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COMPLIANCE ALERT #6 (R9-99)

FIREFIGHTERS PROTECTIVE CLOTHING

ATTENTION: FIRE SERVICE MANAGERS

SEPTEMBER 1999

This notice is being sent as a reminder of the mandatory obligation to provide firefighters protective clothing at no cost to the employees.

The N.J. Department of Labor has issued orders to comply on cases where the employer did not provide the protective clothing to their firefighters. Violations for not providing protective clothing are of the most serious type since a fatality may result.

A penalty order to comply may result if after the original order to comply, the employer has not abated the hazards and/or violations, or has not documented a compliance date that is reasonable, or has not shown good faith efforts to comply.

<u>To Summarize: The employer must provide, pay for, and ensure the use of protective clothing that complies with the standard.</u>

A copy of the standard is attached for your convenience.

For additional copies please call the Office of Public Employees' Safety at: (609) 292-7036.

12:100–8.6 Noise exposure

(a) The Occupational Noise Exposure Standard, Section 1910.95 of 29 CFR Part 1910, adopted by reference at N.J.A.C. 12:100–4.2(a)6, shall be applicable at indoor firing ranges.

(b) To minimize the effect of peak sound pressure levels on individuals in the indoor range, all reflecting walls should be covered with high efficiency sound absorbing material. The coverings should be designed to permit easy cleaning and access to the acoustical material for periodic replacement.

(c) The floors directly behind the shooting booths should be covered with acoustical flooring.

(d) Firing range control rooms should be acoustically treated to reduce noise levels.

(e) The bullet trap should not be anchored or attached to any structural support for the building.

Amended by R.1998 d.574, effective December 7, 1998.
See: 30 N.J.R. 3368(a), 30 N.J.R. 4240(b).
In (a), changed N.J.A.C. reference.

12:100–8.7 Water drains

Each firing range should be equipped with a floor drain and trap to facilitate cleaning by a wet method. The drain location should be approximately 20 feet down range of the firing line. The floor should slope two to three inches toward the drain.

Amended by R.1994 d.492, effective September 19, 1994.
See: 26 N.J.R. 2776(a), 26 N.J.R. 3872(b).

12:100–8.8 Work practices

(a) The ventilation system shall be in operation at all times while the range is in use and during clean-up.

(b) The range shall be cleaned by vacuum or a wet method. The use of a hand broom shall be prohibited. Vacuum cleaners shall be equipped with high efficiency particulate filters (HEPA) or the equivalent.

(c) At all times while cleaning, repairing, or reclaiming lead in the bullet trap, a National Institute of Occupational Safety and Health approved half-mask, air purifying respirator equipped with N–100 filters and disposable coveralls shall be the minimum personal protective equipment worn by all employees performing one or more of these tasks.

(d) Proper ear protection shall be provided for and worn by all individuals inside the firing range. The ear protectors shall be selected on the basis of offering a noise reduction rating of at least 20 decibels. In cases where the noise decibel level is at or above 100 decibels, both plugs and muffs shall be worn simultaneously.

(e) Ear plugs, when worn, shall be properly fitted.

(f) A hearing conservation program shall be instituted and yearly audiometric examinations shall be provided to the firing range officers and instructors.

(g) Eating, drinking, or smoking in the range shall be prohibited.

(h) A specific schedule shall be established to perform maintenance and repair work to keep the range facilities operational and free of hazardous conditions.

Amended by R.1998 d.574, effective December 7, 1998.
See: 30 N.J.R. 3368(a), 30 N.J.R. 4240(b).
In (c), substituted a reference to N–100 filters for a reference to high efficiency filters.

SUBCHAPTER 9. (RESERVED)

Subchapter Historical Note

Subchapter 9, Work in Confined Spaces, was repealed by R.1998 d.574, effective December 7, 1998. See: 30 N.J.R. 3368(a), 30 N.J.R. 4240(b).

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. Standards for personal protective equipment, respiratory protective equipment and other requirements for the fire service (both career and volunteer).

(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 contracting the issuing entities at the addresses listed in N.J.A.C. 12:100–17.3.

Amended by R.1998 d.574, effective December 7, 1998.
See: 30 N.J.R. 3368(a), 30 N.J.R. 4240(b).
In (c), deleted a reference to ANSI.

12:100–10.2 Definitions

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.

"Career firefighter" means any person who has his or her primary employment as a firefighter, who ordinarily works at that employment at least 20 hours per week and who is enrolled as a firefighter in a public retirement system.

