

DEPARTMENT OF CONSUMER AND INDUSTRY SERVICES LICENSING AND REGULATORY AFFAIRS

BUREAU OF SAFETY AND REGULATION DIRECTOR'S OFFICE

GENERAL INDUSTRY SAFETY STANDARDS COMMISSION

FILED WITH THE SECRETARY OF STATE ON SEPTEMBER 16, 2014

These rules become effective immediately upon filing with the Secretary of State unless adopted under sections 33, 44, or 45a(6) of 1969 PA 306. Rules adopted under these sections become effective 7 days after filing with the Secretary of State.

(By authority conferred on the **director of the department of licensing and regulatory affairs general industry safety standards commission** by sections 16 and 21 of ~~1974 Act No. PA 154, of the Public Acts of 1974, as amended, being SS~~ **MCL 408.1016 and 408.1021, of the Michigan Compiled Laws) and Executive Reorganization Order Nos. 1996-2, 2003-18 2003-1, 2008-4, and 2011-4, MCL 408.1016, 408.1021, 445.2001, 445.2011, 445.2025, and 445.2030)**

R 408.15202, R 408.15205, R 408.15211, R 408.15221, R 408.15223, R 408.15229, R 408.15231, R 408.15243, R 408.15244, R 408.15251, R 408.15252, R 408.15254, and R 408.15273, of the Michigan Administrative Code are amended, and R 408.152009, R 408.152012a, R 408.15256, R 408.15280, R 408.15282, and R 408.15284 are added, and Occupational Health Rules 3406, 3505 and 5005 are rescinded, as follows:

PART 52 SAWMILLS

GENERAL PROVISIONS

R 408.15202 Definitions; B.

Rule 5202. (1) "Binder" means a chain, cable, or rope used to bind loads.

(2) "Bolt" means a log which is cut to a length of 8 feet or less and which is ready for sawing into boards.

(3) "Bolt saw" means a saw that is used to cut bolts into cants or boards.

(4) "Boom" means logs or timbers fastened together end-to-end and used to contain floating logs. The term includes enclosed logs.

(5) ~~(4)~~ "Boom sticks" means logs or timbers used in making up a boom.

(6) ~~(5)~~ "Brow log" means a log placed parallel to a roadway at a landing or dump to protect vehicles while loading or unloading.

(7) ~~(6)~~ "Bunk" or "dunnage" means a cross support for a load.

R 408.15205 Definitions; H.

Rule 5205. (1) "Head block" means a part of a carriage ~~which~~ **that** holds a log and upon which the log rests. **It generally consists of base, knee, taper set, and mechanism.**

(2) "Head rig" means a combination of a headsaw and carriage used for the initial breakdown of a log into timbers, cants, and boards.

(3) "Headsaw" means a saw, either circular or band type, used for the initial breakdown of a log into timbers, cants, and boards.

(4) "Hog" means a machine used for cutting, chipping, or grinding slabs, bark, and other coarse residue.

(5) "Husk" means the framework of a circular headsaw.

(6) "Head sawyer" means an operator of a headsaw.

(7) "Kiln tender" means the operator of a kiln.

R 408.15209 Adoption of standards by reference; access to other MIOSHA rules.

Rule 5209. (1) The following standards are adopted by reference in these rules and are available from Global Engineering Documents, 15 Inverness Way East, Englewood, Colorado, USA, 80112, telephone number: 1-800-854-7179 or via the internet at web-site: <http://global.ih.com>; at a cost, as of the time of adoption of these rules, as stated in these rules:

(a) American National Standard Institute (ANSI) Standard ANSI A11.1 "Industrial Lighting," 1965 edition. Cost \$153.00.

(b) ANSI Z21.30 "Installation of Gas Appliances and Gas Piping," 1964 edition. Cost: \$90.00.

(2) The following standards are adopted by reference in these rules and are available from the National Fire Protection Association (NFPA), 1 Batterymarch Park, Quincy, Massachusetts, USA, 02169-7471, telephone number: 1-617-770-3000 or via the internet at website: www.nfpa.org; at a cost, as of the time of adoption of these rules, as stated in these rules:

(a) NFPA 91 "Blower and Exhaust Systems for Dust, Stock, and Vapor Removal or Conveying," 1961 edition. Cost \$27.00.

(b) NFPA 302 "Fire Protection Standard for Pleasure and Commercial Motor Craft," 1968 edition. Cost \$27.00.

