

TABLE OF CONTENTS

CHAPTER Lab 1400 SAFETY AND HEALTH OF EMPLOYEES

PART Lab 1401 SCOPE OF RULES

Section Lab 1401.01 Scope

Section Lab 1401.02 Applicability

PART Lab 1402 DEFINITIONS

Section Lab 1402.01 Competent Person

Section Lab 1402.02 Confined Space

Section Lab 1402.03 Fixed Location

Section Lab 1402.04 Flagger

Section Lab 1402.05 Hospitalization

PART Lab 1403 RULES FOR EMPLOYEE SAFETY AND HEALTH

---

Section Lab 1403.01 Safety and Health Requirements

Section Lab 1403.02 Abrasive Blasting

Section Lab 1403.03 Abrasive Grinding

Section Lab 1403.04 Accident Reporting Requirements

Section Lab 1403.05 Aerial Lifts

Section Lab 1403.06 Air Tools

Section Lab 1403.07 Belt Sanding Machines

Section Lab 1403.08 Bloodborne Pathogens

Section Lab 1403.09 Chains, Cables, Ropes, and Hooks

Section Lab 1403.10 Chipguards

Section Lab 1403.11 Compressed Air Use

Section Lab 1403.12 Compressed Gas Cylinders

Section Lab 1403.13 Concrete, Concrete Forms, and Shoring

Section Lab 1403.14 Confined Space Entry

Section Lab 1403.15 Cranes and Derricks

Section Lab 1403.16 Disposal Chutes

Section Lab 1403.17 Dockboards

Section Lab 1403.18 Ergonomics

Section Lab 1403.19 Excavating and Trenching

Section Lab 1403.20 Exits

Section Lab 1403.21 Fall Protection

Section Lab 1403.22 Flagger

Section Lab 1403.23 Flammables and Combustible

Section Lab 1403.24 Floor Openings and Open Sides

Section Lab 1403.25 Forklift Trucks and Powered Industrial Trucks

Section Lab 1403.26 Guards

Section Lab 1403.27 Hand Tools

Section Lab 1403.28 Hoists

Section Lab 1403.29 Housekeeping

Section Lab 1403.30 Hygiene and Sanitation

Section Lab 1403.31 Joints

Section Lab 1403.32 Ladders

Section Lab 1403.33 Lasers

Section Lab 1403.34 Liquefied Petroleum Gas (LPG)

## NEW HAMPSHIRE CODE OF ADMINISTRATIVE RULES

Section Lab 1403.35 Lockout  
Section Lab 1403.36 Machine Guarding  
Section Lab 1403.37 Machinery in a Fixed Location  
Section Lab 1403.38 Mechanical Power Presses  
Section Lab 1403.39 Medical Services  
Section Lab 1403.40 Mechanized Equipment  
Section Lab 1403.41 Noise Exposure  
Section Lab 1403.42 Overheads and Gantry Hoists and Cranes  
Section Lab 1403.43 Personal Protective Equipment  
Section Lab 1403.44 Portable Abrasive Wheel Machinery  
Section Lab 1403.45 Portable Pneumatic Powered Tools  
Section Lab 1403.46 Powder-Actuated Tools  
Section Lab 1403.47 Radiation  
Section Lab 1403.48 Railings  
Section Lab 1403.49 Record Keeping  
Section Lab 1403.50 Respiratory Protection  
Section Lab 1403.51 Revolving Drums  
Section Lab 1403.52 Rollover Protective Structures (ROPS)  
Section Lab 1403.53 Safety Nets  
Section Lab 1403.54 Saws  
Section Lab 1403.55 Scaffolds  
Section Lab 1403.56 Spray Finishing Operations  
Section Lab 1403.57 Stairs  
Section Lab 1403.58 Storage  
Section Lab 1403.59 Tanks with Open Surface  
Section Lab 1403.60 Tire Cages  
Section Lab 1403.61 Toxic Substance  
Section Lab 1403.62 Traffic Control  
Section Lab 1403.63 Trash  
Section Lab 1403.64 Tree Care Operations  
Section Lab 1403.65 Wall Openings  
Section Lab 1403.66 Washing Facilities  
Section Lab 1403.67 Welding and Cutting  
Section Lab 1403.68 Welding in Confined Spaces  
Section Lab 1403.69 Wire Ropes, Chains, and Rigging Equipment  
Section Lab 1403.70 Woodworking Machinery

## CHAPTER Lab 1400 SAFETY AND HEALTH OF EMPLOYEES

Statutory Authority: RSA 281-A 60 I. (o) and RSA 277:16

### PART Lab 1401 SCOPE OF RULES

Lab 1401.01 Scope. This rule is intended to carry out the intent of RSA 281-A:64 and RSA 277:16 procedures and rules for workplace safety inspections.

Source. #4118 eff 8-22-86, EXPIRED: 8-22-92

New. #6684, eff 2-4-98, EXPIRED: 2-4-06

New. #8606, INTERIM, eff 4-12-06, EXPIRED: 10-09-06

New. #8796, eff 1-11-07; ss by #10809, eff 4-9-15

Lab 1401.02 Applicability. These rules shall be applicable to all public employees' workplaces including buildings, sheds, structures, offices, sites or places owned, leased by the state of New Hampshire or by any political subdivision of the state, including all places used in connection with employee activity at a place of employment in the State. These rules shall not preclude compliance with RSA 155-A, the State Building Code, or other state or federal regulations, or codes. If a conflict should arise between these rules and any other applicable law, rule, regulation or code, these rules shall not supersede the more protective requirements.

Source. #8796, eff 1-11-07 (from Lab 1401.01); ss by #10809, eff 4-9-15

### PART Lab 1402 DEFINITIONS

Lab 1402.01 "Competent person" means one who is capable of identifying existing and predictable hazards in the surroundings or working conditions which are unsanitary, hazardous, or dangerous to employees, and who has the authority to take prompt corrective measures to eliminate them.

Source. #4118 eff 8-22-86, EXPIRED: 8-22-92

New. #6684, eff 2-4-98, EXPIRED: 2-4-06

New. #8606, INTERIM, eff 4-12-06, EXPIRED: 10-09-06

New. #8796, eff 1-11-07; ss by #10809, eff 4-9-15

Lab 1402.02 "Confined space" means a space that meets the following criteria:

- (a) Large enough and so configured that an employee can bodily enter and perform assigned work;
- (b) Has limited or restricted means for entry or exit;
- (c) Is not designed for continuous employee occupancy; and
- (d) Is potentially hazardous because it:
  - (1) Contains or has a potential to contain a hazardous atmosphere;
  - (2) Contains a material that has the potential for engulfing an entrant;
  - (3) Has an internal configuration such that an entrant could be trapped or asphyxiated by inwardly collapsing walls, floors, or other overhead components, or by a floor which slopes downward and tapers to a smaller cross-section; or
  - (4) Contains any other recognized serious safety or health hazard.

Source. #4118 eff 8-22-86, EXPIRED: 8-22-92

New. #6684, eff 2-4-98, EXPIRED: 2-4-06

New. #6684, eff 2-4-98, EXPIRED: 2-4-06

New. #8606, INTERIM, eff 4-12-06, EXPIRED: 10-09-06

New. #8796, eff 1-11-07 (formerly Lab 1402.04); ss by #10809, ef

Lab 1402.04 “Flagger” means all personnel, including uniformed police officers, who conducts temporary (TTC) on roads where 2 lanes of vehicle traffic have been reduced to one lane.

Source. #4118 eff 8-22-86, EXPIRED: 8-22-92

New. #6684, eff 2-4-98, EXPIRED: 2-4-06

New. #8606, INTERIM, eff 4-12-06, EXPIRED: 10-09-06

New. #10809, eff 4-9-15

Lab 1402.05 “Hospitalization” means care in a hospital that includes admission as an inpatient and an overni

Source. #4118 eff 8-22-86, EXPIRED: 8-22-92

New. #6684, eff 2-4-98, EXPIRED: 2-4-06

New. #8606, INTERIM, eff 4-12-06, EXPIRED: 10-09-06

New. #12904, eff 10-23-19

Lab 1402.06 - 1402.09 - EXPIRED

Source. #4118 eff 8-22-86, EXPIRED: 8-22-92

New. #6684, eff 2-4-98, EXPIRED: 2-4-06

New. #8606, INTERIM, eff 4-12-06, EXPIRED: 10-09-06

## PART Lab 1403 RULES FOR EMPLOYEE SAFETY AND HEALTH

### Lab 1403.01 Safety and Health Requirements.

(a) Each employer shall furnish to each of its employees employment and a place of employment that recognized hazards that are causing or are likely to cause death or serious physical harm to its employees.

(b) Each employee shall comply with all safety rules and regulations that are applicable to the employee’s conduct.

(c) The employer shall instruct each employee in the recognition and avoidance of unsafe conditions applicable to his work environment to control or eliminate any hazards or other exposure to illness or injury.

(d) The use of any machinery, tool, material, or equipment which is not in compliance with any applicable these rules shall be prohibited.

Source. #4118 eff 8-22-86, EXPIRED: 8-22-92

New. #6684, eff 2-4-98, EXPIRED: 2-4-06

New. #8606, INTERIM, eff 4-12-06, EXPIRED: 10-09-06

New. #8796, eff 1-11-07; ss by #10809, eff 4-9-15

Lab 1403.02 Abrasive Blasting. The employer shall ensure compliance with the following requirements:

(a) Blast cleaning nozzles shall be equipped with an operating valve which shall be held open manually. . be provided on which the nozzle may be mounted when not in use; and



New. #8796, eff 1-11-07; ss by #10809, eff 4-9-15

Lab 1403.03 Abrasive Grinding. The employer shall ensure compliance with the following requirements:

- (a) Abrasive wheels shall be used only on machines provided with safety guards;
- (b) The following shall be exempt from the safety guard requirements:
  - (1) Wheels used while within the material being ground; and
  - (2) Mounted wheels, used in portable operations, 2 inches and smaller in diameter;
- (c) Abrasive wheel safety guards for bench and floor stands and for cylindrical grinders shall not expose wheel periphery for more than 65 degrees above the horizontal plane of the wheel spindle. The protecting member shall be adjustable for variations in wheel size so that the distance between the wheel periphery and adjustable tongue peripheral member at the top shall never exceed 1/4 inch;
- (d) Abrasive wheel safety guards shall cover the spindle end, nut, and flange projections;
- (e) An adjustable work rest of rigid construction shall be used to support the work on offhand grinding machines. The work rests shall be kept adjusted closely to the wheel with a maximum clearance of 1/8 inch;
- (f) Machines designed for a fixed location shall be securely anchored to prevent movement, or designed in such a way that in normal operation they shall not move; and
- (g) All abrasive wheels shall be closely inspected and ring-tested before mounting to insure that they are free of defects.

