

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 August 5, 2014

These rules become effective immediately upon filing with the Secretary of State unless adopted under section 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 408.15112, R 408.15117, R 408.15118, R 408.15119, R 408.15122, R 408.15123, R 408.15125, R 408.15127, R 408.15131, R 408.15136, R 408.15144, R 408.15146, R 408.15149, and R 408.15167 of the Michigan Administrative Code are amended, and R 408.15102 is added, and Occupational Health Rules 3506 and 5006 are rescinded, as follows:

PART 51 LOGGING

R 408.15102 Adopted and referenced standards.

Rule 5102. (1) The following standards are adopted by reference in these rules and are available from IHS Global, 15 Inverness Way East, Englewood, Colorado, 80112, USA, telephone number: 1-800-854-7179 or via the internet at website: <http://global.ihs.com>; at a cost as of the time of adoption of these rules, as stated in this subrule.

(a) American National Standard Institute (ANSI) Standard, ANSI B175.1 "Gasoline-Powered Chain Saws Safety Requirements," 1991 edition. Cost: \$57.00.

(b) American Society of Mechanical Engineers (ASME) Standard, ASME B56.6 "Safety Standard for Rough Terrain Forklift Trucks," 1992 edition with addenda. Cost: \$120.00.

(c) Society of Automotive Engineers (SAE) Standard, SAE J185 "Access Systems for Off-Road Machines," June 1988 edition. Cost: \$98.00.

(d) SAE J231 "Minimum Performance Criteria for Falling Object Protective Structures (FOPS)," January 1981 edition. Cost: \$98.00.

(e) SAE J386 "Operator Restraint Systems for Off-Road Work Machines," June 1985 edition. Cost: \$98.00.

(f) SAE J397 "Deflection Limiting Volume-Protective Structures Laboratory Evaluation," April 1988 edition. Cost: \$98.00.

(g) SAE J1040 "Performance Criteria for Rollover Protective Structures (ROPS) for Construction, Earthmoving, Forestry, and Mining Machines," April 1988 edition. Cost: \$98.00.

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

(3) Copies of the standards adopted in subrule (1) of this rule may be obtained from the publisher or may also be obtained from the 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.

(4) 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, MI, 48909-8143 or via the internet at website: www.michigan.gov/mioshastandards. For quantities greater than 5, the cost, at the time of adoption of these rules, is 4 cents per page.

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

(b) General Industry Safety Standard Part 8 "Portable Fire Extinguishers," R 408.10801 to R 408.10839.

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

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

(e) General Industry Safety Standard Part 52 "Sawmills," R 408.15201 to R 408.15277.

(f) General Industry Safety Standard Part 55 "Explosives and Blasting Agents," R 408.15501.

(g) General Industry Safety Standard Part 58 "Aerial Work Platforms," R 408.15801 to R 408.15842.

R 408.15112 New jobs; employer's duties.

Rule 5112. Before an employee ~~starts is put to~~ work on a new job, an employer shall do all of the following:

- (a) Familiarize the employee with the type of work to be performed in the job.
- (b) Instruct the employee in the safeguards and hazards of the assigned job.
- (c) Instruct the employee in the operation, adjustment, maintenance, and safe practices of equipment.
- (d) Issue an operator's permit card of the type prescribed in ~~rule 2154 of General Industry Safety Standard Part 21~~ "Powered Industrial Trucks," **as referenced in R 408.15102, being R 408.12154 of the Michigan Administrative Code,** if off-road mobile equipment is to be operated.

R 408.15117 Employee protection in certain weather conditions; stoppage of falling operation; employee spacing and duty organization; work area safety; contact with other employees.

Rule 5117. (1) All work shall stop and employees shall be moved to a place of safety ~~during an~~ **when environmental conditions, such as, but not limited to,** electrical storms, ~~or period of high~~ **strong winds which may affect the fall of a tree, heavy rain or snow, extreme cold, dense fog, fires, mudslides, or darkness,** or other hazardous weather conditions that would be dangerous to the employees **occur**.