(3) The standards adopted in subrules (1) and (2) of this rule, are also available for inspection at the Michigan Department of Licensing and Regulatory Affairs, MIOSHA Standards Section, 7150 Harris Drive, P.O. Box 30643, Lansing, Michigan, 48909-8143.

(4) Copies of the standards adopted in subrules (1) and (2) of this rule, may be obtained from the publisher or may also be obtained from the Michigan Department of Licensing and Regulatory Affairs, MIOSHA Standards Section, 7150 Harris Drive, P.O. Box 30643, Lansing, Michigan, 48909-8143, at the cost charged in this rule, plus \$20.00 for shipping and handling.

(5) The following Michigan Occupational Safety and Health Standards are referenced in these rules. Up to 5 copies of these standards may be obtained at no charge from the Michigan Department of Licensing and Regulatory Affairs MIOSHA Standards Section, 7150 Harris Drive, P.O. Box 30643, Lansing, Michigan, 48909-8143 or via the internet at web-site: www.michigan.gov/mioshastandards. For quantities greater than 5, the cost, as of the time of adoption of these rules, is 4 cents per page.

(a) General Industry Safety Standard Part 2 "Floor and Wall Openings, Stairways, and Skylights," R 408.10201 to R 408.10241.

(b) General Industry Safety Standard Part 7 "Guards for Power Transmission," R 408.10701 to R 408.10765.

(c) General Industry Safety Standard Part 21 "Powered Industrial Trucks," R 408.12101 to R 408.12193.

(d) General Industry Safety Standard Part 27 "Woodworking Machinery," R 408.12701 to R 408.12799

(e) General Industry Safety Standard Part 33 "Personal Protective Equipment," R 408.13301 to R 408.13398.

(f) Occupational Health Standard Part 301 "Air Contaminants for General Industry," R 325.51101 to R 325.51108.

(g) Occupational Health Standard Part 433 "Personal Protective Equipment," R 325.60001 to R 325.60013.

R 408.15211 Employer responsibilities.

Rule 5211. (1) An employer shall do all of the following:

(a) Provide training to each employee as to hazards and safe operation of the assigned job.

(b) Maintain machinery, equipment, buildings, ramps, platforms, and aisles in a hazard-free condition. When a hazardous condition develops concerning floors, docks, and passageways that cannot be immediately repaired, the area shall be guarded until adequate repairs are made.

(c) Provide head protection which shall be used by all employees outside the office, including those in the dry storage area, as prescribed in ~~rules 3370 to 3378 of General Industry Safety Standard Part 33 "Personal Protective Equipment," as referenced in R 408.15209. being R 408.13370 to R 408.13378 of the Michigan Administrative Code.~~

(d) Provide, and an employee shall use, eye protection as prescribed in General Industry Safety Standard Part 33 "Personal Protective Equipment," **as referenced in R 408.15209.** ~~Being R 408.13301 et seq. of the Michigan Administrative Code.~~ If impact resistance is not required, **the employee may wear** a steel wire or nylon mesh screen, or equivalent, mounted on a protective helmet. ~~may be worn.~~ The screen shall be of sufficient strength to protect the face to below the nose from chips or sawdust from the saw.

(e) Provide an approved life jacket to an employee working over water, at no expense to the employee.

(f) Install all gas piping and appliances as prescribed in ANSI standard Z21.30 "**Installation of Gas Appliances and Gas Piping,**" 1964 edition, ~~national fuel gas code, as referenced in R 408.15209. which is incorporated herein by reference and may be inspected at the Lansing office of the department of consumer and industry services. This standard may be purchased at a cost of \$3.00 from the American National Standards Institute, 1430 Broadway, New York, New York 10018, or from the Michigan Department of Consumer and Industry Services, State Secondary Complex, 7150 Harris Drive, Box 30643, Lansing, Michigan 48909.~~

(2) Physical hazard color identification marking shall be in accordance with the following requirements:

(a) Red shall be the basic color for the identification of any of the following:

(i) Fire protection equipment and apparatus.

(ii) Danger, such as any of the following:

(A) Safety cans or other portable containers of flammable liquids having a flash point at or below 80° F.

(B) Table containers of flammable liquids, open cup tester, excluding shipping containers, shall be painted red with some additional clearly visible identification either in the form of a yellow band around the can or the name of the contents conspicuously stenciled or painted on the can in yellow.

(C) Red lights shall be provided at barricades and at temporary obstructions.