Source. #4118 eff 8-22-86, EXPIRED: 8-22-92

New. #6684, eff 2-4-98, EXPIRED: 2-4-06

New. #8606, INTERIM, eff 4-12-06, EXPIRED: 10-09-06

New. #8796, eff 1-11-07; ss by #10809, eff 4-9-15

Lab 1403.04 Accident Reporting Requirements for Fatality and Serious Injury.

(a) Within 8 hours after its occurrence, the employer shall report an employment accident which is fatal to one or more employees to the commissioner of labor. Notification may be given by telephone by calling (603) 271-0127 or 271-6850 or by mail at [SafetyDiv@dol.nh.gov](mailto:SafetyDiv@dol.nh.gov).

(b) The reporter shall include the following information:

- (1) Date and time of fatality;
- (2) Location of fatality;
- (3) Cause of death; and
- (4) Place where the body of the deceased person was sent.

(c) Within 24 hours after the occurrence of a workplace injury which necessitates hospitalization for a serious injury to one or more employees, the employer shall report the employment accident to the commissioner of labor. Notification may be given by telephone by calling (603) 271-0127 or 271-6850 or via email to [SafetyDiv@dol.nh.gov](mailto:SafetyDiv@dol.nh.gov).

(d) The reporter shall include the following information:

- (1) Date of injury;
- (2) Time of injury;
- (3) Cause of the injury;

New. #8606, INTERIM, eff 4-12-06, EXPIRED: 10-09-06

New. #8796, eff 1-11-07; ss by #10809, eff 4-9-15; ss by #12904, eff 4-9-15

Lab 1403.05 Aerial Lifts.

- (a) This section shall not apply to fire fighting apparatus.
- (b) Prior to the use of an aerial-lift device, a visual inspection and operational check shall be made by a competent person in accordance with the manufacturer's and owner's instructions.
- (c) Operators of aerial-lift equipment shall be provided with some means of anchorage to which a safety cable can be secured to the buckets, platforms, or booms.
- (d) The combined load, including workers, material, and tools, shall not exceed the rated lift capacity as determined by the manufacturer. Such rated lift capacity shall be conspicuously and permanently posted on the lift.
- (e) When operating an aerial-lift device, the operator shall look in the direction of travel of the bucket and ladders or booms in relation to all other objects and hazards.
- (f) All hoses affecting the nonconductive characteristics of equipment shall be made of nonconductive material. Hydraulic fluids for insulated equipment shall be of the insulating type.
- (g) An aerial-lift truck shall not be moved when the boom is elevated in a working position with workers on it, except for equipment that is specifically designed for this type of operation. The booms of a fully articulated aerial lift shall not be considered elevated in a working position when the basket is directly in front of or behind the truck with the boom as low as feasible and low enough so that the operator's head is below the highest point of the vehicle.
- (h) During aerial-lift operations, workers not engaged in line clearance shall maintain a minimum clearance of 10 feet (3 m) from energized conductors rated 50 kV phase-to-phase or less. For lines rated over 50 kV phase-to-phase, the clearance shall be 10 feet plus .4 inches (3 m plus 10 mm) for each kilovolt over 50 kV phase-to-phase.

Source. #4118 eff 8-22-86, EXPIRED: 8-22-92

New. #6684, eff 2-4-98, EXPIRED: 2-4-06

New. #8606, INTERIM, eff 4-12-06, EXPIRED: 10-09-06

New. #8796, eff 1-11-07; ss by #10809, eff 4-9-15

Lab 1403.06 Air Tools. The employer shall ensure compliance with the following requirements:

- (a) Pneumatic power tools shall be secured to the hose or whip with a locking mechanical connector to prevent disconnection;
- (b) Safety clips or retainers shall be securely installed and maintained on pneumatic impact tools to prevent them from being accidentally expelled;
- (c) The manufacturer's safe operating pressure for all fittings shall not be exceeded; and
- (d) All hoses exceeding 1/2 inch inside diameter shall have a safety device at the source of supply or branch line to prevent pressure in case of hose failure.

Source. #4118 eff 8-22-86, EXPIRED: 8-22-92

New. #6684, eff 2-4-98, EXPIRED: 2-4-06

New. #8606, INTERIM, eff 4-12-06, EXPIRED: 10-09-06

New. #8796, eff 1-11-07; ss by #10809, eff 4-9-15

Lab 1403.07 Portable Grinding Machines. The employer shall ensure that portable grinding machines shall be provided with the following safety features:

New. #8606, INTERIM, eff 4-12-06, EXPIRED: 10-09-06 1403.08)

New. #8796, eff 1-11-07; ss by #10809, eff 4-9-15

Lab 1403.08 Blood Borne Pathogens. To eliminate or minimize employee exposure to human body fluid waste, the employer shall ensure that the following safety work practices shall be followed:

(a) All human blood and body fluids shall be treated as if known to be infectious for HIV, HBV, and other pathogens;

(b) Employees responding to emergencies or other situations where blood or body fluids are present shall wear disposable gloves, such as surgical or examination gloves, wash hands after removal of gloves, and wear eye protection if blood or other potentially infectious materials might be splashed; and

(c) Work procedures shall include safe handling and disposal of needles and sharps, used bandages and gauze, and all other items that come in contact with blood or other potentially infectious materials.

Source. #4118 eff 8-22-86, EXPIRED: 8-22-92

New. #6684, eff 2-4-98, EXPIRED: 2-4-06

New. #8606, INTERIM, eff 4-12-06, EXPIRED: 10-09-06 1403.09)

New. #8796, eff 1-11-07; ss by #10809, eff 4-9-15

Lab 1403.09 Chains, Cables, Ropes, and Hooks. The employer shall ensure compliance with the following:

(a) Chains, cables, ropes, and hooks shall be visually inspected daily by a competent person, for deformation, excessive wear, twists and stretch, and defective gear shall be replaced or repaired;

(b) Hoist ropes on crawler, locomotive, and truck cranes shall be free from kinks or twists and shall not be used to pull the load; and

(c) All U-bolt wire rope clips on hoist ropes shall be installed so that the U-bolt is in contact with the sheave carrying end of the rope. Clips shall be installed in accordance with the clip manufacturer's recommendation. All installed clips shall be retightened after the first hour of use.

Source. #4118 eff 8-22-86, EXPIRED: 8-22-92

New. #6684, eff 2-4-98, EXPIRED: 2-4-06

New. #8606, INTERIM, eff 4-12-06, EXPIRED: 10-09-06 1403.10)

New. #8796, eff 1-11-07; ss by #10809, eff 4-9-15

Lab 1403.10 Chipguards. The employer shall ensure that protective shields or barriers shall be provided involving cleaning with compressed air, to protect personnel against flying chips or other such hazards.

Source. #4118 eff 8-22-86, EXPIRED: 8-22-92

New. #6684, eff 2-4-98, EXPIRED: 2-4-06

New. #8606, INTERIM, eff 4-12-06, EXPIRED: 10-09-06 1403.11)

New. #8796, eff 1-11-07; ss by #10809, eff 4-9-15

Lab 1403.11 Compressed Air Use. The employer shall ensure that compressed air used for cleaning purposes shall not exceed 30 psi. However, this limitation shall not apply to concrete form or mill scale, or to areas where compressed air is used for breathing apparatus.

New. #8606, INTERIM, eff 4-12-06, EXPIRED: 10-09-06 1403.12)

New. #8796, eff 1-11-07; ss by #10809, eff 4-9-15

Lab 1403.12 Compressed Gas Cylinders. The employer shall ensure compliance with the following requiren

- (a) Valve protection caps shall be in place when compressed gas cylinders are transported, moved, or stored;
- (b) Cylinder valves shall be closed when work is finished and when cylinders are empty or are moved;
- (c) Compressed gas cylinders shall be secured in an upright position at all times, except if necessary for s time when cylinders are actually being hoisted or carried;
- (d) Cylinders shall be kept far enough away from the actual welding or cutting operation or protected by barrier so that sparks, hot slag, or flame will not reach them. When this is impractical, fire resistant shields shall l required by NFPA 51B and Saf-C 6008;
- (e) Oxygen cylinders in storage shall be separated from fuel-gas cylinders or combustible materials a minim 20 feet or by a noncombustible barrier at least 5 feet high having a fire-resistance rating of at least 1/2 hour; and
- (f) Compressed gas shall not be used for cleaning purposes.

Source. #4118 eff 8-22-86, EXPIRED: 8-22-92

New. #6684, eff 2-4-98, EXPIRED: 2-4-06

New. #8606, INTERIM, eff 4-12-06, EXPIRES: 10-09-06 1403.13)

New. #8796, eff 1-11-07; ss by #10809, eff 4-9-15

Lab 1403.13 Concrete, Concrete Forms, and Shoring. The employer shall ensure compliance with requirements:

- (a) Employees shall not work above vertically protruding reinforcing steel, unless it has been protected t hazard of impalement;
- (b) Powered and rotating-type concrete troweling machines that are manually guided shall be equipped w type operating control; and
- (c) Formwork and shoring shall safely support all loads imposed during concrete placement. Drawings o layout, formwork, shoring, working decks, and scaffolding systems shall be available at the jobsite.

Source. #4118 eff 8-22-86, EXPIRED: 8-22-92

New. #6684, eff 2-4-98, EXPIRED: 2-4-06

New. #8606, INTERIM, eff 4-12-06, EXPIRED 10-09-06 (formerl

New. #8796, eff 1-11-07; ss by #10809, eff 4-9-15

Lab 1403.14 Confined Space Entry.

