DEPARTMENT OF LABOR AND ECONOMIC OPPORTUNITY

DIRECTOR'S OFFICE

GENERAL INDUSTRY SAFETY AND HEALTH STANDARD

(By authority conferred on the director of the Michigan department of labor and economic opportunity by sections 14r, 16, and 21 of the Michigan occupational safety and health act, 1974 PA 154, MCL 408.1014r, 408.1016, and 408.1021, and Executive Reorganization Order Nos. 1996-2, 2003-1, 2008-4, 2011-4, and 2019-3, MCL 445.2001, 445.2011, 445.2025, 445.2030, and 125.1998)

PART 74. FIREFIGHTING

R 408.17401 Scope.

Rule 7401. This part prescribes rules for training; for the construction, care, and use of equipment; and for the safeguards to be furnished and maintained as it relates to municipal firefighters and equipment. The occupation can be full-time or part-time; for pay or volunteer status.

History: 1979 AC; 2001 AACS; 2022 AACS.

R 408.17402 Applicability.

Rule 7402. A person who is functioning as a municipal firefighter and who is exposed to the hazards of an emergency operation shall comply with this part.

History: 1979 AC; 1988 AACS; 2022 AACS.

R 408.17403 Definitions; A to M.

Rule 7403. (1) "Approved label" means a label or other identifying mark of a nationally recognized testing laboratory, such as Underwriters Laboratory, Inc., or Factory Mutual Research Corporation, that maintains a periodic inspection of production of labeled equipment or materials and by whose labeling compliance with nationally recognized standards or tests to determine suitable usage in a specified manner is indicated.

(2) "Aerial apparatus" means a fire department vehicle that is equipped with a power operated extension ladder or elevating platform used for rescue, ventilation, elevated master streams, and gaining access to upper levels and that carries ground ladders, tools, and other equipment.

(3) "Control" means the limitation of worker exposure to exhaust emissions to levels not exceeding applicable MIOSHA exposure limits.

(4) "Controlled process" means an arrangement of equipment to control exhaust emissions by means of any of the following:

(a) A point of source capture of exhaust emissions by a mechanical tailpipe exhaust ventilation system.

(b) A general mechanical exhaust ventilation system in a fire apparatus building bay or bays.

(c) A device that is permanently installed directly on the fire apparatus exhaust system.

(5) "Emergency operations" means a fire or nonfire incident, including, but not limited to, rescues, extrications, hazardous material release, and natural disasters, where fire department response can be anticipated and which subjects firefighters to personal injury or hazards. Vegetative cover fires are not included in this definition.

(6) "Exhaust emissions" means exhaust by-products of combustion, from internal combustion engines, capable of causing occupational illness or disease to a person.

(7) "Fire apparatus" means mobile firefighting equipment including, but not limited to, a pumper/engine, aerial apparatus, a tanker/tender, or any other similar equipment that has fire suppression or rescue as its primary use. A vehicle not designed, equipped, or utilized for emergency operations is not fire apparatus.

(8) "Firefighter" means a member of an organized fire department who is responsible for, or is in a capacity that includes responsibility for, the extinguishment of fires, the directing of the extinguishment of fires, the directing or management of emergency response activities, fire safety prevention inspection, plans examination, fire investigation, hazardous materials response, technical rescue response, airport rescue response, airport rescue firefighting, fire service instruction, and the enforcement of the general fire laws of this state and the community where he or she serves.

(9) "Fire station" means a structure in which fire service equipment is housed and employees may be quartered.

(10) "Foam containing PFAS" means firefighting foam containing intentionally added perfluoroalkyl or polyfluoroalkyl substance.

(11) "Ladder pipe" means a large capacity water delivery device attached to an aerial ladder.

(12) "Municipal" means any public entity.

History: 1979 AC; 1988 AACS; 2001 AACS; 2013 AACS; 2022 AACS.

R 408.17404 Definitions; O to V.

