **yes** answer to a question indicates that this portion of the inspection complies with the OSHA or EPA standard, or with a nonregulatory recommendation. Definitions of terms in bold type are provided at the end of the checklist.

This checklist does not address power-transmission apparatus located in basements; guarding friction drives; and belt shifters, clutches, shippers, poles, perches, and fasteners. Consult 29 CFR 1910.219 for regulations dealing with these types of equipment.

r			lease Circle		
Care of Equipment					
<ol> <li>Is all power-transmission equipment inspected every 60 days or less and kept in good working condition at all times?</li> <li>[29 CFR 1910.219(p)(1)]</li> </ol>	Υ	N	N/A	??	
<ol> <li>Are hangers inspected to make certain that all supporting bolts and screws are tight and that supports of hanger boxes are adjusted properly? [29 CFR 1910.219(p)(4)]</li> </ol>	Y	N	N/A	??	
<ul><li>Is machinery oiled wherever possible when not in motion?</li><li>[29 CFR 1910.219(p)(7)]</li></ul>	Y	N	N/A	??	
<ol> <li>Do regular oilers wear tight-fitting clothing?</li> <li>[29 CFR 1910.219(p)(7)]</li> </ol>	Y	N	N/A	??	

#### **Prime-Mover Guards**

5. When exposed to contact, are **flywheels** guarded by an enclosure, guard rail, or toeboard? Y N N/A ?? [29 CFR 1910.219(b)(1)] 6. Are crank and connecting rods guarded when exposed to contact? Y N N/A ?? [29 CFR 1910.219(b)(2)] 7. Are tail rods or extension piston rods guarded? [29 CFR 1910.219(b)(3)] Y N N/A ?? Shafting 8. Is each continuous line of shafting secured against excessive end movement? Y N N/A ?? [29 CFR 1910.219(c)(1)(i)] 9. Are inclined and vertical shafts (particularly inclined idler shafts) securely held in position Y N N/A ?? against end-wise thrust? [29 CFR 1910.219(c)(1)(ii)] 10. For horizontal shafting 7 feet or less above the floor or working platform, are all exposed parts Y N N/A ?? protected by (a) a stationary casing completely enclosing the shafting, or (b) a trough enclosing the sides and top, or sides and bottom of the shafting (as the location requires)? [29 CFR 1910.219(c)(2)(i)] 11. Is shafting under bench machinery enclosed by (a) a stationary casing, or (b) a trough at sides Y N N/A ?? and top, or sides and bottom (as location requires)? [29 CFR 1910.219(c)(2)(ii)] **Note:** The sides of the trough shall come within at least 6 inches of the underside of the table, or within 6 inches of the floor if shafting is near the floor. In every case, the sides of the trough shall extend at least 2 inches beyond the shafting or protuberance. 12. Is vertical or inclined shafting that is 7 feet or less from the floor or working platform (except Y N N/A ?? maintenance runways) enclosed with a stationary casing? [29 CFR 1910.219(c)(3)]

13. Do projecting shaft ends have a smooth edge and end?

1	4. Are shaft ends that project more than 1/2 of the diameter of the shaft guarded by nonrotating caps or safety sleeves? [29 CFR 1910.219(c)(4)(i)]	Y	N	N/A	??
1	5. Are unused keyways filled up or covered? [29 CFR 1910.219(c)(4)(ii)]	Y	N	N/A	??
1	6. Is shafting kept in alignment and free from rust and excess oil or grease? [29 CFR 1910.219(p)(2)]	Y	N	N/A	??
Pulle	eys				
1	7. Are pulleys 7 feet or less from the floor guarded? [29 CFR 1910.219(d)(1)]	Y	N	N/A	??
1	8. Are pulleys with cracks or pieces broken out of the rims taken out of service? (shall not be used) [29 CFR 1910.219(d)(3)]	Y	N	N/A	??
1	9. Are pulleys kept in proper alignment to prevent belts from running off? [29 CFR 1910.219(p)(5)]	Y	N	N/A	??
Belt,	Rope, and Chain Drives				
2	0. Are horizontal belts seven feet or less from the floor level guarded? [29 CFR 1910.219(e)(1)(i)]	Y	N	N/A	??
2	<ol> <li>Are belts, lacings, and fasteners inspected and maintained in good repair?</li> <li>[29 CFR 1910.219(p)(6)(ii)]</li> </ol>	Y	N	N/A	??
Gear	rs, Sprockets, and Chains				
2	2. Are all gears fully guarded? [29 CFR 1910.219(f)(1)]	Y	N	N/A	??
2	3. Are all sprocket wheels and chains that are less than 7 feet above the floor or platform fully guarded? [29 CFR 1910.219(f)(3)]	Y	N	N/A	??

24. Are openings with hinged or sliding self-closing

covers provided when frequent oiling must be done on gears, sprockets, and chains? [29 CFR 1910.219(f)(4)]	Y	N	N/A	??
Keys, Setscrews, and Other Projections				
25. Are all projecting keys, set-screws, and other projections in revolving parts guarded by metal covers or made flush? [29 CFR 1910.219(h)(1)]	Y	N	N/A	??
Collars and Couplings				
26. Are shaft couplings constructed so they do not present hazards from bolts, nuts, set-screws, or revolving surfaces? [29 CFR 1910.219(i)(2)]	Y	N	N/A	??
<b>Note:</b> Bots, nuts, and setscrews are permitted if covered with safety sleeves.				
Bearings and Facilities for Oiling				
27. Are all drip cups and pans securely fastened? [29 CFR 1910.219(j)]	Y	N	N/A	??
28. Are bearings kept in alignment and properly adjusted? [29 CFR 1910.219(p)(3)]	Y	N	N/A	??
Guards				
29. Are all metal guards free from burrs and sharp edges? [29 CFR 1910.219(m)(1)(ii)]	Y	N	N/A	??
30. Are all metal guards securely fastened to the floor or to frame of the machine? [29 CFR 1910.219(m)(1)(i)]	Y	N	N/A	??
31. Are all guards rigidly braced every 3 feet or fractional part of their height to a fixed part of machinery or building structure? [29 CFR 1910.219(o)(1)(i)(a)]	Y	N	N/A	??

#### **Definitions:**

**Belts:** include all power transmission belts, such as flat belts, round belts, V-bets, etc., unless otherwise specified.

**Flywheels:** include flywheels, balance wheels, and flywheel pulleys mounted and revolving on crankshaft of engine or other shafting.

<b>Prime movers:</b> include steam, gas, oil, and air engines; other equipment used as a source of power.	; motors, steam, and hydraulic turbine	s; and

Comments/Corrective action			

Information
Name of Location:
Date of inspection:
Career-Technical program/course/room:
Signature of inspector:

# Medical Services and First Aid Self-Inspection Checklist

**Guidelines:** This checklist covers the regulations issued by the U.S. Department of Labor, Occupational Safety and Health Administration (OSHA) under the general industry standard subpart K: 29 CFR 1910.151. These regulations apply only to private employers and their employees, unless adopted by a State agency and applied to other groups such as public employees. Reference is also made to the OSHA standard 29 CFR 1910.1030, Occupational Exposure to Bloodborne Pathogens, since employees responding to medical emergencies must use universal precautions.

Medical services and first aid at construction sites covered by the OSHA construction standard 29 CFR 1926.50 are not addressed as part of this checklist. See the checklist for **General Safety and Health Provisions for Construction**.

			Ple	ase Ci	rcle
1.	Are medical personnel readily available for advice and consultation on work related health issues? [29 CFR 1910.151(a)]	Y	N	N/A	??
2.	If a hospital, clinic or infirmary is not proximate to areas where employees are located, is at least one person available who is adequately trained to render first aid? [29 CFR 1910.151(b)]	Y	N	N/A	??
3.	Are adequate first aid supplies readily available? [29 CFR 1910.151(b)]	Y	N	N/A	??
4.	Are suitable facilities for quick drenching or flushing of the eyes and body available in work areas where the eyes or body may be exposed to corrosive materials? [29 CFR 1910.151(c)]	Y	N	N/A	??
5.	Do all employees handling blood and body fluids in an emergency follow universal precautions?	Y	N	N/A	??

Information
Name of Location:
Date of inspection:
Career-Technical program/course/room:
Signature of inspector:

### Mobile Ladder Stands Self-Inspection Checklist

**Guidelines:** This checklist covers regulations issued by the U.S. Department of Labor, Occupational Safety and Health Administration (OSHA) under the general industry standard 29 CFR 1910.29. It applies to **mobile ladder stands** that may be used in labs and shops to reach lights or other overhead storage areas. The regulations cited apply only to private employers and their employees, unless adopted by a State agency and applied to other groups such as public employees. Definitions of terms in bold type are provided at the end of the checklist.

			Ple	ase Ci	rcle
1.	Are all exposed surfaces of <b>mobile ladder stands</b> free from sharp edges, burrs, or other safety hazards? [29 CFR 1910.29(a)(2)(v)]	Y	N	N/A	??
2.	Is the maximum work level height less than or equal to four times the minimum or least base dimension of the <b>mobile ladder stand</b> ? [29 CFR 1910.29(a)(3)(i)]	Y	N	N/A	??
	<b>Note:</b> Suitable outrigger frames may be used to achieve the required base dimension or other means used to guy or brace the unit against tipping.				
3.	Is the minimum step width for ladder stands 16 inches? [29 CFR 1910.29(a)(3)(ii)]	Y	N	N/A	??
4.	Are the steps of ladder stands fabricated from slip-resistant <b>treads</b> ? [29 CFR 1910.29(a)(3)(iv)]	Y	N	N/A	??
5.	Are at least two of the four casters equipped with a swivel lock to prevent movement? [29 CFR 1910.29(a)(4)(ii)]	Y	N	N/A	??
6.	Are steps of mobile ladder stands uniformly spaced? [29 CFR 1910.29(f)(3)]	Y	N	N/A	??

 Are steps of mobile ladder stands sloped, with a rise that is not less than 9 and not more than 10 inches, and a depth of at least 7 inches?
 [29 CFR 1910.29(f)(3)]

Y N N/A ??

**Note:** The slope of the steps section shall be a minimum of 55 degrees and a maximum of 60 degrees measured from the horizontal.

8. Are mobile ladder stands with more than five steps equipped with handrails? [29 CFR 1910.29(f)(4)(i)]

Y N N/A ??

Are the handrails at least 29 inches high?
 [29 CFR 1910.29(f)(4)(ii)]

Y N N/A ??

**Note:** Measurements must be taken vertically from the center of the steps.

10. Are all ladder stands with a work level 10 feet or higher above the ground or floor equipped with a standard (4-inch nominal) toeboard? [29 CFR 1910.29(a)(3)(vi)]

Y N N/A ??

#### **Definitions:**

**Mobile ladder stand:** a manually propelled mobile fixed-size self-supporting ladder consisting of a wide flat tread ladder in the form of stairs. The assembly may include handrails. **Rise:** the vertical distance from the top of a tread to the top of the next higher tread.

**Tread:** the horizontal member of a step.



Information
Name of Location:
Date of inspection:
Career-Technical program/course/room:
Signature of inspector:

## Noise (occupational) Self-Inspection Checklist

Guidelines: This checklist is based on regulations issued by the U.S. Department of Labor, Occupational Safety and Health Administration (OSHA) under the general industry standard 29 CFR 1910.95. For noise exposure at constructions sites, please use the checklist entitled Noise, Radiation, and Other Exposures for Construction. These regulations are not designed to cover nuisance noise exposure (e.g. ambient noise, road traffic, etc.). They are designed to protect against hearing loss and apply to situations in which noise levels equal or exceed 85 dBA as an 8-hour time-weighted-average. The OSHA permissible exposure limit (PEL) for noise is 90 dBA. The National Institute for Occupational Safety and Health (NIOSH), however, recommends a different, more protective standard to prevent hearing loss. Please contact NIOSH (1-800-35-NIOSH) for information on their recommendations. The regulations cited apply only to private employers and their employees, unless adopted by a State agency and applied to other groups such as public employees. A yes answer to a question indicates that this portion of the inspection complies with the OSHA or EPA standard, or with a nonregulatory recommendation. Definitions of terms in bold type are provided at the end of the checklist.



Ouestions marked with this symbol may require the help of an outside expert.

Noise-generating operations, processes, and equipment to which people are exposed may cause hearing loss depending on the intensity and duration of exposure. Noisy machinery does not automatically mean a problem exists. As a general rule, if normal conversation is difficult between two people standing at arms length, further investigation is warranted. If noise problems are suspected, a formal evaluation by a qualified person, such as an industrial hygienist, is recommended to determine compliance. The questions below provide general guidance in evaluating your lab, shop or classroom.

# Have all operations or equipment believed to exceed an 8 hour time-weighted avergage of 85 **dBA**been measured to determine their noise levels? [29 CFR 1910.95(d)(1)]

2. If noise levels from operations or equipment equal or exceed 85 **dBA**, has personal noise dosimetry been performed on exposed persons to determine

Y N N/A ??

**Please Circle** 



### their **8-hour time-weighted-averages**? [29 CFR 1910.95(d)(1)(ii)]

<b>†</b>	3.	Does the school administer a continuing, effective hearing conservation program when noise exposures equal or exceed 85 dBA as an 8-hour time-weighted-average?  [29 CFR 1910.95(c)	Y	N	N/A	??
	4.	Are hearing protectors available at no cost to all persons exposed to noise levels at or above 85 <b>dBA</b> as an <b>8-hour time-weighted-average</b> ? [29 CFR 1910.95(i)(1)]	Y	N	N/A	??
<b>†</b>	5.	Have feasible engineering or administrative controls been used to reduce operation or equipment noise levels to below 90 dBA as an 8-hour time-weighted-average?  [29 CFR 1910.95(b)(1)]	Y	N	N/A	??
	6.	Are noise measurements repeated when a change in operations or equipment may increase noise exposure? [29 CFR 1910.95(d)(3)]	Y	N	N/A	??
	7.	Are employees permitted to observe noise measurements? [29 CFR 1910.95(f)]	Υ	N	N/A	??
	8.	Are employees notified of noise monitoring results when exposures equal or exceed 85 dBA as an 8-hour time-weighted-average? [29 CFR 1910.95(e)]	Y	N	N/A	??
<b>†</b>	9.	Are hearing protectors evaluated to verify that they effectively reduce noise to levels below 85 <b>dBA</b> as an <b>8-hour time-weighted-average</b> ? [29 CFR 1910.95(j)(1)]	Y	N	N/A	??
	10	. Are noise measurement records maintained for at least two years? [29 CFR 1910.95(m)(3)(i)]	Y	N	N/A	??
	11	Are employees' hearing test records maintained for the duration of matriculation or employment? [29 CFR 1910.95(m)(i)]	Y	N	N/A	??
	12	. Is a copy of the OSHA noise standard available to employees or students, with a copy posted in the classroom or work area?	Y	N	N/A	??



- 13. If noise measurements indicate an **8-hour time-weighted-average** of 85 **dBA** or greater, is a training program given that covers the effects of noise on hearing; the purpose of hearing protection and how to use it; and the purpose of audiometric testing? [29 CFR 1910.95(k)(3)(i),(ii),and (iii)]
- Y N N/A ??
- 14. If noise measurements indicate an **8-hour time-weighted-average** of 85 **dBA** or greater, are baseline and annual audiometric tests given at no cost to employees or students using properly calibrated testing equipment?

  [29 CFR 1910.95 (g)(1),(2),(3),(4),and(h)]
- Y N N/A ??
- 15. Are audiometric tests preceded by at least 14 hours without career-technical or occupational noise exposure? [29 CFR 1910.95(g)(5)(iii)]
- Y N N/A ??



- 16. Are audiometric tests conducted by a licensed or certified audiologist; otolaryngologist, or other physician; or by a technician who is certified by the Council of Accreditation in Occupational Hearing Conservation or who has demonstrated competence in administering audiometric tests? [29 CFR 1910.95(g)(3)]
- Y N N/A ??

- 17. If audiometric tests show hearing loss due to noise exposure at work, are procedures in place for appropriate referrals, mandatory use of hearing protection, and training? [29 CFR 1910.95(g)(8)(ii)(a)(b),and(c)]
- Y N N/A ??



- 18. Do all students or employees exposed to 85 dBA or above as an 8-hour time-weighted-average receive hearing conservation training when they begin work and annually thereafter? [29 CFR 1910.95(k)(1)and(2)]
- Y N N/A ??

#### **Definitions:**

**8-hour time-weighted average:** an average exposure weighted to account for time and changing noise levels throughout an 8-hour day.

**Administrative controls:** reducing the period of personal noise exposure by job rotation or adding periods of quiet to the work day or work process such that the 8-hour time-weighted-average noise level does not exceed permissible limits.

**dBA:** noise levels in decibels measured with a sound level meter set to the A scale. The A scale simulates how humans hear noise levels at different frequencies.

**Permissible exposure limit (PEL):** an employee's exposure limit to an airborne concentration of a substance which OSHA/USDOL publishes and enforces. It is expressed as an 8-hr time-weighted average (TWA). PELs are protective limits that shall not be exceeded.

Information
Name of Location:
Date of inspection:
Career-Technical program/course/room:
Signature of inspector:

## Noise, Radiation, and Other Exposures for Construction Self-Inspection Checklist

**Guidelines:** This checklist covers selected construction regulations issued by the U.S. Department of Labor, Occupational Safety and Health Administration (OSHA) under 29 CFR 1926. It applies to temporary worksites associated with construction, alteration, demolition, and repair including painting and decorating. Fixed facilities, such as career-technical educational classrooms, are not covered by the construction regulations. This checklist covers exposure to noise, ionizing radiation, nonionizing radiation (lasers and microwaves), gases, vapors, fumes, dusts and mists. The regulations cited apply only to private employers and their employees, unless adopted by a State agency and applied to other groups such as public employees. A **yes** answer to a question indicates that this portion of the inspection complies with the OSHA or U.S. Environmental Protection Agency (EPA) standard, or with a nonregulatory recommendation. Definitions of terms in bold type are provided at the end of the checklist.



Questions marked with this symbol may require the help of an outside expert.

Compliance with the regulations dealing with exposures cannot be completely determined by using a checklist. Many factors are involved in making judgements about exposures including the amount and duration of exposure, sensitive populations, engineering controls such as ventilation, adequacy and use of personal protective equipment, and operating conditions. The following checklist is meant to provide guidance in identifying potential problems. If problems are identified, outside expert professional assistance is recommended.

**Please Circle** 

#### **Gases, Vapors, Fumes, Dusts, and Mists**



1. If employees or students may be exposed to excessive amounts of breathing gases, vapors, fumes, dusts, and mists, has the exposure been evaluated by a competent person to determine whether the exposure is harmful? [29 CFR 1926.55(a)]

Y N N/A ??

2.	If situations of excessive exposure exist, are
	administrative and engineering controls
	implemented (if practical) to eliminate or
	reduce the exposure so that students and
	employees no longer have to wear respirator
	protection?
	[29 CFR 1926.55(b)]

Y N N/A ??

 If such controls are not feasible to achieve full compliance, do students use respirators on an interim basis?
 [29 CFR 1926.55(b)]

Y N N/A ??

**Note:** See the <u>Respiratory Protection</u> checklist for additional information on implementing a respiratory protection program.

4. If any respirators are being used voluntarily, has the respiratory protection program been implemented as required by 29 CFR 1910.134?

Y N N/A ??

**Note:** See the <u>Respiratory Protection</u> checklist for additional information on implementing a respiratory protection program.

#### Noise



5. Have noise levels been evaluated by a competent person to determine whether noise levels exceed 90 dBA as an 8-hour time-weighted-average or 140 dB as a peak value?

[29 CFR 1926.52(a)]

Y N N/A ??

**Note:** The National Institute for Occupational Safety and Health (NIOSH) recommends a different, more protective standard to prevent hearing loss. Please contact NIOSH for information on their recommendations (1-800-35-NIOSH).



6. If employees or students are exposed to noise levels above 90 dBA as an 8-hour time-weightaverage, are feasible administrative or engineering controls used to reduce the noise level to below 90 dBA? [29 CFR 1926.52(b)]

Y N N/A ??

7. If employees or students are exposed to noise levels above 90 dBA as an 8-hour time-weightedaverage, are they required to wear hearing protection? [29 CFR 1926.52(b) and 1926.101(a)]

Y N N/A ??

\*

8. If students or employees are exposed to noise levels above 90 dBA as an 8-hour time-weighted-average, is a continuing, effective hearing

Y N N/A ??

- If hearing protection is used, is the type of hearing protection fitted or determined by a competent person? Y N N/A ?? [29 CFR 1926.101(b)]
- 10. Is the use of plain cotton as hearing protection prohibited?
  Y N N/A ??
  [29 CFR 1926.101(c)]

#### **Ionizing Radiation**



- 11. If ionizing radiation sources are used (such as radioactive materials or X-rays), are precautions YNN/A?? taken to protect against radiation exposure?
  [29 CFR 1926.53(a)]
- 12. Are activities involving ionizing radiation sources (such as radioactive materials or X-rays) only performed by competent persons specially trained in the proper and safe operation of such equipment?

  [29 CFR 1926.53(b)]

#### **Nonionizing Radiation--Lasers**

- 13. Do only qualified and trained persons install, adjust, and operate laser equipment?
  [29 CFR 1926.54(a)]
- 14. If lasers are used, do operators have proof of qualification available at all times?

  [29 CFR 1926.54(b)]

N N/A ??

- 15. If lasers are used that have a potential to give reflected light greater than 0.005 watts (5 milliwatts), Y N N/A ?? are antilaser eye- protection devices used?

  [29 CFR 1926.54(c)]
- 16. Do laser safety glass or goggles provide sufficient protection for the wavelength of the laser, and is the optical density adequate for the energy involved?

  [29 CFR 1926.102(b)(2)(i)]
- 17. Are all laser goggles labeled with the laser wavelengths for which use is intended, the optical density of those wavelengths, and the visible light transmission?

18. If lasers are used, are areas posted with a standard laser warning placard? [29 CFR 1926.54(d)]	Y	N	N/A	??
19. Are beam shutters or caps used for lasers, or is the laser turned off when laser transmission is not required? [29 CFR 1926.54(e)]	Y	N	N/A	??
20. Are lasers turned off when left unattended? [29 CFR 1926.54(e)]	Y	N	N/A	??
21. Are only mechanical or electronic means used as a detector for guiding the internal alignment of the laser (not your eyes)? [29 CFR 1926.54(f)]	Y	N	N/A	??
<ul><li>22. Are lasers prohibited from being directed at students and teachers?</li><li>[29 CFR 1926.54(g)]</li></ul>	Y	N	N/A	??
23. Are lasers prohibited from being used during conditions of rain, snow, dust, or fog? [29 CFR 1926.54(h)]	Y	N	N/A	??
24. Are lasers labeled with the maximum output? [29 CFR 1926.54(i)]	Y	N	N/A	??
<ul><li>25. Where practical, are laser set up above the heads of students and teachers?</li><li>[29 CFR 1926.54(k)]</li></ul>	Y	N	N/A	??
Nonionizing RadiationMicrowaves				
26. If students and teachers have exposure to microwaves, has the exposure been evaluated by a competent person to determine whether the exposure is harmful? [29 CFR 1926.54(I)]	Y	N	N/A	??



dB: noise levels in decibels.

**dBA:** noise levels in decibels with a weighting factor imposed to simulate how humans hear noise levels at different frequencies.

**Respirator:** a device designed to protect the wearer from inhaling harmful atmospheres. Types of **respirators** include self-contained breathing apparatus (SCBA), air-line **respirators** and air-purifying **respirators**.

Information
Name of Location:
Date of inspection:
Career-Technical program/course/room:
Signature of inspector:

#### Nonionizing Radiation Self-Inspection Checklist

**Guidelines:** This checklist covers regulations issued by the U.S. Department of Labor, Occupational Safety and Health Administration (OSHA) under the general industry standard 29 CFR 1910.97. It applies to exposures to electromagnetic energy of frequencies from 10 megahertz (MHz) to 100 gigahertz (GHz). This includes radio frequency (RF) and microwave radiation. The regulations cited apply only to private employers and their employees, unless adopted by a State agency and applied to other groups such as public employees. A **yes** answer to a question indicates that this portion of the inspection complies with the OSHA or U.S. Environmental Protection Agency (EPA) standard, or with a nonregulatory recommendation. Definitions of terms in bold type are provided at the end of the checklist.



Questions marked with this symbol may require the help of an outside expert.

**Nonionizing radiation** is a complex technical subject and may be beyond the ability of untrained personnel to evaluate properly. If you suspect or know that nonionizing radiation sources exist, first obtain competent assistance in measuring field strengths, and then complete the following checklist. This checklist does not cover regulations dealing with **nonionizing radiation** at construction sites. **Please use the <u>Noise</u>**, <u>Radiation</u>, <u>and Other Exposures for Construction</u> checklist.

**Please** Circle 1. Have all possible sources of **nonionizing radiation** in or near the classroom or work environment been Y N identified? (e.g., RF heat sealers, microwave ovens, N/A ?? radio station transmitting towers, FM radio stations, RF dielectric heaters; communications equipment, and antennas) [recommended] 2. Have the sources of **nonionizing radiation** been evaluated by a qualified person (such as an industrial hygienist or health physicist)? N/A ?? [recommended]



 Is the radiation protection guide 10 milliwatts per square centimeter power density and 1 milliwatt hour per square centimeter energy density as averaged over any 0.1 hour period? [29 CFR 1910.97(a)(2)(i)]

Y N N/A ??

4. Have warning signs been posted in and around equipment that emits **nonionizing radiation**? [29 CFR 1910.145(c)(3)]

Y N N/A ??

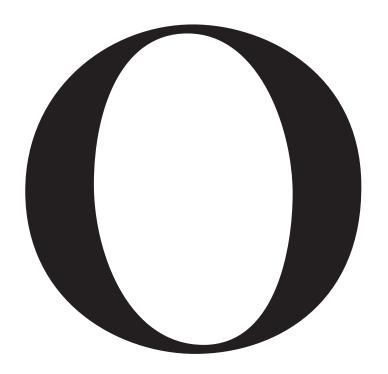


5. Have persons with medical conditions that may be affected by **nonionizing radiation** (such as those with pacemakers or metallic implants) been identified and evaluated? Have their anticipated exposures been evaluated? [recommended]

Y N N/A ??

#### **Definitions:**

**Nonionizing radiation:** electromagnetic radiation that does not cause ionization in biological systems. Examples of ionizing radiation include X-rays and gamma rays. Examples of nonionizing radiation include ultraviolet, visible, microwave, infrared, and radiofrequency radiation.



Information
Name of Location:
Date of inspection:
Career-Technical program/course/room:
Signature of inspector:

## Occupational Injury and Illness Reporting Self Inspection Checklist

**Guidelines:** This checklist covers regulations issued by the U.S. Department of Labor, Occupational Safety and Health Administration (OSHA) under 29 CFR 1904. These regulations apply only to private employers and their employees, unless adopted by a state agency and applied to other groups such as public employees. Definitions of terms in bold type are provided at the end of the checklist to help you understand some of the questions.

Please Circle

1. Does the school (employer) maintain a log and summary of recordable occupational injuries and illnesses (OSHA Form No. 300 or equivalent) that reflects separately the illness and injury experience of each establishment? (in most cases this would mean your school building, see definition) [29 CFR 1904.2(a)]

Y N N/A ??

**Note:** The OSHA No. 300 is a log and summary form available from OSHA for recording occupational injuries and illnesses. OSHA accepts equivalent forms as long as the forms include all the required information and are readable and comprehensible.

 Are all recordable injuries or illnesses reported on the log and summary within 6 working days after the employer finds out about the case, or are the requirements for alternative site recording met, as described Question 3? [29 CFR 1904.2(a)]

Y N N/A ??

3. If the employer keeps the log and summary at an alternative site or in a computer, is a hard copy of the information available at the **establishment** that is current to within 45 days and which can, at anytime, be updated to within 6 days after a reportable case has occurred? [29 CFR 1904.2(b)]

Y N N/A ??

4. Is a supplementary record on OSHA Form No. 301 or

	equivalent available for each recordable occupational injury or illness? [29 CFR 1904.4]	Y N N/A ??
	<b>Note:</b> The OSHA Form No. 301 is a form available from OSHA for recording supplementary information about an occupational injury or illness. Workmen's compensation, insurance, or other reports are acceptable alternative records if they contain the information required by OSHA Form No. 301.	
5.	Is the summary of the previous calendar year showing the totals from the OSHA Form No. 300 completed by February 1 and posted from February 1 to March 1? [29 CFR 1904.5]	Y N N/A ??
6.	Does the posted summary include totals from the OSHA Form No. 300, calendar year covered, <b>establishment</b> name and address, signature of certifier (employer representative), title, and date? [29 CFR 1904.5]	Y N N/A ??
7.	Is the summary posted in places where information for employees is normally posted (such as employee or union bulletin boards)? [29 CFR 1904.5]	Y N N/A ??
8.	Do employees who do not regularly report to their <b>establishment</b> receive a copy of the summary with their paycheck or in the mail? [29 CFR 1904.5]	Y N N/A ??
9.	Are all of the injury and illness records described above kept for 5 years? [29 CFR 1904.6]	Y N N/A ??
10	Are employees, former employees, and their representatives granted access to the summary and the log (OSHA Form No. 300) for examination and copying? [29 CFR 1904.7]	Y N N/A ??
11	Is every fatality or the in-patient hospitalization of three or more employees resulting from a work-related incident reported within 8 hours to the nearest OSHA Area Office in person or by using the OSHA toll-free central telephone number? [29 CFR 1904.8]	Y N N/A ??
12	Are work-related needlestick injuries and cuts from sharp objects that are contaminated with another person's blood or potentially infected material recorded in the OSHA 300 log? [29 CFR 1904.8]	Y N N/A ??
13	Does your establishment complete OSHA's annual survey form, if requested? [29 CFR 1904.17]	Y N N/A ??

#### **Definitions:**

**Establishment:** If an employer has more than one establishment, a separate set of records must be maintained for **each** one. The recordkeeping regulations define an establishment as a single physical or administrative location where governmental business is conducted or where services or other activities are performed (for example: a garage, prison, central administrative office, warehouse, fire station, police precinct, school, institution, etc.). If distinctly separate activities are performed at a single physical location, each activity must be considered as a separate establishment and a separate OSHA No. 200 must be prepared for each such establishment.

**Recordable occupational injuries or illness**are any occupational injuries or illnesses that result in:

- 1. Fatalities, regardless of the time between the injury and death, or the length of the illness; or
- 2. Lost workday cases, other than fatalities, that result in lost workdays; or
- 3. Nonfatal cases without lost workdays that
  - a. result in transfer to another job or termination of employment,
  - b. require medical treatment (other than first aid), or
  - c. involve loss of consciousness or restriction of work or motion. This category also includes any diagnosed occupational illnesses that are reported to the employer but are not classified as fatalities or lost workday cases.

Information
Name of Location:
Date of inspection:
Career-Technical program/course/room:
Signature of inspector:

### Personal Protective Equipment (PPE) Self Inspection Checklist

**Guidelines:** This checklist covers the use of personal protective equipment, including, but is not limited to, safety glasses, goggles, hard hats, gloves, safety shoes, and heat or electrically resistant clothing. Electrical protective equipment, respiratory protection, hearing protection, PPE for construction site lasers, and equipment like safety belts, lifelines, lanyards, and safety nets, are addressed in separate checklists.

It is important to note that engineering controls should be the primary method of establishing a safe workplace. Personal protective equipment should only be used where engineering controls are not feasible.

**Please Circle** 

#### **General Requirements**

 Has a hazard assessment been conducted in the workplace to identify possible hazards that would require the use of PPE? [29 CFR 1910.132(d)(1)]

Y N N/A ??

**Note:** The OSHA standard has a non-mandatory Appendix B which contains example procedures for conducting a hazard assessment.

 Is there a written certification of hazard assessment which idenitifies the workplace evaluated, the person certifying that the evaluation has been performed, and the date(s) of the hazard assessment?
 [29 CFR 1910.132(d)(2)]

Y N N/A ??

 Based on the hazards identified, has PPE been selected for all appropriate individuals? [29 CFR 1910.132(d)(1)(i)]

Y N N/A ??

4. Have individuals involved been informed of the

	PPE selection decisions? [29 CFR 1910.132(d)(1)(ii)]	Y	N	N/A	??
5.	If PPE is necessary to prevent injury or impairment by exposure to chemical hazards, radiological hazards, or mechanical irritants through absorption, inhalation or physical contact, is it provided? [29 CFR 1910.132(a) and 1926.95(a)]	Y	N	N/A	??
6.	Has the selected PPE been fitted to appropriate individuals? [29 CFR 1910.132(d)(1)(iii)]	Y	N	N/A	??
7.	Is PPE maintained in a sanitary and reliable condition? [29 CFR 1910.132(a) and 1926.95(a) and (b)]	Y	N	N/A	??
8.	Do appropriate individuals use the PPE selected? [29 CFR 1910.132(d)(1)(i)]	Y	N	N/A	??
9.	Is defective or damaged PPE removed from service immediately? (shall not be used) [29 CFR 1910.132(e)]	Y	N	N/A	??
Traini	ng				
	Has each individual who is required to use PPE been provided with training? [29 CFR 1910.132(f)(1)]	Y	N	N/A	??
10.	Has each individual who is required to use PPE been provided with training?	Y	N N	N/A	
11.	Has each individual who is required to use PPE been provided with training? [29 CFR 1910.132(f)(1)]  Has training on PPE included all of the following elements: 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 the PPE.	Y	N		??

14. Is retraining conducted whenever changes in the workplace or changes in types of PPE make Y N N/A ?? previous training obsolete? [29 CFR 1910.132(f)(3)(i)-(iii)] 15. Is there written certification for each person who has received PPE training that includes the following: Y N N/A ?? a statement indicating the person understood the training; the name of the person trained; the date(s) of the training; and the subject of the certification? [29 CFR 1910.132(f)(4)] **Head, Foot, and Hand Protection** 16. Are protective helmets used wherever there is the possible danger of head injury from impact, or from Y N N/A ?? falling or flying objects, or from electrical shock and burns? [29 CFR 1910.132(a), 1910.135(a), 1926.95(a), and 1926.100(a)] 17. Do protective helmets that are used in the workplace that were purchased prior to July 5, 1994 meet the Y N N/A ?? American National Standard Safety Requirements for Industrial Head Protection, ANSI Z89.1-1969? [29 CFR 1910.135(b)(2) and 1926.100(b)] 18. Do protective helmets that are used in the workplace that were purchased after July 5, 1994 Y N N/A ?? meet the American National Standard for Personnel Protection--Protective Headwear for Industrial Workers--Requirements, ANSI Z89.1-1986? [29 CFR 1910.135(b)(1)] 19. Is protective footwear used wherever there is the danger of foot injuries due to falling or rolling Y N N/A ?? objects, or objects piercing the sole, and where feet are exposed to electrical hazards? [29 CFR 1910.136(a)] 20. Does protective footwear that is used in the workplace that was purchased prior to July 5, 1994 Y N N/A ?? meet the requirements of the American National Standard for Men's Safety-Toe Footwear, ANSI Z41.1-1967? [29 CFR 1910.136(b)(2)] 21. Does protective footwear that is used in the workplace that was purchased after July 5, 1994 Y N N/A ??

meet the requirements of the American National Standard for Personal Protection--Protective

22. Are appropriate protective gloves used wherever there is the danger to hands of exposure 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? [29 CFR 1910.138(a)]

Y N N/A ??