"Career fire service" means a fire department or fire brigade which is composed of persons who have chosen firefighting or related duties as their occupation in paid, part paid fire departments or fire districts.

"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 users' 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 adjacent walls which may present fire hazards to employees.

"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 the 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 an 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.

"Volunteer firefighter" means any person other than a career firefighter who serves as a firefighter in a public or private firefighting agency or organization.

"Volunteer fire service" means a fire department or brigade composed of persons who provide their services without compensation in the public interest.

Amended by R.1994 d.492, effective September 19, 1994.
See: 26 N.J.R. 2776(a), 26 N.J.R. 3872(b).
Amended by R.1998 d.574, effective December 7, 1998.
See: 30 N.J.R. 3368(a), 30 N.J.R. 4240(b).
Deleted "ANSI"; in "Confined space", substituted CFR reference for N.J.A.C. reference; and rewrote "Self-contained breathing apparatus".

12:100–10.3 Organization

(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.

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.

(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 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;

3. Career firefighters wear foot, leg and body protective clothing complying with this subchapter.

4. Volunteer firefighters wear foot, leg and body protective clothing complying with this subchapter except that existing foot, leg and body protection meeting the previous OSHA standards that are superseded by this subchapter may continue to be worn until either they become unserviceable or replaced.

Amended by R.1994 d.492, effective September 19, 1994.
See: 26 N.J.R. 2776(a), 26 N.J.R. 3872(b).
Amended by R.1998 d.574, effective December 7, 1998.
See: 30 N.J.R. 3368(a), 30 N.J.R. 4240(b).
In (c), rewrote 3 and 4.

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

(a) Foot and leg protection shall comply with this section for all career firefighters, and as replacement of existing foot and leg protection is required for the volunteer firefighters.

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

2. The use of three quarter length boots may continue for volunteer firefighters until replacement of the boots is necessary. At time of replacement, bunker pants and bunker boots as required by NFPA 1974–1987 must be purchased.

Amended by R.1998 d.574, effective December 7, 1998.
See: 30 N.J.R. 3368(a), 30 N.J.R. 4240(b).
Rewrote the section.

12:100–10.7 Protective clothing; body protection

(a) Body protection shall comply with this section for the career firefighters, and as replacement is required for the volunteer 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.

(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 nonmeltable material, such as cotton.

Amended by R.1998 d.574, effective December 7, 1998.
See: 30 N.J.R. 3368(a), 30 N.J.R. 4240(b).
In (a) and (c), deleted a January 4, 1995 deadline.

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.

Amended by R.1994 d.492, effective September 19, 1994.
See: 26 N.J.R. 2776(a), 26 N.J.R. 3872(b).
Amended by R.1998 d.574, effective December 7, 1998.
See: 30 N.J.R. 3368(a), 30 N.J.R. 4240(b).

In (b), substituted a reference to Glove for Structural Fire Fighting for a reference to Gloves for firefighters.

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, 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 December 7, 1999, 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.

Amended by R.1998 d.574, effective December 7, 1998.
See: 30 N.J.R. 3368(a), 30 N.J.R. 4240(b).
In (a), substituted a reference to NFPA 1972–1987, Helmets for Structural Fire Fighting for a reference to NFPA Standard 1972–1987 edition at the end; in (b), substituted "or hoods of" for "hoods or" following "helmets"; and added (c).

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 assure 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:

1. Negative-pressure self-contained breathing apparatus with a rated service life of more than two hours and which has a minimum protection factor of 5,000, as determined by an acceptable quantitative fit test performed on each individual, shall be acceptable for use only during those situations for which the employer demonstrates that long duration breathing apparatus is necessary.

i. Quantitative fit test procedures shall be available for inspection by the Commissioner of Health and Senior Services.

ii. Negative-pressure breathing apparatus shall continue to be acceptable for 18 months after a positive-pressure breathing apparatus with the same or longer rated service life is certified by the National Institute of Occupational Safety and Health (NIOSH). After this 18–month period, all self-contained breathing apparatus used for these long duration situations shall be of the positive-pressure type.

2. The requirements of 29 CFR 1910.134, Respiratory Protection, with amendments published in the Federal Register 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 criteria of 49 CFR Parts 100 through 199 and 30 CFR Parts 11, 12, 13, 14 and 14a;

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.

