OSHA INSTRUCTION

U.S. DEPARTMENT OF LABOR

Occupational Safety and Health Administration

DIRECTIVE NUMBER: CPL 02-02-073	EFFECTIVE DATE: August 27, 2007

SUBJECT: Inspection Procedures for 29 CFR 1910.120 and 1926.65, Paragraph (q): Emergency Response to Hazardous Substance Releases

****NOTE: As a result of the March 26, 2012, revision to OSHA's Hazard Communication Standard, minor changes {in brackets} were made to this directive on December 1, 2015. These changes do not impact this directive's enforcement policy.**

ABSTRACT

Purpose: This instruction updates policies and provides clarification to ensure uniform enforcement of paragraph (q) of the Hazardous Waste Operations and Emergency Response Standard (HAZWOPER), 29 CFR 1910.120 and 1926.65, which covers emergency response operations for releases of, or substantial threats of releases of, hazardous substances without regard to the location of the hazard.

Scope: This instruction applies OSHA-wide.

References: 29 CFR 1910.120 Hazardous Waste Operations and Emergency Response.

29 CFR 1926.65 Hazardous Waste Operations and Emergency Response.

OSHA Instruction CPL 02-00-094, July 22, 1991, OSHA Response to Significant Events of Potentially Catastrophic Consequences.

OSHA Instruction CPL 02-00-103, September 26, 1994, Field Inspection Reference Manual.

OSHA Instruction TED 01-00-015, January 20, 1999, OSHA Technical Manual.

OSHA Instruction HSO 01-00-001, December 18, 2003, National Emergency Management Plan.

Additional reference materials for HAZWOPER are listed in Appendix E of this instruction.

Cancellation OSHA Instruction CPL 02-02-059 dated April 24, 1998 is canceled.

State Impact: Notice of intent and equivalency required. See Section VII. [State Adoption Summary]

Action Offices: OSHA Regional and Area Offices.

Originating Office: Office of Health Enforcement (OHE).

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By and Under the
Authority of

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Assistant Secretary

Executive Summary

This OSHA instruction revises CPL 02-02-059, issued April 24, 1998. This instruction updates enforcement procedures for compliance officers who need to conduct inspections of emergency response operations. It defines additional terms and expands on training requirements for emergency responders and other groups such as skilled support personnel. New guidance is provided on how HAZWOPER may apply to unique events such as terrorist attacks and addresses OSHA's role under the National Response Plan. This instruction will assist other Federal, State, and local personnel who have responsibilities under incident command systems and will assist in emergency response operations.

Significant Changes

This instruction updates policy and provides clarification on the following issues:

- HAZWOPER's application to a terrorist incident response involving chemical, biological, radiological, or nuclear materials.
- OSHA's relationship with Homeland Security Presidential Directive (HSPD-5), including discussion addressing the National Response Plan (NRP), the Worker Safety and Health Support Annex, and the National Incident Management System (NIMS).
- OSHA's National Emergency Management Plan (NEMP) and Regional Emergency Management Plans (REMPs).
- Definition of "First Receivers."
- OSHA's "Best Practices for Hospital-Based First Receivers of Victims from Mass Casualty Incidents Involving the Release of Hazardous Substances."
- Shelter-in-Place.
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II. Scope.

This instruction applies Occupational Safety and Health Administration (OSHA)-wide.

III. References.

29 CFR 1910.120 Hazardous Waste Operations and Emergency Response.

29 CFR 1926.65 Hazardous Waste Operations and Emergency Response.

OSHA Instruction CPL 02-00-094, July 22, 1991, OSHA Response to Significant Events of Potentially Catastrophic Consequences.

OSHA Instruction CPL 02-00-103, September 26, 1994, Field Inspection Reference Manual.

OSHA Instruction TED 01-00-015, January 20, 1999, OSHA Technical Manual.

OSHA Instruction HSO 01-00-001, December 18, 2003, National Emergency Management Plan.

Additional reference materials for HAZWOPER are listed in Appendix E of this instruction.

IV. Action Information.

Responsible Office: Office of Health Enforcement (OHE).

Action Offices: OSHA Regional Offices and Area Offices.

Information Offices: State Designees, National Institute for Occupational Safety and Health (NIOSH), Regional Program Directors, 7(c)(1) Project Managers.

V. Cancellation.

OSHA Instruction CPL 02-02-059 dated April 24, 1998 is canceled.

VI. Actions Required.

OSHA Regional Administrators and Area Directors shall use the guidelines in this instruction to ensure uniform enforcement of the HAZWOPER standard, 29 CFR 1910.120 and 1926.65.

VII. Federal Program Change.

This instruction describes a Federal OSHA program change which establishes policies and procedures for the enforcement of paragraph (q), Emergency Response, of the Hazardous Waste Operations and Emergency Response standard (HAZWOPER), 29 CFR

1910.120 and 1926.65. States with approved OSHA State Plans are required to establish implementing enforcement policies and procedures which are at least as effective as those in this instruction and which must be available for review. States are required to notify OSHA whether they intend to adopt identical policies and procedures or different policies and procedures in response to this instruction.

If the State adopts policies and procedures that differ from the Federal, the State may either post its policy on its State Plan website and provide the link to OSHA or provide information on how a copy may be obtained. If the State adopts identical policies and procedures, it must provide the date of adoption to OSHA. OSHA will provide summary information on the State responses to this instruction on its website.

Public Sector. States operating OSHA-approved plans provide assistance and extend their authority, including the requirements of the HAZWOPER standard, to most private sector and all public sector State and local government employers and employees, including firefighters and other emergency responders, and volunteers as permitted by State law. The guidance in this document is of particular relevance to public sector agencies and employees who have responsibilities under incident command systems and will assist in emergency response operations.

Hazardous Waste Operation and Emergency Response Standard. States were previously required to adopt standards at least as effective as OSHA's Hazardous Waste Operation and Emergency Response standard. If the State's standard differs from the Federal, its standard should either be posted on its State plan website or information provided on how a copy may be obtained.

VIII. Definitions.

Clarification and interpretation of terms are provided in Section XI. B. of this instruction.

IX. Significant Changes.

This instruction updates policy and provides clarification on the following issues:

- HAZWOPER's application to a terrorist incident response involving chemical, biological, radiological, or nuclear materials.
- OSHA's relationship with Homeland Security Presidential Directive (HSPD-5), including discussion addressing the National Response Plan (NRP), the Worker Safety and Health Support Annex, and the National Incident Management System (NIMS).
- OSHA's National Emergency Management Plan (NEMP) and Regional Emergency Management Plans (REMPs).
- Definition of "First Receivers."
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- Shelter-in-Place.

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- Medical Surveillance for emergency responders.
- Computer-based training.
- Updates to citation guidelines.

X. Background Information.

A. Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA).

Commonly known as Superfund, CERCLA was enacted by Congress on December 11, 1980. This law created a tax on the chemical and petroleum industries and provided broad Federal authority to respond directly to releases or threatened releases of hazardous substances that may endanger public health or the environment. Over five years, $1.6 billion was collected and the tax went into a trust fund for cleaning up abandoned or uncontrolled hazardous waste sites. CERCLA also:

1. Established prohibitions and requirements concerning closed and abandoned hazardous waste sites.

2. Provided for liability of persons responsible for releases of hazardous waste at these sites.

3. Established a trust fund to provide for clean-up when no responsible party could be identified.

B. Superfund Amendments and Reauthorization Act of 1986 (SARA), Title I.

CERCLA was amended by SARA on October 17, 1986. SARA Title I required OSHA to develop standards for the protection of employee health and safety during hazardous waste operations, including emergency responses to releases of hazardous substances.

OSHA published an interim final rule in December 1986. In August 1987, OSHA issued a Notice of Proposed Rulemaking and Public Hearings that set forth OSHA's proposed language for the rule, based on the outline given in SARA Title I. This language eventually became the current final rule.

The final HAZWOPER standard was published in the Federal Register on March 6, 1989, and became effective March 6, 1990. The HAZWOPER standard was incorporated into the Construction standards as 29 CFR 1926.65 on June 30, 1993. The U.S. Environmental Protection Agency (EPA) also adopted HAZWOPER in 40 CFR Part 311 (Federal Register June 23, 1989) for public

employees that are both compensated and non-compensated (volunteers) in States where no OSHA-approved State Plan is in place, and, therefore, there is no OSHA coverage for State and local government employees.

C. Superfund Amendments and Reauthorization Act (SARA), Title III.

SARA Title III, also referred to as the "Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA)," requires States and local jurisdictions to develop emergency response plans (ERPs). In addition, certain facilities must share information about the hazardous substances they have on site with community emergency response planners.

SARA Title III directed Governors of each State to appoint a State Emergency Response Commission (SERC), which would in turn appoint and coordinate the activities of Local Emergency Planning Committees (LEPCs). The LEPCs must develop a community ERP that contains emergency response methods and procedures that can be followed by facility owners, local emergency responders, and emergency medical personnel.

The interface between HAZWOPER and SARA Title III is discussed further in Section XII.B.

The HAZWOPER standard for the construction industry, 29 CFR 1926.65, is identical to 29 CFR 1910.120. For brevity, the HAZWOPER standard is referenced as 1910.120 throughout most of this instruction. Section XI. A.2.(2) provides more guidance on 1926.65.

XI. Inspection Guidelines for Paragraph (q): Emergency Response to Hazardous Substance Releases.

A. Scope and Application – 1910.120(a)(1) and (a)(2).

1. General Considerations. The final standard, 29 CFR 1910.120, applies to all operations that require, or have the potential to require, emergency response operations involving exposure to hazardous substances (see Section XI.B. of this instruction for a definition of hazardous substance).

(1) HAZWOPER's provisions require facilities to consider both overall performance and specific elements when complying with the standard. HAZWOPER is referred to as a performance-oriented standard, which allows employers the flexibility to develop a safety and health program suitable for their particular facility or operations. The standard offers work practice guidelines to protect employees from potential risks, but also has specific requirements. In evaluating compliance with 1910.120, Compliance Safety and Health Officers (CSHOs) shall consider both specific requirements and whether the intent of the standard has been met.

(2) The most important aspect of HAZWOPER paragraph (q) is planning for emergencies through the development of an emergency response plan (ERP) or an emergency action plan (EAP) under 29 CFR 1910.38.

(a) When reviewing an ERP, the CSHO must evaluate the employer's ability to protect the health and safety of employees, while the employees contain, control, and clean-up hazardous substance(s) if an emergency were to occur.

(b) If an employer intends to have all employees evacuate immediately in the event of an emergency and not respond to the emergency, the employer must implement an EAP (see Section XII.A.2. of this instruction for further guidance).

(c) If a facility does not have an ERP or an EAP, the employer must prove that the chemicals and the quantities used in the facility will not develop into an emergency incident if released in a (reasonably predictable) worst-case scenario to which the employees are expected to respond or evacuate. In other words, if there is a potential for an emergency, the employer must plan for it, and if there is no potential, then the employer does not fall within the scope of HAZWOPER (see Appendix A of this instruction for guidance on the types of releases that require an emergency response). Although HAZWOPER may not apply to a particular incident, incidental hazardous substance releases are still covered by other applicable standards such as the Hazard Communication standard, 1910.1200 and 1926.59. The CSHO should review what, if any, written procedures exist in the employer's written hazard communication program for handling incidental releases.

(d) OSHA does not consider terrorist events to be foreseeable workplace emergencies for purposes of standards requiring employers to anticipate and prepare for such emergencies. The release of chemicals or hazardous substances into a workplace, whether caused by an accidental release or by a terrorist event would, however, be considered a hazardous materials (HAZMAT) incident. All emergency responders and employees performing emergency response efforts for such releases would, therefore, fall under 1910.120(q). The level of emergency responder training must be based on the duties and functions to be performed by each responder. Although following the direction of 1910.120(q), employers would not be required specifically to prepare for a potential terrorist event and to develop an ERP for such an event, using the elements of

the standard may be of assistance to employers in developing a useful plan of action to respond to any emergency situation.

(e) Workplaces located in areas prone to natural phenomena, such as earthquakes, floods, tornadoes and hurricanes, **and** potentially subject to a "substantial threat of release of hazardous substances" are covered by 1910.120. The ERP required in 1910.120(q)(1) must include responses to emergencies caused by such natural phenomena. The requirements of the ERP clearly state in paragraph (q)(1), that emergency response plans "*shall be developed and implemented to handle anticipated emergencies prior to the commencement of emergency response operations*." This means that employers in areas prone to natural phenomena should anticipate whether such natural phenomena are likely to cause releases of hazardous substances and, if so, incorporate emergency response procedures to such natural phenomenon in their ERP.

(3) Paragraph (q) of HAZWOPER lists seven emergency responder categories, which include the following five principal training levels under (q)(6): first responder awareness level, first responder operations level, HAZMAT technician, HAZMAT specialist, and on-scene incident commander. The remaining two categories include skilled support personnel (q)(4) and specialist employees (q)(5). Employees responding to emergencies at different levels in the command structure are required by OSHA to have specific training that is intended to ensure that emergency responders are properly trained and equipped to perform their assigned tasks.

(4) OSHA Instruction CPL 02-00-094, "OSHA Response to Significant Events of Potentially Catastrophic Consequences," offers guidance and procedures that will apply to many inspections covered under this instruction. Compliance staff is advised to review this instruction to ensure the safety and health of OSHA personnel and employees, and to provide consistent and uniform application of OSHA policy.

Additionally, OSHA Instruction HSO 01-00-001, National Emergency Management Plan (NEMP), clarifies policy and procedures for OSHA during response to nationally significant incidents. The NEMP outlines procedures to ensure that trained and equipped personnel, and logistical and operational assistance are in place to support OSHA’s role as the primary Federal agency for the coordination of technical assistance and consultation for emergency response and recovery worker health and safety.

When the NEMP is activated, any decision to discontinue consultation and assistance in favor of enforcement, including at what point during an incident this transition should occur, if at all, will be made by the Regional Administrator in consultation with the Assistant Secretary or designee. When the NEMP is not activated, OSHA personnel will respond in accordance with CPL Directive 02-00-094 and their respective Regional Emergency Management Plan (REMP).

In order to avoid duplication, the significant sections of CPL 02-00-094 and HSO 01-00-001 have not been reprinted in this instruction.

2. How (a)(1) Scope affects certain employers who may be engaged in emergency response operations.

(1) Application. Paragraph (a)(2)(i) states that all requirements of 1910 and 1926 apply pursuant to their terms to hazardous waste and emergency response operations whether covered by the HAZWOPER standard or not, and when there is a conflict between requirements, "the provision more protective of employee safety and health shall apply...."

For example, asbestos work performed on a construction site falls under the scope of 1926.1101. The asbestos construction standard also applies to work involving removal, repair, maintenance, or demolition, even if such work is performed within a facility otherwise regulated under the General Industry standard. Elements of both the HAZWOPER and asbestos standards would apply to any emergency response to an uncontrolled hazardous substance release involving the presence of asbestos. As stated above, paragraph (a)(2)(i) requires that the provision which is more protective of employee safety and health shall apply (e.g., the monitoring requirements of the asbestos standard are more protective than those of the HAZWOPER standard).

Similarly, elements of both the HAZWOPER and ethylene oxide standards,1910.1047, would apply to the internal release of ethylene oxide gas (e.g., a leak in a hospital sterilizer unit). Although 1910.1047 sets forth medical surveillance, handling procedures, and emergency response training, most leaks would probably require an emergency response under 1910.120(q) due to the hazards that ethylene oxide presents. A hospital that has current procedures for handling ethylene oxide leaks, under 1910.1047, may adapt these procedures to comply with 1910.120(q).

(2) Construction. Hazardous waste operations and emergency response for construction sites are covered by 1926.65 (a standard identical to 1910.120) and this instruction. If an employee on a construction site engages in an emergency response involving hazardous substances, then the employer is subject to all of the provisions of 1926.65(q). (Note: OSHA's August 11, 1994 Memorandum, "Construction vs. Maintenance," addresses the definition of "construction" and provides clarification on differentiating construction work from maintenance under general industry.) Construction employers may direct that all of their employees evacuate in an emergency, and employers doing so would have to comply with paragraph (q) by having a written EAP in accordance with 1926.35. Employers who have 10 or fewer employees may communicate the EAP verbally.

(3) Contractors. Contractor employees must receive HAZWOPER training if their duties or activities fall within the scope of the standard. If a contractor is expected to be part of an emergency response, the employer must comply with the provisions of 1910.120(q). Contractors who have employees that will be called in as specialists or skilled support personnel must act in accordance with the HAZWOPER standard.

(a) Shared Responsibility. Both contractors and their host clients are responsible for complying with the OSHA regulations. OSHA considers personnel providers/contractors who send their own employees to work at other facilities (e.g., utility workers) to be employers whose employees may be exposed to hazards.

There is a shared responsibility between the contractor-employer and the host client for ensuring that employees are protected from workplace hazards (e.g., training, personal protective equipment (PPE), and medical surveillance). Although the contract-employer maintains a continuing relationship with its employees, it is the host client who creates and controls the specific workplace hazards. The host client, therefore, has the primary responsibility for such protection; however, the contractor-employer has a continuing responsibility under the Occupational Safety and Health Act of 1970 (OSH Act) (see OSHA's Multi-Employer Citation Policy (CPL 02-00-124) for further guidance on how OSHA issues citations on multi-employer worksites).

(b) Contracts. It is in the interest of the contractor-employer to ensure that all steps required in the OSHA standards have been taken by the client employer to ensure a safe and healthful

workplace for the contracted employees. Written contracts with clients should clearly describe the responsibility of both parties in order to ensure that all requirements of the standards are met (e.g., training, PPE, and medical surveillance) (see OSHA Instruction CPL 02-00-124, Multi-Employer Citation Policy).

3. Hospitals as Part of a Community Emergency Response (a)(1)(v). Under SARA, the National Contingency Plan (NCP) was revised to require communities to prepare local ERPs (see Section XII.B.1.(3) of this instruction for further guidance on the NCP). Designated local hospitals that will participate in the local planning committee are considered part of the emergency response organization.

(1) Hospitals with Responsibility Under the NCP. Hospitals, or other emergency medical services that are designated by the LEPC or SERC do not have to develop an entire ERP for community emergency response, provided their role is addressed in the local contingency plan. The hospital should have designated decontamination areas, although areas dedicated solely to decontamination need not be set aside.

In terms of a community emergency response, a hospital is not expected to comply with 29 CFR 1910.120 if it has not been designated by a planning committee or by a hazardous waste site as a decontamination facility. The hospital may have responsibility under 1910.120(q) in terms of the potential for an emergency caused by the release of hazardous substances used at the hospital.

(2) Training in Decontamination. Hospitals that will receive contaminated accident victims must accentuate decontamination and PPE in the training for personnel designated to set up decontamination facilities (see Section XI.G. for further guidance on training for hospital staff).

(3) *OSHA Best Practices for Hospital-Based First Receivers of Victims from Mass Casualty Incidents Involving the Release of Hazardous Substances*. OSHA offers this guidance (non-mandatory) document that provides practical information to assist hospitals in developing and implementing emergency management plans. The guidance addresses the protection of hospital-based emergency department personnel during the receipt of contaminated victims from mass casualty incidents occurring at locations other than the hospital. This document, often called the "First Receivers Document," makes a distinction between first responders and first receivers, and it covers victim

decontamination, PPE, employee training, and also includes several informational appendices. First Receiver is further defined in Section XI.B.

(4) Emergency Medical Services at Release Area. Facilities that prepare an ERP under 1910.120 must coordinate with hospitals or other medical care providers prior to emergencies in case victims will need to be decontaminated at a hospital (Note: 1910.120(q)(2) requires emergency medical treatment and first aid as among the elements to be covered in the ERP). The facility must inform the hospital of its intent to use the hospital's services so that the hospital may ensure that it is prepared for its duties (e.g., has PPE, methods of containing the hazardous material and wastewater, etc.).

Hospitals or other employers with emergency medical personnel who would be exposed to hazardous substances because they are expected to treat contaminated patients at the release area (i.e., ambulance personnel) are required by 1910.120(q) to train these personnel to safely perform their duties.

Other medical personnel (e.g., ambulance drivers) whose expected job duties do not include treating contaminated patients may be needed to respond to accidents where the chemical's hazards were unforeseen. These employees may be considered "skilled support personnel" and must be given an initial briefing by their employer, safety official, or some other representative knowledgeable in the incident. The briefing must include instruction in the wearing of appropriate PPE, any limitations of the PPE, the chemical hazards involved, and all other appropriate safety and health precautions which may include respiratory protection and hazard communication.

4. How HAZWOPER Applies to Incidents of National Significance (INS). OSHA's role during an INS (e.g., terrorist events, natural disasters, etc.) will be guided by comprehensive National policies contained in OSHA's NEMP, the NRP, and other legal authorities. (Note: The NRP is available on the Department of Homeland Security's website.) Under the Act, OSHA's primary duty is to ensure that employers are taking necessary actions to protect employees from work-related hazards on the job. Enforcement of standards, including 1910.120, is only one of the means provided by the OSH Act to achieve this end and may not always be appropriate. During an INS, OSHA may provide technical assistance to protect employees rather than using their enforcement authority.

During an INS, when OSHA receives a mission assignment to implement the Worker Safety and Health Support Annex under the NRP, OSHA

becomes part of the overall management system for the response. OSHA staff can work within the Incident Command System of the response to coordinate the safety of responders. By being part of the management system of the response, OSHA can use management tools (e.g., development of the Incident Specific and/or Site Specific Health and Safety Plan, utilizing contract language regarding employee health and safety, and working with funding agencies, etc.) to ensure safe practices.

Any decision to discontinue technical assistance in favor of enforcement, including at what point during an incident this transition should occur (e.g., from emergency response phase to clean-up), if at all, will be made by the Regional Administrator in consultation with the Assistant Secretary, Deputy Assistant Secretary, or designee. OSHA can and will then take any action, including the enforcement of 1910.120 and all other appropriate standards and regulations, as necessary to ensure that employees are properly protected.

5. Employee Exposure 1910.120(a)(1). Employee exposure or the reasonable possibility of employee exposure to safety or health hazards must be associated with the release of a hazardous substance during operations addressed in paragraph (a)(1)(v) of the standard.

   The exposure or potential exposure to health hazards includes all routes of entry (inhalation, ingestion, and skin absorption) without regard to the use of PPE. Health hazards from a hazardous substance could include cancer or organ function impairment from toxic, carcinogenic, or infectious material associated with the work site or emergency site. Employees are considered "exposed" when they encounter any amount of a hazardous substance in the work environment that could cause them potential harm.

   Safety hazards such as fire, explosion, and corrosive action from hazardous substances (e.g., flammable liquids, corrosive materials, etc.) associated with the work site or emergency site would be covered by HAZWOPER. Safety hazards from sources *not* specifically associated with the hazardous substances at the work site or the emergency site (e.g., trenching, moving machinery, slips, trips, and falls) would not be covered under HAZWOPER.

6. Jurisdictional Issues Involving Application of the Provisions in 1910.120(a)(2).

   (1) Homeland Security Presidential Directive (HSPD)-5. Under the HSPD-5, the Department of Homeland Security (DHS) developed a new NRP to align Federal coordination structures, capabilities, and resources into a unified, all-discipline, and all-hazards approach to domestic incident management. The NRP improves the coordination among Federal, State, and local organizations and

is built on the template of the National Incident Management System (NIMS). The NCP was annexed to the NRP and portions of it will be revised to conform to the NRP. OSHA has an expanded role in the NRP that includes the coordination of the Worker Safety and Health Support Annex. Additional information regarding NIMS and OSHA's role under the NRP is provided in Section XII.B.1 of this instruction.

(2) U.S. Department of Transportation (DOT) (a)(2). The Hazardous Materials Transportation Uniform Safety Act of 1990 (HMTUSA) concerns the handling of HAZMAT in the transportation industry. Under 49 CFR, Part 172, Subpart H (49 CFR 172.700 - 704), employers are required to train their employees in the safe loading, unloading, handling, storing, and transportation of HAZMAT.