- (a) The employer shall evaluate the workplace to determine if any areas are confined spaces as defined unde
- (b) If an area is found to be a confined space, the employer shall meet the following requirements:
  - (1) The employer shall inform exposed employees by posting danger signs or by any other equally c of the existence and location of, and the danger posed by, the confined spaces;
  - (2) A minimum of 2 employees shall be assigned to the work activity involving entry into a confin

- a. Oxygen content;
- b. Flammable gases and vapors; and
- c. Potential toxic air contaminants;

(5) The employer shall establish and implement the means, procedures and practices required to eliminate hazards and make the confined space safe for conducting entry operations including purging, making or ventilating the confined space;

(6) Confined space entrants shall use appropriate personal protective and retrieval equipment. equipment shall allow for attendant /observer non-entry rescue;

(7) The employer shall provide training so that all employees whose job duties involve confined space procedures acquire the understanding, knowledge, and skills necessary for the safe performance assigned to them; and

(8) A procedure shall be implemented which shall require a written permit evidencing that the abatement taken prior to entering a confined space.

(c) The training in (b)(7) above shall include the nature of the hazards involved, the necessary precautions to be taken in the use of personal protective and any other equipment necessary for safe entry.

Source. #4118 eff 8-22-86, EXPIRED: 8-22-92

New. #6684, eff 2-4-98, EXPIRED: 2-4-06

New. #8606, INTERIM, eff 4-12-06, EXPIRED: 10-09-06  
1403.15)

New. #8796, eff 1-11-07; ss by #10809, eff 4-9-15

Lab 1403.15 Cranes and Derricks. The employer shall ensure compliance with the following requirements:

(a) The employer shall comply with the manufacturer's specifications and limitations as supplied by the manufacturer.

(b) Rated load capacities, recommended operating speeds, and special hazard warnings or instructions shall be conspicuously posted on all equipment and complied with. Instructions or warnings shall be visible from the operator's position.

(c) Equipment shall be inspected by a competent person before each use and during use, and all deficiencies shall be corrected before further use;

(d) Accessible areas within the swing radius of the rear of the rotating superstructure shall be barricaded to prevent employees from being struck or crushed by the crane;

(e) No part of a crane or its load shall be operated:

- (1) Within 10 feet of a line rated 50 kV or below;
- (2) Within 10 feet + 0.4 inches for each 1 kV over 50 kV for lines rated over 50 kV; or
- (3) Within twice the length of the line insulator, but never less than 10 feet; and

(f) The requirements of the above shall not apply where electrical distribution and transmission lines are energized and visibly grounded at point of work, or where insulating barriers have been erected to prevent physical contact with the lines.

Source. #4118 eff 8-22-86, EXPIRED: 8-22-92

New. #6684, eff 2-4-98, EXPIRED: 2-4-06

New. #8606, INTERIM, eff 4-12-06, EXPIRED: 10-09-06

(b) When debris is dropped through holes in the floor without the use of chutes, the area where the material shall be enclosed with barricades not less than 42 inches high and not less than 6 feet back from the project opening above. Warning signs of the hazard of falling material shall be posted at each level.

Source. #4118 eff 8-22-86, EXPIRED: 8-22-92

New. #6684, eff 2-4-98, EXPIRED: 2-4-06

New. #8606, INTERIM, eff 4-12-06, EXPIRED: 10-09-06  
1403.18)

New. #8796, eff 1-11-07; ss by #10809, eff 4-9-15

Lab 1403.17 Dock-boards. The employer shall ensure that, dock-boards, meaning metal plates used to between a loading dock and truck over which industrial trucks travel to load or unload shall meet the following requirements:

(a) Dock-boards shall be strong enough to carry the load imposed on them;

(b) Dock-boards that are portable shall be anchored or equipped with devices which shall prevent their movement; and shall have handholds or other effective means to allow safe handling; and

(c) Wheel chocks or other devices shall be provided to prevent railroad cars from being moved while docked in position.

Source. #4118 eff 8-22-86, EXPIRED: 8-22-92

New. #6684, eff 2-4-98, EXPIRED: 2-4-06

New. #8606, INTERIM, eff 4-12-06, EXPIRED: 10-09-06  
1403.19)

New. #8796, eff 1-11-07; ss by #10809, eff 4-9-15

Lab 1403.18 Ergonomics.

(a) Each employer shall evaluate all incidences of ergonomically related injuries, such as repetitive motion tunnel syndrome and back injuries, and make necessary workplace modifications to prevent recurrences.

(b) The employer shall develop training procedures for employees who might be subject to ergonomic exposure from those listed above.

Source. #4118 eff 8-22-86, EXPIRED: 8-22-92

New. #6684, eff 2-4-98, EXPIRED: 2-4-06

New. #8606, INTERIM, eff 4-12-06, EXPIRED: 10-09-06  
1403.22)

New. #8796, eff 1-11-07; ss by #10809, eff 4-9-15

Lab 1403.19 Excavating and Trenching. The employer shall ensure compliance with the following requirements:

(a) Before excavation, underground utilities shall be identified and marked, and utility companies contacted to determine if there are underground utility installations in the area;

(b) A competent person as defined in Lab 1402.01 shall inspect and evaluate the condition of all trenches before permitting an employee to enter;

(c) The inspection shall be performed at the beginning of each day and at least 4 times during the workday if conditions include the following:

(1) A change in the condition of the trench or excavation which may affect the condition of the trench or excavation.

(e) In excavations which employees might be required to enter, excavated or other material shall be stored least 2 feet or more from the edge of the excavation;

(f) Trenches 4 feet deep or more shall have an adequate means of exit such as ladders or steps in the trench. The exit shall be located so as to require no more than 25 feet of lateral travel; and

(g) Excavations near retaining walls, utility poles and other objects that are supported by compacted soil shall at all times to prevent their collapse or undermining.

Source. #4118 eff 8-22-86, EXPIRED: 8-22-92

New. #6684, eff 2-4-98, EXPIRED: 2-4-06

New. #8606, INTERIM, eff 4-12-06, EXPIRED: 10-09-06  
1403.23)

New. #8796, eff 1-11-07; ss by #10809, eff 4-9-15

#### Lab 1403.20 Exits.

(a) Every building designed for human occupancy shall be provided with exits sufficient to permit safe escape in case of emergency.

(b) In hazardous areas, or where employees might be endangered by the blocking of any single means of egress or smoke, there shall be at least 2 means of egress remote from each other.

(c) Exits and the way of approach and travel from exits shall be maintained so that they are unobstructed and at all times.

(d) All exits shall discharge directly to the street or other open space that provides safe access to a public way.

(e) Exit doors serving more than 50 people, or at high hazard areas, shall swing in the direction of exit travel.

(f) Exits shall be marked by clearly visible, suitably illuminated exit signs. Exit signs shall be distinctive and provide contrast with the surroundings. The word "EXIT" shall be of plainly legible letters, not less than 6 inches high.

(g) Any door, passage, or stairway which is neither an exit nor a way of exit access, and which is so located to be likely mistaken for an exit, shall be identified by a sign reading "Not An Exit".

Source. #4118 eff 8-22-86, EXPIRED: 8-22-92

New. #6684, eff 2-4-98, EXPIRED: 2-4-06

New. #8606, INTERIM, eff 4-12-06, EXPIRED: 10-09-06  
1403.25)

New. #8796, eff 1-11-07; ss by #10809, eff 4-9-15

#### Lab 1403.21 Fall Protection.

(a) This section shall not apply to stairways, ladders and scaffolds, cranes and derricks or steel erection.

(b) The employer shall ensure that each employee on a walking/working surface with an unprotected side or end 4 feet or more above a lower level shall be protected from falling by the use of guardrail systems, safety net systems or fall arrest systems.

(c) The requirement in (a) above shall apply to the following surfaces:

(1) Hoist areas;

(2) Holes;

- (7) Bricklaying;
- (8) Working above dangerous equipment;
- (9) Roofing work;
- (10) Pre-cast concrete erection;
- (11) Wall openings; and
- (12) Other walking/working surfaces.

Source. #4118 eff 8-22-86, EXPIRED: 8-22-92

New. #6684, eff 2-4-98, EXPIRED: 2-4-06

New. #8606, INTERIM, eff 4-12-06, EXPIRED: 10-09-06  
1403.29)

New. #8796, eff 1-11-07; ss by #10809, eff 4-9-15 (from Lab 1403

Lab 1403.22 Flagger. The employer shall ensure compliance with the following requirements:

(a) At work sites on or adjacent to a highway or street, where signs, signals, and barricades do not provide for traffic, a flagger shall be provided;

(b) A flagger shall be provided with and shall wear a highly visible warning garment while flagging. When worn during low-light conditions or at night shall be equipped with high visibility material that is visible through the flag person's body motions; and

(c) A flagger shall be provided with and use a combination Stop/Slow paddle while flagging that is:

- (1) Highly visible;
- (2) At least 18 inches in height and width; and
- (3) With lettering at least 6 inches in height.

Source. #4118 eff 8-22-86, EXPIRED: 8-22-92

New. #6684, eff 2-4-98, EXPIRED: 2-4-06

New. #8606, INTERIM, eff 4-12-06, EXPIRED: 10-09-06  
1403.32)

New. #8796, eff 1-11-07; ss by #10809, eff 4-9-15 (from Lab 1403

Lab 1403.23 Flammables and Combustible. The employer shall ensure compliance with the following requirements:

(a) Flammable liquids shall be stored only in containers designed for that purpose;

(b) Portable containers in excess of one gallon capacity shall have a self-closing lid and a pressure relief device;

(c) Flammable and combustible liquids shall be drawn from or transferred into containers only through a transfer system, by means of a device drawing through the top, or by gravity through a self-closing valve. Transferring by pressure shall be prohibited;

(d) Precautions shall be taken to prevent the ignition of flammable vapors;

(e) Automatic overhead extinguishers or portable fire extinguishers shall be available at locations where combustible liquids are stored;

(f) Conspicuous and legible signs prohibiting smoking shall be posted in service and refueling areas;



sprinkler system and 50 percent of the wall area in buildings protected throughout by an approved supervised auto system.

