

NOTE TO THE NATIONAL ADVISORY COMMITTEE ON OCCUPATIONAL SAFETY AND HEALTH

This draft regulatory language was developed by the Emergency Response and Preparedness Subcommittee. Many of the provisions are based on, but not directly quoted from, existing OSHA requirements (29 CFR 1910) and on various National Fire Protection Association standards (NFPA). For your convenience, the paragraphs used as the basis for some provisions are identified in parentheses, such as (NFPA 1500, p.1.1). They are for your reference and are not intended as citations to the standards. All of the standards used in the development of this document are listed at the end, for reference.

Section 1910.156, Emergency Responder Preparedness Program Standard

(This standard will replace in entirety existing §1910.156, Fire brigades)

Note: This rule will only apply to organizations that are already required to comply with Federal OSHA or State plan regulations. Many organizations with emergency responders (primarily State, county and municipal employers) do not fall under OSHA jurisdiction.

(a) Scope

(1) This section applies to:

(i) Emergency service organizations (ESO), such as, but not limited to entities that provide one or more of the following services, as a primary or secondary function: firefighting, fire rescue, emergency medical service, technical rescue (trench/excavation, confined space, rope/high angle, mine/cave), vehicle/machinery rescue, water rescue/recovery (land/shore based, swiftwater, underwater), hazardous material spill/release mitigation, search and rescue (urban, mountain, wilderness).

[Note: This section does not apply to law enforcement employers solely engaged in law enforcement/crime prevention activities. It does apply to law enforcement employers who also provide services such as the examples in (a)(1)(i), but only with respect to those services.]

(ii) General industry, construction and maritime industry employers who have or who establish a workplace emergency response team, also known as industrial, emergency or facility fire brigade; industrial fire dept.; emergency response team; fire team; plant emergency organization; etc.).

[Note: For the purposes of this section, an employer with a workplace emergency response team is considered to be an “ESO” and the employees assigned to the team are considered to be “responders.”]

(iii) General industry, construction, and maritime industry employers who expect, based on past experience, a mutual aid agreement, or a contract, to provide skilled support personnel at an emergency incident.

[Note: For the purposes of this section, an employer with skilled support personnel is considered to be a “skilled support employer” and each employee assigned to provide the skilled support is considered to be a “skilled support worker.”]

(A) This section does not apply to skilled support employers during post-emergency incident activities. Typically, skilled support employers are released from the incident scene before, or upon termination of the incident by the Emergency Service Organization’s incident commander. Post-emergency incident activities begin when the Incident Commander of the emergency incident terminates command.

(B) When a skilled support employer will remain at the location of the incident during post-emergency incident activities, the employer shall comply with all other OSHA standards (§§1910, 1926, etc.) as appropriate to the industry.

(b) Duty

(1) Each Emergency Service Organization (ESO) shall develop in writing and implement an Emergency Responder Preparedness Program (ERPP) to provide protection for each responder who is designated to operate at an emergency incident. The ESO shall ensure that the ERPP required by this section meets the criteria in paragraphs (d) through (p) of this section.

(2) Each employer who establishes a workplace emergency response team (also known as industrial, emergency or facility fire brigades; industrial fire depts.; emergency response teams; fire teams; plant emergency organizations; correctional facility response teams; etc.) shall prepare and maintain a statement of written policy which establishes the existence of the workplace emergency response team, and provides organizational structure. Each employer with a workplace emergency response team shall develop in writing and implement an emergency responder preparedness program to provide protection for each employee (responder) who is designated to operate at an emergency incident. The employer shall ensure that the ERPP required by this section meets the criteria in paragraphs (d) through (o) of this section.

(3) Each skilled support employer shall develop in writing and implement an emergency responder preparedness program to provide protection for each employee designated to operate on an emergency incident. The skilled support employer shall ensure that the ERPP required by this section meets the criteria in paragraph (q) thru (u):

(c) Definitions and Acronyms

(1) Definitions.

Advanced life support. Emergency medical treatment beyond basic life support level.

Basic Life Support. Emergency medical treatment performed to sustain life that includes cardiopulmonary resuscitation, control of bleeding, treatment of shock, stabilization of injuries and wounds, and first aid.

Community vulnerability and risk assessment. The process of identifying, quantifying, and prioritizing the potential and known vulnerabilities of the overall community; its structures, inhabitants, infrastructure, organizations, hazardous conditions or processes. The assessment is intended to include human created vulnerabilities and natural disasters.

Control Zones. The areas at an incident that are designated based upon safety and the degree of hazard. Control zones may be designated as cold, warm, hot, or no-entry.

Cold zone. The area immediately outside the boundary of the established warm zone where responders are safe from adverse effects of a fire, hazardous material release, etc. (NFPA 1500, 2013 ed.) The cold zone typically contains the command post and such other support functions as are deemed necessary to control the incident.

Hot zone. The area immediately surrounding the physical location of a fire, hazardous material release, etc., having a boundary that extends far enough away to protect responders outside the hot zone from being directly exposed to the harmful effects of the fire, release, etc. (NFPA 1500, 2013 ed.)

No-entry zone. A control area designated to keep out responders, due to the presence of dangers such as imminent hazard(s), potential collapse, or the need to preserve the scene.

Warm zone. The control area immediately outside the boundary of the hot zone having a boundary that extends far enough from the hot zone to protect responders outside the warm zone from the adverse effects of the fire, release, etc. (NFPA 1500, 2013 ed.) The warm zone typically is where responder and equipment decontamination and hot zone support take place.

Emergency incident. Any situation to which an Emergency Service Organization or Skilled Support Employer responds in order to deliver emergency services, such as intervention for rescue, fire suppression, EMS, special operations, and other forms of hazard control and mitigation. (NFPA 1561 modified)

Emergency Medical Service. The provision of patient treatment, such as first aid, CPR, basic life support, advanced life support, other pre-hospital procedures, and transport. (NFPA 1500 modified)

Emergency Service Organization. An organization whose employees, as part of their regularly assigned duties, respond to emergency incidents to provide service such as rescue, fire

suppression, emergency medical care, special operations and other forms of hazard control and mitigation. It does not include organizations solely engaged in law enforcement, crime prevention, etc.

Employee. For the purposes of this standard, an employee is referred to as a responder or a Skilled Support Worker (SSW).

Employer. For the purposes of this standard, an employer is referred to as an Emergency Service Organization (ESO) or a Skilled Support Employer (SSE).

Facility vulnerability and risk assessment. The process of identifying, quantifying, and prioritizing the potential and known vulnerabilities of the overall facility; its structures, inhabitants, infrastructure, hazardous conditions or processes. The assessment is intended to include human created vulnerabilities and natural disasters.

Fire Suppression. The activities involved in controlling and extinguishing fires. (NFPA 1500, 2013 ed.)

Firefighting, Aircraft. The control or extinguishment of a fire adjacent to or involving an aircraft following ground accidents/incidents.

Firefighting, Marine. The firefighting action taken to prevent, control, or extinguish fire involved in or adjacent to a marine vessel and rescue actions for occupants. (NFPA 1710, 2010) Typically includes vessels operated by the ESO to provide the firefighting or rescue service.

Firefighting, Proximity. Specialized firefighting operations that can include the activities of rescue, fire suppression, and property conservation at incidents involving fires producing very high levels of radiant heat as well as conductive and convective heat. (NFPA 1851, 2013)

Firefighting, Structural. The activities of rescue, fire suppression, and property conservation in buildings, enclosed structures, vehicles, rail cars, marine vessels, aircraft, or like properties that are involved in a fire or emergency situation. (NFPA 1851, 2014 & NFPA 1500, 2013)

Firefighting, Wildland. The activities of fire suppression and property conservation in woodlands, forests, grasslands, brush, prairies, and other such vegetation, or any combination of vegetation, that is involved in a fire situation but is not within buildings or structures. (NFPA 1500, 2013 ed.)

Firefighting, Incipient. Firefighting performed inside or outside of an enclosed structure or building when the fire has not progressed beyond incipient stage. (NFPA 600, 2015 ed.)

Firefighting, Defensive. The mode of manual fire control in which the only fire suppression activities taken are limited to those required to keep a fire from extending from one area to another. (NFPA 600, 2015 ed)

Firefighting, Offensive. The mode of manual fire control in which manual fire suppression activities are concentrated on reducing the size of a fire to accomplish extinguishment. (NFPA 600, 2015 ed.)

Firefighting, Interior Structural. The physical activity of fire suppression, rescue, or both, inside of buildings or enclosed structures that are involved in a fire beyond the incipient stage. (NFPA 600, 2015 ed.)

Firefighting, Exterior. Offensive firefighting performed outside of an enclosed structure when the fire is beyond the incipient stage. (NFPA 600, 2015 ed.) Exterior firefighting may include fighting structure fires from outside of the structure, containing, controlling, and extinguishing exterior fires involving site-specific hazards, such as flammable and combustible liquid spills or leaks, liquefied petroleum gas releases, and electrical substations.

Foreseeable. An action or event that is predictable or should be anticipated.

Gross decontamination. The process during which the amount of surface contaminants and foreign materials on personal protective equipment are removed or significantly reduced. Typically accomplished by physical means involving dislodging or displacement such as, but not limited to: water or liquid rinse, brushing, scraping, wiping off, etc.