(D) Danger signs shall be painted red.

(iii) Stop, shall apply to both of the following:

(A) Emergency stop bars on hazardous machines such as rubber mills, wire blocks, flat work ironers, and others, shall be red.

(B) Stop buttons or electrical switches where letters or other markings appear, and are used for emergency stopping of machinery shall be red.

(b) Yellow shall be the basic color for designating caution and for marking physical hazards for as any of the following:

- (i) Striking against.**
- (ii) Stumbling.**
- (iii) Falling.**
- (iv) Tripping.**
- (v) "Caught in between."**

R 408.15212a Protective equipment.

Rule 5212a. The use of chemicals shall be controlled so as to protect employees from harmful exposure to toxic materials. Where necessary, employees shall be provided with and required to wear protective equipment that will afford adequate protection against harmful exposure as required by General Industry Safety Standard Part 33 "Personal Protective Equipment," and Occupational Health Part 433 "Personal Protective Equipment," as referenced in R 408.15209.

R 408.15221 Illumination.

Rule 5221. (1) Illumination shall be provided at the operator's work station to maintain a minimum of 30 foot candle intensity, except at a debarker, head saw or trim saw. A minimum of 30 foot candle intensity shall be provided at the point of operation of a debarker, head saw or trim saw.

(2) Work areas under mills shall be as evenly surfaced as local conditions permit. Work areas under mills shall not have unnecessary obstructions and shall have lighting facilities in accordance with ANSI A11.1 "Industrial Lighting" 1965 edition, as adopted in R 408.15209

(3) Log dumps, booms, ponds, or storage areas used at night shall be illuminated in accordance with the requirements of ANSI A11.1 "Industrial Lighting" 1965 edition, as adopted in R 408.15209

(4) An employer shall ensure that illumination is provided and designed to supply adequate general and local lighting to rooms, buildings, and work areas when in use.

(5) The adequacy and effectiveness of illumination shall be determined using all of the following factors:

(a) The quantity of light in foot-candle intensity is sufficient for the work being done.

(b) The quality of the light is free from glare, and has correct direction, diffusion, and distribution.

(c) Shadows and extreme contrasts are avoided or kept to a minimum.

(6) All stairways shall be adequately lighted as prescribed in subrules (4) and (5) of this rule.

(7) Fuel houses, bunkers, hoppers, and bins shall have adequate exits and lighting, and all necessary safety devices shall be provided. Persons entering fuel houses, bunkers, hoppers, and bins shall use the safety devices.

R 408.15223 Power control.

Rule 5223. (1) A machine shall be equipped with an emergency stop device, red in color, which can be activated from the operator's work station.

(2) A machine attended by more than 1 operator shall be equipped with a control for each operator exposed to a point of operation hazard. These controls shall be interlocked to prevent operation until each operator activates his control.

(3) A machine control shall be designed and installed to prevent unintentional activation by contact with objects or part of the body.

(4) A written lockout procedure shall be established by an employer and used by an employee. A power source of any equipment to be repaired, serviced or set up shall be locked out by each employee while doing such work. Any residual pressure shall be relieved prior to and during such work.

(5) Upon power failures, provisions shall be made to prevent machines from automatically restarting upon restoration of power.

~~**(6) An electrical repair shall be made only by authorized and qualified personnel.**~~

~~**(7) An overload relay shall be reset by authorized and qualified personnel only.**~~

~~**(8) A passageway to a switch center or panel shall at all times be kept free of obstruction. Not less than 3 feet of clear space shall be maintained in front of switch centers or panels at all times.**~~

R 408.15229 Bins, bunkers, hoppers, and fuel houses.

Rule 5229. (1) An open bin, bunker, or hopper extending less than 36 inches above the working level shall be provided with a standard barrier as prescribed in rule 231 of the General Industry Safety standards commission Standard Part 2 "Floor and Wall Openings, Stairways and Skylights," as referenced in R 408.15209, being R 408.10231 of the Michigan Administrative Code, or the opening shall be covered with a grating with openings small enough to prevent an employee from falling through.

(2) Where wheeled equipment is used to move materials to a bin, bunker or hopper, a bumper stop shall be provided where the bin, bunker or hopper is at floor level. An employee shall be protected from the open side by a standard barrier installed along each side of the wheeled equipment runway.

SPECIFIC EQUIPMENT

R 408.15231 Chippers and hogs.