#### **Eye and Face Protection**

23. Are individuals issued and required to wear appropriate eye protective devices while participating or observing activities which present a potential eye safety hazard?

[29 CFR 1910.133(a) and 1926.102(a)]

Y N N/A ??

**Note:** Eye potential hazards include: caustic or explosive chemicals or materials, hot liquids or solids, molten materials, welding operations of any type, repairing or servicing of vehicles, heat treatment or tempering of metals, the shaping of solid materials and laser device operation and experimentation.

24. Do all protective eye and face devices purhcased after July 5, 1994 comply with Z87.1-1989? [29 CFR 1910.133(b) and 1926.102(a)(2)]

Y N N/A ??

**Note:** Regular prescription eye glasses do not meet this requirement. Goggles or other protective glasses meeting the American National Standard must be warn over-top prescription eye glasses.

#### **Posting Requirements**

25. Are all lab or shop entrances, areas and equipment requiring the use of PPE devices posted with a sign indicating this requirement?
[29 CFR 1910.145(c)(3)]

Y N N/A ??

Information
Name of Location:
Date of inspection:
Career-Technical program/course/room:
Signature of inspector:

### Personnel Protection for Electrical Work

**Self-Inspection Checklist** 

**Guidelines:** This checklist covers regulations issued by the U.S. Department of Labor, Occupational Safety and Health Administration (OSHA) under the general industry standard 29 CFR 1910.335. It applies to persons who are at risk of electrical shock. This checklist does not apply to **qualified persons** working on generation, transmission, and distribution installations; communications installations; installations in vehicles; and railway installations. Definitions of terms in bold type are provided at the end of the checklist. See also the checklist for personal protective equipment. The regulations cited apply only to private employers and their employees, unless adopted by a State agency and applied to other groups such as public employees. A **yes** answer to a question indicates that this portion of the inspection complies with the OSHA or EPA standard, or with a nonregulatory recommendation.

			Ple	ase Ci	rcle
1.	Are students and employees who work in areas where electrical hazards exist provided with and required to use protective equipment that is appropriate for the body parts to be protected and the work to be performed?  [29 CFR 1910.335(a)(1)(i)]	Υ	N	N/A	??
2.	Is the protective equipment maintained in good working condition and periodically inspected or tested? [29 CFR 1910.335(a)(1)(ii)]	Y	N	N/A	??
3.	Is the insulation of protective equipment protected if it is subject to damage during use? (For example, an outer covering of leather may be used to protect rubber insulating material.) [29 CFR 1910.335(a)(1)(iii)]	Y	N	N/A	??
4.	Are employees and students required to wear nonconductive head protection if head injury might occur from electric shock or burns when exposed energized parts are contacted?	Y	N	N/A	??

- 5. Are employees and students required to wear protective equipment for the eyes and face if YNN/A?? injury might occur when electrical explosion causes electric arcs or flashes or flying objects? [29 CFR 1910.335(a)(1)(v)]
- 6. Are employees and students required to use insulated tools or handling equipment if the tool or equipment might contact exposed energized conductors or circuit parts?

  [29 CFR 1910.335(a)(2)(i)]

**Note:** If the insulation of tools or handling equipment is subject to damage, the insulating material shall be protected.

- 7. Is fuse-handling equipment that is insulated from the circuit voltage required to remove or install YNN/A?? fuses when the fuse terminals are energized? [29 CFR 1910.335(a)(2)(i)(A)]
- 8. Are nonconductive ropes and handlines used near exposed energized parts?

  [29 CFR 1910.335(a)(2)(i)(B)]
- Are protective shields, protective barriers, or insulating material used to protect employees and students from shock, burns, or other injuries while they work near exposed energized parts or where dangerous electric heating or arcing might occur?
   [29 CFR 1910.335(a)(2)(ii)]
- 10. Are the following techniques used to warn employees and students about hazards (such as failure of electrical equipment) that could cause electric shock, burns, or other injury?
  [29 CFR 1910.335(b)]
  - 1. Safety signs, safety symbols, or tags. [29 CFR 1910.335(b)(1)]
  - Barricades shall be used with safety signs to prevent or limit access to work areas where people may be exposed to uninsulated energized conductors or circuit parts. Conductive barricades may not be used where they might cause an electrical contact hazard. [29 CFR 1910.335(b)(2)]
  - If signs and barricades do not provide sufficient warning and protection from electrical hazards,

an attendant shall be stationed to warn and protect employees and students. [29 CFR 1910.335(b)(3)]

### **Definitions:**

**Qualified person:** one who is familiar with the construction and operation of the equipment and the hazards involved. A person is likely to be considered "qualified" with regard to certain equipment in the workplace, but "unqualified" as to other equipment. A person 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 a qualified person for those duties.

Information
Name of Location:
Date of inspection:
Career-Technical program/course/room:
Signature of inspector:

# **Pesticides**Self-Inspection Checklist

**Guidelines:** Pesticide manufacturing, packaging, distribution and application are regulated by the Environmental Protection Agency (EPA) under subchapter E, 40 CFR Parts 150 to 189. States develop their own pesticide regulations and enforcement programs in accordance with EPA regulations.

The following checklist is based on New Jersey State regulations and may be used as a general guidance for assessing pesticide applications in schools. Consult your State pesticide enforcement agency to determine what regulations are applicable in your State.

Definitions of terms in bold type are provided at the end of the checklist. Some questions have no code reference. These questions are provided as recommended good practice.

**Please Circle** 

#### **Restricted-use Pesticides**

 Are restricted-use pesticides applied only by a certified applicator or someone under the direct supervision of a certified applicator?

Y N N/A ??

**Note:** Some pesticides that pose special risks to the environment or the public health are classified as restricteduse by the Environmental Protection Agency or your State. A certified applicator has passed written exams demonstrating his or her knowledge about pesticide use and has met other licensing requirements.

- Is a separate storage area available for restricted-use pesticides? Is it locked when unattended, and the windows Y N N/A ?? tight, barred, or boarded over?
- 3. Is the storage area properly ventilated to prevent buildup of noxious fumes?

Y N N/A ??

4. Are herbicides stored separately from other pesticides? Y N N/A ?? **All Pesticides** 5. Is a separate space available to store pesticides? Y N N/A ?? 6. Is the pesticide storage area restricted to a first-story room or area that has direct access to the outside? Y N N/A ?? 7. Are all pesticides kept in this storage area rather than in a garage, basement, refrigerator, or other areas accessible to Y N N/A ?? unauthorized persons? 8. Are signs posted on the storage area indicating that pesticides are stored inside? Y N N/A ?? 9. Do all pesticide containers used for storage have a complete, readable registered label? N N/A ?? 10. Do all pesticide service containers have a copy of the registered label or a readable label with the following Y N N/A ?? information: (a) brand or trade name, (b) EPA registration number, (c) name and percentage of active ingredient(s) in the service container, and (d) an appropriate sign, that is, Danger-poison, Warning, or Caution? 11. Do you keep a list, separate from the storage area, of all pesticides stored? Y N N/A ?? 12. Is a material safety data sheet available for each pesticide at each storage location? Y N N/A ?? 13. Does the fire department have a copy of this list? N N/A ?? 14. Do you check periodically for leaking containers? Y N N/A ?? 15. Are damaged or leaking containers immediately separated and disposed of in accordance with state regulations? Y N N/A ?? 16. Are pesticides stored in the original container rather than in milk jugs, soda bottles, or other containers commonly Y N N/A ?? used for food or drink?

17. Do you carefully read the label before mixing and

	applying the pesticide?	Y	N	N/A	??
	<b>Note:</b> No person shall use or apply a pesticide in a manner inconsistent with its Federal or State registered label or labeling.				
18.	Do you make note of the safety precautions and antidotes before mixing and applying the pesticide?	Y	N	N/A	??
19.	Do you read the label to see what protective clothing you should wear?	Y	N	N/A	??
	<b>Note:</b> All persons using pesticides must be provided appropriate safety equipment in good working order.				
20.	Do you know how to use the protective equipment recommended on the label?	Y	N	N/A	??
	<b>Note:</b> All persons using pesticides must be provided training in the proper operation of safety equipment.				
21.	Do you clean and maintain your protective equipment regularly and often?	Y	N	N/A	??
22.	Do you check your protective equipment for wear and tear before each use?	Y	N	N/A	??
23.	Do you know what to do if you spill a pesticide on yourself while mixing?	Y	N	N/A	??
24.	Do you wear adequate footgear with your pant cuffs on the outside so pesticides won't run into your footgear?	Y	N	N/A	??
25.	Do you have sawdust, vermiculite, kitty litter, or other absorbent material on hand to soak up spills?	Y	N	N/A	??
26.	Do you have a list of emergency numbers to call in case of spill?	Y	N	N/A	??
27.	Is your application equipment well maintained and calibrated so it doesn't leak or dispense the improper amount of pesticide?	Y	N	N/A	??
28.	Do you avoid draining leftover spray mix on the ground?	Y	N	N/A	??

**Note:** No person shall clean or rinse containers or application equipment that holds or has held a pesticide

	persons, property, or the environment, or a significant risk of harm, injury, or damage.				
29	. Do you rinse each empty liquid container at least three times and return the rinsate into the tank?	Y	N	N/A	??
30	. Do you keep used containers in the storage area until disposed of?	Y	N	N/A	??
31	. Do you collect every container, for disposal or storage, before leaving an application site?	Y	N	N/A	??
32	. Do you dispose of all pesticide containers and unused pesticides in accordance with State regulations? (see <a href="Hazardous Waste">Hazardous Waste</a> checklist)	Y	N	N/A	??
33	. Do you puncture, break, or crush containers before disposal so they cannot be reused?	Y	N	N/A	??
34	. Do you keep your spray equipment clean so that those touching it will not be contaminated?	Y	N	N/A	??
35	. Do you always release pressure on your equipment so spray guns won't be accidentally triggered?	Y	N	N/A	??
36	. Do you check the wind direction and speed and the area downwind before applying pesticides?	Y	N	N/A	??
	<b>Note:</b> No person shall apply a pesticide to a target site in such a manner or under such conditions that drift or other movement of the pesticide, which is avoidable through reasonable precautions, infringes on a nontarget site.				
37	. Do you consider substituting a less toxic chemical if you are spraying near a sensitive area?	Y	N	N/A	??
38	. Do you check for the possibility of showers and damaging runoff before applying pesticides?	Y	N	N/A	??
	<b>Note:</b> No person shall apply pesticides in a manner that causes harm, injury, or damage to persons, property, or the environment, or a significant risk of harm, injury, or damage.				
39	Do you plan your pesticide application so it will have little or no effect on bees, birds, fish, or other wildlife?	Y	N	N/A	??

in a manner that causes harm, injury, or damage to

### **Definitions:**

**Restricted-use pesticide:** any pesticide or pesticide use so classified under the provisions of your State code, or so classified by the Administrator of the United States Environmental Protection Agency.

Information
Name of Location:
Date of inspection:
Career-Technical program/course/room:
Signature of inspector:

# Portable Fire Extinguishers Self-Inspection Checklist

**Guidelines:** This checklist covers regulations issued by the U.S. Department of Labor, Occupational Safety and Health Administration (OSHA) under 29 CFR 1910.157. It applies to the placement, use, maintenance, and testing of portable fire extinguishers. The regulations cited apply only to private employers and their employees, unless adopted by a State agency and applied to other groups such as public employees. Definitions of terms in bold type are provided at the end of the checklist.

This checklist does not address detailed regulations covering the methods used for hydrostatic testing of fire extinguishers. Please consult 29 CFR 1910.157 for additional information.

	Please Circle
General Requirements	
1. Are all portable fire extinguishers approved? [29 CFR 1910.157(c)(2)]	Y N N/A ??
<ol> <li>Are portable fire extinguishers using carbon tetrachloride or chlorobromomethane prohibited? [29 CFR 1910.157(c)(3)]</li> </ol>	Y N N/A ??
<ol> <li>Have all the following portable fire extinguishers been removed from service? [29 CFR 1910.157(c)(5)]</li> </ol>	Y N N/A ??
<ul> <li>Soldered or riveted shell self-generating soda acid.</li> </ul>	

Gas cartridge water

Self-generating foam

**Note:** These types of fire extinguishers are operated by inverting the extinguisher to rupture the cartridge or to initiate an uncontrollable pressure-generating chemical reaction to expel the agent.

4. Are portable fire extinguishers mounted, located, and identified so that they are readily accessible?

<ol> <li>Are portable fire extinguishers fully charged, operable, and kept in their designated places at all times?</li> <li>[29 CFR 1910.157(c)(4)]</li> </ol>	Y	N	N/A	??
6. If fire extinguishers are enclosed in cabinets, is access to the cabinet unobstructed and is the cabinet clearly visible? [recommended]	Y	N	N/A	??
<ol> <li>If fire extinguishers are enclosed in cabinets with opaque doors, are doors unlocked, and are the cabinet contents indicated on the outside? [recommended]</li> </ol>	Y	N	N/A	??
8. When fire extinguishers are enclosed in locked cabinets and doors are equipped with approved visual identification clear glass panels, are glass panes easily broken? Is the door capable of being opened when the glass panel is broken? Is the unlocking handle painted red? Is the direction the handle must be pushed or pulled to open the door indicated? Is the door labeled Fire equipment: in case of fire, break glass and operate red handle? [recommended]	Y	N	N/A	??
<ol> <li>When fire extinguishers are enclosed in locked cabinets and doors are completely glass, are doors labeled In case of fire, break glass? [recommended]</li> </ol>	Y	N	N/A	??
10. Are extinguishers installed on the hangers or on the supplied brackets, mounted in cabinets, or set on shelves unless the extinguishers are of the wheeled type? [recommended]	Y	N	N/A	??
11. Are extinguishers installed where they are subject to physical damage protected from impact? [recommended	Y	N	N/A	??
Training and Education				
12. When employees are expected to use fire extinguishers, have they been trained in the general principles of fire extinguisher use and the hazards involved with <b>incipient stage fire</b> fighting? [29 CFR 1910.157(g)(1)]	Y	N	N/A	??
13. Is this training given at the time of initial assignment and annually thereafter? [29 CFR 1910.157(g)(2)]	Y	N	N/A	??
Selection and Distribution				
14. Is at least one fire extinguisher available in each laboratory, shop, or other career-technical room, and one fire extinguisher	Y	N	N/A	??

15. According to the table that follows, are portable fire extinguishers selected and distributed based on the classes (see class definitions at end of checklist) of anticipated fires and on the size and degree of hazard that would affect their use? [29 CFR 1910.157(d)(1)]

Y N N/A ??

First Hazard Class	Maximum Permitted Distance to Portable Fire Extinguisher
Α	75 feet <sup>1</sup>
В	50 feet <sup>2</sup>
С	50-75 feet <sup>3</sup>
D	75 feet <sup>4</sup>

<sup>&</sup>lt;sup>1</sup> Uniformly spaced standpipe systems or hose stations connected to a sprinkler system installed for emergency use may be used instead of Class A portable fire extinguishers.

17.

### **Inspection, Maintenance, and Testing**

Are portable fire extinguishers inspected monthly?
 [29 CFR 1910.157(e)(2)]

Y N N/A ??

17. Are portable fire extinguishers subjected to an annual maintenance check? [29 CFR 1910.157(e)(3)]

Y N N/A ??

18. Does each extinguisher have a tag or label securely attached that indicates the month and year the inspection, maintenance, states that recharging was performed and identifies the person performing the service? [recommended]

Y N N/A ??

19. Are records of the annual maintenance check kept and

Depending on size of extinguisher and size of fire hazard, a maximum 30 feet travel distance may be required.

<sup>&</sup>lt;sup>3</sup> Use existing Class A or Class B hazards to determine the required pattern.

<sup>&</sup>lt;sup>4</sup> Required where combustible metal powders, flakes, shavings or similarly sized products are generated at least once very two weeks.

	retained for at least a year? [29 CFR 1910.157(e)(3)]	Y	N	N/A	??				
20.	When portable fire extinguishers are removed for service, are standby or spare units temporarily installed of the same type and capacity? [29 CFR 1910.157(e)(5)]	Y	N	N/A	??				
21.	Are stored pressure dry chemical extinguishers that require a 12-year hydrostatic test emptied and subjected to applicable maintenance procedures every 6 years? [29 CFR 1910.157(e)(4)]	Y	N	N/A	??				
	<b>Note:</b> Dry chemical extinguishers with non-refillable disposable containers are exempt from this requirement.								
ydro	drostatic Testing								

### Hy

22. Are extinguishers hydrostatically tested at the intervals listed in the table below? [29 CFR 1910.157(f)(2)]

Y N N/A ??

Type of Extinguishers	Test Interval (years)
Stored pressure water a antifreeze	and/or 5
Wetting agent	5
Aqueous film forming a (AFFF)	gent 5
Dry chemical with stain	less steel 5
Carbon dioxide	5
Dry chemical, stored pr with mild steel, braz or aluminum shells	'
Halon 1211	12
Halon 1301	12
Dry powder, cartridge of operated with mild s	•

23.

23. Is hydrostatic testing performed by trained persons with suitable testing equipment and facilities? [29 CFR 1910.157(f)(1)]

Y N N/A ??

24. Are hydrostatic testing certification records maintained that show the date of the test, the signature of the person who performed the test, and the serial number (or other identifier) of the fire extinguisher that was tested?

Y N N/A ??

### **Definitions:**

**Class A fire:** a fire involving ordinary combustible materials such as paper, wood, cloth, and some rubber and plastic materials.

**Class B fire:** a fire involving flammable or combustible liquids, flammable gases, greases and similar materials, and some rubber and plastic materials.

**Class C fire:** a fire involving energized electrical equipment where safety requires the use of electrically nonconductive extinguishing media.

**Class D fire:** a fire involving combustible metals such as aluminum, magnesium, titanium, zirconium, sodium, lithium, and potassium.

**Incipient stage fire:** a fire that is in the initial or beginning stage and can be controlled or extinguished by portable fire extinguishers, Class II standpipe or small hose systems without the need for protective clothing or breathing apparatus.

Information
Name of Location:
Date of inspection:
Career-Technical program/course/room:
Signature of inspector:

# Portable Hand and Power Tools Self Inspection Checklist

Guidelines: This checklist applies to hand and portable power tools and equipment including pneumatic power tools. Fixed and portable abrasive wheels and tools, and fixed woodworking machinery are covered in other checklists.

		I	Plea	ase Ciı	rcle
Gene	ral Requirements				
1.	Are all portable hand or power tools maintained in a safe condition? [29 CFR 1926.300(a)]	Y	N	N/A	??
2.	If compressed air is used for cleaning purposes, is it used at pressures less than 30 psi and only with effective chip guarding and personal protective equipment? [29 CFR 1910.242(b) and 1926.302(b)(4)]	Y	N	N/A	??
3.	Are power tools equipped and used with guards whenever possible? [29 CFR 1926.300(b)(1)]	Y	N	N/A	??
4.	Are all belts, gears, shafts, pulleys, sprockets, spindles, drums, flywheels, chains, or other reciprocating, rotating or moving parts of equipment guarded if operator is exposed to contact or if they otherwise create a hazard? [29 CFR 1926.300(b)(2)]	Y	N	N/A	??
5.	Is all necessary personal protective equipment provided whenever the use of hand and power tools could create falling, flying or splashing debris, or harmful dusts, fumes, mists, vapors, or gases. [29 CFR 1926.300(c)]	Y	N	N/A	??

- 6. If tools and equipment are brought in from home, are they subject to the same safety requirements as supplied tools and equipment? [29 CFR 1910.242(a)]
- Y N N/A ??

- 7. Are all chain saws, percussion tools, and hand-held powered circular saws (with blades greater than 2 inches in diameter) equipped with a constant pressure switch that shuts off power when released? [29 CFR 1910.243(a)(2)(i); and 1926.300(d)(3)]
- Y N N/A ??
- 8. Are all hand-held powered drills; tappers; fastener drivers; horizontal, vertical and angle grinders (with wheels greater than 2 inches in diameter); disc sanders (with discs greater than 2 inches in diameter); belt sanders; reciprocating saws; saber, scroll, jig saws (with blade shanks greater than a nominalone-fourth (1/4) inch); and other similarly power tools equipped with a constant pressure switch or control?

  [29 CFR 1910.243(a)(2)(ii) and 1926.300 (d)(1)-(3)]

Y N N/A ??

Note: They may be equipped with a lock-on control provided the turnoff can be accomplished by a single motion by the same finger or fingers that turns it on. The Construction standard requires a "momentary contact on-off control" instead of a constant pressure switch or control. This means that if the switch is pressed, the tool turns on and if the switched is pressed again, the tool turns off.

Y N N/A ??

Are all-hand held powered platen sanders, grinders (with wheels two-inch diameter or less), routers, planers, laminate trimmers, nibblers, shears, scroll saws, and jig saws (with blade shanks one-fourth (1/4) of an inch wide or less), equipped with a positive "on-off" control?
 [29 CFR 1910.243(a)(2)(iii) and 1926.300(d)(1)]

**Note:** A positive "on-off" control means a switch that you must push to turn the tool on and then push again to turn it off. Control switches as described in questions seven and eight may also be used.

10. On hand-held power tools, is the operating control located so as to minimize the possibility of accidental operation?
[29 CFR 1910.243(a)(2)(iv)]

Y N N/A ??

**Note:** This requirement does not apply to concrete vibrators, concrete breakers, powered tampers, jackhammers, rock drills, garden appliances, household and kitchen appliances, personal care appliances, medical or dental equipment, or to fixed machinery.

11. Are all portable power driven circular saws (with blade diameter greater than 2 inches) equipped with guards above and below the base plate or shoe? [29 CFR 1910.243(a)(1)(i) and 1926.304(d)]	Y	N	N/A	??
Note: This requirement does not apply to meat cutting saws.				
12. Does the upper guard on a circular saw cover the saw to the depth of the teeth, except for the minimum arc required to permit the base to be tilted for bevel cuts? [29 CFR 1926.304(d)]	Y	N	N/A	??
13. Does the lower guard on a circular saw cover the saw to the depth of the teeth, except for the minimum arc required to allow proper retraction and contact with the work? [29 CFR 1926.304(d)]	Y	N	N/A	??
14. When a circular saw is removed from the material being sawed, does the lower guard automatically and instantly return to the covering position? [29 CFR 1926.304(d)]	Y	N	N/A	??
<ol> <li>Are belt sanding machines provided with guards at each nip point, where the sanding belt runs onto a pulley?</li> <li>[29 CFR 1910.243(a)(3)]</li> </ol>	Y	N	N/A	??
16. If a saw cracks, is it immediately removed from service? [29 CFR 1910.243(a)(4)]	Y	N	N/A	??
17. Are all portable, electrically powered tools properly grounded or double insulated? [29 CFR 1910.243(a)(5) and 1926.302(a)(1)] (See checklist for ElectricalWiring Design and Protection)	Y	N	N/A	??
18. Are impact tools, such as drift pins, wedges, and chisels, kept free of mushroomed heads? [29 CFR 1926.301(c)]	Y	N	N/A	??
19. Are the wooden handles of tools kept free of splinters or cracks and are they fixed tightly in the tool? [29 CFR 1926.301(d)]	Y	N	N/A	??
20. Is it prohibited to lower or hoist a tool by the cord? [29 CFR 1926.302(a)(2)]	Y	N	N/A	??
21. Do woodworking tools meet the American National Standards Institute (ANSI) safety codes?	Y	N	N/A	??

### **Pneumatic Power Tools and Hose**

22. Are pneumatic power tools secured to the hose or whip by some positive means, so as to prevent the tool from being accidentally disconnected? [29 CFR 1926.302(b)(1)]	Y	N	N/A	??
23. Are safety clips or retainers used on pneumatic impact (percussion) tools to prevent attachments from being accidentally expelled? [29 CFR 1910.243(b)(1) and 1926.302(b)(2)]	Y	N	N/A	??
24. Are all pneumatically driven nailers, staplers, and other similar equipment which have automatic fastener feeds and which operate at more than 100 psi pressure at the tool equipped with a safety device on the nozzle to prevent the tool from ejecting fasteners, unless the muzzle is in contact with the work surface?  [29 CFR 1926.302(b)(3)]	Y	N	N/A	??
25. Are all compressed air hoses and hose connections designed for the pressure and service to which they are subjected? [29 CFR 1910.243(b)(2) and 1926.302(b)(5)]	Y	N	N/A	??
26. Is it prohibited to lower or hoist tools by the hose? [29 CFR 1926.302(b)(6)]	Y	N	N/A	??
27. Do all hoses (exceeding one-half inch inside				

Y N N/A ??

Y N N/A ??

28. Are airless spray guns [of the type which atomize paints and fluids at high pressure (1,000 pounds or more per square inch)] equipped with automatic or visible manual safety devices which prevent accidental release of paint or fluid?
[29 CFR 1926.302(b)(8)]

diameter) have safety devices at the source of

the supply or branch line, to reduce pressure in

case of hose failure? [29 CFR 1926.302(b)(7)]

**Note:** In lieu of the above, a diffuser nut which will prevent high pressure, high velocity release while the nozzle tip is removed, plus a nozzle tip guard which will prevent the tip from coming in contact with the operator (or other equivalent protection) shall be provided.

29. Are all fuel powered tools stopped while being refueled, serviced, or maintained? [29 CFR 1926.302(c)(1)]
30. Is all fuel transported, handled, and stored in accordance with applicable regulations? [29 CFR 1926.302(c)(1)]
31. When fuel powered tools are used in enclosed spaces, are measures taken to prevent the build-up of toxic gases? [29 CFR 1926.302(c)(2)]

Information
Name of Location:
Date of inspection:
Career-Technical program/course/room:
Signature of inspector:

# Portable Ladders for Construction Self-Inspection Checklist

**Guidelines:** This checklist covers regulations issued by the U.S. Department of Labor, Occupational Safety and Health Administration (OSHA) under the construction standards 29 CFR 1926.1050 to 1926.1060. It applies to **portable ladders** used at temporary worksites associated with construction, alteration, demolition, or repair work including painting and decorating. The regulations cited apply only to private employers and their employees, unless adopted by a State agency and applied to other groups such as public employees. Definitions of terms in bold type are provided at the end of the checklist. A **yes** answer to a question indicates that this portion of the inspection complies with the OSHA or U.S. Environmental Protection Agency (EPA) standard, or with a nonregulatory recommendation.

		Please Circle			
1.	Are ladders or stairways provided at all points of access that are elevated 19 inches or more, and no ramp, runway, sloped embankment, or personnel hoist is provided? [29 CFR 1926.1051(a)]	Y	N	N/A	??
2.	Does a competent person provide ladder training that teaches users how to recognize hazards and procedures for minimizing these hazards? [29 CFR 1926.1060(a)]	Y	N	N/A	??
3.	Is ladder retraining provided when necessary? [29 CFR 1926.1060(b)]	Y	N	N/A	??
4.	Can ladders support the load they are expected to carry? [29 CFR 1926.1053(a)(1)(i),(ii),and(iii)]	Y	N	N/A	??
5.	Are ladder rungs, <b>cleats</b> , and steps parallel, level, and uniformly spaced when the ladder is in position for use?	Y	N	N/A	??

6. Are rungs, cleats, and steps of portable ladders (other than step stools and extension trestle Y N N/A ?? ladders) spaced at least 10 but not more than 14 inches apart (as measured between center lines of the rungs, cleats, and steps)? [29 CFR 1926.1053(a)(3)(i)] 7. Are rungs, cleats, and steps of step stools at least 8 but not more than 12 inches apart (as Y N N/A ?? measured between center lines of the rungs, cleats, and steps)? [29 CFR 1926.1053(a)(3)(ii)] 8. Are rungs, **cleats**, and steps of the base section of extension trestle ladders at least 8 but not Y N N/A ?? more than 18 inches apart (as measured between center lines of the rungs, cleats, and steps)? [29 CFR 1926.1053(a)(3)(iii)] 9. Are rungs, cleats, and steps of the extension section of extension trestle ladders at least 6 Y N N/A ?? but not more than 12 inches apart (as measured between center lines of the rungs, cleats, and steps)? [29 CFR 1926.1053(a)(3)(iii)] 10. Is the clear distance between side rails for all portable ladders at least 11-1/2 inches? Y N N/A ?? [29 CFR 1926.1053(a)(4)(ii)] 11. Are the rungs and steps of portable metal ladders corrugated, knurled, dimpled, coated Y N N/A ?? with skid-resistant material, or otherwise treated to minimize slipping? [29 CFR 1926.1053(a)(6)(ii)] 12. Are ladders prohibited from being tied or fastened together to provide longer sections Y N N/A ?? (unless they are designed for such use)? [29 CFR 1926.1053(a)(7)] 13. Is a metal spreader or locking device provided on each stepladder to hold the front and back Y N N/A ?? sections in an open position when the ladder is being used? [29 CFR 1926.1053(a)(8)]

14. Are ladder surfaced to prevent injury from punctures or lacerations, and to prevent snagging of clothing? [29 CFR 1926.1053(a)(11)]	Y	N	N/A	??
15. Is it prohibited to coat wood ladders with any opaque covering, except for identification or warning labels that are placed on only one face of a side rail? [29 CFR 1926.1053(a)(12)]	Y	N	N/A	??
16. Do <b>portable ladders</b> extend at least 3 feet above the upper landing surface for which the ladder is used to gain access? [29 CFR 1926.1053(b)(1)]	Y	N	N/A	??
<b>Note:</b> As an alternative, secure the ladder at its top to a rigid support that will not deflect. Use a grasping device (such as a grabrail) to mount and dismount the ladder. The extension should never be such that the ladder deflection under load would, by itself, cause the ladder to slip off its support.				
<ul><li>17. Are ladders maintained free of oil, grease, and other slipping hazards?</li><li>[29 CFR 1926.1053(b)(2)]</li></ul>	Y	N	N/A	??
18. Are ladders loaded at or below the maximum intended load for which they were built, or at or below the manufacturer's rated capacity? [29 CFR 1926.1053(b)(3)]	Y	N	N/A	??
<ul><li>19. Are ladders only used for the purpose for which they were designed?</li><li>[29 CFR 1926.1053(b)(4)]</li></ul>	Y	N	N/A	??
20. Are non-self-supporting ladders used at an angle such that the horizontal distance from the top support to the foot of the ladder is approximately 1/4 of the working length of the ladder (the distance along the ladder between the foot and the top support)? [29 CFR 1926.1053(b)(5)(i)]	Y	N	N/A	??
21. Are ladders used only on stable and level surfaces, unless secured to prevent displacement? [29 CFR 1926.1053(b)(6)]	Y	N	N/A	??
22. Are ladders used on slippery surfaces ONLY when they are secured or provided with	Υ	N	N/A	??

slip-resistant feet to prevent displacement? [29 CFR 1926.1053(b)(7)]

**Note:** Do not use slip-resistant feet as a substitute for care in placing, lashing, or holding a ladder on surfaces such as flat metal or concrete that cannot be prevented from becoming slippery.

23. Are ladders secured to prevent displacement, especially in busy, high-traffic areas? [29 CFR 1926.1053(b)(8)]

Y N N/A ??

**Note:** As an alternative, a barricade may be used to keep the activities or traffic away from the ladder.

24. Is the area around the top and bottom of ladders kept clear?
[29 CFR 1926.1053(b)(9)]

Y N N/A ??

25. Is the top of a non-self-supporting ladder placed with the two rails supported equally, unless it has a single support attachment? [29 CFR 1926.1053(b)(10)]

Y N N/A ??

26. Is it prohibited to move, shift, or extend ladders while they are occupied?
[29 CFR 1926.1053(b)(11)]

Y N N/A ??

27. Do ladders have nonconductive siderails if they are used where they could contact exposed energized electrical equipment?
[29 CFR 1926.1053(b)(12)]

Y N N/A ??

28. Is standing on the top or top step of a stepladder prohibited?
[29 CFR 1926.1053(b)(13)]

Y N N/A ??

29. Is climbing on the cross-bracing on the rear section of stepladders prohibited? [29 CFR 1926.1053(b)(14)]

Y N N/A ??

**Note:** This is allowed IF the ladder is designed and provided with steps for climbing on both front and rear sections.

30. Are ladders inspected periodically by a competent person and after any incident that could affect their safe use?
[29 CFR 1926.1053(b)(15)]

Y N N/A ??

31. Are portable ladders with structural defects

	(a) immediately marked in a manner that readily identifies them as defective, (b) tagged with <b>DO NOT USE</b> or similar language, or (c) withdrawn from service until repaired? [29 CFR 1926.1053(b)(16)]	Y	N	N/A	??
	<b>Note:</b> Structural defects include broken or missing rails, corroded components, or other faulty or defective components.				
32.	Does a ladder that is repaired meet its original design criteria, before it is returned to use? [29 CFR 1926.1053(b)(18)]	Y	N	N/A	??
33.	Do all students and employees face the ladder when moving up or down the ladder? [29 CFR 1926.1053(b)(20)]	Y	N	N/A	??
34.	Do all students and employees use at least one hand to grasp the ladder when moving up or down the ladder? [29 CFR 1926.1053(b)(21)]	Y	N	N/A	??
35.	Is it prohibited to carry any object or load that could cause a person to lose balance and fall? [29 CFR 1926.1053(b)(22)]	Y	N	N/A	??

### **Definitions:**

**Cleat:** a ladder crosspiece of rectangular cross section placed on edge. A person steps on a cleat while ascending or descending a ladder.

[29 CFR 1926.1050(b)]

**Extension trestle ladder:** a self-supporting **portable ladder**, adjustable in length, consisting of a trestle ladder base and a vertically adjustable extension section, with a suitable means for locking the ladders together.

Portable ladder: a ladder that can be readily moved or carried.

**Step stool (ladder type):** a self-supporting, foldable, **portable ladder**, nonadjustable in length, 32 inches or less in overall size, with flat steps and without a pail shelf, designed to be climbed on the ladder top cap as well as all steps. The side rails may continue above the top cap.