Source. #4118 eff 8-22-86, EXPIRED: 8-22-92

New. #6684, eff 2-4-98, EXPIRED: 2-4-06

New. #8606, INTERIM, eff 4-12-06, EXPIRED: 10-09-06  
1403.33)

New. #8796, eff 1-11-07; ss by #10809, eff 4-9-15

Lab 1403.24 Floor Openings and Open Sides. The employer shall ensure compliance with the following req

(a) Every stairway and ladder way floor opening shall be guarded by a standard railing on all exposed side entrance. The entrance to ladder way openings shall be guarded to prevent a person from walking directly into the

(b) Every hatchway and chute floor opening shall be guarded by a hinged floor opening cover equipped railings to leave only one exposed side or by a removable railing with toeboard on not more than 2 sides and a railing with toeboards on all other exposed sides; and

(c) Every floor hole into which persons can accidentally walk shall be guarded by either a standard railing toeboard on all exposed sides, or a floor hole cover capable of supporting at least twice the weight of employees, materials that might be imposed on the cover at any one time. All covers shall be secured to prevent accidental dis shall be marked with the word "hole" or "cover" to provide warning of the hazard.

Source. #4118 eff 8-22-86, EXPIRED: 8-22-92

New. #6684, eff 2-4-98, EXPIRED: 2-4-06

New. #8606, INTERIM, eff 4-12-06, EXPIRED: 10-09-06  
1403.34)

New. #8796, eff 1-11-07; ss by #10809, eff 4-9-15 (from Lab 1403

Lab 1403.25 Forklift Trucks and Powered Industrial Trucks. The employer shall ensure compliance with requirements:

(a) If at any time a powered industrial truck is in need of repair, defective, or in any way unsafe, the truck out of service until it has been restored to safe operating condition;

(b) Forklift trucks with extended lifts shall be equipped with an overhead guard unless operating conditions

(c) Fork trucks shall be equipped with a vertical load backrest extension when the type of load presents operator;

(d) The brakes of highway trucks and trailers shall be set and wheel chocks placed under the rear wheels truck from rolling while fork trucks are entering or leaving; and

(e) Employers shall verify that the above equipment shall be operated by competent individuals as defined in

Source. #4118 eff 8-22-86, EXPIRED: 8-22-92

New. #6684, eff 2-4-98, EXPIRED: 2-4-06

New. #8606, INTERIM, eff 4-12-06, EXPIRED: 10-09-06  
1403.35)

New. #8796, eff 1-11-07; ss by #10809, eff 4-9-15 (from Lab 1403

Lab 1403.26 Guards. The employer shall ensure that guards for mechanical power transmission equipment metal or other rigid material. Except that wood guards may be used in the woodworking and chemical industrie

New. #8606, INTERIM, eff 4-12-06, EXPIRED: 10-09-06 1403.37)

New. #8796, eff 1-11-07; ss by #10809, eff 4-9-15 (from Lab 1403

Lab 1403.27 Hand Tools. The employer shall ensure compliance with the following requirements:

(a) Each employer shall be responsible for the safe condition of tools and equipment used by employees, and equipment furnished by employees;

(b) All hand tools shall be kept in safe condition. Handles of tools shall be kept tight in the tool, and wood shall be free of splinters or cracks. Wedges, chisels, and similar tools shall be free of mushroomed heads. Wrenches shall be kept free of mushroomed heads when sprung to the point that slippage occurs; and

(c) Electric power operated tools shall either be double-insulated, grounded, or used with ground fault circuit interrupters.

Source. #4118 eff 8-22-86, EXPIRED: 8-22-92

New. #6684, eff 2-4-98, EXPIRED: 2-4-06

New. #8606, INTERIM, eff 4-12-06, EXPIRED: 10-09-06 1403.38)

New. #8796, eff 1-11-07; ss by #10809, eff 4-9-15 (Lab 1403.25)

Lab 1403.28 Hoists. The employer shall ensure compliance with the following requirements:

(a) The employer shall comply with the hoist manufacturer's specifications and limitations as to the installation of the equipment, whether at a portable or fixed location;

(b) Rated load capacities, recommended operating speeds, and special hazard warnings or instructions shall be marked on cars and platforms;

(c) Hoistway entrances of material hoists shall be protected by full width gates or bars;

(d) Hoistway doors or cages of personnel hoists shall be not less than 6 feet 6 inches high and shall be equipped with mechanical locks which cannot be operated from the landing side and shall be accessible only to persons on the car

(e) Overhead protective coverings shall be provided on the top of the hoist cage or platform.

Source. #4118 eff 8-22-86, EXPIRED: 8-22-92

New. #6684, eff 2-4-98, EXPIRED: 2-4-06

New. #8606, INTERIM, eff 4-12-06, EXPIRED: 10-09-06 1403.39)

New. #8796, eff 1-11-07; ss by #10809, eff 4-9-15 (from Lab 1403

Lab 1403.29 Housekeeping. The employer shall ensure compliance with the following requirements:

(a) Form and scrap lumber with protruding nails and all other debris shall be kept clear from all work areas;

(b) Combustible scrap and debris shall be removed from work areas at least daily;

(c) Trash shall be disposed of on a regular basis, and at other times when necessary;

(d) All places of employment, passageways, storerooms, and service rooms shall be kept clean and in a sanitary condition and

(e) All floors shall be kept clean, dry, safely maintained, and free from trip hazards.

Source. #4118 eff 8-22-86, EXPIRED: 8-22-92

New. #8796, eff 1-11-07 (formerly and moved by Lab 1403.28); ss 4-9-15 (from Lab 1403.27)

Lab 1403.30 Hygiene and Sanitation. The employer shall ensure compliance with the following requiremen

- (a) A supply of potable water shall be provided in all places of employment;
- (b) Potable drinking water containers shall be capable of being tightly closed and be equipped with a tap;
- (c) Every employer shall provide and maintain sanitary and hygienic toilet facilities; and

(d) The above shall not apply to mobile crews or normally unattended locations, as long as employees w locations have transportation immediately available to nearby locations that provide water and sanitary facilities.

Source. #4118 eff 8-22-86, EXPIRED: 8-22-92

New. #6684, eff 2-4-98, EXPIRED: 2-4-06

New. #8606, INTERIM, eff 4-12-06, EXPIRED: 10-09-06 1403.41)

New. #8796, eff 1-11-07; ss by #10809, eff 4-9-15 (from Lab 1403

Lab 1403.31 Jointers. The employer shall ensure compliance with the following requirements:

(a) Each hand-fed jointer with a horizontal cutting head shall have an automatic guard which shall cover th head on the working side of the fence or cage, and a guard which shall cover the back of the cage or fence; and

(b) A jointer guard shall automatically adjust itself to cover the unused portion of the head, and shall rer with the material at all times.

Source. #4118 eff 8-22-86, EXPIRED: 8-22-92

New. #6684, eff 2-4-98, EXPIRED: 2-4-06

New. #8606, INTERIM, eff 4-12-06, EXPIRED: 10-09-06 1403.42)

New. #8796, eff 1-11-07; ss by #10809, eff 4-9-15 (from Lab 1403

Lab 1403.32 Ladders. The employer shall ensure compliance with the following requirements:

(a) Fixed ladders shall comply with the following requirements:

- (1) Rungs shall have a minimum diameter of 3/4 inch, if metal, or 1-1/8 inches, if wood;
- (2) Rungs shall be a minimum of 16 inches in length and be spaced uniformly no more than 12 inches
- (3) Cages, wells, or safety devices, such as fall prevention systems for ladders shall be provided on than 20 feet in length;
- (4) Landing platforms shall be provided each 30 feet of travel, where cages are provided. Where no landing platforms shall be provided for every 20 feet of travel;
- (5) Tops of cages on fixed ladders shall extend at least 42 inches above top of landing. The bottom of not less than 7 feet or more than 8 feet above the base of the ladder; and
- (6) Side rails shall extend 3-1/2 feet above the landing.

(b) Portable ladders shall comply with the following requirements:

- (1) Stepladders shall be equipped with a metal spreader or locking device of sufficient size and str hold the front and back sections in the open position:

- (4) The side rails of a ladder used to gain access to a roof or platform shall extend at least 3 feet above
- (5) Portable metal ladders shall not be used for electrical work or where they might contact electrical c
- (6) Portable ladders shall be safely secured when not in use.

Source. #4118 eff 8-22-86, EXPIRED: 8-22-92

New. #6684, eff 2-4-98, EXPIRED: 2-4-06

New. #8606, INTERIM, eff 4-12-06, EXPIRED: 10-09-06  
1403.45)

New. #8796, eff 1-11-07; ss by #10809, eff 4-9-15 (from Lab 1403

Lab 1403.33 Lasers. The employer shall ensure compliance with the following requirements:

- (a) Only employees who have had training by the employer or equipment manufacturer shall be assigned to and operate laser equipment;
- (b) Employees shall wear appropriate eye protection designed to safeguard against potential exposure to laser light of more than 0.005 watts (5 milliwatts);
- (c) Beam shutters or caps shall be utilized, or the laser turned off, when laser transmission is not actually required. If the laser is left unattended, such as during lunch hour, overnight, or at change of shifts, the laser shall be turned off;
- (d) Employees shall not be exposed to light intensities above the following:
  - (1) Direct staring - 1 micro-watt per square centimeter;
  - (2) Incidental observing - 1 milliwatt per square centimeter; and
  - (3) Diffused reflected light - 2-1/2 watts per square centimeter; and
- (e) Employees shall not be exposed to microwave power densities in excess of 10 milliwatts per square centimeter.

Source. #4118 eff 8-22-86, EXPIRED: 8-22-92

New. #6684, eff 2-4-98, EXPIRED: 2-4-06

New. #8606, INTERIM, eff 4-12-06, EXPIRED: 10-09-06  
1403.46)

New. #8796, eff 1-11-07; ss by #10809, eff 4-9-15 (from Lab 1403

Lab 1403.34 Liquefied Petroleum Gas (LPG). The employer shall ensure compliance with the following requirements:

- (a) Each system shall have containers, valves, connectors, manifold valve assemblies, and regulators which are suitable for use with LPG;
- (b) Every container and vaporizer shall be provided with one or more safety relief valves or device;
- (c) Containers shall be placed upright on firm foundations or otherwise firmly secured;
- (d) Portable heaters shall be equipped with an automatic device to shut off the flow of gas in the event of flameout;
- (e) Storage of LPG within buildings shall be prohibited; and
- (f) Storage locations shall have at least one portable fire extinguisher, designed 20#BC.

Source. #4118 eff 8-22-86, EXPIRED: 8-22-92

New. #6684, eff 2-4-98, EXPIRED: 2-4-06

(a) All stored energy hazards including but not limited to the following shall be released, locked-out, or otherwise non-hazardous prior to commencement of any work which could subject the employee to potential injury:

- (1) Hydraulic pressure;
- (2) Pneumatic pressure;
- (3) Steam pressure;
- (4) Vacuum;
- (5) Electricity;
- (6) Mechanical; and
- (7) Gravity.

