

NEW JERSEY DEPARTMENT OF HEALTH & SENIOR SERVICES
Public Employees Occupational Safety and Health Program

SUBCHAPTER 10. STANDARDS FOR FIREFIGHTERS

12:100-10.1 Scope; standards information

- (a) This subchapter shall apply to all public employment as provided below:
1. This subchapter contains requirements for the organization, training, and personal protective equipment of fire service organizations whenever an employer establishes them.
 2. The requirements of this subchapter shall apply to all fire service members in the public sector performing structural fire fighting.
- (b) This subchapter shall not be applicable to:
1. Construction, agriculture and maritime employment;
 2. Airport crash rescue; or
 3. Forest firefighting operations.
- (c) The CGA and NFPA standards incorporated in this subchapter by reference may be obtained by contacting the issuing entities at the addresses listed in N.J.A.C. 12:100-17.3.

12:100-10.2 Definitions

- (a) The following words and terms, when used in this subchapter, shall have the following meaning unless the context clearly indicates otherwise.

“Approved” means the term as defined at N.J.A.C. 12:100-2.1.

“CGA” means Compressed Gas Association.

“Confined space” means the term as defined at 29 CFR 1910.146(b).

“Damaged equipment” means equipment which has been affected by external forces such as, but not limited to, mechanical, thermal, chemical or hydraulic, to an extent whereby the equipment no longer performs its original function to the extent required for the user’s safety.

“Education” means the process of imparting knowledge or skill through systematic instruction.

“Employee” means the term as defined at N.J.A.C. 12:100-2.1.

“Employer” means the term as defined at N.J.A.C. 12:100-2.1.

“Enclosed structure” means a structure with a roof or ceiling and at least two walls which may present hazards to employees, such as accumulations of smoke, toxic gases and heat, similar to those found in buildings.

“Fire brigade” means an organized group of firefighters who are public employees who have an obligation to fight fires but who may be assigned to other duties.

“Fire department” means an organized group of employees organized by a public employer who are knowledgeable, trained and skilled in basic firefighting operations.

“Firefighter” means a member of the fire service who engages in the physical activity of rescue, fire suppression or both, in buildings, enclosed structures, vehicles, vessels or like properties that are involved in a fire or emergency situation.

“Fire service” means a fire department or fire brigade.

“Helmet” means a head protective device consisting essentially of a shell, an energy absorbing system, a retention system, fluorescent retro-reflective markings, ear covers and faceshield.

“Interior structural firefighting” means the physical activity of fire suppression, rescue or both, inside of buildings or enclosed structures which are involved in a fire situation beyond the incipient stage.

“NFPA” means the National Fire Protection Association.

“Overhaul” means the final control of a fire with suppression of the main body of the fire and other pockets of fire, searching for victims and performing salvage operations.

“Positive-pressure apparatus” means an open or closed-circuit apparatus in which the pressure inside the face piece in relation to the immediate environment is positive during both inhalation and exhalation.

“Quick disconnect valve” means a hand-operated device which provides a means for connecting and disconnecting the air cylinder to the self-contained breathing apparatus.

“Remanufactured” means the complete dismantling and reassembly of the fire apparatus body with or without removal from the chassis during the process.

“Respiratory protective device” means a breathing device designed to protect the wearer from oxygen-deficient or hazardous atmosphere.

“SCBA” means self-contained breathing apparatus.

“Self-contained breathing apparatus” means an atmosphere-supplying respirator for which the breathing air source is designed to be carried by the user.

“Service life” means the period of time that a respirator has been rated to provide protection to the wearer.

“Unserviceable” means past useful life of garment or protective gear, or those that have been declared unsafe.

“Vapor-barrier” means that material used to substantially prevent or inhibit the transfer of water, corrosive liquid, steam or other hot vapors from the outside of a garment to the wearer’s body.