(2) A falling operation shall stop if a wind prevents a tree from falling in the desired direction or if the faller's vision is impaired by a weather condition or darkness.

(3) Employees shall be spaced, and the duties of each employee shall be organized, so that the actions of one employee will not create a hazard for any other employee.

(4) Work area shall be assigned so that trees cannot fall into an adjacent occupied work area. The distance between adjacent occupied work areas shall be not less than 2 tree lengths of the trees being felled. The distance between adjacent occupied work areas shall reflect the degree of slope, the density of the growth, the height of the trees, the soil structure, and other hazards reasonably anticipated at the worksite. A distance of more than 2 tree lengths shall be maintained between adjacent occupied work areas on any slope where the rolling or sliding of trees or logs is reasonably foreseeable.

(5) Each employee shall work in a position or location that is within visual or audible contact of another employee.

(6) Hand signals or audible contact, such as, but not limited to, whistles, horns, or radios, shall be utilized whenever noise, distance, restricted visibility, or other factors prevent clear understanding of normal voice communications between employees.

R 408.15118 Fire prevention.

Rule 5118. (1) Smoking or an open flame is prohibited within 10 feet of an engine being refueled.

(2) Refueling shall not be done in an area where conditions are conducive to fire.

(3) An approved fire extinguisher, as prescribed in the General Industry Safety ~~standards commission~~ Standard Part 8 "Portable Fire Extinguishers," **as referenced in R 408.15102, being R 408.10801 et seq. of the Michigan Administrative Code,** shall be provided and maintained **on each machine where mobile equipment is operated** and on each vehicle.

(4) Gasoline or other flammable liquid shall be stored in an approved container that is located not less than 25 feet from a source of ignition.

(5) Machinery shall be kept free of accumulations of flammable material.

(6) Flammable liquids shall not be transported on a personnel carrier unless a storage box is provided. Flammable and combustible liquids shall not be transported in the driver compartment or any passenger-occupied area of a machine or vehicle.

(7) Flammable liquids shall not be used to start a fire or as a cleaning solvent.

(8) The engine ~~of or~~ a powered machine shall be shut off while being refueled and serviced.

R 408.15119 Training.

Rule 5119. (1) An employer shall provide training for each employee, including supervisors, at no cost to the employee.

(2) The training shall be provided as follows:

(a) As soon as possible after **July 2, 1996, the effective date of these amendatory rules** for initial training for each current and new employee.

(b) Before initial assignment for each new employee.

(c) When an employee is assigned new work tasks, tools, equipment, machines, or vehicles.

(d) When an employee demonstrates unsafe job performance.

(3) At a minimum, training shall consist of all of the following elements:

(a) The safe performance of assigned work tasks.

(b) The safe use, operation, and maintenance of tools, machines, and vehicles that the employee uses or operates, including an emphasis on understanding and following the manufacturer's operating and maintenance instructions, warnings, and precautions.

(c) The recognition of safety and health hazards associated with the employee's specific work tasks, including the use of measures and work practices to prevent or control the hazards.

(d) The recognition, prevention, and control of other safety and health hazards in the logging industry.

(e) The procedures, practices, and requirements of the employer's worksite.

(f) The requirements of these rules.

(4) The training of an employee due to unsafe job performance or before the assignment of new work tasks, tools, equipment, machines, or vehicles may be limited to the elements in subrule (3) of this rule that are relevant to the circumstances giving rise to the need for training.

(5) Each current employee who has received training in the particular elements specified in subrule (3) of this rule shall not be required to be retrained in those elements.

(6) Each new employee who has received training in the particular elements specified in subrule (3) of this rule shall not be required to be retrained in those elements before initial assignment.

(7) An employer shall train each current and new employee in the elements for which the employee has not received training.

(8) Each new employee and each employee who is required to be trained shall work under the close supervision of a designated person until the employee demonstrates to the employer the ability to safely perform his or her new duties independently.