(b) Padlocks shall be made available to employees for the purpose of locking-out equipment when required.

(c) Only the individual who is working on the equipment shall be allowed to remove the lockout device.

(d) Lockout devices shall indicate the identity of the employee applying the device(s).

Source. #4118 eff 8-22-86, EXPIRED: 8-22-92

New. #6684, eff 2-4-98, EXPIRED: 2-4-06

New. #8606, INTERIM, eff 4-12-06, EXPIRED: 10-09-06  
1403.48)

New. #8796, eff 1-11-07; ss by #10809, eff 4-9-15 (from Lab 1403

Lab 1403.36 Machine Guarding. The employer shall ensure compliance with the following requirements:

(a) Machine guarding shall be provided to protect employees from hazards such as those created by point of operation, rotating parts, flying chips and sparks.

(b) Machine guarding shall comply with the following requirements:

- (1) The guard shall be such that it cannot pose an accident hazard in itself; and
- (2) Point of operation guarding devices shall be so designed as to prevent the operator from having body in the danger zone during the operating cycle.

(c) Machines which require point of operation guarding shall include:

- (1) Guillotine cutters;
- (2) Shears;
- (3) Alligator shears;
- (4) Power presses;
- (5) Milling machines;
- (6) Power saws;
- (7) Jointers; and
- (8) Forming rolls and calendars.

(d) Special supplemental hand tools shall be used for placing and removing materials within the danger zone of the machine.

- (3) Pulleys;
- (4) Sprockets;
- (5) Chains;
- (6) Flywheels;
- (7) Shafting;
- (8) Shaft projections;
- (9) Gears;
- (10) Couplings; and
- (11) Rotating or reciprocating parts.

(f) Flywheels protruding through a working floor shall be guarded.

(g) Where both runs of horizontal belts are 7 feet or less from the floor or working surface, the guard shall be 15 inches above the belt.

(h) Safety sleeves shall be required to guard couplings with bolts, nuts, or set screws extending beyond the f

(i) Belts, pulleys, and shafting located in rooms used exclusively for power transmission apparatus shall not be guarded when the following requirements have been met:

- (1) The basement, tower, or room occupied by transmission equipment is locked against unauthorized e
- (2) The route followed by the oiler is protected in such a manner as to prevent accidents.

Source. #4118 eff 8-22-86, EXPIRED: 8-22-92

New. #6684, eff 2-4-98, EXPIRED: 2-4-06

New. #8606, INTERIM, eff 4-12-06, EXPIRED: 10-09-06  
1403.49)

New. #8796, eff 1-11-07; ss by #10809, eff 4-9-15 (from Lab 1403

Lab 1403.37 Machinery in a Fixed Location. The employer shall ensure that machines designed for a fixed location be securely anchored to prevent walking or moving, or designed in such a manner that they do not move in normal

Source. #4118 eff 8-22-86, EXPIRED: 8-22-92

New. #6684, eff 2-4-98, EXPIRED: 2-4-06

New. #8606, INTERIM, eff 4-12-06, EXPIRED: 10-09-06  
1403.50)

New. #8796, eff 1-11-07; ss by #10809, eff 4-9-15 (from Lab 1403

Lab 1403.38 Mechanical Power Presses. The employer shall ensure compliance with the following requiremen

(a) The employer shall provide and ensure the usage of point-of-operation guards or properly applied and maintained point-of-operation devices, per the manufacturer's recommendation, to prevent entry of hands or fingers into the point-of-operation opening through, over, under, and around the guard on every operation performed on a mechanical power press. This requirement shall not apply when the point-of-operation opening is 1/4 inch or less;

(b) A guard shall be placed over the treadle of foot-operated presses;

(c) Pedal counterweights, if provided on foot-operated presses, shall have the path of travel of the weight en

New. #8606, INTERIM, eff 4-12-06, EXPIRED: 10-09-06 1403.51)

New. #8796, eff 1-11-07; ss by #10809, eff 4-9-15 (from Lab 1403

Lab 1403.39 Medical Services. In addition to the requirement for a medical chest required in RSA 277:6, the employer shall ensure emergency telephone numbers for ambulance service, hospital, or physician shall be posted throughout the vehicle.

Source. #4118 eff 8-22-86, EXPIRED: 8-22-92

New. #6684, eff 2-4-98, EXPIRED: 2-4-06

New. #8606, INTERIM, eff 4-12-06, EXPIRED: 10-09-06 1403.21)

New. #8796, eff 1-11-07; ss by #10809, eff 4-9-15 (from Lab 1403

Lab 1403.40 Mechanized Equipment. The employer shall ensure compliance with the following requirements:

(a) All construction equipment in use shall be checked at the beginning of each shift to assure that all parts, accessories that affect safe operation are in proper operating condition and free from defects. All defects shall be corrected before the vehicle is placed in service;

(b) No employer shall use any motor vehicle, earthmoving, or compacting equipment having an obstructed view of the vehicle unless:

(1) The vehicle has a reverse signal alarm distinguishable from the surrounding noise level; or

(2) The vehicle is backed up only when an appointed observer signals that it is safe to do so; and

(c) Heavy machinery, equipment, or parts thereof which are suspended or held aloft shall be blocked to prevent shifting before employees are permitted to work under or between them.

Source. #4118 eff 8-22-86, EXPIRED: 8-22-92

New. #6684, eff 2-4-98, EXPIRED: 2-4-06

New. #8606, INTERIM, eff 4-12-06, EXPIRED: 10-09-06 1403.53)

New. #8796, eff 1-11-07; ss by #10809, eff 4-9-15 (from Lab 1403

Lab 1403.41 Noise Exposure. The employer shall ensure compliance with the following requirements:

(a) Protection against the effects of occupational noise exposure shall be provided when the sound level shown in Table 3, Permissible Noise Exposures. Feasible engineering or administrative controls shall be utilized to reduce the noise level below the allowable limit.

(b) When engineering or administrative controls fail to reduce the noise level to within the levels of Table 1, protective equipment shall be provided and used to reduce the noise to an acceptable level.

(c) Exposure to impulsive or impact noise should not exceed 140 dB peak sound pressure level.

Table 1400.1 Permissible Noise Exposure

	Sound Level
	dBA Slow
Duration Per Day, Hours	Response

1-1/2	102
1	105
1/2	110
1/4 or less	115

Source. #4118 eff 8-22-86, EXPIRED: 8-22-92

New. #6684, eff 2-4-98, EXPIRED: 2-4-06

New. #8606, INTERIM, eff 4-12-06, EXPIRED: 10-09-06  
1403.54)

New. #8796, eff 1-11-07; ss by #10809, eff 4-9-15 (from Lab 1403

Lab 1403.42 Overheads and Gantry Hoists and Cranes. The employer shall ensure compliance with requirements:

- (a) All functional operating mechanisms, air and hydraulic systems, chains, rope slings, hooks, and other lif shall be visually inspected before each use by the operator;
- (b) Complete inspection of the crane shall be performed at least once per year;
- (c) The inspection shall include the following:
  - (1) Identifying deformed, cracked, corroded, worn, or loose members or parts; and
  - (2) Ensuring the good working order of the following:
    - a. Brake system;
    - b. Limit indicators;
    - c. Power plant; and
    - d. Electrical apparatus;
- (d) Overhead cranes shall have stops at the limit of travel of the wheels; and
- (e) The rated load of the crane shall be plainly marked on each side of the crane as follows:
  - (1) If the crane has more than one hoisting unit, each hoist shall have its rated load marked on it or its
  - (2) The marking shall be clearly legible from the ground or floor.

Source. #4118 eff 8-22-86, EXPIRED: 8-22-92

New. #6684, eff 2-4-98, EXPIRED: 2-4-06

New. #8606, INTERIM, eff 4-12-06, EXPIRED: 10-09-06  
1403.55)

New. #8796, eff 1-11-07; ss by #10809, eff 4-9-15 (from Lab 1403

Lab 1403.43 Personal Protective Equipment. The employer shall ensure compliance with the following req

- (a) The employer shall assess the hazards and provide and require the use of appropriate personal protec where indicated based upon that assessment;
- (b) Where employees furnish their own personal protective equipment, the employer shall be responsib adequacy and, to ensure that the equipment is properly maintained and in a sanitary condition;



New. #6684, eff 2-4-98, EXPIRED: 2-4-06

New. #8606, INTERIM, eff 4-12-06, EXPIRED: 10-09-06  
1403.56)

New. #8796, eff 1-11-07; ss by #10809, eff 4-9-15 (from Lab 1403

Lab 1403.44 Portable Abrasive Wheel Machinery. The employer shall ensure compliance with requirements:

- (a) Abrasive wheels shall be used only on machines provided with safety guards; ;
- (b) The following shall be exempt from the safety guard requirement in (a) above:
  - (1) Wheels used while within the work being ground; and
  - (2) Mounted wheels, used in portable operations, 2 inches and smaller in diameter.
- (c) A safety guard shall cover the spindle end, nut, and flange projections. The safety guard shall be maintained in proper alignment with the wheel;
- (d) Safety guards used on right angle head or vertical portable grinders shall:
  - (1) Have a maximum exposure angle of 180 degrees; and
  - (2) Meet the following minimum requirements:
    - a. The above guard shall be so located so as to be between the operator and the wheel during use;
    - b. Adjustment of the guard shall be such that pieces of an accidentally broken wheel shall be deflected away from the operator.

Source. #4118 eff 8-22-86, EXPIRED: 8-22-92

New. #6684, eff 2-4-98, EXPIRED: 2-4-06

New. #8606, INTERIM, eff 4-12-06, EXPIRED: 10-09-06  
1403.58)

New. #8796, eff 1-11-07; ss by #10809, eff 4-9-15 (from Lab 1403

Lab 1403.45 Portable Pneumatic Powered Tools. The employer shall ensure compliance with the following

- (a) Safety clips or retainers shall be securely installed and maintained on pneumatic impact tools to prevent them from being accidentally expelled; and
- (b) Hose and hose connections used for delivering compressed air shall be designed for the pressure and size at which they are used.