(a) OSHA has limited jurisdiction for over-the-road vehicle operation. If operators of vehicles in transportation become actively involved in a non-incidental emergency response to a release of a hazardous substance, then they are covered by 1910.120(q). (Note: The transportation industry is not limited to over-the-road vehicles, and also includes rail, air, and water.)

(b) The operators of vehicles involved in an emergency response would need to be trained at least to the first responder awareness level to recognize an emergency situation, understand their role in an emergency response, and call pre-designated authorities for the containment and control of the release.

(3) DHS – U.S. Coast Guard. Occupational safety and health coverage by the U.S. Coast Guard and OSHA is primarily based on whether the vessel is "Inspected" or "Uninspected." CPL 02-01-020, OSHA/U.S. Coast Guard Authority over Vessels, November 8, 1996, provides complete details regarding the extent of occupational safety and health coverage by each agency.

(4) Employees of Governmental Agencies and Non-Compensated Workers. State and local government employees are excluded from Federal OSHA jurisdiction. However, States with OSHA-approved State plans are required to extend coverage to these employees. Public sector employees in States with an OSHA-approved State plan are protected by the hazardous waste standards adopted by these State plans.

(a) The EPA promulgated a standard that adopts 29 CFR 1910.120 to protect employees who work in the public sector where there is no OSHA-approved State program in place (40 CFR 311).

(b) In addition, EPA specifically included "non-compensated workers" (i.e., volunteer workers) who work for governmental agencies engaged in emergency response, such as volunteer firefighters. Therefore, volunteers who will take part in operations involving hazardous substances must be trained in accordance with the applicable sections of 29 CFR 1910.120.

(c) States with OSHA-approved State plans are encouraged both by OSHA Instruction CSP 01-01-024 (formerly STP 2-1.154C) and EPA's standard, 40 CFR 311, to cover volunteer workers engaged in hazardous waste operations, including emergency response, as permitted by State law.

(d) EPA and OSHA have agreed that interpretations regarding compliance with HAZWOPER will be made by OSHA.

B. Definitions – 1910.120(a)(3).

Clarification and interpretation of some important terms are provided below. They are included to aid CSHOs who may come across them during the course of an emergency response inspection.

1. Emergency Response. An "emergency response" is an organized response to an incident that is, or may pose, an emergency. Since every industry will experience different kinds of emergencies, OSHA will not attempt to create a formula into which all emergencies will fit. Appendix A of this instruction provides further guidance.

2. Hazardous Substance. Hazardous substance means any substance designated or listed under the paragraphs below, and exposure to which results or may result in adverse affects on the health or safety of employees:

(1) Any substance defined under section 101(14) of CERCLA;

(2) Any biological agent and other disease-causing agent which after release into the environment and upon exposure, ingestion, inhalation, or assimilation into any person, either directly from the environment or indirectly by ingestion through food chains, will or may reasonably be anticipated to cause death, disease, behavioral abnormalities, cancer, genetic mutation, physiological malfunctions (including malfunctions in reproduction) or physical deformations in such persons or their offspring;

(3) Any substance listed by the U.S. DOT as a hazardous material under 49 CFR 172.101 and appendices; and

(4) Hazardous waste which means a waste or combination of wastes defined in 40 CFR 261.3, or those substances defined as hazardous wastes in 49 CFR 171.8.

3. First Receiver. *(not found in 1910.120(a)(3)).* First receivers include hospital-based staff (e.g., triage, decontamination, medical treatment, and security) that receive and treat contaminated victims from mass casualty incidents. These personnel are removed from the site of the emergency and the point of release and do not need to be trained – or equipped – for control, containment, or confinement operations as is required for a HAZMAT team. First receivers are still considered to be part of an emergency response and will be required to wear appropriate PPE and be provided effective training based on the duties and functions to be performed.

4. Hazardous Substance, Radioactive Waste. The term "hazardous substance" as defined by 1910.120 includes radioactive waste in addition to hazardous waste, and should not be confused with the definition of hazardous chemical in 1910.1200, Hazard Communication, which specifically excludes any radioactive chemicals.

The U.S. Nuclear Regulatory Commission (NRC) has jurisdiction "inside the fence" at NRC licensed nuclear facilities for the risks involved with licensed radioactive materials, including emergency response procedures. OSHA has jurisdiction "inside the fence" for non-licensed radioactive materials, such as x-ray equipment, accelerators, some electron microscopes, and some naturally occurring radioactive materials (see the MOU between OSHA and the NRC that delineates employee protection responsibilities for each agency at facilities licensed by the NRC, effective October 21, 1988).

There may be both NRC and OSHA jurisdiction when there is an emergency involving mixed wastes (licensed radioactive materials and other hazardous substances) "inside the fence." HAZWOPER may also be applicable "outside the fence" to emergency response and clean-up

activities involving hazardous substances, including licensed radioactive wastes.

5. Immediate Release Area. The immediate release area is the area, process, or machine which is creating the hazardous release. This term is not meant to be used exclusively to determine whether a situation is an emergency under this standard. The key factor that must be considered on a case-by-case basis is the actual or estimated exposure or degree of danger to responders, other employees, neighbors, etc. In order to determine this, factors such as the size of the spill/release, the material of the spill, and the location of the incident (e.g., confined space) play a significant role. Emergency planning must take place prior to any releases that pose an emergency. An employer must determine all likely potentials for emergencies using worst-case assumptions and plan response procedures accordingly. Past history of emergencies at the site should be used as a guide.

6. Hazardous Substance, Infectious Materials. Employers must include infectious materials in their effort to comply with 1910.120(q) if there is a possibility that a release could cause an emergency.

   The definition of "hazardous substance" used in the standard was amended in the Federal Register, April 13, 1990, to include:

   Any biological agent and other disease causing agent which after release into the environment and upon exposure, ingestion, inhalation, or assimilation into any person, either directly from the environment or indirectly by ingestion through food chains, will or may reasonably be anticipated to cause death, disease, behavioral abnormalities, cancer, genetic mutation, physiological malfunctions (including malfunctions in reproduction) or physical deformations in such persons or their offspring.

   Employers with employees engaged in emergency response activities involving infectious materials must comply with the requirements in 1910.120(q), and may also have to comply with the Bloodborne Pathogens standard, 1910.1030. If there is a conflict or overlap between the standards, the provision that is more protective of employee safety and health applies.

C. Emergency Response Plan – 29 CFR 1910.120(q)(1) and (q)(2).

The HAZWOPER standard is a performance-oriented standard. However, there are several parts of the standard that specify what the employer must do to be in compliance. This is particularly true of the requirements in 1910.120(q).

Paragraph (q) is the broadest in its scope of coverage. It applies to any emergency response operations for releases of, or substantial threats of releases of, hazardous

substances without regard to the location of the hazard. There is a spectrum of compliance options ranging from evacuation of the area and calling outside assistance to development of sophisticated hazardous material response teams.

The key to compliance with 1910.120(q) is the ERP required in 1910.120(q)(1), and described in (q)(2). It is this document which must be reviewed carefully to determine whether employers are in compliance with 1910.120(q). It may be that some of the requirements of an ERP are not applicable to the place of employment in question. While OSHA does not expect the employer to meet requirements that are not applicable, an explanation of how the specific requirement is inappropriate, or is otherwise met, must be addressed in the ERP.

An ERP is not required by HAZWOPER if employers elect to develop an EAP in accordance with 29 CFR 1910.38 and evacuate all employees in the case of an emergency. Further, if an employer has developed an Integrated Contingency Plan (ICP) according to the National Response Team's (NRT's) Integrated Contingency Plan Guidance, OSHA recognizes this type of document as demonstrating compliance with the requirements of 1910.120(q)(1) and 1910.38. The ICP must still be carefully reviewed against HAZWOPER requirements, in the same manner as an ERP.

1. Emergency Response Plan.

   (1) Inspection Guidelines.

   The CSHO should first request a briefing on the procedures to be followed in the event of an emergency. This ensures that the CSHO will be familiar with the emergency response procedures at the facility in the event that an emergency occurs during the inspection. Following the briefing, the CSHO should review the employer's 1910.120 ERP. Employers who do not have an ERP have the burden of demonstrating that the hazardous substances used will not require an emergency response if released in a reasonably predictable worst-case scenario.

   If the employer has elected to evacuate all employees when there is a release that would require an emergency response, the employer's EAP should be reviewed in accordance with 1910.38 (see Section XII.A.2., Emergency Action Plans – 1910.38 for review procedures). (The CSHO must still document any violations fully.)

   (a) The CSHO can establish that the employer would fall under the scope of 1910.120 if the existence of a hazardous substance would cause, or could potentially cause, an emergency if released in an uncontrolled manner.

(b) Although CSHOs should be aware of the quantities of hazardous substances at a site, the standard does not define an emergency in terms of a threshold quantity of a hazardous substance spilled. The term "emergency" is dependent upon several factors, including the hazards associated with the substance, the exposure level, the potential for danger, and the ability to safely contain the substance (see Appendix A for further information on distinguishing incidental releases from releases that require an emergency response under 1910.120(q)). CSHOs can obtain chemical information by asking the Local Emergency Planning Committee (LEPC) (or the SERC) to supply Tier I or Tier II reporting forms. These forms must be submitted by the employer in accordance with SARA Title III and offer useful documentation about the chemicals for enforcement purposes (see Section XII.B.2. for further information). For further information on the kinds of hazardous substances covered, see the definition of hazardous substance in Section XI.B. of this instruction. In addition, Toxic Release Inventory (TRI) data is available on EPA's website. Additional EPA databases containing environmental information can be found on the EPA database "envirofacts."

(c) CSHOs shall look at the employer's list of hazardous chemicals developed in accordance with 1910.1200.

(d) The CSHO shall also inquire about the hazardous substances on site and the quantities, conditions, and scenarios in which they are stored.

(e) The CSHO shall also examine whether chemicals are present that are incompatible with each other and could cause an emergency if accidentally mixed. For example, if two vessels are stored close to each other, and one contains ammonia and the other chlorine bleach, the two solutions could generate toxic gas if they were accidentally mixed. Water-reactive substances also pose major incompatibility hazards (e.g., sulfuric acid mixing with water or a caustic solution).

The National Oceanic and Atmospheric Administration (NOAA) provides a "Chemical Reactivity Worksheet" which is a downloadable program including a database of reactivity information for over 6,000 chemicals. This program is one resource that the CSHO can use for chemical compatibility information. (Note: Contact IT for assistance in downloading the program.) CSHOs may also contact OSHA's Salt Lake Technical Center (SLTC) for assistance with incompatibles.

(f) If an employer has chosen to have their own employees respond to releases that would require an emergency response, the employer must develop emergency response capabilities that are appropriate to their individual situation. The CSHO shall examine the ERP in terms of what is expected of the employees during an emergency response.

Are all employees expected to respond:

1) Adequately trained for their intended job duties?

2) Properly equipped for the intended tasks?

3) Capable of responding in a safe manner?

4) Managed by competent leaders?

(2) Citation Guidelines. The CSHO shall cite 1910.120(q)(1) if any of the following conditions exist:

(a) The employer does not have an ERP; the ERP is not in writing; or the ERP is not accessible to employees.

(b) The employer intends to evacuate all employees, but does not have an EAP (Note: The EAP may be communicated orally to employees by employers with 10 or fewer employees.)

(c) If the employer has an EAP but elements of it are missing, reference the missing elements in 1910.38 (see Section XII.A.2., Emergency Action Plans – 1910.38, and OSHA Instruction CPL 02-01-037, Compliance Policy for Emergency Action Plans and Fire Prevention Plans, for further guidance regarding 1910.38).

CSHOs shall review ERPs for the following 1910.120(q)(2) components (Note: if elements are missing from the ERP, the CSHO shall cite (q)(2) and the particular missing elements):

2. (q)(2)(i) Pre-emergency Planning and Coordination.

The term "outside parties" as used in 1910.120(q)(2)(i) means outside responders (fire departments, police, private HAZMAT teams, emergency medical service personnel, and other pertinent components of the local, state, and federal emergency response system) and other employers in the surrounding area who could be affected by a hazardous substance emergency incident.

(1) Inspection Guidelines. CSHOs may ask the following questions with respect to an employer's pre-emergency planning and coordination efforts:

(a) Does the plan address coordination with outside emergency response organizations?

(b) Have employers notified and coordinated their ERP with the organizations listed? CSHOs must verify with the local fire department(s) that the employer has contacted them regarding the employer's emergency response capabilities and needs and the fire department's role, if any, in providing emergency response (e.g., request written mutual aid agreements with the response organizations). The planning and coordination procedures in the employer's written ERP should state the particular conditions or circumstances under which outside responders will provide emergency response to the site or facility. The CSHO should also verify with other randomly-selected emergency response organizations listed in the ERP that these outside parties are aware of and capable of fulfilling their role under the employer's ERP.

(c) Are telephone numbers and contact personnel for in-plant officials and local authorities updated and made available?

(d) Do the employer's pre-emergency planning and coordination procedures address how outside parties are notified of a potential emergency situation and what role each would play in an incident? Verify whether the employer has conveyed these elements of the ERP by contacting several of the affected outside parties.

(e) Are outside responders aware of any circumstances that were either not disclosed or considered by the employer that would delay or prevent them from responding to an incident (e.g., distance, lack of training, etc.)?

In addition, under SARA Title III, facilities are required to share information on hazardous chemicals on site with the LEPC. You may refer industry personnel to the SARA Title III hotline at (800) 424-9346, or to appropriate EPA Regional Offices. CSHOs are encouraged to notify EPA of facilities that have not complied with SARA Title III.

In addition to pre-emergency planning and coordinating with outside parties, the employer must also pre-plan for situations

that may require employees to shelter-in-place. This is addressed further in section XI.C.5.

(2) Citation Guidelines. The CSHO shall cite 1910.120(q)(2)(i) if any of the following conditions exist:

(a) The ERP does not reflect pre-emergency planning and coordination with outside parties.

(b) The plan does not describe procedures or existing agreements addressing how the outside parties are to be notified of a potential emergency situation and what role each should play in an incident.

(c) The plan does not address the expected roles, if any, of outside parties (e.g., local fire department) in providing emergency response.

(d) The plan does not address existing factors, if any, that could delay or prevent outside parties from responding (e.g., distance).

3. (q)(2)(ii) Personnel Roles, Lines of Authority, Training, and Communication.

(1) Inspection Guidelines. Personnel roles must be clearly defined in the ERP. One method of doing this is to list job titles and describe their projected roles in emergency response operations. Although specific HAZWOPER titles are not required, employees should be designated to assume duties that parallel 1910.120(q)(6) and must be trained accordingly. For example, an employer may use the job title, "containment operator," to describe a responder whose responsibilities are equivalent to the first responder operations level. Employers would indicate in the ERP that the employee with this job title has acquired training equal to the first responder operations level.

Lines of authority must also be made clear in the ERP. The senior official or on-scene incident commander (IC) must be notified expeditiously by a predefined chain of communication in the event of a release that would require an emergency response. Although employees at the scene of the release may be expected to inform their supervisors (as opposed to the on-scene IC), the supervisor, unless properly trained, can do nothing other than call for the emergency response personnel and report what is known to be present. Further, the lines of authority in the ERP must prescribe the roles and responsibilities of outside responders (e.g., fire, police, etc.) during a response. The lines of authority and roles

established should be consistent with the standardized organizational structures provided by NIMS.

Provisions for employee training must be incorporated into the ERP. This might include a general outline of the training to be completed for each of the various levels of emergency responders addressed in the ERP, or a reference to the location of the training manual. The plan should also address a schedule for required annual refresher training.

The lines of communication need to be defined clearly in the ERP. Essentially all employees that may encounter a release that requires an emergency response must be addressed in the ERP and each employee must understand to whom they are to report a release. These lines of communication can be developed for groups of employees in specific areas that would be required to report to the same individual in the event of an emergency. A system to communicate the need and method for evacuation of all employees who are not designated as emergency responders must be developed. These evacuation procedures must, at a minimum, meet the requirements of 1910.38.

Means of communication to be used during an emergency response must be established and written into the ERP. This might include dedicated radio frequencies, hand signals, siren blasts, light indicators (e.g., strobe lights), or any other system devised by the employer to alert employees that an emergency response operation has begun. OSHA standard 1910.165 may be used as a guide for employee alarm systems.

(2) Citation Guidelines. The CSHO shall cite 1910.120(q)(2)(ii) if any of the following conditions exist:

(a) Personnel roles or clear lines of authority (including those of outside responders) are not established in the ERP.

(b) The lines of communication, a system of alerting employees of an emergency, or the means of communication during an emergency are not clearly defined in the ERP.

(c) Provisions for employee training are not included in the ERP.

(Note: If personnel roles indicate inadequacies in training, CSHOs shall cite under 1910.120(q)(6).)

4. (q)(2)(iii) Emergency Recognition and Prevention.

(1) Inspection Guidelines. The ERP must define the types of releases that could potentially require an emergency response and should define what types of releases would not be an emergency, or, in other words, what may be handled as an incidental release.

The ERP should include an inventory of the hazardous substances found on site, the manner in which they are stored, and the consequences of an uncontrolled release. Scenarios or circumstances that trigger activation of the ERP should be described for the various hazardous substances stored on site that have the potential to cause an emergency. Reasonably predictable worst-case scenarios must be identified in the planning phase.

(2) Citation Guidelines. If the ERP does not define the types of releases or emergencies that could potentially require an emergency response, cite (q)(2)(iii).

5. (q)(2)(iv) Safe Distances and Places of Refuge.

(1) Inspection Guidelines. The ERP should contain a map with safe places of refuge identified for each section of the area where hazardous substance emergencies could occur, if possible. Ideally, the map should contain the location of all buildings, structures, equipment, emergency apparatus, first aid stations, routes of entry and exit, emergency exit routes and alternate routes, staging areas, and safe places of refuge. The adequacy of safe refuge areas needs to be determined for the worst-case scenario.

The safe places of refuge (out-of-doors or shelter-in-place) should be the areas where an accounting of all employees will be performed. This can be critically important for identifying individuals that did not get out, estimating where they may be, and initiating any rescue operation. Information on safe places of refuge must be given to the emergency response organization or emergency response team in a timely fashion.

In some cases because of the quantity and/or proximity of a contaminant release, it may be safer to remain indoors rather than to evacuate employees. If an employer intends to include a shelter-in-place option in their ERP, they must be sure to include provisions in their ERP to implement a means of alerting their employees to shelter-in-place that is easily distinguishable from that used to signal an evacuation, and to train employees in the shelter-in-place procedures and their roles in implementing them. Examples of situations that might result in a decision by an employer to institute shelter-in-place include an explosion in an ammonia refrigeration facility across the street, a derailed and

leaking tank car of chlorine on the rail line near a place of business, or a chemical, biological or radiological event. The ERP must identify who is responsible for determining whether to institute shelter-in-place and what situations may require it.

The CSHO should evaluate the employer's shelter-in-place procedures to determine their suitability. For example, do the procedures include turning off, sealing, or disabling the HVAC air exchange? OSHA's Evacuation Plans and Procedures e-Tool provides additional specific shelter-in-place procedures as guidance.

(2) Citation Guidelines. If the ERP does not address safe distances and places of refuge adequate for all employees who may need it, cite (q)(2)(iv).

If the employer intends to implement a shelter-in-place policy for any anticipated emergencies, the ERP must address the shelter-in-place procedures. If planned shelter-in-place procedures are not documented in the ERP, the CSHO shall cite (q)(2)(iv). If the shelter-in-place procedures are not suitable for the workplace, the CSHO shall cite (q)(2)(iv).

Failure to plan for and implement a distinctive means of alerting employees to shelter-in-place shall be cited under 1910.120(q)(2)(ix).

Failure to train employees regarding shelter-in-place procedures and their roles in such cases shall be cited under 1910.120(q)(2) with reference to the applicable paragraphs under 1910.38.

6. (q)(2)(v) Site Security and Control.

(1) Inspection Guidelines. Areas surrounding the danger area need to be controlled during emergencies by prohibiting unauthorized personnel from entering the emergency release area. Methods of excluding areas and defining various zones need to be addressed in the ERP. Emergency responses are coordinated from a command post a safe distance away from the emergency release area. The way this command post is assembled and its functions must also be addressed in the ERP. (1910.120 Appendix C, Section 7 provides further guidance).

Personnel expected to set up boundaries designating safe and unsafe areas must be trained to the first responder operations level. An employee trained to the first responder awareness level may not set up safe distances because they lack knowledge regarding the

potential for exposure, explosion, or radiation. Once these areas have been established, first responder operations level personnel must control entry and exit from the area of the release. (Note: Awareness level trained personnel may assist in preventing unauthorized entry into the area of the release providing all of their activities are done at a safe remote location.)

(2) Citation Guidelines. If the ERP does not designate equipment, people, and procedures to ensure site security and control, cite (q)(2)(v).

Failure to properly train employees consistent with their roles in supporting site security and control shall be cited under 1910.120(q)(6).

7. (q)(2)(vi) Evacuation Routes and Procedures.

(1) Inspection Guidelines. All employees that are not trained in emergency response and who will not be needed during the response operation should be evacuated from the exclusion and decontamination zones. This aspect of the ERP should be in compliance with 1910.38 as described in Section XII.A.2. CSHOs must use 1910.38 as a model to evaluate the employer's "evacuation routes and procedures."

(2) Citation Guidelines. The CSHO shall cite 1910.120(q)(2)(vi) if any of the following conditions exist:

(a) Evacuation routes and procedures are not developed and included in the ERP.

(b) Evacuation routes and procedures do not coincide with the methods developed for emergency alerting and the designation of places of refuge.

8. (q)(2)(vii) Decontamination.

(1) Inspection Guidelines. The ERP must contain provisions for decontamination of emergency responders leaving the exclusion zone. Individuals who will assist the responders as they leave the exclusion area must be trained in decontamination procedures. These individuals must wear PPE at the same level or one level below that worn by the emergency responders they are supporting, as appropriate to the hazards.

Decontamination of response equipment left in the exclusion zone and the contaminated area may be handled in the post-emergency response and, therefore, decontamination procedures for these areas and equipment do not necessarily need to be part of the ERP.

If emergency responders are expected to decontaminate their own equipment or the contaminated area, then the procedures to be followed must be included in the ERP. See 1910.120, Appendix C, Section 3, for further guidance.

(2) Citation Guidelines. If the ERP does not address the setting up of decontamination stations and the decontamination of personnel and equipment, the CSHO shall cite (q)(2)(vii).

If the ERP does not properly prescribe the selection of PPE for personnel performing decontamination, the CSHO shall cite 1910.120(q)(2)(xi).

9. (q)(2)(viii) Emergency Medical Treatment Procedures.

(1) Inspection Guidelines. The plan must provide for advanced first aid support trained personnel. These personnel must be qualified Basic Life Support (BLS) personnel or better-trained personnel. BLS refers to a unique group of trained individuals (e.g., EMTs) who have received an established level of specialized training that exceeds basic first aid skills such as control of bleeding and cardiopulmonary resuscitation (CPR). These personnel must be on standby, as per 1910.120(q)(3)(vi), and the plan must list all the qualified emergency medical personnel on site, their certifications, and how best to contact them during an emergency. The advanced first aid support personnel shall be no more than 3-4 minutes from the site. (Note: Although the online version of HAZWOPER refers to BLS personnel, some hard copy versions of HAZWOPER may refer to "Advanced First Aid Support.")

CSHOs must verify that emergency medical personnel are aware of their roles in an emergency and are trained to fulfill their roles.

(2) Citation Guidelines. If adequate emergency medical treatment and first aid procedures for emergency responders and provisions for qualified personnel are not included in the ERP, then cite (q)(2)(viii).

10. (q)(2)(ix) Emergency Alerting and Response Procedures.

(1) Inspection Guidelines. The plan must also address how employees will be informed that an emergency exists and how they should respond. The alarm system must inform "all affected employees" that an emergency exists and what their immediate response should be based on the alarm sequence. There are three important questions that need to be addressed:

(a) Who needs to be made aware of the emergency?

(b) What do they need to be told to do?

(c) How will they be alerted?

Depending on the size and the magnitude of the emergency "all affected employees" may include all employees, employees who work for other employers in the same facility or nearby facilities, or just employees from a limited area. If employers intend to evacuate people from a limited area, they must have alerting procedures in place that can communicate who must evacuate.