(9) An employer shall verify training by preparing a written certification record that contains all of the following information:

(a) The name or other identity of the employee trained.

(b) The date or dates of the training.

(c) The signature of the person who conducted the training or the signature of the employer.

If an employer relies on training conducted before the employee's hiring or completed before the effective date of this rule, then the certification record shall indicate the date on which the employer determined the previous training was adequate.

(10) ~~The employer shall maintain the most recent training certification for an employee. shall be maintained.~~

(11) An employer shall hold safety and health meetings as necessary, but at least once each month for each employee. Safety and health meetings may be conducted individually, in crew meetings, in larger groups, or as part of other staff meetings.

R 408.15122 Protective helmets.

Rule 5122. An employer shall provide, at no cost to the employee, and assure that each employee ~~shall wear~~, a protective helmet on the jobsite as prescribed in General Industry Safety Standard Part 33 "Personal Protective Equipment," **as referenced in R 408.15102.** ~~being R 408.13301 et seq. of the Michigan Administrative Code.~~

R 408.15123 Eye and face protection.

Rule 5123. (1) An employer shall provide, at no cost to the employee, and assure that each employee ~~shall wear~~, eye protection as prescribed in General Industry Safety Standard Part 33 "Personal Protective Equipment," **as referenced in R 408.15102.** ~~being R 408.13301 et seq. of the Michigan Administrative Code.~~

(2) A steel wire or nylon mesh screen that is strong enough to protect the face to below the nose from chips or sawdust from a chain saw or where there is potential for facial injury shall be provided by the employer and worn by the employee. Face protection shall be in compliance with the requirements of General Industry Safety Standard Part 33 "Personal Protective Equipment," **as referenced in R 408.15102.** ~~being R 408.13301 et seq. of the Michigan Administrative Code.~~

R 408.15125 Foot and leg protection.

Rule 5125. (1) An employer shall assure that each employee wears foot protection, such as heavy-duty logging boots which are waterproof or water-repellent and which cover and provide support to the ankle. The employer shall assure that each employee who operates a chain saw wears foot protection that is constructed with cut-resistant material that will protect the employee's foot against contact with a running chain saw. **The employer shall assure that each employee wears sharp, calk-soled boots or other slip-resistant type boots where the employer demonstrates that they are necessary for the employee's job, the terrain, the timber type, and the weather conditions, provided that foot protection otherwise required by this rule is met.**

(2) The employer shall provide, at no cost to the employee, and assure that each employee **who operates a chain saw** wears leg protection made of cut-resistant material, such as ballistic nylon. **The leg protection shall cover the full length of the thigh to the top of the boot on each leg to protect against contact with a moving chain saw. Exception: This requirement does not apply when an employee is working as a climber if the employer demonstrates that a greater hazard is posed by wearing leg protection in the particular situation, or when an employee is working from a vehicular mounted elevating and rotating work platform meeting the requirements of General Industry Safety Standard Part 58 "Aerial Work Platforms," as referenced in R 408.15102.**

R 408.15127 Explosives and blasting agents generally.

Rule 5127. (1) Explosives and blasting agents shall be stored, handled, transported, and used in accordance with the requirements of General Industry Safety Standard Part 55 "Explosives **and Blasting Agents**," **as referenced in R 408.15102.** ~~(1910.109), being R 408.15501 et seq. of the Michigan Administrative Code.~~

(2) Only a designated person shall handle or use explosives and blasting agents.

(3) Explosives and blasting agents shall not be transported in the driver compartment or in any passenger-occupied area of a machine or vehicle.

R 408.15131 Chain saws generally.

Rule 5131. (1) A hand-held chain saw shall be equipped with a positive-type, on-off ignition switch which is conveniently located on the saw so that the operator can move the switch into the off position without relinquishing a secure grip on the saw.

(2) A manual chain oiler control, if provided on a handheld chain saw, shall be located so that it can be operated without relinquishing a secure grip on the saw.