Rule 7404. (1) "Operator's control station" means a work station where the operator of an apparatus, such as an aerial ladder or pumper, is stationed.

(2) "Personal alert safety systems" or "PASS" means a device that is certified as complying with these rules, that senses movement or lack of movement, and that automatically activates an audible alarm signal, which can also be manually activated to alert and to assist others in locating a firefighter or emergency services person who is in danger.

(3) "PFAS" means a perfluoroalkyl or polyfluoroalkyl substance.

(4) "Platform control station" means a work station where the rider of an elevating platform is stationed.

(5) "Physician or other licensed health care professional" or "PLHCP" means an individual whose legally permitted scope of practice based on their license, registration, or

certification, allows him or her to independently provide, or be delegated the responsibility to provide, some or all of the health care services.

(6) "Primary control station" means a work station where the operator of apparatus that has an aerial ladder or platform is stationed.

(7) "Protective ensemble" means multiple elements of clothing and equipment designed to provide a degree of protection for firefighters from adverse exposures to the inherent risks of structural firefighting operations and other emergency operations.

(8) "Qualified" means a person who, by possession of a recognized degree, certificate, or professional standing, or who by extensive knowledge, training, and experience has successfully demonstrated the ability to solve or resolve problems relating to the subject matter, the work, or the project.

(9) "Structural firefighting" means activities of rescue, fire suppression, and property conservation in buildings, enclosed structures, aircraft, vehicles, vessels, or like properties that are involved in a fire.

(10) "Training" means the process of making firefighters proficient through instruction or hands-on practice, or both, in the operation and care of equipment that is expected to be used and in the performance of assigned duties.

History: 1979 AC; 1988 AACS; 2001 AACS; 2013 AACS; 2022 AACS.

R 408.17405 Adopted and referenced standards.

Rule 7405. (1) The following National Fire Protection Association (NFPA) standards are adopted by reference in these rules and are available from the National Fire Protection Association, 1 Batterymarch Park, P.O. Box 9101, Quincy, Massachusetts, 02169-7471, or via the internet at the following website: www.nfpa.org, at a cost as of the time of adoption of these amendments, as stated in these rules:

(a) NFPA 1901: "Standard for Automotive Fire Apparatus," 2009 edition. Cost: $96.60.

(b) NFPA 1983: "Standard on Life Safety Rope and Equipment for Emergency Services," 2001 edition. Cost: $68.50.

(c) NFPA 1971: "Standard on Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting," 2007 edition. Cost: $79.50.

(d) NFPA 1971: "Standard on Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting," 2013 edition. Cost: $74.00.

(e) NFPA 1981: "Standard on Open-Circuit Self-Contained Breathing Apparatus (SCBA) for Emergency Services," 1997 edition. Cost: $68.50.

(f) NFPA 1981: "Standard on Open-Circuit Self-Contained Breathing Apparatus (SCBA) for Emergency Services," 2007 edition. Cost: $63.50.

(g) NFPA 1982: "Standard on Personal Alert Safety Systems (PASS)," 1998 edition. Cost: $68.50.

(h) NFPA 1982: "Standard on Personal Alert Safety Systems (PASS)," 2007 edition. Cost: $68.50.

(i) NFPA 1403: "Standard on Live Fire Training Evolutions," 2018 edition. Cost: $57.00.

(j) NFPA 1931: "Standard for Manufacturer's Design of Fire Department Ground Ladders," 1994 edition. Cost: $31.00.

(k) NFPA 1932: “Standard on Use, Maintenance, and Service Testing of In-Service Fire Department Ground Ladders,” 2015 edition. Cost: $49.50.

(2) The standards adopted in these rules are available for inspection at the Department of Labor and Economic Opportunity, MIOSHA Standards and FOIA Section, 530 West Allegan Street, P.O. Box 30643, Lansing, Michigan, 48909-8143.