Health and Safety Officer. An individual assigned and authorized by the ESO as the manager of the safety and health program. This individual can also be the incident safety officer or that role can be assigned to another individual as a separate function. (NFPA 1500, p. 3.3.24) (NFPA 1521, p. 3.3.47)

Incident Commander. Typically the most senior or most experienced responder at the emergency incident, who is responsible for overall management of the incident and the safety of all responders involved in the incident. (NFPA 1500, p. 8.1.5) Responsible for all incident activities, including the development of strategies and tactics and the ordering and release of resources. (NFPA 472)

Incident Safety Officer. A responder who is a member of the command staff operating on an incident scene, who is responsible for monitoring and assessing safety hazards and unsafe situations and for developing measures for ensuring personnel safety. (NFPA 1521, p. 3.3.47)

Incident scene. The physical location of the emergency incident.

Incipient Stage. Refers to the severity of a fire where the progression is in the early stage and has not developed beyond that which can be extinguished using portable fire extinguishers or small diameter hose lines flowing up to 125 gpm (473L/min). (NFPA 1081)

Incident Action Plan. The objectives reflecting the overall incident strategy, tactics, risk management, and responder safety that are developed by the incident commander. Incident action plans are updated throughout the incident. (NFPA 1500. 2013)

Law Enforcement Agency. An organization responsible for the prevention, investigation, apprehension, or detention of individuals suspected or accused of committing a crime or breaking an establish law.

Living area. The room(s) or area(s) of the ESO's facility where responders may cook, eat, relax, read, study, watch television, complete paperwork or data entry, etc. Examples include: "day room," kitchen/dining area, classroom, office, TV room, etc. Exclusions include: maintenance shop, utility and storage areas, etc.

Mayday. An emergency procedure term used to signal an individual is in distress, is in need of assistance, and is unable to self-rescue. Typically used when safety or life is in jeopardy.

Mutual aid, mutual aid agreement (also known as automatic aid and fire protection agreements). A written agreement between ESOs, and between ESOs and jurisdictions that they will assist one another upon request by furnishing personnel, equipment, and expertise in a specified manner. (NFPA 1710) A written plan for reciprocal assistance between ESOs.

Near miss. An unplanned event that did not result in injury, illness, or damage; but had the potential to do so. Only a fortunate break in the chain of events prevented an injury, fatality or damage; in other words, a miss that was nonetheless very near. Also known as a close call, narrow escape, near collision, near hit, etc.

Non-Governmental Organization. A non-profit, voluntary citizen's group which is organized on a local, national or international level and is not part of any government. Examples include: American Red Cross, faith-based organizations, etc.

Personal Protective Equipment (also known as personal protective ensemble). Clothing and equipment worn and utilized to prevent or minimize exposure to serious workplace injuries and illnesses. Examples include items such as, but not limited to, gloves, safety glasses and goggles, safety shoes and boots, earplugs and muffs, hard hats and helmets, respirators and self-contained breathing apparatus, protective coats and pants, hoods, coveralls, vests and full body suits.

Post-Emergency Incident Activity. Any activity that occurs after the ESO incident commander releases the skilled support employer's assets, or terminates the ESO's command.

Pre-Incident Plan. A document developed by gathering general and detailed data that is used by responding personnel in effectively managing emergencies for the protection of occupants, responding personnel, property, and the environment. (NFPA 1006, 1081, 1620) It is developed before an incident occurs and is intended to be used during an incident to aid in mitigation.

Qualified Healthcare Professional. A physician, physician’s assistant, occupational nurse, or other medical professional who possesses a license, professional qualifications or certification required to practice medicine in the ESO’s jurisdiction, and who is knowledgeable in the physical requirements needed to perform the duties designated to responders.

Rapid Intervention Team (RIT) (also known as Rapid Intervention Crew, Firefighter Assist and Search Team). A team of responders dedicated solely to serve as a stand-by rescue team available for the immediate search and rescue of any missing, trapped, injured or unaccounted for responder(s). This team shall be fully equipped with the appropriate personal protective equipment, and specialized rescue equipment needed based on the specifics of the operation that is underway. A RIT is not the same as “2-in, 2-out” which is a separate, specific requirement (1910.134 and (n)(4)(iii)).

Responder. An employee who is, or will be, assigned to perform duties at emergency incidents.

Risk-benefit analysis. A decision made by a responder based on a hazard identification and situation assessment that weights the risks likely to be taken against the benefits to be gained for taking those risks.

Safety officer. A generic title given to a responder within an ESO who performs the functions of a health and safety officer, incident safety officer, or who serves as an assistant to a person in either of those positions. (NFPA 1521, p. 3.3.47)

Size-up. An initial and on-going evaluation of the incident scene for the purpose of determining the scope and nature of operational activities to determine mitigation strategies.

Skilled support employer (SSE). An employer who has a primary function other than providing an emergency service, but who designates one or more employees to provide a service at the scene of an emergency incident. Examples include, but are not limited to, employers who provide cranes, tow trucks, construction equipment, and utility service (gas, water, electric, public health employers, EMS and medical personnel etc.).

Skilled support worker (SSW). An employee of a skilled support employer who is skilled in certain tasks or disciplines that can support an ESO, (such as operators of tow vehicles, mechanized earth moving or digging equipment, crane and hoisting equipment, qualified health care professionals, technical experts, etc.) who is needed to perform immediate emergency support work that cannot reasonably be performed in a timely fashion by an ESO responder, and who will be or may be exposed to the hazards at an emergency incident scene. (§1910.120)

Sleeping area. Designated room(s) or area(s) of the ESO’s facility where responders sleep in beds; sometimes referred to as a dormitory, bunkroom, sackroom, etc.

Spontaneous Unaffiliated Volunteer: A responder from a non-dispatched ESO, or a skilled or unskilled person who voluntarily arrives at an incident scene or disaster site to provide

assistance, after the establishment of control/command by the ESO. This person is typically not affiliated with any disaster support group, such as, but not limited to the American Red Cross, Community Emergency Response Teams (CERT), or other Non-Governmental Organization (NGO)). This person may or may not have training.

Standard Operating Procedure. A Standard Operating Procedure is an organizational directive that establishes or prescribes specific operational or administrative methods to be followed routinely for the performance of designated operations or actions. When used as guidelines, SOPs can be varied due to operational need in the performance of designated operations or actions. (Combination of definitions in NFPA 1521, p. 3.3.50 & 51)

Workplace emergency response team. A group of employees who prepare for and respond to emergency incidents in the workplace. May also be known as industrial, emergency or facility fire brigade; industrial fire dept.; emergency response team; fire team; plant emergency organization; etc.

(2) Acronyms.

EMS - Emergency Medical Service

ERPP – Emergency Responder Preparedness Program

ESO - Emergency Service Organization

HSO – Health and Safety Officer

IAP - Incident Action Plan

ICS – Incident Command System

IDLH – Immediately Dangerous to Life or Health

IMS – Incident Management System

ISO – Incident Safety Officer

NGO – Non-Governmental Organization

PIP - Pre-Incident Plan

PPE – Personal Protective Equipment

RIT – Rapid Intervention Team

SCBA – Self-Contained Breathing Apparatus

SOP – Standard Operating Procedure

SSE – Skilled Support Employer

SSW – Skilled Support Worker

SUV – Spontaneous Unaffiliated Volunteer

(d) Responder Participation

(1) Each Emergency Service Organization (ESO) shall establish and implement a process to:

(i) Consult with responders in developing and updating the Emergency Responder Preparedness Program (ERPP);

(ii) Involve responders in implementing and evaluating the program, and in the review and change process;

(iii) Request input from responders regarding workplace modifications;

(iv) Involve responders in ESO facility inspections and incident investigations;

(v) Encourage responders to report safety and health concerns, such as hazards, injuries, illnesses, near misses, and deficiencies in the program;

(vi) Respond to such reports in a reasonable period of time; and

(vii) Post procedures for reporting safety and health concerns under paragraph (d)(1)(v) of this section in a conspicuous place or places where notices to responders are customarily posted.

(2) The ESO shall not retaliate or discriminate against responders for, or otherwise engage in practices or implement policies that deter responders from, participating in the program, including reporting safety and health concerns.

(e) Establishment of Emergency Service(s) Capability

(1) The Emergency Service Organization (ESO) shall conduct a community or facility vulnerability and risk assessment for its service area, for the purpose of establishing its standards of response and determining its ability to match the community or facility's risks with available resources.

[Note: An ESO whose primary service area is a community (municipality, county, parish, region, state, etc.), shall assess the community it serves. An ESO whose primary service area is, for example: a manufacturing facility, a military facility, a research & development facility, etc., shall assess the facility.]

(i) The ESO shall develop in writing a comprehensive community or facility vulnerability and risk assessment of hazards within the area where the emergency service(s) it provides is/are expected to be performed. The assessment should include the following considerations:

- (A) Civilian and worker injury or loss of life;
- (B) Property damage or loss;
- (C) Critical infrastructure damage or loss; and
- (D) Environmental damage or loss.

(ii) A variety of factors shall be taken into account when developing the community or facility vulnerability and risk assessment including the size, height and configuration of buildings; special life risks; exposures between structures; construction types; occupancy classifications; fixed facilities; transportation modes; and other hazards.

(A) The assessment shall determine structures, facilities, locations, etc., where a Pre-Incident Plan (PIP) is needed.

(B) All facilities within the ESOs service area that are subject to reporting requirements under the Emergency Planning and Community Right-to-Know Act (EPCRA), also known as the Superfund Amendments and Reauthorization Act of 1986 (SARA) shall be included in the ESO's community risk and vulnerability assessment.

(2) The community or facility vulnerability and risk assessment process shall define the Authority Having Jurisdiction (AHJ) for command responsibility during mitigation activities, and ensure all activities occur within the framework of the existing AHJ, legislation or legal restrictions.

(i) The community or facility vulnerability and risk assessment shall identify how the ESO will be incorporated into large-scale mitigation effort(s) managed by Federal or State agencies that have the authority to manage larger scale incident(s) in addition to cooperating agencies and NGOs.