Information
Name of Location:
Date of inspection:
Career-Technical program/course/room:
Signature of inspector:

### **Portable Ladders**Self-Inspection Checklist

**Guidelines:** This checklist covers regulations issued by the U.S. Department of Labor, Occupational Safety and Health Administration (OSHA) under the general industry standards 29 CFR 1910.25 (portable wooden ladders) and 29 CFR 1910.26 (portable metal ladders). It applies to wooden and metal ladders, including step ladders. It does not apply to stockroom step ladders, aisle-way step ladders, shelf ladders, and library ladders. The regulations cited apply only to private employers and their employees, unless adopted by a State agency and applied to other groups such as public employees. Please use the checklist entitled **Portable Ladders for Construction** for construction site situations.

**Please Circle** 

### **Portable Wooden Ladders**

1.	Are all wooden ladder parts (a) sound, (b) free of sharp edges and splinters, and (c) on visual inspection, free from shake, wane, compression failure, decay, or other irregularities? [29 CFR 1910.25(b)(1)(i)]	Y	N	N/A	??
2.	Are all portable wooden step ladders 20 feet or less in length? [29 CFR 1910.25(c)(2)]	Y	N	N/A	??
3.	Is the portable step ladder of uniform step spacing and less than 12 inches apart? [29 CFR 1910.25(c)(2)(i)(b)]	Y	N	N/A	??
4.	Is the inside width between side rails of each portable step ladder at least $11-1/2$ inches? [29 CFR $1910.25(c)(2)(i)(c)$ ]	Y	N	N/A	??
5.	Is the metal spreader or locking device of portable step ladders of sufficient size and strength to securely hold the front and back sections in the open position? [29 CFR 1910.25(c)(2)(i)(f)]	Y	N	N/A	??

<ol> <li>Are all single wooden ladders 30 feet or less in length? [29 CFR 1910.25(c)(3)(ii)(a)]</li> </ol>	Y	N	N/A	??
7. Are all two-section wooden extension ladders 60 feet or less in length? [29 CFR 1910.25(c)(3)(iii)(a)]	Y	N	N/A	??
8. Are all wooden ladders in good condition with the joint between the step and siderails tight? Are all hardware and fittings securely attached? Are the movable parts operating freely without binding or undue play? [29 CFR 1910.25(d)(1)(i)]	Y	N	N/A	??
<ol> <li>Are the metal bearings of locks, wheels, pulleys, etc. frequently lubricated? [29 CFR 1910.25(d)(1)(ii)]</li> </ol>	Y	N	N/A	??
<pre>10. Is frayed or badly worn rope replaced? [29 CFR 1910.25(d)(1)(iii)]</pre>	Y	N	N/A	??
11. Are the safety feet or other auxiliary equipment kept in good condition? [29 CFR 1910.25(d)(1)(iv)]	Y	N	N/A	??
12. Are wooden ladders inspected frequently? Are those with defects withdrawn from service for repair or destruction and tagged or marked as <b>Dangerous</b> , <b>do not use</b> ? [29 CFR 1910.25(d)(1)(x) and (d)(2)(viii)]	Υ	N	N/A	??
<b>Note:</b> Wooden ladders with missing steps, rungs, or cleats; broken siderails; or other faulty equipment must not be used. Discarded ladders should be cut down the center of the rungs.				
13. Are rungs kept free of grease and oil? [29 CFR 1910.25(d)(1)(xi)]	Y	N	N/A	??
14. Are wooden ladders used and placed so that the horizontal distance from the top support to the foot of the ladder is one quarter of the working length of the ladder (the length along the ladder between the foot and the top support)? [29 CFR 1910.25(d)(2)(i)]	Y	N	N/A	??
15. Is the ladder (a) placed to prevent slipping, (b) lashed, or (c) held in position? [29 CFR 1910.25(d)(2)(i)]	Y	N	N/A	??
16. Is the use of wooden ladders in the horizontal position prohibited? [29 CFR 1910.25(d)(2)(i)]	Y	N	N/A	??
<b>Note:</b> Ladders must never be used as platforms, runways, or scaffolds.				
17. Is only one person allowed on the ladder at one time?				

[29 CFR 1910.25(d)(2)(ii)]	Y	N	N/A	??
18. Are ladders placed away from the front of doors that open toward the ladder unless the door is blocked, locked, or guarded? [29 CFR 1910.25(d)(2)(iv)]	Y	N	N/A	??
19. Are ladders always placed on stable bases? [29 CFR 1910.25(d)(2)(v)]	Y	N	N/A	??
<b>Note:</b> Ladders must never be placed on boxes, barrels, or other unstable bases.				
20. Is the splicing of short ladders together prohibited? [29 CFR 1910.25(d)(2)(ix)]	Y	N	N/A	??
21. Is the use of the tops of stepladders as steps prohibited? [29 CFR 1910.25(d)(2)(xii)]	Y	N	N/A	??
22. When in use, do all 36-foot or less two-section extension wooden ladders have a minimum overlap of 3 feet between the two sections? [29 CFR 1910.25(d)(2)(xiii)]	Y	N	N/A	??
23. When in use, do all 36- to 48-foot two-section extension wooden ladders have a minimum overlap of 4 feet between the two sections? [29 CFR 1910.25(d)(2)(xiii)]	Y	N	N/A	??
24. When in use, do all 48- to 60-foot two-section extension wooden ladders have a minimum overlap of 5 feet between the two sections? [29 CFR 1910.25(d)(2)(xiii)]	Y	N	N/A	??
25. If ladders are used to gain access to a roof, are they extended at least 3 feet above the point of support? [29 CFR 1910.25(d)(2)(xv)]	Y	N	N/A	??
26. Are all portable rung ladders equipped with nonslip bases where a hazard of slipping exists? [29 CFR 1910.25(d)(2)(xix)]	Y	N	N/A	??
<b>Note:</b> Nonslip bases are not intended as a substitute for care in safely placing, lashing, or holding a ladder that is being used.				
Portable Metal Ladders				
27. Are metal ladders maintained in good usable condition at all times? [29 CFR 1910.26(c)(2)(iv)]	Y	N	N/A	??

28. Are the rungs and steps of portable metal ladders corrugated,

knurled, dimpled, coated with skid-resistant material, or otherwise treated to minimize the possibility of slipping? [29 CFR $1910.26(a)(1)(v)$ ]	Y	N	N/A	??
29. Are all portable metal single ladders 30 feet or less in length? [29 CFR 1910.26(a)(2)(ii)]		N	N/A	??
30. Are all portable metal two-section ladders 48 feet or less in length? [29 CFR 1910.26(a)(2)(ii)]	Y	N	N/A	??
31. If a portable metal ladder tips over, is it inspected immediately for damage? [29 CFR 1910.26(c)(2)(vi)(a)]	Y	N	N/A	??
<b>Note:</b> The inspection must include looking for dents, bends, or excessively dented rungs; and checking all rungs to siderail connections, checking hardware connections, and checking rivets for shears.				
32. If metal ladders are exposed to oil and grease, are they cleaned immediately? [29 CFR 1910.26(c)(2)(vi)(d)]	Y	N	N/A	??
33. Are metal ladders with defects marked and taken out of service until repaired by either the maintenance department or the manufacturer? [29 CFR 1910.26(c)(2)(vii)]	Y	N	N/A	??
34. Are metal ladders placed at the proper angle? [29 CFR 1910.26(c)(3)(i)]	Y	N	N/A	??
<b>Note:</b> That is, the base distance from the vertical wall to the ladder is one fourth the working length of the ladder or height at which the ladder touches the wall.				
35. Is the use of a metal ladder as a brace, skid, guy or gin pole, gangway, or for other uses than that which the ladder was intended prohibited? [29 CFR 1910.26(c)(3)(vii)]	Y	N	N/A	??
36. Has inspection been conducted to determine if metal ladders might contact energized conductors? [29 CFR 1910.26(c)(3)(viii)]	Y	N	N/A	??
Note: The use of metal ladders should be prohibited wherever they might make contact with energized				

electrical conductors.

Information
Name of Location:
Date of inspection:
Career-Technical program/course/room:
Signature of inspector:

# Powered Lawnmowers Self-Inspection Checklist

**Guidelines:** This checklist covers regulations issued by the U.S. Department of Labor, Occupational Safety and Health Administration (OSHA) under the general industry standard 29 CFR 1910.243(e). It applies to walk-behind and riding rotary mowers. Selected design specifications required in 29 CFR 1910.243(e) have not been included as part of this checklist. Please consult the OSHA regulations for additional details in this area. The regulations cited apply only to private employers and their employees, unless adopted by a State agency and applied to other groups such as public employees. A **yes** answer to a question indicates that this portion of the inspection complies with the OSHA or EPA standard, or with a nonregulatory recommendation.

	,				
			Ple	ase Ci	rcle
Gene	ral Requirements				
1.	Are all power-driven chains, belts, and gears positioned or otherwise guarded to prevent contact during starting, mounting, and operation? [29 CFR 1910.243(e)(1)(ii)]	Y	N	N/A	??
2.	Is a shutoff device provided to stop operation of a motor or engine? [29 CFR 1910.243(e)(1)(iii)]	Y	N	N/A	??
	<b>Note:</b> This device must require manual reactivation to restart the motor or engine. [29 CFR 1910.243(e)(1)(iii)]				
3.	Are all positions of the operating controls clearly identified? [29 CFR 1910.243(e)(1)(iv)]	Y	N	N/A	??
4.	Are the words <b>Caution:</b> be sure the operating control(s) is in neutral before starting the engine (or similar wording) clearly visible at an engine-starting control point on self-propelled mowers? [29 CFR 1910.243(e)(1)(v)]	Y	N	N/A	??

## **Walk-Behind and Riding Rotary Mowers**

and the er cutting po	wer blade enclosed except on the bottom, nclosure extended to or below the lowest bint of the blade in the lowest blade position? 910.243(e)(2)(i)]	Y	N	N/A	??
assembly, the openir without ei	must be removed to install a catcher is a warning affixed to the mower near ng stating that the mower must not be used ther the catcher assembly or the guard in place? 910.243(e)(2)(ii)(a)]	Y	N	N/A	??
for discha angle of th lowest bla	ngs in the blade enclosure that are intended rge of grass limited to a maximum vertical he 30-degree opening measured from the de position?  910.243(e)(2)(iii)]	Y	N	N/A	??
the mowe	rd <b>Caution</b> (or stronger wording) placed on r at or near the discharge opening? 910.243(e)(2)(v)]	Y	N	N/A	??
blades sto speed with	utching or shutting off the power, do the op rotating from the manufacturer's maximum hin 15 seconds? 910.243(e)(2)(vii)]	Y	N	N/A	??
Walk-Behind Ro	otary Mowers				
blade encl directed s	izontal angle of the opening(s) in the losure intended for the discharge of grass o it does not contact the operator? 910.243(e)(3)(i)]	Y	N	N/A	??
in the blac discharge	the following found at all openings de enclosure intended for the of grass? 910.243(e)(3)(ii)]	Y	N	N/A	??
3 ii the	minimum unobstructed horizontal distance of nches from the end of the discharge chute to blade tip circle  OCFR 1910.243(e)(3)(ii)(a)]				
sec	rigid bar fastened across the discharge opening, cured to prevent removal without the use of tools.				

The bottom of the bar shall be no higher than the

bottom edge of the blade enclosure. [29 CFR 1910.243(e)(3)(ii)(b)]

12. Is the highest point on the blade enclosure front (except discharge openings) 1-1/4 inches or less Y N N/A ?? above the lowest cutting point of the blade in the lowest blade position? [29 CFR 1910.243(e)(3)(iii)] 13. Is the mower handle fastened to the mower to prevent loss of control by uncoupling? Y N N/A ?? [29 CFR 1910.243(e)(3)(iv)] 14. Is a positive upstop or latch provided for the mower handle in the normal operating position? Y N N/A ?? [29 CFR 1910.243(e)(3)(v)] Note: The upstop shall not be disengaged during normal operation of the mower. 15. Do wheel-drive disengaging controls, except deadman controls, move opposite to the direction of the vehicle Y N N/A ?? motion to disengage the drive? [29 CFR 1910.243(e)(3)(vii)] **Note:** Deadman controls shall automatically interrupt the power to a drive when the operator's activating force is removed, and may operate in any direction to disengage the drive. **Riding Rotary Mowers** 16. Are openings placed so that grass or debris will not discharge directly toward any part of the operator's seat Y N N/A ?? in the normal operating position? [29 CFR 1910.243(e)(4)(ii)] 17. Is one of the following present at all openings in the blade enclosures intended for grass discharge? Y N N/A ?? [29 CFR 1910.243(e)(4)(iii)] a. A minimum unobstructed horizontal distance of 6 inches from the end of the discharge chute to the blade tip circle [29 CFR 1910.243(e)(4)(iii)(a)] b. A rigid bar fastened across the discharge opening, secured to prevent removal without the use of tools. The bottom of the bar shall be no higher than the bottom edge of the blade enclosure. [29 CFR 1910.243(e)(4)(iii)(b)]

18. Are mowers provided with stops to prevent

[29 CFR 1910.243(e)(4)(iv)]

jackknifing or locking of the steering mechanisms?

19. Are vehicle-stopping means provided? [29 CFR 1910.243(e)(4)(v)] Y N N/A ?? 20. Do hand-operated wheel-drive disengaging controls move opposite to the direction of the vehicle motion Y N N/A ?? to disengage the drive? [29 CFR 1910.243(e)(4)(vi)] 21. Do foot-operated, wheel-drive disengaging controls disengage the drive when depressed? Y N N/A ?? [29 CFR 1910.243(e)(4)(vi)] 22. Do deadman controls (both hand- and foot-operated) automatically interrupt power to the drive when the Y N N/A ?? mower's actuating force is removed, and operate in any direction to disengage the drive? [29 CFR 1910.243(e)(4)(vi)]

## **Comments/Corrective action:**



Information			
Name of Location:			
Date of inspection:			
Career-Technical program/course/room:			
Signature of inspector:			

# Regulated Medical Waste Self-Inspection Checklist

**Guidelines:** No Federal regulations cover the disposal of medical waste. However some States such as New Jersey have adopted their own regulations. This checklist is modeled on medical waste regulations issued by the New Jersey Department of Environmental Protection (NJDEP) under the New Jersey Administrative Code 7:26-3A. It applies to the generation, storage, transportation, disposal and management of **regulated medical waste**. This checklist addresses regulations covering on site generation of **regulated medical waste**, subsequent temporary storage, and its shipment off site for disposal or treatment. It does not cover **regulated medical waste** transporters, on site treatment or disposal, or shipment through the U.S. Postal Service and rail shipments. Definitions of terms in bold type are provided at the end of the checklist. Use this checklist as a guideline for handling medical waste. A **yes** answer to a question indicates that this portion of the inspection complies with the OSHA or U.S. Environmental Protection Agency (EPA) standard, or with a nonregulatory recommendation. Consult the appropriate agency or agencies in your State to determine what regulations are enforced in your State. This checklist should also be used with the **Bloodborne Pathogens** checklist.

		Please Circle					
1.	If medical waste is generated or stored, has someone determined whether it is a <b>regulated medical waste</b> in your State?	Y	N	N/A	??		
2.	If <b>regulated medical waste</b> is generated, is the school registered with your State as a <b>regulated medical waste</b> generator?	Y	N	N/A	??		
3.	Is <b>regulated medical waste</b> to be transported off site separated in containers according to the following groups: sharps, fluids (use quantities greater than 20 cubic centimeters as a guideline), and other <b>regulated medical waste</b> ?	Y	N	N/A	??		
4.	Is <b>regulated medical waste</b> to be transported off site placed in containers that are rigid, leak-resistant, impervious to moisture, strong enough to prevent tearing or bursting under normal conditions of use and handling, and sealed to prevent leakage	Y	N	N/A	??		

5.	Are sharps with residual fluids to be transported off site packaged in puncture-resistant containers?	Y	N	N/A	??
6.	Are fluids (use quantities greater than 20 cubic centimeters as a guideline) to be transported off site packaged in containers that are break-resistant and have tight lids or stoppers?	Y	N	N/A	??
7.	Is <b>regulated medical waste</b> stored in a manner and location that maintains the integrity of the packaging and provides protection from water and wind?	Y	N	N/A	??
8.	Is <b>regulated medical waste</b> stored to prevent rotting or decay, using refrigeration when necessary?	Y	N	N/A	??
9.	Are outdoor <b>regulated medical waste</b> storage areas locked to prevent unauthorized access?	Y	N	N/A	??
10.	Is access to <b>regulated medical waste</b> storage areas limited to authorized persons?	Y	N	N/A	??
11.	Is <b>regulated medical waste</b> stored in a manner that gives protection from animals and does not provide a breeding place or a food source for insects and rodents?	Y	N	N/A	??
12.	Are all non-rigid packaging and inner liners from reusable containers managed as <b>regulated medical</b> waste and not reused?	Y	N	N/A	??
13.	Are reusable containers, used to hold <b>regulated medical waste</b> , decontaminated if the containers show signs of contamination?	Y	N	N/A	??
14.	Are reusable containers used to hold <b>regulated medical waste</b> disposed of as <b>regulated medical waste</b> if the containers can't be properly decontaminated?	Y	N	N/A	??
15.	Does each package of untreated <b>regulated medical waste</b> to be transported off site display the biohazard symbol or have a water-resistant label or print on the outside of the container with the words <b>medical waste</b> or <b>infectious waste</b> ?	Y	N	N/A	??

**Note:** Red plastic bag(s) used as inner packaging do not need a label.

16. Is each package of <b>regulated medical waste</b> to be transported off site marked on the outside with the following information: the generator's name and address; the transporter's name and the State solid waste registration number; the date of shipment; and the identification of contents as medical waste?	Υ	N	N/A	??
17. Is each inner container within a package of regulated medical waste to be transported off site marked with the generator's name and address?	Y	N	N/A	??
18. If required by your State, do the transporters of the school's regulated medical waste have State registration numbers?	Y	N	N/A	??
19. If required by your State, are State regulated medical waste tracking forms completed for each shipment of regulated medical waste sent off site for treatment, destruction, or disposal?	Y	N	N/A	??
20. If required by your State, are copies of completed regulated medical waste tracking forms maintained for at least 3 years?	Y	N	N/A	??
21. If required by your State, are logs maintained of all regulated medical waste that are generated and sent off site for treatment or disposal?	Y	N	N/A	??
22. If required by your State, are copies of regulated medical waste logs maintained for at least 3 years?	Y	N	N/A	??
23. If required by your State, are annual generator reports submitted to the appropriate State agency?	Y	N	N/A	??
24. If required by your State, are copies of the annual generator reports maintained for at least 3 years?	Y	N	N/A	??
25. If the generator does not receive a copy of the completed tracking form with the handwritten signature of the owner or operator of the destination facility within 35 days of the date the waste was accepted by the initial transporter, are the owner or operator of a destination facility, transporter(s), and intermediate handler(s)	Y	N	N/A	??

contacted to determine the status of any

tracked waste (if so required by your State)?

26. If the generator has not received a completed copy of the tracking form signed by the owner or operator of the destination facility within 45 days of the date the waste was accepted by the initial transporter, is an exception report submitted by the generator to the appropriate State agency (if required by your State)?

Y N N/A ??

27. If required by your State, are copies of the exception reports maintained for at least 3 years?

Y N N/A ??

#### **Definitions:**

Regulated medical waste: in New Jersey) a solid waste, generated in the diagnosis, treatment, or immunization of human beings or animals: cultures and stocks contaminated with infectious agents; pathological wastes; human blood and blood products; sharps such as hypodermic needles, syringes, pipettes, scalpel blades, blood vials, needles with attached tubing, and used slides and cover slips contaminated with blood or other infectious materials; animal waste contaminated with infectious agents; isolation wastes; and unused sharps such as hypodermic needles, suture needles, syringes, and scalpel blades. The following are **not** considered **regulated medical waste**: hazardous waste listed in 40 CFR Part 261; household waste generated in households using home self-care; incineration ash generated by burning regulated medical waste; residues from treatment and destruction processes once the regulated medical waste has been treated and destroyed; and human corpses, remains, and anatomical parts that are intended for burial or cremation.

**Comments/Corrective action:** 

Information			
Name of Location:			
Date of inspection:			
Career-Technical program/course/room:			
Signature of inspector:			

# Respiratory Protection Self-Inspection Checklist

**Guidelines:** This checklist applies to the use of either atmosphere-supplying or air-purifying respirators being worn, voluntarily or otherwise, for comfort or to protect health. The checklist is divided into three sections. "Section One" should be used if **filtering facepiece (dust mask)** respirators are voluntarily used. "Section Two" should be used if respirators other than **dust masks** are voluntarily used. "Section Three" should be used if respirators are required to protect individuals from exposure to air contaminants above applicable limits. This checklist does not deal with respirators for **immediately dangerous to life or health (IDLH)** atmospheres, for agricultural use, or for emergency escape. Definitions of underlined terms are provided at the end of the checklist to help you understand some of the questions.



Questions marked with this symbol may require the help of an outside expert.

**Please Circle** 

## **Voluntary Use of Filtering Facepieces (Dust Masks)**

 Are filtering facepieces (dust masks) provided which are clean and uncontaminated?
 [29 CFR 1910.134(c)(2)]

Y N N/A ??

 Does the use of the dust mask not interfere with the individual's ability to work safely? [29 CFR 1910.134(c)(2)]

Y N N/A ??

Has a copy of <u>Appendix D</u> been given to each voluntary wearer?
 [29 CFR 1910.134(c)(2)(i)]

Y N N/A ??

**Note:** A copy of **Appendix D** is included in this checklist.

**Voluntary Use of Respirators Other Than Dust Masks** 

		the individual's ability to work safely? [29 CFR 1910.134(c)(2)]	Y	N	N/A	??
	5.	Has a copy of Appendix D been given to each voluntary wearer? [29 CFR 1910.134(c)(2)(i)]	Y	N	N/A	??
		<b>Note:</b> A copy of <b>Appendix D</b> is included in this checklist.				
<b>↑</b>	6.	Is there a written respiratory protection program that includes the following? [29 CFR 1910.134(c)(1)]	Υ	N	N/A	??
		<ul> <li>Medical evaluations of individuals who will wear respirators; and [29 CFR 1910.134(c)(1)(ii)]</li> </ul>				
		<ul> <li>b. Procedures and schedules for cleaning, disinfecting, storing, inspecting, repairing, discarding, and otherwise maintaining respirators.</li> <li>[29 CFR 1910.134(c)(1)(v)]</li> </ul>				
<b>†</b>	7.	Was a medical evaluation performed, before a respirator was used in the workplace, that determined the individual's ability to use a respirator? [29 CFR 1910.134(e)(1)]	Y	N	N/A	??
		<b>Note:</b> Consult 29 CFR 1910.134(e) for required medical evaluation procedures.				
	8.	Are respirators which are issued for the exclusive use of an individual cleaned and disinfected as often as necessary to be maintained in a sanitary condition?[29 CFR 1910.134(h)(1)(i)]	Y	N	N/A	??
		<b>Note:</b> Exclusive use means the respirator is used only by one person and is not shared.				
	9.	Are respirators which are issued to more than one individual cleaned and disinfected before being worn by different individuals? [29 CFR 1910.134(h)(1)(ii)]	Y	N	N/A	??
	10.	Are respirators stored so as to be protected from damage, contamination, dust, sunlight, extreme temperatures, excessive moisture, or damaging chemicals? [29 CFR 1910.134(h)(2)(i)]	Y	N	N/A	??

11. Are respirators which are used in routine

4. Does the use of the respirator **not** interfere with

during cleaning? [29 CFR 1910.134(h	)(3)(i)(A)]	ľ	IN	N/A	ff
otherwise found to b	fail an inspection or are be defective removed from scarded or repaired? )(4)]	Υ	N	N/A	??
Respirators Required or an Individual's Health	Respirators Needed to Protect				
	ntrols been employed, where or reduce atmospheric )(1)]	Y	N	N/A	??
confinement of an o	y include enclosure or peration, general and local stitution of less toxic				
14. Is there a written re [29 CFR 1910.134(c	spiratory protection program? )(1)]	Y	N	N/A	??
		Υ	N	N/A	??
		Y	N	N/A	??
	piratory protection program ocedures for tight-fitting	Υ	N	N/A	??
include procedures f		Y	N	N/A	??
include procedures a	piratory protection program and schedules for cleaning, inspecting, repairing, discarding, taining respirators?	Y	N	N/A	??

situations inspected before each use and

20	Does the written respiratory protection program include procedures to ensure adequate air quality, quantity, and flow of breathing air for atmosphere-supplying respirators?  [29 CFR 1910.134(c)(1)(vi)]	Y	N	N/A	??
21.	Does the written respiratory protection program include training of individuals with regards to the respirator hazards to which they are potentially exposed during routine and emergency situations?  [29 CFR 1910.134(c)(1)(vii)]	Y	N	N/A	??
22.	Does the written respiratory protection program include training of individuals in the proper use of respirators, including putting on and removing them, limitations of use, and their maintenance?  [29 CFR 1910.134(c)(1)(viii)]	Y	N	N/A	??
23.	Does the written respiratory protection program include procedures for regularly evaluating the effectiveness of the program?  [29 CFR 1910.134(c)(1)(ix)]	Y	N	N/A	??
24.	Has a program administrator been designated who is qualified by appropriate training and experience to administer or oversee the respiratory protection program and conduct the required evaluations of program effectiveness?  [29 CFR 1910.134(c)(3)]	Y	N	N/A	??
25.	Are respirators, training, and medical evaluations provided at no cost to individuals? [29 CFR 1910.134(c)(4)]	Y	N	N/A	??
26	Are respirators selected on the basis of the anticipated hazards? [29 CFR 1910.134(d)(1)(i)]	Y	N	N/A	??
27	Are all respirators <b>NIOSH certified</b> ? [29 CFR 1910.134(d)(1)(ii)]	Y	N	N/A	??

28. Has a potential respiratory hazard(s) been identified and evaluated?
[29 CFR 1910.134(d)(1)(iii)]

Y N N/A ??

**Note:** This evaluation shall include a reasonable estimate of a person's exposure to respiratory hazard(s) and an identification of the contaminant's chemical state and physical form. Although personal air monitoring is the most reliable and accurate method to determine exposure, it is not required.

29. Are medical evaluations performed, before a respirator is used in the workplace, to determine an individual's ability to use a respirator?

[29 CFR 1910.134(e)(1)]

Y N N/A ??

**Note:** The employer may discontinue medical evaluations when the individual is no longer required to use a respirator. Consult 29 CFR 1910.134(e) for required medical evaluation procedures.

30. Has an appropriate qualitative fit test or quantitative fit test been conducted on individuals who are using tight-fitting respirators?
[29 CFR 1910.134(f)(1)]

Y N N/A ??

**Note:** A record of the fit test should be maintained to document compliance.

31. Was the fit test conducted prior to the initial use of the respirator, whenever a different facepiece (size, style, model or make) is used, and at least annually thereafter?
[29 CFR 1910.134(f)(2)]

Y N N/A ??

32. Is the wearing of tight-fitting respirator facepieces prohibited whenever any condition that interferes with the face-to-facepiece seal or valve function is present?

[29 CFR 1910.134(g)(1)(i)]

Y N N/A ??

**Note:** Facial hair that comes between the sealing surface of the facepiece and the face or that interferes with valve function is prohibited.

33. Are corrective glasses or goggles or other personal protective equipment worn so as not to interfere with the seal of the facepiece to the face of the user?

[29 CFR 1910.134(g)(1)(ii)]

34. Is a user seal check performed by the employee each time a tight fitting respirator is put on? [29 CFR 1920.134(g)(1)(iii)]	Y	N	N/A	??
<b>Note:</b> User seal checks include positive and negative pressure checks to identify potential leakage around the facepiece.				
35. Do individuals leave the respirator use area to wash their faces and facepieces as necessary, to replace filter, cartridge, or canister elements, or if they detect vapor or gas breakthrough, changes in breathing resistance, or facepiece leakage?  [29 CFR 1910.134(g)(2)(ii)]	Y	N	N/A	??
36. Are respirators which are issued for the exclusive use of an individual cleaned and disinfected as often as necessary to be maintained in a sanitary condition?  [29 CFR 1910.134(h)(1)(i)]	Y	N	N/A	??
37. Are respirators which are issued to more than one individual cleaned and disinfected before being worn by different individuals? [29 CFR 1910.134(h)(1)(ii)]	Y	N	N/A	??
38. Are respirators stored so as to be protected from damage, contamination, dust, sunlight, extreme temperatures, excessive moisture or damaging chemicals? [29 CFR 1910.134(h)(2)(i)]	Y	N	N/A	??
39. Are respirators which are used routinely inspected before each use and during cleaning? [29 CFR 1910.134(h)(3)(1)(A)]	Y	N	N/A	??
40. Are respirators that fail an inspection or are otherwise found to be defective removed from service and either discarded or repaired? [29 CFR 1910.134(h)(4)]	Y	N	N/A	??
41. Does compressed breathing air meet the requirements for <b>Grade D Breathing Air</b> ? [29 CFR 1910.134(i)(1)(ii)]	Y	N	N/A	??
<b>Note:</b> Documentation of breathing air quality should be maintained to show compliance.				
42. Are compressors used to supply breathing air situated so as to prevent entry of contaminated air into the air supply system?	Y	N	N/A	??

43. Are compressors used to supply breathing air constructed so as to minimize moisture content? [29 CFR 1910.134(i)(5)(ii)]	Y	N	N/A	??
44. Are compressors used to supply breathing air equipped with air-purifying sorbent beds and filters to further ensure breathing air quality? [29 CFR 1910.134(i)(5)(iii)]	Y	N	N/A	??
45. Are compressors used to supply breathing air provided with tags indicating the most recent date on which the air-purification filters or sorbent beds were changed, along with the signature of the authorized person performing the change?  [29 CFR 1910.134(i)(5)(iv)]	Y	N	N/A	??
46. Are high temperature or carbon monoxide alarms, or both, present on oil-lubricated compressors to monitor carbon monoxide levels? [29 CFR 1910.134(i)(7)]	Y	N	N/A	??
47. Are filters, cartridges and canisters labeled and color-coded with the NIOSH approval label? [29 CFR 1910.134(j)]	Y	N	N/A	??
48. Has training been provided to individuals who wear respirators on why the respirator is necessary and its proper use, fit, and maintenance? [29 CFR 1910.134(k)(1)(i)]	Y	N	N/A	??
49. Has training been provided to individuals who wear respirators on the capabilities and limitations of the respirator? [29 CFR 1910.134(k)(1)(ii)]	Y	N	N/A	??
50. Has training been provided to individuals who wear respirators on how to use the respirator in emergency situations? [29 CFR 1910.134(k)(1)(iii)]	Y	N	N/A	??
51. Has training been provided to individuals who wear respirators on how to inspect, put on and remove, use, and check the seals of the respirator? [29 CFR 1910.134(k)(1)(iv)]	Y	N	N/A	??

52. Has training been provided to individuals who wear respirators on procedures for maintenance and storage of the respirator? [29 CFR 1910.134(k)(1)(v)]

Y N N/A ??

53. Has training been provided to individuals who wear respirators on how to recognize medical signs and symptoms that may limit or prevent the effective use of respirators?

[29 CFR 1910.134(k)(1)(vi)]

Y N N/A ??

54. Are workplace evaluations conducted to ensure that the written respiratory protection program is being properly implemented?
[29 CFR 1910.134(I)]

Y N N/A ??

55. Are records maintained for 30 years regarding medical evaluations, fit testing, and the respirator program? [29 CFR 1910.134(m)]

Y N N/A ??

#### **Definitions:**

**Dust mask:** a filtering facepiece type respirator.

Engineering control: physical changes to equipment and operations to reduce exposure to air contaminants. Engineering controls may include: adding local exhaust ventilation, changing to better equipment that release less air contaminants and enclosing operations to prevent exposure. Filtering facepiece (dust mask): a negative pressure particulate respirator with a filter as an integral part of the facepiece or with the entire facepiece composed of the filtering medium. Grade D breathing air: air quality specified by the Compressed Gas Association Commodity Specification G7.1-1989 as referenced in OSHA 29 CFR 1910.134(i)(1)(ii). It specifies that the oxygen content be 19.5-23.5%, the condensed hydrocarbon concentration be at or below 5 mg/m³, the carbon monoxide concentration be at or below 10 ppm, and the carbon dioxide concentration be at or below 1,000 ppm.

Immediately dangerous to life or health (IDLH): an atmosphere that poses an immediate threat to life, would cause irreversible adverse health effects, or would impair an individual's ability to escape from a dangerous atmosphere.

NIOSH "certified" respirator: a respirator meeting the requirements of 42 CFR Part 84. All respirators approved by NIOSH have an approval number that looks like this: TC-84A-111 or TC-23C-222. A respirator is "approved" for a specific set of circumstances and conditions. If the particular circumstances or conditions of use exceed those for which it was approved, the respirator may provide inappropriate protection and is no longer considered to be approved. The following are examples of things you can do to invalidate the approvals: altering the respirator in any way such as by removing a strap or interchanging parts; using an air-purifying respirator equipped with organic vapor cartridges for an organic vapor warning properties; using an air-purifying respirator equipped with organic vapor cartridges for an organic vapor at concentrations above the maximum use concentration established by OSHA or NIOSH.

# Appendix D to 1910.134 (Slightly Modified): Information for Individuals Using Respirators When Not Required Under the Standard

Respirators are an effective method of protection against designated hazards when properly selected and worn. Respirator use is encouraged, even when exposures are below the exposure limit, to provide an additional level of comfort and protection for individuals. However, if a respirator is used improperly or not kept clean, the respirator itself can become a hazard to the individual. Sometimes, individuals may wear respirators to avoid exposures to hazards, even if the amount of hazardous substance does not exceed the limits set by applicable standards. If your school provides respirators for your voluntary use, or if you provide your own respirator, you need to take certain precautions to be sure that the respirator itself does not present a hazard.

You should do the following:

- 1. Read and heed all instructions provided by the manufacturer on use, maintenance, cleaning and care, and warnings regarding the respirators limitations.
- 2. Choose respirators certified for use to protect against the contaminant of concern. NIOSH, the National Institute for Occupational Safety and Health of the U.S. Department of Health and Human Services, certifies respirators. A label or statement of certification should appear on the respirator or respirator packaging. It will tell you what the respirator is designed for and how much it will protect you.
- 3. Do not wear your respirator into atmospheres containing contaminants for which your respirator is not designed to protect against. For example, a respirator designed to filter dust particles will not protect against gases, vapors, or very small solid particles of fumes or smoke.
- 4. Keep track of your respirator so that you do not mistakenly use someone else's respirator.