(3) Copies of the standards adopted in these rules may be obtained from the publisher or may be obtained from the Michigan Department of Labor and Economic Opportunity, MIOSHA Standards and FOIA Section, 530 West Allegan Street, P.O. Box 30643, Lansing, Michigan, 48909-8143, at the cost charged in these rules plus $20.00 for shipping and handling.

(4) The Michigan Occupational Safety and Health Administration (MIOSHA) standards may be obtained at no charge from the Michigan Department of Labor and Economic Opportunity, MIOSHA Standards and FOIA Section, 530 West Allegan Street, P.O. Box 30643, Lansing, Michigan, 48909-8143 or via the internet at the following website: 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.

History: 2001 AACS; 2013 AACS; 2016 AACS; 2019 AACS; 2022 AACS.

R 408.17411 Duties of employer.

Rule 7411. (1) An employer shall comply with all of the following requirements:

(a) Ensure that prospective firefighters receive a pre-employment physical conducted by a PLHCP to ensure they have the ability to perform assigned emergency operations.

(b) Ensure that job-required equipment and tools are maintained free of recognized defects that could cause an injury.

(c) Develop a written procedure that covers the treatment and transport of injured employees from the emergency scene to a medical facility.

(d) Comply with the requirements of this part, review with, and make available a copy of this part for employees.

(2) An employer shall prepare and maintain a written policy that establishes its basic organizational structure. The organizational structure must be available for inspection by the director of the department of labor and economic opportunity or his or her authorized representative and by an employee or his or her authorized representative.

History: 1979 AC; 1988 AACS; 1993 AACS; 2001 AACS; 2013 AACS; 2016 AACS; 2022 AACS.

R 408.17412. Duties of employee.

Rule 7412. An employee shall do all of the following:

(a) Use personal protective equipment as prescribed by this part.

(b) Report defective equipment, tools, and hazardous conditions to a supervisor.

(c) Not remove safeguards from equipment except when necessary to service. The safeguard or equivalent shall be replaced before returning the equipment to operation.

(d) Not use equipment and tools unless trained in their use and authorized to do so.

(e) Only perform those duties that he or she is trained to do.

History: 1979 AC; 2013 AACS.

R 408.17415 Fire station safety.

Rule 7415. (1) The area within 3 feet of the slide pole on all sides must be maintained free of any obstruction. A floor-to-ceiling wall shall not be construed to be an obstruction.

(2) A cushioned mat, not less than 3 feet in diameter, must be located around the base of the slide pole at all times.

(3) A dormitory and any means of egress from the dormitory, apparatus bay, and aisleways must be equipped with an emergency lighting system that must be automatically activated in case of power failure. The system may be operated by battery or generator.

(4) Switches and electrical equipment located in the shower or other areas subject to hazards created by moisture must be approved for the location or removed to a nonhazardous area.

(5) All sleeping quarters must be equipped with an operational smoke detection device and an operational carbon monoxide detection device.

(6) Effective January 1, 2025, all new construction or significantly remodeled facilities (50% or more area) that house a fire apparatus must install a controlled process exhaust ventilation system that will effectively control exhaust emissions created by the fire apparatus. If a general mechanical exhaust ventilation system is utilized, a mechanical air supply system must be provided if its absence will result in building negative pressures sufficient to cause back drafting of vents from fuel-fired equipment.

(7) All equipment used for the control of exhaust emissions from fire apparatus must be used, inspected, and maintained in accordance with the manufacturer’s recommendations.

History: 1979 AC; 1988 AACS; 2001 AACS; 2013 AACS; 2022 AACS.

CONSTRUCTION AND USE OF EQUIPMENT

R 408.17421 Fire apparatus generally.

Rule 7421. (1) A fire apparatus must be able to stop within 30 feet after application of the brakes at 20 miles per hour.

(2) A fire apparatus must be equipped with all of the following items:

(a) Windshield wipers.

(b) Head, tail, stop, and backup lights and a backup alarm.

(c) Horn and siren.