(ii) When it is deemed necessary to coordinate resources on a regional level, the ESO shall establish a multi-agency coordination system to facilitate the coordination and support between other ESOs and jurisdictions. (NFPA 1561, p. 5.7)

(iii) The community or facility vulnerability and risk assessment shall define how the ESO will integrate and work within a unified command structure that, due to the complexity of the mitigation effort, requires a shared responsibility among two or more ESO or agencies.

(3) The ESO shall evaluate the resources needed, including personnel and equipment, for mitigation of emergency incidents identified in the community or facility vulnerability and risk

assessment, and establish in writing the type(s) and level(s) of emergency service(s) it is capable of performing.

(4) The ESO shall establish tiers of responder responsibilities, duties, qualifications and capabilities. Examples of tiers include, but are not limited to:

- Emergency Operations: Support, Awareness, Operation, Technician
- Emergency Medical Services: Support, EMR, EMT, Advanced EMT, Paramedic, Nurse, Physician

[Note: See Appendix (# ??) “Examples of various types and levels of service and tiers of responders.”]

(5) The ESO shall define the service(s) needed based paragraph (e)(3) that the ESO is unable to provide and identify how the service(s) can be provided through neighboring ESOs. The ESO shall:

(i) Develop in writing and implement mutual aid agreements with other ESOs, as necessary to ensure adequate resources are available to mitigate foreseeable incidents, based on paragraph (e)(3) of this section.

(A) Mutual aid agreements among ESOs shall include, but not be limited to, the following issues:

- (i) Legal authorizations;
- (ii) When and how to request for assistance;
- (iii) Operating procedures;
- (iv) Prohibitions against self-deployment to an incident in another ESO’s jurisdiction;
- (v) Liabilities for injuries, disabilities, and deaths;
- (vi) Cost of service;
- (vii) Staffing; and equipment including the resources to be made available;
- (viii) The designation of the incident commander; and (NFPA 1720, p. 4.8.1)
- (ix) Responder training and qualifications meet the requirements of paragraphs (h)(1) and (h)(2).

(ii) Procedures and training for all ESOs in the mutual aid agreement shall be based on the type and level of service(s) established in paragraph (e)(4) of this section, and shall be

comprehensive enough to produce an effective force of responders to deal with foreseeable emergency incidents and ensure uniform operations at those incidents. (NFPA 1720, p. 4.8.2)

(6) The ESO shall define the service(s) needed based paragraph (e)(3) that requires Skilled Support Employer (SSE) participation and service(s) that the ESO is unable to provide and identify how the service(s) can be provided. The ESO shall:

(i) Identify the type(s) of skilled support the ESO anticipates it will need.

(ii) Develop service agreements/contracts with the SSE(s) identified in (e)(6)(i), who meet the requirements established in this section. [Specifically Skilled Support Employer paragraphs (q) through (u)]

(iii) Ensure the SSE is advised of likely responses.

(iv) Provide SSEs with information regarding services required and special equipment, PPE needs and other information as outlined in paragraph (q) of this section.

(v) Advise SSEs that only those workers who the SSE determines are properly trained (see paragraph (s)), qualified and fit, based on the requirements of this section, are designated to operate at emergency incidents. [Specifically Skilled Support Employer paragraphs (q)-(u).]

(7) The ESO shall develop a projection of the potential outcomes for incidents where available resources do not meet the needs of an identified vulnerability.

(8) The ESO shall only perform the type and level of service(s) it specifies in accordance with (e)(4).

(9) The ESO shall ensure that PIPs identified in (e)(1)(ii)(A), are developed in accordance with paragraph (k).

(f) Organization Risk Management Plan

(1) The Emergency Service Organization (ESO) shall develop in writing and implement a comprehensive risk management plan for the organization, based on the type and level of service(s) established in paragraph (e) of this section, that:

(i) Covers, at a minimum, risks associated with the following:

(A) Administration;

(B) Facilities;

(C) Training;

- (D) Vehicle operations, both emergency and non-emergency;
 - (E) Personal protective equipment;
 - (F) Operations at emergency incidents;
 - (G) Operations at non-emergency incidents; and
 - (H) Other related activities. (NFPA 1500, p. 4.2)
- (ii) Includes, at a minimum, the following components:
- (A) Hazard identification – actual and potential hazards;
 - (B) Risk evaluation – likelihood of occurrence of a given hazard and severity of its consequences;
 - (C) Establishment of priorities for action – the degree of a hazard based upon the frequency and risk of occurrence;
 - (D) Risk control techniques – solutions for elimination or mitigation of potential hazards; implementation of best solution;
 - (E) Risk management monitoring – evaluation of effectiveness of risk control techniques (NFPA 1500, p. 4.2);
 - (F) Personal Protective Equipment hazard assessment
 - (G) Respiratory protection for responders that meets the requirements of §1910.134;
 - (H) Infection control, equivalent to the requirements of NFPA 1581, 2015 ed., that identifies, limits, or prevents the exposure of responders to infectious and contagious diseases; and
 - (I) Protection for responders from bloodborne pathogens that meets the requirements of §1910.1030.

[Note: OSHA is developing a standard for the protection of workers from infectious diseases. When that rule is promulgated, this paragraph will be updated to reference OSHA's standard.]

(2) The ESO shall include in the risk management plan, a policy to address extraordinary situations when a responder, after making a risk-benefit determination based on the responder's training, education and experience, attempts to rescue a person in imminent peril, presumably

without benefit of, for example, Personal Protective Equipment (PPE), Self-Contained Breathing Apparatus (SCBA), tools, equipment.¹

[Note: A responder's decision to not use PPE, SCBA, etc., is to be made on a case-by-case basis and must have been prompted by legitimate and truly extenuating circumstances.]

(g) Responder Medical/Fitness Requirements

(1) Medical Requirements.

(i) The Emergency Service Organization (ESO) shall establish in writing the minimum medical requirements for responders, based on the type and level of service(s) established in paragraph (e) of this section. Requirements will differ based on “tiers” of responder duties, tasks and responsibilities in accordance with (e)(4).

(ii) Each responder shall be medically evaluated, in accordance with (g)(3)(ii) and qualified for duty by a qualified healthcare professional. (NFPA 1500, 10.1.1).

(2) Physical Performance Requirements. The ESO shall:

(i) Establish the minimum physical performance requirements for each responder who engages in emergency operations, based on the type and level of service(s) established in paragraph (e) of this section. (NFPA 1500, 10.2.1).

(ii) Ensure each responder is qualified as meeting the physical performance requirements established by the ESO prior to entering into a training program or becoming a responder (NFPA 1500, 10.2.2).

(iii) Ensure each responder who engages in emergency operations is annually qualified to meet the physical performance requirements established by the ESO in paragraph (g)(2)(i). (NFPA 1500, 10.2.3)

(iv) Develop a physical performance rehabilitation program for responders who are unable to meet the physical performance requirements. (NFPA 1500, 10.2.5)

(3) Medical Evaluation.

(i) The ESO shall establish in writing and implement a medical evaluation program for responders, based on the type, level and tier of service(s) established in paragraph (e) of this section.

¹ OSHA notes that this subparagraph applies to unusual situations, (“Risk a lot to save a lot! Risk little to save little! Risk nothing to save nothing!”) where it is obvious that if the responder does not take immediate action (presumably without appropriate PPE, other safeguards, etc.), a person will be seriously injured or killed. This is not a “loophole” for ESOs to avoid compliance with the requirements of this section.

(ii) The medical evaluation shall include a medical and vaccination history, physical examination, and any laboratory tests required to detect physical or medical condition(s) that could adversely affect the responder's ability to safely perform the essential job functions. (NFPA 1582, 7.1)

(iii) Medical evaluations shall be conducted as a baseline for surveillance and annually thereafter. (NFPA 1582, 7.1)

(iv) A medical evaluation shall be performed following a responder's occupational exposure, illness, injury, or protracted absence from the job. (NFPA 1582, 7.1)

(v) Components of the medical evaluation program shall comply with §§1910.120, 1910.134, 1910.95, and 1910.1030.

(4) Health and Fitness.

(i) The ESO shall establish in writing and implement a health and fitness program which enables responders to develop and maintain a level of fitness that allows them to safely perform their assigned functions, based on the type, level and tier of service(s) established in paragraph (e) of this section. (NFPA 1583, 4.1.1)

(ii) The program shall include the following components:

(A) Assignment of a health and fitness coordinator;

(B) Periodic (not to exceed 3 years) fitness assessment for all responders;

(C) Exercise training that is available to all responders;

(D) Education and counseling regarding health promotion for all responders; and

(E) Process for collecting and maintaining health-related fitness program data. (NFPA 1583, 4.2)

(iii) The health and fitness program shall be incorporated into the risk management plan, established in paragraph (e)(1) of this section. (NFPA 1583, 4.1.5)

(iv) The ESO shall establish fitness levels specified in the program based on fitness standards determined by the qualified healthcare professional that reflect the responder's assigned functions. (NFPA 1500, 10.3.2)

(5) Fitness for Duty Evaluation.

(i) The ESO shall establish in writing and implement a process to evaluate the ability of responders to perform essential job functions, based on the type, level and tier of service(s) established in paragraph (e) of this section. (NFPA 1500, 10.7.1)

(ii) A qualified person shall be responsible for evaluating the fitness of a responder and confirmed by the ESO's qualified healthcare professional. (NFPA 1500, 10.7.2)

(6) Behavioral Health and Wellness Program.