Rule 5231. (1) A whole log chipper or a hog shall have the feed system arranged so that an employee does not stand in direct line with the chipper hopper.

(2) A guard shall be installed over the chipping or hog throat to prevent slab and wood particles from being discharged at an operator.

(3) To prevent an employee from falling onto a chipper or hog belt-type, feed-in conveyor, the belt-type conveyor shall be guarded for the entire length of the conveyor by an enclosure or standard barrier as prescribed in ~~rule 231 of General Industry Safety Standard Part 2 "Floor and Wall Openings, Stairways, and Skylights,"~~ **as referenced in R 408.15209.** ~~being R 408.10231 of the Michigan Administrative Code.~~

(4) A safety belt and lanyard shall be used by an employee when feeding at or near the hopper of a drop feed chipper or drop feed hog. The lanyard shall be adjusted to prevent an employee from falling into the chipper or hog.

(5) A board chipper or hog shall have the feed spout enclosed not less than 40 inches from the blade to the opening or the operator shall wear a safety belt and lanyard. The lanyard shall be short enough to prevent any portion of the operator's body from touching the blade.

(6) Where jam-ups cannot be cleared with a stick, the in-feed equipment shall be stopped and locked out and the employee clearing the jam shall be provided with, and use, a safety belt and lanyard, as prescribed in General Industry Safety Standard Part 33 "Personal Protective Equipment," **as referenced in R 408.15209,** ~~being R 408.13301 et seq. of the Michigan Administrative Code,~~ which is adjusted to prevent contact with the chipper blade before additional cleaning is done.

(7) A chipper on a head rig or edger shall be enclosed to protect the employee.

R 408.15243 Double circular head saw.

Rule 5243. A double circular head saw shall comply with ~~rule R 408.15242~~ and in addition, have a movable guard or hood made of a minimum of 14 gauge sheet metal or material of ~~e~~Equivalent or greater strength over the upper blade.

R 408.15244 Self-feed circular gang saws.

Rule 5244. (1) A bank of circular gang saws and their feed rolls, if so equipped, shall be enclosed by a cover over the top, front, and open ends, except where guarded by location. A drive mechanism to feed rolls shall be enclosed. The cover shall be made of a minimum of 14 gauge sheet metal, or material of ~~e~~Equivalent or greater strength, and the bottom of the cover shall come within 3/8 inch of the plane formed by the bottom of the working surfaces of the feed rolls.

(2) A circular gang saw shall be equipped with an anti-kickback device. A circular gang saw shall be equipped with a live roll or other tailing device on the off side or shall be provided with a splitter as prescribed in ~~rule R 408.15242~~(4).

(3) The carriage cradle of a whole log sash gang saw shall be of such height as to prevent a log from kicking out while being loaded.

R 408.15251 Woodworking machines.

Rule 5251. An employer using machines and equipment more commonly found in a woodworking shop, including but not limited to, jointers, planers, mitre saws and swing cutoff saws, shall follow the General Industry Safety ~~standard~~ ~~commission~~ Standard Part 27 "Woodworking Machinery," **as referenced in R 408.15209.** ~~being R 408.12701 to R 408.12799 of the Michigan Administrative Code.~~

R 408.15252 Kilns.

Rule 5252. (1) A kiln door shall have a device to hold it open during a loading or unloading cycle. A counterweight for the kiln door shall be guarded as prescribed in ~~rule 730 of the General Industry Safety standards commission~~ Standard Part 7 "Guards and Power Transmission," **as referenced in R 408.15209.** ~~being R 408.10730 of the Michigan Administrative Code.~~ Installation of a kiln door shall be such that it will not topple if it becomes disengaged from the carriers or hangers.

(2) If procedures require access to a kiln, **then either of the following applies:**

(a) The kiln shall be provided with an escape hatch that opens from the inside, swings with the direction of travel, and is located in or near the main kiln door.

(b) A passageway shall be provided on not less than 1 side or in the center of an end piled kiln, or on 2 sides of a cross piled kiln.

(3) A steam line less than 7 feet from the floor and in or by a walkway shall be covered with an insulating material or protected by a barrier.

(4) A kiln car shall be blocked by chocks to prevent unintentional movement.

(5) A kiln shall be constructed on a foundation capable of preventing the sagging of the racks.

(6) Where a pit is provided, it shall be ventilated, drained, and lighted and large enough to give the operator safe working space **with operating devices such as valves, dampers, damper rods, and traps.**

(7) A warm room shall be provided for kiln employees to stay in during cold weather after leaving a hot kiln.