(3) A hand-held chain saw shall have a guard that protects the throttle lever from casual contact and from brush or other foreign objects.

(4) Each gasoline-powered chain saw shall be equipped with a continuous pressure throttle control system that will stop the chain when pressure on the throttle is released.

(5) A hand-held chain saw's moving parts, such as a flywheel, rotating screen, or clutch, shall be guarded.

(6) Each chain saw placed into initial service after **July 2, 1996**, ~~the effective date of these amendatory rules shall be equipped with a chain brake and shall be in compliance with the requirements of American National Standards Institute Standard ANSI B175.1 -1991 entitled "Safety Requirements for Gasoline-Powered Chain Saws," 1991 edition, which is adopted by reference in R 408.15102. these rules. The standard is available for purchase from the American National Standards Institute, 11 West 42nd Street, New York, New York 10036, or from the Safety Standards Division, Michigan Department of Consumer and Industry Services, Box 30643, Lansing, Michigan 48909, at a cost as of the time of adoption of these rules of \$48.00.~~

R 408.15136 Hand-held chain saw operations.

Rule 5136. (1) A chain saw operator shall shut off a hand-held saw motor when carrying it for a distance of more than 50 feet (15.2m) or in a hazardous situation. A hand-held chain saw shall be carried so as to prevent an employee from coming in contact with the saw chain or muffler.

(2) **A chain saw operator shall shut down a chain saw** ~~shall be shut down or engage~~ the chain brake ~~shall be engaged~~ when **carrying** a saw ~~is carried~~ less than 50 feet if conditions, such as the terrain, underbrush, and slippery surfaces, ~~may~~ create a hazard for an employee.

(3) An approved container shall be used for refueling a hand-held chain saw. A hand-held chain saw shall not be started within 10 feet (3m) of a refueling area.

(4) A chain saw shall be fueled not less than 10 feet (3m) from any open flame or other source of ignition.

(5) **A chain saw operator shall hold a hand-held chain saw** ~~shall be held properly~~ with both hands during its use, with thumbs firmly locked around the handles.

(6) Before starting a cut, a chain saw operator shall clear away brush and other items that would interfere with the cutting operation or the retreat path.

(7) A chain saw operator shall be certain of his or her footing before starting to cut. A chain saw shall not be used in a position or at a distance that could cause the operator to become off-balance, to have insecure footing, or to relinquish a firm grip on the saw.

(8) **A chain saw operator shall not use a hand-held chain saw** ~~shall not be used~~ to cut directly overhead or in a position which could cause **him or her** ~~the operator~~ to relinquish a secure grip on the saw.

(9) A hand-held chain saw which is purchased after **July 2, 1996**, ~~the effective date of these amendatory rules~~ and which is used by an employee to perform logging operations shall be equipped with **both of the following**:

(a) A chain brake and a chain designed to reduce kickback.

(b) A safety bar and a chain designed to reduce kickback.

(10) A chain saw shall be operated and adjusted in accordance with the manufacturer's instruction.

(11) A chain saw shall be started on the ground or where otherwise firmly supported. A chain saw shall not be drop started.

(12) A chain saw shall be shut off or the throttle released before a feller starts to retreat.

R 408.15144 Rollover protection and cab guards. ~~adoption of standard by reference.~~

Rule 5144. **(1)** Each tractor, skidder, swing yarder, log stacker, and mechanical felling device, such as a tree shears or feller-buncher, that is placed into initial service after February 9, 1995, shall be equipped with falling object protective structure (FOPS) or rollover protective structure (ROPS), or both. **The employer shall replace FOPS or ROPS that have been removed from any machine.**

Exception: This requirement does not apply to machines that are capable of 360 degree rotation.