(i) The ESO shall provide access to a behavioral health and wellness program for its responders, based on the type, level and tier of service(s) established in paragraph (e) of this section. (NFPA 1500, 11.1.1)

(ii) The program shall contain, at minimum: (NFPA 1500, 11.1.1.1)

(A) The capability to provide assessment;

(B) Basic counseling;

(C) Crisis intervention assistance;

(D) Assessment to include alcohol and substance abuse, stress and anxiety, depression, and personal problems that affect work performance;

(E) Prevention strategies and health promotion activities related to identified risk factors for emergency responders health and safety; and (NFPA 1500, 11.2.1)

(F) Protocols to address occupational exposure to atypically stressful events. (NFPA 1500, 12.1.2)

(iii) The ESO shall inform each responder of the assistance and intervention available under this program. (NFPA 1500, 12.1.3)

(iv) The ESO shall ensure that responder participation in the program is kept confidential. (NFPA 1500, 11.1.4, 1.5)

(7) Confidential Health Data Base.

(i) The ESO shall ensure that a confidential, permanent health file is established and maintained on each responder, based on the type and level of service(s) established in paragraph (e) of this section. (NFPA 1500, 10.4.1)

(ii) The individual health file shall record the results of regular medical evaluations and physical performance tests, any occupational illness or injuries, and any events that expose the responder to known or suspected hazardous materials, toxic products, or contagious diseases. (NFPA 1500, 10.4.2)

(iii) Health information shall be maintained as a confidential record for each responder as well as a composite data base for the analysis of factors pertaining to the overall health and fitness of the group. (NFPA 1500, 10.4.3)

(iv) Paragraph (g)(7) does not affect the requirement for access to medical records specified in §1910.1020.

(h) Responder Training and Qualifications

(1) Minimum training and professional development. The Emergency Service Organization (ESO) shall:

(i) Establish in writing the minimum knowledge and skills required for each responder to participate in emergency operations, based on the type, level and tier of service(s) established in paragraph (e) of this section. The minimum knowledge and skills required will differ based on “tiers” of job performance requirements for differing responder duties, tasks and responsibilities.

(ii) Provide initial training, on-going training, refresher training, education, and professional development for each responder commensurate with the performance of expected duties and functions based on the tiers of job performance requirements and the type and level of service(s) established in paragraph (e) of this section; (NFPA 1500, p. 5.1.2) and restrict the activities of each new responder during emergency operations until the responder has demonstrated the skills and abilities to complete the tasks expected. (NFPA 1500, p. 5.1.4)

(iii) Provide each responder with training and education on the risk management plan established in paragraph (f)(1); the safety and health policy established in paragraph (f)(2); and the SOPs established in paragraph (k)(3). (NFPA 1500, p. 5.1.5)

(iv) Provide each responder with training and education that covers the selection, use (including special incidents procedures operation), limitations, maintenance, and retirement criteria for all personal protective equipment used by the responder. (NFPA 1500, p. 5.1.8)

(v) Train each responder in the incident management system, accountability system, Mayday and Rapid Intervention Team procedures implemented in accordance with paragraphs (l)(7) and (l)(8) respectively, (NFPA 1500, p. 5.1.11) and ensure that training for each responder engaged in emergency activities includes procedures for the safe exit and accountability of responders during rapid evacuation, equipment failure, or other dangerous situations and events. (NFPA 1500, p. 5.1.10)

(vi) Ensure each trainer has a level of training and education that is more comprehensive than the responder(s) being trained. (§1910.156 (c)(1))

(vii) Ensure each responder that is not trained and authorized to enter confined spaces is trained, to at least an awareness level, equivalent to NFPA 1670, p.7.2.4, 2014 ed., how to recognize the hazards of confined spaces and avoid entry into them.

(viii) Ensure each responder is trained to meet the requirements of (HAZWOPR) §1910.120(q)(6)(i), the “First Responder Awareness Level.”

(2) Professional Qualification. The ESO shall:

(i) Establish in writing the professional qualification(s) for each responder commensurate with the performance of expected duties and functions based on the type and level of service(s) established in paragraph (e) of this section.

(ii) Demonstrate that each responder who participates in interior structural firefighting meets professional qualifications that are at least equivalent to the requirements of NFPA 1001, Structural Fire Fighter Professional Qualifications. (NFPA 1500, 5.2)

(iii) Demonstrate that each responder who is a driver operator meets professional qualifications that are at least equivalent to the requirements of NFPA 1002, Standard for Fire Apparatus Driver/Operator Professional Qualifications, (NFPA 1500, 5.2) or equivalent Emergency Vehicle Operator qualifications based on the type of vehicle the responder drives or operates.

(iv) Demonstrate that each responder who is a manager/supervisor (crew leader/officer) meets professional qualifications that are at least equivalent to the requirements of NFPA 1021, Standard for Fire Officer Professional Qualifications. (NFPA 1500, 5.2)

(v) Demonstrate that each wildland responder meets professional qualifications that are at least equivalent to the requirements of NFPA 1051, Standard for Wildland Fire Fighter Professional Qualifications, (NFPA 1500, 5.2) or has a “Red Card” in accordance with the National Wildfire Coordinating Group – Interagency Fire Qualifications.

(vi) Ensure each responder who is authorized to operate beyond the “Awareness” level at hazardous materials incidents is trained to meet the requirements of (HAZWOPR) §1910.120(q)(6)(ii), the “First Responder Operations Level,” and also trained to meet, at a minimum, the “Core Competencies for Operations Level Responders” in Chapter 5 of NFPA 472, Standard of Competence of Responders to Hazardous Materials/Weapons of Mass Destruction Incidents, 2013 ed. (NFPA 1500, 5.2)

(vii) Ensure each technical search and rescue responder meets the operational capabilities equivalent to the requirements of NFPA 1006, Standard for Technical Rescuer Professional Qualifications.

(viii) Ensure each marine responder meets professional qualifications that are at least equivalent to the requirements of NFPA 1005, Standard for Professional Qualifications for Marine Fire Fighting for Land-Based Fire Fighters, 2014 ed.

(ix) Ensure, based on the type and level of service(s) established in paragraph (e) of this section, that each EMS responder possesses the professional qualifications, certification or license required in the ESO's jurisdiction.

(3) Proficiency. The ESO shall:

(i) Ensure each responder maintains proficiency in the skills and knowledge commensurate with the performance of expected duties and functions, based on the type and level of service(s) established in paragraph (e) of this section. (NFPA 1500, p. 5.1.9)

(ii) Provide a periodic skills check to verify minimum qualifications of responders. (NFPA 1500, p. 5.5.3) Time frames may differ due to varying requirements of certification organizations and licensing bodies. (CPR, EMT, Paramedic, etc.)

(iii) Establish a system to monitor and measure training progress and activities of responders. (NFPA 1500, p. 5.5.2)

(i) Facility and Equipment Preparedness

(1) Facility Safety.

(i) General Requirements.

(A) The Emergency Service Organization (ESO) shall ensure each emergency responder facility complies with Subpart E and other applicable safety and health regulations.

(B) The ESO shall provide facilities for disinfection, cleaning, and storage of equipment. (NFPA 1581, Standard on Fire Department Infection Control Program).

(C) Slide poles will not be permitted in new ESO facilities (approved for construction, as determined by building permit, after 2 years after final rule published). Stairs, chutes or slides may be used to provide access to a lower level.

(D) The ESO shall ensure each floor hole with a pole, chute or slide that provides rapid access to a lower level is secured or protected in accordance with subpart D of this part to prevent unintended falls through the floor hole. (NFPA 1500, p. 9.1)

(E) The ESO shall develop and implement a system to identify and correct safety and health hazards at ESO facilities. (NFPA 1500, p. 9.2 & 9.3).

(ii) Sleeping and Living Areas.

(A) The ESO shall ensure interconnected hard-wired smoke alarms, with battery back-up are installed inside every sleeping area, and outside in the immediate vicinity of every sleeping area, and on all levels of the facility, including basements. (NFPA 1500, p. 9.1)

(B) Each ESO facility with one or more sleeping area(s) (approved for construction, as determined by building permit, after 2 years after final rule published) shall be protected throughout by an approved automatic sprinkler system. (NFPA 1500, 9.1.4)

(C) The ESO shall ensure each sleeping and living area has carbon monoxide detectors installed such that any source of carbon monoxide is detected before endangering the responders. (NFPA 1500, p. 9.1.3.4)

(D) The ESO shall prevent exposure of responders to, and contamination of sleeping and living areas by, exhaust emissions. (NFPA 1500, p. 9.1.5)

(E) The ESO shall ensure that contaminated Personal Protective Equipment (PPE) is not worn or stored in sleeping and living areas.

(2) Equipment Needed for Emergency Operations. The ESO shall:

(i) Provide the equipment needed to train for and perform emergency services, based on the type and level of service(s) established in paragraph (e) of this section.

(ii) Ensure new equipment (purchased or acquired after the effective date of this rule) meets the design and manufacturing requirements of a nationally recognized consensus standard, or applicable 29 CFR 1910 (OSHA) standard.

[See Appendix for examples of equipment standards.]

(iii) Inspect, maintain, functionally test and service test equipment as follows:

- At least annually;
- In accordance with manufacturer's instructions and industry practices; and
- As necessary to ensure equipment is in safe working order.