The following list outlines the information necessary to inform the employees of what their immediate response should be. All of these criteria may not be applicable to all employers, depending on the size and nature of the place of work and the employer's preplanning efforts:

(a) Notification – Making the existence of the emergency situation known.

(b) Level and Type of Response – The required response based on the extent and type of emergency.

(c) Nature of the Response – The type of emergency condition (explosion, chemical spill, medical).

(d) Location – Critically important in large facilities.

(e) Ambient Conditions – Environmental factors, such as wind speed and direction that influence evacuation or response procedures.

If the emergency situation calls for special instructions, determine if the emergency alerting system indicates the location of the hazard, the direction employees should evacuate, what the hazard is, and any special PPE employees must don.

(2) Citation Guidelines. The CSHO shall cite 1910.120(q)(2)(ix) if any of the following conditions exist:

(a) Emergency alerting and response procedures are not addressed in the ERP or the procedures do not indicate the action "all affected employees" should take (see OSHA's Multi-Employer Citation Policy (CPL 02-00-124) for further guidance on how OSHA issues citations on multi-employer worksites).

(b) There is no evidence of an alerting and response system on site.

11. (q)(2)(x) Critiques of Response and Follow-up.

(1) Inspection Guidelines. ERPs are based on site-specific needs and experience. It is important to consider previous emergency incidents in preparing an ERP. It is just as important to consider new information, experience, and incidents with the goal of enhancing the effectiveness of the ERP and keeping it current.

Written procedures for the critique of an emergency response must be part of the ERP. Appropriate changes should be made in the ERP in accordance with the results of a critique of a specific incident.

Time spent by emergency response employees reviewing incidents can be credited toward their refresher training requirements under 1910.120(q)(8).

(2) Citation Guidelines. If the ERP does not provide procedures for the critique of emergency responses, then cite (q)(2)(x).

12. (q)(2)(xi) PPE and Emergency Equipment.

(1) Inspection Guidelines. This section of the ERP lists the inventory of PPE and emergency response equipment and materials. The ERP must include instructions on how the PPE and equipment and materials are to be used, their limitations, and in what situations emergency responders will use them.

HAZWOPER requires the IC to be aware of the equipment and PPE available during an emergency. In addition, responders trained to the HAZMAT technician or HAZMAT specialist levels must be trained in the selection and proper use of PPE.

Emergency responders must be made aware of the inventory in order to utilize the PPE and emergency response equipment effectively.

(2) Citation Guidelines. If the ERP does not address the types and uses of PPE and emergency response equipment to be used, then cite (q)(2)(xi).

Failure to properly train employees in the selection and proper use of PPE shall be cited under 1910.120(q)(6).

13. (q)(2)(xii) Use of the Local Emergency Response Plan (LERP) or the State Emergency Response Plan (SERP).

Community emergency response agencies should be integral components of the community ERP. The community-wide ERP should spell out specific roles and responsibilities for various organizations or agencies, and will state which function each agency is expected to play in the event of an emergency. The employer's ERP may reference or otherwise include all or applicable sections of a LERP or SERP.

D. Procedures for Handling Emergency Response – 1910.120(q)(3).

At ongoing or recently completed emergency response operations there is usually a shift in emphasis from the planning requirements of the standard toward the procedural requirements of the standard. An inspection of an actual emergency response should focus on the appropriate implementation of the ERP and compliance with the requirements of 1910.120(q)(3).

Upon arriving at an emergency response incident the CSHO should immediately seek out and report to the on-scene IC (or the on-scene coordinator (OSC) if the NCP is activated), or the appropriate official within the Incident Command System (ICS), such as the safety and health official (safety officer). The purpose of this meeting is to inform the IC/OSC of your presence and the purpose of the visit.

(Note: OSHA Instruction HSO 01-00-001, National Emergency Management Plan (NEMP), clarifies procedures and policy for OSHA during response to nationally significant incidents. According to the NEMP, any decision to discontinue consultation and assistance in favor of enforcement at a nationally significant incident or other emergency, including at what point during an incident this transition should occur, if at all, will be made by the Regional Administrator in consultation with the Assistant Secretary, Deputy Assistant Secretary, or designee. Paragraph XI.A.1.(4) of this instruction, CPL 02-00-094, "OSHA Response to Significant Events of Potentially Catastrophic Consequences," and HSO 01-00-001 provide additional information.)

The CSHO may find it necessary to hold an abbreviated opening conference, during which the CSHO should obtain a copy of the ERP.

The CSHO must determine whether contamination zones have been created and, if so, the CSHO must avoid entry into zones for which the CSHO has not been appropriately trained or equipped. CSHOs should make every effort to comply with the restrictions imposed by the IC/OSC.

If the employer fails to follow his/her emergency plan and also responds inappropriately, the CSHO should separately cite the employer for both actions. An example would be where an employer has designated the local fire department as the emergency responder, and then during an incident fails to notify the department and sends in inadequately trained employees to respond to the incident. In that case, the employer shall be cited under (q)(2) *and* (q)(6).

1. (q)(3)(i) Incident Command System.

   (1) Inspection Guidelines. All activity at a site must be coordinated through the Incident Command System (ICS), which specifies that one individual be in charge of coordinating and supervising emergency response efforts. The ICS is to include a pre-established chain of command, in which control of the incident is passed up the chain of command as more senior officials arrive. For example, in the event it is necessary to call in an outside HAZMAT team, the senior official would turn over control of the incident to the head of the outside HAZMAT team (Note: It is *not* acceptable for the employer to designate and train an individual (e.g., plant manager, supervisor, etc.) who must be called in from off-site as the initial senior official). The employer must specify in advance whether the on-site senior official will turn over control of the incident to an individual arriving from off-site. Whoever serves in the role of senior official must have full authority to coordinate and supervise emergency response activities. The senior official must be trained based on the duties and function to be performed.

   Paragraph (q)(3)(i) in the standard includes a note that provides information regarding the senior official and the note states: "The 'senior official' at an emergency response is the most senior official on the site who has the responsibility for controlling the operations at the site. Initially it is the senior officer on the first-due piece of responding emergency apparatus to arrive on the incident scene. As more senior officers arrive (i.e., battalion chief, fire chief, state law enforcement official, site coordinator, etc.) the position is passed up the line of authority which has been previously established."

For large incidents, this could involve multi-employer responses and multiple worksites. Compliance with the incident command system as defined by the National Incident Management System (NIMS) during an event governed by NIMS protocol is considered compliant with the requirements under this section. NIMS was published by the Department of Homeland Security on March 1, 2004. Additional information on NIMS is provided in Section XII.B.1 of this instruction.

(2) Citation Guidelines. The CSHO shall cite 1910.120(q)(3)(i) if any of the following conditions exist:

(a) There is not an ICS in place.

(b) A single individual has not been designated as the senior official or on-scene incident commander.

(c) There is not a system in place that passes the senior official position up the line of authority as more senior officials arrive on the scene.

2. (q)(3)(ii) Identification of Hazardous Substances and Conditions.

(1) Inspection Guidelines. Under paragraph (q)(3)(ii), the IC, or the designated safety official as directed by the IC, has the responsibility to "identify, to the extent possible, all hazardous substances or conditions present and shall address as appropriate site analysis, use of engineering controls, maximum exposure limits, hazardous substance handling procedures, and use of any new technologies."

The IC has a responsibility to utilize all available resources to characterize the hazards associated with response activities. The information gathering/site characterization stage of an emergency response operation is critical in that it influences all other subsequent aspects of the response (e.g., delineation of contamination zones, selection of appropriate PPE, etc.).

(2) Citation Guidelines. If the IC has not ensured that all hazardous substances or conditions present have been identified and addressed, then the CSHO shall cite (q)(3)(ii).

3. (q)(3)(iii) Implementation of Appropriate Emergency Response Operations and PPE.

(1) Inspection Guidelines. Based on characterization of the site, the IC is responsible for implementing appropriate emergency response operations, and ensuring that proper PPE is used. To establish the effectiveness of the response operation, the CSHO must ask the IC or an appropriate official within the ICS after the incident is over what he/she knew about the hazardous substances present and how he/she knew it? Did the IC rely on placards, labels, manifests, or information from the plant pursuant to (q)(3)(iii)?

The IC must establish and maintain lines of communication including links to the senior official present for each employer. If a senior official for an employer was not incorporated in the lines of communication, there may have been a violation of (q)(3)(i).

Adequate coordination of emergency responders is critical to a safe emergency response operation. The CSHO should explore any evidence of inadequate coordination of emergency responders. Were responders receiving direction from more than one source? Was there more than one command post? Did any of the employer's employees refuse to take direction from the IC? Were the responders aware of the existence of any pre-emergency planning procedures or agreements between the facility and their organization? Were they aware of their roles once response operations were initiated?

(2) Citation Guidelines. The CSHO shall cite 1910.120(q)(3)(iii) if any of the following conditions exist:

(a) The individual in charge of the ICS did not ensure that emergency response operations were implemented based on the hazardous substances and/or site conditions (including the case of multiple responders).

(b) The individual in charge of the ICS did not ensure that PPE worn was appropriate for the hazards to be encountered during response operations (e.g., PPE worn for fire fighting operations beyond the incipient stage did not meet the criteria contained in 1910.156(e)).

4. (q)(3)(iv) Positive Pressure Self-Contained Breathing Apparatus (SCBA).

(1) Inspection Guidelines. 1910.120(q)(3)(iv) requires that positive pressure SCBA be used "while engaged in emergency response, until such time that the individual in charge of the ICS determines through the use of air monitoring that a decreased level of

respiratory protection will not result in hazardous exposure to employees."

If the IC is limited in his or her ability to monitor and characterize the site, positive pressure SCBA must be used. The CSHO should determine whether air monitoring equipment was available on-site to assist the IC in determining when to increase or lower the level of PPE.

Chemical Protective Clothing is covered in paragraph XI.K of this instruction.

(2) Citation Guidelines. If the site has not been adequately characterized (e.g., through air monitoring) and respiratory protection less protective than positive pressure SCBA is used, then cite (q)(3)(iv).

5. (q)(3)(v) Limited Number of Emergency Responders/Buddy Systems.

(1) Inspection Guidelines. The number of individuals in areas of potential or actual exposure must be limited to those individuals actually engaged in emergency response operations. If there are excess personnel on site, or the facility was not properly evacuated, there may be a violation of 1910.120(q)(3)(v).

Although the IC has the responsibility to limit the number of emergency responders in areas of exposure or potential exposure, the IC must employ the buddy system for all operations in hazardous areas. At a minimum, the buddy system must be used within the hazardous area (entry by at least two persons) and at least two additional personnel must stand by outside the hazardous area. Thus, there must be at least four individuals at the site.

(2) Citation Guidelines. The CSHO shall cite 1910.120(q)(3)(v) if any of the following conditions exist:

(a) The individual in charge of the ICS does not limit the number of emergency responders at the emergency site.

(b) The CSHO determines that the buddy system was not used in hazardous areas or that the buddy system used was ineffective (i.e., individuals in the danger area were out of sight of others).

6. (q)(3)(vi) Backup Personnel and Qualified Basic Life Support.

(1) Inspection Guidelines. For emergency responders that enter the hazardous area there must be backup personnel standing by who are identically equipped (or have a higher level of protection) to provide assistance or rescue. If SCBAs for the backup personnel can effectively permit safe rescue, then that protective measure would meet OSHA's requirements. Paragraph (q)(3)(vi) is a performance-based provision requiring employers to select and provide appropriate rescue equipment based on the anticipated circumstances. Examples of other types of appropriate rescue equipment are chest or full body harnesses, wristlets, and a lifting device or anchor.

Paragraph (q)(3)(v) requires that operations in hazardous areas of an emergency response be performed using the buddy system in groups of two or more (see Section XI.D.5., above).

Paragraph (q)(3)(vi) requires at least two additional personnel outside the hazardous area as backup personnel for assistance or rescue. One of the two individuals outside the hazard area can be assigned to another task, provided that the second assignment does not interfere with the performance of the standby role.

Paragraph (q)(3)(vi) also requires that advanced first aid support trained personnel stand by with medical equipment and transportation capability. As previously discussed under section (q)(2)(viii) above, these personnel must be qualified Basic Life Support (BLS) personnel or better-trained personnel. BLS refers to a unique group of trained individuals (e.g., EMTs) who have received an established level of specialized training that exceeds basic first aid skills such as control of bleeding and CPR. The advanced first aid support personnel shall be no more than 3-4 minutes from the site.

(2) Citation Guidelines. The CSHO shall cite 1910.120(q)(3)(vi) if any of the following conditions exist:

(a) Properly equipped backup personnel are not available when employees are working in the danger area.

(b) An individual assigned as backup personnel performs tasks that interfere with or prohibit performance of the standby role.

(c) Appropriately trained and equipped advanced first aid support personnel are not standing by during entry into the danger area.

7. (q)(3)(vii)-(viii) Designated Safety Official/Safety Officer (SO).

(1) Inspection Guidelines. The IC has the responsibility to designate an SO (the IC may designate herself or himself as SO, particularly in smaller response operations). The level and type of training and experience is to be based on the SO's specific roles and functions, and should be based on having to assess and mitigate all hazards confronting workers in reasonably anticipated worst-case scenarios. The SO must have the following competencies as required by (q)(3)(vii):

(a) Be knowledgeable in the operations being implemented at the emergency response site.

(b) Have the ability to identify existing hazards and to provide direction with respect to the safety of operations for the emergency at hand.

(Note: Although a Certified Industrial Hygienist or a Certified Safety Professional may play the role of safety official, this certification should not be regarded as absolute criteria of eligibility.)

When the safety official believes that there is a situation that poses an imminent danger to life or health, the safety official must be vested with the authority to suspend operations.

For an Incident of National Significance which implements the NRP, the designated Safety Officer should have the competency to perform or ensure that the appropriate tasks in the Worker Safety and Health Support Annex are conducted or coordinated among responding organizations (Note: The NIMS provides a definition of safety officer).

(2) Citation Guidelines. If the IC has not designated a competent safety official for the response operation, the CSHO shall cite a (q)(3)(vii) violation. (Note: (q)(3)(vii) shall not be cited if the IC is also the designated safety official.)

If the CSHO finds evidence that the safety official does not have authority to suspend operations in an immediately dangerous to life or health (IDLH) or imminent danger situation, it shall be cited as a (q)(3)(viii) violation.

8. (q)(3)(ix) Decontamination.

(1) Inspection Guidelines. The IC has the responsibility to institute appropriate decontamination procedures after emergency response

operations have terminated (see Section XII.B.2. of this instruction for resources that provide guidance on decontamination procedures).

(2) Citation Guidelines. If the ICS has not instituted decontamination procedures appropriate for the response operations and site hazards, then the CSHO shall cite (q)(3)(ix).

9. (q)(3)(x) SCBA Cylinder Interchangeability.

(1) Inspection Guidelines. Employers are permitted to use other manufacturer's cylinders on SCBAs when deemed necessary to meet the tasks at hand. This means that this practice can only be used during emergency situations such as a lifesaving response.

An example of an allowed situation would be when several different emergency response organizations respond to a hazardous situation that requires the use of their SCBAs. As the cylinder supplies get depleted, the appropriate approved cylinder may not be available for a particular SCBA during the emergency response. Rather than waiting until the appropriate cylinder is obtained, the responder is permitted to use another manufacturer's cylinder provided that it *meets the specifications of the respirator manufacturer and has the same capacity and pressure rating*.

(2) Citation Guidelines. If the cylinders being used during an emergency situation do not meet the specifications of the SCBA manufacturer and/or do not have the same capacity and pressure rating, then the CSHO shall cite (q)(3)(x).

E. Skilled Support Personnel – 1910.120(q)(4).

Skilled support personnel (SSP) are those employees who are needed temporarily to perform immediate emergency support work, such as those who may occasionally assist the Incident Commander (IC) by operating cranes, backhoes, or trucks. This category of employee was included in paragraph (q) to recognize the need at times for fast-response assistance by individuals who possess needed skills and equipment at an emergency scene.

1. Inspection Guidelines. Since many of these employees do not expect to help in emergency response incidents and do not have even minimal awareness training, attention must be given to their proper safety and health protection at the scene before they participate in the incident. This can be accomplished by an on-site briefing that includes a discussion of the hazards present, the personal protective clothing and equipment to be used, how the equipment is used, the exact tasks they are expected to

perform, and any other safety and health precautions. In cases where the SSP is the only person who can perform the emergency procedure (e.g., tow truck drivers and heavy equipment operators), on-the-spot instruction in the proper use of the specific respirator chosen for them would be sufficient. (Note: Employees who are routinely expected to perform emergency procedures as part of their job responsibilities would be considered part of a HAZMAT team and would need to be trained in accordance with (q)(6).)

2. Citation Guidelines. If SSP are not provided an appropriate initial briefing at the site prior to their participation in an emergency response or are not provided other appropriate safety and health precautions, the CSHO shall cite (q)(4).

Personnel who are regularly expected to perform emergency procedures can no longer be considered SSP and require HAZWOPER training under paragraph (q)(6). Lack of training for these employees shall be cited under (q)(6) (see Section XI.G. for more information).

(Note: OSHA's Office of Training and Education (OTE) developed a non-mandatory 16-hour course [OSHA Course #7600 – *"Disaster Site Worker Course"*] that focuses on disaster site workers who provide skilled support services (e.g., utility, demolition, debris removal, heavy equipment operation, etc.). The purpose of the course is to increase the awareness of safety and health hazards, including chemical, biological, radiological, and nuclear (CBRN) agents, that may be encountered at a natural or man-made disaster site. OTE also developed a course [OSHA Course #5600 – *"Disaster Site Worker Train-the-Trainer Course"*] to prepare experienced trainers to present Course #7600.)

To schedule either of the two courses above, please contact your local OSHA Training Institute (OTI) Education Center. To find the education center nearest you, click on the link below and then click on the section of the colored map that is nearest to you (http://www.osha.gov/fso/ote/training/edcenters/index.html).

F. Specialist Employees – 1910.120(q)(5).

The "specialist employees" category is to be used for employees from off-site who assist, counsel, or advise the on-scene IC or HAZMAT team. Specialist employees may provide technical assistance in operations such as servicing specific valves on a storage tank or a tank car, or in similarly skilled areas, in addition to offering advice. Specialist employees could also include medical or environmental experts.

These employees may be individuals who work with and are trained in the hazards of a specific hazardous substance, but do not necessarily have all of the

competencies of the HAZMAT technician or HAZMAT specialist. Specialist employees may not enter the danger area unless they are fully trained in the use of the required PPE and are accompanied by a HAZMAT technician or HAZMAT specialist.

1. Inspection Guidelines. Specialist employees who may be sent to the scene of an emergency to advise and assist the person in charge must receive training or demonstrate competency in the area of their specialization annually (see 1910.120, Appendix C, Section 2, for more details).

   Activities of all emergency responders responding to or on the scene of a release of a hazardous substance must be coordinated and controlled through the individual in charge of the ICS, as per 1910.120(q)(3)(i). Specialist employees are not exempted from this requirement.

2. Citation Guidelines. If specialist employees are not provided training or do not demonstrate competency in the area of their specialization annually, then the CSHO shall cite (q)(5).

   Personnel who are to enter contaminated areas on a regular basis can no longer be considered specialist employees, and require HAZWOPER training under paragraph (q)(6). Lack of training for these employees shall be cited under (q)(6) (see Section XI.G. for more information).

G. Training – 1910.120(q)(6).

1. (q)(6) Training. CSHOs must evaluate the adequacy of emergency responder training required in 1910.120(q)(5) and (q)(6) and the refresher training required in 1910.120(q)(8) by interviewing the employer, employee representatives, and employees who may be involved in an emergency involving hazardous substances in order to determine their ability to perform their designated response roles and responsibilities. Appendix C of this instruction provides a guidance checklist. [Training curriculum guidelines are provided in 1910.120, Appendix E.]

   The training hours in the standard are minimums. HAZWOPER training programs often will exceed the 8-, 24-, or 40-hour minimums in order to include all of the required subjects.

   An employer with a limited range of hazardous substances on site may opt to supply their personnel with one type of PPE and require employees to wear the entire complement of PPE for any response. This strategy would relieve that particular employer of the requirement of training HAZMAT technicians to be able to "select appropriate PPE," if employees are trained in the PPE that they are required to wear and the employer has determined that the PPE will always provide sufficient protection.

(Note: If an employer selects a single type of PPE for all releases that require an emergency response, the employer must be sure to evaluate the full range of performance criteria that PPE must meet, such as likely chemical exposures, heat stress, physical constraints, maintenance, permeability, as well as employee fit.)

- Another example of requirements specified in the standard that may not be universally applicable is found in 1910.120(q)(6)(iii)(B), training for HAZMAT technicians, where knowledge of "the classification, identification, and verification of known and unknown materials by using field survey instruments and equipment" is required. In many chemical manufacturing facilities this may not be necessary because hazardous substances that have a potential for being released are already known.

  The ERP and training components may cover this by identifying the known hazardous substances that would cause, or have the potential to cause, an emergency if released. Where mixtures of hazardous substances may occur in an emergency and/or hazardous byproducts may be formed during an emergency, the plan must anticipate, identify, and include training components about these mixtures or byproducts.

  Employees trained in this limited manner would only be able to respond to spills on site that involve the limited range of hazardous substances in which they are trained. For example, employees trained to respond only to releases of chlorine may not respond to a release of ethylene oxide without broadening their limited training.

Training of hospital staff and emergency medical service personnel:

- Hospitals that are designated by a LEPC or by a hazardous waste site as a decontamination facility must comply with 1910.120(q) for employee training. Facilities or sites that prepare an ERP under 1910.120 must coordinate with hospitals or other medical care providers prior to emergencies in case victims will need to be decontaminated at a hospital (1910.120(q)(2) requires emergency medical treatment and first aid as one of the elements to be covered in the ERP). If a hospital is selected by a facility, it must be made aware of a facility's intent to use its services so that the hospital may ensure that it is prepared for its duties (e.g., has properly trained personnel, PPE, methods of containing runoff wastewater, etc.).

- OSHA's non-mandatory First Receivers Document provides practical information to assist hospitals in developing and

implementing emergency management plans that address the protection of hospital-based emergency department personnel during the receipt of contaminated victims from mass casualty incidents occurring at locations other than the hospital.

- Hospitals that will receive contaminated accident victims must stress decontamination and PPE in the training for personnel designated to set up decontamination facilities. For medical personnel (first receivers) who will receive and decontaminate accident victims, first responder operations level training is required. This level of training is appropriate for anyone with a designated role in the Hospital Decontamination Zone (Note: The term “Hospital Decontamination Zone” is defined in Section B.3.1. of the First Receivers Document). Employers may develop an in-house training course that would focus on decontamination and PPE or provide site-specific training in decontamination and PPE after sending personnel to a standard "first responder operations level" course.

- Hospitals that employ emergency medical service personnel (e.g., ambulance personnel) who would be exposed to hazardous substances because they are expected to treat contaminated patients at the release area (but at a safe distance from the point of release), are required by 1910.120(q) to train these personnel to safely perform these duties. First responder operations level training is appropriate for these personnel.

  Other medical personnel whose expected job duties do not include treating contaminated patients may be needed to respond to accidents where the chemical's hazards were unforeseen. These employees may be considered "skilled support personnel" or “specialist employees” and must be given an initial briefing that includes instruction in the wearing of appropriate PPE, any limitations of the PPE, the chemical hazards involved, and the facility's safety and health precautions.

(1) Inspection Guidelines. CSHOs should verify that employee training is based on the assigned duties to be performed by an employee during an emergency. Employees must not perform any emergency response operations unless they have been trained to the level required by their job function and responsibility, and have been certified by their employer as having completed the necessary training. Employee training requirements are further defined by the nature of the work (e.g., temporary emergency response personnel, firefighters, safety officers, HAZMAT personnel, and incident commanders).

(2) Citation Guidelines. If employees who participate or are expected to take part in emergency operations were not trained at all, then the CSHO shall cite (q)(6).