(d) Slip-resistant steps, tailboard, and work platforms.

(3) Any employee riding on or in a fire apparatus shall be safely secured by a seat belt or safety harness any time the fire apparatus is in motion. No employee may stand or ride on the tail steps, sidesteps, running boards, or other exposed part of a fire apparatus while the fire apparatus is in motion, except for hose loading operations as provided in this subrule. Hose loading operations may be performed on a moving fire apparatus only when all of the following conditions are met:

(a) Hose loading operations must be specified in a written procedure that includes the conditions set forth in this subdivision. All employees involved in the hose loading operation must be trained in these procedures.

(b) There must be an employee, other than those employees loading the hose, assigned as a safety observer. The safety observer shall have an unobstructed view of the hose loading operation and be in visual and voice contact with the fire apparatus driver.

(c) All vehicular traffic must be excluded from the area or be under the direction of qualified traffic control individuals.

(d) The fire apparatus must be driven at a speed of 5 mph or less.

(e) No employee may stand on the tail step, sidesteps, running boards, or any other location on the fire apparatus while the fire apparatus is in motion unless otherwise allowed by the manufacturer's specifications.

(f) Employees using a travel restraint system or appropriate fall protection may be in the hose bed, but no employee may stand while the fire apparatus is in motion.

(g) Before each hose loading operation, the situation must be evaluated to ensure compliance with the written procedure. If the written procedure cannot be followed, or if there is any question as to the safety of the operation for the specific situation, the hose may not be loaded on a moving fire apparatus.

(4) Any fire apparatus manufactured and purchased after April 17, 2013, must meet or exceed the requirements of the NFPA 1901: "Standard for Automotive Fire Apparatus," 2009 edition, as adopted in R 408.17405.

(5) Except on instructions of a designated signalperson, an operator of the fire apparatus shall not move the fire apparatus when his or her vision is obstructed.

(6) A minimum distance of 10 feet from unprotected energized equipment or high-voltage transmission lines, as distinguished from low voltage secondary lines and series streetlight construction, must be maintained when using fire apparatus. The training of firefighters must include development of the ability to recognize and identify primary, high-voltage transmission lines and series street lighting construction.

History: 1979 AC; 1988 AACS; 1993 AACS; 2001 AACS; 2013 AACS; 2013 AACS; 2016 AACS; 2022 AACS.

R 408.17422 Fire apparatus tires and rims.

Rule 7422. (1) A thorough visual inspection of the tread and sidewall areas of fire apparatus tires for cuts, cracks, splits, or bruises, including a tread depth measurement, must be made at least annually. A record of this inspection must be maintained for a minimum of 10 years.

(2) A tire must be replaced if 1 of the following occurs:

(a) The average tread depth is worn to 5/32 of an inch or less.

(b) The tread depth at any 1 location is 2/32 of an inch, or less.

(c) A cut or crack exposes the cord fabric.

(3) A replacement tire must meet or exceed the standards of the original tire furnished with the apparatus.

(4) Fire apparatus tires and rims must be inspected inside at least once every 10 years.

History: 1979 AC; 1988 AACS; 2001 AACS; 2013 AACS; 2016 AACS; 2022 AACS.

R 408.17423 Fire apparatus with elevating platforms.

Rule 7423. (1) When an aerial apparatus platform is elevated, parking brakes must be set and stabilizing jacks or outriggers and safety locks must be used. When needed, ground plates must be used under the jack or outriggers.

(2) An instructional information plate, which is clearly visible to the operator, must be located at the operator's control station. If the aerial is equipped with a platform, then a plate must also be located at the platform control station. The plate must contain all of the following information:

(a) Rated capacity of the aerial tip or platform.

(b) Operating controls identified for motion.

(c) Cautions or restrictions of operation.

(3) An operator shall comply with all of the following provisions:

(a) Remain at the primary control station when the aerial ladder or platform is occupied.

(b) Not move the apparatus unless the ladder or platform is in the bed of the apparatus.