**Comments/Corrective action:** 



Information
Name of Location:
Date of inspection:
Career-Technical program/course/room:
Signature of inspector:

# Scaffolding Part 1

**Self Inspection Checklist** 

**Guidelines:** This checklist covers regulations issued by the U.S. Department of Labor, Occupational Safety and Health Administration (OSHA) under subpart L of the construction standards 29 CFR 1926.451. It applies to temporary scaffolding at worksites associated with construction, alteration, demolition, or repair work including painting and decorating. It covers general requirements regarding capacity, scaffold platform construction, criteria for **supported scaffolds**, and access. The checklist does not address criteria for suspension scaffolds, suspension ropes, and stairtowers. Please consult the OSHA standard 29 CFR 1926.451 for these types of scaffold situations. The regulations cited apply only to private employers and their employees, unless adopted by a State agency and applied to other groups such as public employees. A **yes** answer to a question indicates that this portion of the inspection complies with the OSHA or U.S. Environmental Protection Agency (EPA) standard, or with a nonregulatory recommendation. This checklist should be used with the **Scaffolding-Part 2** checklist. Subpart L of the OSHA construction standards includes appendixes that provide useful information on scaffold specifications. Definitions of terms in bold type are provided at the end of the checklist.

**Please Circle** 

#### Construction

Y N N/A ??

 Does each scaffold and scaffold component support (without failure) its own weight and at least 4 times the maximum intended load? [29 CFR 1926.451(a)(1)]

**Note:** The stall load of any scaffold hoist must not exceed 3 times its rated load [29 CFR 1926.451(a)(5)]. Appendix A of the OSHA regulations gives directions for constructing scaffolds.

Are all working levels on scaffolds fully planked or decked between the front uprights and the guardrail supports?

Y N N/A ??

 Are scaffold platform spaces 1inch or less between adjacent units and the uprights? [29 CFR 1926.451(b)(1)(i)]

**Note:** Spaces up to 9 1/2 inches wide are permitted around uprights. If platforms are used only as walkways or during erecting or dismantling, the employer may establish the space between planking as necessary to provide safe working conditions.

Y N N/A ??

 Are all scaffold platforms at least 18 inches wide? [29 CFR 1926.451(b)(2)]

**Note:** Scaffold platforms less than 18 inches wide are permitted if wider platforms are not possible. However, students and employees who use these platforms must be protected by guardrails or **personal fall arrest systems**.

Y N N/A ??

5. Is the distance between the front edge of the scaffold platform and the face of the work 14 inches or less, unless guardrail systems are put along the front edge, or **personal fall arrest systems** are used? [29 CFR 1926.451(b)(3)]

**Note:** Exceptions are permitted under special situations. Consult the OSHA regulations for details. The maximum distance from the face for plastering and lathing operations is 18 inches.

Y N N/A ??

6. Does the end of each scaffold platform extend over the centerline of its support at least 6 inches unless cleated or otherwise restrained by hooks or equivalent means? [29 CFR 1926.451(b)(4)]

Y N N/A ??

7. If the scaffold platform is 10 feet or less in length, does the end of the scaffold platform

extend 12 inches or less over its support? [29 CFR 1926.451(b)(5)(i)]

**Note:** The end of the scaffold platform may extend more than 12 inches over its support if the platform is designed and installed so that the cantilevered portion of the platform can support workers or materials without tipping, or a guardrail blocks worker access to the cantilevered end.

Y N N/A ??

8. On scaffolds where planks are abutted to form a long platform, does each plank end rest on a separate support surface?
[29 CFR 1926.451(b)(6)]

**Note:** Common support members, such as "T" sections, may be used to support abutting planks. Hook-on platforms designed to rest on common supports may also be used.

Y N N/A ??

 On scaffolds where platforms overlap to form a long platform, does the overlap occur over supports? Is the overlap at least 12 inches unless the platform is nailed together or otherwise restrained to prevent movement?
 [29 CFR 1926.451(b)(7)]

Y N N/A ??

10. At points of a scaffold where the platform changes direction, is this procedure followed? [29 CFR 1926.451(b)(8)]

**Step 1:** Lay the platform that rests on a bearer at an angle other than a right angle.

**Step 2:** Lay the platform that rests at right angles over the same bearer, on top of the first platform.

Y N N/A ??

11. Is it prohibited to cover wood platforms on scaffolds with opaque finishes? [29 CFR 1926.451(b)(9)]

**Note:** Platform edges may be covered or marked for identification. Wood platforms may be coated periodically with wood preservatives, fire-retardant finishes, and slip-resistant finishes; however, the coating may not obscure the top or

12. Do scaffold components from different manufacturers fit together without force and maintain the scaffold's structural integrity? [29 CFR 1926.451(b)(10)]

Y N N/A ??

13. Are scaffold components from different manufacturers modified ONLY if a **competent person** determines that the scaffold made of the 'mixed' parts is structurally sound?
[29 CFR 1926.451(b)(10)]

Y N N/A ??

14. Are scaffold components made of dissimilar metals used together ONLY if a **competent person** has determined that galvanic action will not reduce the strength of any component to an unacceptable level? [29 CFR 1926.451(b)(11)]

Y N N/A ??

#### **Criteria for Supported Scaffolds**

Y N N/A ??

15. Are **supported scaffolds** with a height to base width ratio of more than 4 to 1 restrained from tipping by guying, tying, bracing, or equivalents?
[29 CFR 1926.451(c)(1)]

**Note:** Install guys, ties, and braces at locations where horizontal members support both inner and outer legs. Install Guys, ties, and braces according to the scaffold manufacturer's recommendations or at the closest horizontal member to the 4 to 1 height. Repeat vertically at locations of horizontal members every 20 feet or less thereafter for scaffolds 3 feet wide or less, and every 26 feet or less thereafter for scaffolds greater than 3 feet wide. Place the top guy, tie, or brace of completed scaffolds no further than the 4 to 1 height from the top. Install guys, ties, and braces at each end of the scaffold and at horizontal intervals 30 feet or less (measured from one end [not both] towards the other). Use ties,

guys, braces, or outriggers to prevent tipping when there is an eccentric load, such as a cantilevered work platform.

16. Are <b>supported scaffold</b> poles, legs, posts, frames, and uprights placed on base plates and mud sills or other firm foundation? [29 CFR 1926.451(c)(2)]	Y	N	N/A	??
17. Are footings level, sound, and rigid? Can they support the loaded scaffold without settling or displacement? [29 CFR 1926.451(c)(2)(i)]	Y	N	N/A	??
18. Is it prohibited to use unstable objects for supporting scaffolds and platform units? [29 CFR 1926.451(c)(2)(ii)]	Y	N	N/A	??
<ul><li>19. Is it prohibited to use unstable objects as working platforms?</li><li>[29 CFR 1926.451(c)(2)(iii)]</li></ul>	Y	N	N/A	??
20. Is it prohibited to use front-end loaders and similar pieces of equipment to support scaffold platforms, unless they were designed by the manufacturer for such use? [29 CFR 1926.451(c)(2)(iv)]	Y	N	N/A	??
21. Are <b>supported scaffold</b> poles, legs, posts, frames, and uprights plum and braced to prevent swaying and displacement? [29 CFR 1926.451(c)(3)]	Y	N	N/A	??

## Access

to access scaffold platforms more than 2 feet above or below a point of access? [29 CFR 1926.451(e)(1)]

**Note:** Cross-braces must not be used as a means of access.

23.	Are portable, hook-on, and attachable ladders positioned to prevent the scaffold from tipping? [29 CFR 1926.451(e)(2)(i)]	Y	N	N/A	??
24.	Are hook-on and attachable ladders positioned so the bottom rung is not more than 24 inches above the scaffold supporting level? [29 CFR 1926.451(e)(2)(ii)]	Y	N	N/A	??
25.	Are hook-on and attachable ladders designed for the scaffold in use? [29 CFR 1926.451(e)(2)(iv)]	Υ	N	N/A	??
26.	Do hook-on and attachable ladders have rung length of at least 11 1/2 inches? [29 CFR 1926.451(e)(2)(v)]	Y	N	N/A	??
27.	Do hook-on and attachable ladders have uniformly spaced rungs with a maximum spacing between rungs of 16-3/4 inches? [29 CFR 1926.451(e)(2)(vi)]	Y	N	N/A	??
28.	Is the bottom step of stairway-type ladders 24 inches or less above the scaffold supporting level? [29 CFR 1926.451(e)(3)(i)]	Y	N	N/A	??
29.	Do stairway-type ladders have rest platforms at 12-foot maximum vertical intervals?	Y	N	N/A	??

[29 CFR 1926.451(e)(3)(ii)]

30.	Do stairway-type ladders have a step width of at least 16 inches? [29 CFR 1926.451(e)(3)(iii)]  Note: Mobile scaffold stairway-type ladders	Y	N	N/A	??
31.	may have a minimum step width of 11 1/2 inches.  Do stairway-type ladders have slip-resistant	Υ	N	N/A	??
	treads on all steps and landings? [29 CFR 1926.451(e)(3)(iv)]	Y	N	N/A	??
32.	Do ramps and walkways 6 feet or more above lower levels have guardrails? [29 CFR 1926.451(e)(5)(i)]				
33.	Are ramps and walkways inclined with a slope less than 1 vertical to 3 horizontal 20 degrees above the horizontal? [29 CFR 1926.451(e)(5)(ii)]	Y	N	N/A	??
34.	Do ramps and walkways that are steeper than 1 vertical in 8 horizontal have cleats 14 inches (or less) apart that are securely fastened to the planks to provide footing? [29 CFR 1926.451(e)(5)(iii)]	Y	N	N/A	??
35.	Are integral prefabricated scaffold access frames constructed for use as ladder rungs? [29 CFR 1926.451(e)(6)(i)]	Y	N	N/A	??
36.	Do integral prefabricated scaffold access frames have rung lengths of at least 8 inches? [29 CFR 1926.451(e)(6)(ii)]	Y	N	N/A	??
37.	Do students and employees have fall protection if integral prefabricated scaffold access frames with rungs less than 11 1/2 inches are used	Y	N	N/A	??

Y N N/A ?? 38. Are integral prefabricated scaffold access frames uniformly spaced within each frame section? [29 CFR 1926.451(e)(6)(iv)] Y N N/A ?? 39. Do integral prefabricated scaffold access frames have a maximum spacing between rungs of 16-3/4 inches? [29 CFR 1926.451(e)(6)(v)] Note: Non-uniform rung spacing caused by joining end frames together is allowed, provide the resulting spacing is 16-3/4 inches or less. Y N N/A ?? 40. Do steps and rungs of ladder and stairway-type access line up vertically with each other between rest platforms? [29 CFR 1926.451(e)(7)] Y N N/A ?? 41. Is the horizontal distance 14 inches (or less) and the vertical distance 24 inches (or less) between two surfaces used to provide direct access between them? [29 CFR 1926.451(e)(8)] Y N N/A ?? 42. During erecting and dismantling of supported scaffolds, does a competent person provide and evaluate safe means of access? [29 CFR 1926.451(e)(9)(i)] Y N N/A ?? 43. During erecting and dismantling of supported **scaffolds**, are hook-on or attachable ladders installed as soon as they can be used safely? [29 CFR 1926.451(e)(9)(ii)] Y N N/A ??

 During erecting and dismantling of supported scaffolds, are the ends of tubular welded frame scaffolds used as climbing devices for access only if the horizontal members are parallel, level, and 22 inches apart (or less) vertically? [29 CFR 1926.451(e)(9)(iii)]

45. During erecting and dismantling of **supported scaffolds**, is it prohibited to use the cross braces on tubular welded frame scaffolds for access or exit?

[29 CFR 1926.451(e)(9)(iv)]

Y N N/A ??

#### Use

46. Are scaffolds and scaffold components loaded below their maximum intended loads or rated capacities (whichever is less)?
[29 CFR 1926.451(f)(1)]

Y N N/A ??

47. Is the use of **shore** or **lean-to scaffolds** prohibited? [29 CFR 1926.451(f)(2)]

Y N N/A ??

48. Does a **competent person** inspect scaffolds and scaffold components for visible defects before each work shift, and after any occurrence that could affect a scaffold's structural integrity? [29 CFR 1926.451(f)(3)]

Y N N/A ??

49. Are parts of a scaffold that are damaged or weakened immediately repaired, replaced, braced, or removed from service until repaired? [29 CFR 1926.451(f)(4)]

Y N N/A ??

50. Is the horizontal movement of a scaffold prohibited while workers are on the scaffold (unless the scaffold is designed for movement by a registered professional engineer, or is a mobile scaffold meeting OSHA standards)? [29 CFR 1926.451(f)(5)]

51. Are proper clearances (as shown in Tables 1 and 2) between scaffolds and power lines always maintained?
[29 CFR 1926.451(f)(6)]

**Note:** Scaffolds and materials may be closer to power lines if such clearance is necessary, and only after the utility company or electrical system operator has been notified, and the utility company or electrical system operator has deenergized the lines, relocated the lines, or installed protective coverings to prevent contact with the lines.

Table 1: Insulated Power Lines				
Insulated Lines Voltage	Minimum Distance	Alternative		
Less than 300 volts	3 feet (0.9 m)			
300 volts to 50 kv	10 feet (3.1 m)			
More than 50 kv	10 feet (3.1 m) plus 4.0 inches (10 cm) for each 1 kv over 50 kv	2 times the length of the line insulator, but never less than 10 feet (3.1m)		

Table 2: Uninsulated Power Lines						
Uninsulated Line Voltage	Minimum Distance	Alternatives				
Less than 50 kv	10 feet (3.1 m)					
More than 50 kv	10 feet (3.1 m) plus 4.0 inches (10 cm) for each 1 kv over 50 kv	2 times the length of the line insulator, but never less than 10 feet (3.1 m)				

Y N N/A ??

52. Are scaffolds erected, moved, dismantled, or altered only under the supervision and direction of a **competent person** qualified in scaffold erection, moving, dismantling, or alteration?

[29 CFR 1926.451(f)(7)]

Y N N/A ??

53. Are scaffolds erected, moved, dismantled, or altered only by experienced and trained employees selected for such work by the **competent person?** 

54.	Is it prohibited to work on scaffolds covered with snow, ice, or other slippery material, except as necessary to remove such materials? [29 CFR 1926.451(f)(8)]	Y	N	N/A	??
55.	If swinging loads are hoisted onto or near scaffolds, are tag lines or equivalent measures used to control the loads? [29 CFR 1926.451(f)(9)]	Y	N	N/A	??
56.	Is working on scaffolds during storms or high winds prohibited unless a <b>competent person</b> has determined that it is safe for workers to be on the scaffold and workers are protected by a <b>personal fall arrest system</b> or wind screens?  [29 CFR 1926.451(f)(12)]	Y	N	N/A	??
57.	Is debris removed from platforms? [29 CFR 1926.451(f)(13)]	Y		N/A	
58.	Are makeshift devices, such as boxes and barrels, prohibited on scaffold platforms for increasing the working level height? [29 CFR 1926.451(f)(14)]	Y	N	N/A	??
59.	Is it prohibited to use ladders on scaffolds to increase the working level height? [29 CFR 1926.451(f)(15)]  Note: Ladders may be used on large area scaffolds if certain conditions are met. Consult the OSHA regulations for the required conditions.	Y	N	N/A	??

60. Are scaffold platforms used only if they deflect 1/60 of the span (or less) when loaded?

#### **Definitions:**

**Competent person:** one who can identify hazards in the surroundings or working conditions that are unsanitary, hazardous, or dangerous to workers, and who has authority to take prompt corrective measures to eliminate them.

**Lean-to scaffold:** a supported scaffold that is kept erect by tilting it toward and resting it against a building or structure.

**Personal fall arrest system:** a system used to stop an employee's fall. It consists of an anchorage, connectors, a body belt or body harness, and may include a lanyard, deceleration device, lifeline, or combinations of these.

**Shore scaffold:** a supported scaffold that is placed against a building or structure and held in place with props.

**Supported scaffold:** one or more platforms supported by outrigger beams, brackets, poles, legs, uprights, posts, frames, or similar rigid support.

## **Comments/Corrective action:**

Information
Name of Location:
Date of inspection:
Career-Technical program/course/room:
Signature of inspector:

# Scaffolding Part 2 Self Inspection Checklist

Guidelines: This checklist covers regulations issued by the U.S. Department of Labor, Occupational Safety and Health Administration (OSHA) under subpart L of the construction standards 29 CFR 1926.451, 1926.452, and 1926.454. It applies to erecting temporary scaffolding at worksites associated with construction, alteration, demolition, or repair work, including painting and decorating. It covers fall protection, falling object protection, pole scaffolds, tube and coupler scaffolds, fabricated frame scaffolds, horse scaffolds, ladder jack scaffolds, and training. This checklist does not cover additional requirements for plasterers', decorators', and large-area scaffolds; bricklayers' square scaffolds; form scaffolds and carpenters' bracket scaffolds; roof bracket scaffolds; outrigger scaffolds; pump jack scaffolds; window jack scaffolds; crawling boards (chicken ladders); step, platform, and trestle ladder scaffolds; single-point adjustable suspension scaffolds; two-point adjustable suspension scaffolds (swing stages); multi-point adjustable suspension scaffolds, stonesetters' multi-point adjustable suspension scaffolds, and masons' multipoint adjustable suspension scaffolds; catenary scaffolds; float (ship) scaffolds; interior hung scaffolds; needle beam scaffolds; multi-level suspended scaffolds; mobile scaffolds; repair bracket scaffolds; stilts; and aerial lifts. Please consult the OSHA standards 29 CFR 1926.451, 1926.452 and 1926.453 for these types of scaffolds. The regulations cited apply only to private employers and their employees, unless adopted by a State agency and applied to other groups such as public employees. A yes answer to a question indicates that this portion of the inspection complies with the OSHA or U.S. Environmental Protection Agency (EPA standard), or with a nonregulatory recommendation. This checklist should be used with the Scaffolding-Part 1 checklist. Subpart L of the OSHA construction standards includes appendixes that give useful information on scaffold specifications. Definitions of terms in bold type are provided at the end of the checklist.

**Please Circle** 

#### **Fall Protection**

1. Are workers on scaffolds that are more than 10 feet above a lower level protected from falling by one of the following measures:

- a personal fall arrest system for workers on ladder jack scaffolds.
   [29 CFR 1926.451(g)(1)(i)]
- b. a guardrail system installed within9 1/2 inches of and along at least oneside of the walkway for workers on a

walkway located within a scaffold. [29 CFR 1926.451(g)(1)(v)]

- c. a personal fall arrest system or guardrail system to protect workers doing overhand bricklaying from a supported scaffold from falling off open sides and ends of the scaffold (except at the side next to the wall being laid)? [29 CFR 1926.451(g)(1)(vi)]
- a personal fall arrest system or guardrail system for workers on all other scaffolds. [29 CFR 1926.451(g)(1)(vii)]
- Does a competent person determine the feasibility and safety of providing fall protection for workers erecting or dismantling supported scaffolds? [29 CFR 1926.451(g)(2)]

3. Do workers erecting or dismantling supported scaffolds use fall protection when it is safe and feasible?
Y N N/A ??

4. Are personal fall arrest systems used on scaffolds attached by a lanyard to a vertical lifeline, horizontal lifeline, or scaffold structural member?
[29 CFR 1926.451(g)(3)]

Y N N/A ??

Y N N/A ??

5. When vertical **lifelines** are used, are they fastened to a fixed safe point of anchorage, independent of the scaffold, and protected from sharp edges and abrasion?
[29 CFR 1926.451(g)(3)(i)]

[29 CFR 1926.451(g)(2)]

Y N N/A ??

**Note:** Safe points of anchorage include structural members of buildings, but do not include standpipes, vents, other piping systems, electrical conduit, outrigger beams, or counterweights.

6. When horizontal lifelines are used, are they secured to two or more structural members of the scaffold? [29 CFR 1926.451(g)(3)(ii)]

Y N N/A ??

7. Is it prohibited to attach vertical lifelines and independent support lines to one another, to the same point of anchorage, and to the same point on the scaffold or personal fall arrest system?

 When guardrail systems are required, are they installed along all open sides and ends of platforms?
 [29 CFR 1926.451(g)(4)(i)]

Y N N/A ??

**Note:** Guardrails systems must be installed before the scaffold is used by workers other than erecting or dismantling crews.

 If the scaffolds were manufactured or placed in service after January 1, 2000, is the top edge height of toprails (or equivalent member) on supported scaffolds between 38 and 45 inches above the platform surface? [29 CFR 1926.451(g)(4)(ii)]

Y N N/A ??

**Note:** When necessary, the height of the top edge may exceed 45 inches if the guardrail meets all OSHA requirements.

10. If scaffolds were manufactured or placed in service before January 1, 2000, is the top edge height of toprails (or equivalent member) on **supported scaffolds** between 36 and 45 inches above the platform surface? [29 CFR 1926.451(g)(4)(ii)]

Y N N/A ??

**Note:** When necessary, the height of the top edge may exceed 45 inches if the guardrail meets all OSHA requirements.

11. Are midrails, screens, mesh, intermediate vertical members, and solid panels (or equivalent structural members) installed between the top edge of the guardrail system and the scaffold platform?
[29 CFR 1926.451(g)(4)(iii)]

Y N N/A ??

12. When midrails are used, are they installed approximately midway between the top edge of the guardrail system and the platform surface?

[29 CFR 1926.451(g)(4)(iv)]

Y N N/A ??

13. When screens and mesh are used, do they extend from the top edge of the guardrail system to the scaffold platform, and along the entire opening between the supports? [29 CFR 1926.451(g)(4)(v)]

Y N N/A ??

14. When intermediate members (such as balusters or additional rails) are used, are

they installed 19 inches or less apart? [29 CFR 1926.451(g)(4)(vi)]

15. Can each toprail (or equivalent member) of a guardrail system withstand (without Y N N/A ?? failure) a 200-pound force applied in any downward or horizontal direction at any point along its top edge? [29 CFR 1926.451(g)(4)(vii)] Note: Appendix A of subpart L of the OSHA regulations gives directions for constructing acceptable guardrail systems. 16. When a 200 pound force is applied in a downward direction on the toprail (or Y N N/A ?? equivalent member) of a guardrail system, does the top edge still maintain the OSHA required height (see questions 9 and 10)? [29 CFR 1926.451(g)(4)(viii)] 17. Can midrails, screens, mesh, intermediate vertical members, solid panels, and equivalent Y N N/A ?? structural members of a guardrail system withstand (without failure) a 150-pound force applied in any downward or horizontal direction at any point along the midrail or other member? [29 CFR 1926.451(g)(4)(ix)] 18. Are guardrails surfaced to prevent snagging of clothing and injury from punctures or Y N N/A ?? lacerations? [29 CFR 1926.451(g)(4)(xi)]

19. Is it prohibited for rails to overhang the terminal posts, except when such overhang YNN/A?? does not constitute a projection hazard? [29 CFR 1926.451(g)(4)(xii)]

20. Is the use of steel or plastic banding for toprails or midrails prohibited?

[29 CFR 1926.451(q)(4)(xiii)]

21. If manila, plastic, or other synthetic rope is used for toprails or midrails, is it inspected by a **competent person** as necessary to ensure that it continues to meet the OSHA strength requirements?

[29 CFR 1926.451(g)(4)(xiv)]

22. If crossbracing is used to replace a midrail, is the crossing point of the two <b>braces</b> between 20 and 30 inches above the work platform? [29 CFR 1926.451(g)(4)(xv)]	Y	N	N/A	??
23. If crossbracing is used to replace a toprail, is the crossing point of the two <b>braces</b> between 38 and 48 inches above the work platform? [29 CFR 1926.451(g)(4)(xv)]	Y	N	N/A	??
<ul><li>24. If crossbracing is used to replace a midrail or toprail, are the end points at each upright 48 inches apart or less?</li><li>[29 CFR 1926.451(g)(4)(xv)]</li></ul>	Y	N	N/A	??
Falling Object Protection				
25. Do workers on scaffolds wear hardhats? [29 CFR 1926.451(h)(1)]	Y	N	N/A	??
26. Are workers protected from falling hand tools, debris, and other small objects by toeboards, screens, guardrail systems, debris nets, catch platforms, or canopy structures that contain or deflect the falling objects? [29 CFR 1926.451(h)(1)]	Y	N	N/A	??
27. If objects are too large, heavy, or massive to be contained or deflected, are they moved away from the edge of the surface from which they could fall and secured? [29 CFR 1926.451(h)(1)]	Y	N	N/A	??
28. If tools, materials, or equipment could fall from a scaffold and strike workers, are one of the following protective measures used? [29 CFR 1926.451(h)(2)]	Y	N	N/A	??
<ul> <li>The area below the scaffold to which objects can fall is barricaded, and workers are not permitted to enter the hazard area.</li> </ul>				
<ul> <li>A toeboard is erected along the edge of platforms more than 10 feet above lower levels for a distance sufficient to protect workers below.</li> </ul>				
29. If tools, materials, or equipment are piled higher				

than the top edge of the toeboard, are one of

the following protective measures used?

# [29 CFR 1926.451(h)(2)]

- a. Paneling or screening extending from the toeboard or platform to the top of the guardrail is erected for a distance sufficient to protect the workers below.
- b. A guardrail system is installed with openings small enough to prevent passage of falling objects.
- c. A canopy structure, debris net, or catch platform strong enough to withstand the impact forces of the falling objects is erected over the workers.
- 30. If canopies are used to protect workers, are they installed between the falling object hazard and the workers?
  [29 CFR 1926.451(h)(3)(i)]

Y N N/A ??

31. If toeboards are used to protect workers, can they withstand (without failure) a force of at least 50 pounds applied in any downward or horizontal direction at any point along the toeboard? [29 CFR 1926.451(h)(4)(i)]

Y N N/A ??

**Note:** Appendix A of Subpart L of the OSHA regulations provides directions for constructing

acceptable toeboards.

32. If toeboards are used to protect workers, are they at least 3-1/2 inches high from the top edge of the toeboard to the level of the walking/working surface? [29 CFR 1926.451(h)(4)(ii)]

Y N N/A ??

33. If toeboards are used to protect workers, are they securely fastened in place at the outermost edge of the platform? Do they have 1/4-inch or less clearance above the walking or working surface? [29 CFR 1926.451(h)(4)(ii)]

Y N N/A ??

34. If toeboards are used to protect workers, are they solid or with openings of 1inch or less in the greatest dimension?
[29 CFR 1926.451(h)(4)(ii)]

Y N N/A ??

#### **Pole Scaffolds**

35. When platforms are moved to the next level, are existing platforms left undisturbed until the new **bearers** have been set in place and braced?

36. Is crossbracing installed between the inner and outer set of poles on double pole scaffolds? Y N N/A ?? [29 CFR 1926.452(a)(2)] 37. Is diagonal bracing that is installed in both directions across the entire inside face of Y N N/A ?? double-pole scaffolds used to support loads equivalent to a uniformly distributed load of 50 pounds or more per square foot? [29 CFR 1926.452(a)(3)] 38. Is diagonal bracing installed in both directions across the entire outside face of all double-Y N N/A ?? and single-pole scaffolds? [29 CFR 1926.452(a)(4)] 39. Are runners and bearers installed on edge? [29 CFR 1926.452(a)(5)] Y N N/A ?? 40. Do bearers extend at least 3 inches over the outside edges of the **runners**? Y N N/A ?? [29 CFR 1926.452(a)(6)] 41. Do **runners** extend at least over two poles? Are they supported by bearing blocks that are Y N N/A ?? securely attached to the poles? [29 CFR 1926.452(a)(7)] 42. Is it prohibited to splice **braces**, **bearers**, and runners between poles? Y N N/A ?? [29 CFR 1926.452(a)(8)] 43. If wooden poles are spliced, are they square? Does the upper section rest squarely on the lower section? Y N N/A ?? [29 CFR 1926.452(a)(9)] Note: Wood splice plates must be on at least two adjacent sides, and must extend at least 2 feet on either side of the splice, overlap the abutted

# **Tube and Coupler Scaffolds**

44. When platforms are moved to the next level, are existing platforms left undisturbed until the new **bearers** have been set in place and braced?

ends equally, and have at least the same

cross-sectional areas as the pole. Splice plates of other materials of equivalent strength may be used.

45. Are transverse **braces** that form an "X" across the width of the scaffold installed at the scaffold ends and at least at every 3rd set of posts horizontally (measured form one end) and every 4th **runner** vertically?

[29 CFR 1926.452(b)(2)]

Y N N/A ??

46. Dose bracing extend diagonally from the inner or outer posts or **runners** upward to the next outer or inner posts or **runners**?
[29 CFR 1926.452(b)(2)]

Y N N/A ??

47. Are building ties installed at the **bearer** levels between the transverse bracing? [29 CFR 1926.452(b)(2)]

Y N N/A ??

48. On straight run scaffolds, is longitudinal bracing across the inner and outer rows of posts installed diagonally in both directions? Does bracing extend from the base of the end posts upward to the top of the scaffold at approximately a 45° angle? [29 CFR 1926.452(b)(3)]

Y N N/A ??

Note: On scaffolds whose length is greater than their height, such bracing must be repeated beginning at least at every 5th post. On scaffolds whose length is less than their height, such bracing must be installed from the base of the end posts upward to the opposite end posts, and then in alternating directions until reaching the top of the scaffold. Bracing must be installed as close as possible to the intersection of the bearer and post or runner and post.

49. If bracing cannot be attached to posts, is it attached to the **runners** as close to the post as possible?
[29 CFR 1926.452(b)(4)]

Y N N/A ??

50. Are **bearers** installed transversely between posts? When coupled to the posts, does the inboard **coupler** bear directly on the **runner coupler**? [29 CFR 1926.452(b)(5)]

Y N N/A ??

**Note:** When the **bearers** are coupled to the **runners**, the **couplers** must be as close to the posts as possible.

51. Do **bearers** extend beyond the posts and **runners**, and provide full contact with the **coupler**?

Y N N/A ??

**Note:** When tube and **coupler** guardrails and midrails are used on outside posts, they may be used in place of outside **runners**.

53. Are **runners** interlocked on straight runs to form continuous lengths, and coupled to each post? [29 CFR 1926.452(b)(8)]

Y N N/A ??

**Note:** Install bottom **runners** and **bearers** as close to the base as possible.

54. Are **couplers** made of structural metal, such as drop-forged steel, malleable iron, or structural grade aluminum?
[29 CFR 1926.452(b)(9)]

Y N N/A ??

**Note:** The use of gray case iron is prohibited.

### **Fabricated Frame Scaffolds**

55. When moving platforms to the next level, are existing platforms left undisturbed until the new end frames have been set in place and braced? [29 CFR 1926.452(c)(1)]

Y N N/A ??

56. Are frames and panels braced by cross, horizontal, or diagonal **braces** (or combinations thereof), to secure vertical members together laterally? [29 CFR 1926.452(c)(2)]

Y N N/A ??

**Note:** The cross **braces** shall be long enough to automatically square and align vertical members so that the erected scaffold is plumb, level, and square. All **brace** connections must be secured.

57. Are frames and panels joined together vertically by coupling or stacking pins or equivalent means? [29 CFR 1926.452(c)(3)]

Y N N/A ??

58. Are frames and panels locked together vertically by pins or equivalent means at points where uplift could displace scaffold end frames or panels? [29 CFR 1926.452(c)(4)]

Y N N/A ??

# **Bricklayers' Square Scaffolds**

59. Are wood scaffolds reinforced with gussets on

both sides of each corner? [29 CFR 1926.452(e)(1)]	Y	N	N/A	??
60. Are diagonal <b>braces</b> installed on all sides of each square? [29 CFR 1926.452(e)(2)]	Y	N	N/A	??
61. Are diagonal <b>braces</b> installed between squares on the rear and front sides of the scaffold, and do they extend from the bottom of each square to the top of the next square? [29 CFR 1926.452(e)(3)]	Y	N	N/A	??
62. Are scaffolds three tiers or less in height? Are they constructed so that one square rests directly above the other? [29 CFR 1926.452(e)(4)]	Y	N	N/A	??
<b>Note:</b> The upper tiers shall stand on a continuous row of planks laid across the next lower tier, and shall be nailed down or otherwise secured to prevent displacement.				
Horse Scaffolds				
63. Are scaffolds less than 10 high? Are they two tiers high or less? [29 CFR 1926.452(f)(1)]	Y	N	N/A	??
64. When horses are arranged in tiers, is each horse place directly over the horse in the tier below? [29 CFR 1926.452(f)(2)]	Y	N	N/A	??
65. When horses are arranged in tiers, are the legs of each horse nailed down or otherwise secured to prevent displacement? [29 CFR 1926.452(f)(3)]	Y	N	N/A	??
<ul><li>66. When horses are arranged in tiers, is each tier crossbraced?</li><li>[29 CFR 1926.452(f)(4)]</li></ul>	Y	N	N/A	??
Ladder Jack Scaffolds				
<ul><li>67. Are all ladder jack scaffolds 20 feet or less above the ground?</li><li>[29 CFR 1926.452(k)(1)]</li></ul>	Y	N	N/A	??
68. Are ladders that are used to support ladder jack scaffolds in compliance with OSHA regulations (see	Y	N	N/A	??

subpart X of this part)? - Stairways and Ladders. [29 CFR 1926.452(k)(2)]

69. Are ladder jacks designed and constructed so that they will bear on the side rails in addition to the ladder rungs? [29 CFR 1926.452(k)(3)]	Y	N	N/A	??
<b>Note:</b> If bearing on rungs only, the bearing area shall be at least 10 inches on each rung.				
70. Are ladders that are used to support ladder jacks placed, fastened, or equipped with devices to prevent slipping? [29 CFR 1926.452(k)(4)]	Y	N	N/A	??
<ul><li>71. Is it prohibited to bridge scaffold platforms one to another?</li><li>[29 CFR 1926.452(k)(5)]</li></ul>	Y	N	N/A	??
Training Requirements				
72. Are workers trained to recognize the hazards associated with the type of scaffold used and to understand the procedures to control or minimize those hazards? [29 CFR 1926.454(a)]	Y	N	N/A	??
<b>Note:</b> Consult the OSHA regulations for the specific training areas that must be covered.				
73. Are trainers <b>qualified</b> in the subject matter? [29 CFR 1926.454(a)]	Y	N	N/A	??
74. Are workers who erect, disassemble, move, operate, repair, maintain, or inspect a scaffold trained to recognize hazards associated with the work? [29 CFR 1926.454(b)]	Y	N	N/A	??
<b>Note:</b> Consult the OSHA regulations for the specific training areas that must be covered.				
75. Are trainers who train the workers mentioned in question 74 <b>competent</b> ? [29 CFR 1926.454(b)]	Y	N	N/A	??
76. Are workers retrained when they show a lack of skills or understanding needed for safe work involving erecting, using or dismantling scaffolds? [29 CFR 1926.454(c)]	Y	N	N/A	??

