

SAFETY AUDIT GUIDELINES FOR SHOPS

(For assistance, please contact EHS at (402) 472-4925, or visit our web site at <http://ehs.unl.edu/>)

Safety audits represent one of the most important elements in the implementation of an effective occupational health and safety program. The importance of auditing is underscored in UNL's Injury and Illness Prevention Plan, which requires supervisors to conduct regular work area safety inspections. The benefits and purposes of conducting work area surveys are listed below:

- Identify uncontrolled hazardous conditions, processes, and work practices that may lead to injury, illness, or prohibited releases to the environment.
- Serve as a communication tool by which responsible individuals are made aware of the potentially hazardous processes, conditions, or work practices and appropriate control measures.
- Identify regulatory risk by assessing compliance with various regulatory standards.

The checklist and information provided below is not meant to cover every possible hazard that may exist in shops, but rather as abridged guidelines to assess hazardous conditions and operations common to these types of spaces. Add additional inspection items as appropriate, based on past inspections, accident or near miss analysis, unique facility/equipment attributes, etc.

Problems? (Yes/No)	Inspection Item
General Electrical Safety	
	Power strips, extension cords, or multi-plug adapters are plugged directly into a permanently installed electrical outlet (not each other).
	Extension cords are used only for temporary applications.
	Electrical cords are protected from damage and are in good repair (no loose plugs, broken insulation, etc.).
	Unused openings in cabinets, boxes, and fittings are closed with appropriate covers, plugs, or plates and outlet face plates are present and in good condition.
	Equipment and/or outlets are enclosed to protect against shock or electrocution.
	Ground Fault Circuit Interrupters (GFCI) are installed on outlets/circuits in damp/wet locations (e.g., near sinks and in "wash down" locations).
	Electrical appliances are UL or FM approved and have not been altered in a manner that compromises the UL or FM approval.
	Three feet of clearance is maintained in front of electrical panels and breaker boxes; emergency shut-off controls to equipment are accessible.
Abrasive Wheels/Grinders	
	Guards and work rests are present and in good condition.
	Work rests are adjusted to a maximum opening of 1/8" with respect to the wheel.
	The tongue is adjusted such that it is no more than 1/4" from the wheel.
	Wheels are in good condition (free of chips, cuts, warping, etc.).
Hand and Portable Power Tools	
	Hand and portable power tools are in good condition (e.g., handles, housings, cords, plugs, accessories, etc.).

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	Guards, interlocks, shields, shutoff devices, or other safety interlocks/devices/accessories are present and operable.
	Tools are used for their intended purpose.
Compressed Air Receivers	
	Pressure relief valve and/or pressure gauges are in good condition and operable.
	Tank has good integrity and does not show signs of cracking, rusting, etc.
	Compressed air is not used for cleaning purposes.
Welding & Cutting	
	Arc welding machine is disconnected from its power source when welding operations are suspended.
	Hoses, regulators, cables, electrode holders, or other welding equipment/accessories are clean, in good condition, and are properly stored to protect against damage.
	A fire extinguisher is readily available and combustible materials are not within 35' of the welding area.
	Welding cylinders are secured from tipping; and regulators are removed when not in use.
	Appropriate Personal Protective Equipment (PPE), including welding lenses are readily available and in good condition.
	Ventilation is sufficient to prevent accumulation of fumes and vapors and designed such that contaminated air is not circulated to other areas of the building.
Machine Guarding	
	Equipment and machinery designed to be fixed in place is securely anchored.
	Effective guards are in place over belts, pulleys, chains, sprockets, blades, and other moving parts.
Walking/Working Surfaces & Ladders	
	Guard rails are present on walking surfaces that are more than 4' above the adjacent floor or ground level.
	Floor openings are guarded with a cover, rail, or equivalent.
	Ladders are in good repair, clean, and/or appropriate for the intended load and type of work.
General Chemical Safety	
	Entrances to areas where hazardous chemicals are stored are identified with a legible and accurate NFPA placard.
	An accurate inventory of hazardous chemicals stored or used in the area is available.
	Employees are aware of procedures for accessing MSDSs for hazardous chemicals that are used in the area.
	Chemical containers are adequately labeled (labels are not missing, illegible, or incomplete and are consistent with the name on the MSDS).
	Chemicals are stored in a safe and proper manner; and quantities of chemicals stored do not exceed maximum prescribed limits.
	Food/drink are not stored or consumed in areas where hazardous chemicals are used or stored.
Exposure Controls	
	Personal protective equipment is available, accessible, and appropriate for the operation(s) conducted.
	Engineering controls are appropriate for the operation conducted and operable.
	Administrative controls (e.g., procedures, practices, training) are available and appropriate for the operation conducted.
	Emergency shower and/or eyewash are immediately available, accessible, and operable in areas where toxic and/or corrosive materials are used.
Regulated Waste Management	
	Waste containers are appropriately labeled (chemical name and indication of whether used/spent).
	Collection containers are in good condition and/or compatible with the contents.
	Collection containers are closed.

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	Volumes of waste in storage do not exceed satellite accumulation limits (55 gallon or one quart of P-listed material).
	Waste is stored in the same room where it is generated while awaiting EHS pickup.
	There is no evidence of improper disposal (e.g., trash, drain, evaporation, etc.).
	Unused chemicals that are inherently waste-like are not present (e.g., unlabeled/unknown/unwanted, etc.).
	Spent fluorescent lamps are contained in a sealed box, labeled as "Universal Waste Lamps," and dated with a date less than 6 months old.
	Spent/unwanted non-alkaline batteries are labeled as "Universal Waste Batteries," dated with a date less than 6 months old, and placed in an outer container if leaking, and are disposed via EHS or a reputable battery recycler.
	Aerosol cans are not discarded. They are placed in the designated drum or container for collection/disposal by EHS.
	Rags used with solvents are collected for disposal by EHS.
	Bead/sand blaster waste is collected for disposal by EHS.
	Soldering wastes are collected for disposal by EHS (including contaminated sponges, rags, etc.).
Miscellaneous	
	Items are not placed/stored within 18" of a sprinkler head.
	Aisles, exits, and/or stairwells are maintained free of obstructions or tripping hazards.
	Furnishings are stable, designed for the intended load, or used/secured in a manner to prevent injury.
	Hoist hooks and slings are in good condition or are not used for loads in excess of their rated capacity.
Additional Items	

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