(c) Maintain clearances as required in R 408.17421(6).

History: 1979 AC; 1988 AACS; 2001 AACS; 2013 AACS; 2016 AACS; 2022 AACS.

R 408.17424 Aerial apparatus.

Rule 7424. (1) An aerial apparatus that is equipped with a ladder must not have the ladder extended or retracted when an employee is positioned on the ladder unless otherwise allowed by the manufacturer's specifications.

(2) While working in a fixed position from an aerial apparatus ladder, an employee shall be secured with a ladder belt system that meets or exceeds the requirements of NFPA 1983: "Standard on Life Safety Rope and Equipment for Emergency Services," 2001 edition, as adopted in R 408.17405.

(3) The tip of the aerial ladder must not be forcefully extended against a solid object or used to support the ladder.

(4) The steps and rungs of an aerial apparatus must have a slip-resistant surface.

(5) Jacks, outriggers, and safety locks must be used as required in R 408.17423(1).

(6) The rated capacity for an aerial apparatus must not be exceeded.

(7) The operator of an aerial ladder shall comply with all of the following provisions:

(a) Remain at the primary control station when the ladder is occupied.

(b) Communicate to the occupant of the ladder before movement.

(c) Not move the apparatus unless the ladder is in the bed.

(8) The operator of an aerial ladder shall maintain clearances as required in R 408.17421(6).

(9) The controls for the operation of an aerial apparatus must be of a type that returns to a neutral position when released.

(10) Tools or equipment mounted or installed on the turntable must be installed or approved by the manufacturer.

(11) A 2-way voice communication system must be provided between the employee on the raised portion of the equipment and the operator control station.

(12) Detachable ladder pipes must be operated in the direction the ladder is facing.

(13) Ladder pipes must be secured to the ladder so that the pipe cannot be accidentally dislodged while in operation.

(14) An employer shall follow the manufacturer's instructions and recommendations for the use, testing, and maintenance of aerial apparatus.

History: 1979 AC; 1988 AACS; 2001 AACS; 2013 AACS; 2016 AACS; 2022 AACS.

R 408.17425 Rescinded.

History: 1979 AC; 2001 AACS.

R 408.17426 Portable ladders.

Rule 7426. (1) Effective January 1, 2025, portable ground ladders used in structural firefighting or training for these operations must meet or exceed the requirements of both of the following:

(a) NFPA 1931: "Standard for Manufacturer's Design of Fire Department Ground Ladders," 1994 edition.

(b) NFPA 1932: "Standard on Use, Maintenance, and Service Testing of In-service Fire Department Ground Ladders," 2015 edition.

(2) Portable ladders that are mounted more than 4 feet in height and less than 7 feet in height on a fire apparatus, and that have ends that extend beyond the ladder's mounting surface or compartment must be protected from contact.

History: 1979 AC; 1988 AACS; 2001 AACS; 2013 AACS; 2016 AACS; 2019 AACS; 2022 AACS.

R 408.17427 Line throwing guns.

Rule 7427. (1) A line throwing gun shall:

(a) Be loaded just prior to firing time.

(b) Not be pointed, loaded or unloaded at any person.

(c) Not be left unattended or stored while loaded.

(d) Be stored in a box with the cleaning kit and breakdown tools.

(2) The storage box shall have the words, "Explosive Tool," conspicuously printed on the top of the box.

History: 1979 AC.

R 408.17428 Storage of equipment.

Rule 7428. All equipment shall be stored in or on the fire apparatus in a safe manner.

History: 1979 AC.

R 408.17430 Proper use, handling, storage, and containment of firefighting foam concentrate.

Rule 7430. (1) An employer must follow the specific, manufacturer provided safety data sheets (SDSs) for all firefighting foam concentrate that employees may be exposed to and follow best practices regarding the proper use, handling, and storage information.