Source. #4118 eff 8-22-86, EXPIRED: 8-22-92

New. #6684, eff 2-4-98, EXPIRED: 2-4-06

New. #8606, INTERIM, eff 4-12-06, EXPIRED: 10-09-06  
1403.58)

New. #8796, eff 1-11-07; ss by #10809, eff 4-9-15 (from 1403.42)

Lab 1403.46 Powder-Actuated Tools. The employer shall ensure compliance with the following requirements:

- (a) Only employees trained by the employer or equipment manufacturer shall be allowed to operate powder-actuated tools;
- (b) All powder-actuated tools shall be tested by the employee before each use and all defects discovered before use shall be corrected.

New. #8606, INTERIM, eff 4-12-06, EXPIRED: 10-09-06 1403.60)

New. #8796, eff 1-11-07; ss by #10809, eff 4-9-15 (from Lab 1403

Lab 1403.47 Radiation. The employer shall ensure compliance with the following requirements:

(a) Employers shall provide controls to prevent any employee from being exposed to radiation, either electromagnetic, in excess of acceptable limits as established by He-P 4001;

(b) Each radiation area shall be conspicuously posted with visible signs and/or barriers; and

(c) Employers shall maintain records of the radiation exposure of all employees who are required to work in

Source. #4118 eff 8-22-86, EXPIRED: 8-22-92

New. #6684, eff 2-4-98, EXPIRED: 2-4-06

New. #8606, INTERIM, eff 4-12-06, EXPIRED: 10-09-06 1403.61)

New. #8796, eff 1-11-07; ss by #10809, eff 4-9-15 (from Lab 1403

Lab 1403.48 Railings. The employer shall ensure compliance with the following requirements:

(a) This section shall not apply to scaffolding and stairway railings;

(b) A standard railing shall consist of top rail, intermediate rail, and posts, and shall have a vertical height from upper surface of top rail to floor, or platform;

(c) A railing for open-sided floors, platforms, and runways shall have a toeboard which shall be a vertical level erected along exposed edges of a floor opening, wall opening, platform, runway, or ramp to prevent fall whenever persons can pass beneath the open side, or where there is equipment with which falling materials could and

(d) Railings shall be of such construction that the complete structure shall be capable of withstanding a load of 200 pounds in the vertical or horizontal direction.

Source. #4118 eff 8-22-86, EXPIRED: 8-22-92

New. #6684, eff 2-4-98, EXPIRED: 2-4-06

New. #8606, INTERIM, eff 4-12-06, EXPIRED: 10-09-06 1403.62)

New. #8796, eff 1-11-07; ss by #10809, eff 4-9-15 (from Lab 1403

Lab 1403.49 Record Keeping. The employer shall ensure compliance with the following requirements:

(a) An annual log of all workplace injuries and illnesses, for which an employer's first report of injury is submitted to the department of labor, shall be kept at the place of employment and made available to a safety inspector upon request

(b) Employers having existing records or logs of injuries and illnesses, required by other agencies, may not be required to meet this requirement; and

(c) The log shall include, at a minimum, the following information:

(1) Date of injury;

(2) Name of employee;

(3) Occupation of employee;

New. #6684, eff 2-4-98, EXPIRED: 2-4-06

New. #8606, INTERIM, eff 4-12-06, EXPIRES: 10-09-06  
1403.63)

New. #8796, eff 1-11-07; ss by #10809, eff 4-9-15 (from Lab 1403

Lab 1403.50 Respiratory Protection. The employer shall ensure compliance with the following requirements

(a) Respirators shall be selected by the employer on the basis of the hazard to which the worker is exposed provided by the employer as necessary to protect the health of the workers;

(b) Employees who are expected to use respirators shall be fit tested to ensure that an adequate face-to-face seal be maintained;

(c) Both the supervisors and the workers shall be instructed by the employer in the selection, use, and maintenance of respirators;

(d) Respirators shall be cleaned and disinfected, and shall be inspected during cleaning. Deteriorated respirators shall be replaced;

(e) Respirators for emergency use shall be inspected at least once a month and after each use; and

(f) When not in use, respirators shall be stored in a clean and sanitary location.

Source. #4118 eff 8-22-86, EXPIRED: 8-22-92

New. #6684, eff 2-4-98, EXPIRED: 2-4-06

New. #8606, INTERIM, eff 4-12-06, EXPIRED: 10-09-06  
1403.64)

New. #8796, eff 1-11-07; ss by #10809, eff 4-9-15 (from Lab 1403

Lab 1403.51 Revolving Drums. The employer shall ensure that revolving drums, barrels, or containers shall be enclosed in an interlocked enclosure that shall prevent the drum from revolving unless the guard enclosure is in place.

Source. #4118 eff 8-22-86, EXPIRED: 8-22-92

New. #6684, eff 2-4-98, EXPIRED: 2-4-06

New. #8606, INTERIM, eff 4-12-06, EXPIRED: 10-09-06  
1403.65)

New. #8796, eff 1-11-07; ss by #10809, eff 4-9-15 (from Lab 1403

Lab 1403.52 Rollover Protective Structures (ROPS). The employer shall ensure that, except for side booms, tractors and compactors, rollover protective structures of substantial strength be used with the following types of handling equipment:

(a) All rubber-tired, self-propelled scrapers;

(b) Rubber-tired front-end loaders;

(c) Rubber-tired dozers;

(d) Wheel-type agricultural and industrial tractors;

(e) Crawler tractors;

(f) Crawler-type loaders;

(g) Motor graders, with or without attachments, that are used in construction work; and

New. #8606, INTERIM, eff 4-12-06, EXPIRED: 10-09-06  
1403.66)

New. #8796, eff 1-11-07 (from Lab 1403.56); ss by #10809, eff 4-  
1403.49)

Lab 1403.53 Safety Nets. The employer shall ensure that, where nets are used, operations shall not be under a net system is installed by a person trained by the employer or equipment manufacturer and the system complies with standards.

Source. #4118 eff 8-22-86, EXPIRED: 8-22-92

New. #6684, eff 2-4-98, EXPIRED: 2-4-06

New. #8606, INTERIM, eff 4-12-06, EXPIRED: 10-09-06  
1403.67)

New. #8796, eff 1-11-07 (from Lab 1403.57); ss by #10809, eff 4-  
1403.50)

Lab 1403.54 Saws. The employer shall ensure compliance with the following requirements:

(a) Band saws shall comply with the following requirements:

- (1) All portions of band saw blades shall be enclosed or guarded except for the working portion of the blade, the bottom of the guide rolls and the table; and
- (2) Band saw wheels shall be fully enclosed according to the following requirements:
  - a. The outside periphery of the enclosure shall be solid; and
  - b. The front and back shall be either, solid wire mesh or perforated metal;

(b) Portable circular saws shall comply with the following requirements:

- (1) All portable power-driven circular saws having a blade diameter greater than 2 inches shall have guards above and below the base plate or shoe;
- (2) The lower guards shall cover the saw to the depth of the teeth, except for the minimum area required for the base plate to be tilted for bevel cuts, and shall automatically return to the covering position when withdrawn from the work;

(c) The above provision shall not apply to circular saws used in the meat industry for meat cutting purposes;

(d) Radial saws shall comply with the following requirements:

- (1) Radial saws shall have an upper guard which completely encloses the upper half of the saw blade;
- (2) The sides of the lower exposed portion of the blade shall be guarded by a device that shall automatically adjust to the thickness of the material and remain in contact with the material being cut;
- (3) Radial saws used for ripping shall be equipped with a device which will prevent material from kicking back at the operator and shall be properly adjusted;
- (4) An adjustable stop shall be provided to prevent the forward travel of the blade beyond the table necessary to complete the cut in repetitive operations; and
- (5) Radial saws shall be installed so that the cutting head shall return to the starting position when the operator;

(e) Swing or sliding cut-off saws shall comply with the following requirements:

- (3) Each swing or sliding cut-off saw shall be provided with an effective device to return the saw aut back of the table when released at any point of its travel; and
- (4) Inverted cut-off saws shall be provided with a hood that shall cover the part of the saw that protruc of the table or material being cut; and
- (f) Table saws shall comply with the following requirements:
- (1) Circular table saws shall have a hood over the portion of the saw above the table, with the hood n shall automatically adjust itself to the thickness of and remain in contact with the material being cut;
  - (2) Circular table saws shall have a spreader aligned with the blade spaced no more than 1/2 inch b blade mounted in the saw. The provision of a spreader in connection with grooving, dadoing, or rabb required;
  - (3) Circular table saws used for ripping shall be equipped with a device which will prevent material fi toward the operator and shall be properly adjusted; and
  - (4) Feed rolls and blades of self-feed circular saws shall be protected by a hood or guard to prevent t operator from coming in contact with the in-running rolls at any point.

Source. #4118 eff 8-22-86, EXPIRED: 8-22-92

New. #6684, eff 2-4-98, EXPIRED: 2-4-06

New. #8606, INTERIM, eff 4-12-06, EXPIRED: 10-09-06  
1403.58)

New. #8796, eff 1-11-07 (from Lab 1403.58); ss by #10809, eff 4-  
1403.51)

Lab 1403.55 Scaffolds. The employer shall ensure compliance with the following requirements:

- (a) Scaffolds shall be erected on sound, rigid footing capable of carrying the maximum intended load with displacement;
- (b) All planking shall stress-graded lumber to assure the quality of the lumber; and
- (c) The maximum permissible spans for 2 x 10 or wider planks shall be as shown in Table 4 1400.2, Pl Thickness:

Table 1400.2 – Planking Material Thickness

	Full Thickness Undressed Lumber			Nominal Thickness Lumber	
Working load (p.s.f.)	25	50	75	25	50
Permissible Span (ft.)	10	8	6	8	6

- (d) The maximum permissible span for 1-1/4 x 9 inch or wider plank of full thickness ~~is~~ shall be 4 feet loading of 50 p.s.f.;
- (e) Scaffold planking shall be overlapped a minimum of 12 inches or secured from movement;
- (f) Scaffold planks shall extend over their end supports not less than 6 inches nor more than 12 inches;
- (g) Defective parts of all scaffolding and accessories shall immediately be replaced or repaired;
- (h) An access ladder or equivalent safe access shall be provided;

(1) The lifeline shall be securely attached to substantial members of the structure, not the scaffold rigged lines, which shall safely suspend the employee in case of a fall; and

(2) In order to keep the lifeline continuously attached, with a minimum of slack, to a fixed structural point of the lifeline shall be changed as the work progresses; and

(k) Tubular welded frame scaffolds shall be properly braced by cross bracing or diagonal braces, or both vertical members together laterally, as follows:

(1) The cross braces shall be of such length as shall automatically square and align vertical members erected scaffold is always plumb, square, and rigid; and

(2) All brace connections shall be made secure.