Amended by R.1995 d.43, effective January 17, 1995.
See: 26 N.J.R. 4313(a), 27 N.J.R. 373(b).
Amended by R.1998 d.574, effective December 7, 1998.
See: 30 N.J.R. 3368(a), 30 N.J.R. 4240(b).
Rewrote the section.

12:100–10.11 Life-safety rope, harnesses 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.

Amended by R.1998 d.574, effective December 7, 1998.
See: 30 N.J.R. 3368(a), 30 N.J.R. 4240(b).
In (c), deleted "on a date not later than January 4, 1994" at the end.

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.

Amended by R.1994 d.492, effective September 19, 1994.
See: 26 N.J.R. 2776(a), 26 N.J.R. 3872(b).
Amended by R.1998 d.574, effective December 7, 1998.
See: 30 N.J.R. 3368(a), 30 N.J.R. 4240(b).
In (b), substituted a reference to NFPA 1982–1983, Personal Alert Fire Safety Systems (PASS) for Fire Fighters for a reference to NFPA standard 1982–1983.

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. 12:100–4.2(a) 6, Subpart G, Occupational Health and Environment Control, is applicable to this subchapter.

Amended by R.1998 d.574, effective December 7, 1998.
See: 30 N.J.R. 3368(a), 30 N.J.R. 4240(b).
In (d), changed NJAC reference.

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.

Amended by R.1998 d.574, effective December 7, 1998.
See: 30 N.J.R. 3368(a), 30 N.J.R. 4240(b).
Rewrote the section.

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.

Amended by R.1994 d.492, effective September 19, 1994.
See: 26 N.J.R. 2776(a), 26 N.J.R. 3872(b).
Amended by R.1998 d.574, effective December 7, 1998.
See: 30 N.J.R. 3368(a), 30 N.J.R. 4240(b).
In (b), deleted "by January 4, 1998" following "apparatus"; and in (c)4, inserted "Fire" following "Platform".

12:100–10.16 Maintenance of firefighter equipment

(a) Firefighting equipment required under this subchapter that is in damaged or 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.

Amended by R.1998 d.574, effective December 7, 1998.
See: 30 N.J.R. 3368(a), 30 N.J.R. 4240(b).
Designated the former section (a); and added (b).

SUBCHAPTER 11. (RESERVED)

Subchapter Historical Note

Subchapter 11, Control of Hazardous Energy Sources, was repealed by R.1998 d.574, effective December 7, 1998. See: 30 N.J.R. 3368(a), 30 N.J.R. 4240(b).

SUBCHAPTER 12. (RESERVED)

Subchapter Historical Note

Subchapter 12, Asbestos, was repealed by R.1996 d.370, effective August 5, 1996. See: 28 N.J.R. 2507(a), 28 N.J.R. 3801(a).

SUBCHAPTER 13. INDOOR AIR QUALITY STANDARD

Authority

N.J.S.A. 34:16–27, 34:1–20, 34:1A–3 and 34:16–20 et seq., 29 U.S.C. §§ 701 et seq., and 34 C.F.R. 361.1 et seq.

Source and Effective Date

R.1997 d.109, effective March 3, 1997.
See: 28 N.J.R. 4564(a), 29 N.J.R. 796(a).

12:100–13.1 Scope

This subchapter shall apply to matters relating to indoor air quality in existing buildings occupied by public employees during their regular working hours.

12:100–13.2 Definitions

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

"Air contaminants" refers to substances contained in the vapors from paint, cleaning chemicals, pesticides, solvents, particulates, outdoor air pollutants and other airborne substances which together may cause material impairment to employees working within the enclosed workplace.

"Building-related illness" describes specific medical conditions of known etiology which can be documented by physical signs and laboratory findings. Such illnesses include sensory irritation when caused by known agents, respiratory allergies, asthma, nosocomial infections, humidifier fever, Legionnaires' disease, and the signs and symptoms characteristic of exposure to chemical or biologic substances such as carbon monoxide, formaldehyde, pesticides, endotoxins, or mycotoxins.

"Building systems" includes the heating, ventilation and air-conditioning (HVAC) system, the energy management system and all other systems in a facility which may impact indoor air quality.

"Department" means the Department of Health and Senior Services.

"Designated person" means a person who has been given the responsibility by the employer to take necessary measures to assure compliance with this subchapter.

"Designated smoking area" means an area in a building, where smoking is permitted and which is physically separated from non-smoking areas and which non-smokers are not required to enter or pass through.

"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.