If employee training is not based on the specific duties and functions to be performed at the site or the training was insufficient (whether the training was performed on-site or off-site), then cite the appropriate subparagraph, (q)(6)(i) through (q)(6)(v), as discussed in the following sections.

2. (q)(6)(i) First Responder Awareness Level. Individuals who are likely to witness or discover a hazardous substance release and are to initiate an emergency response sequence by notifying the proper authorities of the release must be trained to the first responder awareness level. They are to take no further action beyond notifying the authorities of the release.

Generally, law enforcement and facility security personnel should be trained to the first responder awareness level since they are likely to witness or discover a release of a hazardous substance.

Security guards or other similar personnel who, upon discovery of a release requiring an emergency response, are limited to activation of an alarm, notification of appropriate authorities, and controlling access to the release from a remote area (safe distance) must also at a minimum receive first responder awareness level training. These employees can initiate an emergency response sequence by notifying the authorities of the release, including alarm activation. Employees trained to the awareness level may control entry to and exit from the site from a remote location but must not assist in setting up safe distances because they lack knowledge regarding the potential for exposure, explosions, or radiation.

(1) Inspection Guidelines. CSHOs should verify that employees who may discover an emergency release and whose duties are limited to initiating an emergency response sequence receive first responder awareness level training at a minimum.

The standard does not set a minimum number of hours for this training, but such courses often run from 4 to 12 hours. Regardless of the duration of the training, employees must have sufficient training or have had sufficient experience to objectively demonstrate competency in the six areas of knowledge listed in the standard (see 1910.120(q)(6)(i)(A)-(F)).

(2) Citation Guidelines. If an employee participates or is expected to participate in emergency response operations at the first responder awareness level and training is inadequate, then the CSHO shall cite (q)(6)(i).

If one or more elements are missing from the required training, the CSHO shall cite (q)(6)(i) with the specific element(s) that are missing.

If the employee takes action beyond that which they have been trained to do (e.g., more aggressive role comparable to the first responder at the operations level), CSHOs shall cite a violation of 1910.120(q)(6)(i).

3. (q)(6)(ii) First Responder Operations Level. Employees who respond to releases as part of the initial response for the purpose of protecting nearby persons, property, or the environment by responding in a defensive fashion must be trained to the first responder operations level. Their defensive actions must be performed from a safe distance and may include activities such as placing absorbents or constructing dikes.

Firefighters expected to respond to releases of hazardous substances must be trained to at least the first responder operations level since they will respond to releases, or potential releases, of hazardous substances for the purpose of protecting nearby persons, property, or the environment.

Firefighters responding to propane and gasoline fires:

- Firefighters trained to the operations level, who are also trained in the hazards of propane, may enter the danger area to shut off the valves that will starve the fire and thus extinguish it. Normally, employees trained to the operations level would be restricted from taking aggressive action. **This is considered to be a special case.** The principal hazards from propane are fire and explosion, not toxicity. Because propane fires are common, most firefighters are fully trained and equipped to respond to propane fires, including taking aggressive action by shutting off the valves in the danger area.

  If firefighters are fully trained and equipped (which is a high degree of training), and have also received first responder operations level training, OSHA believes they have sufficient training to take aggressive action due to propane's relatively low toxicity. In this circumstance, it would only be a technical violation of 1910.120(q)(6) and OSHA would not issue a citation.

- Releases of gasoline similar to the example involving propane discussed above may be addressed by operations level emergency responders if they have the required PPE, emergency response equipment, and specific training in the safety and health hazards associated with gasoline.

Employers who expect firefighters to shut off a gasoline valve in the danger area, and who can show that employees are trained to the operations level and adequately trained in the hazards of gasoline, have committed a technical violation of 1910.120(q)(6)(iii) for such employees not having the training required of a HAZMAT technician.

(Note: The fire and explosion hazards of propane and gasoline are very substantial. The interpretations herein are applicable only when firefighters are fully trained and equipped to handle the explosion and fire hazards of propane, gasoline, or similar flammable gases and liquids.)

- If an injury occurred during an emergency response involving these responders (operations level plus additional training) the CSHO would need to consider whether the responders' training and experience were sufficient for the tasks being performed.

  A violation of training requirements that resulted in an actual injury to an employee during an emergency response by definition cannot be a "technical violation." Thus, if an injury occurred and the CSHO determined that the responders' training and experience were not sufficient for the tasks being performed, then a citation shall be issued for a violation of 1910.120(q)(6)(iii) carrying a fine and requiring abatement would be appropriate. Whether abatement should require full training in all of the competencies of the HAZMAT technician level, or whether certain training requirements could safely be omitted, would depend on the training needed to safely perform the tasks in question.

  If, however, the CSHO determines that the training that had been provided to employees had been adequate, then the training violation would be considered *de minimis* and no citation would be issued. In this situation the CSHO might determine that the cause of the injury was due to a violation of some other requirement of 1910.120 or other standards, for which a citation carrying a fine and requiring abatement would be appropriate.

(1) Inspection Guidelines. CSHOs should verify that employees who are to respond in a defensive action from a safe distance receive first responder operations level training at a minimum.

First responders at the operations level must receive at least eight hours of training, or have had sufficient experience to objectively demonstrate competency in the six areas of knowledge listed in the standard (see 1910.120(q)(6)(ii)(A)-(F)) in addition to those listed

for the awareness level). Therefore, depending on an employee's competencies, more than eight hours may be required.

(2) Citation Guidelines. If an employee participates in emergency response operations at the first responder operations level or is expected to take on that role and training is inadequate, then the CSHO shall cite (q)(6)(ii).

If one or more elements are missing from the required training, the CSHO shall cite (q)(6)(ii) with the specific element(s) that are missing.

If the employee takes action beyond that which they have been trained to do (e.g., more aggressive role comparable to the first responder at the technician level), CSHOs shall cite a violation of 1910.120(q)(6)(ii).

4. (q)(6)(iii) Hazardous Materials Technician. Employees who respond to releases in an aggressive fashion for the purpose of stopping the release must be trained to the HAZMAT technician level. These individuals approach the point of release to plug, patch, or otherwise stop the hazardous substance release.

Employees such as chemical process operators may be required to shut down processes, close emergency valves and otherwise secure operations that are not in the danger area before evacuating in the event of an emergency (see 1910.38(c)(3)). These procedures need to be delineated in the ERP, and employees must be trained to be able to perform these pre-evacuation procedures safely. Employees who perform these operations are not considered "emergency responders." However, if they are expected to perform duties in the danger area beyond what they are trained to do and comparable to those of a HAZMAT technician or the defensive role of the first responder at the operations level, then they would be expected to be trained as emergency responders in accordance with 1910.120(q).

Process operators who have (1) informed the incident command structure of an emergency (defined in the facility's ERP); (2) adequate PPE; (3) adequate training in the procedures they are to perform; and (4) employed the buddy system, may take limited action in the danger area (e.g., turning a valve) before the emergency response team arrives. The limited action taken by process operators must be addressed in the ERP.

- Once the emergency response team arrives, these employees would be restricted to the actions that their training level allows. This limited action assumes that the emergency response team is on its

way and that the action taken is necessary to prevent the incident from increasing in severity (i.e., to prevent a catastrophe).

- Employers must inform such employees during their training that they are to evacuate when they lack the capabilities to respond in a safe manner and in accordance with the standard operating procedures defined in the ERP.

For example, first responders (e.g., law enforcement, firefighters, etc.) involved in methamphetamine lab raids are often confronted with releases of, or substantial threats of releases of, hazardous substances such as caustics, solvents, and toxic gases (e.g., phosphine). The training for these personnel must be based on the expected roles and responsibilities during the emergency response. As such, the response personnel responsible for taking the aggressive role of shutting down the laboratory "cooking" process would likely face the greatest exposures, and must be trained to at least the hazardous materials technician level. (Note: Any post-emergency response clean-up must be done in accordance with (q)(11); clean-ups not resulting from an emergency response and that fall under (a)(1)(i)-(iv) must be done in accordance with paragraphs (b)-(o) of HAZWOPER.)

(1) Inspection Guidelines. CSHOs should verify that employees who are required to approach the point of release or danger area and are to respond in an aggressive fashion to stop the release have received HAZMAT technician training.

First responders at the HAZMAT technician level must receive at least 24 hours of training equal to the operations level, and in addition have competency in the nine areas of knowledge listed in the standard (see 1910.120(q)(6)(iii)(A)-(I)). Therefore, depending on an employee's competencies, more than 24 hours of training may be required.

(2) Citation Guidelines. If an employee participates in emergency response operations at the HAZMAT technician level or is expected to take on that role and training is inadequate, then the CSHO shall cite (q)(6)(iii).

If one or more elements are missing from the required training, the CSHO shall cite (q)(6)(iii) with the specific element(s) that are missing.

If a chemical process operator or other employees take limited action in the danger area beyond what they have been trained to do, and the action was comparable to the aggressive role that a HAZMAT technician would take, CSHOs shall cite a violation of 1910.120(q)(6)(iii).

5. (q)(6)(iv) Hazardous Materials Specialist. Employees who respond to releases to provide support to HAZMAT technicians in the form of specialized knowledge of substances involved in the release are HAZMAT specialists. The duties of these individuals parallel those of the HAZMAT technician.

   (1) Inspection Guidelines. CSHOs should verify that employees serving in a HAZMAT specialist role receive training consistent with (q)(6)(iv).

   First responders at the HAZMAT specialist level must receive at least 24 hours of training equal to the technician level, and in addition have competency in the nine areas of knowledge listed in the standard (see 1910.120(q)(6)(iv)(A)-(I)). Therefore, depending on an employee's competencies, more than 24 hours of training may be required.

   (2) Citation Guidelines. If an employee is expected to participate in emergency response operations at the HAZMAT specialist level or is expected to take on that role and training is inadequate, then the CSHO shall cite (q)(6)(iv).

   If one or more elements are missing from the required training, the CSHO shall cite (q)(6)(iv) with the specific element(s) that are missing.

6. (q)(6)(v) On Scene Incident Commander. The incident commander is an individual who will assume control of the incident scene beyond the first responder awareness level. The intent of the standard is to provide an incident command system that is headed by a single person who is well trained in managing emergencies of differing severity, as well as overseeing the HAZMAT team, but does not necessarily have extensive knowledge of certain technical aspects such as classification and verification of hazardous substances. Appendix C, section 6., of the standard explains:

   > "This enable[s] one individual to be in charge of managing the incident, rather than having several officers from different companies making separate, and sometimes conflicting, decisions. The individual in charge of the [incident command system] would delegate responsibility for performing various tasks..."

   Consequently, the IC requires more training in general matters, plus extensive training in command and management. Training for the IC may require more than 24 hours of total training.

(1) Inspection Guidelines. *CSHOs should verify that individuals serving in the role of IC minimally receive 24 hours of training equal to first responder operations level, and in addition have competency in the six areas of knowledge listed in the standard (see 1910.120(q)(6)(v)(A)-(F)).* Therefore, depending on an employee's competencies, more than 24 hours of training may be required.

(2) Citation Guidelines. If an individual is serving as the IC and his or her training is inadequate, then the CSHO shall cite (q)(6)(v).

If one or more elements are missing from the required training, the CSHO shall cite (q)(6)(v) with the specific element(s) that are missing.

H. Trainers – 1910.120(q)(7).

1. Inspection Guidelines. The CSHO should determine the type of training provided to employees and assure that qualified instructors with proper training and/or academic training delivered the training. For example, the U.S. National Fire Academy offers courses that are appropriate for trainers. An in-house training program, among other options, may be developed. Credential requirements for trainers are defined in 1910.120(q)(7). Furthermore, trainers should maintain professional competency by participating in professional development programs or successfully completing an annual refresher course.

A video-only approach to train employees would not be sufficient, although videos could be used for part of the training if the employer can demonstrate that the employee has achieved sufficient knowledge and skills. For example, providing an instructor to respond to the employees' questions after the video presentations, and evaluating employee understanding of the material would be required. First responder operations level training (q)(6)(ii) and higher would require hands-on training and more interaction with the instructor.

Similarly, computer-based training can serve as a valuable training tool in the context of an overall training program but, by itself, would not be sufficient to meet the intent of the training requirements. Training under HAZWOPER includes site-specific elements and must be tailored to employees' assigned duties, including hands-on training involving PPE and equipment.

2. Citation Guidelines. If the CSHO determines that unqualified trainers provided training that was insufficient to convey necessary training requirements, the CSHO shall cite (q)(7).

If the training approach utilized did not provide for answering student questions or hands-on training, cite (q)(7).

I. Refresher Training – 1910.120(q)(8).

1. Inspection Guidelines. Employees who must receive training as required by (q)(6), must also receive refresher training or demonstrate competency at least annually. Refresher training is required because employees must stay up-to-date in their skills and knowledge.

OSHA's intent is that employees should complete their refresher training within twelve months of their initial training, although sometimes courses may be missed due to unavoidable circumstances. In such an event, employees should take the next available refresher training course. However, there should be a record in the employee's file indicating why the training has been delayed and when the training will be completed. If the employee has gone without refresher training for more than twelve months, the employer must evaluate whether the initial comprehensive training needs to be repeated. The need to repeat initial training must be determined based on the employee's familiarity with safety and health procedures and potential hazards.

Refresher training may be given in segments throughout the year so long as the required training has been completed by the employee's anniversary date. Time spent by emergency response employees reviewing incidents can also be credited toward their refresher training requirements.

The employer must have a "statement of training" or "statement of competency" for annual refresher training or competency for all employees trained in emergency response.

2. Citation Guidelines. If the CSHO determines that an employee has received no or inadequate annual refresher training, the CSHO shall cite (q)(8)(i).

If the employer has not made a written statement of the employee's annual refresher training or competency, the CSHO shall cite (q)(8)(ii).

J. Medical Surveillance and Consultation – 1910.120(q)(9).

1. Inspection Guidelines. Employers are obligated to make medical surveillance available to specific employees without cost to the employees. The CSHO should determine those employees entitled to medical surveillance and consultation, and assure that these employees were offered such services.

Paragraph (q)(9)(i) requires that members of an organized and designated HAZMAT team and HAZMAT specialists receive a baseline physical

examination and medical surveillance in accordance with paragraph (f). A HAZMAT team refers to a group of individuals who are expected to control actual or potential leaks or spills of hazardous substances *requiring close approach* to the substance. Examinations must be provided prior to initial assignment, at least yearly thereafter, and at termination of employment. Medical examinations must also be provided in cases where employees are injured or develop signs or symptoms of overexposure to health hazards.

The actual content of medical examinations (e.g., laboratory tests, chest x-rays, spirometry, etc.) is determined by the attending physician. Chapter 5 of the *Occupational Safety and Health Guidance Manual for Hazardous Waste Sites* ("4 Agency Manual") provides guidelines for designing a medical program.

The medical examination must include a medical and work history (or updated history if one is in the employee's file) with an emphasis on the following:

- Symptoms related to the handling of hazardous substances and health hazards.
- Fitness for duty and the ability of the employee to wear any required PPE including respiratory protection under the expected conditions at the work site (e.g., temperature extremes).

The employer must also provide medical consultation to *any* emergency responder (not limited to HAZMAT team members and HAZMAT specialists) who becomes injured or ill or develops signs or symptoms due to exposure to hazardous substances from an emergency response. Consultations must be provided as soon as possible following the incident, and also at additional times if the physician determines it is necessary. Similar to examinations, the content of consultations is determined by the attending physician.

(Note: 1910.120(f)(3) provides that the employer must make medical examinations available, at no cost, to employees engaged in hazardous waste operations. The standard does not require an employee to take the medical examination. However, 1910.120(q)(9)(i) provides that members of an organized and designated HAZMAT team and hazardous materials specialists shall receive a baseline examination and be provided with medical surveillance as set forth in 1910.120(f). As a result, in order for an individual to qualify as a member of an organized HAZMAT team, or hazardous materials specialist, the individual must undergo medical examination set forth in paragraph (f).

In the event that an employee chooses not to have a medical exam or participate in a medical surveillance program, the employer should so note the refusal in the employees' personnel file.)

2. Citation Guidelines. If the CSHO determines that organized and designated HAZMAT team members or HAZMAT specialists have not been offered a baseline medical examination or medical surveillance, the CSHO shall cite (q)(9)(i).

   If emergency response employees who exhibited signs or symptoms from exposure to hazardous substances that may have occurred during an emergency incident have not been offered medical consultation, cite (q)(9)(ii).

   If employees were offered medical surveillance but it was inconsistent with 1910.120(f), then cite (q)(9)(i) or (q)(9)(ii), as appropriate, and reference the paragraph (f) deficiencies.

K. Personal Protective Equipment (PPE) – 1910.120(q)(10).

PPE shall be selected and used with the intent to protect employees from hazards and potential hazards. Chemical protective clothing and equipment used by HAZMAT team members and HAZMAT specialists must meet the requirements contained in (g)(3)-(g)(5), i.e., PPE selection criteria, totally-encapsulating chemical protective suit testing protocols, and PPE program.

(Note: Personnel engaged in emergency response and exposed to hazardous substances presenting an inhalation or potential inhalation hazard must comply with (q)(3)(iv) for respirator selection criteria. Paragraphs (g)(3)-(g)(5) as discussed above refer to other types of PPE and equipment.)

In situations where the type of hazard is fire beyond the incipient stage, or thermal energy, then 1910.120(q)(3)(iii) must be followed, and when the type of chemical and its concentration are "totally unknown" or "somewhat known," the appropriate protective clothing and other equipment selected must be based on experience, judgment, and professional knowledge.

Obtaining air measurements with monitoring equipment for toxic concentrations of vapors, particulates, explosive potential, and the possibility of radiation exposure would be appropriate in determining the nature, degree, and extent of the hazards. Also, visual observation, reviewing the existing data (including material safety data sheets (MSDSs) { or safety data sheets (SDS) }), and any past experience can help determine the potential risks of exposure.

Hospital staff who may have to decontaminate chemically-contaminated patients at the hospital, i.e., first receivers, are removed from the point of release. As such, these personnel would not be considered HAZMAT team members or

HAZMAT specialists, and, therefore, are not covered by (q)(10) or (q)(3)(iv). The PPE provided to these employees must be selected in accordance with 1910 Subpart I and be sufficient for the type and level of exposure the hospital anticipates. Under the hospital's emergency response planning, the selection of PPE should be based on worst-case employee exposure scenarios as well as the hospital's role within the local community ERP. OSHA's non-mandatory First Receivers Document offers recommendations for selecting respiratory protection to protect hospital-based staff during the receipt of contaminated victims from mass casualty incidents occurring at locations other than the hospital.

1. Inspection Guidelines. Evaluate the employer's PPE program for compliance with 1910.120(q)(10) in addition to 1910 Subpart I. Paragraph (q)(10) of HAZWOPER requires employers to meet the requirements of paragraph 1910.120(g)(5): PPE program. The CSHO should also evaluate the employer's process for selecting protective clothing and other equipment in accordance with (g)(3). If the employer utilizes totally-encapsulating chemical protective suits for emergency response, the CSHO should determine whether these suits are capable of maintaining positive air pressure in accordance with (g)(4)(ii).

2. Citation Guidelines. If the CSHO determines that organized and designated HAZMAT team members or HAZMAT specialists have not or are not using appropriate protective clothing or other equipment based on site hazards and potential hazards, the CSHO shall cite (q)(10), referencing the applicable paragraph of (g)(3).

   Emergency responders exposed to hazardous substances presenting an inhalation or potential inhalation hazard must wear SCBAs, unless it has been shown through exposure monitoring that a lower level of respiratory protection is adequate. If emergency responders in this situation are wearing anything less than SCBAs, the CSHO shall cite (q)(3)(iv).

   If the CSHO determines that totally-encapsulating suits used by HAZMAT team members or HAZMAT specialists are inappropriate or do not properly protect employees from site hazards, the CSHO shall cite (q)(10), referencing the applicable paragraph of (g)(4).

   If the CSHO determines that the employer's PPE program does not address the necessary elements as required by 1910.120(g)(5), the CSHO shall cite (q)(10), referencing the applicable subparagraph of (g)(5).

L. Post-emergency Response Operations – 1910.120(q)(11).

Post-emergency clean-up begins when the individual in charge of the initial emergency response declares the site to be under control and ready for clean-up. As long as an emergency response team is still in control of the site and a safety or health hazard exists, an emergency classification continues to be in effect. For

example, if a vacuum truck arrives to remove spilled gasoline while an emergency response team is managing the activity, the vacuum truck operator's activity is part of the emergency response operations. Once the IC has declared the response activity over or finished, and the immediate threat has been stabilized, any remaining clean-up would be considered a post-emergency operation.

- In a large release, emergency response and post-emergency response activities may occur simultaneously, as in a marine oil spill. The IC must be careful to define the boundaries between the emergency response area and the post-emergency area in this scenario (see OSHA Instruction "Inspection Guidelines for Post-Emergency Response Operations Under 1910.120" [CPL 02-02-051]).

- The IC must convey information on all of the hazards that may still remain at a post-emergency clean-up site to employees who are involved in the clean-up operations. The individuals who will take control of the site to perform the post-emergency response clean-up also have a responsibility to contact the IC to determine if there are any remaining hazards or any special conditions on the site. If the IC feels that the post-emergency response clean-up crews are not sufficiently trained or prepared to perform their duties, the Commander may notify the employer or OSHA.

Post-Emergency Response for Contract Personnel:

- Contract personnel assigned full-time at a plant facility are considered "plant or workplace employees" for the purposes of 1910.120(q)(11)(ii) when such employees are conducting clean-up in areas where they routinely work.

- Contractors brought in specifically for clean-up operations are covered by 1910.120(q)(11)(i).

Emergency Response During a Post-Emergency Response:

If an additional emergency release of a hazardous substance occurs during a post-emergency response clean-up, the HAZWOPER emergency response provision that applies would depend upon who is handling the clean-up, who will be responding, and whether the clean-up is done on plant property.

- If the emergency is responded to by an outside response team or responders, 1910.120(q) would apply.

- Employees who work at a hazardous waste clean-up site or a Resource Conservation and Recovery Act of 1976 (RCRA) corrective action (a post-emergency response may be considered either), and are trained in accordance with 1910.120(e)(7), may respond to emergencies at that site.

- The contractor hired for the clean-up procedure may respond to emergencies during the clean-up if the contractor's employees who are involved in the clean-up are trained in accordance with 1910.120(e)(7) and (l).

1. Inspection Guidelines. The CSHO should determine through observation and information from the IC the status of operations. It is important to know whether the IC is continuing emergency response operations or if the IC has declared emergency response activities completed and shifted to post-emergency response clean-up. The CSHO should also determine, depending on site conditions, whether there are areas of the site still under emergency response operations.

   For response actions at a fixed facility, the CSHO must also determine whether post-emergency response operations are being performed by site employees consistent with (q)(11)(ii) or by off-site or outside personnel. If the clean-up is not being done on plant property using workplace employees, the employer conducting the clean-up must follow (q)(11)(i).

2. Citation Guidelines. If off-site employees are performing post-emergency response clean-up and the employer has not implemented requirements of 1910.120(b)-(o), the CSHO shall cite (q)(11)(i) and reference the applicable requirements from (b)-(o).

   If clean-up work is done on plant property using on-site employees and the employees have not been adequately trained, the CSHO shall cite (q)(11)(ii) and reference the applicable OSHA training requirement(s) (e.g., 1910.38 (e)-(f), 1910.134 (k), 1910.1200 (h)), or other appropriate training necessary based on tasks employees are expected to perform.

   If equipment to be used for clean-up by on-site employees has not been inspected or is not in a serviceable condition, the CSHO shall cite (q)(11)(ii).

XII. Interface with Other Standards.

A. Relationship of 29 CFR 1910.120 with Other OSHA Standards.

1. Expanded Health Standards (Subpart Z). Paragraph 29 CFR 1910.120(a)(2)(i) states that when there is a conflict or overlap of coverage between standards, the provision that is more protective of employee safety and health shall apply. Employers must comply with all safety and health standards that are applicable to their workplace; however, certain provisions of HAZWOPER may be more protective than the analogous provisions of an expanded health standard. HAZWOPER does not completely supersede any standard; only those provisions of another standard that are addressed by HAZWOPER may be superseded if HAZWOPER is more protective. For example:

(1) CSHOs may cite the provisions of one of two standards, the Ethylene Oxide (EtO) standard or HAZWOPER, depending on which provision offers more protection. The EtO standard provides instruction on exposure monitoring that is more protective than HAZWOPER. However, HAZWOPER offers more protection to employees responding to emergencies involving releases of EtO through its incident command system and hazardous substances training requirements.