(iv) Immediately remove from service equipment found to be defective or in an unserviceable condition. (NFPA 1500, p. 6.5.9)

(3) Personal Protective Equipment. The ESO shall:

(i) Conduct a PPE hazard assessment for the selection of the protective ensemble, elements and other protective equipment for responders, based on the type and level of service(s) established in paragraph (e) of this section. (NFPA 1500, 7.1.1.1)

(ii) Provide, at no cost to responders, protective ensembles, ensemble elements, and protective equipment designed to provide protection from hazards to which the responders are likely to be exposed and suitable for the task the responder is expected to perform, as determined by the risk assessment in (h)(3)(i). (NFPA 1500, 7.1.1) ("no cost to responders" §1910.156 & 132)

(A) Existing personal protective equipment shall be in compliance with the edition of the respective standard (listed in (h)(3)(ii)(B)) that was current when the personal protective equipment was manufactured. (NFPA 1500, p. 7.20)

(B) New personal protective equipment shall meet the requirements of the following standards: (NFPA1500, p. 7.20)

- NFPA 1951, Standard on Protective Ensembles for Technical Rescue Operations, 2013 ed.
- NFPA 1952, Standard on Surface Water Operations Protective Clothing and Equipment, 2015 ed.
- NFPA 1971: Standard on Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting, 2013 ed.
- NFPA 1977, Standard on Protective Clothing and Equipment for Wildland Fire Fighting, 2011 ed.
- NFPA 1981, Standard on Open-Circuit Self-Contained Breathing Apparatus (SCBA) for Emergency Services, 2013 ed.
- NFPA 1982, Standard on Personal Alert Safety Systems (PASS), 2013 ed.
- NFPA 1984, Standard on Respirators for Wildland Fire-Fighting Operations, 2016 ed.
- NFPA 1991, Standard on Vapor-Protective Ensembles for Hazardous Materials Emergencies, 2005 ed. (next ed. 2016),
- NFPA 1992, Standard on Liquid Splash Protective Ensembles and Clothing for Hazardous Materials Emergencies, 2012 ed.
- NFPA 1994, Standard on Protective Ensembles for First Responders to CBRN Terrorism Incidents, 2012 ed.
- NFPA 1999, Standard on Protective Clothing for Emergency Medical Operations, 2013 ed.
- §1910.133, Eye and Face Protection
- §1910.134, Respiratory Protection
- ANSI 207, Public Safety Vests

(iii) Ensure SCBA purchased new, in addition to the requirements of NFPA 1981, are also certified by NIOSH as compliant with the NIOSH Standard for Chemical, Biological, Radiological and Nuclear (CBRN) Open Circuit Self-Contained Breathing Apparatus (SCBA). (NFPA 1500, p. 7.12.1)

(iv) Ensure closed-circuit SCBA have a minimum rated service life of two hours and operate in the positive pressure mode only. (NFPA 1500, p. 7.12.1.4)

(v) Ensure air-purifying respirators are used only in non-Immediately Dangerous to Life or Health (IDLH) atmospheres for those contaminants that NIOSH certifies them against. (NFPA 1500, p. 7.12.3)

(vi) Ensure each responder properly uses or wears the protective ensemble, elements or equipment whenever the responder is exposed, or potentially exposed to the hazards for which it is provided. (NFPA 1500, 7.1.2)

(vii) Provide for cleaning, care and maintenance of protective ensembles, ensemble elements and protective equipment in accordance with the manufacturer's instructions and recognized industry best practices. (NFPA 1851, Standard on the Selection, Care, and Maintenance of Structural Fire Fighting Protective Ensembles) (NFPA 1500, 7.1.3&.6)

(A) Each protective ensemble, element and piece of equipment shall be maintained within the manufacturer's specifications to ensure it is ready for service.

(B) Defective or damaged protective ensembles, elements or equipment shall immediately be removed from service.

(viii) Ensure, where an ESO permits a responder to provide a protective ensemble, element or other protective equipment for personal use, the requirements of paragraph (h)(3)(ii) through (vii) are met. (§1910.132(b))

(ix) Ensure PPE is gross decontaminated, or separately contained to prevent responder exposure, before leaving the incident scene.

(x) To the extent feasible, ensure responders are not exposed to contaminated PPE in the passenger compartment of vehicles.

(j) Vehicle Preparedness and Operation

(1) To ensure vehicles are prepared for use by responders, the Emergency Service Organization (ESO) shall:

(i) Establish and implement standard operating procedures to inspect, maintain and repair, or remove from service, each vehicle to ensure the safety of responders using them.

(ii) Ensure each riding position is provided with a seat and properly operating seat belt that is designed to accommodate a person with and without heavy clothing. (NFPA 1901, 14.1.3)

[Note: Some vehicles are designed, built, and intended for use without seatbelts. For those vehicles, the ESO is not required to comply with the seatbelt requirement in (j)(1)(ii). Examples include: ATVs, utility carts, passenger seats in buses, scooters and motorcycles, etc.]

(iii) Service test aerial devices on apparatus as directed by the manufacturer, or to a standard equivalent to NFPA 1911, Standard for the Inspection, Maintenance, Testing, and Retirement of In-Service Automotive Fire Apparatus, 2012 ed. (NFPA 1500, p. 6.4)

(iv) Service test vehicle mounted fire pumps on apparatus as directed by the manufacturer or to a standard equivalent to NFPA 1911, Standard for the Inspection, Maintenance, Testing, and Retirement of In-Service Automotive Fire Apparatus, 2012 ed. (NFPA 1500, p. 6.4)

(2) To ensure vehicles are driven and operated in a manner that will keep persons safe, the ESO shall:

(i) Ensure each vehicle is driven/operated by a responder who has successfully completed a training program commensurate with the type of vehicle the responder will drive/operate or by a trainee driver who is under the supervision of a qualified driver. (NFPA 1500, p. 6.2.1)

(ii) Develop in writing and implement SOPs for safely driving vehicles during non-emergency travel and emergency response, and shall include specific criteria for vehicle speed, crossing intersections, traversing railroad grade crossings, the use of emergency warning devices, and the backing of vehicles. SOP for backing shall include at least one of the following:

- Spotter
- Driver walk-around
- Back-up camera

(iii) Ensure the responder driving does not move the vehicle until all persons in or on the vehicle are seated and secured with seat belts in approved riding positions, other than as specifically excepted in paragraph (j)(2)(v) of this section. (NFPA 1500, p. 6.2.5)

(iv) Ensure each person riding in or on a vehicle is seated and belted securely by a seat belt in an approved riding position at any time that the vehicle is in motion; and that seat belts are not released or loosened for any purpose while the vehicle is in motion, including the donning or doffing of Personal Protective Equipment (PPE) and Self-Contained Breathing Apparatus (SCBA). (NFPA 1500, p. 6.3.1 & .2)

[Note: Some vehicles are designed, built, and intended for use without seatbelts. For those vehicles that are manufactured without seatbelts, the ESO is are not required to comply with the seatbelt requirement in (j)(2)(iv). Examples include: ATVs, utility carts, passenger seats in buses, scooters and motorcycles, etc.]

(A) The ESO shall ensure responders actively performing necessary emergency medical care while the vehicle is in motion are secured to the vehicle by a seat belt, or by a vehicle safety harness designed for occupant restraint, to the extent consistent with the effective provision of such emergency medical care. (NFPA 1500, p. 6.3.3)

(B) The ESO shall establish in writing and implement a procedure for driver training of vehicles with tiller steering that ensures when the instructor and trainee are both located at the tiller position, they are adequately secured to the vehicle whenever it is in motion. (NFPA 1500, p. 6.3.5)

(C) The ESO shall provide a vehicle safety harness designed for occupant restraint to secure the responder in a designated stand-up position during pump-and-roll operations.

(v) Establish in writing and implement a procedure that provides alternative means for ensuring responder safety when the ESO determines it is not feasible for each responder to be belted in a seat, such as when backing the vehicle while loading hose, standing as honor guards during a funeral procession, transporting holiday figures, parades, etc., and for vehicles without seatbelts [see Note in (j)(1)(ii) and (j)(2)(iv)].

(vi) Establish in writing and implement rules, regulations, and procedures that are at least equivalent to the provisions regulating the operation of ESO vehicles, for operation of vehicles not directly under the control of the ESO (privately owned/leased/operated by responders), for responders whom the ESO authorizes to respond directly to emergency incidents, or to respond to ESO facilities. (NFPA 1500, 6.2.14)

(vii) Ensure , where tools, equipment, or respiratory protection are carried within enclosed seating areas of vehicles, each is secured either by a positive mechanical means of holding the item in its stowed position or by placement in a compartment with a positive latching enclosure. (NFPA 1500, p. 6.1.5)

(k) Pre-Incident Planning

(1) Pre-Incident Planning.

(i) The Emergency Service Organization (ESO) shall determine the locations and facilities where responders may be called to provide service needing a Pre-Incident Plan (PIP), based on the community or facility vulnerability assessment and the type and level of service(s) established in paragraph (e) of this section. The ESO shall develop PIPs for significant structures, facilities, locations, infrastructure, etc., where emergency events may occur.

(ii) PIPs shall be prioritized based on the life safety hazards of responders and facility occupants. (NFPA 1620 p. 4.1.1 and 4.1.9)

(iii) The ESO shall prepare a preplan for each facility within the ESO's service area that is subject to reporting requirements under the Emergency Planning and Community Right-to-Know Act (EPCRA), also known as the Superfund Amendments and Reauthorization Act of 1986 (SARA).

(iv) The ESO shall ensure facility personnel consulted are knowledgeable about the facility's use, contents, processes, hazards and occupants. (NFPA 1620 p. 4.3.1.1)

[Note: The ESO should develop and implement a written policy to protect proprietary business information. (NFPA 1620 p. 4.3.1.2)]

(v) The ESO shall develop the PIP(s) and ensure the responder(s) responsible for PIP preparation are capable of identifying the information to be collected and included in the PIP. (NFPA 1620 p. 3.3.15 and 4.1.2)

(vi) The information obtained shall be commensurate with the facility complexity and the hazards to facility occupants and responders. (NFPA 1620 p. 4.3.1)

(vii) To the extent feasible, the ESO shall develop PIPs for facilities, locations, infrastructure, etc., where significant incidents could occur, that include actions to be taken if the scope of the incident is beyond the capability of the ESO.