12:100-10.3 Organization, training, and education

- (a) The employer shall prepare and maintain a statement or written policy which contains the following:
 - 1. The basic organizational structure of the fire service;
 - 2. The expected number of members in the fire service; and
 - 3. The functions that the fire service is to perform.
- (b) The organizational statement shall be available for inspection by the Commissioner of Labor and by the employees or their designated representative.
- (c) Training and education requirements are as follows:
 - 1. The employer shall provide training and education for all fire service members commensurate with those duties and functions that fire service members are expected to perform. Such training and education shall be provided to fire service members before they perform fire service emergency activities. Fire service leaders and training instructors shall be provided with training and education, which is more comprehensive than that provided to the general membership of the fire service.
 - 2. The employer shall assure that training and education is conducted frequently enough to assure that each member of the fire service is able to perform the member's assigned duties and functions satisfactorily and in a safe manner so as not to endanger fire service members or others. All fire service members shall be provided with training at least annually. In addition, fire service members who are expected to perform interior structural fire fighting shall be provided with an education session or training at least quarterly.
 - 3. The quality of the training and education program for fire service members shall be similar to those conducted by such fire training schools as the Maryland Fire and Rescue Institute; Iowa Fire Service Extension; West Virginia Fire Service Extension; Georgia Fire Academy; New York State Department, Fire Prevention and Control; Louisiana State University Firemen Training Program, or Washington State's Fire Service Training Commission for Vocational Education. (For example, for the oil refinery industry with its unique hazards, the training and education program for those fire service members shall be similar to those conducted by Texas A & M University, Reno Fire School, or the Delaware State Fire School.)
 - 4. The employer shall inform fire service members about special hazards such as storage and use of flammable liquids and gases, toxic chemicals, radioactive sources and water reactive substances to which they may be exposed during fire and other emergencies. The fire service members shall also be advised of any changes that occur in relation to the special hazards. The employer shall develop and make available for inspection by fire service members written procedures that describe the actions to be taken in situations involving the special hazards and shall include these in the training and education program.
 - 5. The employer shall provide each member of the fire service training in HAZMAT Operations Level I, Bloodborne Pathogens, Incident Management System Training

Orientation (I-100), and where applicable, Confined Space Entry Rescue Operations, Trench Rescue Operations and High Angle and Technical Rescue Techniques. All training shall be consistent with the applicable PEOSH Standard.

6. The employer shall comply with the Hazard Communication Standard, N.J.A.C.12:100-7, and relevant parts of the New Jersey Worker and Community Right to Know Act.

12:100-10.4 Personnel; limitations on ability to perform

(a) The employer shall assure that employees who are expected to do interior structural firefighting are physically capable of performing duties, which may be assigned to them during emergencies.

1. Prior to appointment as a structural firefighter, all individuals shall have successfully passed a medical evaluation, which meets the Medical Evaluation Protocol required under the Respiratory Protection Standard, 29 CFR 1910.134. Failure to pass said examination shall exclude the individual from serving as a structural firefighter.

(b) The employer shall assure that compliance with (a) above shall be accomplished in conformity with the provisions of the Americans with Disabilities Act of 1990.

12:100-10.5 Protective clothing

(a) The employer shall provide, at no cost to the employee, and assure the use of, protective clothing which complies with this subchapter.

(b) Firefighters performing interior structural firefighting and overhaul shall be provided with, and required to wear, the equipment covered in this subchapter.

(c) The employer shall assure that:

1. Protective clothing protects the head, body and extremities, and consists of at least the following components: body protection, eye, face and head protection;
2. Protective clothing ordered or purchased after the effective date of this subchapter shall comply with this subchapter; and
3. Firefighters wear foot, leg and body protective clothing complying with this subchapter.

12:100-10.6 Protective clothing; foot and leg protection

(a) Foot and leg protection shall comply with this section for all firefighters.

1. Protective footwear shall comply with NFPA 1974-1987, Protective Footwear for Structural Firefighting.

12:100-10.7 Protective clothing; body protection

(a) Body protection shall comply with this section for all firefighters.

(b) Body protection shall be achieved by the wearing of a fire resistive coat and bunker pants, both of which shall be at least equivalent to NFPA 1971-1986, Protective Clothing for Structural Firefighting, incorporated herein by reference. For career firefighters, body protection must be

worn in combination with a station/work uniform or apparel complying with (c) below. If the employer issues or requires the wearing of uniforms for volunteer firefighters, the uniform must comply with (c) below

(c) Station/work apparel shall be provided to the career firefighter as follows:

1. The performance, construction and testing of station/work uniforms shall be at least equivalent to NFPA 1975-1985, Station/Work Uniforms for Firefighters, incorporated herein by reference; or
2. Apparel issued to the firefighter must be of a non-meltable material, such as cotton.

12:100-10.8 Protective clothing; hand protection

(a) Hand protection shall consist of protective gloves or a glove system which will provide protection against cuts, punctures and heat penetration.

(b) The performance, construction, and testing of gloves for structural firefighters shall be at least equivalent to NFPA 1973-1988, Gloves for Structural Fire Fighting, incorporated herein by reference.

12:100-10.9 Protective clothing; head, eye and face protection

(a) Head protection shall consist of a protective head device with ear flaps and chin strap which meet the performance, construction and testing requirements of 29 CFR Part 1910.156(e)(5) or NFPA 1972-1987, Helmets for Structural Fire Fighting.

(b) Full facepieces, helmets, goggles or hoods of breathing apparatus which comply with 29 CFR 1910.134 and N.J.A.C. 12:100-10.10 shall be deemed to comply with (a) above.