(2) When a hospital uses EtO to sterilize instruments and there is a potential for a release that would cause an emergency, the hospital must establish either an EAP or an ERP, depending on the expected duties of employees. An employer may implement an EAP in accordance with 29 CFR 1910.38 if in an emergency it evacuates all employees from the danger area and calls in outside assistance to provide emergency response. The employer must develop and implement an ERP in accordance with 29 CFR 1910.120(q)(1) if it expects its own employees to respond to releases.

(3) Other hazardous substances used by the hospital must also be addressed in their ERP and/or EAP, if there is a potential for a release that would cause an emergency.

2. Emergency Action Plans – 1910.38. Employers who will evacuate all employees from the danger area, and who will not permit any employees to assist in handling the emergency, have the option of creating a written EAP in accordance with 29 CFR 1910.38 in lieu of an ERP. Employers with 10 or fewer employees can communicate the EAP orally and the employer need not maintain a written plan.

(1) Because chemical, biological, or radiological contaminants may be released into the environment in such quantity and/or proximity to a place of business that it is safer to remain indoors rather than to evacuate employees, some employers may develop shelter-in-place procedures. "Shelter-in-place" means selecting an interior room or rooms within a facility, or ones with no or few windows, and taking refuge there. In many cases, local authorities issue advice to shelter-in-place via TV or radio that employers may follow. In addition, an employer may decide to institute shelter-in-place for particular situations, for example, an explosion in an ammonia refrigeration facility across the street or a derailed and leaking tank car of chlorine on a rail line behind their place of business.

The employer must ensure that the shelter-in-place procedures instituted are adequate and suitable for that workplace and will protect the employees. OSHA's Evacuation Plans and Procedures

e-Tool provides some specific shelter-in-place procedures as guidance.

If an employer intends to include a shelter-in-place option in their emergency plan, they must:

- Establish and implement procedures within their EAP for alerting employees to shelter-in-place that is easily distinguishable from that used to signal an evacuation.
- Train employees in the shelter-in-place procedures and in their roles in implementing them.

(2) When used to meet the requirements of HAZWOPER, 29 CFR 1910.38 requires employers to have an effective alarm system to alert employees to an emergency, evacuate all employees, and notify an emergency response team, such as a fire department that is trained in accordance with HAZWOPER.

(3) Employers who will train some of their employees to respond to an emergency release must create an ERP (see Section XI.C. for more information). An EAP is to be part of the ERP for the evacuation of all employees in the area that are not essential for the response to the emergency.

(4) 29 CFR 1910.38 provides for alternative means of employee protection from hazardous substance releases by implementing an effective EAP that includes evacuating all employees from the release area. In case of a HAZWOPER release, an employer must adhere to the provisions of 1910.120(q).

- If elements of 1910.38 are not included in an ERP referenced by 1910.120(q)(1), the CSHO may only cite 1910.120(q)(1).
- Paragraph 1910.120(q)(1) will be cited in accordance with OSHA Instruction CPL 02-01-037 and in no case will 1910.38 be cited when it serves as an exemption from a particular OSHA standard.
- If the employer chose total evacuation as afforded by the exemptions but then did not comply with 1910.38, the employer shall be cited for a violation of 1910.120(q)(1). See CPL 02-01-037, Compliance Policy for Emergency Action Plans and Fire Prevention Plans, for additional citation guidance.

CSHOs shall follow the additional guidance below when citing an employer who has opted to create an EAP in lieu of an ERP:

(a) The CSHO shall cite 29 CFR 1910.120(q)(1) if an employer with more than 10 employees merely expresses the intent to evacuate all employees from the danger area, and would not allow employees to assist in handling the emergency, but does not have a written EAP. This intent must have been communicated to employees, which the CSHO may verify by employee interviews.

(b) The CSHO shall cite a grouped violation of 29 CFR 1910.120(q)(1) and 1910.165, the Employee Alarm Systems standard (referenced in 1910.38), if there are deficiencies found in a written EAP or alarm system.

(c) The CSHO shall cite 1910.120(q)(1) if the employer does not have a written EAP, and has not expressed any related intention to employees (i.e., the employer has done absolutely nothing in planning for emergencies).

(d) The CSHO shall cite 29 CFR 1910.120(q)(1) if the employer has not established reasonable procedures in the plan for notifying both inside and outside parties of incidents so that employees are not at risk.

3. Process Safety Management for Highly Hazardous Chemicals – 1910.119. The standard for Process Safety Management of Highly Hazardous Chemicals (PSM) covers processes in quantities at or above the threshold quantities specified in 1910.119(a)(1), except as provided by 1910.119(a)(2). The purpose of the standard is to prevent catastrophic releases of highly hazardous chemicals.

(1) Due to the nature of the facilities covered by the scope of the PSM standard, facilities covered by 29 CFR 1910.119 would have the potential for an emergency release.

(2) Facilities that fall under the scope of PSM shall establish and implement an EAP in accordance with 29 CFR 1910.38. Paragraph (n) of the PSM standard states that employers covered by PSM "may also be subject" to the hazardous waste and emergency response provisions of 29 CFR 1910.120. If the employer plans to direct its employees to respond to emergency releases, the employer would be subject to 29 CFR 1910.120(q). (For further guidance see Appendix C, 29 CFR 1910.119 and OSHA Instruction CPL 02-02-045, "Process Safety Management

of Highly Hazardous Chemicals – Compliance Guidelines and Enforcement Procedures.")

(3) The requirements of the PSM standard are geared toward preventing catastrophic releases, but they do not address the specific procedures for responding to such releases. HAZWOPER's emergency response provisions apply to the actual emergency response effort at facilities covered by the PSM standard.

4. Personal Protective Equipment (General Requirements) – 1910.132. The Personal Protective Equipment standard requires that protective equipment for the eyes, face, head, and extremities, protective clothing, respiratory devices and other barriers be provided, used, and maintained in a sanitary and reliable condition. The standard also requires an employer to assess the workplace to determine if hazards are present, or are likely to be present, which require the use of PPE. An employer must verify that a hazard assessment has been performed through a written certification including an identification of the workplace, the date(s) of the assessment, and the person certifying that the assessment was completed. The standard also addresses employee owned equipment, safe design, defective and damaged equipment, and training.

(1) Paragraph (q) covers PPE requirements under certain paragraphs such as (q)(3)(iii), (q)(3)(iv), and (q)(10). As such, HAZWOPER PPE requirements apply to these scenarios (e.g., paragraph (q)(10) requires organized and designated HAZMAT team members to use chemical protective clothing and equipment in accordance with paragraphs (g)(3) through (g)(5) of HAZWOPER). Where there is a conflict or overlap between 1910.120(q) and Subpart I requirements, the provision more protective of employee safety and health applies.

(2) General protective equipment requirements under 1910.132 are applicable when HAZWOPER PPE requirements do not apply to a particular situation. For example, first receivers decontaminating chemically-contaminated patients are not operating as members of a designated HAZMAT team, and therefore the chemical protective clothing requirements under 1910.120(q)(10) would not apply. The employer must still, however, conduct an appropriate hazard assessment and provide the necessary PPE pursuant to 1910.132. The selection of PPE should be based on worst-case employee exposure scenarios as well as the hospital's role within the local community ERP. Respiratory protection is addressed separately below.

5. Respiratory Protection – 1910.134. The Respiratory Protection standard requires that employers establish and maintain an effective respiratory protection program when employees must wear respirators to protect against workplace airborne hazards. The standard contains requirements for program administration, worksite-specific procedures, respirator selection, employee training, fit testing, medical evaluation, and respirator use, cleaning, maintenance, and repair. The employee's equipment must be properly selected, used, and maintained for a particular work environment and contaminant. In addition, employers must train employees in all aspects of the respiratory protection program. See CPL 02-00-120, Inspection Procedures for the Respiratory Protection standard, for additional citation guidance.

   (1) Since respirators may be needed during an emergency response to an uncontrolled release of a hazardous substance, the written personal protective program developed in compliance with HAZWOPER must address the selection, limitations, maintenance, storage, training, fitting, and donning and doffing procedures for respirators in addition to other PPE. In addition, all the requirements of CFR 1910.134, including paragraph (g), must be met when employees are required to use respirators to meet HAZWOPER requirements.

   (2) In facilities where an uncontrolled release of a hazardous substance could create an emergency IDLH atmosphere, employers must follow the requirements of HAZWOPER paragraph (q). These situations must be addressed in the employer's ERP and the response procedures must be consistent with that standard.

   Under the respirator standard, the outside personnel must maintain communication with entrants in an IDLH atmosphere. The outside personnel may perform outside rescue, but are required to be trained and suitably equipped to enter the IDLH atmosphere to provide emergency rescue if needed. The expectations and outcomes in an emergency should be the same in either case. If the IDLH is a result of an uncontrolled release of a hazardous substance, then the appropriate section of the HAZWOPER standard, 1910.120 shall be cited. Otherwise, violations shall be cited under the applicable subparagraph of 1910.134(g)(3). If adequate communication is not maintained between the entrants and the standby personnel located outside the IDLH area, 1910.134(g)(3)(ii) shall be cited.

   (3) The medical questionnaire for 1910.134 will not satisfy the HAZWOPER requirement for medical surveillance. The intent and the requirements for medical surveillance under HAZWOPER are much different than those required by the Respiratory

Protection standard. The intent of the HAZWOPER medical surveillance requirements is two-fold: (1) to determine fitness-for-duty, including the ability to work while wearing PPE (e.g., respirators), and (2) to establish baseline data for comparison with future medical data. The Respiratory Protection standard, however, requires a medical evaluation for the sole purpose of establishing an employee's ability to use a respirator while performing assigned work tasks with the added psychological and/or physiological burden of wearing the protective equipment.

6. Permit-Required Confined Spaces – 1910.146. The Permit-Required Confined Spaces (PRCS) standard covers sites or facilities that contain permit-required confined spaces as defined in 1910.146 (b), Definitions. The purpose of the standard is to prevent unauthorized entry into a permit space and to establish adequate precautions and procedures for entry into permit spaces.

   (1) The response to hazardous substance releases may involve permit-required confined spaces. Emergency response personnel and outside response parties may be required to enter permit spaces for rescue operations.

   (2) While HAZWOPER addresses response procedures to emergency releases, it does not address response to incidents involving PRCS with the detail provided in 1910.146. The requirements of the PRCS standard are targeted specifically toward work and emergency rescue as they relate to permit spaces. Employers who decide that their employees will enter PRCS shall establish a PRCS program in accordance with 1910.146(d).

   (3) The PRCS standard details specific requirements applicable to employers who have employees enter permit spaces to perform rescue services. These requirements include employee training, coordination with outside rescue services, and rescue retrieval systems, methods, and annual rehearsals.

7. Fire Brigades – 1910.156. The Fire Brigade standard contains requirements for the organization, training, and PPE of private, contractual, and industrial fire departments and Fire Brigades.

   (1) The Fire Brigade standard uses broader language than HAZWOPER in 29 CFR 1910.156(c): "The employer shall provide training and education for all Fire Brigade members commensurate with those duties and functions that members are expected to perform."

(2) The Fire Brigade standard addresses the need for industrial firefighters to be aware of { MSDSs/SDSs }, and requires written procedures and training for flammable toxic and radioactive materials; however, the emphasis is on structural fires. Employees within a Fire Brigade who are expected to respond to incidents involving hazardous substances must also receive HAZWOPER training.

8. Occupational Exposure to Bloodborne Pathogens – 1910.1030. The definition of "hazardous substance" found in HAZWOPER includes any biological agent or infectious material that may cause disease or death.

(1) The following are three scenarios where the Bloodborne Pathogens standard may interface with HAZWOPER:

- Clean-up of a hazardous waste site containing infectious waste (overlap with 29 CFR 1910.120(b)-(o) for clean-up operations).
- Operation of a RCRA-permitted incinerator that burns infectious waste (overlap with 29 CFR 1910.120(p) for treatment storage and disposal (TSD) facilities).
- Response to an emergency caused by the uncontrolled release of an infectious waste, or where infectious waste is part of the release (overlap with 29 CFR 1910.120(q) for emergency responses not otherwise covered by the standard).

(2) In the past, a medical waste incinerator was defined as a treatment, storage, and disposal (TSD) facility by the Federal EPA. However, recently Federal EPA allowed this definition to lapse and left the responsibility of specifying the status of a medical waste incinerator as a TSD facility to the State. Therefore, in States where medical waste incinerators are considered TSD facilities, 29 CFR 1910.120(p) applies.

(3) 29 CFR 1910.120(q) may apply to any other medical waste incinerator. In addition to complying with the Bloodborne Pathogens standard, these employers would be expected to comply with 29 CFR 1910.120(q), which would require an ERP and/or an EAP. Employers may create one plan that would incorporate all of the applicable components of both standards (see Section XII.B.7. for more information).

9. Hazard Communication – 1910.1200. The Hazard Communication standard (HCS) requires that employers train employees who may be exposed or potentially exposed to hazardous chemicals. Employers are to train employees in (1) methods to detect a hazardous chemical, (2) the hazards of chemicals in the work area, (3) measures employees can take to protect themselves, and (4) the details of the hazard communication

program (further detailed in 29 CFR 1910.1200(h)). It is important to note the objectives of both HAZWOPER and the HCS, especially where the two standards require training:

(1) The HCS is designed to ensure that employees are informed of the hazards associated with hazardous chemicals in the workplace, so that they may make informed judgments to protect themselves from exposure. The HCS does not require the employer to develop emergency procedures, although HCS does require training in emergency procedures if the employer has already developed them. For example, when another standard (such as the Formaldehyde standard) requires an employer to develop emergency procedures, the employer would be required to incorporate those procedures into the HCS training program.

(2) Employers who fall under the scope of HAZWOPER must have either a written ERP and/or an EAP in accordance with 29 CFR 1910.38. If employers expect their own employees to respond to a potential emergency involving hazardous substances, then the employer must create an ERP and the employees must be trained to perform the duties expected of them. HAZWOPER does not cover responses to incidental spills that do not have the potential for becoming an emergency. In such cases, OSHA enforces other applicable standards such as HCS, 29 CFR 1910.119, 29 CFR 1910.132, 29 CFR 1910.134, and other OSHA standards.

(3) If employees are required to respond to spills that have the potential for becoming an emergency, then all of the provisions of 29 CFR 1910.120(q) are applicable. Therefore, in workplaces where there is a potential for emergencies, the employer's HCS training program would have to address the HAZWOPER ERP and/or EAP. (Note that the HCS training can be adapted easily to encompass all of the required training competencies in 29 CFR 1910.120(q)(6)(i), the first responder awareness level, and that a single training session could satisfy the requirements of both standards.)

10. Occupational Exposure to Hazardous Chemicals in Laboratories – 1910.1450. Spills or releases of hazardous substances, emergency situations, etc., that occur inside a laboratory under the purview of the Laboratory standard, 29 CFR 1910.1450, and require an emergency response are covered by HAZWOPER. Incidental releases that can be safely handled by employees working with a chemical are not considered emergency responses. (For a discussion of the distinction between an incidental release and a release that requires an emergency response, see Appendix A of this instruction.)

11. Shipyard Employment (Part 1915); Marine Terminals (Part 1917); and Longshoring (Part 1918). Employers are required under 1917.30 and 1918.100 to develop and implement EAPs to ensure employee safety from fires and other emergencies. However, if employees are directed by their employer to respond to an emergency beyond the scope of an EAP, then paragraph (q) of HAZWOPER will apply (*see footnotes at bottom of 1917.30 and 1918.100*). HAZWOPER is also applicable to Shipyard work under 1915.

B. Relationship of 29 CFR 1910.120 with Other Agencies'/Organizations' Response Plans and Standards.

1. Homeland Security Presidential Directive (HSPD-5), Management of Domestic Incidents, (February 28, 2003). HSPD-5 directed the Secretary of Homeland Security to develop a new approach to domestic incident management based on the NIMS and NRP. The NIMS, released by the DHS in March 2004, provides a consistent nationwide template for incident management that will allow responders to work together more effectively. The NIMS adopts the Incident Command System, including operating characteristics, interactive management components, and structure of incident management and emergency response organizations engaged throughout the life cycle of an incident. Compliance with the Incident Command System as defined by the NIMS is consistent with compliance with using an incident command system under this section of HAZWOPER. CSHOs can obtain further information on NIMS implementation through the NIMS Integration Center.

   The NRP, released by the Department on January 6, 2005, uses the comprehensive framework of the NIMS to provide the structure and mechanisms for the coordination of Federal support to State, local, and tribal incident managers and for exercising direct Federal authorities and responsibilities. The NRP standardizes Federal incident management actions by integrating existing and formerly distinct processes. It is applicable to all Federal departments and agencies that may be requested to provide assistance or conduct operations during actual or potential "Incidents of National Significance."

   (1) Activations of the NRP and the Worker Safety and Health Support Annex. Under activations of the NRP, involving Incidents of National Significance, OSHA may provide technical assistance through the ICS during the emergency phase. This technical assistance may be provided through the Worker Safety and Health Support Annex of the NRP. OSHA's role under the NRP is to directly protect Federal assets, and coordinate with other Federal, State, local, and tribal government agencies and private sector organizations. (Note: OSHA has authority to conduct emergency-related activities which are not limited to those defined in the

NRP/Annex/Mission Assignment.) In accordance with the NRP, OSHA would be the lead coordinating Federal agency for employee safety and health. OSHA may also take any other action necessary to assure that employees are properly protected at such activities.

The Worker Safety and Health Support Annex provides guidelines for implementing worker safety and health support functions and intends to ensure that threats to responder safety and health are anticipated, recognized, evaluated, and controlled consistently so that responders are properly protected during incident management operations. OSHA's responsibilities as the coordinating agency of the annex include, but are not limited to:

- Providing occupational safety and health technical advice.
- Identifying and assessing health and safety hazards.
- Undertaking site-specific occupational safety and health plan development.
- Collecting and managing data (exposure data, accident/injury documentation, etc.).
- Resolving technical, procedural, and risk assessment conflicts, if necessary.

(Note: See the Worker Safety and Health Support Annex for a more detailed list of OSHA responsibilities. The NRP including all of the annexes are available on the Department of Homeland Security's website.)

(2) OSHA's National Emergency Management Plan (NEMP) and Regional Emergency Management Plans (REMPs). The NEMP, OSHA Instruction HSO 01-00-001, clarifies procedures and policy for OSHA's National Office and Regional offices during responses to nationally significant incidents. The NEMP establishes OSHA's Emergency Preparedness Executive Steering Committee, and requires that each Region create a REMP and proactively coordinate with State plan States and Consultation Projects. In addition, the NEMP outlines procedures to ensure that trained and equipped personnel, and logistical and operational assistance are in place to support OSHA's role under the NRP as the primary Federal agency for the coordination of technical assistance and consultation for emergency response and recovery worker health and safety.

Each Region's REMP describes the procedures that the Region will follow when it is necessary to respond to a covered incident or other large-scale emergencies. It also identifies how the Regional effort will be integrated with that of the other responding organizations through the ICS. The REMP is designed for large-scale, catastrophic incidents, but its concepts can be implemented at the Regional or Area Office level in response to natural disasters or smaller scale incidents without activation of the NEMP. The NEMP and/or the REMP may be activated fully or partially, depending on the circumstances of the incident.

When the NEMP is activated, any decision to discontinue consultation and assistance in favor of enforcement, including at what point during an incident this transition should occur, if at all, will be made by the Regional Administrator in consultation with the Assistant Secretary, Deputy Assistant Secretary, or designee. When the NEMP is not activated, Regional personnel will respond in accordance with CPL Directive 02-00-094 and their REMP.

(3) The Environmental Protection Agency, National Contingency Plan (NCP). CERCLA, also known as Superfund, required the President to revise and republish the NCP, which was originally published pursuant to the Federal Water Pollution Control Act, "for the removal of oil and hazardous substances." The current NCP was created out of this mandate. The NCP is the framework for coordination among Federal, State, and local responders and responsible parties for discharges of oil and chemicals into the environment. The NCP, which contains references to OSHA and employee safety and health in their regulations found in 40 CFR Part 300.150, has been annexed to the NRP and will be modified to be consistent with the NRP. (Note: The NRP is available on the Department of Homeland Security's website.) These modifications to the NCP should be minimal with respect to OSHA compliance and should not impact OSHA's role under the NRP. Consult the NCP regulations for future modifications.

(a) These regulations require that response actions under the NCP comply with 29 CFR 1910.120 and that an occupational safety and health program consistent with HAZWOPER be made available for the protection of employees at the response site. Further, the regulation requires compliance with all other OSHA standards promulgated under the OSH Act applicable to the response operations.

(b) When a State, or a political subdivision of a State, without an OSHA-approved State plan is the lead agency for response, the State or political subdivision must comply with standards in

40 CFR Part 311, promulgated by EPA pursuant to Section 126(f) of SARA.

(c) The NCP establishes three organizational levels: The NRT, Regional Response Teams (RRTs) and On-Scene Coordinators (OSCs). OSHA is a member of the NRT and RRTs, and also participates in the Weapons of Mass Destruction (WMD) Science and Technology subcommittee and the Response, Preparedness, and Training Subcommittees. The NRT consists of 16 Federal agencies with interests and expertise in various aspects of emergency response to pollution incidents. The NRT is primarily a national planning, policy and coordinating body and does not respond directly to incidents. The NRT provides policy guidance before an incident and assistance as requested by an On-Scene Coordinator via a RRT during an incident. NRT assistance usually takes the form of technical advice, access to additional resources/equipment or coordination with other RRTs.

(d) Facilities must submit an EPA Tier I or Tier II inventory form to their SERC, LEPC and fire department with jurisdiction over the facility. { MSDSs/SDSs must also be submitted (see Section XII.B.2. for more detail). The MSDSs/SDSs are } available to the public, and Tier I and Tier II forms are available to State or local officials acting in an official capacity, by requesting the information from their LEPC.

2. Superfund Amendments and Reauthorization Act, Title III. SARA Title III, also referred to as "EPCRA," required States and local jurisdictions to develop ERPs. In addition, certain facilities must share information about the hazardous substances they have on site with the community emergency response planners.

SARA Title III directed Governors of each State to appoint a SERC, which would in turn appoint and coordinate the activities of LEPCs. The LEPCs must develop a community ERP that contains emergency response methods and procedures to be followed by facility owners, local emergency responders, and emergency medical personnel.

(1) Facilities must submit an EPA Tier I or Tier II inventory form to their SERC, LEPC and local fire department. { ~~A~~ An MSDS, SDS }, or alternative, must also be submitted in accordance with the following (defined in 40 CFR Part 370.20(b)):

(a) When hazardous chemicals (as defined in 29 CFR 1910.1200) are kept in amounts equal to or greater than 10,000 pounds.

(b) When "extremely hazardous substances" (a list is provided in Federal EPA's regulation, 40 CFR Part 355 – Appendix A) are present in amounts greater than or equal to 500 pounds, or greater than or equal to the "threshold planning quantity," whichever is lower.

(c) When facilities are requested to submit an { MSDS/SDS } or Tier II form by the SERC, LEPC or fire department (the minimum "threshold" for reporting in response to requests is zero; i.e., the { MSDS/SDS } or Tier II form must be submitted anytime the SERC or LEPC or fire department makes a request).

(Note: The facility's responsibility is further explained in 40 CFR Part 355 – Emergency Planning and Notification.)

(2) Section 303 of SARA gives LEPCs minimum requirements which they are to include in their ERP as follows:

(a) Identification of facilities with reportable quantities, routes likely to be used for the transportation of extremely hazardous substances, and facilities contributing or subjected to additional risk due to their proximity.

(b) Emergency response methods and procedures to be followed by facility owners, local emergency responders, and emergency medical personnel.