(viii) The ESO shall ensure that the most recent PIPs are disseminated as needed and are accessible and available to responders operating at emergency incidents.

(ix) The PIP shall be reviewed periodically at a frequency determined by the ESO, based on the life safety hazards of responders and occupants at the facility for which the PIP was developed. (NFPA 1620 p. 12.2)

[See Appendix # ?? for PIP considerations.]

(2) OSHA will deem an ESO demonstrating compliance with NFPA 1620, Standard for Pre-Incident Planning (2015 ed.); NFPA 241, Standard for Safeguarding Construction, Alteration, and Demolition Operations (2013 ed.); or NFPA 1144, Standard for Reducing Structure Ignition Hazards from Wildland Fire (2013 ed.), to be in compliance with the corresponding requirements of this paragraph.

(1) Standard Operating Procedures for Emergency Incidents. The Emergency Service Organization (ESO) shall develop in writing and implement emergency incident standard operating procedures (SOPs) that are flexible and expandable in order to be applicable to unforeseen events:

(1) For operating at emergency events that the ESO foreseeably expects to encounter, based on the community or facility vulnerability and risk assessment developed in accordance with paragraph (e) of this section.

(2) That describes the actions to be taken in situations involving special hazards in the ESO's workplace. (§1910.156)

(3) That address how responders are to operate at incidents that are beyond the capability of the ESO, specified in paragraph (e) of this section.

(4) That establishes and implements procedures for rapid evacuation of responders from dangerous situations, such as, but not limited to, rapid growth of fire, impending collapse, impending explosion, incidents of active violence against responders, etc.

(5) That establishes and implements procedures for orderly evacuation of responders.

(6) That establishes and implements a responder accountability system for maintaining accountability of all responders operating at an incident which includes, but is not limited to, periodic responder accountability checks and reports. (NFPA 1500, p. 8.4)

(7) That establishes and implements procedures for Mayday situations, such as when a responder becomes lost, trapped, injured, ill, etc.

(8) That establishes and implements procedures for a Rapid Intervention Team, for the immediate deployment on the scene of a team of responders to search and rescue any missing, disoriented, injured, ill, lost, unaccounted for, or trapped responders. (based on defs in NFPA 1500 & 1710) The SOP shall include, but not be limited to:

(i) The minimum number of responders needed for the team, based on the size and complexity of the incident.

(ii) A standard list of tools and equipment to be assembled by the team, for foreseeable incidents.

(iii) The type of PPE needed.

(9) That establishes and implements procedures that provide a systematic approach to provide responders with medical monitoring and rehabilitation at emergency incidents as needed. The procedures shall include, but not be limited to:

(A) Rest

(B) Basic life support

(C) Hydration

(D) Active cooling where needed

(E) Protection from extreme elements

(10) That establishes and implements a procedure for protecting responders from vehicular traffic while operating at an emergency incident on, or adjacent to, roadways and highways. The procedure shall include:

(i) Setting up a safe work zone, beginning with proper placement of the first arriving ESO vehicle and subsequent ESO vehicles.

(ii) A means of coordination with law enforcement and mutual aid ESOs.

(iii) Use of safety vests that have high visibility and are reflective.

(11) That establishes and implements procedures for vehicle preparedness and operation that meet the requirements in paragraphs (j)(1)(i) and (j)(2).

(12) That establishes and implements procedures for radio communication that meet the requirements of paragraph (n)(5).

(13) That establishes and implements procedures for conducting Post-Incident Analysis (PIA) that meet the requirements in paragraph (o)(1).

(m) Incident Management System Development

(1) The Emergency Service Organization (ESO) shall adopt or develop in writing an Incident Management System (IMS) to manage all emergency incidents, based on the type and level of service(s) established in paragraph (e) of this section, and the pre-incident plans developed in accordance with paragraph (k) of this section. The IMS shall provide structure and coordination to the management of emergency incident operations to provide for the safety and health of responders involved in those activities. (NFPA 1561, p. 4.1, 4.4.1)

(i) The IMS shall be compatible with the National Incident Management System (NIMS)² and the National Response Framework³.

(ii) The ESO shall ensure a unified command structure is utilized on incidents where the complexity requires a shared responsibility among two or more ESOs or agencies.

(iii) The IMS shall include assurance that the safety function is addressed, or an Incident Safety Officer (ISO) is assigned and designated, to assess the incident scene for existing or potential hazards.

(iv) The IMS shall include a means for responders to notify the Incident Commander of unsafe conditions and unsafe acts on the incident scene.

(2) The IMS shall consist of interactive components that provide the basis for clear communication and effective operations.

² <https://www.fema.gov/national-incident-management-system>

³ http://www.fema.gov/media-library-data/20130726-1914-25045-1246/final_national_response_framework_20130501.pdf

(i) Components shall include, but not be limited to:

- (A) Common, standard terminology for incident information
- (B) Modular organization
- (C) Integrated communications
- (D) Unified command structure
- (E) Manageable span of control
- (F) Comprehensive resource management

(ii) The IMS shall include, but not be limited to, the following functions:

- (A) Command
- (B) Operations
- (C) Planning
- (D) Logistics
- (E) Finance/Administration

(5) The ESO shall designate the responsibilities of the Incident Commander (IC). The IC shall be responsible for front-line management of the incident, for tactical planning and execution, for determining whether outside assistance is needed and for relaying requests for internal resources or outside assistance through the communications or emergency operations center, as appropriate.

(i) The IC shall have the training and authority to perform at least the following:

- (A) Assume command
- (B) Assess the situation
- (C) Approve or implement the Incident Action Plan
- (D) Determine response strategies
- (E) Activate resources
- (F) Order an evacuation
- (G) Oversee all incident response activities
- (H) Declare that the incident has concluded

(n) Emergency Incident Operations

(1) Incident Command and Management. The Emergency Service Organization (ESO) shall:

(i) Ensure the Incident Management System, developed in paragraph (m), is utilized at each emergency incident.

(ii) Ensure each emergency incident has an incident commander

(iii) Ensure the safety function is addressed, or an Incident Safety Officer (ISO) is assigned and designated, to monitor and assess the incident scene for safety hazards or unsafe situations and develops measures for ensuring responder safety. (NFPA 1500, p. 8.1.6.)

(iv) Ensure that if an incident escalates in size and complexity, the incident commander divides the incident into strategic/tactical-level management components.

(v) Ensure a unified command structure is utilized on incidents where the complexity requires a shared responsibility among two or more ESOs or agencies.

(vi) Ensure the incident commander(s) and responders are rotated or replaced during complex or extended operations, as determined by the ESO.

(2) Incident Commander. The ESO shall ensure: (NFPA 1720, p. 4.5)

(i) One individual responder is assigned as the incident commander.

(ii) The establishment, or assumption, of “Command” and the location of command post, is communicated to other responders, responding to or involved at the incident scene.

(iii) The incident commander conducts a comprehensive and ongoing size-up of the incident scene that places life safety as the highest priority.

(iv) The incident commander conducts a risk-benefit analysis based on the size-up before actively engaging the incident.

(v) The incident commander coordinates and directs all activities for the duration of the incident.

(vi) The incident commander implements a personnel accountability system to rapidly account for all responders at the incident scene.

(vii) The incident commander utilizes the information contained in the Pre-Incident Plan to draft an Incident Action Plan, based on the following priorities in descending order: life safety, scene stabilization, and incident mitigation. (NFPA 1620, p. 11.3.1 & .3)

(3) Hazard Control Zones. The ESO shall ensure that:

(i) Hazard control zones are established at every emergency incident to identify the level of risk to responders and the appropriate protective measures, including Personal Protective Equipment (PPE). (NFPA 1500, p. 8.6.1)

(ii) The perimeters of the hazard control zones are designated by the incident commander. (NFPA 1500, p. 8.6.2)

(iii) The change to the perimeter during the course of the incident is communicated to all responders on the scene. (NFPA 1500, p. 8.6.3)

(iv) Hazard control zones are established as follows: (NFPA 1500, p. 8.6.4)

(A) Designated as no-entry, hot, warm or cold (similar to hazardous materials incidents)

(B) Marked in a conspicuous manner, with colored tape, signage, or other appropriate means, whenever possible.

(C) Communicated to all responders attending the incident prior to being assigned to a hazard control zone.

(v) Only responders with an assigned task are permitted in the hot zone. (NFPA 1500, p. 8.6.4.1.1)

(vi) Where a “no-entry” zone is designated, responders are prohibited from entering the zone due to the presence of dangers such as imminent hazard(s), potential collapse, or the need to preserve the scene. (NFPA 1500, p. 8.6.4.4)

(vii) The designation of the appropriate protective measures, including personal protective equipment is commensurate with the hazard in the zone the responder will be operating in, and that each responder appropriately uses the protective measures for that zone. (NFPA 1500, p. 8.6.5, and .6)

(4) Incident Safety. The ESO shall:

(i) Identify minimum staffing requirements needed to ensure incidents are mitigated safely and effectively. (NFPA 1720, p. 4.3.1, 1710)

(ii) Ensure operations are limited to those that can be safely performed by the responders available on the scene. (NFPA 1500, p. 8.5.1.1)

(iii) Ensure that at least four responders are assembled before operations are initiated in an Immediately Dangerous to Life or Health (IDLH) atmosphere. (NFPA 1720, p. 4.6, 1710) (§1910.134(g)(4))

[Exception: If, upon arrival at an emergency scene, the initial responders find an imminent life-threatening situation where immediate action could prevent the loss of life or serious injury, then such action is permitted with less than four responders present. (NFPA 1720, 4.6.4) (§1910.134, Note 1 to (g))]

(A) At least two responders shall enter the IDLH atmosphere as a team and remain in visual or voice contact with one another at all times. (NFPA 1720, p. 4.6) (§1910.134(g)(4))

(B) Ensure that outside the IDLH, a minimum of two responders are present for assistance to, or rescue of the team operating in the IDLH. (NFPA 1720, p. 4.6) (§1910.134(g)(4))

(iv) Ensure each responder in the IDLH uses positive-pressure Self Contained Breathing Apparatus (SCBA) in accordance with the respiratory protection program specified in paragraph (f)(ii)(G) of this section.