(2) An employer must prevent intentionally added PFAS containing foam concentrate or foam solution from entering ground water, surface water, or storm drains, as soon as possible. Manual containment strategies used for spills involving a hazardous liquid should be employed. These include blocking storm drains to prevent the contaminated foam/water solution from entering the wastewater system or the environment. Defensive tactics such as damming, diking, and diverting should be employed to get the foam/water solution to an area suitable for containment until it can be removed in accordance with local, state, and federal regulations. Immediately after the end of a fire or other incident at which an organized fire department uses firefighting foam containing intentionally added PFAS, the fire chief shall report the incident to the Michigan pollution emergency alert system.

(3) An employer must dispose of materials contaminated by foam containing PFAS pursuant to the natural resources and environmental protection act, 1994 PA 451, MCL 324.101 to 324.90106.

(4) An employer must ensure the decontamination of a firefighter's body and equipment as follows:

(a) Post fire response contaminated personal protective equipment (PPE) must be decontaminated as soon as practical. A mild detergent, with a pH of not less than 6 and not greater than 10.5, must be used. The use of chlorine bleach, chlorinated solvents, or solvents is not permitted. Follow manufacturer's recommended cleaning procedures.

(b) A firefighter's exposed skin, including the neck, face, and hands, must be decontaminated, post fire response and whenever exposed to firefighting foam. Employees must wash exposed skin with a mild soap and rinse thoroughly with water.

(5) An employer must prohibit the use of firefighting foam concentrate containing intentionally added PFAS, by a firefighter, for training purposes.

(6) An employer must prohibit the use of firefighting foam concentrate containing intentionally added PFAS, by a firefighter, for equipment calibration purposes, unless required by law or facility where the calibration takes place has implemented appropriate measures.

History: 2022 AACS.

PROTECTIVE EQUIPMENT

R 408.17431 Personal protective equipment.

Rule 7431. (1) An employer shall ensure that all emergency service personnel use PPE appropriate for the hazards involved when performing emergency operations.

(2) Personal protective equipment must be provided by the employer at no cost to the employee and comply with the requirements of this part.

(3) An employer shall ensure that PPE protects the head, body, and extremities and consists of at least all of the following components:

(a) Foot and leg protection.
(b) Hand protection.
(c) Body protection.
(d) Face, eye, and head protection.

(4) Personal protective equipment that is required by these rules to comply with the requirements of a nationally recognized standard must either bear an approved label of, or be certified in writing by, the manufacturer as being in compliance with the applicable standard.

(5) Personal protective equipment must be inspected and cleaned after each use.

(6) An employer shall implement procedures for the inspecting and servicing of PPE according to manufacturer's recommendations.

(7) An employer shall implement a procedure for determining whether PPE must be repaired or replaced. All repairs must be made in compliance with the manufacturer's recommendations.

History: 1979 AC; 1988 AACS; 1993 AACS; 2001 AACS; 2013 AACS; 2022 AACS.

R 408.17432 Protective ensemble for structural firefighting.

Rule 7432. An employer shall provide a protective ensemble~~,~~ to all employees who engage in or are exposed to structural firefighting. The protective ensemble must meet or exceed the requirements of NFPA 1971: "Standard on Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting," 2007 edition, as adopted in R 408.17405. Effective January 1, 2025, the protective ensemble must meet or exceed the requirements of NFPA 1971: "Standard on Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting," 2013 edition, as adopted in R 408.17405.

History: 1988 AACS; 1993 AACS; 2001 AACS; 2013 AACS; 2016 AACS; 2022 AACS.

R 408.17433 Eye and face protection for emergency operations.

Rule 7433. While conducting emergency operations, if there is a potential exposure to eye and face hazards, the requirement of face and eye protection must be met by 1 of the following:

(a) Helmet face shield, if equipped, and primary eye protection.
(b) Breathing apparatus face piece.
(c) Primary eye protection and secondary means of face protection.