(c) Designation of a community emergency coordinator and facility emergency coordinators, who shall make determinations necessary to implement the plan.

(d) Emergency notification procedures for the facility and community emergency coordinators.

(e) Methods for determining the occurrence of a release, and the population likely to be affected.

(f) A description and location of emergency equipment and facilities in the community, and identification of personnel responsible for equipment and facilities.

(g) Evacuation plans.

(h) Training programs and their schedules for emergency responders.

(i) Methods and schedules for exercising the emergency plan.

(Note: The provisions of the community ERP are significant because 29 CFR 1910.120(q) allows community responders to use the plan developed under SARA title III in complying with OSHA. HAZWOPER paragraph (q) states that "… emergency response organizations who have developed and implemented programs equivalent to this paragraph for handling releases of hazardous substances pursuant to Section 303 of the SARA ... shall be deemed to have met the requirements of this paragraph.")

3. Environmental Protection Agency, Clean Air Act (CAA) Amendments of 1990. Section 112(r) of the amended CAA, signed into law on November 15, 1990 mandates a new Federal focus on the prevention of chemical accidents. The objective of section 112(r) is to prevent serious chemical accidents that have the potential to affect public health and the environment. The risk management planning requirements of CAA 112(r) complement and support EPCRA, also known as Title III of SARA.

EPA's risk management planning requirements build on OSHA's Process Safety Management standard, 29 CFR 1910.119. CAA 112(r) mandates that EPA publish rules and guidance for chemical accident prevention and that these rules include requirements for facilities to develop risk management programs. The risk management program must incorporate a hazard assessment, a prevention program, and an emergency response program, summarized in a risk management plan (RMP). The RMP must be made available to state and local government agencies and to the public.

(1) On June 20, 1996, EPA published the Risk Management Plan final rule (40 CFR 68). The RMP rule applies to all stationary sources with more than a threshold quantity of regulated substances in process on August 19, 1996. The list of regulated substances, promulgated separately, was published on January 31, 1994, amended on April 16, 1996, and is found in 40 CFR 68.130.

(2) EPA attempted to minimize inconsistencies between its RMP requirements and the chemical risk management requirements published by OSHA and the DOT. The RMP's emergency response program requirements closely parallel the requirements of OSHA's PSM standard and contain many of the requirements of an ERP under 29 CFR 1910.120(q). Nevertheless, the focus of the RMP rule is primarily on the safety and health of the public and the surrounding environment, versus HAZWOPER's emphasis on employee health and safety. Because an RMP must be provided to EPA, state and local government agencies, and to the public, outside responders should be familiar with ERPs for facilities with

an RMP. Facilities that must comply with both EPA's RMP rule and OSHA's emergency response requirements under HAZWOPER may prepare an Integrated Contingency Plan (ICP) according to guidance published by the National Response Team in order to comply with both regulations (see Section XII.B.7. for more information).

4. National Fire Protection Association (NFPA) Standards. The NFPA is a nonprofit organization that develops and publishes over 300 consensus codes and standards on protection from fire and other risks. The NFPA is recognized as a national consensus standards development organization. Their standards development process is approved by the American National Standards Institute.

(1) OSHA modeled the emergency response provisions in HAZWOPER after certain parts of the NFPA standards. CSHOs may review NFPA 472, "Standard for Professional Competence of Responders to Hazardous Material Incidents," and NFPA 471, "Recommended Practice for Responding to Hazardous Material Incidents," and NFPA 1500, “Standard on Fire Department Occupational Safety and Health Program.” These guidelines may be used as supplementary material in understanding and complying with the emergency response provisions of HAZWOPER. NFPA 472 is referenced repeatedly in HAZWOPER's non-mandatory Appendix E, Training Curriculum Guidelines.

(2) In general, employers of emergency response organizations who follow the NFPA standards should be in compliance with 29 CFR 1910.120(q). It is important that the applicable portions of all related standards be followed. For instance, NFPA 471 no longer addresses the position of "Safety Officer" (i.e., the individual designated by the IC to evaluate hazards). However, NFPA 1500 contains a chapter on Emergency Response with broad applicability, and which addresses risk analysis and the Safety Officer position. A designated "Safety Official" (Safety Officer) is mandatory in HAZWOPER, and the absence of a "Safety Official" in a HAZMAT team shall be cited as a failure to comply with 29 CFR 1910.120(q)(3)(vii). See Section XI.D.7. of this instruction for further information concerning the Safety Official.

(3) Additional NFPA standards that address more narrow aspects of emergency response, but may provide useful reference material include:

(a) NFPA 473, “Standard for Competencies for EMS Personnel Responding to Hazardous Materials Incidents.”

(b) NFPA 600, “Standard on Industrial Fire Brigades.”

(c) NFPA 1001, “Standard for Fire Fighter Professional Qualifications.”

(d) NFPA 1021, “Standard for Fire Officer Professional Qualifications.”

(e) NFPA 1521, “Standard for Fire Department Safety Officer.”

(f) NFPA 1561, “Standard on Emergency Services Incident Management System.”

(g) NFPA 1971, “Standard on Protective Ensemble for Structural Fire Fighting.”

(h) NFPA 1981, “Standard on Open-Circuit Self-Contained Breathing Apparatus for Fire and Emergency Services.”

(i) NFPA 1991, “Standard on Vapor-Protective Ensembles for Hazardous Materials Emergencies.”

(j) NFPA 1992, “Standard on Liquid Splash-Protective Ensembles and Clothing for Hazardous Materials Emergencies.”

(k) NFPA 1994, “Standard on Protective Ensembles for Chemical/Biological Terrorism Incidents.”

5. Department of Transportation (DOT), Hazardous Material Transportation Uniform Safety Act of 1990 (HMTUSA). The handling of HAZMAT in the transportation industry is regulated by HMTUSA. Training for the safe handling and safe transportation of HAZMAT is required by Section 7, which states that for purposes of Section 4(b)(1) of the OSH Act, no action taken by the Secretary of Transportation pursuant to HMTUSA shall be deemed to be an exercise of statutory authority to prescribe or enforce standards or regulations affecting occupational safety and health.

(1) On May 15, 1992, DOT published the final rule "Hazardous Materials; Training for Safe Transportation" (49 CFR 171-177, predominantly 172 Subpart H) to enhance training requirements for persons involved in the transportation of HAZMAT. The rule requires employers to train their employees in the safe loading, unloading, handling, storing, and transportation of HAZMAT. Such employees are primarily in the private sector but the DOT rule may apply to public sector employees if commerce is involved. The rule is also designed to improve emergency

preparedness for responding to accidents or incidents involving the transportation of HAZMAT.

(2) The DOT rule does not preempt OSHA from enforcing occupational safety and health regulations, such as 29 CFR 1910.120, when employers fall under the scope of HMTUSA. For example, HAZWOPER applies if transporters are handling hazardous waste that is on the way to a hazardous waste site or to a TSD facility, or when transporters become involved in emergency responses to the release of hazardous substances.

(3) Training that is performed to satisfy OSHA, EPA, or DOT training requirements may be used to satisfy the training requirements of the other agency's rule. Duplicative training is not necessary. In addition, DOT administers a training grant program under HMTUSA to help public emergency responders meet the HAZWOPER and NFPA (471 and 472) standards. DOT issued its grant regulations September 17, 1992, and will be using a national curriculum guide to evaluate training programs that will be eligible for funding.

6. United States Coast Guard (USCG), Oil Pollution Act of 1990 (OPA 90). The removal of an "oil discharge" according to Subtitle B of OPA 90, must be performed in accordance with the NCP and any appropriate Area Contingency Plan (see Section XII.B.1. of this instruction). The OPA 90 further states that "the President shall prepare and publish a NCP," specifically for the removal of oil and hazardous substances on and near navigable waters.

(1) The role of OSHA in responding to an oil spill, in accordance with OPA 90, is similar to the function it plays in the NCP. The NCP designates OSHA as the agency responsible for ensuring that employees are protected, and to determine if the site is in compliance with HAZWOPER (see Section XII.B.1. of this instruction). The lead agency for the NCP (EPA or USCG) may request OSHA's assistance, but OSHA is not preempted from its regular enforcement duties. See Section XII.B.1.(2) of this instruction for information on activation of the NEMP and REMPs.

(2) USCG also enforces the following rules:

(a) DOT-Research and Special Programs Administration, 49 CFR Part 194, "Response Plans for Onshore Oil Pipelines."

(b) DOT-Research and Special Programs Administration, 49 CFR Part 130, "Oil Spill Prevention and Response Plans."

(c) DOT-USCG, 33 CFR Part 154, Subpart D and Part 155, Subpart F, which address ERP requirements for facilities and vessels.

7. National Response Team (NRT) Integrated Contingency Plan ("One-Plan"). The NRT's membership consists of 16 Federal agencies with responsibilities, interests, and expertise in various aspects of emergency response to pollution incidents, including chemical releases and oil spills. The EPA serves as chair and the USCG serves as vice-chair of the NRT. The NRT is primarily a national planning, policy, and coordinating body and does not respond directly to incidents. NRT assistance usually takes the form of technical advice, access to additional resources and equipment, or coordination with RRTs.

(1) The NRT published "The National Response Team's Integrated Contingency Plan Guidance" in the Federal Register on June 5, 1996 (61 FR 28641). Five agencies signed the Integrated Contingency Plan (ICP) Guidance: EPA, the USCG, OSHA, the Office of Pipeline Safety of DOT, and Minerals Management Services in the Department of the Interior. The ICP, or one-plan, is intended to assist employers in preparing integrated ERPs that meet the requirements of multiple Federal agency regulations with a single plan.

(2) The OSHA regulations addressed by the One-Plan guidance include 29 CFR 1910.38, 1910.119, and 1910.120; EPA and USCG regulations are also covered under the plan. The NRT Integrated Contingency Plan Guidance is guidance only and does not relieve employers from their obligations under existing Federal emergency response planning requirements. An ICP is designed to assist employers in simplifying ERP development and maintenance and to improve coordination of response activities while demonstrating full compliance with applicable Federal emergency response regulations. The One-Plan does not specifically address state and local requirements to which employers may be subject.

XIII. Classification and Grouping of Violations.

The procedures in the Field Inspection Reference Manual shall be followed except as modified by this instruction.

A. If deviations appear appropriate, however, they shall be coordinated with the Directorate of Enforcement Programs, Office of Health Enforcement, through the Regional Office.

B. Serious violations shall be issued whenever a deficiency in the program can contribute to a potential exposure capable of causing death or serious physical

harm. In addition, the CSHO shall document that the employer knew or should have known of the violation.

XIV. Authorization to Review Limited Medical Information.

Appropriately qualified compliance personnel, under the direction of the OSHA Team Leader or Supervisory Industrial Hygienist, are authorized to review medical records and medical opinions pertinent to HAZWOPER. This authorization has limitations and procedures which must be followed as set forth in OSHA Instructions CPL 02-02-030, CPL 02-02-032, and CPL 02-02-033.

XV. Training for OSHA Personnel.

A. For all inspections on a site where an ongoing emergency is not occurring, but where HAZWOPER applies because it is reasonable to anticipate an emergency (i.e., where 29 CFR 1910.120(q) would apply), OSHA personnel must be knowledgeable of:

1. Potential hazards they may encounter.

2. Site-specific procedures to be followed in the event of an emergency (addressed in paragraph XI.C. of this instruction).

3. Signs and symptoms of overexposure to hazardous substances, and the use of appropriate monitoring equipment.

4. The appropriate PPE to be worn. Each CSHO who will be expected to use PPE shall be trained in the proper care, use, and limitations of the PPE. (Refer to both the OSHA Technical Manual, OSHA Instruction TED 01-00-015 and OSHA Instruction CPL 02-02-054, Respiratory Protection Program Guidelines.)

B. For all inspections on a site where OSHA personnel are investigating an emergency that involves hazardous substances, OSHA personnel must be knowledgeable of the elements listed in paragraphs XV.A.1.-4. (above). In addition, OSHA personnel must:

1. Have the appropriate training required by 29 CFR 1910.120 before entering danger areas, and any applicable annual refresher training.

2. Be knowledgeable of the contents of OSHA Instruction CPL 02-00-094. OSHA Regional training shall provide an overview of OSHA's expected role during operations covered by the NRP and NCP, an overview of RRT activities and interagency coordination pursuant to CPL 02-00-094.

3. Be familiar with the applicable sections of the Regional Contingency Plan, or the local ERP for the community, if available.

C. For actions during nationally significant incidents such as those that result in a Presidential Emergency Declaration, the activation of the National Response Plan, or a request for assistance from the DHS (FEMA), OSHA personnel must be knowledgeable of the NEMP and their Region's REMP. All OSHA personnel assigned a role or function related to implementing the NEMP during a covered incident need to be trained in the basic elements of the NEMP and the specific responsibilities of their assigned role. See Section XII.B.1.(2) of this instruction and OSHA Instruction HSO 01-00-001 for additional detail and information concerning the NEMP and REMPs.

1. All OSHA personnel assigned a role or function related to implementing either the NEMP or REMP will complete the ICS Level 200 course, to ensure their familiarity with ICS concepts and nomenclature. In addition, Regional Administrators and their designees, the Assistant Secretary, the Deputy Assistant Secretaries, National Office executive staff, and other designated senior management staff will complete ICS for Executives.

2. Regional OSHA On-site Leaders/Coordinators will participate in the initial training identified for all OSHA personnel above and in OSHA's Risk Management training program, which includes OTI 3600: OSHA Technical Assistance for Emergencies and OTI 3610: OSHA On-site Leaders/Coordinators Course.

D. Regional and Area Offices shall include exercises and drills for CSHOs who will be participating in inspections or providing technical assistance during emergency incidents (see OSHA Instruction CPL 02-00-094, G.1.a.). This is crucial for the OSHA offices that expect to take part in NCP responses. OSHA's presence and acceptance during emergency response operations covered by the NCP will be greatly enhanced if other agencies, that are also responding under the NCP, are aware of and can plan for OSHA's role during an emergency response.

XVI. Medical Examinations for OSHA Personnel.

A. Many of the hazards that CSHOs may encounter are already regulated by the medical surveillance requirements in other OSHA standards. In addition, Regional Administrators and Area Directors are responsible for implementing the CSHO medical examination program, which includes: Pre-Employment Examinations (OSHA Instruction PER 04-00-002), Annual Examinations (OSHA Instruction PER 04-00-003), and Emergency treatment.

B. Ongoing medical surveillance (as opposed to medical consultation or emergency treatment, discussed in XVI.C.), which is addressed in 29 CFR 1910.120(q)(9), applies to designated hazardous material (HAZMAT) teams and HAZMAT specialists. Most OSHA personnel will not be expected to participate in an emergency in either of these capacities; therefore, the medical surveillance requirements of HAZWOPER would not apply to those individuals. For select OSHA personnel, such as members of Specialized Response Teams (SRTs), who

are expected to fill such roles, the medical surveillance requirements of 1910.120(q)(9)(i) would apply.

C. The standard, 29 CFR 1910.120(q)(9)(ii), requires that any employee who exhibits signs or symptoms that may have been a result of exposure to hazardous substances during the course of an emergency incident must be provided medical consultation. During any investigation of emergency incidents, any CSHO experiencing such signs or symptoms shall be entitled to a medical consultation.

D. CSHOs who are required to wear a negative pressure air-purifying respirator and protective clothing shall be medically cleared via the CSHO Physical Examination procedures. Further, OSHA Instruction CPL 02-02-054, Respiratory Protection Program Guidelines, includes medical evaluation requirements for those OSHA personnel expected to wear respiratory protection. The instruction requires that CSHOs be medically evaluated and found eligible to wear the respirator selected for their use prior to fit testing and first-time use of the respirator in the workplace. In addition, OSHA personnel who will wear SCBAs as part of a Level A or B ensemble must also consult with the Office of Occupational Medicine for medical clearance requirements (e.g., stress test).

XVII. Protection of OSHA Personnel.

No enforcement action, on-site consultation, or on-site technical assistance is so important as to place the life and health of the CSHO in danger.

A. Personal Protective Equipment (PPE). It is recognized that situations will arise where entry into areas involving highly hazardous substances is necessary; however, it is permitted only when appropriate PPE is available. CSHOs must work with Area Directors and Regional Administrators to acquire PPE appropriate to the site hazards and potential exposures. Members of SRTs should contact the Salt Lake Technical Center and coordinate with the Health Response Team to obtain any necessary specialized PPE.

1. Regional Administrators and Area Directors shall ensure that appropriate PPE is available for the CSHO. Further guidance on the appropriate PPE will be addressed in another instruction. (The selection of appropriate PPE is covered in Appendix B, 29 CFR 1910.120, and the OSHA Technical Manual, OSHA Instruction TED 01-00-015.)

    (1) Where respiratory protection will be necessary, the CSHO shall adhere to the guidance set forth in both the OSHA Technical Manual and OSHA Instruction CPL 02-02-054, Respiratory Protection Program Guidelines.

2. The Regional Administrator or designee shall be consulted for assistance in determining the appropriateness of SCBA used in any planned entry requiring the use of SCBA.

(1) Whenever CSHOs wear SCBA, a buddy system shall be employed wherein each CSHO who enters a danger area is accounted for by another identically equipped CSHO, who must remain in a safe location as a standby to assist in emergency rescue and decontamination if necessary. Two CSHOs, at a minimum, shall comprise a team to enter into the danger area while their respective buddies remain in a safe location.

(2) Appropriately equipped and trained personnel other than CSHOs (e.g., EPA personnel) may be substituted for the required number of CSHOs under the buddy system.

3. If additional PPE is necessary, the Regional Administrators and Area Directors shall ensure that it is obtained prior to exposure. Under no circumstances shall a CSHO be unprotected from any hazard encountered during the course of an investigation.

B. Decontamination Procedures for OSHA Personnel. Prior to site entry, CSHOs shall determine if decontamination facilities exist, whether they are adequate for the expected conditions at the site, and if they will be available for OSHA use.

1. When decontamination facilities exist at the inspection site CSHOs shall utilize them if, in their professional judgment, the facilities are adequate. In the event that decontamination facilities are nonexistent, inadequate or not available for use, or if someone is not available to assist in decontamination, CSHOs shall not proceed into areas where there would be a need for decontamination, but shall contact the CSHOs' supervisor immediately.

2. The Area Director shall ensure that decontamination equipment is available to CSHOs. The decontamination equipment shall accompany CSHOs on each inspection where it is likely that the CSHOs will be required to wear special PPE before entering the emergency response site. Guidance documents for decontamination procedures and the selection of decontamination equipment include:

(1) Occupational Safety and Health Guidance Manual for Hazardous Waste Site Activities, developed by NIOSH, OSHA, the USCG, and EPA.

(2) Guide for the Selection of Chemical and Biological Decontamination Equipment for Emergency First Responders (National Institute of Justice (NIJ) Guide 103-00).

(3) OSHA Technical Manual, Section VIII. Chapter 1.

APPENDIX A

RELEASES OF HAZARDOUS SUBSTANCES THAT REQUIRE AN EMERGENCY RESPONSE

The function of this appendix is to present a discussion of the distinction between incidental releases of hazardous substances and releases that require an emergency response, and, therefore, compliance with the provisions of 1910.120(q)., Emergency response program to hazardous substance releases.

An understanding of the distinction between an incidental release of a hazardous substance and a release that requires an emergency response is fundamental to proper compliance with the provisions of 29 CFR 1910.120(q). Emergency response operations for releases of, or substantial threats of releases of, hazardous substances without regard to the location of the hazard, (29 CFR 1910.120(a)(1)(v)), was written to cover a wide array of facilities and situations.

Potential releases of hazardous substances in the workplace can be categorized into three distinct groups in terms of the planning provisions of 1910.120(q). These groups are:

1. Releases that are clearly incidental regardless of the circumstances.

2. Releases that may be incidental or may require an emergency response depending on the circumstances.

3. Releases that clearly require an emergency response regardless of the circumstances.

Releases that Are Clearly Incidental

The scope of the HAZWOPER standard does not cover the foreseeable release of a hazardous substance that is limited in quantity and poses no emergency or significant threat to the safety and health of employees in the immediate vicinity. This type of release is referred to as an "incidental release" in 29 CFR 1910.120(a)(3), under the definition of “emergency response.”

An incidental release is a release of a hazardous substance which does not pose a significant safety or health hazard to employees in the immediate vicinity or to the employees cleaning it up, nor does it have the potential to become an emergency within a short time frame. 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.

If the hazardous substances that are in the work area are always stored in very small quantities, such as a laboratory which handles amounts in pint size down to test tubes, and the hazardous substances do not pose a significant safety and health threat at that volume, then the risks of having a release that escalates into an emergency are minimal. In this setting incidental releases will generally be the norm and employees will be trained to protect themselves in handling incidental releases as per the training requirements of the Hazard Communication standard (HCS), 29 CFR 1910.1200.

Another example is a tanker truck receiving a load of HAZMAT at a tanker truck loading station. At the time of an accidental spill, the product **can** be contained by employees in the immediate vicinity and cleaned up utilizing absorbent without posing a threat to the safety and health of employees. As such, the employer may respond to certain incidental releases.

A third example of an incidental release may include maintenance personnel who are repairing a small leak that resulted from a routine maintenance activity and the small leak can be readily repaired; or the leak does not need to be taken care of immediately, i.e., the safety and health of the employees are not threatened if an immediate response is not initiated.

These situations describe an "incidental spill" under HAZWOPER. An incidental spill poses an insignificant threat to health or safety, and may be safely cleaned up by employees who are familiar with the hazards of the chemicals with which they are working.

Releases that May Be Incidental or Require an Emergency Response, Depending on the Circumstances

The properties of hazardous substances, such as toxicity, volatility, flammability, explosiveness, corrosiveness, etc., as well as the particular circumstances of the release itself, such as quantity, confined space considerations, ventilation, etc., will have an impact on what employees can handle safely and what procedures should be followed. Additionally, there are other factors that may mitigate the hazards associated with a release and its remediation, such as the training or experience of the employees in the immediate work area, the response and PPE at hand, and the pre-established standard operating procedures for responding to releases of hazardous substances. There are also some engineering control measures that will mitigate the release that employees can activate to assist them in controlling and stopping the release.

These considerations (properties of the hazardous substance, the circumstances of the release, and the mitigating factors in the work area) combine to define the distinction between incidental releases and releases that require an emergency response. The distinction is site-specific and its impact is a function of the ERP.

For example, a spill of the solvent toluene in a facility that manufactures toluene may not require an emergency response because of the advanced knowledge of the personnel in the immediate vicinity and equipment available to absorb and clean up the spill. However, the same spill inside a furniture refinishing shop with personnel that have had only the basic hazard communication training on toluene, may require an emergency response by more highly trained personnel. The furniture refinishing shop's ERP in this case would call for evacuation for all but the most minor spills, while evacuation and emergency response would be necessary only for much larger spills at the chemical manufacturing facility.

Personnel responding to an overturned aircraft leaking jet fuel would likely be performing emergency response due to the significant and uncontrolled hazards posed by the aircraft and jet fuel. These personnel would be conducting operations such as fire fighting, passenger rescue, and working to stop the release of jet fuel. However, a fuel spill from a tanker truck that can be absorbed, neutralized, or otherwise controlled by employees in the immediate release area through the placement of absorbent pads may qualify as an incidental release, provided that there are no significant health or safety hazards. (Note: If the release of jet fuel is covered by 40 CFR

300, the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), an employer may be required by the EPA to follow HAZWOPER.)

Releases that Require an Emergency Response Regardless of the Circumstances

There are releases of hazardous substances that pose a sufficient threat to health and safety that, by their very nature, require an emergency response regardless of the circumstances surrounding the release or the mitigating factors. An employer must determine the potential for an emergency in a reasonably predictable worst-case scenario (or "anticipated emergencies," 29 CFR 1910.120(q)(1)), and plan response procedures accordingly.