(v) Ensure each supplied-air respirator used in an IDLH atmosphere is equipped with a NIOSH certified emergency escape air cylinder and pressure-demand facepiece. (NFPA 1500, p. 7.12.2.2)

(5) Communication. The ESO shall:

(i) Ensure effective communication capability between responders and the incident commander.

(ii) Ensure operating procedures for communications provide for the use of standard protocols and terminology at all types of incidents. (NFPA 1710, p. 6.4.3)

(iii) Ensure that communication equipment allows mutual aid responders to communicate with the incident commander and other responders. (NFPA 1720, p. 4.8.3)

(6) The ESO shall ensure the responder accountability system established in paragraph (l)(6) is utilized at each emergency incident.

(7) The ESO shall implement a Rapid Intervention Team in accordance with the SOP established in paragraph (l)(8).

(8) The ESO shall implement the medical monitoring and rehabilitation procedures, as needed, in accordance with the SOP established in paragraph (l)(9) .

(9) The ESO shall implement the scene safety (traffic) procedures, as needed, in accordance with the SOP established in paragraph (l)(10).

(10) Use of Skilled Support Workers. Prior to participation by skilled support workers at an emergency incident, the ESO shall ensure:

(i) That SSEs specified in (e)(6) are utilized.

(ii) An initial briefing is provided to each skilled support worker, which includes at a minimum, instruction in the use of appropriate personal protective equipment, what hazards are involved, what safety precautions are to be taken, and what duties are to be performed by the skilled support worker. (§1910.120)

(iii) An effective means of communication is provided between the incident commander and the skilled support worker.

(iv) Where appropriate, a responder is designated and escorts the skilled support worker at the emergency incident scene.

(v) All other appropriate safety and health precautions provided to ESO responders are used to ensure the safety and health of skilled support workers. (§1910.120)

(11) Use of Spontaneous Unaffiliated Volunteers (SUVs). Prior to participation of SUVs at an emergency incident, the ESO shall ensure:

(i) The incident priorities are assessed and established to determine the need for assistance from SUVs.

(ii) An assembly and registration area for SUVs is established.

(iii) An initial briefing is provided to each SUV which includes at a minimum, instruction in the use of appropriate personal protective equipment, what hazards are involved, what safety precautions are to be taken and what duties are to be performed by the SUV.

(iv) Each SUV is evaluated based on the SUV's skills and pre-incident training, (such as but not limited to the OSHA Disaster Site Worker training, Community Emergency Response Training, Red Cross Disaster Response Training, or other NGO training), before assigning tasks to the SUV.

(v) To the extent possible, participation by SUVs who have not registered or received the safety briefing is restricted.

(12) Use of Good Samaritans. A Good Samaritan is an individual who may be on the scene of an incident providing service or assistance, before the arrival of the ESO. If the ESO permits the Good Samaritan to continue to provide the service or assistance, the ESO shall ensure the individual's safety to the extent feasible.

(o) Post-Incident Analysis

(1) The ESO shall promptly conduct a PIA after a significant event such as, but not limited to a large scale incident, a near miss incident, a responder or SSW injury or illness requiring off scene treatment, or responder or SSW fatality, to determine the effectiveness of the ESO's response to an incident. The PIA shall include, but not be limited to, a review and evaluation of the Pre-Incident Plan, Standard Operating Procedures, and Incident Action Plans, for accuracy and adequacy after each significant emergency incident. (NFPA 1620 p. 4.10.1)

(2) The ESO shall promptly identify and implement recommended changes to the Pre-Incident Plans, Incident Action Plans, and Standard Operating Procedures based on the lessons learned as a result of the PIA. If the recommended changes cannot be promptly implemented, the ESO shall develop a written timeline for implementation.

(p) Program Evaluation

(1) The Emergency Service Organization (ESO) shall evaluate the adequacy and effectiveness of the Emergency Responder Preparedness Program (ERPP) at least annually. Review of the ERPP shall include, but not be limited to, determining: if the ERPP was implemented as designed; if the ERPP is making progress towards meeting its goals; and if modifications are necessary to correct deficiencies.

(2) The ESO shall identify and implement recommended changes to the ERPP to include timelines for correcting identified deficiencies, based on the review of the program.

The following paragraphs apply to Skilled Support Employers.

(q) Skilled Support Employer General Requirements

[Note: Spontaneous Unaffiliated Volunteers (SUV) are not employees of a Skilled Support Employer (SSE). See subparagraph (n)(11) for requirements for SUVs.]

(1) Establishment of Emergency Services Provided

(i) The Skilled Support Employer (SSE) shall establish in writing the type and level of emergency service(s) it expects to perform.

(ii) The SSE shall obtain from the Emergency Service Organization (ESO) information about the protective equipment and other types of protective measures or strategies required for a Skilled Support Worker (SSW), based on the type and level of service(s) established in paragraph (q)(1)(i) of this section and the ESOs risk assessment.

(iii) The SSE shall only designate workers who the SSE determines are properly trained, qualified and fit, based on the requirements of this section, to perform as an SSW at an emergency incident.

(2) Medical Screening

(i) The SSE shall establish in writing the minimum fitness for duty medical requirements for workers that establishes whether the worker has the physical and emotional fitness to perform the essential expected functions of the job, based on the type and level of service(s) established in paragraph (q)(1) of this section.

(ii) The SSE shall screen their SSWs annually based on the written medical requirements in (q)(2)(i)

(iii) The SSE shall ensure the medical screening is evaluated by a qualified health care professional and verifies:

(A) The SSW is physically able to safely perform required activities without requiring direct assistance of another individual.

(B) The SSW is not significantly limited in musculoskeletal mobility or exercise tolerance, regardless of the assignment given. Routine, ordinary physical activity should not cause unexplained fatigue, shortness of breath, pronounced muscular weakness, or severe pain.

(C) The SSW does not have any medical condition(s) (physical or psychological) that prevents them from performing the essential job functions or poses a direct and imminent threat to the safety of the SSW or others, place the SSW at an increased risk of adverse health effects, or prohibit the wearing of appropriate Personal Protective Equipment (PPE).

(D) The SSW is capable of receiving essential and requisite immunizations, prophylaxis, treatments, pharmaceuticals, and other interventions that are necessary to safeguard health and allow assigned duties to be successfully completed.

[Note: Examples of medical screening forms that meet the requirement of (q)(2)(iii) can be found in Appendix (# ??)]

(iv) SSEs shall review the medical requirements annually and the SSE shall verify that all SSWs meet the requirements.

(v) SSEs shall maintain medical records for SSWs for a minimum of 30 years from the date of exposure to hazards on a disaster site. (29 CFR 1910.1020 Toxic Substances)

(3) Fatigue Management

(i) The Skilled Support Employer shall adopt or develop, and implement a fatigue management plan that includes at least the following:

(A) A fatigue risk management policy that identifies the roles and responsibilities for the program.

(B) An education and awareness training program that includes the identification of fatigue risk factors associated with the emergency operations being performed, [see (s)(1)(i)(A)] and recognition of the effects of fatigue. Examples include briefings regarding work hours and the need for rest and sleep, site conditions, nature of work, emotional stress, how off-duty activities contribute to fatigue and information about fatigue as a health hazard.

(C) Implements control/mitigation strategies that manage SSW fatigue (e.g., work/rest policies, psychological first aid programs) including, but limited to:

(i) Establishing shift lengths, schedule rotations, and maximum hours-of-service that provide SSWs off-duty time sufficient to achieve eight hours of continuous sleep;

(ii) Criteria for setting a maximum work shift duration or minimum amount of time off during a 24-hour period (e.g., 10 hours rest/sleep time in a 24-hour time period, with as much of that in consecutive hours as possible.);

(iii) Consideration for how work shift duration may change based on the use of controls to mitigate fatigue (e.g., use of transportation service or an assigned staff member as the “designated driver” to shuttle personnel to/from rest/sleep facilities and the work site.);

(iv) Procedures for enforcing work/rest and rotation schedules for SSEs and supervisors;

(v) Provisions (e.g., job rotation, extended lunch/breaks, additional time off, on-site rest, food, and sanitation facilities) for personnel and crews; and

(vi) Time off between work rotations (e.g., 48 hours off after 14 consecutive days of work.

(D) Assesses the effectiveness of the controls in mitigating SSW fatigue that include evaluations and monitoring for disaster site SSW fatigue to enable quick course corrections.

(ii) The SSE shall coordinate with the IC and communicate the fatigue management plan.

(iii) The SSE shall implement the fatigue management plan when:

(A) Demands of the site require SSWs to be on site longer than established shift or work at times during which people typically sleep;

(B) The physical nature of the work is more demanding than normal working conditions;
or

(C) Long work hours (> 12 hrs per day, >50 hrs per week), rotating shifts, lack of/limited rest breaks, exposure to chemical, biological, or physical hazards, temperature extremes, extended use of PPE, unfamiliar environment/work tasks, psychological stressors including prolonged exposure to wounded or deceased casualties, lack of access to nutrition, and/or lack of access to fitness/recreational opportunities.

(iv) The SSE shall develop and implement a system for monitoring and reporting SSW fatigue and incident investigation when it may be due to fatigue.