Source. #4118 eff 8-22-86, EXPIRED: 8-22-92

New. #6684, eff 2-4-98, EXPIRED: 2-4-06

New. #8606, INTERIM, eff 4-12-06, EXPIRED: 10-09-06  
1403.69)

New. #8796, eff 1-11-07 (from Lab 1403.59); ss by #10809, eff 4-1-07  
1403.52)

Lab 1403.56 Spray Finishing Operations. The employer shall ensure compliance with the following requirements:

(a) In conventional dry type spray booths, over-spray dry filters or filter rolls shall ensure an average air velocity at the face of the booth of not less than 100 linear feet per minute;

(b) Electrostatic spraying operations shall be conducted with an air velocity of not less than 60 linear feet per minute, depending on the volume of the finishing material being applied and its flammability and explosion characteristics;

(c) Visible gauges or an audible alarm or pressure-activated devices shall be installed to indicate or ensure that air velocity is maintained;

(d) Filter pads shall be inspected, and clogged filter pads discarded, and replaced. Filter rolls shall be inspected for proper replacement of filter media;

(e) Spray booths shall be so installed that all portions are readily accessible for cleaning;

(f) A clear space of not less than 3 feet on all sides of a spray booth shall be kept free from storage, equipment, or construction;

(g) There shall be no open flame or spark producing equipment in any spraying area nor within 20 feet of a spraying area separated by a partition capable of stopping vapor travel;

(h) Electrical wiring and equipment not subject to deposits of combustible residues but located in a spraying area shall be of explosion proof type;

(i) The quantity of flammable or combustible liquids kept in the vicinity of spraying operations shall be limited to that required for operations and shall not exceed a supply for one day or one shift;

(j) Whenever flammable or combustible liquids are transferred from one container to another, both containers shall be bonded and grounded to prevent discharge sparks of static electricity;

(k) All spraying areas shall be kept as free from the accumulation of deposits of combustible residues as practicable. Cleaning shall be conducted daily if necessary. Scrapers, spuds, or other such tools used for cleaning purposes shall be kept free of material;

(l) Residue scrapings and debris contaminated with residue shall be immediately removed from the premises

New. #8606, INTERIM, eff 4-12-06, EXPIRED: 10-09-06  
1403.70)

New. #8796, eff 1-11-07 (from Lab 1403.60); ss by #10809, eff 4-  
1403.53)

Lab 1403.57 Stairs. The employer shall ensure compliance with the following requirements:

(a) Every flight of stairs having 4 or more risers shall be equipped with standard stair railings or standards specified below:

- (1) On stairways less than 44 inches wide having one side open, at least one stair railing on the open side;
- (2) On stairways less than 44 inches wide having both sides open, one stair railing on each side; and
- (3) On stairways more than 44 inches wide but less than 88 inches wide, one handrail on each end and one stair railing on each open side.

(b) A stair railing shall be not more than 34 inches nor less than 30 inches from the upper surface of the surface of tread in line with the face of riser at the forward edge of tread;

(c) Riser height and tread width shall be uniform throughout any flight of stairs;

(d) Hollow pan-type metal stairs shall be filled to the level of the nosing with solid material;

(e) Fixed stairs shall be provided for access from one structure level to another where operations necessitate between levels and for access to operating platforms at any equipment which requires attention routinely during operation. Fixed stairs shall also be provided where access to a raised structure or floor is traveled daily or at each shift which might expose employees to harmful substances, or for which purposes that carrying of tools or equipment by hand is required; and

(f) Spiral stairways shall be prohibited except for special limited usage and secondary access situations practical to provide a conventional stairway.

Source. #4118 eff 8-22-86, EXPIRED: 8-22-92

New. #6684, eff 2-4-98, EXPIRED: 2-4-06

New. #8606, INTERIM, eff 4-12-06, EXPIRED: 10-09-06  
1403.71)

New. #8796, eff 1-11-07); ss by #10809, eff 4-9-15

Lab 1403.58 Storage. The employer shall ensure compliance with the following requirements:

(a) All stored materials stacked in tiers shall be stacked, blocked, interlocked, and limited in height so that they will not slide, tip, or collapse;

(b) Storage areas shall be kept free from accumulation of materials that constitute hazards from tripping, fire, or pest harborage. Vegetation control shall be exercised when necessary; and

(c) Where mechanical handling equipment is used, aisles that are not clearly defined shall be marked with paint or tape, sufficient safe clearance shall be allowed for aisles, at loading docks, through doorways, and whenever turns are made.

Source. #4118 eff 8-22-86, EXPIRED: 8-22-92

New. #6684, eff 2-4-98, EXPIRED: 2-4-06

New. #8606, INTERIM, eff 4-12-06, EXPIRED: 10-09-06  
1403.73)

(b) Whenever there is a danger of toxic substances being splashed, the employees shall wear either tight-fitting goggles or an effective face shield;

(c) Near each tank containing liquid which might be harmful to the skin if splashed upon the worker's body shall be a supply of clean cold water. The water pipe shall be provided with a quick opening valve and at least 48 inch diameter smaller than three-fourths inch. At no time shall water pressure for eyewashes exceed 25 p.s.i. Alternatively, deluge eye flushes shall be provided; and

(d) All employees working in and around open-surface tank operations shall be trained by the employer as to the hazards of their respective jobs, and in the personal protection and first aid procedures applicable to these hazards.

Source. #4118 eff 8-22-86, EXPIRED: 8-22-92

New. #6684, eff 2-4-98, EXPIRED: 2-4-06

New. #8606, INTERIM, eff 4-12-06, EXPIRED: 10-09-06 (1403.74)

New. #8796, eff 1-11-07 (from Lab 1403.62); ss by #10809, eff 4-1-09 (1403.55)

Lab 1403.60 Tire Cages. The employer shall ensure that a safety tire rack, cage, or equivalent protection shall be used when inflating, mounting, or dismounting tires installed on split rims, or rims equipped with locking rim devices.

Source. #4118 eff 8-22-86, EXPIRED: 8-22-92

New. #6684, eff 2-4-98, EXPIRED: 2-4-06

New. #8606, INTERIM, eff 4-12-06, EXPIRED: 10-09-06 (1403.75)

New. #8796, eff 1-11-07 (from Lab 1403.63); ss by #10809, eff 4-1-09 (1403.56)

#### Lab 1403.61 Toxic Substance

(a) The employer shall remove hazards from the workplace, and establish policies and work practices aimed at providing a safe work environment to protect workers from exposure to hazardous and toxic substances such as radioactive materials and other hazardous substances which are defined as a toxic substance under RSA 277-A:3 V.

(b) When engineering and administrative controls are not feasible to achieve acceptable levels, protective equipment shall be used to keep the exposure of employees below the established limits.

Source. #4118 eff 8-22-86, EXPIRED: 8-22-92

New. #6684, eff 2-4-98, EXPIRED: 2-4-06

New. #8606, INTERIM, eff 4-12-06, EXPIRES: 10-09-06 (1403.77)

New. #8796, eff 1-11-07 (from Lab 1403.64); ss by #10809, eff 4-1-09 (1403.57)

#### Lab 1403.62 Traffic Control.

(a) The employer shall ensure that an effective means for control of pedestrian and vehicular traffic be installed at each job site where necessary.

(b) Under the authority of RSA 277:16 and in reference to traffic control devices on job sites, the employer shall ensure that all traffic control devices are properly installed and maintained.



New. #8606, INTERIM, eff 4-12-06, EXPIRES: 10-09-06 1403.78)

New. #8796, eff 1-11-07 (from Lab 1403.65); ss by #10809, eff 4-12-06 1403.58)

Lab 1403.63 Trash. The employer shall ensure that all sweepings, solid or liquid wastes, refuse, and garbage shall be removed in such a manner as to avoid creating a menace to health and as often as necessary to maintain good sanitation.

Source. #4118 eff 8-22-86, EXPIRED: 8-22-92

New. #6684, eff 2-4-98, EXPIRED: 2-4-06

New. #8606, INTERIM, eff 4-12-06, EXPIRED: 10-09-06 1403.79)

New. #8796, eff 1-11-07 (formerly Lab 1403.66); ss by #10809, eff 4-12-06 1403.59)

Lab 1403.64 Tree Care Operations. The employer shall ensure compliance with the following requirements:

(a) Head protection shall be worn by workers engaged in tree operations. The head protection worn shall have the manufacturer's certification that it complies with ANSI Z89.1-1981 with revisions. When working in proximity to energized power lines, the head protection worn shall contain the manufacturer's certification that it is a Class B hard hat which complies with ANSI Z89.1-1981 with revisions;

(b) Safety belts, tree-trimming saddle belts, or a saddle formed by a double bowline on a bight shall be worn by workers above ground level;

(c) Saddle belts or safety belts used for climbing operations shall have forged support rings. Snaps used in or in safety straps, for attachment to the forged support ring, shall be of self-closing safety type. Forged support rings shall be designed so that the snaps will not become disengaged, or roll off accidentally;

(d) Climbing ropes shall be used when working aloft in trees. Manila ropes shall have minimum diameter of 1/2 inch and shall be 3 or 4 strand first-grade manila, with a rated breaking strength of 2385 pounds or equivalent durability. Synthetic rope shall have a maximum elasticity of not more than 7 percent;

(e) Climbing ropes shall not be used to lower limbs or other parts of trees, or to raise or lower equipment;

(f) The employer shall provide, and the employee shall use, chaps specifically designed to protect a moving chain saws are used;

(g) All employees shall be instructed in the hazards associated with working in close proximity to overhead power lines;

(h) It shall be the responsibility of a competent person, as defined by Lab 1402.01, to determine whether tree operations can be safely performed near energized power lines;

(i) Rescue procedures for employees working above ground shall be established by the employer, and employees shall be trained accordingly;

(j) Brush chipper access panels for maintenance and adjustment shall be closed and secured prior to operation of the chipper;

(k) Each rotary drum tree or brush chipper or disk-type tree or brush chipper not equipped with a mechanical in-feed system shall be equipped with an in-feed hopper not less than 85 inches 2.15 m, measured from the blades or knives to the level over the centerline of the hopper, and shall have sufficient height on its side members so as to prevent the side members from contacting the blades or knives of the machine during normal operations;

(l) Each disk-type tree or brush chipper equipped with a mechanical in-feed system shall have a quick stop device on the in-feed. The activating lever for the quick stop and reversing device shall be located across the top, and shall be readily accessible to the operator.