#### **Definitions:**

**Bearer (putlog):** a horizontal transverse scaffold member supported by ledgers or **runners**. The scaffold platform rests on the bearer, and the bearer joins scaffold uprights, posts, poles, and similar members.

**Brace:** a rigid connection that holds one scaffold member in a fixed position with respect to another member, or to a building or structure.

**Competent person:** one who can identify hazards in the work area or conditions that are unsanitary, hazardous, or dangerous, and who has the authority to take prompt corrective measures to eliminate them.

**Coupler:** a device for locking together the tubes of a tube and coupler scaffold.

**Gusset:** a metal plate used for connections.

**Personal fall arrest system:** a system used to stop an employee's fall. It consists of an anchorage, connectors, a body belt or body harness, and may include a lanyard, deceleration device, **lifeline**, or combinations of these.

**Lifeline:** a component consisting of a flexible line that connects to an anchorage at one end to hang vertically (vertical lifeline), or that connects to anchorages at both ends to stretch horizontally (horizontal lifeline). The lifeline serves connects other components of a personal fall arrest system to the anchorage.

**Qualified:** a person who, by a recognized degree, certificate, or professional standing; or by extensive knowledge, training, and experience, has successfully demonstrated an ability to solve problems related to a subject matter, work, or project.

**Runner (ledger or ribbon):** the lengthwise horizontal spacing or bracing member that support the bearers.

**Supported scaffold:** one or more platforms supported by outrigger beams, brackets, poles, legs, uprights, posts, frames, or similar rigid support.

**Comments/Corrective action:** 

Information			
Name of Location:			
Date of inspection:			
Career-Technical program/course/room:			
Signature of inspector:			

# Service and Repair of Motor Vehicle Air Conditioners (MVACs)

**Self-Inspection Checklist** 

**Guidelines:** This checklist covers regulations issued by the U.S. Environmental Protection Agency (EPA) under 40 CFR 82.30 to 82.42. They apply to anyone servicing **motor vehicle air conditioners** for cash, credit, goods, or services. A **yes** answer to a question indicates that this portion of the inspection complies with the EPA or Occupational Safety and Health Administration (OSHA) standard, or with a nonregulatory recommendation. These regulations do not cover service work for free but do cover Career-Technical schools. Appendix A of the regulations 40 CFR 82.30 to 82.42 should also be consulted and include *Standard of purity for use in mobile air conditioning systems*, Extraction and recycle equipment for mobile automotive air conditioning systems, and Recommended service procedure for the containment of R-12.

**Please Circle Servicing Motor Vehicle Air Conditioners** 1. Are all teachers who teach the repair or service of motor vehicle air conditioners trained and Y N N/A ?? certified by an EPA approved program for MVACs? [40 CFR 82.34 and 82.40] 2. Do students and employees follow proper **procedures** to prevent loss of refrigerant when Y N N/A ?? recycling or recovering refrigerant from **motor** vehicle air conditioners? [40 CFR 82.34] 3. Is intentionally venting or disposing of refrigerant prohibited? Y N N/A ?? [40 CFR 82.32 and 82.34] 4. Is all equipment used to recycle or recover refrigerant EPA-approved? Y N N/A ?? [40 CFR 82.34 and 82.36]

5. Has a proper repair equipment certification been prepared and sent to the EPA? Y N N/A ?? [40 CFR 82.42] 6. Are records maintained that show the name and address of the reclamation facility to Y N N/A ?? which refrigerant is sent? [40 CFR 82.42] 7. Are records maintained that demonstrate that all employees authorized to operate refrigerant Y N N/A ?? recycling or recovery equipment are currently certified? [40 CFR 82.42] 8. Are all required records maintained on site for at least 3 years? Y N N/A ?? [40 CFR 82.42] 9. Is it prohibited to sell or distribute containers that have less than 20 pounds of refrigerant, unless Y N N/A ?? the buyer is properly trained and certified to repair and service MVACs? [40 CFR 82.34 and 82.42]

# **Definitions:**

Approved: certified by EPA or certified by an EPA-approved organization. Approved recover/recycle machines meet the technical specifications of SAE Standard J-1990 and have the capacity to purify used refrigerant to SAE Standard J-1991 for safe and direct return to the air conditioner following repairs. Recover-only equipment removes the refrigerant from the A/C unit as specified by SAE Standard J-2209 and transfers it into a holding tank. A list of both types of approved equipment is available from EPA. Most certified equipment is labeled as design-certified to SAE standards. Technicians who repair or service motor vehicle air conditioners must be trained and certified by an EPA-approved organization. Training programs must cover use of recycling equipment in compliance with SAE Standard J-1989, the regulatory requirements, the importance of refrigerant containment, and the effects of ozone depletion. To be certified, technicians must pass a test demonstrating their knowledge in these areas. A list of approved testing programs is available from EPA

**Motor vehicle air conditioners (MVACs):** mechanical vapor compression refrigeration equipment used to cool the driver's or passenger's compartment of any motor vehicle. This definition does not encompass the hermetically sealed refrigeration systems used on motor vehicles for refrigerated cargo and the air conditioning systems on passenger buses using HCFC-22 refrigerant. **Proper procedures:** using equipment following *Recommend service procedure for containment of R-12 (CFC-12)* in Appendix A of the regulations 40 CFR Subpart B, 82.30 to 82.42. In addition, this means operating the equipment according to the manufacturer's guide to operation and maintenance and using only the controlled substance for which the machine is designed. For equipment that extracts and recycles refrigerant, **proper procedures** means to recycle refrigerant before it is returned to a motor vehicle air conditioner. For equipment that only recovers refrigerant,

proper procedures means recycling the refrigerant on site or sending the refrigerant off site for reclamation. Refrigerant from reclamation facilities that is used for recharging motor vehicle air conditioners must be at or above the standard of purity developed by the Air-conditioning and Refrigeration Institute (ARI 700-88) [available at 4301 North Fairfax Drive, Suite 425, Arlington, Virginia 22203] in effect as of November 15, 1990. Refrigerant may be recycled off site only if the refrigerant is extracted using recover-only equipment, and is subsequently recycled off site by a person that owns the recover-only equipment and owns or operates the establishment at which the refrigerant was extracted. **Approved** equipment must be used to extract refrigerant before any service is performed during which discharge of refrigerant from the motor vehicle air conditioner can reasonably be expected. Intentionally venting or disposing of refrigerant to the atmosphere is an improper use of equipment. [82.32(e)]

Repair equipment certification: a signed statement by the owner of the equipment used to recycle or recover refrigerant that includes: (a) the name of the purchaser of any EPA approved equipment used to recycle or recover refrigerant; (b) the address of the establishment where the equipment will be located; (c) the manufacturer name and equipment model number, the date of manufacture, and the serial number of the equipment; (d) a statement that the equipment will be properly used in servicing motor vehicle air conditioners; (e) a statement that each teacher authorized to teach service is properly trained and certified for repairing and servicing MVAC; and (f) a signature of the owner of the equipment or other responsible officer. This certification must be sent to MVACs Recycling Program Manager, Stratospheric Ozone Protection Branch (6202-J), U.S. Environmental Protection Agency, 401 M Street, SW., Washington, DC 20460.

[40 CFR 82.42]

**Comments/Corrective action:** 

Information				
Name of Location:				
Date of inspection:				
Career-Technical program/course/room:				
Signature of inspector:				

# Servicing Appliances Containing Refrigerant Self-Inspection Checklist

**Guidelines:** This checklist covers regulations issued by the U.S. Environmental Protection Agency under Subpart F, 40 CFR 82.150 to 82.166. A answer to a question indicates that this portion of the inspection complies with the EPA standard, an Occupational Safety and Health Administration (OSHA) standard, or with a nonregulatory recommendation. Definitions of terms in bold type are provided at the end of the checklist. This checklist does not cover motor vehicle air conditioners (MVACs). See the **Service and Repair of Motor Vehicle Air Conditioners** checklist. This checklist does not address regulations for approved equipment testing organizations, technician certification programs, persons who take the final step in the disposal process of **small appliances** or **MVAC-like appliances**, and reclaimer certification. appendixes A through D of the regulations 40 CFR 82.150 to 82.166 should also be consulted and include: Appendix A-Specifications for fluorocarbon refrigerants; Appendix B-Performance of refrigerant recovery, recycling, and/or reclaim equipment; Appendix C-Method for testing recovery devices for use with small appliances; and Appendix D-Standards for becoming a certifying program for technicians.

**Please Circle** 

# Maintaining, Servicing, and Repairing Appliances

 Is it prohibited to knowingly vent or release any class I or class II refrigerant into the environment? [40 CFR 82.154(a)]

Y N N/A ??

**Note:** Small releases associated with good faith attempts to recycle or recover refrigerants are permitted if proper procedures are followed.

 Do students and employees follow EPA-required procedures when opening an appliance for maintenance, service, or repair? [40 CFR 82.154(b) and 82.156]

Y N N/A ??

**Note:** Different **appliances** must be evacuated to different pressures according to the age of the recovery or recycling equipment and the type of **appliance**. Certain exceptions are also permitted. Consult 40 CFR 82.156 for additional

information.

Are students and employees who open an appliance EPA-certified for that type of appliance?
 Y N N/A ??
 [40 CFR 82.161(a)]

**Note:** Employees must be certified as one of the following:

- a. Type I persons maintain, service, or repair **small appliances**.
- Type II persons maintain, service, or repair high- or very high-pressure appliances or MVAC-like appliances.
- c. Type III persons repair **low-pressure** appliances.
- d. Universal persons maintain, service, or repair all types of **appliances**.

Persons who maintain, service, or repair MVAC-like appliances may be certified according to the requirements for MVAC service, repair, and disposal (see checklist for Service and Repair of Motor Vehicle Air Conditioners).

- 4. When students or employees **open appliances**, is refrigerant that is evacuated to a system receiver or a recovery or recycling machine certified according to EPA requirements? [40 CFR 82.154(f) and 82.156]
- 5. When students or employees service **appliances** normally containing 50 or more pounds of YNN/A?? refrigerant, does the owner/operator of the appliance receive an invoice or other

Y N N/A ??

Y N N/A ??

6. Are copies of certifications maintained at the school for at least 3 years?
[40 CFR 82.166(I) and (m)]

documentation that indicates the amount of

refrigerant added to the appliance? [40 CFR 82.166(j) and 82.158]

[40 CFR 82.156(d)]

7. Do students and employees use recovery or recycling equipment according to the manufacturer's directions, unless the directions conflict with EPA requirements?

## **Disposal**

 Is it prohibited to knowingly vent or release any class I or class II refrigerant to the environment when disposing of an appliance? [40 CFR 82.154(a)]

Y N N/A ??

**Note:** Small releases associated with good faith attempts to recover refrigerants are permitted, if all EPA required practices are followed.

 Are all students and employees who dispose of appliances (except small appliances and MVAC-like appliances) EPA-certified for that type of appliance? [40 CFR 82.161(a)]

Y N N/A ??

10. Are copies of required certifications maintained at the school for at least 3 years? [40 CFR 82.166(I) and (m)]

Y N N/A ??

11. When students or employees dispose of appliances (except small appliances and MVAC-like appliances), is refrigerant that is evacuated to a system receiver or a recovery or recycling machine certified according to EPA requirements?

[40 CFR 82.156(a)]

Y N N/A ??

12. If students or employees remove refrigerant before disposing of **appliances**, (except **small appliances** and **MVAC-like appliances**), do they follow EPA required procedures for proper evacuation?
[40 CFR 82.156]

Y N N/A ??

**Note:** Different evacuation pressures are specified according to the age of the recovery or recycling equipment and the type of **appliance**. Consult 40 CFR 82.156(a) for additional information.

13. If students or employees dispose of **small appliances**, do they recover refrigerant from the appliance according to one of the following? [40 CFR 82.156(h)]

- a. Ninety percent of the refrigerant must be recovered if the compressor is operating.
- b. Eighty percent of the refrigerant must be recovered if the compressor is not operating.
- c. The appliance is evacuated to 4 inches

of mercury vacuum.

14.	If refrigerant is recovered for disposal of <b>MVAC-like appliances</b> , is the system pressure of the <b>appliance</b> reduced to or below 102 mm of mercury vacuum, using equipment that meets EPA requirements? [40 CFR 82.156(g)]	Y	N	N/A	??
15	If the <b>small appliance</b> or <b>MVAC-like appliance</b> is sent to someone else for final disposal and the refrigerant has been recovered according to EPA requirements, is documentation provided that includes (a) a signed statement certifying that the refrigerant has been properly removed, (b) the name and address of the person who recovered the refrigerant, and (c) the date the refrigerant was removed? [40 CFR 82.156(f)]	Y	N	N/A	??
16	If the small appliance or MVAC-like appliance refrigerant is not recovered before disposal, is the appliance sent to a person who will dispose of the appliance according to EPA requirements?  [40 CFR 82.156]	Y	N	N/A	??
Gene	ral Requirements				
17	Has a proper <b>Equipment operations</b> certification been prepared and sent to EPA? [40 CFR 82.154(e) and 82.162]	Y	N	N/A	??
18	If <b>class I</b> or <b>class II</b> substances are sold or distributed for use as a refrigerant, are invoices maintained for at least 3 years indicating the name of the purchaser, the date of sale, and the quantity of refrigerant purchased? [40 CFR 82.166(a) and (m)]	Y	N	N/A	??
19	Is it prohibited to alter the design of any certified refrigerant recycling or recovery equipment in a way that would affect the equipment's ability to meet the certification standards? [40 CFR 82.154(d)]	Y	N	N/A	??
20	If <b>class I</b> or <b>class II</b> refrigerants are purchased,	v	N	NI / A	22

Y N N/A ??

is evidence provided to the wholesaler

regarding each person's certification,

including any changes to certification? [40 CFR 82.166(b)]

21. Is selling any used class I or class II refrigerant prohibited unless one of the following is true? [40 CFR 82.154(g) and (h)]

Y N N/A ??

- a. The buyer is an EPA-certified reclaimer following EPA approved procedures.
- b. The class I or class II substance was used only in an MVAC or MVAC-like appliance and is to be used only in an MVAC or MVAC-like appliance.
- c. The class I or class II substance is contained in an appliance that is sold or offered for sale together with the class I or class II substance.
- 22. Is selling or distributing any class I or class II substance for use as a refrigerant prohibited unless [40 CFR 82.154(m)]

Y N N/A ??

- a. the buyer is a EPA-certified technician;
- the refrigerant is sold only for eventual resale to EPA-certified technicians or to appliance manufacturers;
- c. the refrigerant is sold to an **appliance** manufacturer;
- d. the refrigerant is contained in an **appliance**; or
- e. the refrigerant is charged into an **appliance** by a EPA certified technician during maintenance, service, or repair.
- 23. If you are the owner/operator of an **appliance** normally containing 50 or more pounds of refrigerant, are records maintained documenting the date and type of service on the **appliance** and the amount of refrigerant added?

  [40 CFR 82.166(k)]

Y N N/A ??

24. If you are the owner/operator of a commercial refrigeration or industrial process refrigeration equipment, are all leaks repaired within 30 days if the equipment is leaking at a rate such that the loss of refrigerant will exceed

35° of the total charge during a 12-month period? [40 CFR 82.156(i)(1)]

25. If you are the owner/operator of an **appliance** normally containing more than 50 pounds of refrigerant and not covered by question 25, are all leaks repaired within 30 days if the appliance is leaking at a rate such that the loss of refrigerant will exceed 15° of the total charge during a 12-month period? [40 CFR 82.156(j)]

Y N N/A ??

**Note:** Owners are not required to repair the leaks indicated in questions 25 and 26 if, within 30 days, they develop a one-year retrofit or retirement plan for the leaking equipment. The plan must be in writing, dated and kept on site. All work must be completed within one year of the plan's date.

#### **Definitions:**

**Appliance:** any device that contains and uses a **class I** or **class II** substance as a refrigerant and that is used for household or commercial purposes, including air conditioner, refrigerator, chiller, or freezer.

**Class I refrigerants:** include chlorofluorocarbons (CFCs), halons, carbon tetrachloride, and methyl chloroform.

Class II refrigerants: include hydrochlorofluorocarbons (HCFCs).

**Equipment operations certification:** a signed statement from a school that maintains, services, or repairs appliances except for MVACs and includes: (a) the name and address (including the county) of the purchaser of any EPA-approved equipment used to recover and recycle refrigerant; (b) the name and address of the establishment where the equipment will be located; (c) the manufacturer name and equipment model number, the date of manufacture, and the serial number of the equipment; (d) a statement that the equipment will be properly used in servicing **appliances** and that the information given is true and correct; (e) a signature of the owner of the equipment or other responsible officer. This **equipment operations certification** must be sent to CAA § 608 Enforcement Contact, EPA Region II, Jacob K. Javits Federal Building, 26 Federal Plaza, Room 5000, New York, NY 10278. [40 CFR 82.154(e) and 82.162]

**High-pressure appliance:** an appliance that uses a refrigerant with a boiling point between -50 and 10°C at atmospheric pressure (29.9 inches of mercury). This definition includes appliances using refrigerants -12, -22, -114, -500, or -502.

**Low-pressure appliance:** an appliance that uses a refrigerant with a boiling point above 10°C at atmospheric pressure (29.9 inches of mercury). This definition includes equipment using refrigerants -11, -113, and -123.

**MVAC-like appliance:** a motor-vehicle air-conditioner-like appliance. It includes mechanical vapor compression, open-drive compressor appliances used to cool the driver's or passenger's compartment of a non-road motor vehicle. This includes the air-conditioning equipment found on agricultural or construction vehicles. This definition does not cover appliance using HCFC-22 refrigerant.

**Opening an appliance:** any service, maintenance, or repair on an appliance that could be reasonably expected to release refrigerant from the appliance to the atmosphere unless the refrigerant was previously recovered from the appliance.

**Small appliance:** any of the following products that are fully manufactured, charged, and hermetically sealed in a factory with 5 pounds or less of refrigerant: refrigerators and freezers designed for home use, room air conditioners (including window air conditioners and packaged terminal air conditioners), packaged terminal heat pumps, dehumidifiers, under-the-counter ice makers, vending machines, and drinking water coolers.

**Very high-pressure appliance:** an appliance that uses a refrigerant with a boiling point below - 50°C at atmospheric pressure (29.9 inches of mercury). This definition includes equipment using refrigerants -13 and -503.

## **Sources of Additional Information:**

Stratospheric Ozone Information Hotline: 1-800-296-1996

**Comments/Corrective action:** 

Information				
Name of Location:				
Date of inspection:				
Career-Technical program/course/room:				
Signature of inspector:				

# Servicing Multipiece and Single-Piece Rim Wheels

**Self Inspection Checklist** 

**Guidelines:** This checklist covers regulations issued by the U.S. Department of Labor, Occupational Safety and Health Administration (OSHA) under 29 CFR 1910.177. It applies to servicing **multi-** and **single-piece rim wheels** used on large vehicles such as trucks, tractors, trailers, busses, and offroad machines. These regulations do not apply to **rim wheels** used on automobiles or pickup trucks and vans with automobile tires or truck tires designated <u>LT</u>. The regulations cited apply only to private employers and their employees, unless adopted by a State agency and applied to other groups such as public employees. A **yes** answer to a question indicates that this portion of the inspection complies with the OSHA or U.S. Environmental Protection Agency (EPA) standard, or with a nonregulatory recommendation. Definitions of terms in bold type are provided at the end of the checklist.

Servicing tires on **multipiece** and **single-piece rim wheels** can result in serious injury or death to anyone in the area. The wheel can be propelled at great distances at great forces. The OSHA standard is quite specific about training requirements.

Training

1. Is a training program in place (including information about hazards and safety procedures) for employees or students who service rim wheels?
[29 CFR 1910.177(c)(1)]

2. As part of the training program, have all employees and students been given the information on charts, rim manuals, and the OSHA regulations covered in this checklist?
[29 CFR 1910.177(c)(1)(ii)]

Note: Charts should be posted in the lab or shop.

 If students or employees are unable to read or understand the **charts** or **rim manuals**, has the information been conveyed in a manner that they understand? [29 CFR 1910.177(c)(1)(iii)]

Y N N/A ??

- 4. Have students and employees who service rim wheels demonstrated and maintained the ability to service rim wheels safely, including acceptable performance of the following tasks? [29 CFR 1910.177(c)(2)]
  - a. Demounting tires (including deflation)
  - b. Inspecting and identifying **rim wheel** components
  - c. Mounting tires (including inflation with restraining device or other safeguard required by this section)
  - d. Using the restraining device or barrier and other equipment required by this section
  - e. Handling rim wheels
  - f. Inflating a tire when a **single-piece rim wheel** is mounted on a vehicle
  - g. Installating and removing rim wheels

Y N N/A ??

 Do students and employees stand outside the trajectory when tires are inflated and when the wheel is inspected following inflation?
 [29 CFR 1910.177(c)(2)]

Y N N/A ??

 Have the students or employees who service rim wheels been individually evaluated on their ability to perform these tasks and service rim wheels safely? [29 CFR 1910.177(c)(3)]

**Note:** If anyone lacks proficiency in servicing **rim wheels**, he or she must be provided additional training.

# **Tire-Servicing Equipment**

7.	Are restrainir on <b>multi-pie</b> [29 CFR 1910		Y	N	N/A	??
8.	is not bolted	ng a tire on a <b>single-piece wheel</b> that onto the vehicle, are restraining arriers provided?	Y	N	N/A	??
9.	capacity to w would be tran separation oc maximum tire rim wheel be	straining device or barrier have the withstand the maximum force that ensferred to it during a rim wheel eccurring at 150% of the especification pressure for the ing serviced?	Y	N	N/A	??
10	preventing the thrown outside	ng devices and barriers capable of ne <b>rim wheel</b> component from being de or beyond the device or barrier?	Y	N	N/A	??
11.	for the follow any separation sudden release	ng devices and barriers inspected ring before each day's use and after on of the <b>rim wheel</b> component or se of contained air? 0.177(d)(3)(iii)]	Y	N	N/A	??
	a. Crac	ks at welds				
	b. Crac	ked or broken components				
	mish	or sprung components caused by andling, abuse, tire explosion, or rim el separation				
	d. Pittin	ng of components due to corrosion				
		er structural damage that would ease its effectiveness				

<ul><li>12. Are damaged restraining devices or barriers immediately removed from service?</li><li>[29 CFR 1910.177(d)(3)(iii)]</li></ul>				
13. Are damaged restraining devices or barriers returned to service only after a manufacturer or a registered professional engineer has repaired, reinspected, and certified them as meeting strength requirements? [29 CFR 1910.177(d)(3)(iv)]	Y	N	N/A	??
14. Does the air line assembly used for inflating tires have a clip-on chuck; an in-line valve with a pressure gauge or a presettable regulator; and a sufficient length of hose between the clip-on chuck and the in-line valve (if one is used) to allow the student or employee to stand out of the trajectory? [29 CFR 1910.177(d)(4)]	Y	N	N/A	??
15. Are the current charts or <b>rim manuals</b> containing instructions for the types of wheels being serviced readily available in the service area? [29 CFR 1910.177(d)(5)]	Y	N	N/A	??
16. Do employees and students use the tools recommended in the <b>rim manual</b> for the type of rim being serviced? [29 CFR 1910.177(d)(6)]	Υ	N	N/A	??
Wheel Component Acceptability				
<ul><li>17. Is interchanging components strictly prohibited, except as permitted in the charts or in the applicable rim manual?</li><li>[29 CFR 1910.177(e)(1)]</li></ul>	Y	N	N/A	??
18. Are all multipiece wheel components and single-piece wheels inspected before assembly? [29 CFR 1910.177(e)(2)]	Y	N	N/A	??

**Note:** Do not use any wheel or wheel component that is bent out of shape, pitted from corrosion, broken, or cracked. Mark or tag it as unserviceable and remove it from the service area. Replace damaged or leaky valves.

19. Are rim flanges, rim gutters, rings, bead seating surfaces, and the bead areas of tires free from any dirt, surface rust, scale or loose or flaked rubber buildup before mounting and inflation?
[29 CFR 1910.177(e)(3)]

Y N N/A ??

Y N N/A ??

20. Is the size (bead diameter and tire/wheel widths) and type of the tire and the wheel checked for compatibility before assembly of the rim wheel? [29 CFR 1910.177(e)(4)]

# Safe Operating Procedures: Multipiece Rim Wheels

21. Have safe operating procedures been established for servicing **multipiece rim wheels**? [29 CFR 1910.177(f)]

Y N N/A ??

22. Do students and employees use the following procedures?[29 CFR 1910.177(f)]

- a. Completely deflate tires before demounting by removing the valve core.
- b. Completely deflate tires by removing the valve core before a **rim wheel** is removed from the axle in either of the following situations:
  - 1. When the tire has been driven underinflated at 80% or less of its recommended pressure.
  - 2. When the tire or wheel components have obvious damage or if damage is suspected.
- c. Apply rubber lubricant to bead and rim mating surfaces when the wheels are assembled and tires are inflated, unless the manufacturer recommends against it.

- d. If a tire on a vehicle is underinflated but has more than 80% of the recommended pressure, inflate the tire while the **rim wheel** is on the vehicle (provided remote control inflation equipment is used, and no one is in the trajectory during inflation).
- e. Inflate tires outside a restraining device only to a pressure sufficient to force the tire bead onto the rim ledge, and create an airtight seal with the tire and bead.
- f. Whenever a rim wheel is in a restraining device, do not rest or lean any equipment or part of the body on or against the restraining device.
- g. After tire inflation, be sure the tire and wheel components are inspected while still within the restraining device to make sure that they are properly seated and locked. If further adjustment to the tire or wheel components is necessary, deflate the tire by removing the valve core before making the adjustment.
- h. Do not correct the seating of side and lock ring by hammering, striking, or forcing the components while the tire is pressurized.
- Do not rework, weld, braze, or otherwise heat cracked, broken, bent, or otherwise damaged rim components.
- j. Whenever multipiece rim wheels are being handled, stay out of the trajectory unless the servicing makes presence in the trajectory necessary.
- k. Do not apply heat to a **multipiece wheel** or wheel component.

# Safe Operating Procedures: Single-Piece Rim Wheels

23. Have safe operating procedures for servicing **single-piece rim wheels** been established? [29 CFR 1910.177(g)]

Y N N/A ??

Y N N/A ??

24. Do students and employees use the following procedures?
[29 CFR 1910.177(g)]

- a. Completely deflate tire by removing the valve core before demounting.
- Mount and demount the tire only from the narrow ledge side of the wheel. Avoid damaging the tire beads while mounting tires on wheels.
   Mount tires only on compatible wheels of matching bead diameter and width.
- c. Apply nonflammable rubber lubricant to bead and wheel mating surfaces before assembling the **rim wheel**, unless the tire or wheel manufacturer does not recommend rubber lubricant.
- d. If a tire-changing machine is used, inflate the tire only to the minimum pressure necessary to force the tire bead onto the rim ledge.
- e. If a bead expander is used, remove it before the valve core is installed and as soon as the **rim wheel** becomes airtight (the tire bead slips onto the bead seat).
- f. Inflate tires only when they are contained within a restraining device, positioned behind a barrier, or bolted on the vehicle with the lug nuts fully tightened.
- g. Do not inflate tires when any flat, solid surface is in the trajectory and within one foot of the sidewall.
- h. Stay out of the trajectory when inflating a tire.
- Do not inflate tires to more than the inflation pressure stamped in the sidewall, unless a higher pressure is recommended by the manufacturer.
- j. Do not inflate tires above the maximum pressure recommended by the manufacturer to seat the tire bead firmly against the rim flange.
- k. Do not apply heat to a single-piece wheel.
- 1. Do not rework, weld, braze, or otherwise heat cracked, broken, bent, or otherwise damaged wheels.

### **Definitions:**

**Charts:** The OSHA publications entitled *Demounting and Mounting Procedures for Truck/Bus Tires and Multipiece Rim Matching Chart*; the National Highway Traffic Safety Administration (NHTSA) publications entitled *Demounting and Mounting Procedures Truck/Bus Tires and Multipiece Rim Matching Chart*; or any other poster that contains at least the same instructions, safety precautions, and other information in the charts that is applicable to the types of wheels being serviced.

Multipiece rim wheel: a multipiece wheel with the tire tube and other components.

**Multipiece wheel:** a vehicle wheel consisting of two or more parts, one of which is a side or locking ring designed to hold the tire on the wheel by interlocking components when the tire is inflated.

**Rim manual:** a publication containing instructions from the manufacturer or other qualified organization for correct mounting, demounting, maintenance, and safety precautions for the type of wheel being service.

Rim wheel: an assemblage of tire, tube, and liner (where appropriate), and wheel components.

**Single-piece rim wheel:** the assemblage of single piece rim wheel with the tire and other components.

**Single-piece wheel:** a vehicle wheel consisting of one part, designed to hold the tire on the wheel when the tire is inflated.

**Comments/Corrective action:** 

Information
Name of Location:
Date of inspection:
Career-Technical program/course/room:
Signature of inspector:

# Slings-General Requirements Self-Inspection Checklist

**Guidelines:** This checklist covers regulations issued by the U.S. Department of Labor, Occupational Safety and Health Administration (OSHA) under the general industry standards 29 CFR 1910.184 and the construction standard 29 CFR 1926.251. It applies to **slings** used with other equipment to move material by lifting or hoisting. Slings might be used to wrap around engine blocks to lift them out of automobiles. The regulations cited apply only to private employers and their employees, unless adopted by a State agency and applied to other groups such as public employees. A **yes** answer to a question indicates that this portion of the inspection complies with the OSHA or U.S. Environmental Protection Agency (EPA) standard, or with a nonregulatory recommendation. Definitions of terms in bold type are provided at the end of the checklist.



 $m{\pi}$  Questions marked with this symbol may require the help of an outside expert.

			Ple	ase Ci	rcle
Safe	Operating Practices				
1.	Are damaged or defective <b>slings</b> immediately taken out of service? [29 CFR 1910.184(c)(1); (d); (e)(3)(iii); and (e)(9) and 1926.251(a)(1)]	Y	N	N/A	??
2.	Are <b>slings</b> the original length without the use of knots, bolts, or other devices to shorten them? (i.e., have not been shortened by the use of knots, bolts, or any other device) [29 CFR 1910.184(c)(2) and 1926.251(c)(6)]	Y	N	N/A	??
3.	Are slings free of kinks? [29 CFR 1910.184(c)(3) and 1926.251(c)(7)]	Y	N	N/A	??
4.	Are <b>sling</b> loads always at or below the rated capacities?	Y	N	N/A	??



# [29 CFR 1910.184(c)(4) and 1926.251(a)(2)]

**Note:** Consult the OSHA regulations or the manufacturer's requirements for permitted load ratings.

5.	If a <b>basket hitch</b> is used, has the load been
	balanced to prevent slippage?
	[29 CFR 1910.184(c)(5) and 1926.251(c)(8)]

Y N N/A ??

6. Are **slings** always securely attached to their loads? [29 CFR 1910.184(c)(6)]

Y N N/A ??

7. Are **slings** padded or protected from the sharp edges of their loads? [29 CFR 1910.184(c)(7) and 1926.251(c)(9)]

Y N N/A ??

8. Are suspended loads kept clear of all obstructions? [29 CFR 1910.184(c)(8)]

Y N N/A ??

9. Are employees and students kept clear of loads to be lifted and suspended? [29 CFR 1910.184(c)(9)]

N N/A ??

10. Have all employees and students been instructed not to place hands or fingers between the sling and the Y N N/A ?? load while it is being tightened? [29 CFR 1910.184(c)(10) and 1926.251(c)(10)]

11. Is **shock loading** prohibited? [29 CFR 1910.184(c)(11) and 1926.251(c)(11)]

Y N N/A ??

12. Have employees and students been instructed not to pull a **sling** from under a load when the load is resting on the **sling**? [29 CFR 1910.184(c)(12) and 1926.251(c)(12)]

Y N N/A ??

## **Inspections**

13. Are all **slings**, fasteners, and attachments inspected for damage or defects by a competent person each day before they are used? [29 CFR 1910.184(d) and 1926.251(a)(1)]

# **Definitions:**

**Basket hitch:** a sling assembly made by passing the sling under the load. It has both ends, end attachments, eyes, or handles on the hook or a single master link.

**Shock loading:** loading the sling suddenly.

**Sling:** an assembly that connects the load to the material handling equipment.

# **Comments/Corrective action:**

Information
Name of Location:
Date of inspection:
Career-Technical program/course/room:
Signature of inspector:

# Slings--Natural Rope, Synthetic Rope, and Synthetic Web

**Self Inspection Checklist** 

**Guidelines:** This checklist covers regulations issued by the U.S. Department of Labor, Occupational Safety and Health Administration (OSHA) under the general industry standard 29 CFR 1910.184 and the construction standard 1926.251. It applies to **slings** used with other equipment to move material by lifting or hoisting. The regulations cited apply only to private employers and their employees, unless adopted by a State agency and applied to other groups such as public employees. A yes answer to a question indicates that this portion of the inspection complies with the OSHA or U.S. Environmental Protection Agency (EPA) standard, or with a nonregulatory recommendation. Definitions of terms in bold type are provided at the end of the checklist.



Questions marked with this symbol may require the help of an outside expert.

Numerous tables in 29 CFR 1910.184 and 1926.251 give **sling** configuration, **sling** construction, **sling** diameter, and maximum load capacity. These tables have not be included as part of this checklist. For additional information, consult the OSHA regulations.

**Please Circle** 

# **Natural and Synthetic Fiber Rope Slings**



1. Are fiber rope **slings** that are made from conventional three-strand construction fiber rope used only within their rated capacities and minimum diameter of curvature?

[29 CFR 1910.184(h)(1)(i) and 1926.251(d)(1)]

**Note:** Consult the tables in the OSHA regulations or the manufacturer's requirements for permitted load ratings and diameter of curvature restrictions for the different rigging situations. Diameter of curvature is important since wrapping a sling around something at a diameter less than that recommended reduces the strength of the sling at the bend and could cause failure of the line.