(4) Decontamination

(i) General. To prevent the spread of contaminants and disease related exposures, SSEs shall, in coordination with the ESO develop procedures for decontamination.

(ii) Decontamination procedures.

(A) A decontamination procedure shall be developed, communicated to SSWs, and implemented before any SSWs or equipment may enter areas on site where potential for exposure to hazardous substances exists.

(B) Standard operating procedures shall be developed to minimize SSW contact with hazardous substances or with equipment that has contacted hazardous substances.

(C) All SSWs leaving a contaminated area shall be appropriately decontaminated; all contaminated clothing and equipment leaving a contaminated area shall be appropriately disposed of or decontaminated.

(D) Decontamination procedures shall be monitored by the ESO and SSE to determine their effectiveness. When such procedures are found to be ineffective, appropriate steps shall be taken to correct any deficiencies.

(iii) Location. Decontamination shall be performed in geographical areas that will minimize the exposure of uncontaminated SSWs or equipment to contaminated SSEs or equipment.

(iv) Equipment and solvents. All equipment and solvents used for decontamination shall be decontaminated or disposed of properly.

(v) Personal protective equipment.

(A) Personal protective equipment shall be decontaminated, cleaned, laundered, maintained or replaced as needed to maintain its effectiveness.

(B) SSEs whose permeable clothing becomes wetted with hazardous substances shall immediately remove that clothing and proceed to be decontaminated. The clothing shall be disposed of or decontaminated before it is removed from the work zone.

(5) Unauthorized SSEs. Unauthorized SSEs shall not remove personal protective equipment from site.

(6) Commercial laundries or cleaning establishments. Commercial laundries or cleaning establishments that decontaminate clothing or personal protective equipment shall be informed of the potentially harmful effects of exposures to hazardous substances.

(7) Showers and change rooms. Where the decontamination procedure indicates a need for regular showers and change rooms outside of a contaminated area, they shall be provided and meet the requirements of 29 CFR 1910.141. If temperature conditions prevent the effective use of water, then other effective means for cleansing shall be provided and used.

(r) Personal Protective Equipment

(1) The Skilled Support Employer (SSE) shall:

(i) Conduct a Personal Protective Equipment (PPE) hazard assessment in accordance with §§1910.132 and 134 for the selection of the protective equipment for skilled support workers, based on the type and level of service(s) established in paragraph (e) of this section.

(ii) Provide, at no cost to SSWs protective equipment designed to provide protection from hazards to which the SSW are likely to be exposed and suitable for the task the SSW is expected to perform, as determined by the PPE hazard assessment in (r)(1)(i). §1910.156 & 132, 134)

(iii) Follow all provisions of §1910.134 when SSWs are required to wear respirators.

(iv) Ensure each SSW properly uses or wears the protective equipment.

(v) Provide for cleaning, care and maintenance of protective equipment in accordance with the manufacturer's instructions or recognized industry guidelines.

(vi) Defective or damaged PPE shall immediately be removed from service.

(vii) Ensure, where an SSE permits an SSW to provide their own personal protective equipment for personal use, the requirements of paragraph (r)(1)(ii) through (vi) are met. (§1910.132(b))

(s) Training

(1) The Skilled Support Employer (SSE):

(i) Shall provide pre-incident training for each Skilled Support Worker (SSW) covering the following topics:

(A) Disaster/emergency site safety and health hazard recognition (including, but not limited to, fatigue, heat and cold stress, struck-by and motor vehicle accidents, confined space awareness);

(B) Care and proper use of personal protective equipment and procedures to safely work on a disaster site. Including training on use and limitations of respirators in accordance with §1910.134;

(C) Decontamination procedures; and

(D) Basic principles of the incident command system.

(ii) Shall keep a written record of SSWs who have received pre-incident training.

(iii) The SSE, in cooperation with the ESO, shall ensure that SSWs receive a site specific briefing before they begin operating.

(iv) Shall ensure that, at a minimum, the briefing consists of information on site specific hazards, anticipated safety and health hazard exposures, evacuation procedures and how to protect themselves.

(v) Shall, in cooperation with the ESO, provide SSWs with site specific information updated on hazards that emerge during the incident.

(2) The pre-incident training:

(i) This training shall be a minimum of seven and a half hours. (The OSHA Outreach program Disaster Site Worker 7.5 hour and Disaster Site Worker 15 hour programs would meet this requirement.)

(ii) The training required in (s)(1)(i) of this paragraph shall not be waived because of the emergency phase of an incident.

(t) Skilled Support Worker Participation

(1) Each Skilled Support Employer (SSE) shall establish and implement a process to:

(i) Consult with Skilled Support Workers (SSW) in developing and updating the Emergency Response Preparedness Program (ERPP);

(ii) Involve skilled support workers in implementing and evaluating the program, and in the review and change process;

(iii) Request input from skilled support workers regarding workplace modifications;

(iv) Involve skilled support workers in workplace inspections and workplace incident investigations;

(v) Encourage skilled support workers to report safety and health concerns, such as hazards, injuries, illnesses, near misses, and deficiencies in the program;

(vi) Respond to such reports in a reasonable period of time; and

(vii) Post procedures for reporting safety and health concerns under paragraph (t)(1)(v) of this section in a conspicuous place or places where notices to workers are customarily posted.

(2) The SSE shall not retaliate or discriminate against skilled support workers for, or otherwise engage in practices or implement policies that deter workers from, participating in the program, including reporting safety and health concerns.

(u) Skilled Support Program Evaluation

(1) The Skilled Support Employer (SSE) shall evaluate the adequacy and effectiveness of the Emergency Responder Preparedness Program (ERPP) at least annually. Review of the ERPP shall include, but not be limited to, determining: if the ERPP was implemented as designed; if the ERPP is making progress towards meeting its goals; and if modifications are necessary to correct deficiencies.

(2) The SSE shall identify and implement recommended changes to the ERPP to include timelines for correcting identified deficiencies, based on the review of the program.

() Other affected sections in §1910**

(1) §1910.120(q)(3)(iv) – This paragraph cross references to existing §1910.156(e) for PPE. Revise to match new 156.

(2) §1910.120(q)(10) – Revise to read as follows (new text is underlined for clarity): *Chemical protective clothing*. Chemical protective clothing and equipment to be used by organized and designated HAZMAT team members, or to be used by hazardous materials specialists, shall meet the requirements of ~~paragraphs (g)(3) through (5) of this section.~~ NFPA 1991, Standard on

Vapor-Protective Ensembles for Hazardous Materials Emergencies, 2005 ed. (next ed. 2016), and NFPA 1992, Standard on Liquid Splash Protective Ensembles and Clothing for Hazardous Materials Emergencies, 2012 ed.

(3) §1910.134 - Revise by deleting paragraph (g)(4), the 2 in-2 out provision

(@@) Possible Non-Mandatory Appendices

- Examples of various types and levels of service and tiers of responders.
- Template for an ERPP
- Pre-Incident Planning considerations
- Sample Risk Management Plan
- Medical questionnaire for SSEs [based on Emergency Responder Health Monitoring and Surveillance program (ERHMS) 2.1 and 2.2 pg 5&6]
- Medical questionnaire for responders
- Training matrix
- Examples SDO standards for equipment manufacturing, maintenance, testing, etc.
- Table 5 in the American College of Occupational and Environmental Medicine (ACOEM) guidance: “Investigation Procedure Checklist- Establishing the Fatigued State” can be referenced in an appendix.

(++) Standards used for reference

29 CFR 1910.120, HAZWOPR

29 CFR 1910.132, Eye and Face Protection

29 CFR 1910.134, Respiratory Protection

29 CFR 1910.146, Permit Required Confined Spaces

29 CFR 1910.156, Fire Brigades

29 CFR 1910.1030, Bloodborne pathogens

29 CFR 1926 Subpart P, Excavations

NFPA 241, Standard for Safeguarding Construction, Alteration, and Demolition Operations, 2013 ed.

NFPA 472, Standard for Competence of Responders to Hazardous Materials/Weapons of Mass Destruction Incidents, 2013 ed.

NFPA 600, Standard on Facility Fire Brigades, 2015 ed.

NFPA 1144, Standard for Reducing Structure Ignition Hazards from Wildland Fires, 2013 ed.

NFPA 1250, Recommended Practice in Fire and Emergency Services Organization Risk Management, 2015 ed.

NFPA 1500, Standard on Fire Department Occupational Safety and Health Program, 2013 ed.

NFPA 1561, Standard on Emergency Services Incident Management System and Command Safety, 2014 ed.

NFPA 1581, Standard on Fire Department Infection Control Program, 2015 ed.

NFPA 1582, Standard on Comprehensive Occupational Medical Program for Fire Departments, 2013 ed.

NFPA 1583, Standard on Health-Related Fitness Programs for Fire Department Members, 2015 ed.

NFPA 1620, Standard for Pre-Incident Planning, 2015 ed.

NFPA 1670, Standard for Operations and Training for Technical Search and Rescue Incidents, 2014 ed.

NFPA 1710, Standard for the Organization and Deployment of Fire Suppression operations, Emergency Medical Operations, and Special Operations to the Public by Career Fire Departments, 2010 ed.

NFPA 1720, Standard for the Organization and Deployment of Fire Suppression operations, Emergency Medical Operations, and Special Operations to the Public by Volunteer Fire Departments, 2014 ed.

NFPA 1851, Standard on Selection, Care, and Maintenance of Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting, 2014 ed.

NFPA 1981, Standard on Open-Circuit Self-Contained Breathing Apparatus (SCBA) for Emergency Services, 2013ed.

NFPA 1971, Standard on Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting, 2013 ed.