(c) A full protective hood shall be provided for the firefighter that meets the performance, construction, and testing requirements of NFPA 1971-1991, Protective Clothing for Structural Fire Fighting.

1. Firefighters shall be provided with a full protective hood provided that if the wearing of the hood interferes with the proper fit of the helmet, a full protective hood need not be provided until the helmet becomes unserviceable and is replaced.

12:100-10.10 Respiratory protection devices

(a) The employer shall ensure that respirators are provided to, and used by firefighters, and that the respirators meet the requirements of 29 CFR 1910.134 and this section.

(b) Approved self-contained breathing apparatus with a full-facepiece, or with approved helmet or hood configuration, shall be provided to, and worn by, firefighters as follows:

1. While engaged in interior structural firefighting;
2. While working in confined spaces where toxic products of combustion or an oxygen deficiency may be present;
3. During emergency situations involving toxic substances; and

4. During all phases of firefighting and overhaul.

(c) The employer shall ensure that:

1. Respirators ordered or purchased after January 4, 1993 shall be at least equivalent to NFPA 1981-1987, Open-Circuit Self-Contained Breathing Apparatus for Fire Fighters, incorporated herein by reference; and
2. All firefighters shall wear respirators complying with this subchapter except that existing respirators meeting the previous OSHA standards that are superseded by this subchapter may continue to be worn until such time as the respirator becomes unserviceable.

(d) The employer shall establish and maintain a respiratory protection program, which includes the requirements of 29 CFR 1910.134, Respiratory Protection, with amendments published in the Federal Registry through April 23, 1998 and any subsequent amendments thereto, are incorporated and adopted herein by reference as standards applicable to firefighters for respiratory protection.

(e) Existing respirators meeting the previous OSHA standards that are superseded by this subchapter:

1. May be used with approved cylinders from other approved self-contained breathing apparatus provided that such cylinders are of the same capacity and pressure rating. All compressed air cylinders used with self-contained breathing apparatus shall meet the United States Department of Transportation (49 CFR Parts 100 through 199) and the National Institute for Occupational Safety and Health (42 CFR Part 84) criteria.
2. Can be switched from a demand to a positive pressure mode. However, such apparatus shall be in the positive pressure mode when firefighters are performing interior structural firefighting operations or overhaul.

12:100-10.11 Life-safety rope, harness and hardware

(a) This section is intended to apply to fire departments that train and perform rope rescue services. All employees that are required by the fire department to participate in such rescue services shall be provided with the proper equipment meeting the requirements of this section.

(b) The employer shall provide, at no cost to the employee, and assure the use of, life-safety rope, harnesses, and hardware which comply with this section.

(c) The employer shall assure that the life-safety rope, harnesses and hardware complying with this section are used to support fire service personnel during rescue, firefighting, and other emergency operations, or during training exercises.

(d) The performance, construction and testing of ropes, harnesses, and hardware for firefighters shall be at least equivalent to NFPA 1983-1985, Fire Service Life-Safety Rope, Harnesses and Hardware, incorporated herein by reference.

(e) Life-safety rope, harnesses and hardware need only be provided in those departments that perform rope rescue services and to employees who perform such services.

12:100-10.12 Personal alert safety system

(a) The employer shall provide, at no cost to the employee, and assure the use of, a personal alert safety system which complies with this section.

(b) The employer shall assure that all firefighters wear personal alert safety systems that comply with this section by January 4, 1994, except that personal alert safety systems complying with NFPA 1982-1983, Personal Alert Safety Systems (PASS) for Fire Fighters, may continue to be used until they become unserviceable.

(c) The performance, construction and testing of a personal alert safety system for a firefighter shall be at least equivalent to NFPA 1982-1988, Personal Alert Safety Systems (PASS) for Fire Fighters, incorporated herein by reference.

(d) Approved personal alert safety systems shall be provided and worn by the firefighter as follows:

1. While engaged in interior structural firefighting;
2. While working in confined spaces;
3. During all phases of overhaul; and
4. The PASS device shall be attached to the exterior of the firefighter's turnout gear.

12:100-10.13 Hearing protection

(a) This section is intended to provide hearing protection to the firefighter in non-emergency situations. An example of a non-emergency situation requiring hearing protection to the employee would be during the testing of equipment creating a noise level exceeding 90 decibels (dBA). The hearing conservation program described should be in writing and may be incorporated into standard operating procedures (SOP).

(b) The fire department shall provide hearing protection for all members when they are exposed to noise in excess of 90 dBA from power tools or equipment, except for situations where the use of hearing protection devices would create an additional hazard to the user.

(c) The fire department shall engage in a hearing conservation program to identify and reduce or eliminate potentially harmful sources of noise in the work environment.