History: 1979 AC; 1988 AACS; 1993 AACS; 2001 AACS; 2013 AACS; 2016 AACS; 2022 AACS.

R 408.17434 Rescinded.

History: 1979 AC; 1988 AACS; 1993 AACS; 2001 AACS; 2013 AACS; 2016 AACS; 2022 AACS.

R 408.17435 Rescinded.

History: 1979 AC; 1988 AACS; 1993 AACS; 2001 AACS; 2013 AACS; 2016 AACS; 2022 AACS.

R 408.17436 Respirator protection devices.

Rule 7436. Any self-contained breathing apparatus currently in use must meet or exceed the requirements of NFPA 1981: “Standard on Open-Circuit Self-Contained Breathing Apparatus (SCBA) for Emergency Services,” 1997 edition, as adopted in R 408.17405. Effective January 1, 2025, any self-contained breathing apparatus currently in use must meet or exceed the requirements of NFPA 1981: “Standard on Open Circuit Self-Contained Breathing Apparatus (SCBA) for Emergency Services,” 2007 edition, as adopted in R 408.17405.

History: 1979 AC; 1988 AACS; 1993 AACS; 2001 AACS; 2013 AACS; 2016 AACS; 2022 AACS.

R 408.17437 Rescinded.

History: 2001 AACS; 2013 AACS; 2016 AACS; 2022 AACS.

R 408.17440 Personal alert safety system (PASS).

Rule 7440. An employer shall provide and enforce the use of a PASS device to each employee utilizing a self-contained breathing apparatus while engaged in structural firefighting operations. PASS devices shall meet or exceed the requirements of NFPA 1982: "Standard on Personal Alert Safety Systems (PASS)," 1998 edition, as adopted in R 408.17405. Effective January 1, 2025, PASS devices must meet or exceed the requirements of NFPA 1982: "Standard on Personal Alert Safety Systems (PASS)," 2007 edition, as adopted in R 408.17405.

History: 2001 AACS; 2016 AACS; 2022 AACS.

TOOLS

R 408.17441 Explosive devices.

Rule 7441. (1) An explosive device shall not be used in an explosive or flammable atmosphere.

(2) A fire service which uses an explosive device shall develop a procedure for protecting the employees and general public.

History: 1979 AC.

R 408.17442 Using, covering, or protecting tools.

Rule 7442. (1) Chain saws that are specifically designed for firefighting operations to cut holes in roofs, floors, and walls shall be used where cutting operations are performed. If a

chain saw is not in use, then the cutting teeth of the chain saw shall be covered to prevent inadvertent contact.

(2) An axe or other sharp-edged or pointed tool shall be protected when stored or carried on the apparatus. A rounded tipped pike pole is excluded from the requirements of this subrule.

History: 1979 AC; 1993 AACS; 2001 AACS.

R 408.17443 Air-moving equipment.

Rule 7443. Air-moving equipment exposed to hazardous levels of flammable gases, flammable vapors, or combustible dust must be approved as intrinsically safe.

History: 1979 AC; 2022 AACS.

OPERATIONS

R 408.17451 Management of emergency operations.

Rule 7451. (1) Each fire department shall establish and implement written procedures for emergency operations. The written procedures must include all of the following:

(a) A requirement that a recognized incident management system providing structure and coordination to the management of emergency operations is implemented at each emergency.

(b) A requirement that a personnel accountability system is implemented at each emergency.

(c) A written assessment of the types of emergency operations the fire department is expected to perform, for example, fire suppression, trench rescue, and rope rescue, and the employees authorized to perform the identified operations.

(2) A qualified employee shall function as the incident commander at each emergency.

History: 1979 AC; 1993 AACS; 2001 AACS; 2013 AACS; 2016 AACS; 2022 AACS.

R 408.17452 Rescinded.

History: 1979 AC; 1988 AACS; 2001 AACS.

INSPECTIONS

R 408.17461 Inspection of fire apparatus and equipment; record of repair or replacement; lifeline guns and explosive devices; apparatus and equipment involved in accident; equipment testing.