(2) For each machine manufactured after August 1, 1996, the FOPS shall be installed, tested, and maintained in accordance with ~~the Society Of Automotive Engineers Standard SAE J231, January 1981, entitled "Minimum Performance Criteria for Falling Object Protective Structures (FOPS)," January 1981 edition, which is adopted by reference in R 408.15102. these rules. The standard is available for purchase from the Society of Automotive Engineers, 400 Commonwealth Drive, Warrendale, Pennsylvania 15096, or from the Safety Standards Division, Michigan Department of Consumer and Industry Services, Box 30643, Lansing, Michigan 48909, at a cost as of the time of adoption of these rules of \$25.00.~~

(3) For each machine manufactured after August 1, 1996, the ROPS shall be installed, tested, and maintained in accordance with ~~The Society Of Automotive Engineers Standard SAE J1040, April 1988, entitled "Performance Criteria for Rollover Protective Structures (ROPS) for Construction, Earthmoving, Forestry, and Mining Machines," April 1988 edition,~~ which is adopted by reference in **R 408.15102.** ~~these rules. The standard is available for purchase from the Society of Automotive Engineers, 400 Commonwealth Drive, Warrendale, Pennsylvania 15096, or from the Safety Standards Division, Michigan Department of Consumer and Industry Services, Box 30643, Lansing, Michigan 48909, at a cost as of the time of adoption of these rules of \$25.00.~~

(4) For each machine manufactured after August 1, 1996, the ROPS and FOPS shall be in compliance with the requirements of ~~The Society of Automotive Engineers Standard SAE J397, April 1988, entitled "Deflection Limiting Volume- ROPS/FOPS Laboratory Evaluation," April 1988 edition,~~ which is adopted by reference in **R 408.15102.** ~~these rules. The standard is available for purchase from the Society of Automotive Engineers, 400 Commonwealth Drive, Warrendale, Pennsylvania 15096, or from the Safety Standards Division, Michigan Department of Consumer and Industry Services, Box 30643, Lansing, Michigan 48909, at a cost as of the time of adoption of these rules of \$25.00.~~

(5) A protective structure shall not impede the operator's normal movements.

(6) In addition to the rollover protection, the upper portion of the cab of mobile equipment shall have both of the following:

(a) A screen brush guard on all 4 sides, except for doorways. The front, rear, and side brush screen shall be 1/4-inch wire, or equivalent, and have not more than a 2-inch mesh.

(b) An overhead canopy guard or solid material that extends the full width and length of the canopy.

(7) The lower portion of a cab of mobile equipment shall be enclosed with solid material, except at an entrance, to prevent objects from entering the cab. The entrance shall be not less than 52 (1.3m) inches in vertical height from the floor of the cab.

(8) An enclosure of the upper portion of each cab shall allow maximum visibility. Where glass is used on a cab, it shall be safety glass or an equivalent.

An additional metal screen shall be used where there is exposure to falling or flying objects. Provision shall be made to clean glass to assure adequate visibility.

(9) Transparent material that may create a hazard for the operator, such as cracked, broken, or scratched safety glass, shall be replaced.

(10) A deflector shall be installed in front of each cab to deflect whipping saplings and branches. A deflector shall be located so as not to impede visibility and access to the cab.

(11) Each machine operated near cable yarding operations shall be equipped with sheds or roofs that are strong enough to provide protection from breaking lines.

(12) Each forklift shall be equipped with an overhead guard that is in compliance with the requirements of ~~The American Society Of Mechanical Engineers Standard ASME B56.6 -1992 (with addenda), entitled "Safety Standard for Rough Terrain Forklift Trucks," 1992 edition with addenda,~~ which is adopted by reference in **R 408.15102.** ~~these rules. The standard is available for purchase from the American Society of Mechanical Engineers, United Engineering Center, 345 East 47th Street, New York, New York 10017-2392, or from the Safety Standards Division, Michigan Department of Consumer and Industry Services, Box 30643, Lansing, Michigan 48909, at a cost as of the time of adoption of these rules of \$60.00.~~