(d) The provisions of 29 CFR 1910.95, Occupational Noise Exposure, incorporated at N.J.A.C. 12:100-4 are applicable to this subchapter.

12:100-10.14 Filling air cylinders

(a) Air cylinders for respiratory equipment shall be filled only by trained personnel.

(b) The charging station shall be equipped with proper facilities to ensure the safety of the charging station operator and nearby personnel.

12:100-10.15 Fire apparatus operations

(a) Whenever a fire apparatus leaves the fire station in response to a fire alarm, all firefighters, except the driver of the fire apparatus, shall have donned their protective clothing before the apparatus is in motion. The term “fire apparatus” does not include an automobile.

(b) The employer shall provide restraining devices for all firefighters aboard a fire apparatus. Restraining devices may include protective seating, seatbelts, or vehicle harnesses for all firefighters aboard.

(c) All fire apparatus purchased and/or remanufactured after January 4, 1993 shall provide enclosed seating with seatbelts for all personnel riding on the apparatus, complying with the following standards, incorporated herein by reference:

1. NFPA 1901-1991 Pumper Fire Apparatus;
2. NFPA 1902-1991 Initial Attack Fire Apparatus;
3. NFPA 1903-1991 Mobile Water Supply Fire Apparatus; and
4. NFPA 1904-1991 Aerial Ladder and Elevating Platform Fire Apparatus.

12:100-10.16 Maintenance of firefighter equipment

(a) Firefighting equipment required under this subchapter shall be maintained and inspected by the employer at least annually to ensure the safe operational condition of the equipment. Damaged equipment or equipment found to be in unserviceable condition shall be removed from service and replaced.

(b) All fire department aerial apparatus is to be subject to visual inspection, operational tests and load tests at least annually in accordance with NFPA 1914-1991, Testing Fire Department Aerial Devices. Complete inspections and tests including, the non-destructive testing defined in NFPA 1914-1991, Testing Fire Department Aerial Devices, shall be conducted whenever visual inspection or load testing indicates a potential problem or at least every five years. Any device that fails a test shall be immediately removed from service and shall not be returned to service until properly repaired and retested. In addition, pumper fire apparatus shall be inspected at least annually in accordance with criteria of NFPA 1911-1997; initial attack fire apparatus shall be inspected at least annually in accordance with criteria of NFPA 1911-1997; and mobile water supply fire apparatus shall be inspected at least annually in accordance with criteria of NFPA 1911-1997. Each inspection shall include road-worthiness and safety equipment.

SUBCHAPTER 17. STANDARDS AND PUBLICATIONS REFERRED TO IN THIS CHAPTER

12:100-17.1 Documents referred to by reference

(a) The full title and edition of each of the standards or publications referred to in this chapter are as follows:

1. ACGIH, Threshold Limit Values for Chemical Substances and Physical Agents in the Work Environment (2003 Edition);
- 2.-4. (No change)

- 5. IARC, International Agency for Research on Cancer Monographs; Recodify existing 5.-19. as 6.-20. (No change in text.)
- 21. N.J.S.A. 34:6A-25 et seq., New Jersey Public Employees Occupational Safety and Health Act;
- 22. N.J.S.A. 34:13A-1 et seq., Employer-Employee Relations Act; and
- 23. NTP, National Toxicology Program Annual Report on Carcinogens (10th Edition).

12:100-17.3 Availability of documents from issuing organization

Copies of the standards and publications referred to in this chapter may be obtained from the organizations listed below. The abbreviations preceding these standards and publications have the following meaning, and are the organizations issuing the standards and publications listed in N.J.A.C. 12:100-17.1:

ANSI American National Standards Institute
25 West 43rd Street
New York, New York 10036

CFR Code of Federal Regulations
Copies available from:
Superintendent of Documents
Government Printing Office
Washington, DC 20402

Or

U.S. Government Printing Office
Government Book Store
Robert Morris Building
100 North 17th Street
Philadelphia, PA
Phone: (215) 636-1900

CGA Compressed Gas Association, Inc.
1235 Jefferson Davis Highway, Suite 509
Arlington, VA 22202

NFPA National Fire Protection Association
Batterymarch Park
Quincy, MA 02269

NIOSH National Institute for Occupational Safety and Health
Division of Technical Services
Cincinnati, Ohio 45226

NJAC New Jersey Administrative Code
Copies available from:
Office of Public Employee Safety
N.J. Department of Labor and Workforce Development
PO Box 386
Trenton, NJ 08625-0386

NJSA New Jersey Statutes Annotated

Copies available from:

Public Safety and Occupational Safety and Health

New Jersey Department of Labor and Workforce Development

PO Box 386

Trenton, NJ 08625-0386