2.	Are natural and synthetic fiber rope <b>slings</b> used only within a temperature range of !20°F to 180°F? [29 CFR 1910.184(h)(2) and 1926.251(d)(3)]	Y	N	N/A	??
3.	If natural and synthetic fiber rope <b>slings</b> are used outside the temperature range of !20°F to 180°F or have been wetted or frozen, are the manufacturer's recommendations followed for continued use? [29 CFR 1910.184(h)(2) and 1926.251(d)(3)]	Y	N	N/A	??
4.	Is the use of spliced fiber rope  Note: Consult the OSHA regulations under 29 CFR 1910.184(h)(3) and 1926.251(d)(2) and (4) for additional requirements on splices.	Y	N	N/A	??
5.	Do fiber rope <b>slings</b> have a minimum clear length of rope between eye splices equal to 10 times the rope diameter? [29 CFR 1910.184(h)(3)(iv) and 1926.251(d)(4)(iv)]	Y	N	N/A	??
6.	Is the use of knots in place of splicing prohibited for fiber rope <b>slings</b> ? [29 CFR 1910.184(h)(3)(v) and 1926.251(d)(2)(v)]	Y	N	N/A	??
7.	Is the use of are fiber rope <b>slings</b> prohibited if the end attachments in contact with the rope have sharp edges or projections? [29 CFR 1910.184(h)(4) and 1926.251(d)(5)]	Y	N	N/A	??
8.	Are natural and synthetic fiber rope <b>slings</b> immediately removed from service if any of the following conditions are present? [29 CFR 1910.184(h)(5) and 1926.251(d)(6)]	Y	N	N/A	??

- a. Abnormal wear
- b. Powdered fiber between strands

d. Variations in size or roundness of strands e. Discoloration or rotting f. Distortion of hardware in the slings Y N N/A ?? 9. Are fiber rope slings only made from new rope; i.e., is the use of repaired or reconditioned fiber rope **slings** prohibited? [29 CFR 1910.184(h)(6)] **Synthetic Web Slings** Y N N/A ?? 10. Is each synthetic web **slings** marked or coated to show the rated capacity for each type of hitch and synthetic web material? [29 CFR 1910.184(i)(1) and 1926.251(e)(1)] Y N N/A ?? 11. Is the synthetic webbing of uniform thickness and width? [29 CFR 1910.184(i)(2) and 1926.251(e)(3)] Note: Selvage edges must not be split from the webbing's width. Y N N/A ?? 12. Do fittings have a minimum breaking strength equal to that of the sling? [29 CFR 1910.184(i)(3) and 1926.251(e)(4)] Y N N/A ?? 13. Are fittings free of all sharp edges that could damage the webbing? [29 CFR 1910.184(i)(3) and 1926.251(e)(4)] Y N N/A ?? 14. Is stitching the only method used to attach end fittings to webbing and to form eyes? [29 CFR 1910.184(i)(4) and 1926.251(e)(5)]

c. Broken or cut fibers





15. Are synthetic web **slings** only used within their rated load capacity?
[29 CFR 1910.184(i)(5) and 1926.251(e)(2)]

Note: Consult the tables in the OSHA regulations or the manufacturer's requirements for permitted load ratings for the different rigging situations.

Y N N/A ??

- 16. When synthetic web **slings** are used, are the following precautions taken? [29 CFR 1910.184(i)(6) and 1926.251(e)(6)]
  - a. Nylon web **slings** are not used where fumes, vapors, sprays, mists, or liquids of acids or phenolics are present.
  - b. Polyester and polypropylene web **slings** are not used where fumes, vapors sprays, mists, or liquids of caustics are present.
  - c. Web **slings** with aluminum fittings are not used where fumes, vapors, sprays, mists, or liquids of caustics are present.

Y N N/A ??

17. Is the use of synthetic web **slings** of polyester and nylon above 180°F prohibited?
[29 CFR 1910.184(i)(7) and 1926.251(e)(7)]

Y N N/A ??

18. Is the use of polypropylene web **slings** above 200°F prohibited?
[29 CFR 1910.184(i)(7) and 1926.251(e)(7)]

Y N N/A ??

19. Are synthetic web **slings** only repaired by the **sling** manufacturer or another competent person or organization?
[29 CFR 1910.184(i)(8)(i)]

Y N N/A ??

20. Is each repaired **sling proof tested** by the manufacturer (or another competent person or organization) to twice the rated capacity before its return to service? Is a certificate of **proof test** available?

Y N N/A ??

21. Is the use of temporarily repaired **slings** (including webbing and fittings) prohibited? [29 CFR 1910.184(i)(8)(iii)]

Y N N/A ??

- 22. Are synthetic web **slings** immediately removed from service if any of the following conditions are present?
  [29 CFR 1910.184(i)(9) and 1926.251(e)(8)]
  - a. Acid or caustic burns
  - b. Melting or charring of any part of the **sling** surface
  - c. Snags, punctures, tears, or cuts
  - d. Broken or worn stitches
  - e. Distortion of fittings



Y N N/A ??

23. Are shackles and hooks only used within their safe working loads?
[1926.251(f)]

**Note:** Consult the OSHA regulations for the safe working loads of various sizes of shackles. Use the manufacturer's recommendations to determine the safe working loads for the various sizes and types of hooks. Test all hooks with no applicable manufacturer's recommendations at twice the intended safe working load before they are initially put into use. Maintain documentation of the dates and results of the test.

### **Definitions:**

**Proof test:** a nondestructive tension test performed by the **sling** manufacturer (or another competent person or organization) to verify construction and workmanship of a **sling**.

Sling: an assembly that connects the load to the material handling equipment.

Information
Name of Location:
Date of inspection:
Career-Technical program/course/room:
Signature of inspector:

### Slings--Steel Chain, Wire Rope, and Metal Mesh Self-Inspection Checklist

**Guidelines:** This checklist covers regulations issued by the U.S. Department of Labor, Occupational Safety and Health Administration (OSHA) under the general industry standards 29 CFR 1910.184 and the construction standards 1926.251. It applies to **slings** used with other equipment to move material by lifting or hoisting. The regulations cited apply only to private employers and their employees, unless adopted by a State agency and applied to other groups such as public employees. A **yes** answer to a question indicates that this portion of the inspection complies with the OSHA or U.S. Environmental Protection Agency (EPA) standard, or with a nonregulatory recommendation. Definitions of terms in bold type are provided at the end of the checklist.



 $m{\pi}$  Questions marked with this symbol may require the help of an outside expert.

Numerous tables are included as part of 29 CFR 1910.184 and 1926.251 that relate **sling** configuration, **sling** construction, **sling** diameter and maximum load capacity. These tables have not be included as part of this checklist. For additional information, consult the OSHA regulations.

		Ple	ase Circle
Alloy	Steel Chain Slings		
1.	Do alloy steel chain <b>slings</b> have permanently affixed durable identification stating the size, grade, rated capacity, and reach? [29 CFR 1910.184(e)(1) and 1926.251(b)(1)]	Y N ??	N/A
2.	Do hooks, rings, oblong links, pear-shaped links, welded or mechanical coupling links, or other attachments have rated capacities at least equal to that of the alloy steel chain with which they are used?  [29 CFR 1910.184(e)(2)(i) and 1926.251(b)(2)]	Y N ??	N/A
3.	Is the <b>sling</b> used at or below the rated capacity of the weakest component?	V N	N/A

<b>↑</b>		[29 CFR 1910.184(e)(2)(i)]	??		
	4.	Are makeshift links or other fasteners formed from bolts or rods prohibited? [29 CFR 1910.184(e)(2)(ii) and 1926.251(b)(3)]	Y ??	N	N/A
<b>†</b>	5.	Is a thorough inspection made of the alloy steel chain <b>sling</b> at least once every 12 months? [29 CFR 1910.184(e)(3)(i) and 1926.251(b)(6)(i)]	Y ??	N	N/A
	6.	Are written records kept of these inspections? [29 CFR 1910.184(e)(3)(ii) and 1926.251(b)(6)(ii)]	Y ??	N	N/A
<b>†</b>	7.	Are thorough inspections of alloy steel chain <b>slings</b> performed by competent persons? [29 CFR 1910.184(e)(3)(iii)]	Y ??	N	N/A
		Note: The inspector must check for wear, defective welds, deformation, and increase in length. The OSHA construction regulations 1926.251(b)(5) require the sling be removed from service if any chain link has excessive wear. Consult the OSHA regulation for additional details.			
	8.	Have new, repaired, or reconditioned alloy steel chain <b>slings</b> been <b>proof tested</b> by the manufacturer, and is a certificate of <b>proof tested</b> available? [29 CFR 1910.184(e)(4) and (e)(7)(i)]	Y ??	N	N/A
<b>†</b>	9.	Are of alloy steel chain <b>slings</b> used with loads at or below the rated capacities? [29 CFR 1910.184(e)(5) and 1926.251(b)(4)]  Note: Consult the OSHA regulations or the manufacturer's requirements for permitted load ratings.	Y ??	N	N/A
	10	O. Are alloy steel chain <b>slings</b> permanently removed from service if heated above 1,000°F? [29 CFR 1910.184(e)(6)]	Y ??	N	N/A
	11	Are maximum working loads reduced in accordance with the manufacturer's recommendations if the chain or <b>sling</b> is exposed to temperatures above 600°F? [29 CFR 1910(e)(6)]	Y ??	N	N/A
	12	2. Is the use of mechanical coupling links or low carbon steel repair links prohibited?	Y	N	N/A

a ti n	Are <b>slings</b> removed from service if their hooks are cracked or are opened more than 15 percent of the normal throat opening (measured at the narrowest point)?  29 CFR 1910.184(e)(9)(ii)]	Y ??	N	N/A
a o	Are <b>slings</b> removed from service if their hooks are twisted more than 10 degrees from the plane of the unbent hook?  29 CFR 1910.184(e)(9)(ii)]	Y ??	N	N/A
Wire Ro	ope Slings			
lo	are wire rope <b>slings</b> used with coads at or below their rated capacities? 29 CFR 1910.184(f)(1) and 1926.251(c)(1)]	Y ??	N	N/A
n	<b>Note:</b> Consult the OSHA regulations or the nanufacturer's requirements for permitted load atings.			
r te	are fiber core wire rope <b>slings</b> permanently emoved from service if they are exposed to emperatures above 200°F? 29 CFR 1910.184(f)(3) and 1926.251(c)(14)]	Y ??	N	N/A
fo u	Are recommendations of the <b>sling</b> manufacturer ollowed when nonfiber core wire rope <b>slings</b> are used at temperatures above 400°F or below -60°F? 29 CFR 1910.184(f)(3) and 1926.251(c)(14)]	Y ??	N	N/A
a	s welding of end attachments performed before assembly of the sling? 29 CFR 1910.184(f)(4)(i) and 1926.251(c)(15)(i)]	Y ??	N	N/A
ti ti a	Are all welded end attachments <b>proof tested</b> by he manufacturer or equivalent entity at twice heir rated capacity before their initial use, and is a certificate of the <b>proof test</b> available?  29 CFR 1910.184(f)(4)(ii) and 1926.251(c)(15)(ii)]	Y ??	N	N/A
S	are wire rope <b>slings</b> immediately removed from ervice if any of the following conditions are present?  29 CFR 1910.184(f)(5) and 1926.251(c)(4)(iv)]	Y ??	N	N/A
	The control of the distributed back that the control of the contro			

a. Ten randomly distributed broken wires in

in one rope lay

one rope lay, or five broken wires in one strand

- b. Wear or scraping of one-third the original diameter of outside individual wires
- c. Kinking, crushing, bird caging, or other damage resulting in distortion of the wire rope structure
- d. Evidence of heat damage
- e. End attachments that are cracked, deformed, or worn
- f. Hooks that have been opened more than 15 percent of the normal throat opening (measured at the narrowest point), or hooks twisted more than 10 degrees from the plane of the unbent hook
- g. Corrosion of the rope or end attachments
- 21. Are protruding ends of strands in splices covered or blunted [29 CFR 1926.251(c)(2)]

Y N N/A

### **Metal Mesh Slings**

22. Does each metal mesh **sling** have a permanently affixed durable marking that states the rated capacity for vertical basket hitch and choker hitch loading? [29 CFR 1910.184(g)(1)]

Y N N/A

23. Do **handles** have a rated capacity at least equal to the metal fabric and show no deformation after proof testing?
[29 CFR 1910.184(g)(2)]

Y N N/A

24. When fabric and **handles** are joined, [29 CFR 1910.184(g)(3)]

Y N N/A

- a. Is the rated capacity of the **sling** the same (i.e., not reduced)?
- b. Is the load is evenly distributed across the width of the fabric?
- c. Is the fabric protected from sharp edges?
- 25. Are slings free of coatings that diminish the rated capacity of the **sling** prohibited? [29 CFR 1910.184(g)(4)]

Y N N/A

26. Are all new and repaired metal mesh **slings** and **handles proof tested** by the manufacturer or other

Y N N/A

competent person at a minimum of one and a half times their rated capacity? Is a certificate of <b>proof test</b> available? [29 CFR 1910.184(g)(5)]	??
27. Are metal mesh <b>slings</b> only used below their permitted load rated capacities? [29 CFR 1910.184(g)(6)]	Y N N/A ??
<b>Note:</b> Consult the OSHA regulations or the manufacturer's requirements for permitted load ratings.	
28. Are the <b>sling</b> manufacturer's recommendations followed concerning safe operating temperatures? [29 CFR 1910.184(g)(7)	Y N N/A ??
29. Are all repairs to metal mesh <b>slings</b> performed by the manufacturer or another competent person? [29 CFR 1910.184(g)(8)(i)]	Y N N/A ??
30. Once repaired, are metal mesh <b>slings</b> marked or tagged, or are written records maintained to indicate the date and nature of the repair and the person or organization that performed the repairs?  [29 CFR 1910.184(g)(8)(ii)]	Y N N/A ??
31. Are metal mesh <b>slings</b> immediately removed from service if any of the following conditions are present? [29 CFR 1910.184(g)(9)]	Y N N/A ??
<ul> <li>a. Broken weld or brazed joint is broken along the sling edge [29 CFR 1910.184(g)(9)(i)]</li> </ul>	
<ul> <li>Twenty-five percent reduction in wire diameter due to abrasion, or 15% reduction due to corrosion [29 CFR 1910.184(g)(9)(ii)]</li> </ul>	
c. Lack of flexibility due to distortion of the fabric [29 CFR 1910.184(g)(9)(iii)]	
<ul> <li>d. Distortion of the female <b>handle</b> so that the depth of the slot is increased more than 10 percent [29 CFR 1910.184(g)(9)(iv)]</li> </ul>	
<ul> <li>e. Distortion of either <b>handle</b> so that the width of the eye is decreased more than 10 degrees</li> <li>[29 CFR 1910.184(g)(9)(v)]</li> </ul>	
<ul> <li>f. A 15 reduction of the original cross sectional areas of metal at any point around the <b>handle</b> eye [29 CFR 1910.184(g)(9)(vi)]</li> </ul>	

g. Distortion of either **handle** out of its plane [29 CFR 1910.184(g)(9)(vii)]

### **Definitions:**

**Handle:** a terminal fitting to which metal mesh fabric is attached.

**Proof test:** a nondestructive tension test performed by the sling manufacturer (or other competent

person or organization) to verify construction and workmanship of a sling. **Sling:** an assembly that connects the load to the material handling equipment.

Information
Name of Location:
Date of inspection:
Career-Technical program/course/room:
Signature of inspector:

## **Spray Finishing**Self-Inspection Checklist

**Guidelines:** This checklist covers regulations issued by the U.S. Department of Labor, Occupational Safety and Health Administration (OSHA) under the general industry standards 29 CFR 1910.94 and 1910.107. In addition, this checklist includes questions from the National Fire Protection Associations (NFPA) standards NFPA 1 and 33. The checklist applies to spray-finishing operations involving **flammable** and **combustible** liquids such as paint, varnish, lacquer, or stain. **This checklist must be used in conjunction with the checklist entitledFlammable and Combustible Liquids**. The regulations cited apply only to private employers and their employees, unless adopted by a State agency and applied to other groups such as public employees. Definitions of terms in bold type are provided at the end of the checklist. A answer to a question indicates that this portion of the inspection complies with the OSHA and U.S. Environmental Protection Agency (EPA) standard, or with a nonregulatory recommendation.



Ouestions marked with this symbol may require the help of an outside expert.

Spray-finishing operations should be conducted **only** in a room that is protected with an **approved** fire-suppression system and separated vertically and horizontally from other areas. Undercoating spray operations do not have to comply with this checklist if (1) the area has adequate natural or mechanical ventilation, (2) the local fire official approves of the operation; and (3) the undercoating materials use only solvents having a flash point in excess of 100°F.

Please Circle

General Requirements

1. Are smoking and open flames prohibited in any spray-finishing area?
[NFPA 1 and 33]

2. Are spraying areas posted with a conspicuous sign reading No Smoking?
[29 CFR 1910.107(g)(7)]

3. Is an adequate supply of portable fire extinguishers near all spraying areas?

Y N N/A



4.	Are <b>approved</b> metal waste cans with self-closing lids
	provided wherever rags or waste are impregnated with
	finishing material? Are all such rags or waste deposited
	there immediately after use?
	[NFPA 1 and 33]

Y N N/A

#### Construction

5.	Are <b>spray booths</b> substantially constructed with securely
	and rigidly supported steel, concrete, or masonry?
	[29 CFR 1910.107(b)(1)]

Y N N/A ??

 Are floor and baffle plates in spray booths constructed of noncombustible material?
 [29 CFR 1910.94(c)(3)(iii)]

Y N N/A

7. Are **spray booth** interiors smooth and continuous, without edges, and designed to prevent accumulation of residues? [29 CFR 1910.107(b)(2)]

Y N N/A

 Are spraying operations and booths separated from other operations by at least three feet or a partition or wall to reduce the hazard?
 [29 CFR 1910.107(b)(8)]

Y N N/A ??

 Are spray booths installed so that all portions are readily accessible for cleaning? [NFPA 1 and 33]

Y N N/A

10. When **spraying areas** are illuminated through glass panels or other translucent materials, are only fixed lighting units used as a source of illumination? [29 CFR 1910.107(b)(10)]

Y N N/A

11. Are all motors, wiring, and lighting fixtures that are not separated by a partition and located within 20 feet from spray finishing operations explosion proof? [29 CFR 1910.94(c)(3) and 1910.107(c)(6)]

Y N N/A

12. Are **spray booths** interiors protected with an automatic fire sprinkler system? [29 CFR 1910.107(b)(5)(iv)]

Y N N/A ??

13. Are hot surfaces such as space heaters, appliances, and steam pipes located away from spray-finishing operations?

Y N N/A

??





14. Are all metal parts of <b>spray booths</b> , exhaust ducts, and piping systems effectively and permanently grounded? [29 CFR 1910.107(c)(9)(i)]	Y ??	N	N/A
Operations and Maintenance			
15. Are <b>spray booth</b> interiors free from accumulated deposits? [29 CFR 1910.107(b)(2) and (g)(2)]	Y ??	N	N/A
<b>Note:Combustible</b> coverings (thin paper, plastic, etc.) and strippable coatings may be used to facilitate cleaning operations.			
16. Are tools used for scraping residues and debris nonsparking? [29 CFR 1910.107(g)(2)]	Y ??	N	N/A
17. Are residue scrapings and debris immediately removed from the premises and disposed of properly? [29 CFR 1910.107(g)(3)]	Y ??	N	N/A
[25 CH (1510.107(g)(5)]	**		
<ul><li>18. Are cleaning solvents restricted to those with flash points above 100°F?</li><li>[29 CFR 1910.107(g)(3)]</li></ul>	Y ??	N	N/A
19. Are cleaning operations using <b>flammable</b> or <b>combustible</b> solvents conducted inside <b>spray booths</b> , with the ventilating equipment operating during the cleaning procedure? [NFPA 33]	Y ??	N	N/A
20. Are fire sprinkler heads kept free of accumulated deposits? [29 CFR 1910.107(f)(3)]	Y ??	N	N/A
21. Are <b>spray booth</b> overspray filters regularly inspected, cleaned, and replaced? [29 CFR 1910.94(c)(3)(iii)(a)]	Y ??	N	N/A
22. Are <b>spray booth</b> overspray filters discarded at the end of each day unless maintained completely in water? [29 CFR 1910.107(b)(5)(ii)]	Y ??	N	N/A
23. Is at least 3 feet on all sides of a <b>spray booth</b> maintained free of any stored <b>combustible</b> materials? [NFPA 33]	Y ??	N	N/A

### Flammable and Combustible Liquids

24. Is only the quantity of **flammable** or **combustible** liquids

required for one day kept near spraying operations? [29 CFR 1910.107(e)(2)]	Y N ??	N/A
25. Are all <b>flammable</b> and <b>combustible</b> liquids transported in closed containers, <b>approved</b> portable tanks, <b>approved</b> safety cans, or closed piping? [29 CFR 1910.107(e)(3)]	Y N ??	N/A
26. Are all <b>flammable</b> and <b>combustible</b> liquids in containers larger than 60 gallons transferred by means of an <b>approved</b> pump? [29 CFR 1910.107(e)(4)]	Y N ??	N/A
<ul><li>27. Do all containers or pipes attached to flexible hoses have shutoff valves at the connections?</li><li>[29 CFR 1910.107(e)(6)(i)]</li></ul>	Y N ??	N/A
28. When <b>flammable</b> liquids are transferred from one container to another, are both containers <b>bonded</b> and <b>grounded</b> ? [29 CFR 1910.107(e)(6)(iv)]	Y N ??	N/A
29. Are containers supplying spray nozzles of a closed type, or are they provided with a metal cover? [NFPA 33]	Y N ??	N/A
30. Are containers supplying spray nozzles resting on floors, on noncombustible supports, or suspended by wire cables? [NFPA 33]	Y N ??	N/A
31. Are containers supplying spray nozzles by gravity flow less than 10 gallons? [NFPA 33]	Y N ??	N/A
32. If <b>flammable</b> or <b>combustible</b> liquids are supplied to spray nozzles by positive displacement pumps, is the discharge pressure prevented from exceeding the operating pressure of the system? [NFPA 33]	Y N ??	N/A
Ventilation		
33. Are <b>spraying areas</b> provided with mechanical ventilation that is kept in use during spraying? [29 CFR 1910.107(d)(2)]	Y N ??	N/A
34. Do spraying operations have sufficient ventilation to maintain individual exposures to within acceptable limits?	Y N ??	N/A



35. Are <b>spray booths</b> designed to sweep air currents toward the exhaust outlet? [29 CFR 1910.107(b)(a)]	Y ??	N	N/A
36. Are exhaust ventilation systems well constructed and in good working order? [29 CFR 1910.94(a)(5),(6),(7)]	Y ??	N	N/A
37. Is the average velocity of air flowing into the face of <b>spray booths</b> maintained at least 100 feet per minute? [29 CFR 1910.94(c)(6)(i) and 1910.107(b)(5)(i)]	Y ??	N	N/A
<b>Note:</b> Electrostatic spraying operations may be conducted with an average air velocity of at least 60 feet per minute.			
38. Are visible gauges, audible alarms, or pressure-activated devices installed to indicate or insure that the required air velocity is maintained?  [29 CFR 1910.107(b)(5)(i)]	Y ??	N	N/A
<ul><li>39. Are doors to downdraft booths kept closed when the booth is in operation?</li><li>[29 CFR 1910.94(c)(6)(iii)(b)]</li></ul>	Y ??	N	N/A
40. Is clean, fresh makeup air supplied to the area to replace the volume of air exhausted through the <b>spray booth</b> ? [29 CFR 1910.94(c)(7)(i)]	Y ??	N	N/A
<b>Note:</b> If the outdoor air temperature is less than 55°F, makeup air must be heated.			
41. Do all <b>spray booths</b> have independent exhaust stacks to the outside? [29 CFR 1910.107(d)(3)]	Y ??	N	N/A
42. Are all fan-rotating elements constructed of nonferrous or nonsparking materials? [29 CFR 1910.107(d)(4)]	Y ??	N	N/A
43. Are electric motors driving the exhaust fans placed outside booths or ducts? [29 CFR 1910.107(d)(5)]	Y ??	N	N/A
<ul><li>44. Are belts and pulleys in ducts that are used to drive the fan blades thoroughly enclosed?</li><li>[29 CFR 1910.107(d)(6)]</li></ul>	Y ??	N	N/A

45. Are <b>spray booth</b> exhaust duct terminals located at least six feet from any <b>combustible</b> exterior wall or roof and prevented from discharging in the direction of any <b>combustible</b> construction? [29 CFR 1910.107(d)(8)]	Y N N/A ??
46. Is <b>spray booth</b> exhaust air directed so that it will not contaminate makeup air or create a nuisance? [29 CFR 1910.107(d)(9)]	Y N N/A ??
47. Are exhaust ducts fitted with access doors for cleaning? [29 CFR 1910.107(d)(10)]	Y N N/A ??
48. Are freshly spray-finished articles set to dry in areas with adequate ventilation? If not, are those areas treated as <b>spraying areas</b> ? [29 CFR 1910.107(d)(12)]	Y N N/A ??
Electrostatic Apparatus	
49. Is only <b>approved</b> electrostatic equipment used in connection with paint-spraying operations? [NFPA 33]	Y N N/A ??
50. Are transformers, power packs, control apparatus, and all other electrical portions of the equipment located outside of the spraying or vapor areas? (with the exception of high-voltage grids and electrostatic atomizing heads and their connection) [NFPA 33]	Y N N/A ??
51. Is a space of at least twice the sparking distance maintained between goods painted and fixed electrodes, electrostatic atomizing heads, or conductors? [NFPA 33]	Y N N/A ??
<b>Note:</b> A suitable sign stating the sparking distance should be posted near the assembly.	
52. Is electrostatic apparatus equipped with automatic controls that operate without time delay to disconnect the power supply to the high-voltage transformer and to signal the operator under any of the following conditions? [NFPA 33]	Y N N/A ??
a. Ventilating fans stop or ventilation equipment fails.	
b. The conveyor carrying goods past the high-voltage	

- grid stops.
- c. A ground or imminent ground occurs at any point of the high voltage system.

d. The primary voltage input to the power supply de-energizes.

53. Are adequate booths, fencing, railings, or guards placed about the equipment that safely isolate the process from storage and persons?
[NFPA 33]

Y N N/A

**Note:** Such railings, fencing, and guards shall be of conducting material, adequately grounded, and at least five feet from processing equipment.

54. Are signs posted designated the process zone as hazardous (e.g., with respect to fire)? [NFPA 33]

Y N N/A

55. Are all insulators kept clean and dry? [NFPA 33]

Y N N/A

#### **Definitions:**

**Approved:** verified and listed by a nationally recognized testing laboratory.

**Bonded:** the permanent joining of metallic parts to form an electrically conductive path that will assure electrical continuity and the capacity to conduct safely any current likely to be imposed.

Combustible: any liquid having a flashpoint at or above 100°F but below 200°F.

Flammable: any liquid having a flashpoint below 100°F.

**Grounded:** connected to the earth or to some conducting body that serves in place of the earth. **Spraying area:** any area in which dangerous quantities of flammable vapors or mists or combustible residues, dusts, or deposits are present because of spraying processes. This includes the interior of spray booths, the interior of ducts exhausting from spraying processes, and any area in the direct path of spray.

**Spray booth:** a power-ventilated structure that encloses or accommodates a spraying operation to confine and limit the escape of spray, vapor, and residue and to conduct or direct them safely to an exhaust system.

Information
Name of Location:
Date of inspection:
Career-Technical program/course/room:
Signature of inspector:

### Standpipe and Hose Fire Protection Systems Self-Inspection Checklist

**Guidelines:** This checklist covers regulations issued by the U.S. Department of Labor, Occupational Safety and Health Administration (OSHA) under 29 CFR 1910.158. The OSHA regulations apply only to **Class II** and **Class III standpipe** systems with hoses that are intended for use by school personnel to fight **incipient fires**. The installation of **standpipe** and hose fire protection systems is generally controlled by the building code in effect at the time of first occupancy. The regulations cited apply only to private employers and their employees, unless adopted by a State agency and applied to other groups such as public employees. Definitions of terms in bold type are provided at the end of the checklist.

Regulations dealing with **standpipe** water supply and testing requirements are not included as part of this checklist. Please consult the OSHA regulations for additional information.

			Ple	ase Ci	rcle
1.	Are <b>Class II</b> and <b>Class III</b> hose outlets and connections located high enough above the floor so that they are easily accessible and not obstructed? [29 CFR 1910.158(c)(2)(i)]	Y	N	N/A	??
2.	Are <b>Class II</b> and <b>Class III standpipe</b> hose systems located so they are protected against mechanical damage? [29 CFR 1910.158(b)]	Y	N	N/A	??
3.	Is every hose outlet 1-1/2 inches or smaller equipped with a hose ready for use? [29 CFR 1910.158(c)(3)(i)]	Y	N	N/A	??
4.	Is the <b>standpipe</b> hose system equipped with shut-off type nozzles? [29 CFR 1910.158(c)(4)]	Y	N	N/A	??
5.	Are standardized screw threads or appropriate adapters applied throughout the system to assure the hose connections are compatible with those used on supporting fire equipment?	Y	N	N/A	??

6.	Where reels and cabinets are used, are they conspicuously identified for use by fire fighting personnel only? [29 CFR 1910.158(c)(1)]	Y	N	N/A	??
7.	When <b>standpipe</b> stations are enclosed in <b>locked</b> cabinets, and doors are equipped with approved visual identification clear glass panels, are glass panes easily broken? Is the door capable of being opened when the glass panel is broken? Is the unlocking handle painted red? Is the direction the handled must be pushed or pulled indicated to open the door? Is the door labeled <b>Fire equipment-in case of fire, break glass and operate red handle</b> ? [recommended]	Y	N	N/A	??
8.	When <b>standpipe</b> stations are enclosed in <b>locked</b> cabinets and doors are completely glass, is door labeled <b>In case of fire</b> , <b>break glass</b> ? [recommended]	Y	N	N/A	??
9.	Are fire department connections to <b>standpipes</b> labeled <b>Standpipes</b> on metal signs with raised letters at least 1 inch in size? [recommended]	Y	N	N/A	??
10	Are dry <b>standpipe</b> stations marked with a sign reading <b>Dry hose-fire department use only</b> with letters not less than 2 inches high, in a color that contrasts with the background color? [recommended]	Y	N	N/A	??
11.	Are valves in the main piping connection to the automatic sources of water supply kept fully open at all times except during repair? [29 CFR 1910.158(e)(2)(ii)]	Y	N	N/A	??
12.	Is the hose system inspected at least annually and after each use to assure that all the equipment and hoses are in place, available for use, and in serviceable condition? [29 CFR 1910.158(e)(2)(iii)]	Y	N	N/A	??
13.	Is hemp or linen hose on existing systems unracked, physically inspected for deterioration, and reracked using a different fold pattern at least annually? [29 CFR 1910.158(e)(2)(v)]	Y	N	N/A	??
14	Are <b>standpipe</b> fire lines tested at least every five years? [recommended]	Y	N	N/A	??
15	Are damaged <b>standpipe</b> systems repaired promptly? [29 CFR 1910.158(b)]	Y	N	N/A	??

16. When the system or any portion of it is found not to be serviceable, is it removed from service immediately and replaced with equivalent protection, such as extinguishers and fire watches? [29 CFR 1910.158(e)(2)(iv)]	Y	N	N/A	??
17. Are trained people designated to conduct inspections required under this section? [29 CFR 1910.158(e)(2)(vi)]	Y	N	N/A	??
18. If <b>standpipe</b> stations are enclosed in cabinets, is access to the cabinet unobstructed, and is the cabinet clearly visible? [29 CFR 1910.158(c)(1)]	Y	N	N/A	??
19. If <b>standpipe</b> stations are enclosed in cabinets with opaque doors, are doors unlocked and are cabinet contents indicated on the outside? [recommended]	Y	N	N/A	??

### **Definitions:**

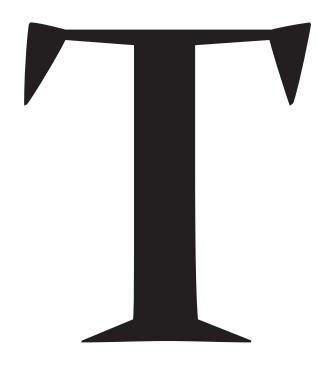
**Class I standpipe systems:** a 2-1/2 inch hose connection for use by fire departments and those trained in handling heavy fire streams.

**Class II standpipe systems:** a 1-1/2 inch hose system that provides a means for the control or extinguishment of incipient stage fires.

**Class III standpipe systems:** a combined system of hoses used by in-house personnel trained in hose operations. The system is capable of furnishing effective water discharge during the more advanced stages of fire (beyond the incipient stage) inside workplaces. Hose outlets are available for both 1-1/2 inch and 2-1/2 inch hose.

**Incipient stage fire:** a fire that is in the initial or beginning stage and can be controlled or extinguished by portable fire extinguishers, Class II **standpipe**, or small hose systems without protective clothing or breathing apparatus.

**Standpipe:** a wet or dry pipe line, extending from the lowest to the topmost story of a building or structure, equipped with a shutoff valve with hose outlets at every story.



Information
Name of Location:
Date of inspection:
Career-Technical program/course/room:
Signature of inspector:

# Toxic and Hazardous Substance Exposure Self-Inspection Checklist

**Guidelines:** This checklist covers regulations issued by the U.S. Department of Labor, Occupational Safety and Health Administration (OSHA) under the general industry standards 29 CFR 1910.1000 to 1910.1500. These regulations are designed to protect workers from exposure to toxic and hazardous substances. The regulations cited apply only to private employers and their employees, unless adopted by a State agency and applied to other groups such as public employees.

Regulations dealing with toxic and hazardous substance exposures at construction sites are different. Please consult 29 CFR 1926.55, and use the checklist **Noise**, **Radiation**, **and Other Exposures for Construction** for construction, alteration, demolition, or repair that includes painting and decorating.

Compliance with this section of the OSHA regulations cannot be determined accurately using a self-inspection checklist. Complex judgments regarding chemical toxicity, duration of exposure, sensitive populations, adequacy of personal protective equipment in use, and unique operating circumstances that may be encountered in a career-technical school setting make a "yes or no" evaluation inappropriate. However, the following general questions can be asked to determine which areas need further study. career-technical school management is strongly urged to seek outside expert professional assistance if the health of workers who are exposed to chemical substances is uncertain.



Questions marked with this symbol may require the help of an outside expert.

**Please Circle** 



1. Are career-technical program activities controlled to prevent airborne chemical gas, mist, vapor, fumes, or dust from being generated and released into a person's breathing area?