(13) Machine access systems that are in compliance with the specifications of ~~The Society Of Automotive Engineers Standard SAE J185, June 1988, entitled "Recommended Practice for Access Systems for Off-Road Machines," June 1988 edition, as adopted in R 408.15102,~~ shall be provided for each machine where the operator or any other employee must climb onto the machine to enter the cab or to perform maintenance. ~~The standard is adopted by reference in these rules and is available for purchase from the Society of Automotive Engineers, 400 Commonwealth Drive, Warrendale, Pennsylvania 15096, or from the Safety Standards Division, Michigan Department of Consumer and Industry Services, Box 30643, Lansing, Michigan 48909, at a cost as of the time of adoption of these rules of \$25.00.~~

(14) Each machine cab shall have a second means of egress.

(15) ROPS shall be tested, installed, and maintained in serviceable condition.

R 408.15146 Equipment, maintenance of mufflers; seating and seatbelts; design and construction of skidding and hauling equipment; towing; prehaulers and forwarders; crane or clam turning; trucks; operation of loading devices; alteration of logging equipment; insulation or shielding or surfaces of logging equipment.

Rule 5146. (1) Equipment originally equipped with a muffler shall have the muffler maintained when the equipment is in operation.

The exhaust pipes on each machine shall be located so exhaust gases are directed away from the operator and mounted or guarded to protect each employee from accidental contact.

An exhaust pipe shall be equipped with a spark arrester. An engine equipped with turbochargers does not require a spark arrester.

(2) Equipment shall be operated only from the position or seat intended for that purpose. A seat belt shall be provided on mobile equipment, including any vehicle or machine provided by an employee. An employer shall assure all of the following:

(a) That a seat belt is provided for each vehicle or machine operator.

(b) That each employee uses the available seat belt while the vehicle or machine is being operated.

(c) That each employee securely and tightly fastens the seat belt to restrain the employee within the vehicle or machine cab.

(d) That each machine seat belt is in compliance with the requirements of ~~The Society Of Automotive Engineers Standard SAE J386, June 1985, entitled "Operator Restraint Systems for Off-Road Work Machines,"~~ **June 1985 edition, as adopted in R 408.15102**, which was equipped with seat belts at the time of manufacture.

(e) That seat belts are not removed from any vehicle or machine. The employer shall replace each seat belt that has been removed from any vehicle or machine ~~that which~~ was equipped with seat belts at the time of manufacture.

(f) That each seat belt is maintained in a serviceable condition.

(3) Skidding and prehauling equipment shall be designed and constructed to allow a minimum radius vehicle turn without the load contacting the rear wheel or the rear track assembly.

(4) Towed equipment shall be attached in a manner that will allow a full 90-degree turn, prevent overrunning, and assure control of the towed equipment.

(5) A prehauler or forwarder shall have a means of retaining loads and a means for securing the load during transport.

(6) A crane or clam that has a turning house shall have not less than 2 feet of clearance between the turning radius of the house and a fixed object.

(7) A truck shall have a guard that protects the operator in the cab from a load shift.

(8) A truck shall be driven by a licensed driver and have, in its cab, flares and flags and an approved multipurpose fire extinguisher that has a rating of not less than 2a-4bc.

(9) A loading device shall not be operated so that the load passes over the operator or employees.

(10) Logging equipment shall not be altered to exceed the rated capacity, unless the alterations are approved by the manufacturer.

(11) All hot surfaces on logging equipment ~~that which~~ have a temperature of more than 150 degrees Fahrenheit and ~~that which~~ could be contacted by the operator during normal starting and operating shall be thermally insulated or shielded.

R 408.15149 Machines generally.

Rule 5149. (1) An employer shall assure that each machine, including any machine provided by an employee, is maintained in serviceable condition. An employer shall assure that each machine, including any machine provided by an employee, is inspected before initial use during each work shift. Defects or damage shall be repaired or the unserviceable machine shall be replaced before work is commenced.