Rule 7461. (1) All of the following items of the fire apparatus, if so equipped, must be inspected for proper operation and for defects at least once a month:

(a) Windshield washers and wipers.

(b) Defroster and heater.

(c) Head, tail, stop, backup, and flasher lights.

(d) Backup alarm.

(e) Horn and siren.

(f) Slip-resistant steps and platforms.

(g) Tires, rims, and suspension system.

(h) Steering mechanism.

(i) Braking system.

(j) Operational controls.

(2) Inspection records must be maintained for a minimum period of 24 months for the apparatus.

(3) Records of repair or replacement must be maintained for the life of the apparatus.

(4) Lifeline guns and explosive devices must be cleaned and made ready for operation after each use.

(5) All portable equipment carried on a fire apparatus must be inspected for operation and for defects at least monthly and within 24 hours after any use. Inspection records must be maintained for a minimum period of 24 months for portable equipment.

(6) All equipment carried on fire apparatus or designated for training must be tested at least annually in accordance with manufacturers' instructions and applicable standards.

(7) Firefighting apparatus and equipment found to be defective or in unserviceable condition must be removed from service or repaired or replaced.

History: 1979 AC; 1993 AACS; 2013 AACS; 2013 AACS; 2016 AACS; 2022 AACS.

R 408.17462 Rescinded.

History: 1979 AC; 1988 AACS.

R 408.17463 General utility ropes, life safety ropes, harnesses, and auxiliary equipment.

Rule 7463. (1) Life safety rope, harnesses, and auxiliary equipment dedicated for the purpose of supporting people during emergency operations or training for these operations must be used and meet or exceed the requirements of NFPA 1983: "Standard on Life Safety Rope and Equipment for Emergency Services," 2001 edition, as adopted in R 408.17405.

(2) General utility ropes must comply with the following conditions:

(a) A rope must be inspected after each use for all of the following:

(i) Externally for abrasions, cut or broken fibers, decay, burns, lack of strength, softness, variation in size or roundness of the strands, and for mildew or mold.

(ii) Natural fiber ropes must be inspected internally annually, by separating the strands at 3-foot intervals, for broken fibers, presence of grit, mildew or mold, color change of the fibers, or powdering and short, loose fibers.

(b) A rope that has any of the conditions described in subdivision (a) of this subrule must be replaced or repaired.

(c) Ropes must be stored in a dry location.

History: 1979 AC; 2001 AACS; 2013 AACS; 2016 AACS; 2022 AACS.

R 408.17464 Training and education program.

Rule 7464. (1) Each fire department shall establish and maintain an employee training and education program. The training and education program must include all of the following:

(a) A written policy that establishes the type, amount, and frequency of training to be provided to firefighters. Training records must be maintained and be made available for inspection by the director of the department of labor and economic opportunity or his or her authorized representative and by an employee or his or her authorized representative.

(b) Assurance that the training and education provided under this section are based upon the fire department's written policies or procedures.

(c) Assurance that the training and education required under this section are provided by a qualified person.

(d) Assurance that an employee receives initial and continuing training and education commensurate with and specific to the duties and functions that the employee is expected to perform. The training and education must be provided before the employee is permitted to perform emergency operations.

(e) Assurance that firefighters receive annual training and education on incident management and personnel accountability systems.

(f) Assurance that firefighters receive and maintain certification in first aid, cardiopulmonary resuscitation, and automated external defibrillator.

(2) All live fire training must meet or exceed the requirements of the NFPA 1403: "Standard on Live Fire Training Evolutions," 2018 edition, as adopted in R 408.17405.

(3) An employer shall provide additional training in relevant topics to an employee under any of the following conditions:

(a) An employee has been involved in an accident or near miss incident.

(b) An employee has been observed operating in an unsafe manner.

History: 1979 AC; 1993 AACS; 2001 AACS; 2022 AACS.