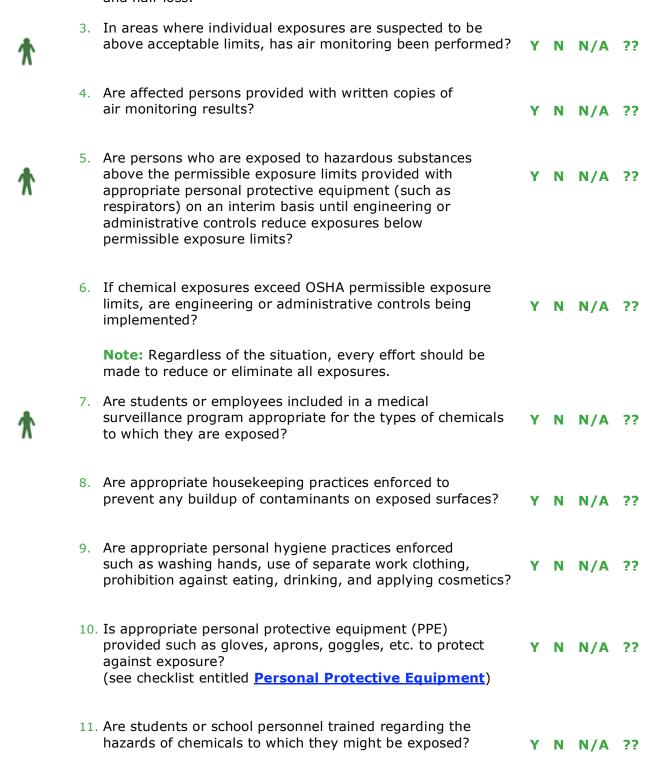
Y N N/A ??

**Note:** Airborne concentrations of hazardous substances above an acceptable limit are considered excessive and are usually determined by air monitoring. If you suspect a problem exists, consult an expert.

2. Are school personnel and students free from medical complaints or symptoms that could be associated with

classroom activities or career-technical programs?

**Note:** Such symptoms might include headache; nausea; vomiting; drowsiness; vision problems; skin or lung irritation; itching; excessive watering of the eyes; sleeplessness; coughing; excess sputum; impaired motor skills or coordination; skin, teeth, or gum discoloration; and hair loss.

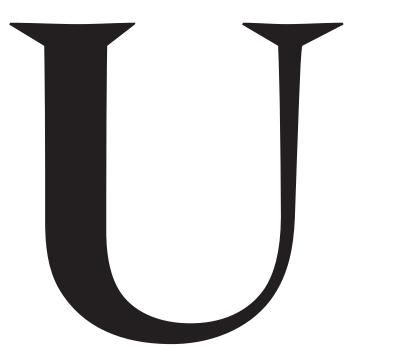


12. In laboratory settings, is a written chemical hygiene plan available describing the appropriate precautions and

N/A ??



procedures that will be followed to protect students and employees from the chemical hazards?



Information
Name of Location:
Date of inspection:
Career-Technical program/course/room:
Signature of inspector:

# Underground Storage Tanks (UST) Self-Inspection Checklist

**Guidelines:** This checklists covers regulations issued by the U.S. Environmental Protection Agency (EPA) under 40 CFR 280. The purpose of these regulations is to reduce the likelihood of leaks of hazardous substances from these tanks into soil and ground water and to ensure timely detection and abatement of such releases. A **yes** answer to a question indicates that this portion of the

inspection complies with the OSHA or EPA standard, or with a nonregulatory recommendation.



Questions marked with this symbol may require the help of an outside expert.

The regulations require registration and specific spill and leak prevention measures based on the type of UST, age of the tank, and substances stored in the tank system. USTs are any one or combination of tanks (including underground pipes connected to them) used to contain an accumulation of regulated substances. Regulated substances include petroleum products (e.g., gasoline and used motor oil) and certain other hazardous substances. Heating oil if stored and used on the premises is not covered by the Federal regulations.

States typically enforce the Federal regulations as well as adopt their own regulations for USTs. Please consult the appropriate agency in your state about any additional regulations and requirements. This checklist includes some recommended practices that are based on regulations adopted in the State of New Jersey.

**Please Circle** 

### Registration

1. Is the underground storage tank system registered in your State with the appropriate State agency? [40 CFR 280.22]

Y N N/A ??

### **Performance Standards and Engineering Requirements**

 Has corrosion, spill, and overfill protection been installed on all existing USTs? [40 CFR 280.21]

Y N N/A ??



3. Is corrosion, spill, and overfill protection planned for new USTs that will be installed? [40 CFR 280.20]

Y N N/A ??



 Is monthly leak detection monitoring performed on all USTs?
 [40 CFR 280.40; 280.41 and 280.42]

Y N N/A ??

**Note:** Acceptable leak detection methods include at least one of the following: statistical inventory control, automatic tank gauging, groundwater monitoring, soil vapor monitoring, or interstitial monitoring. Tank tightness with inventory control (or manual tank gauging for small tanks) may be used for ten years or less, depending on the situation.

### **Spill and Overfill Control**

 Are procedures in place to ensure that USTs are not overfilled during delivery? Do procedures include methods to measure available tank volume and to meter delivery volume immediately before delivery? [40 CFR 280.30]

Y N N/A ??

### **Release Response Plan**

6. Is a release response plan available for inspection at the school that includes the following items? [recommended]

Y N N/A ??

- a. Emergency telephone numbers of local and State officials.
- b. Emergency telephone number of the person in charge of the school during the emergency.
- c. Name and phone number of any spill cleanup contractor(s).
- d. Procedures to follow in the event of a spill or leak from the UST.

### Release Reporting, Investigation, and Cleanup

7. Are all employees aware of conditions listed below that may indicate a leak? [recommended]

Y N N/A ??

- a. Inventory records indicating unexplained loss of material
- b. Visible product or product vapors in surrounding soil, surface water, or adjacent well
- c. Erratic behavior by product-dispensing equipment

- d. Water levels greater than normally recorded condensation levels
- When any one of the above suspect conditions occurs, is a plan available to investigate the condition that includes the items listed below? [40 CFR 280.50 and 280.52]

Y N N/A ??

- a. Checking inventory records for accuracy
- b. Conducting visual checks for leakage or damage
- c. Collecting and analyzing soil and water samples using appropriate methods
- After a release or leak is confirmed, is a plan followed that includes the items listed below? [40 CFR 280.61 through 280.66]
  - a. Notify the appropriate State agencies.
  - b. Implement the release response plan.
  - c. Immediately empty the tank.
  - d. Arrange for tank repair.
  - e. Conduct a remedial investigation and document findings in a report.
  - f. Clean up all impacted soils, surface water, ground water, and other affected media.

### **Other Requirements**

- Are USTs that are equipped with cathodic protection operated and maintained to provide continuous corrosion protection? [40 CFR 280.31]
- 11. Are installation and repairs of USTs conducted only by qualified persons?
  [40 CFR 280.20 and 280.33]
- 12. Are all USTs that do not meet Federal and State requirements placed out of service and closed according to Federal and State procedures?
  [40 CFR 280.21 and 280.70 through 280.74]

Information
Name of Location:
Date of inspection:
Career-Technical program/course/room:
Signature of inspector:

# Use of Electrical Equipment Self Inspection Checklist

**Guidelines:** This checklist covers regulations issued by the U.S. Department of Labor, Occupational Safety and Health Administration (OSHA) under 29 CFR 1910.334. It applies to all electrical use systems. This checklist does not apply to **qualified persons** working on installations in vehicles and generation, transmission, distribution, communications, and railway installations. The regulations cited apply only to private employers and their employees, unless adopted by a State agency and applied to other groups such as public employees. A **yes** answer to a question indicates that this portion of the inspection complies with the OSHA or EPA standard, or with a nonregulatory recommendation. Definitions of terms in bold type are provided at the end of the checklist.

Postoble Electric Equipment		Please Circle			
Portable Electric Equipment					
1.	Is portable equipment handled in a manner that will not cause damage? [29 CFR 1910.334(a)(1)]	Y	N	N/A	??
2.	Is the use of flexible cords connected to equipment for raising or lowering that equipment prohibited? [29 CFR 1910.334(a)(1)]	Y	N	N/A	??
3.	Is it prohibited to fasten flexible cords with staples or hang them in a manner that could damage the outer jacket or insulation? [29 CFR 1910.334(a)(1)]	Y	N	N/A	??
4.	Are portable cord and plug-connected equipment and flexible cord sets (extension cords) visually inspected before use every day? [29 CFR 1910.334(a)(2)(i)]	Y	N	N/A	??

**Note:** Cord and plug-connected equipment and flexible cord sets that remain connected (once they are put in place) and are not exposed to damage need not be visually inspected until they are relocated.

5. If a defect might expose students to injury, is the defective or damaged item removed from service and are students and teachers prohibited from using it until repairs and tests have been made? [29 CFR 1910.334(a)(2)(ii)]

Y N N/A ??

 Do flexible cords used with grounding-type equipment contain an equipment grounding conductor? [29 CFR 1910.334(a)(3)(i)] Y N N/A ??

7. Is it prohibited to connect or alter attachment plugs or receptacles in any way that would prevent proper continuity of the equipment grounding conductor at the point where the plugs are attached to the receptacles? [29 CFR 1910.334(a)(3)(ii)]

Y N N/A ??

 Is it prohibited to alter these devices to allow the grounding pole of the plug to be inserted into slots intended for connections to the current-carrying conductors?
 [29 CFR 1910.334(a)(3)(ii)] Y N N/A ??

 Are adapters that interrupt the continuity of the equipment grounding connection prohibited?
 [29 CFR 1910.334(a)(3)(iii)] Y N N/A ??

10. Are only approved portable electric equipment and flexible cords used in highly conductive work locations (such as those wet with water or other conductive liquids), or in job locations where students are likely to contact water or conductive liquids? [29 CFR 1910.334(a)(4)] Y N N/A ??

**Note: Ground-fault circuit interrupters** are recommended in these situations.

plugging and unplugging flexible cords and plug-connected equipment if energized equipment is involved? [29 CFR 1910.334(a)(5)(i)]

12. Are energized plug and receptacle connections handled only with insulating protective equipment if the connection could provide a conducting path to the student's hand (if, for example, a cord connector is wet from being immersed in water)? [29 CFR 1910.334(a)(5)(ii)]

Y N N/A ??

13. Are locking-type connectors properly secured after connection? [29 CFR 1910.334(a)(5)(iii)]

Y N N/A ??

Y N N/A ??

### **Electric Power and Lighting Circuits**

14. Are load-rated switches, circuit breakers, or other devices designed to be a disconnecting means used for opening, reversing, or closing of circuits under load conditions?
[29 CFR 1910.334(b)(1)]

**Note:** Only cable connectors of the load-break type, fuses, terminal lugs, and cable splice connections may be used for such purposes, except in emergency.

Y N N/A ??

- 15. After a circuit is deenergized by a circuit protective device, is manually reenergizing the circuit prohibited until it is determined that the equipment and circuit can be safely energized? [29 CFR 1910.334(b)(2)]
- Y N N/A ??
- Is repetitive manual reclosing of circuit breakers or reenergizing circuits through replaced fuses prohibited? [29 CFR 1910.334(b)(2)]

Y N N/A ??

17. Is modifying overcurrent protection of circuits and conductors prohibited? [29 CFR 1910.334(b)(3)]

### **Test Instruments and Equipment**

Y N N/A ??

18. Are only qualified persons permitted to perform

testing work on electric circuits or equipment? [29 CFR 1910.334(c)(1)]

19. Have all test instruments, equipment, and all associated test leads, cables, power cords, probes, and connectors been visually inspected for external defects and damage before the equipment is used? [29 CFR 1910.334(c)(2)]

Y N N/A ??

20. If a defect may expose a student to injury, is the defective or damaged item removed so that no student or teacher can use it until the necessary repairs and tests have rendered the equipment safe? [29 CFR 1910.334(c)(2)]

Y N N/A ??

21. Are test instruments, equipment, and their accessories rated for the circuits and equipment to which they will be connected? Are they designed for the environment in which they will be used? [29 CFR 1910.334(c)(3)]

Y N N/A ??

Y N N/A ??

22. When flammable materials are present only occasionally, is electrical equipment capable of igniting them prohibited? [29 CFR 1910.334(d)]

#### **Definitions:**

**Ground-fault circuit-interrupter:** a device whose function is to interrupt the electric circuit to the load when a fault current to the ground exceeds a predetermined value that is less than that required to operate the overcurrent protective device of the supply circuit.

**Qualified person:** one familiar with the construction and operation of the equipment and the hazards involved. Whether a teacher or student is considered a qualified person depends on various circumstances in the workplace. A person may be considered qualified with regard to certain equipment in the workplace, but unqualified as to other equipment. A person who, in the course of on-the-job training, demonstrates 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.



Information
Name of Location:
Date of inspection:
Career-Technical program/course/room:
Signature of inspector:

# Welding and Cutting with Oxygen-Fuel Gas

**Self Inspection Checklist** 

Guidelines: This checklist covers regulations issued by the U.S. Department of Labor, Occupational Safety and Health Administration (OSHA) under the general industry standard 29 CFR 1910.253 and the construction standard 29 CFR 1926.350. It applies to operations involving oxygen-fuel gas welding and cutting. This checklist must be used with the Welding, Cutting, and Brazing-General Requirements checklist. The regulations cited apply only to private employers and their employees, unless adopted by a State agency and applied to other groups such as public employees. A yes answer to a question indicates that this portion of the inspection complies with the OSHA or U.S. Environmental Protection Agency (EPA) standard, or with a nonregulatory recommendation.

This checklist does not cover the extensive regulations dealing with manifolding of cylinders, service piping systems, pressure relief devices, piping protective equipment, and acetylene generators. Consult the OSHA regulations in 29 CFR 1910.253 for further details.

Please Circle

Y N N/A ??

**General Requirements** 

 Is acetylene generated, piped, or used at pressures no greater than 15 psig (pounds per square inch, gauge) or 30 psia (pounds per square inch, absolute)?
 [29 CFR 1910.253(a)(2)]

Y N N/A ??

 Is all welding apparatus (torches, regulators, pressure- reducing valves, acetylene generators, and manifolds) purchased from reputable welding dealers who have indicated the equipment is suitable for the intended purpose? [29 CFR 1910.253(a)(3)]

Y N N/A ??

3. Are all employees trained and judged

4.	Are rules and instructions covering the operation and maintenance of oxygen or fuel-gas supply equipment readily available? [29 CFR 1910.253(a)(4)]	Y	N	N/A	??
Cylind	ders and Containers				
5.	Are all compressed gas cylinders legibly marked on their shoulders (by stenciling, stamping, or permanent labeling) with the chemical or trade name of the gas? [29 CFR 1910.253(b)(1)(ii)]	Y	N	N/A	??
6.	Are oxygen and acetylene cylinders kept away from radiators and other sources of heat? [29 CFR 1910.253(b)(2)(i)]	Y	N	N/A	??
7.	Inside buildings, are cylinders stored in well-protected, well-ventilated, dry locations at least 20 feet from highly combustible material such as oil? [29 CFR 1910.253(b)(2)(ii)]	Y	N	N/A	??
8.	Are cylinders stored in designated spaces where they will not be knocked over, damaged by passing or falling objects, or subjected to tampering by unauthorized people? [29 CFR 1910.253(b)(2)(ii)]	Y	N	N/A	??
9.	Do empty cylinders have the valves closed? [29 CFR 1910.253(b)(2)(iii) and (b)(5)(ii)(H) and 1926.350(a)(8)]	Y	N	N/A	??

 Are valve-protection caps always in place on cylinders that are not in use?
 [29 CFR 1910.253(b)(2)(iv) and 1926.350(a)(1)]

11. Is storage of fuel gas cylinders inside a building limited to a total gas capacity of 2,000 cubic feet or 300 pounds of liquefied petroleum gas (except for those being used or attached and ready to use)?

[29 CFR 1910.253(b)(3)]

Y N N/A ??

12. Is a separate, specially constructed room or compartment provided to store cylinders that have more than 2,000 cubic feet total gas capacity or 300 pounds of liquefied petroleum gas?

[29 CFR 1910.253(b)(3)(i)]

Y N N/A ??

13. Are stored oxygen cylinders separated from fuel-gas cylinders or combustible materials (especially oil or grease) by at least 20 feet, or by a noncombustible barrier at least 5 feet high with a fire-resistance rating of at least one-half hour?

[29 CFR 1910.253(b)(4)(iii)]

Y N N/A ??

14. Are cylinders, cylinder valves, couplings, regulators, hoses, and apparatus kept free from oily and greasy substances?
[29 CFR 1910.253(b)(5)(i) and 1926.350(i)]

Y N N/A ??

15. Are employees and students required to handle oxygen cylinders with oil- and grease-free hands or gloves? [29 CFR 1910.253(b)(5)(i) and 1926.350(i)] Y N N/A ??

16. Is care taken to ensure cylinders are not dropped, struck, handled roughly, or permitted to strike each other violently? [29 CFR 1910.253(b)(5)(ii)(B), (b)(5)(ii)(O), and (b)(5)(iii)(B); and 1926.350(a)(3)]

**Note:** Cylinders may be moved by tilting and rolling them on their bottom edges, but a cylinder cart is **strongly** recommended.

Y N N/A ?? 17. Is using valve-protection caps prohibited for lifting the cylinder from one vertical position to another? [29 CFR 1910.253(b)(5)(ii)(C) and 1926.350(a)(5)] Y N N/A ?? 18. Unless the cylinders are secured on a special truck, are regulators removed and valve-protection caps installed before cylinders are moved? [29 CFR 1910.253(b)(5)(ii)(D) and 1926.350(a)(6)] Y N N/A ?? 19. Do cylinders without fixed hand wheels have keys, handles, or nonadjustable wrenches on the valve stems while the cylinders are in service? [29 CFR 1910.253(b)(5)(ii)(E) and 1926.350(d)(2)] Y N N/A ?? 20. Are cylinder valves closed when work is finished and before cylinders are moved? [29 CFR 1910.253(b)(5)(ii)(F) and (b)(5)(ii)(G) and 1926.350(a)(8)] Y N N/A ?? 21. Are cylinders kept far enough away from the welding or cutting operation so that sparks, hot slag, or flames will not reach them? Or, are fire-resistant shields provided? [29 CFR 1910.253(b)(5)(ii)(I) and 1926.350(b)(1)] Y N N/A ?? 22. Are cylinders placed where they cannot become part of an electrical circuit? [29 CFR 1910.253(b)(5)(ii)(J) and 1926.350(b)(2)] Y N N/A ?? 23. Is using cylinders as rollers or supports prohibited? [29 CFR 1910.253(b)(5)(ii)(K) and 1926.350(c)(1)]

24. When cylinders are hoisted, are they secured on a cradle, slingboard, or pallet? [29 CFR 1926.350(a)(2)]

**Note:** Cylinders may not be hoisted or transported by magnets or choker slings.

Y N N/A ??

25. Is using a hammer or wrench to open cylinder valves prohibited?
[29 CFR 1910.253(b)(5)(ii)(Q)]

**Note:** If valves cannot be opened by hand, notify the supplier.

Y N N/A ??

26. Is a policy in place to report problems promptly to the supplier?
[29 CFR 1910.253(b)(5)(ii)(R)(1)]

**Note:** Employees and students should **not** attempt to repair a cylinder.

Y N N/A ??

27. Are fuel-gas cylinders placed with the valve end up whenever they are in use? [29 CFR 1910.253(b)(5)(iii)(A) and 1926.350(b)(3)]

Y N N/A ??

Are compressed-gas cylinders secured in an upright position so they cannot fall or be knocked over?
 [29 CFR 1926.350(a)(9)]

**Note:** Use a suitable cylinder truck, chain, or other steadying device.

Y N N/A ??

29. Before connecting a regulator to a cylinder valve, do employees open the valve slightly and close it immediately?
[29 CFR 1910.253(b)(5)(ii)(P) and (b)(5)(iii)(C) and 1926.350(d)(1)]

**Note:** Open the valve while standing to one side of the outlet; never in front of it. Never crack the fuel-gas or oxygen cylinder valve near other welding work or near sparks, flames, or other possible sources of ignition and

Y N N/A ?? 30. Before a regulator is removed, is the cylinder valve closed and the gas released from the regulator? [29 CFR 1910.253(b)(5)(iii)(D) and 1926.350(d)(4)] Y N N/A ?? 31. For torches or other devices equipped with shutoff valves, is the fuel gas from cylinders only used through a suitable regulator to reduce the pressure? [29 CFR 1926.350(d)(3)] Y N N/A ?? 32. If cylinders have leaky valves or fittings that cannot be stopped by closing the valve or tightening the gland nut, are cylinders immediately taken outside away from sources of ignition and slowly emptied? [29 CFR 1910.253(b)(5)(iii)(F) and 1926.350(d)(5)] Y N N/A ?? 33. Is tampering with safety devices prohibited? [29 CFR 1910.253(b)(5)(iii)(H)] Y N N/A ?? 34. Are cylinder valves always opened slowly? [29 CFR 1910.253(b)(5)(iii)(J) and 1926.350(d)(2)] Y N N/A ?? 35. Do employees and students know not to open acetylene cylinder valves more than 1-1/2 turns of the cylinder, and preferably no more than 3/4 of a turn? [29 CFR 1910.253(b)(5)(iii)(K) and 1926.350(d)(2)] Y N N/A ?? 36. Is flash-back protection provided by an approved device that will prevent flame from passing into the fuel-gas system? [29 CFR 1910.253(e)(3)(ii)(C)(3)]

37. When parallel lengths of oxygen and fuel-gas hose are taped together for convenience or to prevent tangling, is four inches (or less) of every 12 inches of hosed taped?  [29 CFR 1910.253(e)(5)(ii) and 1926.350(f)(2)]	Υ	N	N/A	??
38. Are the fuel-gas hose and oxygen hose easily distinguished from each other? [29 CFR 1926.350(f)(1)]	Y	N	N/A	??
39. Are all hoses inspected at the beginning of each day? [29 CFR 1926.350(f)(3)]	Y	N	N/A	??
40. Are leaking, defective, burned, or worn hoses removed, repaired, or replaced? [29 CFR 1910.253(e)(5)(v) and 1926.350(f)(3)]	Y	N	N/A	??
41. Are hose couplings of the type that cannot be unlocked or disconnected by a straight pull without rotary motion? [29 CFR 1926.350(f)(5)]	Y	N	N/A	??
<ul><li>42. Are boxes used for the storage of gas hose ventilated?</li><li>[29 CFR 1926.350(f)(6)]</li></ul>	Y	N	N/A	??
43. Are hoses, cables, and other equipment kept clear of passageways, ladders, and stairs? [29 CFR 1926.350(f)(7)]	Y	N	N/A	??
44. Are clogged torch-tip openings cleaned with suitable cleaning wires, drills, or other devices designed for this purpose? [29 CFR 1926.350(g)(1)]	Υ	N	N/A	??

45. Are torches inspected at the beginning of each day for leaking shutoff valves, hose couplings, and tip connections? [29 CFR 1926.350(g)(2)]	Y	N	N/A	??
46. Are defective torches removed from use? [29 CFR 1926.350(g)(2)]	Y	N	N/A	??
<ul> <li>47. Are torches lighted by friction lighters or other approved devices? [29 CFR 1926.350(g)(3)]</li> <li>Note: Torches should not be lighted by matches or from hot work.</li> </ul>	Y	N	N/A	??
48. Are regulators (including gauges) repaired only by skilled mechanics who have had proper instruction? [29 CFR 1910.253(e)(6)(ii)]	Y	N	N/A	??
49. Are gauges on oxygen regulators marked USE NO OIL? [29 CFR 1910.253(e)(6)(iii)]	Y	N	N/A	??
50. Are union nuts and connections on regulators inspected before use to detect faulty seats that may cause leakage of gas when the regulators are attached to the cylinder valves? [29 CFR 1910.253(e)(6)(iv)]	Y	N	N/A	??

Information
Name of Location:
Date of inspection:
Career-Technical program/course/room:
Signature of inspector:

## Welding, Cutting, and **Brazing-General Requirements Self-Inspection Checklist**

Guidelines: This checklist covers regulations issued by the U.S. Department of Labor, Occupational Safety and Health Administration (OSHA) under the general industry standard 29 CFR 1910.25 and the construction standards 29 CFR 1926.351, 1926.352, 1926.353, and 1926.354. The checklist applies to operations involving welding, cutting, brazing, and heating. This checklist does not cover in detail regulations dealing with work in confined or enclosed spaces. If these conditions are encountered, please consult 29 CFR 1910.146, 1910.252, and 1926.353. The regulations cited apply only to private employers and their employees, unless adopted by a State agency and applied to other groups such as public employees. A yes answer to a question indicates that this portion of the inspection complies with the OSHA or U.S. Environmental Protection Agency (EPA) standard, or with a nonregulatory recommendation.



 $m{\pi}$  Questions marked with this symbol may require the help of an outside expert.

**Please Circle** 

#### Fire Prevention and Protection

1. Are all moveable fire hazards and combustibles moved to at least 35 feet away from areas or objects to be welded? [29 CFR 1910.252(a)(1)(i) and 1910.252(a)(2)(vii) and 1926.352(a)]

Y N N/A ??

2. When welding or cutting operations are performed within 35 feet of combustible materials or floor, ceiling, or wall openings, are guards, barriers, or other precautions used to confine heat sparks and slag? [29 CFR 1910.252(a)(1)(ii), 29 CFR 1910.252(a)(2)(iii)(A), and 1926.352(b)]

Y N N/A ??

Note: If all fire hazards cannot be removed or when the floor, ceiling, or wall has openings,

special precautions listed in 1910.252(a)(2) and 1926.352(e) and (f) may be necessary. These
requirements include having fire watchers
present during and up to 30 minutes after the
job is done; having an inspection conducted
before beginning work; covering or wetting
combustible materials; relocating combustibles;
and covering or shutting down ventilation ducts
and conveyors. In some cases, welding or
cutting is prohibited if sprinkler systems are
inoperable or unusual fire and explosion
hazards exist.

 Is welding prohibited where flammable materials are used (such as paints) or where heavy dust concentrations are present?
 [29 CFR 1926.352(c)]

Y N N/A ??

4. Is suitable fire extinguishing equipment kept where welding or cutting is done? Is this equipment ready for instant use?
[29 CFR 1910.252(a)(2)(ii) and 1926.352(d)]

Y N N/A ??

5. When students or employees weld or cut containers such as barrels or tanks, are the containers thoroughly cleaned to remove materials that, when heated, may cause fire, explosion, or release of toxic materials? [29 CFR 1910.252(a)(3)(i) and 1926.352(i)]

Y N N/A ??

**Note:** The construction regulations in 1926.352(i) also permit barrels or tanks to be filled with water as an alternative to cleaning.

 Before welding or cutting containers, are all hollow spaces and cavities vented to release trapped air or gases?
 [29 CFR 1910.252(a)(3)(ii) and 1926.352(j)]

Y N N/A ??

**Note:** Purging with inert gas is recommended.

#### **Protection of Personnel**

7. Are welding cables and hoses kept clear of passageways, ladders, and stairways? [29 CFR 1910.252(b)(1)(ii)]

Y N N/A ??

8. Are welders, cutters, brazers, and helpers given suitable face, neck, and ear protection to prevent direct radiant energy from the arc?
[29 CFR 1910.252(b)(2)(ii)(B)]

Y N N/A ??

9. Are welders, cutters, brazers, and helpers given suitable eye protection with proper filter

lens shade numbers? [29 CFR 1910.252(b)(2) and 1926.353(e)(2)]

**Note:** The following is a guide for selecting proper shade numbers. These recommendations may vary to suit individual needs: [29 CFR 1910.252(b)(2)(ii)(H)]

Welding Operations <sup>*</sup>	Shade No.
Shielded metal-arc welding: 1/16-, 3/32-, 1/8-, 5/32-inch electrodes	10
Gas-shielded arc welding (nonferrous): 1/16-, 3/32-, 1/8-, 5/32-inch electrodes	11
Gas-shielded arc welding (ferrous): 1/16-, 3/32-, 1/8-, 5/32-inch electrodes	12
Shielded metal-arc welding: 3/16-, 7/32-, 1/4-inch electrodes 5/16-, 3/8-inch electrodes	12 14
Atomic hydrogen welding	10-14
Carbon arc welding	14
Soldering	2
Torch brazing	3 or 4
Light cutting, up to 1 inch	3 or 4
Medium cutting, 1 inch to 6 inches	4 or 5
Heavy cutting, 6 inches and over	5 or 6
Gas welding (light) up to 1/8 inch	4 or 5
Gas welding (medium) 1/8 inch to 1/2 inch	5 or 6
Gas welding (heavy) 1/2 inch and over	6 or 8

<sup>\*</sup>Note: In gas welding or oxygen cutting in which the torch produces a high yellow light, use a filter or lens that absorbs the yellow or sodium line in the visible light of the operation.

Are employees and students who are welding on platforms, scaffolds, or runways protected from falls by railings, lifelines, or safety belts? [29 CFR 1910.252(b)(1)(i)]

	11. When the work permits, are welders enclosed in an individual noncombustible booth or screened-in area with an internal, nonreflective surface? [29 CFR 1910.252(b)(2)(iii) and 1926.351(e)]	Υ	N	N/A	??
	<ul><li>12. Do booths and screens permit air circulation at the floor level?</li><li>[29 CFR 1910.252(b)(2)(iii) and (c)(1)(ii)]</li></ul>	Υ	N	N/A	??
	<b>Note:</b> At least 2 feet of space is recommended at the bottom.				
	13. Are employees and students working nearby protected from arc welding rays by screens, booths, or shields? [29 CFR 1910.252(b)(2)(iii)]	Y	N	N/A	??
	14. Are employees and students given personal protective clothing to prevent injury from welding hazards? [29 CFR 1910.252(b)(3)]	Υ	N	N/A	??
<b>†</b>	15. Are all welding operations in confined spaces done with careful consideration to space ventilation, respiratory protection, rescue, escape, atmospheric testing, and personnel training? [29 CFR 1910.252(b)(4)]	Υ	N	N/A	??
<b>†</b>	16. Have all operations involving the welding, cutting, or heating of metals containing lead, cadmium, mercury, or beryllium been evaluated to determine if respiratory protection is required? [29 CFR 1926.353(c)]	Y	N	N/A	??
	Health Protection and Ventilation				
<b>†</b>	17. Is local or general exhaust ventilation provided during welding to maintain concentrations of toxic materials such as fluorides, cadmium, zinc, beryllium, lead, or mercury within acceptable limits? [29 CFR 1910.252(c) and 1926.353(a)(2)]	Y	N	N/A	??
	18. Do the suppliers of fluxes, coatings, coverings, and filler metals supply information about the hazardous releases associated with these materials? [29 CFR 1910.252(c)(1)(iv)]	Y	N	N/A	??
	<b>Note:</b> Check the MSDS (material safety data sheet) for information.				

19. Is mechanical ventilation provided when there is less than 10,000 cubic feet of space per welder? [29 CFR 1910.252(c)(2)(i)(A)]	Y	N	N/A	??
20. Is mechanical ventilation provided when the ceiling height is less than 16 feet? [29 CFR 1910.252(c)(2)(i)(B)]	Y	N	N/A	??
21. Is contaminated air exhausted from a working space discharged into the open air and away from sources of fresh intake air? [29 CFR 1926.353(a)(4)]	Y	N	N/A	??
<ul><li>22. Is first aid equipment for welders immediately available at all times?</li><li>[29 CFR 1910.252(c)(13)]</li></ul>	Y	N	N/A	??
Welding, Cutting, and Heating of Coatings				
23. Is the welding, cutting, or heating of surfaces covered by a preservative coating prohibited unless the flammability of the coating has been evaluated by a competent person? [29 CFR 1926.354(a)]	Y	N	N/A	??
<b>Note:</b> Preservative coatings shall be considered highly flammable when scrapings burn quickly.				
<ul><li>24. Are highly flammable coatings stripped from the area to be heated?</li><li>[29 CFR 1926.354(b)]</li></ul>	Y	N	N/A	??
25. Have preservative coatings been stripped from the object so that the temperature of the unstripped metal will not be appreciably raised? [29 CFR 1926.354(d)]	Y	N	N/A	??
26. Are toxic preservative surfaces removed to at least 4 inches away from the area of heat application, or is suitable respiratory protection provided? [29 CFR 1926.354(c)]	Y	N	N/A	??

Information
Name of Location:
Date of inspection:
Career-Technical program/course/room:
Signature of inspector:

## **Welding with Arc-Welding Equipment Self-Inspection Checklist**

Guidelines: This checklist covers regulations issued by the U.S. Department of Labor, Occupational Safety and Health Administration (OSHA) under the general industry standards 29 CFR 1910.254 and 1910.306, and the construction standards 1926.351 and 1926.353. It applies to the use of arcwelding and cutting equipment. This checklist must be used with the Welding, Cutting, and **Brazing--General Requirements** checklist. The regulations cited apply only to private employers and their employees, unless adopted by a State agency and applied to other groups such as public employees. A yes answer to a question indicates that this portion of the inspection complies with the OSHA or U.S. Environmental Protection Agency (EPA) standard, or with a nonregulatory recommendation.



lack lack Questions marked with this symbol may require the help of an outside expert.

3. Are arc-welding machines designed and constructed to operate under their anticipated environmental

			Ple	ase Ci	rcle
Gener	ral Control of the Co				
1.	Are employees and students properly instructed and qualified to operate arc-welding equipment? [29 CFR 1910.254(a)(3) and 1926.351(d)]	Y	N	N/A	??
Applic	cation of Arc-Welding Equipment				
2.	Does arc-welding equipment comply with the Requirements for Electric Arc-Welding Apparatus (NEMA EW-1-1962, National Electric Manufacturers Association), or the Safety Standard for Transformer-Type Arc-Welding Machines (ANSI C33-2-1956, Underwriters Laboratories)? [29 CFR 1910.254(b)(1)]	Y	N	N/A	??

conditions including unusual altitude, temperature, corrosive chemicals, steam, humidity, oil vapors, flammable liquids, vibration/shock, dust, or weather? [29 CFR 1910.254(b)(2)]

4.	Are alternating-current <b>manual</b> arc-welding and cutting machines limited to 80 volts? [29 CFR 1910.254(b)(3)(i)(A)]	Y	N	N/A	??
5.	Are alternating-current <b>automatic</b> arc-welding and cutting machines limited to 100 volts? [29 CFR 1910.254(b)(3)(i)(B)]	Y	N	N/A	??
6.	Are <b>manual</b> or <b>automatic</b> direct-current (DC) arc-welding and cutting machines limited to 100 volts? [29 CFR 1910.254(b)(3)(ii)(A)]	Y	N	N/A	??
7.	Are terminals for welding leads protected from contact?	Y	N	N/A	??
	[29 CFR 1910.254(b)(4)(iv)]				
8.	When manual electrode holders are used, are they designed specifically for arc welding and cutting? [29 CFR 1926.351(a)(1)]	Y	N	N/A	??
9.	Are manual electrode holders of a capacity capable of safely handling the maximum rated current required by the electrodes? [29 CFR 1926.351(a)(1)]	Y	N	N/A	??
10.	Are the outer surfaces of the jaws of the holder and all current-carrying parts passing through the portion of the holder that the arc welder or cutter grips fully insulated against the maximum voltage to ground? [29 CFR 1926.351(a)(2)]	Y	N	N/A	??
11.	Are arc-welding and cutting cables completely insulated, flexible, and capable of handling the maximum current requirement of the work in progress?  [29 CFR 1926.351(b)(1)]	Y	N	N/A	??