- (o) The power unit shall be equipped with a quick shutoff switch readily accessible to the operator;
- (p) When chainsaws are operated the manufacturer's operating and safety instructions shall be followed;
- (q) Chain saw used by employees shall be equipped with a properly adjusted inertia chain brake designed to stop rotation in the event of a saw kickback;
- (r) Chain saws weighing more than 15 pounds 6.8 kg that are used in trees shall be supported by a separate device when used from an aerial-lift device;
- (s) The engine shall be stopped when power saws are being carried. The saw shall not need to be stopped during consecutive felling, bucking, or climbing or cutting operations on level ground. The chain shall not be in the operator's hand shall be off the throttle lever while operators move between work locations. One-man saws shall be carried by the worker on his/her side with the guide bar of the saw pointed to the rear. A two-man saw shall be carried by 2 workers.
- (t) The engine shall be stopped for all cleaning, refueling, adjustments, and repairs to the saw or motor or engine except where manufacturer's procedures require otherwise.

Source. #4118 eff 8-22-86, EXPIRED: 8-22-92

New. #6684, eff 2-4-98, EXPIRED: 2-4-06

New. #8606, INTERIM, eff 4-12-06, EXPIRED: 10-09-06  
1403.80)

New. #8796, eff 1-11-07 (formerly Lab 1403.67); ss by #10809, eff 1-11-07  
Lab 1403.60)

Lab 1403.65 Wall Openings. The employer shall ensure that wall openings, from which there is a drop of more than 3 feet and the bottom of the opening is less than 3 feet above the working surface, be guarded.

Source. #4118 eff 8-22-86, EXPIRED: 8-22-92

New. #6684, eff 2-4-98, EXPIRED: 2-4-06

New. #8606, INTERIM, eff 4-12-06, EXPIRED: 10-09-06  
1403.81)

New. #8796, eff 1-11-07 (formerly Lab 1403.68); ss by #10809, eff 1-11-07  
Lab 1403.61)

Lab 1403.66 Washing Facilities. The employer shall ensure compliance with the following requirements:

- (a) Washing facilities shall be maintained in a sanitary condition and be provided in every place of employment where mobile crews or normally unattended work locations where employees have ready access to nearby sanitary facilities.
- (b) A cleaning agent and either individual hand towels, sections of cloth or paper, warm air blowers, or continuous sections of continuous cloth toweling shall be provided at washing facilities.

Source. #4118 eff 8-22-86, EXPIRED: 8-22-92

New. #6684, eff 2-4-98, EXPIRED: 2-4-06

New. #8606, INTERIM, eff 4-12-06, EXPIRED: 10-09-06  
1403.82)

New. #8796, eff 1-11-07 (formerly Lab 1403.69); ss by #10809, eff 1-11-07  
Lab 1403.62)

Lab 1403.67 Welding and Cutting. The employer shall ensure compliance with the following requirements:

- (a) Welding equipment shall be chosen for safe application to the work and shall be installed properly.

(d) When welding in a fixed location the welder shall be enclosed with a booth, or non-combustible screen with a finish of low reflectivity with respect to visible and ultraviolet radiation;

(e) Proper precautions for fire protection such as isolating welding and cutting, removing fire hazards from the area, and providing a fire watch shall be taken in areas where welding or cutting is being done;

(f) When welding operations requiring fluxes, coverings, coatings, or alloys, or involving fluorine compounds, beryllium, cadmium or mercury produce specific health hazards, a competent person shall evaluate potential exposures and necessary protective measures, such as ventilation and personal protective equipment, are used;

(g) Welding and cutting operations shall be shielded by noncombustible or flameproof shields to protect employees from direct arc rays;

(h) Arc welding and cutting operations shall be shielded by non-combustible or flameproof shields to protect employees from direct arc rays;

(i) When electrode holders are left unattended, the electrodes shall be removed and the holder shall be placed so that they cannot make electrical contact with employees or conducting objects;

(j) All arc welding and cutting cables shall be completely insulated and be capable of handling the maximum current requirements for the job. There shall be no repairs or splices within 10 feet of the electrode holder, except where the insulation is equal to the insulation of the cable. Defective cable shall be repaired or replaced;

(k) Fuel gas and oxygen hose shall be easily distinguishable and shall not be interchangeable. Hoses shall be inspected at the beginning of each shift and shall be repaired or replaced if defective; and

(l) Oxygen and fuel gas regulators shall be in proper working order when in use.

Source. #10809, eff 4-9-15 (from Lab 1403.63)

Lab 1403.68 Welding in Confined Spaces. The employer shall ensure compliance with the following requirements:

(a) In addition to the requirements in Lab 1403.14, all welding and cutting operations carried on in confined spaces shall be ventilated to prevent the accumulation of toxic substances or possible oxygen deficiency;

(b) In such operations where it is impossible to provide such ventilation, air supplied respirators or hose masks shall be used and labeled to indicate they are approved by Mine Safety and Health Administration MSHA for this purpose, shall be used;

(c) In areas immediately hazardous to life, hose masks with blowers or self-contained breathing equipment shall be used. The breathing equipment shall be labeled to indicate it is approved by MSHA;

(d) Where welding operations are carried on in confined spaces and where welders and helpers are provided with masks, hose masks with blowers or self-contained breathing equipment, a worker shall be stationed outside the confined spaces to ensure the safety of those working within; and

(e) Oxygen shall never be used for ventilation.

Source. #10809, eff 4-9-15 (from Lab 1403.64)

Lab 1403.69 Wire Ropes, Chains, and Rigging Equipment. The employer shall ensure compliance with the following requirements:

(a) Wire ropes, chains, ropes, and other rigging equipment shall be inspected prior to use and as necessary to assure their safety. Defective gear shall be removed from service;

(b) Job or shop hooks and links, or makeshift fasteners, formed from bolts and rods, or other such attachments shall not be used;

(c) When U-bolts are used for eye splices, the U-bolt shall be applied so that the "U" section is in contact with the end of the rope; and

Rope Diameter Inches	Forged	Material	Spacing (inches)
1/2	3	4	3
5/8	3	4	3-3/4
3/4	4	5	4-1/2
7/8	4	5	4-1/2
1	5	6	6
1-1/8	6	6	6
1-1/4	6	7	7-1/2
1-3/8	7	7	8-1/4
1-1/2	7	8	9

Source. #10809, eff 4-9-15 (from Lab 1403.65)

Lab 1403.70 Woodworking Machinery. The employer shall ensure compliance with the following requirem

(a) All woodworking machinery such as table saws, swing saws, radial saws, band saws, jointers, tenon boring and mortising machines, shapers, planers, lathes sanders, and veneer cutters; shall be effectively guarded operator and other employees from hazards inherent to their operation;

(b) A power control device shall be provided on each machine to make it possible for the operator to cut o the machine without leaving his or her position at the point of operation;

(c) Power controls and operating controls shall be located within easy reach of the operator while he or she regular work location, making it unnecessary to reach over the cutter to make adjustments. This shall not app pressure controls used only for setup purposes;

(d) Each operating treadle shall be protected against unexpected or accidental tripping;

(e) Disconnect switches shall be capable of being locked or tagged in the off position; and

(f) On applications where injury to the operator might result if motors were to restart after a power failure, be made to prevent machines from automatically restarting upon restoration of power.

Source. #10809, eff 4-9-15 (from Lab 1403.66)

## APPENDIX A

Rule	Statute
Lab 1401.01 & 1401.02	RSA 281-A:64, RSA 273:9, RSA 277:13, RSA 277:15
Lab 1401.03 - Lab 1403.35	RSA 281-A:64
Lab 1402.01 & 1402.03	RSA 281-A:64, RSA 273:9, RSA 277:11, RSA 277:13, RSA 277:15
Lab 1402.04	RSA 281-A:64, RSA 273:9, RSA 277:11, RSA 277:13, RSA 277:15
Lab 1402.05	RSA 277:1-b, V
Lab 1403.04	RSA 277:15-a, RSA 277:15-b
Lab 1403.05 – 1403.29	RSA 281-A:64, RSA 273:9, RSA 277:11, RSA 277:13, RSA 277:15
Lab 1403.30	RSA 281-A:64, RSA 273:9, RSA 277:10, RSA 277:11, RSA 277:13, RSA 277:15
Lab 1403.31 - 1403.54	RSA 281-A: 64, RSA 273:9, RSA 277:11, RSA 277:13, RSA 277:15
Lab 1403.55	RSA 281-A: 64, RSA 273:9, RSA 277: 2, RSA 277:3, RSA 277: 4, RSA 277:11, RSA 277:13, RSA 277:15
Lab 1403.56 - 1403.65	RSA 281-A:64, RSA 273:9, RSA 277:10, RSA277:11, RSA 277:13, RSA 277:15

<b>Rule</b>	<b>Title</b>	<b>Obtain at:</b>
Lab 1403.62(b)	Part 6 of the 2009 Edition of the Federal Highway Administration Manual on Uniform Traffic Control Devices (MUTCD) with Revisions 1 and 2, May 2012 approved under Rules 23CFR PART 630, Subpart F, 630.1106 (c), effective January 15, 2010	<p>The material can be obtained at no cost on the US Department of Transportation Federal Highway Administration's web site: <a href="http://mutcd.fhwa.dot.gov/pdfs/2009/part6.pdf">http://mutcd.fhwa.dot.gov/pdfs/2009/part6.pdf</a> and Links to copy publications can be found on their web site at <a href="http://mutcd.fhwa.dot.gov/ser-pubs.htm">http://mutcd.fhwa.dot.gov/ser-pubs.htm</a>.</p> <p>Costs for hard a copy of publication: AASHTO Bookstore - \$60.00 for non-members; American Traffic Safety Services Assoc. - \$29.70 for non-members (\$22.50 for Flash Drive); Institute of Transportation Engineers - \$50.00; IMSA \$100.00</p>