(2) An employer shall assure that operating and maintenance instructions are available on the machine or in the area where the machine is being operated. To maintain stability, the machine shall be operated within the limitations imposed by the manufacturer as described in the operating and maintenance instructions. Each machine operator and maintenance employee shall comply with the operating and maintenance instructions.

(3) A stationary logging machine and its components shall be anchored or otherwise stabilized to prevent movement during operations.

(4) An employee shall not ride on any load.

(5) After a machine engine is shut down, pressure or stored energy from hydraulic and pneumatic storage devices shall be discharged if the storage device can move the moving elements. Each moving element, such as blades, buckets, saws, or shears, shall be lowered to the ground or otherwise secured. The machine's transmission shall be placed in the manufacturer's specified park position and the brake or brake locks shall be applied.

(6) A machine shall be loaded, secured, and unloaded so that it will not create a hazard for an employee.

(7) Brakes shall be sufficient to hold each machine and its rated load capacity on the slopes over which it is being operated.

(8) Each machine placed into initial service on or after September 8, 1995, shall be equipped with a secondary braking system, which shall be effective in stopping the machine and maintaining parking performance regardless of the direction of travel or whether the engine is running and parking brakes that are capable of holding a stopped machine stationary are employed.

(9) Each machine shall be equipped with guarding to protect employees from exposed moving elements, such as shafts, pulleys, belts on conveyors, and gears, in accordance with the requirements of General Industry Safety Standard Part 7 "Guards for Power Transmission," **as referenced in R 408.15102.** ~~being R 408.10701 et seq. of the Michigan Administrative Code.~~

(10) Each machine used for debarking, limbing, and chipping shall be equipped with guarding to protect employees from flying wood chunks, logs, chips, bark, limbs, and other material.

(11) The guarding on each machine shall be in place when the machine is in operation.

R 408.15167 Chipping.

Rule 5167. Chipping shall be accomplished as prescribed in **R 408.15231** ~~subrules (1), (3) and (5) of rule 5231 of the General Industry Safety standards commission Standard Part 52, "Sawmills,"~~ **as referenced in R 408.15102.** ~~being R 408.15231 of the Michigan Administrative Code.~~

Rule 3506 Rescinded. Personal Protective Equipment in Pulpwood Logging

- ~~–(1) Applicability. This rule applies to all operations subject to Rule 5006 and supplements the general industry requirements for personal protective equipment set forth in Rules 3501 and 3502.~~
- ~~–(2) Dust masks in accordance with American National Standard Practices for Respiratory Protection Z88.2-1969 shall be provided for use where conditions warrant. [1910.266(c)(1)(v)]~~
- ~~–(3) Protection against the effects of noise exposure shall be provided when the sound levels exceed those shown in Table G-16 of Rule 2401 when measured on the A scale of a standard sound level meter at slow response. [1910.266(c)(1)(vi)]~~

Rule 5006 Rescinded. General requirements in: Pulpwood Logging

- ~~–(1) Application.~~
 - ~~–(a) General. This rule applies to pulpwood logging operations including but not limited to the operations of felling, limbing, marking, bucking, loading, skidding, prehauling and other operations associated with the preparation and movement of pulpwood timber from the stump to the point of delivery. The provisions of this rule do not apply to logging operations relating to sawlogs, veneer bolts, poles, piling and other forest products. [1910.266(a)(1)]~~
 - ~~–(b) Standards incorporated by reference. Standards covering issues of occupational health which are of general application without regard to any specific industry are incorporated by reference in subsections of this rule and made applicable to pulpwood logging. All such standards shall be construed according to the rules of construction set out in Rule 1106(3). [1910.266(a)(2)]~~
- ~~–(2) Personal protection equipment. For standards supplementing the general standards for personal protection equipment – see Rule 3506.~~
- ~~–(3) Lighting – pulpwood harvesting – see Rule 4106.~~
- ~~–(4) First aid. For specific information supplementing the general rules of first aid – see Rule 4401(5)~~