Appendix Q. Fact Sheet—Implementation of the HAZWOPER Program

The following is a fact sheet developed by EPA Region 6 (originally published in 2015, with minor revisions made for this handbook) on the implementation of the HAZWOPER program at the state and local levels.

Implementation of the Hazardous Waste Operations and Emergency Response Program at the State and Local Levels (Region 6)

Introduction: The Chemical Safety and Security Executive Order (E.O. 13650)—U.S. EPA-OSHA-DHS

Responding to several catastrophic chemical facility incidents in the United States, including the tragic events in West Texas in April 2013, President Obama issued Executive Order 13650, *Improving Chemical Facility Safety and Security*, on August 1, 2013. The focus of the executive order is to reduce risks associated with hazardous chemical incidents to owners and operators, workers and communities by enhancing the safety and security of chemical facilities.

Regional Working Groups (RWGs) have been established in the Federal Regions under the leadership of regional tri-chairs from DHS, EPA, and OSHA. The RWGs were tasked with developing SOPs, many of which serve as initiatives to assist local communities with emergency planning and preparedness. For example, the Region 6 RWG has established eight such SOPs, including SOP #2, which is the focus of this discussion.

Historically, lack of training has been identified as a contributing factor in injuries sustained by first responders when

responding to an emergency. The primary objective of SOP #2 is to ensure that response and planning organizations understand the requirements under the



OSHA HAZWOPER Standard, and the accompanying EPA regulations.

Additionally, the RWG will coordinate with state training officers, state LEPC/HAZMAT coordinators and state training academies to determine what assistance federal agencies can provide in training of local responders, including Incident Command System/National Incident Management System (ICS/NIMS) training programs.

Accordingly, the RWG will coordinate with federal and state partners to ensure that responders have the appropriate level of HAZMAT training for the position and duties they occupy. Efforts in this regard will include outreach, including HAZWOPER awareness training and other effective chemical safety training. The goal is to ensure that first responders understand the OSHA 29 CFR 1910.120 and EPA 40 CFR 311 requirements. The Region 6 HAZWOPER awareness training is discussed later in this section.

Section 1. Overview of EPA and OSHA Worker Protection Authority

The Occupational Safety and Health Act of 1970, as amended (OSH Act), established health and safety standards for the American workplace.



Section 6 of the OSH Act established federal authority to issue general health and safety standards for private industry. Section 19 of the OSH Act addresses standards for federal government employees.

Under the authority of Section 6 of the OSH Act, OSHA promulgated standards that are codified at 29 CFR and set forth the minimum health and safety requirements necessary to ensure protection for all private sector employees in the United States. See OSHA standards at

https://www.govinfo.gov/content/pkg/CFR-2017-title29-vol5/pdf/CFR-2017-title29-vol5-sec1910-120.pdf.

In 1986, Congress passed the Superfund Amendments and Reauthorization Act (SARA) Section 126(a). SARA Section 126(a) requires the Secretary of Labor to issue health and safety standards under Section 6 of the OSH Act for the benefit of private sector employees and federal employees that are engaged in hazardous waste operations and emergency response.

Section 126(a) required the Assistant Secretary of OSHA, pursuant to Section 6 of the Occupational Safety and Health Act of 1970, to promulgate standards ("regulations") for the health and safety of employees engaged in hazardous waste operations.

On March 6, 1989, OSHA issued the final Standard (29 CFR 1910.120) to fulfill the requirements of Section 126. This standard is known as the Hazardous Waste Operations and Emergency Response (HAZWOPER). However, federal OSHA has no authority to enforce regulations protecting state and local government employees.

SARA Section 126(f) required the EPA to issue regulations for hazardous waste operations and emergency response identical to OSHA's standards. The EPA promulgated the



HAZWOPER regulation (40 CFR 311) in June 1989, which requires state and local entities to follow the requirements under the HAZWOPER Standard.

Although the two sets of standards contain identical substantive provisions, EPA and OSHA address different audiences. The EPA's authority extends to state and local government employees conducting hazardous waste operations and emergency response in states that do not have a federal OSHA-approved state OSHA program.