R 408.15254 Stackers and unstackers.

Rule 5254. (1) A stacker or unstacker shall be blocked whenever an employee goes beneath the hoisting platform.

(2) The lifting device on a stacker or unstacker shall be constructed or equipped with safety devices to minimize the potential of lumber falling.

(3) Guarding of a stacker hoistway openings and lower landing shall be pursuant to ~~rule 234 of the General Industry Safety standards commission~~ Standard Part 2 "Floor and Wall Openings, Stairways and Skylights," **as referenced in R 408.15209.**

(4) Where an operator has no clear view of the discharge path from a stacker, or in case of a discharge path of an automatic stacker, a barrier guard shall be provided to prevent an employee from entering the discharge path. In either case, a warning device shall be installed to alert an employee of the hazard.

R 408.15256 Cleaning pits.

Rule 5256. An employer shall provide safe means of entrance and exit to permit cleaning of pits.

R 408.15273 Log and material handling equipment.

Rule 5273. (1) Equipment used for handling logs and material shall be equipped with a braking system capable of holding the imposed load of equipment and material.

(2) A hydraulic system of log and material handling equipment shall be equipped with a valve capable of preventing uncontrolled descent of the load in case of failure of the system.

(3) Log and material handling equipment shall be equipped with a limit switch to prevent over-travel of the lift arms if the control device is not released in time.

(4) When a forklift-type handling machine is used, a means shall be used to secure a loading attachment to the forks.

(5) Where log and material handling mobile equipment lifts the load higher than the operator's head, overhead protection shall be provided not less than equivalent to that prescribed in ~~rule 2143 of the General Industry Safety standards commission~~ Standard Part 21 "Powered Industrial Trucks," **as referenced in R 408.15209.** ~~being R 408.12143 of the Michigan Administrative Code.~~

(6) Mobile log and material handling mobile equipment shall be equipped with head and rear running lights when used during periods of darkness.

(7) Unloading devices shall have their movements coordinated by audible or hand signals when the operator's vision is obstructed or when operating near another employee.

(8) Wood pike poles shall be straight-grained, select material. Defective or blunt poles shall not be used. A handle for a pike pole used near conductors shall be of an insulating type material.

(9) An ungrounded electrically powered hoist operated by a handheld remote control at grounded locations, such as a log dump or a mill log lift, shall be actuated by not more than 50 volts to ground.

(10) Where the operator is exposed to a hazard from backing a vehicle into objects, an approved platform guard shall be provided and so arranged as to not impede the exiting of the driver from the vehicle.

(11) All vehicles shall be equipped with audible warning signals and backup alarm and, where practicable, shall have spark arrestors.

(12) Carriers shall be designed and constructed so that the operator's field of vision is not unnecessarily restricted. Carriers shall be provided with an access ladder or equivalent.

(13) Railroad tracks and other hazardous crossings shall be plainly posted. ~~and appropriate traffic control devices pursuant to American national standards institute standard D8.1-1974 for railroad-highway grade crossing protection, which is herein adopted by reference shall be utilized. This standard may be inspected at the Lansing office of the Michigan Department of Consumer and Industry Services, State Secondary Complex, 7150 Harris Drive, Box 30643, Lansing, Michigan 48909, and may be purchased at a cost of \$2.50 from the American National Standards Institute, 1430 Broadway, New York, New York 10018.~~

(14) Periodic inspection of cable or dogging lines shall be made to determine when repair or removal from service is necessary.

(15) A vehicle shall not be operated with a load exceeding its safe load capacity.

R 408.15275 Rescinded. **Water log dumps.**

Rule 5275 (1) Ungrounded electrically powered hoists using handheld remote control in grounded locations, such as log dumps or mill log lifts, shall be actuated by circuits operating at less than 50 volts to ground.

(2) Roadbeds at log dumps shall be of sufficient width and evenness to ensure safe operation of equipment.

(3) An adequate brow log or skid timbers or the equivalent shall be provided where necessary. Railroad-type dumps, when located where logs are dumped directly into water or where entire loads are lifted from a vehicle, may be exempted providing such practice does not create a hazardous exposure of personnel or equipment.

(4) Unloading lines shall be arranged so that it is not necessary for the employees to attach them from the pond or dump side of the load except when entire loads are lifted from the log-transporting vehicle.