## **Installation of Arc-Welding Equipment**

12. Are arc-welding **machine frames** or **cases** electrically grounded?

13. Does the circuit between the ground and the grounded power conductor have resistance low enough to permit sufficient current to flow to cause the fuse or circuit breaker to interrupt the current? [29 CFR 1926.351(c)(5)]

Y N N/A ??

14. Do ground return cables have a safe current-carrying capacity equal to or greater than the maximum output capacity of the arc-welding or cutting unit that it services? [29 CFR 1926.351(c)(1)]

Y N N/A ??

15. Are chains, wire ropes, cranes, hoists, elevators, and conduits containing electrical conductors prohibited from being used to complete work-lead circuits? [29 CFR 1910.254(c)(2)(ii) and (iii) and 1926.351(c)(2)]

Y N N/A ??

16. If pipelines are temporarily used to complete work-lead circuits, are they free from threaded joints, flange-bolted joints, or caulked joints? [29 CFR 1910.254(c)(2)(ii)]

Y N N/A ??

Note: Special precautions must also be used to avoid sparking at connection of the work-lead current.

17. If a structure or pipeline is used as a ground-return circuit, are periodic inspections performed to determine that the required electrical contact exists at all joints? [29 CFR 1926.351(c)(3)]

Y N N/A ??

Note: The generation of an arc, sparks, or heat at any point shall cause rejection of the pipelines are used continuously, all joints should be bonded and periodic inspections conducted to ensure that no condition of electrolysis or fire hazard exists because of such use.

structures as a ground circuit. If the structure or

18. Are all grounding connections checked to determine that they are mechanically strong and electrically adequate for the required [29 CFR 1910.254(c)(2)(v) and 1926.351(c)(6)]

Y N N/A ??

19. Is a disconnecting switch with overcurrent protection located at or near each arc-welding machine that does not have such a switch?

[29 CFR 1910.254(c)(3)(i) and 29 CFR 1910.306(d)(1)]

	20. Is a disconnecting switch with overcurrent protection provided for each outlet intended for connection to a portable welding machine? [29 CFR 1910.254(c)(3)(i)]	Y	N	N/A	??
	21. For individual welding machines, is the rated current-carrying capacity of the supply conductors not less than the rated primary current of the welding machine? [29 CFR 1910.254(c)(3)(ii)]	Y	N	N/A	??
<b>†</b>	<ul><li>22. Are all DC arc-welding machines connected with the same polarity?</li><li>[29 CFR 1910.254(c)(3)(iv)(A)]</li></ul>	Υ	N	N/A	??
<b>†</b>	23. Are all <b>AC</b> arc-welding machines connected to the same phase of the supply circuit and with the same instantaneous polarity? [29 CFR 1910.254(c)(3)(iv)(B)]	Y	N	N/A	??
	Operation and Maintenance				
	24. Are employees and students assigned to operate or maintain arc-welding equipment acquainted with the requirements of 29 CFR 1910.252 and 1910.254? [29 CFR 1910.254(d)(1)]	Y	N	N/A	??
	25. Are employees and students engaged in gas-shielded arc-welding acquainted with Recommended Safe Practices for Gas-Shielded Arc-Welding (A6.1-1966, American Welding Society)? [29 CFR 1910.254(d)(1)]	Y	N	N/A	??
	26. Are arc-welding machine hookups checked before starting operations? [29 CFR 1910.254(d)(2)]	Y	N	N/A	??
	<ul><li>27. Is coiled welding cable spread out before use to avoid serious overheating and damage to insulation?</li><li>[29 CFR 1910.254(d)(2)]</li></ul>	Y	N	N/A	??
	28. Is the grounding of the welding machine frame checked before operations are started?	Y	N	N/A	??

29. Are arc-welding machines checked for leaks of cooling water, shielding gas, or engine Y N N/A ?? fuel before operations are started? [29 CFR 1910.254(d)(4)] 30. Is proper switching equipment provided for shutting down the machine? Y N N/A ?? [29 CFR 1910.254(d)(5)] 31. Are the manufacturer's printed rules and instructions covering operation of the Y N N/A ?? equipment supplied strictly followed? [29 CFR 1910.254(d)(6)] 32. When not in use for any substantial period of time (such as during lunch hour or overnight) Y N N/A ?? are (a) electrodes removed from the holders; (b) the holders safely placed so they cannot make contact with people, conductive objects, fuel or compressed gas tanks; and (c) the machines disconnected form the power source? [29 CFR 1910.254(d)(7) and 1926.351(d)(1) and (d)(3)] 33. Are electrode cables free from splices within 10 feet from holders? Y N N/A ?? [29 CFR 1910.254(d)(8) and 1926.351(b)(1)] **Note:** The general industry standard 1910.254(d)(9)(iii) and the construction standard 1926.351(b)(1) permit joining lengths of cable by standard insulated connectors specifically designed for that purpose. The construction standard, however, also permits splices that are insulated as well as the original cable. 34. Is the operator required to report any equipment defects or safety hazards and to Y N N/A ?? discontinue use until safety has been assured? [29 CFR 1910.254(d)(9)(i) and 1926.351(d)(4)] 35. Are arc-welding machines repaired only by qualified personnel? Y N N/A ?? [29 CFR 1910.254(d)(9)(i)] 36. If arc-welding machines become wet, are they thoroughly dried and tested before use? Y N N/A ?? [29 CFR 1910.254(d)(9)(ii)]

37. Is dipping hot electrode holders into water prohibited?
[29 CFR 1926.351(d)(2)]

Y N N/A ??

38. Are cables with damaged insulation or exposed bare conductors replaced? [29 CFR 1910.254(d)(9)(iii)]

Y N N/A ??

**Note:** The construction standard 1926.351(b)(4) permits repair of cables with rubber and friction tape or other equivalent means as long as the areas are protected by sufficient insulation.

39. When metal-arc welding with inert gas, are special precautions taken for hazards associated with chlorinated solvents?
[29 CFR 1926.353(d)(1)(i)]

Y N N/A ??

**Note:** Inert-gas metal-arc welding produces 5 to 30 times more ultraviolet radiation then shielded metal-arc welding. The ultraviolet rays cause the decomposition of chlorinated solvents, liberating toxic fumes and gases. When in use, chlorinated solvents must be kept at least 200 feet away from the exposed arc (unless shielded) and surfaces prepared with chlorinated solvents must be thoroughly dry before welding is permitted. In addition, the shading density for filter lenses must be increased. All skin must be covered to protect against flashes and radiant energy.

#### **Comments/Corrective action:**

Information
Name of Location:
Date of inspection:
Career-Technical program/course/room:
Signature of inspector:

# Welding with Resistance Welding Equipment Self-Inspection Checklist

**Guidelines:** This checklist covers regulations issued by the U.S. Department of Labor, Occupational Safety and Health Administration (OSHA) under the general industry standards 29 CFR 1910.255 and 29 CFR 1910.306. It applies to the use of resistance welding equipment. **This checklist must be used with the Welding, Cutting, and Brazing--General Requirements checklist.** The regulations cited apply only to private employers and their employees, unless adopted by a State agency and applied to other groups such as public employees. A **yes** answer to a question indicates that this portion of the inspection complies with the OSHA, and U.S. Environmental Protection Agency (EPA) standard, or with a nonregulatory recommendation.

			Ple	ase Ci	rcle
Gene	ral				
1.	Is all resistance welding equipment installed by a qualified electrician? [29 CFR 1910.255(a)(1)]	Y	N	N/A	??
2.	Is a disconnecting switch, circuit breaker, or circuit interrupter located at or near each resistance welding machine that can isolate the machine from the supply circuit? [29 CFR 1910.255(a)(1) and 29 CFR 1910.306(d)(2)]	Y	N	N/A	??
3.	Do ignition tubes that are used in resistance welding equipment have a thermal protection switch? [29 CFR 1910.255(a)(2)]	Y	N	N/A	??
4.	Are employees and students trained and judged competent to operate resistance-welding equipment? [29 CFR 1910.255(a)(3)]	Y	N	N/A	??

5.	Are controls of automatic or air and hydraulic clamps arranged or guarded to prevent unintentional operator activation? [29 CFR 1910.255(a)(4)]	Y	N	N/A	??
	and Seam-Welding Machines ortable)				
6.	Are external weld initiation control circuits of nonportable spot- and seam-welding machines limited to 120 volts? [29 CFR 1910.255(b)(1)]	Y	N	N/A	??
7.	Are welding machine cabinet doors electrically interlocked to interrupt power, short circuit all capacitors, or otherwise prevent access to live electrical equipment? [29 CFR 1910.255(b)(2) and (3)]	Y	N	N/A	??
8.	Are press welding machines effectively guarded to prevent operator hand injury? [29 CFR 1910.255(b)(4)]	Y	N	N/A	??
9.	Are point-of-operation shield guards and fire-resistant curtains installed to protect students, employees, or passers-by from flying sparks? [29 CFR 1910.255(b)(5)]	Y	N	N/A	??
10.	Are foot switches guarded to prevent unintentional machine operation? [29 CFR 1910.255(b)(6)]	Y	N	N/A	??
11.	Are two or more safety emergency stop buttons provided on all special multispot welding machines, including two-post and four-post weld presses? [29 CFR 1910.255(b)(7)]	Y	N	N/A	??
12.	Are secondary welding transformers that are used in multispot, projection, and seam welding machines grounded where possible? [29 CFR 1910.255(b)(9)]	Y	N	N/A	??
Portab	ole Welding Machines				
13.	Are portable welding guns suitably counterbalanced for supporting the guns (including cables), unless the design of the gun or fixture makes counterbalancing impractical or unnecessary?	Y	N	N/A	??

14.	Are portable welding machines that are suspended from overhead structures equipped with safety chains or cables? [29 CFR 1910.255(c)(2)]	Y	N	N/A	??
15.	Are initiating switches guarded to prevent unintentional operator activation? [29 CFR 1910.255(c)(4)]	Y	N	N/A	??
16.	Does the movable holder, where it enters the gun frame, have sufficient clearance to prevent fingers from being cut when they are placed on the operating movable holder? [29 CFR 1910.255(c)(5)]	Y	N	N/A	??
17.	Are the secondary and case of all portable welding transformers grounded? [29 CFR 1910.255(c)(6)]	Y	N	N/A	??
Flash-	-Welding Equipment				
18.	Are flash-welding machines equipped with a hood to control flying flash? [29 CFR 1910.255(d)(1)]	Y	N	N/A	??
19.	Are fire-resistant curtains or suitable shields set up around the machine to protect the operators of nearby equipment? [29 CFR 1910.255(d)(2)]	Y	N	N/A	??
20.	Are fire-resistant curtains or suitable shields set up around the machine in a manner that does not hamper the operator's movements? [29 CFR 1910.255(d)(2)]	Y	N	N/A	??
21.	Are periodic inspections of welding equipment performed by qualified maintenance personnel? [29 CFR 1910.255(e)]	Y	N	N/A	??
22.	Is a certification record of periodically inspected welding equipment maintained? [29 CFR 1910.255(e)]	Y	N	N/A	??
23.	Does the certification record of periodically inspected welding equipment include the date of inspection, signature of the inspector, and	Y	N	N/A	??

equipment serial number or other identifier? [29 CFR 1910.255(e)]

#### **Maintenance**

24. Are welding machine operators required to report any equipment defect to his or her supervisor?
[29 CFR 1910.255(e)]

Y N N/A ??

25. Is defective equipment taken out of service until repairs have been completed? [29 CFR 1910.255(e)]

Y N N/A ??

### **Comments/Corrective action:**

Information
Name of Location:
Date of inspection:
Career-Technical program/course/room:
Signature of inspector:

# Woodworking Machinery General Requirements

**Self Inspection Checklist** 

**Guidelines:** This checklist covers regulations issued by the U.S. Department of Labor, Occupational Safety and Health Administration (OSHA) under the general industry standard 29 CFR 1910.213 and the construction standard 29 CFR 1926.304. It applies to all wood working machinery. **This checklist must be used in conjunction with the Machines--General Requirements checklist.** The regulations cited apply only to private employers and their employees, unless adopted by a State agency and applied to other groups such as public employees. A **yes** answer to a question indicates that this portion of the inspection complies with the OSHA, and EPA standard, or with a nonregulatory recommendation. Definitions of terms in bold type are provide at the end of the checklist.

General Machine Construction			Please Circle				
free from sensi	e constructed and installed so it is ble vibration when the largest tool is un at full speed? 213(a)(1)]	Y	N	N/A	??		
	mandrels constructed to have firm and and be free from play? 213(a)(2)]	Y	N	N/A	??		
on the frame o	s on tables constructed with lugs cast r with equivalent means to limit the blade that can be mounted? 213(a)(5)]	Y	N	N/A	??		
Note: This is d	one to avoid overspeed caused by						

4.	Are circular saw fences constructed so they can be firmly secured to the table without changing their alignment with the saw?  [29 CFR 1910.213(a)(6)]	Y	N	N/A	??
5.	Are circular saw gauges constructed so they slide in grooves or tracts that are securely machined, to ensure exact alignment with the saw for all positions on the guide? [29 CFR 1910.213(a)(7)]	Y	N	N/A	??
6.	Are hinged table saws constructed so that the table can be firmly secured in any position and in true alignment with the saw? [29 CFR 1910.213(a)(8)]	Y	N	N/A	??
7.	Are all belts, pulleys, gears, shafts, and moving parts guarded? [29 CFR 1910.213(a)(9)]	Y	N	N/A	??
8.	Is each woodworking machine provided with a disconnect switch that can be locked in the off position? [29 CFR 1910.213(a)(10) and 1926.304(a)]  Note: The construction standard 1926.304 permits a disconnect switch that can be tagged in the off position.	Y	N	N/A	??
9.	Are the frames of all exposed noncurrent-carrying metal parts grounded? [29 CFR 1910.213(a)(11)]	Y	N	N/A	??
10.	If the possibility exists of contacting part of a circular saw either beneath or behind the table, is that part covered with either an exhaust hood or guard? [29 CFR 1910.213(a)(12)]	Y	N	N/A	??

Y N N/A ?? 11. Are revolving double arbor saws fully guarded? [29 CFR 1910.213(a)(13)] Y N N/A ?? 12. Is the placement and mounting of saws, cutter heads, or tool collars on machine arbors accomplished when the tool has been accurately machined to size and shape to fit the arbor? [29 CFR 1910.213 (a)(14)] Y N N/A ?? 13. Are combs (featherboards) or suitable jigs provided at the shop or lab for use when a standard guard cannot be used, as in dadoing, grooving, joining, moulding, and rabbetting? [29 CFR 1910.213(a)(15)] Y N N/A ?? 14. Is the operating speed etched or otherwise permanently marked on all circular saws over 20 inches in diameter and operating at over 10,000 peripheral feet per minute? [29 CFR 1926.304(b)] Y N N/A ?? 15. Do woodworking tools and machinery meet the American National Standards Institute (ANSI) codes for safety? [29 CFR 1926.304(f)] Note: A label on the equipment or manufacturer's literature might indicate that it meets ANSI's standards. In case of doubt, the manufacturer of the equipment should be contacted. **Machine Controls and Equipment** Y N N/A ?? 16. Are mechanical or electrical power controls provided on each machine to make it possible for the operator to cut off the power without leaving his or her operating position?

[29 CFR 1910.213(b)(1)]

<ul><li>17. On machines driven by belts and shaftings, is a locking-type belt shifter or equivalent positive device used?</li><li>[29 CFR 1910.213(b)(2)]</li></ul>				
<ul><li>18. Is each operating treadle protected against unexpected tripping?</li><li>[29 CFR 1910.213(b)(6)]</li></ul>	Y	N	N/A	??
19. Are automatic feeding devices installed on machines whenever the nature of the work permits? [29 CFR 1926.304(c)]	Y	N	N/A	??
20. Do feeder attachments have the feed rolls or other moving parts covered or guarded to protect the operator from hazardous points? [29 CFR 1910.213(b)(7) and 1926.304(c)]	Y	N	N/A	??
Inspection and Maintenance of Woodworking Machinery	v		N / A	22
21. Are dull, badly set, improperly filed, or improperly tensioned saws immediately removed from service before they cause the material to stick, jam, or kickback when it is fed to the saw at normal speed? [29 CFR 1910.213(s)(1)]	Y	IN	N/A	**
22. Are saws with adhered gum cleaned immediately? [29 CFR 1910.213(s)(1)]	Y	N	N/A	??
23. Are all knives and cutting heads of woodworking machines kept sharp, properly adjusted, and firmly secured? [29 CFR 1910.213(s)(2)]	Y	N	N/A	??
24. Are all bearings well lubricated and kept free from lost	<b>v</b>	N	N/A	??

25. Are arbors of circular saws free from play? [29 CFR 1910.213(s)(4)]	Y	N	N/A	??
26. Is sharpening or tensioning of saw blades or cutters done only by people with demonstrated skill in this kind of work? [29 CFR 1910.213(s)(5)]	Y	N	N/A	??
27. Is cleanliness maintained around woodworking machinery so guards function properly and fire hazards are prevented in switch enclosures, bearings, and motors? [29 CFR 1910.213(s)(6)]	Y	N	N/A	??
<ul><li>28. Are all cracked saws immediately removed from service? [29 CFR 1910.213(s)(7)]</li><li>Note: Dispose of cracked saws in a manner that will prevent injury to anyone handling the discarded saws.</li></ul>	Y	N	N/A	??
29. Is inserting wedges between the saw disk and the collar to form what is commonly known as a <b>wobble saw</b> prohibited? [29 CFR 1910.213(s)(8)]	Y	N	N/A	??
30. Are push sticks or blocks provided at workplaces in several sizes and types suitable for the work to be done? [29 CFR 1910.213(s)(9)]	Y	N	N/A	??

## **Definitions:**

**Dadoing:** cutting a rectangular groove across the width of a board or plank.

**Grooving:** cutting a hollow channel into a piece of wood.

**Joining:** cutting a piece of wood or plank to have it join exactly with another piece of wood or plank.

**Moulding:** cutting or working a piece of wood on its side or edge to a uniform cross section. other than rectangular, to give it an ornamental effect.

**Rabbetting:** cutting a rectangular, longitudinal groove in the corner edge of a board or plank in order to have it join with another board or plank.

**Comments/Corrective action:** 

Information
Name of Location:
Date of inspection:
Career-Technical program/course/room:
Signature of inspector:

# **Woodworking Machinery Other Than Saws**

**Self-Inspection Checklist** 

Guidelines: This checklist covers regulations issued by the U.S. Department of Labor, Occupational Safety and Health Administration (OSHA) under the general industry standard 29 CFR 1910.213. It applies to the following: jointers; tenoning machines, boring and mortising machines; wood shapers and similar equipment; planing, molding, sticking, and matching machines; profile and swing-head lathes and wood-heel turning machines; sanding machines; veneer cutters and wringers; and miscellaneous woodworking machines. This checklist must be used in conjunction with the Woodworking MachineryCGeneral Requirements checklist. The regulations cited apply only to private employers and their employees, unless adopted by a State agency and applied to other groups such as public employees. A yes answer to a question indicates that this portion of the inspection complies with the OSHA or EPA standard, or with a nonregulatory recommendation.

**Please Circle** 

#### **Jointers**

 Is each hand-fed planer or jointer with a horizontal head equipped with a cylindrical cutting head? [29 CFR 1910.213(j)(1)]

Y N N/A ??

**Note:** The knife projection of the cylindrical cutting head cannot exceed 1/8 inch beyond the cylindrical body of the head.

2. Is the opening in the table kept as small as possible? [29 CFR 1910.213(j)(2)]

Y N N/A ??

**Note:** The clearance between the edge of the rear table and the cutting head shall be 1/8 inch or less. The table throat opening shall not be more than 1-1/2 inches when tables are set or aligned with each other for a zero cut.

3. Does each hand-fed jointer with a horizontal cutting head have an automatic guard that covers all sections of the head on the working side of the fence or gauge?

[29 CFR 1910.213(j)(3)]

**Note:** The guard must automatically adjust itself to cover the unused portion of the head and shall remain in contact with the material at all times.

 Does each hand-fed jointer with a horizontal cutting head have a guard that covers the section of the head back to the gauge or fence? [29 CFR 1910.213(j)(4)]

Y N N/A ??

5. Does each wood jointer with a vertical head have either an exhaust hood or other guard arranged so it completely encloses the revolving head, except for a slot wide enough for the material to be jointed? [29 CFR 1910.213(j)(5)]

Y N N/A ??

6. Is the knife blade of jointers installed and adjusted so that it does not protrude more than 1/8 inch beyond the cylindrical body of the head?
[29 CFR 1910.213(s)(12)]

Y N N/A ??

#### **Tenoning Machines**

7. Are feed chains and sprockets of double-end tenoning machines completely enclosed, except for the portion of chain used for conveying the stock?

[29 CFR 1910.213(k)(1)]

Y N N/A ??

8. Are sprockets and chains at the rear ends of frames guarded at the sides by plates projecting beyond the edges of sprockets and lugs?

[29 CFR 1910.213(k)(2)]

Y N N/A ??

 If used on tenoning machines, are cutting heads and saws covered by metal guards? [29 CFR 1910.213(k)(3)]

Y N N/A ??

**Note:** The guards must cover at least the unused part of the periphery of the cutting head. If the guard is made of sheet metal, the material used must be at least 1/16 inch thick, and if it is cast iron, it must be at least 3/16 inch thick.

10. If an exhaust system is used on a tenoning machine, is the guard part of the exhaust hood?

#### **Boring and Mortising Machines**

- 11. Are safety-bit chucks with projecting-set screws prohibited?

  [29 CFR 1910.213(I)(1)]

  Y N N/A ??
- 12. Are boring bits provided with a guard that encloses all portions of the bit and chuck above the material being worked?

  [29 CFR 1910.213(I)(2)]
- 13. Is the top of the cutting chain and driving mechanism enclosed?

  [29 CFR 1910.213(I)(3)]

  Y N N/A ??
- 14. When a counterweight is used, is one of the following (or equivalent means) used to YNN/A?? prevent its dropping?
  [29 CFR 1910.213(I)(4)]
  - a. It is bolted to the bar by a bolt passing through both bar and counterweight
  - b. A bolt is put through the extreme end of the bar
  - c. Where the counterweight does not encircle the bar, a safety chain is attached to it
  - d. Other types of counterweights are suspended by chain or wire rope and shall travel in a pipe (or other suitable enclosure) if they might fall and cause injury.
- 15. Are universal joints on spindles of boring machines completely enclosed to prevent contact by the operator? Y N N/A ?? [29 CFR 1910.213(l)(5)]
- 16. Is each operating treadle covered by an inverted U-shaped metal guard, fastened to the floor, and of adequate size to prevent tripping?
  [29 CFR 1910.213(l)(6)]

#### **Wood Shapers and Similar Equipment**

17. Is the cutting head of each wood shaper or hand-fed panel raiser (or other similar machine that is not automatically fed) enclosed with a cage or adjustable guard designed to keep the operator's hand away from the cutting edge?

#### Planing, Molding, Sticking, and Matching Machines

18. Is each planing, molding, sticking, and matching
machine equipped with a metal guard covering
the cutting heads?
[29 CFR 1910.213(n)(1)]

Y N N/A ??

19. When an exhaust system is used, does the guard form part of the exhaust hood? [29 CFR 1910.213(n)(2)]

Y N N/A ??

**Note:** If the guard is constructed of sheet metal, the material used shall be at least 1/16 inch thick, and if it is constructed of cast iron, it must be at least 3/16 inch thick.

20. Are feed rolls guarded by a hood or suitable guard to prevent the hands of the operator from contacting the in-running rolls?
[29 CFR 1910.213(n)(3)]

Y N N/A ??

21. Do the surfaces and planers (provided with the sectional infeed rolls) give sufficient feeding contact pressure on the stock thickness?
[29 CFR 1910.213(n)(4)]

Y N N/A ??

## Profile and Swing-Head Lathes and Wood Heel Truning Machine

22. Are the cutting heads of each profile and swing-head lathe covered by a metal guard? [29 CFR 1910.213(o)(1)]

Y N N/A ??

23. Are cutting heads on wood-turning lathes covered as much as possible by hoods or shields? [29 CFR 1910.213(o)(2)]

Y N N/A ??

24. Do the following have hoods enclosing the cutter blades completely? (except at the contact points where the stock is being cut): shoe last and spoke lathes, doweling machines, wood heel-turning machines, and other automatic wood-turning lathes of the rotating knife type.

[29 CFR 1910.213(o)(3)]

Y N N/A ??

25. Are lathes used for turning long pieces of wood stock held only between the two centers equipped with long, curved guards extending over the tops of the lathe?

[29 CFR 1910.213(o)(4)]

**Note:** This is to prevent the work pieces from being thrown out of the machine if they become loose.

26. When an exhaust system is used, does the guard form part or all of the exhaust hood? [29 CFR 1910.213(o)(5)]

Y N N/A ??

**Note:** If the guard is constructed of sheet metal, the material used must be at least 1/16 inch thick, and if it is constructed of cast iron, it must be at least 3/16 inch thick.

#### **Sanding Machines**

27. Are the feed rolls of self-feeding sanding machines protected with a semicylindrical guard to prevent contact with the in-running rolls?
[29 CFR 1910.213(p)(1)]

Y N N/A ??

28. Does the bottom guard come to within 3/8 inch of a plane formed by the bottom or contact face of the feed roll where it touches the stock? [29 CFR 1910.213(p)(1)]

Y N N/A ??

29. Is each drum-sanding machine equipped with an exhaust hood or other guard if no exhaust hood is required?
[29 CFR 1910.213(p)(2)]

Y N N/A ??

30. Does each disk-sanding machine enclose the revolving disk (except for the portion of the disk above the table if a table is used)? [29 CFR 1910.213(p)(3)]

Y N N/A ??

31. Is each belt-sanding machine provided with guards at each nip point where the sanding belt runs onto a pulley?
[29 CFR 1910.213(p)(4)]

Y N N/A ??

#### **Veneer Cutting and Wringers**

32. Are veneer-slicer knives guarded at the front and rear to prevent contact with the knife edge? [29 CFR 1910.213(q)(1)]

Y N N/A ??

33. Do veneer clippers have automatic feeds, or are they provided with a guard that makes it impossible to place a finger or fingers under the knife while feeding

or removing the stock? [29 CFR 1910.213(q)(2)]

34. Are sockets on chain or slat-belt conveyors enclosed?
[29 CFR 1910.213(q)(3)]

Y N N/A ??

35. Are hand and footpower guillotine veneer cutters provided with rods or plates or other satisfactory means, arranged on the feeding side so that the hands cannot reach the cutting edge of the knife while feeding or holding the stock in place?
[29 CFR 1910.213(q)(4)]

Y N N/A ??

36. Is the operator required to make sure that the machine is clear and that other people are not in a hazardous position before starting or restarting the machine? (for example, when veneer slicers or rotary veneer-cutting machines have been shut down to insert logs or to make adjustments) [29 CFR 1910.213(s)(13)]

Y N N/A ??

#### **Miscellaneous Woodworking Machinery**

37. Are the feed rolls of roll-type glue spreaders guarded by a semicylindrical guard? [29 CFR 1910.213(r)(1)]

Y N N/A ??

**Note:** The bottom of the guard shall come to within 3/8 inch of a plane formed by the bottom or contact face of the feed roll where it touches the stock.

38. Is each point of operation for combination or universal woodworking machines guarded as required for such a tool in a separate machine? [29 CFR 1910.213(r)(3)]

Y N N/A ??

#### **Comments/Corrective action:**

Information			
Name of Location:			
Date of inspection:			
Career-Technical program/course/room:			
Signature of inspector:			

### Woodworking Machinery Saws

**Self-Inspection Checklist** 

**Guidelines:** This checklist covers regulations issued by the U.S. Department of Labor, Occupational Safety and Health Administration (OSHA) under 29 CFR 1910.213. It applies to hand-fed ripsaws, hand-fed crosscut table saws, circular resaws, self-feed circular saws, swing cutoff saws, sliding cutoff saws, bandsaws, and band resaws. **This checklist must be used in conjunction with the Woodworking Machinery--General Requirements checklist**. The regulations cited apply only to private employers and their employees, unless adopted by a State agency and applied to other groups such as public employees. A **yes** answer to a question indicates that this portion of the inspection complies with the OSHA and EPA standard, or with a nonregulatory recommendation.

			Ple	ase Ci	rcle
Hand	-Fed Ripsaws				
1.	Is each circular hand-fed ripsaw guarded by a hood that completely encloses the portions of the saw that are above the table and above the material being cut?  [29 CFR 1910.213(c)(1)]	Y	N	N/A	??
2.	Is the hood and mounting arranged so that the hood will automatically adjust itself to the thickness of the material and remain in contact with the material being cut?  [29 CFR 1910.213(c)(1)]	Y	N	N/A	??
	<b>Note:</b> The hood should not offer considerable resistance to insertion of the material.				
3.	Is each hand-fed circular ripsaw furnished with a spreader to prevent material from squeezing the saw or being thrown back on the operator? [29 CFR 1910.213(c)(2)]	Y	N	N/A	??
4.	Is each hand-fed circular ripsaw provided with nonkickback fingers or dogs located to oppose	Y	N	N/A	??

the thrust or tendency of the saw to pick up the material or throw it back toward the operator? [29 CFR 1910.213(c)(3)]

#### **Hand-Fed Crosscut Table Saws**

5. Is each hand-fed crosscut table saw guarded by a hood that completely encloses portions of the saw that are above the table and above the material being cut? [29 CFR 1910.213(d)(1)]

Y N N/A ??

6. Is the hood and mounting arranged so that the hood will automatically adjust itself to the thickness of and remain in contact with the material being cut?

[29 CFR 1910.213(d)(1)]

Y N N/A ??

**Note:** The hood should not offer considerable resistance to insertion of the material.

#### **Circular Resaws**

 Is each circular resaw guarded by a hood or shield of metal above the saw?
 [29 CFR 1910.213 (e)(1)]

Y N N/A ??

 Does each circular resaw have a spreader fastened securely behind the saw?
 [29 CFR 1910.213(e)(2)]

Y N N/A ??

#### **Self-Feed Circular Saws**

9. Are feed rolls and saws protected by a hood or guard to prevent the hands of the operator from coming into contact with the in-running rolls at any point? [29 CFR 1910.213(f)(1)]

Y N N/A ??

**Note:** The guard must be constructed of heavy material (preferably metal), and the bottom of the guard must come down to within 3/8 inch of the plane formed by the bottom or working surfaces of the feed rolls. This distance may be increased to 3/4 inch, provided the lead edge of the hood is extended to at least 5-1/2 inches in front of the nip point between the front roll and the work.

10. Is each self-feed circular ripsaw provided with sectional nonkickback fingers for the full width of the feed rolls? [29 CFR 1910.213(f)(2)]

11. Are swing and sliding cutoff saws provided with a hood that completely encloses the upper half of the saw, the arbor end, and the point of operation at all positions of the saw? [29 CFR 1910.213(g)(1)]

Y N N/A ??

**Note:** The hood must be constructed to protect the operator from flying splinters and broken saw teeth. It must automatically cover the lower portion of the blade so that when the saw is returned to the back of the table, the hood will rise on top of the fence, and when the saw is moved forward, the hood will drop on top of and remain in contact with the table or material being cut.

12. Are swing and sliding cutoff saws equipped with an effective device to return the saw automatically to the back of the table when released at any point of its travel?

[29 CFR 1910.213(g)(2)]

Y N N/A ??

13. Are swing and sliding cutoff saws equipped with limit chains or other equally effective devices to prevent the saw from swinging beyond the front or back edges of the table, or beyond a forward position where the gullets of the lowest saw teeth rise above the table top?

[29 CFR 1910.213(q)(3)]

Y N N/A ??

14. Are inverted swing cutoff saws provided with a hood that covers the part of the saw that protrudes above the table or above the material being cut? [29 CFR 1910.213(g)(4)]

Y N N/A ??

**Note:** The hood must automatically adjust itself to the thickness of the material and remain in contact with the material being cut.

#### **Radial Saws**

15. Does the upper hood completely enclose the upper portion of the blade down to the point that will include the end of the saw arbor?
[29 CFR 1910.213(h)(1)]

Y N N/A ??

16. Are the sides of the lower exposed portion of the blade guarded to the full diameter of the blade by a device that automatically adjusts itself to the thickness of the stock? Does this device remain in contact with the stock being cut to give maximum protection for the operation being performed?

[29 CFR 1910.213(h)(1)]

Y N N/A ??

17. Are radial saws used for ripping provided with

nonkickback fingers or dogs located on both sides of the saw to oppose the thrust or tendency of the saw to throw material back toward the operator? [29 CFR 1910.213(h)(2)]	Y	N	N/A	??
18. Is an adjustable stop provided that prevents the forward travel of the blade beyond the position necessary to complete the cut in repetitive operations? [29 CFR 1910.213(h)(3)]	Y	N	N/A	??
19. Is the installation designed so that the front end of the unit is slightly higher than the rear? (This design causes the cutting head to return gently to the starting position when released by the operator) [29 CFR 1910.213(h)(4)]	Y	N	N/A	??
<b>Note:</b> The cutting head should be fitted with an automatic return device.				
<ul><li>20. Is the direction of saw rotation conspicuously marked on the hood?</li><li>[29 CFR 1910.213(h)(5)]</li></ul>	Y	N	N/A	??
21. Is a permanent label (at least -1/2 inches by 3/4 inch affixed to the rear of the guard at approximately the level of the arbor that reads as follows?	) Y	N	N/A	??
Danger: Do not rip or plow from this end				
[29 CFR 1910.213(h)(5)]				
Bandsaws and Band Resaws				
22. Are all portions of the band saws and band resaws enclosed or guarded, except for the working portion of the blade between the bottom of the guide rolls and the table? [29 CFR 1910.213(i)(1)]	Υ	N	N/A	??
23. Does a self-adjusting guard raise and lower the guide [29 CFR 1910.213(i)(1)]	? <b>Y</b>	N	N/A	??
24. Is each band saw machine provided with a tension control device to indicate the proper tension for the standard saws used on the machine? [29 CFR 1910.213(i)(2)]	Y	N	N/A	??
25. Are feed rolls of band resaws protected with a suitable guard to prevent the hands of the operator from coming in contact with the in-going rolls at any point?	Y	N	N/A	??

**Comments/Corrective action:**