40 CFR part 311—WORKER PROTECTION

§ 311.1 Scope and application.

The substantive provisions found at 29 CFR 1910.120 on and after March 6, 1990, and before March 6, 1990, found at 54 FR 9317 (March 6, 1989), apply to State and local government employees engaged in hazardous waste operations, as defined in 29 CFR 1910.120(a), in States that do not have a State plan approved under section 18 of the Occupational Safety and Health Act of 1970.

§ 311.2 Definition of employee.

Employee in § 311.1 is defined as a compensated or non-compensated worker who is controlled directly by a State or local government, as contrasted to an independent contractor.

The EPA regulations cover both compensated and uncompensated state and local government employees engaged in the covered activities. Therefore, the EPA standards protect volunteers, such as volunteer firefighters who are responding to hazardous substance emergencies. Although federal OSHA recommends that approved OSHA state programs also cover uncompensated employees, not all states have followed this recommendation.

In summary, in states without an OSHAapproved plan, federal OSHA standards protect all private-sector and federal employees engaged in hazardous waste operations and emergency response.

The EPA worker protection standards protect all state and local government employees, including volunteer workers. In states with an OSHA-approved plan, the state program covers all private sector employees, as well as state and local government employees; federal OSHA covers federal employees in those states. Regardless of affiliation (city/county or parish), each employer must determine the need for such training of their employees. Such a threshold may be based upon the number and type of facilities within the jurisdiction or the amount and type of

hazardous material that is transported through their jurisdiction(s).

Various state and local response organizations may have adopted specific professional certification and/or accreditations, such as International Fire Service Accreditation Congress (IFSAC) and the Pro-Board Fire Service Professional Qualification System.

Additionally, certification programs for various response organizations may require hazardous materials response training, which would meet the requirements under 29 CFR 1910.120 and 40 CFR 311. Each organization should work through their training officers, as well as state training officers, to determine the requirements their employees must meet, and how to best address those requirements.

EPA regulations:

https://www.ecfr.gov/cgi-bin/textidx?SID=d76d91640a1d1def7f4811a0f05 2645d&mc=true&node=pt40.30.311&rg n=div5

Section 2. Inter-Agency Agreement

EPA and OSHA have an agreement to share responsibility for implementing the Title I worker protection standards. Under the terms of this agreement, OSHA performs the following activities:

- Support of the NRT and RRTs.
- Technical Assistance. OSHA advises EPA on the types of actions EPA should take at uncontrolled hazardous waste sites to ensure full compliance with the HAZWOPER requirements. As an advisor, OSHA will identify problems that EPA may face and suggest appropriate solutions.
- Compliance Activities. OSHA
 conducts inspections and takes
 enforcement actions to ensure
 compliance with the worker
 protection standards at a
 Superfund site.
- Implementation Activities. OSHA supports EPA in conducting workshops to explain the requirements of the standards and provides official interpretatiwons of the health and safety requirements.

Section 3. Scope of the HAZWOPER Standard

The HAZWOPER Standard covers all employers performing the following three general categories of work operations:

- Hazardous waste site cleanup operations [29 CFR 1910.120 paragraphs (b)-(o)] (e.g., SUPERFUND cleanup).
- Operations involving hazardous waste that are conducted at treatment, storage, and disposal (TSD) facilities [paragraph (p)] (e.g., landfill that accepts hazardous waste).
- Emergency response operations involving hazardous substance releases [paragraph (q)] (e.g., chemical spill at a manufacturing plant).