For example, a motor carrier is engaged in the transportation of HAZMAT. At the time of an accidental release, the product cannot be contained by employees in the immediate vicinity and be cleaned up utilizing absorbent. Because of the larger problem, the motor carrier's employees evacuate the area and call for outside help, as instructed by the employer. In this instance, if a spill of a hazardous substance occurs and an employer instructs all of his/her employees to evacuate the danger area, then the employer may not be required to train those employees under 1910.120. However, the ability to decide whether a spill is an incidental spill or one requiring an emergency response requires training. Also, any employees who are expected to become actively involved in an emergency response due to a release of a hazardous substance are covered by 1910.120 and must be trained accordingly. (Note: OSHA has limited jurisdiction for over-the-road vehicle operation. In the instance of spills occurring while the material is on the vehicle or otherwise "in transportation," OSHA's HAZWOPER standard may not cover the operator in all circumstances. If the operator of the vehicle in transportation becomes actively involved in an emergency response, then he/she becomes an emergency responder and is covered by 1910.120(q) as are all emergency response personnel who respond to the incident.)

Generally, the release of anhydrous ammonia, for example, from a refrigeration unit would necessitate an emergency response under HAZWOPER. Employers must determine if there is a potential for release of ammonia in their facility which could result in an emergency situation. Anhydrous ammonia can produce severe health effects, depending upon the degree of exposure.

Another situation that would likely require an emergency response includes fire departments who receive emergency calls reporting a suspected release of a hazardous substance. The fire department should not knowingly dispatch a firefighter trained only under the HCS standard, or even trained to the “Awareness Level” to respond to a hazardous substance emergency response. For example, an emergency call involving the discovery of three 55-gallon drums on the side of a road that may be connected to a nearby methamphetamine laboratory would classify the situation as a potential emergency response requiring appropriately trained personnel.

An emergency response includes, but is not limited to, the following situations:

1. The response comes from outside the immediate release area.

2. The release requires evacuation of employees in the area.

3. The release poses, or has the potential to pose, conditions that are immediately dangerous to life or health (IDLH).

4. The release poses a serious threat of fire or explosion (exceeds or has the potential to exceed the lower explosive limit or lower flammable limit).

5. The release requires immediate attention because of imminent danger.

6. The release may cause high levels of exposure to toxic substances.

7. There is uncertainty about whether the employees in the work area can handle the severity of the hazard with the PPE and equipment that has been provided and the exposure limit could easily be exceeded.

8. The situation is unclear, or data are lacking on important factors.

Responders from Outside the Immediate Release Area

"Emergency response" is defined in 29 CFR 1910.120(a)(3) as follows:
"Emergency response . . . means a response effort by employees from outside the immediate release area or by other designated responders (i.e., mutual-aid groups, local fire departments, etc.) to an occurrence which results, or is likely to result, in an uncontrolled release of a hazardous substance. Responses to incidental releases of hazardous substances where the substance can be absorbed, neutralized, or otherwise controlled at the time of release by employees in the immediate release area, or by maintenance personnel, are not considered to be emergency responses within the scope of this standard. Responses to releases of hazardous substances where there is no potential safety or health hazard (i.e., fire, explosion, or chemical exposure) are not considered to be emergency responses."

The standard covers responses "by other designated responders." The use of the word "or" means that responders are a separate group, different from employees outside the immediate release area, directed to respond to the emergency by the employer. Employees working in the immediate release area (not just outsiders) are covered if the employer designates them as emergency responders. The standard, 29 CFR 1910.120(q), uses the term "responders" generally to refer to employees who respond to emergencies.

SARA, the statute mandating HAZWOPER, directs broad coverage of all employees responding to emergencies with no limitation to their location. SARA states, ". . . standards shall set forth responding requirements for training of workers who are responsible for responding to hazardous emergency situations who may be exposed to toxic substances" (see SARA 126(d)(4)). For an emergency to be covered by the standard, conditions causing a dangerous situation which involve hazardous substances are sufficient; there need not be both an emergency and a response by outside responders before the employer prepares for an emergency.

For example, a release of chlorine gas above the IDLH level, obscuring visibility and moving through a facility, is an emergency situation even if the initial responders are from the immediate release area. Employees who would respond to this situation, whether they work in the immediate area or come from outside, would need to act in accordance with 29 CFR

1910.120(q).

Employees are not barred from responding to releases in the immediate release area that would otherwise require outside assistance from a trained HAZMAT team merely because the definition of an emergency response states that an emergency response is ". . . a response effort by employees from outside the immediate release area."

Conversely, incidental releases of hazardous substances that are routinely cleaned up by those from outside the immediate release area need not be considered emergency responses solely because the employees responsible for clean up come from outside the immediate release area.

For example, Paint thinner is spilled in an art studio and the janitor is called from outside the immediate release area to mop it up. The janitor does not have to respond in accordance with 29 CFR 1910.120, although the janitor would be expected to understand the hazards associated with paint thinner through hazard communication training.

Other OSHA Standards

Other standards that impact emergency response to fires, chemical releases, or other incidents should be part of an emergency response compliance evaluation. Flammable chemical spills and other small fires are covered by 29 CFR 1910.156 as well as 29 CFR 1910.157. The "Process Safety Management for Highly Hazardous Chemicals," standard, 29 CFR 1910.119, and the "Hazard Communication," standard, 29 CFR 1910.1200, as well as some of the specific expanded health standards in Subpart Z would also apply (see Section XII.A. of this instruction).

APPENDIX B

EMPLOYER RESPONSE TO RELEASES OF HAZARDOUS OR POTENTIALLY HAZARDOUS SUBSTANCES FROM DAMAGED PACKAGES DURING SHIPPING

The purpose of this appendix is to discuss employer responsibilities for protecting employees who may discover, respond to, or clean-up hazardous or potentially hazardous substances from damaged packages during shipping.

Employees with the greatest risk of being exposed to potentially hazardous substances include package handlers, hub employees, and delivery employees engaged in package handling operations. OSHA has conducted numerous inspections of incidents where employees were exposed to hazardous substances leaking or being released from shipped packages. These incidents were reported primarily in the parcel shipping industry but may apply wherever employees handle packages that could contain hazardous substances, either declared (labeled) or undeclared (unlabeled). Previous experiences with undeclared hazardous substances that have leaked from packages at parcel shipping facilities include carcinogens (e.g., formaldehyde), corrosive materials (e.g., sodium hydroxide), highly toxic materials (e.g., sodium bromide), explosive materials (e.g., ammunition), and flammable substances (e.g., acetone). Employee responses to the releases have ranged from unprotected, direct contact with the leaking package to evacuation and activation of a trained hazardous materials response team.

For the purposes of this appendix, the term "damaged package" includes, but is not limited to, a labeled or unlabeled package that is suspected of, or is actively leaking or emitting a chemical that may be hazardous as defined by the Hazard Communication standard (HCS) (29 CFR 1910.1200), a substance that may be hazardous as defined by the Hazardous Waste Operations and Emergency Response standard (29 CFR 1910.120), or a material that is unknown.

The issues addressed by this appendix include:

- Determining the employer's need for policies and procedures for handling damaged packages.

- The standards applicable to the employer's workplace conditions and existing response procedures, if any.

Where there is a reasonable possibility of a hazardous substance release from a damaged package, an employer should have procedures for distinguishing an *incidental* release from a release that requires an emergency response. Incidental releases are not considered emergency situations and, therefore, are not covered by 1910.120. An incidental release is one that does not pose a significant safety or health hazard to employees in the immediate vicinity or to the employee cleaning it up, and does not have the potential to become an emergency within a short time frame. This determination is based on criteria such as the properties of the hazardous substance, the circumstances of the release, and any mitigating factors in the work area. Most packages that are shipped are limited in quantity and potentially present only minor safety or health hazards to employees in the immediate work area or those assigned to clean it up. For example, major package carriers have established procedures and designated personnel who are

trained and equipped to respond to, and clean-up, such spills. As a result, most damaged package incidents would be classified as incidental in nature. However, packages that are generating smoke, visible fumes, fumes irritating to the skin, nose, throat, mouth, or eyes, or a strong odor may indicate the need for initiating an emergency response under 1910.120. Furthermore, in situations where the contents of a package are unknown (e.g., package not labeled) or the package label indicates an extremely hazardous substance (e.g., corrosives, explosives, or radioactive materials) it may be necessary to summon emergency responders as part of the response. Appendix A provides a thorough discussion of the criteria used to differentiate between an incidental release and a release requiring an emergency response.

Although 1910.120 does not apply to the response and clean-up of incidental spills, employers are covered by other OSHA standards. Where engineering and work practice controls do not adequately protect employees, the employer must select and provide appropriate personal protective equipment (PPE) in accordance with the requirements of the general PPE standard (29 CFR 1910.132) and the Respiratory Protection standard (29 CFR 1910.134). These procedures must include the selection of PPE for handling a release from a damaged package. The PPE selection procedures must be based on the employer's hazard assessment as required by 1910.132(d) and 1910.134(d). The hazard assessment and PPE must be based on the known or anticipated hazards from damaged packages. For respiratory hazards, the employer must assess the exposures in the workplace (this may include, but is not limited to personnel air sampling, mathematical modeling, or some other means), what the exposure levels are, and what level of respiratory protection is necessary to keep employee exposure within the prescribed limits set forth in 1910 Subpart Z when handling a release from a damaged package. All of the unique conditions at the site must be considered, e.g., existing ventilation controls, work practices, and potential duration of exposure. Employees who are required to use PPE must be adequately trained in accordance with 1910.132(f) and 1910.134(k). Employees must also be trained to protect themselves in accordance with the training requirements under the HCS, 1910.1200. For exposure to blood or other potentially infectious materials (OPIM), the employer must select and provide PPE in accordance with the Bloodborne Pathogens standard (29 CFR 1910.1030).

Where there is the potential of a hazardous substance release requiring an **emergency response under 1910.120**, an employer must develop and implement an emergency response plan (ERP) in accordance with (q)(1) and (q)(2) of the standard if employees are expected to respond to the emergency release (See Section XI.C. for further guidance on ERPs). An employer must determine the potential for an emergency in a reasonably predictable worst-case scenario (e.g., anticipated emergency). Furthermore, employers must develop procedures for handling emergency response in accordance with (q)(3) of the standard (See Section XI.D. for further guidance on emergency response procedures), train emergency responders to the appropriate level as specified in (q)(6) of the standard (See Section XI.G. for further guidance on training levels), and provide necessary PPE to protect employees performing emergency response and clean-up (See Section XI.K for further guidance on PPE, including respiratory protection).

(Note: An employer who elects to evacuate~~s~~ all employees under an EAP is not covered by 1910.120; See Section XII.A.2. for further guidance on EAPs.)

RESPONSE TO DAMAGED PACKAGES – QUESTIONS AND ANSWERS

1. What types of employees and operations are covered by this Appendix?

Employees involved in a damaged package response would typically include package handlers and drivers who perform loading, unloading, sorting and delivery work; managers and supervisors of package handlers; and employees in the package or customer service areas. This directive covers employers engaged in package handling operations designated in Standard Industrial Codes (SIC) Division E, Major Groups 42, 43, and 45 (Note: The North American Industrial Classification System (NAICS) codes covering these three major groups include NAICS Groups 48 and 49). Specific Industry SICs may include, but are not limited to SIC 4215 (Courier Services, Except by Air), SIC 4311 (United States Postal Service), and SIC 4513 (Air Courier Services). (Note: NAICS code 492110 covers both SIC 4213 and 4215 and NAICS code 491 covers SIC 4311.)

A careful assessment of the employer's worksite must be made by the CSHO. Not only should the employer's history of releases be examined, but also employee interviews should be used to evaluate the company's work practices to determine applicability of this directive.

Employers who do not transport packages, or have no previous employee exposure incidents from unlabeled damaged packages are not covered by this appendix. Flight crews, crews of Coast Guard inspected vessels and others who are subject to Department of Transportation regulations that supersede OSHA's standards also are not covered.

2. Must all package handling operations have an ERP under 1910.120(q)(1)-(2) in place?

Employers must first determine, for each package handling operation, the possibility for a release to occur that would require an emergency response under 1910.120. This determination is based on criteria such as the existence of prior unknown releases from damaged packages, and also whether such an incident is a reasonable possibility for that package handling operation. If there is that potential, the employer must develop an ERP. The sole exception to this requirement is if the employer evacuates all their employees under an EAP from the danger area and does not permit <u>any</u> of their employees at the site to assist in handling the emergency.

3. Are <u>all</u> responses to damaged packages emergency responses under 1910.120(q)(1)?

Appendix A provides three categories of releases, those that are "purely incidental," those that "may be incidental or require emergency response depending on the circumstances" and "releases requiring an emergency response regardless of circumstances." An incidental release is a release of a substance which does not pose a significant safety or health hazard to employees in the immediate vicinity or to the employee cleaning it up. Furthermore, an incidental release does not have the potential to become an emergency within a short time frame. 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.

Most packages that are shipped are limited in quantity and would present only minor safety or health hazards to employees in the immediate work area or those assigned to clean it up. As a result, most such releases would be incidental in nature. However, an emergency response under 1910.120 may be required for the following situations: 1) a damaged package appears outwardly hazardous (e.g., emitting irritating fumes), 2) the label indicates an extremely hazardous or toxic material, or 3) the contents are unknown, but there is a reasonable belief that it may contain a hazardous substance capable of causing an exposure to a serious safety or health hazard.

4. What level of training is appropriate for employees who will perform emergency response under 1910.120?

The level of training required for each employee will vary based on that employee's assigned duties and responsibilities during an emergency response. Employees who are likely to discover a damaged package, and whose only responsibility is to summon assistance, must be trained to the first responder awareness level (1910.120(q)(6)(i)). First responder operations level training would be appropriate for employees who respond in a defensive manner to releases or potential releases from damaged packages from a safe distance (1910.120(q)(6)(ii)). Hazardous materials technician level training is required for all employees expected to take offensive measures to approach and control a release (1910.120(q)(6)(iii)). Additional training may be necessary based on each employee's expected response to an emergency.

5. What are the PPE requirements under 1910.120 for HAZMAT team members ?

The PPE selected and used must protect these employees from the hazards and potential hazards that they are likely to encounter. The selection criteria must be based on the employer's assessment of the hazards or potential hazards. Furthermore, PPE selected for designated HAZMAT teams must meet the requirements under 1910.120(g)(3)-(g)(5).

6. What type of respiratory protection must be worn during an emergency response under 1910.120?

HAZWOPER paragraph (q)(3)(iv) requires use of positive pressure SCBAs during emergency responses until the individual in charge of the Incident Command System (ICS) determines through the use of air monitoring that a decreased level of respiratory protection will not result in hazardous exposures to the employees.

7. What types of hazards must employers include in their hazard assessments for general PPE under 1910.132(d) and for respiratory protection under 1910.134(d)?

Each employer is required to assess their workplace to determine the hazards present, or that are likely to be present, that may require the use of PPE. This determination is required by 1910.132(d) for PPE, except for respiratory protection. The hazard determination for PPE (other than respiratory protection) must document the name of the person who conducted the assessment and the date that it was conducted (1910.132(d)(2)). Employers must provide the appropriate PPE if they cannot eliminate employee exposure through engineering and administrative controls.

Paragraph 1910.134(d) includes hazard determination requirements. A written Respiratory Protection Program is also required by 1910.134(c) when respirators are required to protect the health of the employee. These determinations, at a minimum, must include the types of packages the employer accepts. Because previous release incidents are indicators of future potential hazardous exposures in the workplace, assessments following incidents involving damaged packages that created or had the potential for creating hazards to employees should also be used as a basis for a hazard determination. Employers should consider the potential for chemical or physical events including, but not limited to, reactivity, flammability and explosivity in their assessments.

8. What engineering and administrative controls for respiratory protection under 1910.134(a)(1) must employers use to protect employees from respiratory hazards arising from releases of hazardous substances from damaged packages?

The engineering and administrative (work practice) controls implemented by the employer must address the hazards identified in the respiratory hazard assessment, and must be used as primary means of hazard control before PPE is used. Employees who are potentially exposed to the contents of damaged packages must be trained in the proper use and implementation of control systems. Possible control measures include isolating packages in an unoccupied location, use of spill tubs, local exhaust ventilation and other control technologies. If engineering and work practice controls are not feasible, the use of PPE is required.

9. What general PPE under 1910.132(d) and what respiratory protection under 1910.134(d) must employers provide to employees responding to damaged packages?

Employers must select and provide PPE that adequately protects employees from hazards that are present, or likely to be present, as specified in the hazard determination(s). 29 CFR 1910 Subpart I (1910.132 - 1910.138) addresses the requirements for PPE. OSHA does not prescribe what PPE must be provided to deal with an incidental release from a damaged package. OSHA only specifies that the choice of PPE by the employer must be based on the potential hazards determined to exist. Employers should use prior incidents, employee complaints and other relevant criteria in their hazard determination. Employers must also consider employee exposure, or the reasonable possibility of employee exposure, to safety or health hazards for all routes of entry including inhalation, ingestion, and skin absorption when determining the need for and selecting PPE. PPE must maintain employee exposures below the permissible exposure limits listed in 29 CFR 1910 Subparts G and Z. Defective or damaged equipment may not be used (1910.132(e)).

Information on PPE for hazardous substance clean-up is available in the "4-Agency Manual" (Occupational Safety and Health Guidance Manual for Hazardous Waste Site Activities).

10. What training in the use of general PPE under 1910.132(f) and what training in the use of respiratory protection under 1910.134(k) must be provided to employees responding to damaged packages?

Employees who will wear PPE under 1910.132(f) must be trained to know at least the following: 1) when PPE is necessary, 2) what PPE is necessary, 3) how to properly don, doff, adjust, and wear PPE, 4) the limitations of the PPE, and 5) the proper care, maintenance, useful life and disposal of the PPE.

Employers must make sure that each employee demonstrates an understanding of the PPE training as well as the ability to properly wear and use equipment before they are allowed to perform work requiring the use of the PPE. If an employer believes that a previously trained employee is not demonstrating the proper understanding and skill level in the use of PPE, that employee should receive refresher training. Other situations that require additional or retraining of employees include changes in the workplace or types of PPE that make that make prior training obsolete.

Employees who will wear respiratory protection must be trained in accordance with 1910.134(k). The employer must ensure that employees demonstrate knowledge of the items listed in 1910.134(k)(1)(i-vii), and the training must be provided before the employee has to use the respirator. Retraining must be performed annually, and when any of the conditions listed in (k)(5)(i-iii) occur.

11. Are responses to blood or OPIM spills considered emergency responses under 1910.120?

The Bloodborne Pathogens standard may interface with HAZWOPER when it involves a response to an emergency caused by the uncontrolled release of an infectious waste, or where infectious waste is part of the uncontrolled release.

Employers with employees engaged in emergency response activities involving blood or OPIM must comply with the requirements in 29 CFR 1910.120(q), and may also have to comply with the Bloodborne Pathogens standard, 29 CFR 1910.1030. 29 CFR 1910.120(a)(2)(i) states: "If there is a conflict or overlap, the provision that is more protective of employee safety and health shall apply without regard to 29 CFR 1910.5(c)(1)."

Employees who respond to incidental releases of biological hazards must be protected according to other OSHA standards. For example, if you anticipate that employees will be exposed to blood or other potentially infectious materials (OPIM) in the workplace, then those employees are covered by OSHA's Bloodborne Pathogens standard, 1910.1030. Employees exposed to other biohazards from incidental spills must be protected by personal protective equipment in accordance with 1910 Subpart I, Personal Protective Equipment (PPE), and provided training consistent with 1910.132(f).

If an employer is using their own employees for post-emergency response clean-up (see 1910.120(q)(11)) on their site, compliance with all applicable portions of 1910.134, including the hazard assessment in paragraph (d), is required.

12. Under what conditions is it acceptable for employers to provide escape-only respirators?

Employers may provide escape-only respirators to those whose only action is to leave the area immediately and take no part in the response. Escape-only respirators must be NIOSH-approved and appropriate for the potential airborne concentration and class of substances specified in the employer's hazard determination (1910.134(d)). Emergency escape-only respirators must be inspected before being carried into the workplace for use (1910.134(h)(3)(i)(C)). All respirators maintained for emergency situations must be inspected at least monthly and in accordance with the manufacturer's recommendations. They also must be checked for proper function before and after each use (1910.134(h)(3)(i)(B)). Employees only wearing escape-only respirators do not have to be medically evaluated or fit tested, however, the employer would still be responsible for compliance with all other provisions of the respirator standard, as applicable, such as the written program and training requirements.

EXAMPLE SCENARIOS OF DAMAGED PACKAGE RESPONSE

Example Scenario #1a – Response to an incidental release of a damaged package in a package-handling facility

Upon discovery of a damaged package on a conveyor belt that appears to be leaking a fluid, a package handler who has been trained to the first responder awareness level (see Section XI.G. for emergency response training levels), observes that the package does not appear outwardly hazardous, but notices that it is labeled as containing a hazardous material. The package handler alerts the other employees in the immediate area to evacuate and notifies the on-site supervisor of the leaking package. As the package handler evacuates, the conveyor belt is stopped to isolate the package which reduces potential exposure hazards to other employees. The supervisor contacts designated employees who are trained under 1910.120 (e.g., first responder operations level) to determine whether the spill is incidental or requires an emergency response performed by the company's on-site HAZMAT team. After evaluating the circumstances of the release, the team makes the determination whether the spill is or is not incidental and whether it can or cannot be immediately cleaned up by personnel in the immediate area. If the spill is incidental, the clean-up personnel must be trained under 1910.1200 and equipped under 1910.132 and 1910.134 (if necessary).

Example Scenario #1b – Emergency response to damaged package in package-handling facility

Upon discovery of a damaged package on a conveyor belt that is emitting an irritating odor, a package handler who has been trained to the first responder awareness level (see Section XI.G. for emergency response training levels) alerts the other employees in the immediate area to evacuate and initiates an emergency response sequence by notifying the on-site supervisor of the fuming package. As the package handler evacuates, the conveyor belt is shut down to isolate the package which reduces potential exposure hazards to other employees. Because the emanating odor poses a potentially serious health hazard, the supervisor immediately contacts the facility's on-site HAZMAT team to respond to the release and takes measures (if necessary) to ensure that the HVAC system is shut down. Members of the HAZMAT team, who are trained to the first responder operations level, don the appropriate PPE including respiratory protection (see Section XI.K for guidance on PPE selection) and set up a boundary around the damaged package to designate safe and unsafe areas. Operations level personnel also control entry and exit from the release area and work to contain the release from a safe distance. Other members of the HAZMAT team, who are trained to the first responder technician level, don the appropriate PPE and approach the damaged package with the intent of stopping the release and cleaning up the spill.

Example Scenario #2 – Emergency response to damaged package in delivery truck

During a routine package delivery stop, a truck driver discovers a damaged package labeled as a corrosive in the back of the truck and immediately begins to experience a strong irritating sensation. The driver, who has been trained to the first responder awareness level, realizes that this is a potentially hazardous situation and notifies the supervisor of the discovery. Through established procedures, the supervisor contacts the city fire department which has a dedicated and organized HAZMAT team, to respond to the release. While waiting for emergency responders to arrive, the driver maintains a safe distance from the truck and ensures that no one

approaches the truck. When the HAZMAT team arrives, first responder operations level trained personnel set up a boundary around the truck to designate safe and unsafe areas and take over the responsibility of controlling entry and exit from the release area. First responder technician level trained personnel don the appropriate PPE and enter the back of the truck to contain and clean-up the spill.

Example Scenario #3 – Emergency response to damaged package at a drop-off box

During a routine stop at a drop-off box to pick up packages, a truck driver discovers an unlabeled damaged package that has been torn and a powder is spilling out. The driver, who has been trained to the first responder awareness level, cannot determine what the material may be and notifies the supervisor. The supervisor follows established procedures for treating a release of an unknown substance as an emergency response and contacts the local HAZMAT team who covers the location of the drop-off box. While waiting for emergency responders to arrive, the driver maintains a safe distance from the box and ensures that no one approaches the area. When the HAZMAT team arrives, first responder operations level trained personnel set up a boundary around the box to designate safe and unsafe areas and take over the responsibility of controlling entry and exit from the release area. First responder technician level trained personnel don the appropriate PPE and clean-up the spill.

