

Highlights of "Hazardous Waste Operations and Emergency Response" for Emergency Services

Sources: Code of Federal Regulations 29 CFR 1910.120
and California Code of Regulations, Title 8, Section 5192
(Citations taken from CCR, updated October 2008)

Purpose: *This fact sheet is intended only to help the reader understand the basics of hazardous materials regulations for purposes of planning and training for potential emergency response. It is not represented as a complete compendium or interpretation of any federal or state regulations, and is not intended for use during an emergency response. Some state regulations may differ. For authoritative information, the reader is directed to applicable state and/or local regulations.*

Law enforcement, EMS and fire service personnel are considered to fall under these requirements unless the employer "can demonstrate that the operation does not involve employee exposure or the reasonable possibility for employee exposure to safety or health hazards". (a)(1)

Approved training is required for personnel who may be part of "emergency response operations for releases of, or substantial threats of releases of, hazardous substances without regard to the location of the hazard". (a)(1)(E) Since field operations routinely involve this potential, responders are considered at risk. Hospitals should consider whether they can provide a similar demonstration of safety for personnel in patient receiving areas.

Emergency response personnel must only comply with subsection (q) of this section. (2)(D)

Emergency response employers must meet the following requirements:

Development and implementation of an emergency response plan prior to the commencement of emergency response operations. The plan shall be in writing and available for inspection and copying by employees. (q)(1)

Elements of the plan shall include at a minimum:

- (A) Pre-emergency planning and coordination with outside parties
- (B) Personnel roles, lines of authority, training, and communication
- (C) Emergency recognition and prevention
- (D) Safe distances and places of refuge
- (E) Site security and control
- (F) Evacuation routes and procedures
- (G) Decontamination
- (H) Emergency medical treatment and first aid
- (I) Emergency alerting and response procedures
- (J) Critique of response and follow-up
- (K) Personal protective equipment and emergency equipment
- (L) Emergency response organizations may use the local emergency response plan or the state emergency response plan or both, as part of their emergency response plan, to avoid duplication.

The senior emergency response official shall confirm that ICS is in place and the position of Incident Commander instituted. All emergency responders and their communications shall be coordinated and controlled using ICS. (q)(3)(A)

Employees engaged in emergency response and exposed to hazardous substances presenting a potential inhalation hazard shall wear positive pressure SCBA. (q)(3)(D)

Advanced first aid support personnel, at a minimum, shall also stand by with medical equipment and transportation capability. (q)(3)(F)

Training shall be based on the duties and function to be performed by each responder of an emergency response organization. The skill and knowledge levels required for all new responders shall be conveyed through training before they are permitted to take part in actual emergency operations on an incident. Employees who participate, or are expected to participate, in emergency response, shall be given training in accordance with the following subsections: (q)(6)

Training or competency levels required:

First Responder Awareness (4 hours required, 8 recommended by OES): Individuals likely to witness or discover a release and who have been trained to initiate an emergency response sequences by notifying proper authorities. They would take no further action. (q)(6)(A)

Content:

1. An understanding of what hazardous substances are, and the risks associated with them in an incident.
2. An understanding of the potential outcomes associated with an emergency created when hazardous substances are present
3. The ability to recognize the presence of hazardous substances in an emergency.
4. The ability to identify the hazardous substances, if possible.
5. The FRA's role in the employer's plan, including site security and control, and use of the Emergency Response Guidebook
6. Ability to realize the need for additional resources, and to make appropriate notifications to the communication center.

First Responder Operations (8 hours required, 24 recommended by OES): Individuals who respond to releases or potential releases as part of the initial response to the site for the purpose of protecting nearby persons, property, or the environment from the effects of the release. They are trained to respond in a defensive fashion without actually trying to stop the release. First responders at the operational level shall have received at least eight hours of training or have had sufficient experience to objectively demonstrate competency in the following areas in addition to those listed for the awareness level. (q)(6)(B)

Content: FRA content plus:

1. Knowledge of the basic hazard and risk assessment techniques.
2. Know how to select and use proper PPE provided to the first responder operational level.
3. An understanding of basic hazardous materials terms.
4. Know how to perform basic control, containment, and/or confinement operations and rescue injured or contaminated persons within the capabilities of the resources and PPE available with their unit.
5. Know how to implement basic equipment, victim, and rescue personnel decontamination.
6. An understanding of the relevant standard operating procedures and termination procedures.

Refresher training: Those employees trained as above shall receive annual refresher training of sufficient content and duration to maintain their competencies, or shall demonstrate competency in those areas at least yearly. (q)(8)(A)

A statement shall be made of training or competency. The employer shall keep a record of the methodology used to demonstrate competency. (q)(8)(B)

Medical surveillance: Any emergency response employee who exhibits signs or symptoms which may have resulted from an emergency incident, either immediately or subsequently, shall be provided with medical consultation. (q)(9)(B)

Useful Hazardous Materials Resources for EMS & Hospitals

Related References

Emergency Response Guidebook (Latest Edition)

U.S. Department of Transportation Research and Special Programs Administration

Source: Local Office of Emergency Services

Other locations: State EMS agency or office of emergency management

Note: **This guidebook should be on every EMS response unit**

Many EMS and OEM offices will provide a copy for each emergency response vehicle and communications center free of charge

NIOSH Pocket Guide to Chemical Hazards

National Institute for Occupational Safety and Health and Centers for Disease Control

Source: NIOSH Publications Mail Stop C-13 4676 Columbia Parkway Cincinnati, OH 45226-1998
(800)35-NIOSH

Note: Another useful reference on response units

Requires some training and practice to interpret its jargon and many abbreviations

NIOSH will provide a single copy free of charge while supplies last

Fire Service Field Operations Guide (ICS 420-1)

FIRESCOPE

Source: www.oes.ca.gov

Note: A useful response resource for HM response organization and roles

State or Regional Hazardous Materials Response Plans or WMD Response Plans

Many regional or state offices of Emergency Management or EMS

Source: Regional OES offices throughout the state

Note: Useful for planning and as a region-specific response resource

Competencies for EMS Personnel Responding to Hazardous Materials Incidents

NFPA 473

National Fire Protection Association

Source: California Fire Chiefs Association Bookstore (about \$30)

Note: Quite expensive for a short document, but a useful tool to evaluate and develop hazmat training programs