Scope and Application of the HAZWOPER Standard			
Work Operation	HAZWOPER (Applicable Paragraphs)	Examples of Work Activities	
 Cleanup Operations Cleanup operations required by governmental body or other operations involving hazardous substances that are conducted at uncontrolled hazardous waste sites. Corrective actions involving cleanup operations at sites covered by RCRA. Voluntary cleanup operations at sites recognized by federal, state, local or other governmental bodies as uncontrolled hazardous waste sites. 	29 CFR 1910.120(b)–(o)	 Site characterization of hazardous waste site. Drum removal. Contaminated soil removal. Underground storage. Tank (UST) removal. 	
 Operations at TSD Facilities Operations involving hazardous waste conducted at TSD facilities regulated by 40 CFR 264 and 265 pursuant to RCRA or by agencies under agreement with RCRA the EPA to implement RCRA regulations. 	29 CFR 1910.120(p)	 Treating waste for disposal at RCRA landfill. Handling waste at RCRA landfill. 	
Emergency Response Operations • Emergency response operations for releases of, or substantial threats of releases of, hazardous substances without regard to location of hazards.	29 CFR 1910.120(q)	 Response to spill of highly toxic substance from overturned 55-gallon drum. Response to leaking storage tank. Response to overturned truck carrying hazardous materials. Response to chemical fire. 	

Section 4. Provisions of HAZWOPER for Emergency Response Operations



Paragraph (q) of HAZWOPER (29 CFR 1910.120) applies to releases of—or substantial threats of releases of—hazardous substances without regard to their location. Covered employees generally include first responders, such as HAZMAT team members, fire and rescue personnel, police, and medical personnel who may respond to emergency releases.

Paragraph (q) does not apply to "incidental releases" of hazardous substances, which are releases that do not pose a significant safety or health hazard to employees in the immediate vicinity or to the employees cleaning it up. Incidental releases are limited in quantity, exposure potential, or toxicity and present minor safety or health hazards to

employees in the immediate work area or those assigned to clean them up (see 29 CFR 1910.120(a)(3)—"Definitions") for an interpretation on the definition of an emergency response.)

Section 5. Elements of the 29 CFR 1910.120(q)—Emergency Response Program to Hazardous Substance Releases

The emergency response program (subpart q) covers employers whose employees are engaged in emergency response, no matter where it occurs. Those emergency response organizations that have developed and implemented programs equivalent to this paragraph for handling releases of hazardous substances pursuant to Section 304 of EPCRA and CERCLA hazardous substances shall all be deemed to have met the requirements of this paragraph.

Elements of the Emergency Response Program		
1910.120(q)(1)	Emergency response plan	
	Pre-emergency planning and coordination with outside parties.	
	• Personnel roles, lines of authority, training and communication.	
	Emergency recognition and prevention.	
	Safe distances and places of refuge.	
	Site security and control.	
	Evacuation routes and procedures.	
	• Decontamination procedures not covered by the site safety and health plan.	
	Emergency medical treatment and first aid.	
	• Emergency alerting and response procedures.	
	Critique of response and follow-up.	
	PPE and emergency equipment.	
1910.120(q)(3)	Procedures for handling emergency response	
1910.120(q)(4)	Skilled support personnel	
1910.120(q)(5)	Specialist employees	
1910.120(q)(6)	Training (discussed in Section 6)	
1910.120(q)(7)	Trainers	
1910.120(q)(8)	Refresher training	
1910.120(q)(9)	Medical surveillance and consultation	
1910.120(q)(10)	Chemical protective clothing	
1910.120(q)(11)	Post-emergency response operation	

Section 6. Training (29 CFR 1910.120(q)(6)

Training shall be based on the duties and functions to be performed by each responder of an emergency response organization.

The skill and knowledge levels required for all new responders hired after the effective date of this standard shall be conveyed to them 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:

- **First responder awareness level:** First responders at the awareness level are individuals who are likely to witness or discover a hazardous substance release and who have been trained to initiate an emergency response sequence by notifying the proper authorities of the release. They would take no further action beyond notifying the authorities of the release.
- First responder operations level: First responders at the operations level are individuals who respond to releases or potential releases of hazardous substances 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. Their function is to contain the release from a safe distance, keep it from spreading and prevent exposures.
- Hazardous materials technician: Hazardous materials technicians are

individuals who respond to releases or potential releases for the purpose of stopping the release. They assume a more aggressive role than a first responder at the operations level in that they will approach the point of release in order to plug, patch or otherwise stop the release of a hazardous substance.