APPENDIX C

GUIDANCE FOR 29 CFR 1910.120 EMERGENCY RESPONSE COMPLIANCE INSPECTION

The function of this non-mandatory appendix is to supply the compliance officer guidance on pertinent information that should be collected relating to various subparagraph requirements in 1910.120(q), Emergency Response to Hazardous Substance Releases.

(Name of Site)

(Street Address or Geographic Location of Incident)

(City, State, Zip)

(Name of Manager/Owner)

(Phone Number)

I. **Review of the Emergency Response Plan (ERP)**. (See Section XI.C. of this instruction for a discussion of ERP requirements and strategies.)

	Applicable Standards	**Met Y/N**
A. Do the provisions of 29 CFR 1910.120(q) apply to the employer? (Would the substances present on-site require an emergency response if released?) (See Appendix A of this instruction.)	1910.120(q) 1926.65(q)	

B. Which compliance strategy does the employer use? Evacuation of all employees in accordance with 29 CFR 1910.38, or emergency response by employees in accordance with 29 CFR 1910.120(q)?	1910.120(q)(1) 1926.65(q)(1)	
C. Does the employer have an ERP or an EAP? If not, cite paragraph 29 CFR 1910.120(q)(1).	1910.120(q)(1) 1926.65(q)(1)	
D. If the employer does not have an ERP but expresses an intent to evacuate all personnel and not allow any employees to respond, does the employer have an EAP in accordance with 29 CFR 1910.38 (may be communicated orally to employees by employers with 10 or fewer employees)? If not, then 29 CFR 1910.120(q)(1) shall be cited. The determination that the employer intends to evacuate all employees must be documented on the Narrative, OSHA-1A Form.	1910.120(q)(1) 1926.65(q)(1)	
E. If the employer does not have an ERP but has an EAP, is the EAP adequate? If not, then 29 CFR 1910.120(q)(1) shall be cited.	1910.120(q)(1) 1926.65(q)(1)	

F. Emergency Action Plan compliance checklist:		
1. Is the plan in writing (may be communicated orally to employees by employers with 10 or fewer employees)? (1910.38(b))	1910.120(q)(1) 1926.65(q)(1)	
2. Does the plan include procedures for reporting fires or other emergencies? (1910.120(c)(1))	1910.120(q)(1) 1926.65(q)(1)	
3. Are emergency evacuation procedures and type of evacuation and exit route assignments designated? (1910.120(c)(2))	1910.120(q)(1) 1926.65(q)(1)	
4. Does the plan include procedures to be followed by employees performing rescue or medical duties or employees who remain to operate critical plant operations? (1910.38(c)(3), 1910.38(c)(5))	1910.120(q)(1) 1926.65(q)(1)	
5. Are procedures established to account for all employees after the emergency evacuation has been completed? (1910.38(c)(4))	1910.120(q)(1) 1926.65(q)(1)	
6. Has an employee alarm system which complies with 29 CFR 1910.165 been established? (1910.38(d))	1910.120(q)(1) 1926.65(q)(1)	
7. If an employee alarm system is used for other purposes, have distinctive signals for each purpose been developed? (1910.38(d))	1910.120(q)(1) 1926.65(q)(1)	
8. Has the employer designated and trained a sufficient number of persons to assist in the safe and orderly evacuation of employees (generally one per 20 employees)? (See Appendix to 29 CFR 1910 Subpart E – Emergency action plan training, 3.) (1910.38(e))	1910.120(q)(1) 1926.65(q)(1)	

9. Has the employer reviewed the EAP with each employee covered by the plan initially, and when the plan or the employee's responsibilities under the plan change? (1910.38(f))	1910.120(q)(1) 1926.65(q)(1)	
10. Is the written plan kept at the workplace (may be communicated orally to employees by employers with 10 or fewer employees) and made available for employee review? (1910.38(b))	1910.120(q)(1) 1926.65(q)(1)	
11. Has the plan been effectively communicated and implemented by the employer to ensure that employees do not assist in handling emergencies, or does the employer actually intend to have employees respond to emergencies?	1910.120(q)(1) 1926.65(q)(1)	
12. Does the employer intend to have employees handle incidental releases? If so, are the training, tools, equipment, and PPE appropriate for handling incidental releases of the hazardous substance available in the work area?	1910.1200 1926.59 1910.132 1926.95	

13. Does the employer have procedures for notifying both inside and outside parties of incidents? Employees may be placed at risk in situations where they are required by the plan to remain in a temporarily safe area to shut down an operation, and the plan does not have procedures for the employer to ensure that outside responders are notified in a timely manner. CSHOs should look closely at EAPs that do not have procedures for immediately contacting the local fire department and other outside parties in order to determine whether such plans place any employees at risk. (1910.38(c)(1)) NOTE: The term "outside parties" means outside responders (fire departments, police, private HAZMAT teams, emergency medical service personnel, and other pertinent components of the local, state, and Federal emergency response system) and other employers in the surrounding area who could be affected by a hazardous substance release requiring an emergency response.	1910.120(q)(1) 1926.65(q)(1)	
G. Is the ERP in writing?	1910.120(q)(1) 1926.65(q)(1)	
H. Is the ERP easily accessible to employees?	1910.120(q)(1) 1926.65(q)(1)	

I. Does the employer make use of the local or State ERP in the company ERP? If so, does the local or State ERP adequately provide employee protection for this employer? NOTE: Emergency response organizations may use the local or State ERP as part of their ERP to avoid duplication. However, the plan must address all of the provisions listed in 29 CFR 1910.120(q)(2) and (q)(3).	1910.120(q)(2)(xii) 1926.65(q)(2)(xii)	
J. Does the ERP reflect pre-emergency planning and coordination with outside parties?	1910.120(q)(2)(i) 1926.65(q)(2)(i)	
1. Does the plan describe procedures or existing agreements addressing how the outside parties are to be notified of a potential emergency situation and what role each should play in an incident?	1910.120(q)(2)(i) 1926.65(q)(2)(i)	
2. If any response coordination procedures or agreements are included in the plan, are the local fire department and other selected outside emergency response parties aware of their roles and responsibilities as described in the plan?	1910.120(q)(2)(i) 1926.65(q)(2)(i)	
3. Can outside responders identify any reasons that were not considered by the employer that would delay or prevent them from responding to an incident (e.g., distance, lack of training, etc.)?	1910.120(q)(2)(i) 1926.65(q)(2)(i)	

K. Are personnel roles, lines of authority, training, and communication provided in the ERP? (Suggestion: review personnel roles and lines of authority with the designated On-Scene Incident Commander if possible. These should be consistent with the NIMS.)	1910.120(q)(2)(ii) 1926.65(q)(2)(ii)	
L. Does the ERP address emergency recognition and prevention? (Suggestion: Determine if the employer established the kinds of emergencies that could occur in the workplace, trained employees to recognize potential emergencies, and/or installed monitoring devices to alert employees to an emergency.)	1910.120(q)(2)(iii) 1926.65(q)(2)(iii)	
M. Does the ERP address safe distances and places of refuge adequate for all employees who may need it?	1910.120(q)(2)(iv) 1926.65(q)(2)(iv)	
N. Does the ERP designate equipment, people, and procedures to ensure site security and control?	1910.120(q)(2)(v) 1926.65(q)(2)(v)	

O. Are evacuation routes and procedures developed, and do they work well with the methods developed for emergency alerting and the designation of places of refuge? (Suggestion: Check the evacuation routes and procedures against the requirements given in 29 CFR 1910.38, emergency action plans.)	1910.120(q)(2)(vi) 1926.65(q)(2)(vi)	
P. Does the ERP address the setting up of a decontamination station, and the decontamination of personnel and equipment?	1910.120(q)(2)(vii) 1926.65(q)(2)(vii)	
Q. Are emergency medical treatment and first aid available to employees during an emergency response? (Suggestion: Verify that emergency medical personnel are aware of their roles in an emergency and trained to fulfill their roles.)	1910.120(q)(2)(viii) 1926.65(q)(2)(viii)	

R. Are emergency alerting and response procedures addressed in the ERP? Is there evidence of an alerting and response system? (Suggestion: If the emergency situation calls for special instructions, determine if the emergency alerting system indicates the location of the hazard, the direction employees should evacuate, what the hazard is, and any special PPE employees must don.)	1910.120(q)(2)(ix) 1926.65(q)(2)(ix)	
S. Does the ERP address the types and uses of PPE and emergency response equipment to be used?	1910.120(q)(2)(xi) 1926.65(q)(2)(xi)	
T. Does the ERP provide procedures for the critique of emergency responses?	1910.120(q)(2)(x) 1926.65(q)(2)(x)	

U. Are there any other features that are missing or should be addressed in the employer's ERP? NOTE: The elements listed in 29 CFR 1910.120(q)(2) are minimum requirements. The performance-oriented aspect of the ERP is in 29 CFR 1910.120(q)(1), which states that the ERP "shall be developed and implemented to handle anticipated emergencies prior to the commencement of emergency response operations."	1910.120(q)(1) 1926.65(q)(1)	

II. Review of Procedures for Handling Emergencies.

A. Has a single individual been identified as the On-Scene Incident Commander?	1910.120(q)(3) 1926.65(q)(3)	
B. Is there a system in place that passes the senior official position up the line of authority as more senior officials arrive on the scene? NOTE: The senior official assists the On-Scene Incident Commander, "the individual in charge of the Incident Command System" in 29 CFR 1910.120(q)(3).	1910.120(q)(3) 1926.65(q)(3)	

C. Has a safety official (officer) been identified? NOTE: In smaller responses the On-Scene Incident Commander may play this role.	1910.120(q)(3)(vii) 1926.65(q)(3)(vii)	
D. Is the site/facility system consistent with the NIMS and does it ensure that responders are familiar with/trained in NIMS?	1910.120(q)(3) 1926.65(q)(3)	

III. Review of Training Requirements.

A. Has the employer certified that the employee has been provided training? NOTE: The employee does not necessarily have to be provided with a certificate, although the employer must certify in writing that employees who have successfully completed the first responder operations, HAZMAT Technician, HAZMAT Specialist, and On-Scene Incident Commander levels are trained.	1910.120(q)(6) 1926.65(q)(6)	
B. If employee training is done in-house, is training based on the specific duties and functions to be performed at the site? NOTE: Keep in mind that OSHA does not endorse training programs, but may offer suggestions as to their comprehensiveness.	1910.120(q)(6) 1926.65(q)(6)	

C. Does the employer have a "statement of training" or "statement of competency" for annual refresher training or competency for all employees trained in emergency response? NOTE: Methods of demonstrating competency include critiques of actual incidents or "dress rehearsals" which identify any weakness and effectiveness of the response effort.	1910.120(q)(8) 1926.65(q)(8)	
D. If employee annual refresher training is done in-house, is training adequate for the site? NOTE: Keep in mind that OSHA does not endorse training programs, but may offer suggestions as to their comprehensiveness.	1910.120(q)(8) 1926.65(q)(8)	

IV. Review of Medical Surveillance.

A. Have HAZMAT team members and HAZMAT specialists received medical surveillance?	1910.120(q)(9)(i) 1926.65(q)(9)(i)	
B. Does the employer furnish the employee with the physician's written opinion indicating medical results and whether the employee is capable of working with HAZMAT?	1910.120(q)(9)(i) 1926.65(q)(9)(i) 1910.1020	
C. Are emergency response workers who exhibit signs or symptoms of hazardous substance exposure during an emergency incident offered medical consultation?	1910.120(q)(9)(ii) 1926.65(q)(9)(ii)	

D. Is medical recordkeeping done in a manner consistent with 29 CFR 1910.1020, Access to Employee Exposure and Medical Records?	1910.1020	

V. Review of Personal Protective Equipment Program. Ask to review the written PPE Program required in 29 CFR 1910.120(q)(10).

NOTE:
Subparagraph 29 CFR 1910.120(q)(10) refers to the provisions for PPE in 29 CFR 1910.120(g)(3)-(g)(5).

A. Is the PPE chosen sufficiently protective of employees, based on hazards and potential hazards?	1910.120(q)(10) 1926.65(q)(10)	
B. Is the PPE maintained and inspected routinely?	1910.120(q)(10) 1926.65(q)(10)	
C. Does the PPE appear to be in good condition and up-to-date?	1910.120(q)(10) 1926.65(q)(10)	
D. Is air monitoring equipment available to assist the Incident Commander in determining when to increase or lower the level of PPE?	1910.120(q)(3)(iv) 1926.65(q)(3)(iv)	

VI. Employee Interview Questions.

Opening questions:

(Employee's Name)

(Home Address)

(Home Phone Number) **(Work Phone Number)**

(Employee Job Title)

(Years Employed in Present Position)

A. Does the employee have access to the ERP?	1910.120(q)(1) 1926.65(q)(1)	
B. Has the employee ever been through an emergency response drill or an evacuation drill? Is the employee aware of the evacuation route in the event of an emergency? NOTE: Drills may be required by SARA Title III if the facility or emergency response organization is designated to be part of a community emergency response.	1910.120(q)(2)(i) 1926.65(q)(2)(i)	

C. Is the employee expected to take any action, other than evacuation, during an emergency? If so, what level of training does the employee have? (Suggestion: Review with the employee the competencies for the level of training that the employee has received.)	1910.120(q)(6) 1926.65(q)(6)	
D. Does the employee feel the training was sufficient to perform expected duties and functions during an emergency as an emergency responder?	1910.120(q)(6) 1926.65(q)(6)	
E. Does the employee know how to select, use, and inspect the PPE designated for employee use during an emergency?	1910.120(q)(6)(ii)-(iv) 1926.65(q)(6)(ii)-(iv)	
F. Have the employees been fitted properly for PPE? NOTE: Paragraph 29 CFR 1910.120(q)(10), Chemical protective clothing, refers to the provisions in 29 CFR 1910.120(g)(3-5): PPE selection (which requires selection and use of PPE in compliance with 29 CFR Part 1910, Subpart I), totally encapsulating chemical protective suits, and a written PPE program.	1910.120(q)(10) 1926.65(q)(10) 1910.132 1910.134	

G. Does the employee know how to use the emergency response equipment designated for use in performing control, containment and/or confinement operations?	1910.120(q)(6)(ii)-(iv) 1926.65(q)(6)(ii)-(iv)	
H. If possible, interview the designated On-Scene Incident Commander to determine if the individual:		
1. Is aware of the potential hazards and/or benefits associated with certain PPE and engineering controls;	1910.120(q)(3) 1926.65(q)(3)	
2. Is capable of implementing appropriate emergency operations;	1910.120(q)(3) 1926.65(q)(3)	
3. Can really designate a safety official (officer);	1910.120(q)(3)(vii) 1926.65(q)(3)(vii)	
4. Can implement appropriate decontamination procedures;	1910.120(q)(3) 1926.65(q)(3)	
5. Has received training as an On-Scene Incident Commander.	1910.120(q)(6)(v) 1926.65(q)(6)(v)	
I. Has the employee gone through refresher training or demonstrated competency annually?	1910.120(q)(8) 1926.65(q)(8)	

J. Have employees who are entitled to a baseline physical and periodic consultations received them? NOTE: Designated members of HAZMAT Teams and HAZMAT Specialists must receive baseline physicals and be part of a medical surveillance program.	1910.120(q)(9)(i) 1926.65(q)(9)(i)	
K. Are employees offered medical consultation following the development of signs or symptoms resulting from exposure to hazardous substances during an emergency incident?	1910.120(q)(9)(ii) 1926.65(q)(9)(ii)	

APPENDIX D

LIST OF ACRONYMS IN THIS DOCUMENT

BLS	basic life support
CAA	Clean Air Act
CERCLA	Comprehensive Environmental Response Compensation and Recovery Act of 1980 (also, Superfund)
CFR	Code of Federal Regulations
CPR	cardiopulmonary resuscitation
CSHO	Compliance Safety and Health Officer
DHS	Department of Homeland Security
DOT	U.S. Department of Transportation
EAP	emergency action plan
EMS	emergency medical services
EMT	emergency medical technician
EPA	U.S. Environmental Protection Agency
EPCRA	Emergency Planning and Community Right-to-Know Act
ERP	emergency response plan
EtO	ethylene oxide
HAZMAT	hazardous materials
HAZWOPER	Hazardous Waste Operations and Emergency Response standard, 29 CFR 1910.120
HCS	Hazard Communication standard, 29 CFR 1910.1200
HHS	U.S. Department of Health and Human Services
HMTUSA	Hazardous Material Transportation Uniform Safety Act of 1990
HSPD-5	Homeland Security Presidential Directive
IC	[On-scene] incident commander
ICP	Integrated Contingency Plan
ICS	Incident Command System
IDLH	immediately dangerous to life or health
INS	incident of national significance
JFO	Joint Field Office
LEPC	local emergency planning committee
LERP	local emergency response plan
MOU	Memorandum of Understanding

MSDS	material safety data sheet
NCP	National Contingency Plan
NEMP	National Emergency Management Plan
NFPA	National Fire Protection Association
NIJ	National Institute of Justice
NIMS	National Incident Management System
NIOSH	National Institute for Occupational Safety and Health
NOAA	National Oceanic and Atmospheric Administration
NRC	U.S. Nuclear Regulatory Commission
NRP	National Response Plan
NRT	National Response Team
OPA 90	Oil Pollution Act of 1990
OSC	On-scene coordinator (term used in NCP)
OSHA	Occupational Safety and Health Administration
OSH Act	Occupational Safety and Health Act of 1970
OTE	Office of Training and Education
OTI	OSHA Training Institute
PPE	personal protective equipment
PRCS	Permit-Required Confined Space
PSM	Process Safety Management of Highly Hazardous Chemicals standard, 29 CFR 1910.119
RCRA	Resource Conservation and Recovery Act of 1976
REMP	Regional Emergency Management Plan
RMP	Risk Management Plan
RRTs	Regional Response Teams
SARA	Superfund Amendments and Reauthorization Act of 1986
SCBA	Self-contained breathing apparatus
{ SDS	Safety Data Sheet }
SERC	State emergency response commission
SERP	State emergency response plan
SLTC	Salt Lake Technical Center
SRTs	Specialized Response Teams
SSP	Skilled Support Personnel
SO	Safety Official (Officer)
TRI	Toxic Release Inventory
TSD	treatment, storage and disposal

USCG	United States Coast Guard

APPENDIX E

REFERENCE MATERIALS FOR HAZWOPER

Emergency Response Guidebook, U.S. Department of Transportation, Washington, DC, 1996.

Federal Register, Vol. 58, June 30, 1993, pages 35076-35306: **Incorporation of General Industry Safety and Health Standards Applicable to Construction Work; Final Rule**. (29 CFR 1926).

Federal Register, Vol. 57, No. 95, May 15, 1992, pages 20944-20954: **Hazardous Materials; Training for Safe Transportation; Final Rule**. (49 CFR Parts 171-177).

Federal Register, Vol. 57, No. 36, February 24, 1992, pages 6356-6417: **Process Safety Management of Highly Hazardous Chemicals; Explosives and Blasting Agents; Final Rule**. (29 CFR 1910.119).

Federal Register, Vol. 56, No. 75, April 18, 1991, pages 15832-15833: **Hazardous Waste Operations and Emergency Response; Final Rule; Corrections**.

Federal Register, Vol. 55, No. 72, April 13, 1990, pages 14072-14075: **Hazardous Waste Operations and Emergency Response; Final Rule; Corrections**.

Federal Register, Vol. 55, No. 18, January 26, 1990, pages 2776-2794: **Accreditation of training Programs for Hazardous Waste Operations; Notice of Proposed Rulemaking**.

Federal Register, Vol. 54, No. 120, June 23, 1989, pages 26654-26658: **Worker Protection Standards for Hazardous Waste Operations and Emergency Response; Final Rule**. (40 CFR Part 311).

Federal Register, Vol. 54, No. 42, March 6, 1989, pages 9294-9336: **Hazardous Waste Operations and Emergency Response; Final Rule**. (29 CFR Subpart 1910.120).

{ Federal Register, Vol. ~~52~~ 77, No. ~~163~~ 58, ~~August 24, 1987~~ March 26, 2012, pages ~~31852-31886~~ 17574-17896: **Hazard Communication; Final Rule**. (29 CFR 1910.1200). }

Federal Register, Vol. 52, No. 85, May 4, 1987, pages 16241-16243: **Hazardous Waste Operations and Emergency Response; Interim Final Rule; Corrections**.

Federal Register, Vol. 51, No. 244, December 19, 1986, pages 45654-45675: **Hazardous Waste Operations and Emergency Response; Interim Final Rule**.

Guide for the Selection of Chemical and Biological Decontamination Equipment for Emergency First Responders, National Institute of Justice (NIJ), October 2001, (Guide 103-00).

Health and Safety Audit Guidelines, SARA Title I, Section 126, December 1989, United States Environmental Protection Agency: Office of Solid Waste and Emergency Response,

Office of Emergency and Remedial Response, and Emergency Response Division. (EPA/540/G-89/010).

"Memorandum of Understanding Between the United States Coast Guard, U.S. Department of Transportation, and the Occupational Safety and Health Administration, U.S. Department of Labor, Concerning Their Authority to Prescribe and Enforce Standards or Regulations Affecting the Occupational Safety and Health of Seamen Aboard Vessels Inspected and Certificated by the United States Coast Guard," March 4, 1983.

"Memorandum of Understanding between OSHA and the NRC that delineates worker protection responsibilities for each agency at facilities licensed by the NRC," effective October 21, 1988.

National Oil and Hazardous Substances Pollution Contingency Plan, Environmental Protection Agency [40 CFR Part 300 (2003)].

National Response Plan, Office of Homeland Security, December 2004.

OSHA Best Practices for Hospital-Based First Receivers of Victims from Mass Casualty Incidents Involving the Release of Hazardous Substances, OSHA, December 20, 2004.

OSHA Instruction TED 01-00-015, January 20, 1999, "OSHA Technical Manual."

OSHA Instruction CPL 02-00-094, July 22, 1991, "OSHA Response to Significant Events of Potentially Catastrophic Consequence."

OSHA Instruction CPL 02-00-120, September 25, 1998, "Inspection Procedures for the Respiratory Protection Standard."

OSHA Instruction CPL 02-01-037, July 9, 2002, "Compliance Policy for Emergency Action Plans and Fire Prevention Plans."

OSHA Instruction CPL 02-02-030, November 14, 1980, "29 CFR 1913.10(b)(6), Authorization of Review of Medical Opinions."

OSHA Instruction CPL 02-02-032, January 19, 1981, "29 CFR 1913.10(b)(6), Authorization of Review of Specific Medical Information."

OSHA Instruction CPL 02-02-033, February 8, 1982, "29 CFR 1913.10, Rules of Agency Practice and Procedure Concerning OSHA Access to Employee Medical Records – Procedures Governing Enforcement Activities."

OSHA Instruction CPL 02-02-045 (Revised), September 28, 1992, "29 CFR 1910.119, Process Safety Management of Highly Hazardous Chemicals – Compliance Guidelines and Enforcement Procedures."

OSHA Instruction CPL 02-02-051, November 5, 1990, "Inspection Guidelines for Post-Emergency Response Operations Under 29 CFR 1910.120."

OSHA Instruction CPL 02-02-054, July 14, 2000, "Respiratory Protection Program Guidelines."

OSHA Instruction CSP 01-01-024, June 10, 1991, "Hazardous Waste Operations and Emergency Response; Final Rule and Corrections."

OSHA Instruction HSO 01-00-001, December 18, 2003, "National Emergency Management Plan (NEMP) ."

OSHA Instruction PER 04-00-002, March 31, 1989, "CSHO Pre-Employment Medical Examination."

OSHA Instruction PER 04-00-003, March 31, 1989, "CSHO Medical Examinations."

Occupational Safety and Health Guidance Manual for Hazardous Waste Site Activities, NIOSH/OSHA/USCG/EPA; October 1985. (NIOSH Publication Number 85-115).

Recommended Practice for Responding to Hazardous Materials Incidents; National Fire Protection Association Standard 471; August 14, 1992.

Standard for Professional Competence of Responders to Hazardous Materials Incidents; National Fire Protection Association Standard 472; August 14, 1992.

State of Washington Industrial Safety and Health Administration, May 3, 1991; "Inspection Guidelines for Post-Emergency Response Operations Under WAC 296-62-300."

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