(5) Unloading lines, crotch lines, or equally effective means shall be arranged and used in a manner to minimize the possibility of any log from swinging or rolling back.

(6) When logs are unloaded with peavys or similar manual methods, means shall be provided and used that will minimize the danger from rolling or swinging logs.

(7) Guardrails, walkways, and standard handrails shall be installed as prescribed in General Industry Safety Standard Part 2 "Floor and Wall Openings, Stairways, and Skylights," as referenced in R 408.15209.

(8) An employer shall provide approved life rings with line attached and maintained to retain buoyancy.

R 408.15280 Air requirements.

Rule 5280. (1) Ventilation shall be provided to supply adequate fresh healthful air to rooms, buildings, and work areas.

(2) Employees shall not be exposed to airborne concentration of toxic dusts, fumes, vapors, mists, or gases that exceed the threshold limit values in Occupational Health Standard Part 301 "Air Contaminants for General Industry," as referenced in R 408.15209.

R 408.15282 Blower, collecting, and exhaust systems.

Rule 5282. (1) Blower, collecting, and exhaust systems shall be designed, constructed, and maintained in accordance with NFPA 91 "Blower and Exhaust Systems for Dust, Stock, and Vapor Removal or Conveying," 1961 edition, as adopted in R 408.15209.

(2) All mills containing 1 or more machines that create dust, shavings, chips, or slivers during a period of time equal to or greater than 1/4 of the working day, shall be equipped with a collecting system. The collection system may be either continuous or automatic, and shall be of sufficient strength and capacity to enable it to remove such refuse from points of operation and immediate vicinities of machines and work areas.

(3) Each woodworking machine that creates dust, shavings, chips, or slivers shall be equipped with an exhaust or conveyor system located and adjusted to remove the maximum amount of refuse from the point of operation and immediate vicinity.

(4) Exhaust pipes shall not discharge into an unconfined outside pile if uncontrolled fire or explosion hazards are created. The exhaust pipes may empty into settling or dust chambers designed to prevent the dust or refuse from entering any work area. The chambers shall be constructed and operated to minimize the danger of fire or dust explosion.

R 408.15284 Pond boats and rafts.

Rule 5284. (1) Pond boats and rafts shall comply with the provisions of NFPA 302 "Fire Protection Standard for Pleasure and Commercial Motor Craft," 1968 edition, as adopted in R 408.15209.

(2) Decks of pond boats shall be covered with nonslip material.

(3) Powered pond boats or rafts shall be provided with at least 1 approved fire extinguisher, and 1 life ring with line attached.

(4) Boat fuel shall be transported and stored in approved safety containers such as Underwriters' Laboratories, Inc..

(5) An employer shall provide inspection, maintenance, and ventilation of the bilge area to prevent accumulation of highly combustible materials.

(6) An employer shall provide adequate ventilation for the cabin area on enclosed cabin-type boats to prevent accumulation of harmful gases or vapors.

Rule 3406 ~~Rescinded~~. ~~Ventilation controls in: Sawmills~~

~~(1) Applicability. This rule applies to all sawmill operations subject to Rule 5005.~~

~~(2) Building facilities, and isolated equipment.~~

~~(a) Air requirements. Ventilation shall be provided to supply adequate fresh healthful air to rooms, buildings, and work areas. [1910.265(c)(7)]~~

~~(b) Storage, handling, and use of chemicals.~~

~~(i) Threshold limits. Employees shall not be exposed to airborne concentrations of toxic dusts, fumes, vapors, mists or gases that exceed the threshold limit values set forth by Chapter II. [1910.265(c)(17)(i)]~~

~~(ii) Protective equipment. The use of chemicals shall be controlled so as to protect employees from harmful exposure to toxic materials. Where necessary, employees shall be provided with and required to wear such protective equipment as will afford adequate protection against harmful exposure as required by Part V of this Chapter.~~

~~(iii) Open-surface tank operations. Open-surface tank operations shall conform to the requirements of Rule 3220. [1910.265(c)(17)(iii)]~~

~~(c) Blower, collecting, and exhaust systems.~~

~~(i) Design, construction, and maintenance.~~

~~Blower, collecting, and exhausting systems should be designed, constructed, and maintained in accordance with American National Standards Z33.1-1961 (For the Installation of Blower and Exhaust Systems for Dust, Stock, and Vapor Removal or Conveying) and Z12.2-1962 (R1969) (Code for the Prevention of Dust Explosion in Woodworking and Wood Flour Manufacturing Plants). [1910.265(c)((20)(i)]~~