• Hazardous materials specialist:

Hazardous materials specialists are individuals who respond with and provide support to hazardous materials technicians. Their duties parallel those of the hazardous materials technician, however, those duties require a more directed or specific knowledge of the various substances they may be called upon to contain. The hazardous materials specialist would also act as the site liaison with federal, state, local and other government authorities in regards to site activities.

On-scene incident commander:

Incident commanders, who will assume control of the incident scene beyond the first responder awareness level, shall receive at least 24 hours of training equal to the first responder operations level and, in addition, will know and understand how to implement the employer's incident command system; how to implement the employer's emergency response plan; the hazards and risks associated with employees working in chemical protective clothing; how to implement the local emergency response plan; the state emergency response plan and of the RRT; and the importance of decontamination procedures.

• **Trainers:** Trainers who teach any of the above training subjects shall have satisfactorily completed a training course for teaching the subjects they are

expected to teach, such as the courses offered by the U.S. National Fire Academy, or they shall have the training and/or academic credentials and instructional experience necessary to demonstrate competent instructional skills and a good command of the subject matter of the courses they are to teach.

• **Refresher training:** Those employees who are trained in accordance with

paragraph (q)(6) of this section shall receive annual refresher training of sufficient content and duration to maintain their competencies or shall demonstrate competency in those areas at least yearly. A statement shall be made of the training or competency, and if a statement of competency is made, the employer shall keep a record of the methodology used to demonstrate competency.

Training Requirements Emergency	Response Operations	
Emergency Responders (29 CFR 1910.120(q)(6))		
• First Responder Awareness Level (witnesses or discovers a release of hazardous substances and is trained to notify the proper authorities).	Sufficient initial training and competencies.Annual refresher.	
• First Responder Operations Level (responds to the releases of hazardous substances in a defensive manner, without trying to stop the release).	Eight hours of initial training and competencies.Annual refresher.	
Hazardous Materials Technician Level (responds aggressively to stop the release of hazardous substances).	24 hours of initial training and competencies.Annual refresher.	
• Hazardous Materials Specialist (responds with and in support of HAZMAT technicians, but who have specific knowledge of various hazardous substances).	24 hours of initial training and competencies.Annual refresher.	
• On Scene Incident Commander (assumes control of the incident scene beyond the first responder awareness level).	24 hours of initial training and competencies.Annual refresher.	

There are two National Fire Protection Association standards. NFPA 472— "Standard for Professional Competence of Responders to Hazardous Material Incidents" and NFPA 471—"Recommended Practice for Responding to Hazardous Material Incidents," which are excellent resource documents to aid fire departments and other emergency response organizations in developing their training program materials.

NFPA 472 provides guidance on the skills and knowledge needed for first responder awareness level, first responder operations level, hazmat technicians, and hazmat specialists. It also offers guidance for the officer corps who will be in charge of hazardous substance incidents. The scope of NFPA 472 includes:

This standard shall identify the minimum levels of competence required by responders to emergencies involving hazardous materials/weapons of mass destruction (WMD). This standard shall apply to any individual or member of any organization who responds to hazardous materials/WMD incidents. This standard shall cover the

competencies for awareness level personnel, operations level responders, hazardous materials technicians, incident commanders, hazardous materials officers, hazardous materials safety officers and other specialist employees.

In general, employers of emergency response organizations who follow the NFPA standards should be in compliance with 29 CFR 1910.120(q). For more information on the NFPA 472 standard, go to https://www.nfpa.org/codes-and-standards/list-of-codes-and-standards/detail?code=472.

Workers who respond, but only initiate defensive response measures (e.g., emergency shutdown activation), must be trained to the operations level. Finally, workers who initiate offensive response measures must be trained to either the technician or specialist level.

States offer training to their local responders using HMEP training funds, other grants, or state supported fees. Additionally, many trade associations offer free training for local agencies and emergency responders: https://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=STANDARDS&p_id=9765.