(ii) Collecting systems. All mills containing one or more machines that create dust, shavings, chips or slivers during a period of time equal to or greater than one-fourth of the working day, shall be equipped with a collecting system. It may be either continuous or automatic, and shall be of sufficient strength and capacity to enable it to remove such refuse from points of operation and immediate vicinities of machines and work areas. [1910.265(c)(20)(ii)]

(iii) Exhaust or conveyor systems. Each woodworking machine that creates dust, shavings, chips, or slivers shall be equipped with an exhaust or conveyor system located and adjusted to remove the maximum amount of refuse from the point of operation and immediate vicinity. [1910.265(c)(20)(iii)]

(iv) Exhaust pipes. Exhaust pipes shall be of such construction and internal dimensions as to minimize the possibility of clogging. They should be accessible for cleaning. [1910.265(c)(20)(iv)]

(v) Dust chambers. Exhaust pipes shall not discharge into an unconfined outside pile if uncontrolled fire or explosion hazards are created. They may empty into settling or dust chambers, designed to prevent the dust or refuse from entering any work area. Such chambers shall be constructed and operated to minimize the danger of fire or dust explosion. [1910.265(c)(20)(v)]

(3) Log handling, sorting, and storage.
Log unloading and storage areas.

Pond boats and rafts. Adequate ventilation shall be provided for the cabin area on enclosed cabin type boats to prevent accumulation of harmful gases or vapors. [1910.265(d)(2)(iv)]

(4) Dry kilns and facilities.

(a) Pits. Pits shall be well ventilated, drained, and lighted, and shall be large enough to safely accommodate the kiln operator together with operating devices such as valves, dampers, damper rods, and traps. [1910.265(f)(4)]

(b) Kiln tender room. A warm room shall be provided for kiln employees to stay in during cold weather after leaving a hot kiln. [1910.265(f)(8)]

Rule 3505 Rescinded. Personal Protective Equipment in Sawmills

(1) Application. This rule applies to those sawmill operations subject to Rule 5005.

(2) The requirements for personal protective equipment specified in Rules 3501 and 3502 shall be complied with. [1910.265(g)]

Rule 5005 Rescinded. General requirements in: Sawmills

(1) General requirements.

(a) Application.

This rule includes safety requirements for sawmill operations including, but not limited to, log and lumber handling, sawing, trimming, and planing; waste disposal; operation of dry kilns; finishing; shipping; storage; yard and yard equipment; and for power tools and affiliated equipment used in connection with such operations, but excluding the manufacture of plywood, cooperage, and veneer. [1910.265(a)(1)]

(b) Incorporation of standards by reference. Certain of the subsections of this rule incorporate and apply occupational safety and health standards of general application without regard to any specific industry. Such standards shall apply to sawmill operations in accordance with the rules of construction set forth in Rule 1106(3). [1910.265(a)(2)]

(c) Definitions.

(i) Boom. The term "boom" means logs or timbers fastened together end to end and used to contain floating logs. The term includes enclosed logs. [1910.265(b)(4)]

(ii) Kiln tender.

The term "kiln tender" means the operator of a kiln. [1910.265(b)(21)]

(2) Lighting. For standards supplementing the general standards for illumination -- see Rule 4106(4).

(3) Ventilation and contaminant control. For ventilation and control standards supplementing the general standards -- see Rule 3406.

(4) Powered industrial trucks. For standards supplementing the general standards for powered industrial trucks -- see Rule 3225(3)(b)

(5) Mechanical equipment -- dry kilns and facilities.

(a) Mechanical equipment. All belts, pulleys, blowers, and other exposed moving equipment used in or about kilns shall be guarded in accordance with the requirements of the MIOSHA occupational safety standards for general industry applicable to sawmills. [1910.265(f)(9)].

(b) Illumination requirements for unguarded mechanical equipment are at Rule 4106(4). [1910.265(f)(9)]

(6) Building facilities and isolated equipment.

Mechanical stackers and unstackers

Cleaning pits. Safe means of entrance and exit shall be provided to permit cleaning of pits. [1910.265(c)(26)(x)] (See Rule 3301 -- Control Methods for Process Spaces Containing a Known or Suspected Non-Respirable Atmosphere.)

(7) Personal protective equipment -- see Rule 3505.

(8) Sanitation -- see Rule 4201.