

Hazardous Waste Operations and Emergency Response Plans (HAZWOPER)

Purpose

This section covers E&B's program related to Hazardous Waste Operations and Emergency Response Plans commonly referred to as HAZWOPER. A significant percentage of E&B's services are provided in operating facilities placing E&B employees in situations where they may be required to react to such unplanned events as product spills, releases, or other emergencies.

This program will outline E&B employee's responsibility and training requirements as a first responder at the awareness level in compliance with the regulation below.

Scope

E&B Hazardous Waste Operations and Emergency Response Program (HAZWOPER) shall be used by all company operations both in business units and project operations. Because E&B is a service organization with no operating facilities of its own, our compliance with 29 CFR 1910.120 will focus primarily on training for emergency response as specified by paragraph (q) "Emergency Response Program to Hazardous Substance Releases."

Regulatory References

This HAZWOPER Program is primarily intended to satisfy the following regulatory requirements:

Policy

29 CFR 1910.120(g)(1)(i); CAL/OSHA T8 CCR 5192. E&B is committed to using engineering and safe work practice controls to reduce and maintain affected company employee exposures to or below the permissible exposure limit (PEL) as regulated by OSHA in 29 CFR 1910 and 29 CFR 1926, except to the extent that such controls and safe work practices are deemed not feasible. Examples of engineering controls that could be considered feasible include the use of pressurized cabs, control booths, ventilation, and the use of remotely operated material handling equipment. Safe work practice controls which may be feasible include limiting the number of E&B's employees that can be affected from potential exposure, staging affected company employees upwind of potential chemical hazards, and specific training.

See also
29 CFR 1910.120(q)

Training

All E&B employees shall be trained in the E&B HAZWOPER Program as needed per assignment. Training must be completed prior to engaging in work where employees could be exposed to hazardous substances, safety or health hazards.

First Responder Awareness Level

Unless specific plans, actions and training have been implemented otherwise, E&B employee's participation in HAZWOPER emergency response operations will be limited to First Responder Awareness Level.

Stop the Work

E&B employees are to stop the work and immediately inform their supervisor if they witness, discover, or suspect a hazardous substance release, spill, or emergency.

Incident Reports

All HAZWOPER related events resulting in injury, illness or direct employee exposure to a hazardous substance shall be recorded as Incidents on an E&B Incident Report.

Near Miss Reports

Evacuations, notifications, failures in containment, control methods, isolation, etc., not resulting in employee exposure, illness, or injury, but would have resulted in employee exposure, illness or injury if an employee had been in the immediate area shall be record as near miss events on an E&B Near Miss Report.

Senior Official

E&B employees shall follow all instructions and directives from a Hazardous Response Team member, a senior official or Incident Commander.

Responsibilities

Management – E&B Management is responsible for the following:

- Ensure that the HSE Management System includes a HAZWOPER Program and that the program is reviewed annually and revised as necessary.
- Provide HAZWOPER training for all E&B employees as needed per assignment.
- Provide resources to implement and maintain the HAZWOPER Program.
- Provide leadership and guidance in resolving issues or corrective actions related to HAZWOPER concerns, events, releases, or emergencies.

Supervision – E&B Supervisors are responsible for the following:

- Understand and enforce the HAZWOPER Program.
- Provide on-the-job training for all employees regarding the HAZWOPER Program.
- Document and maintain all training records required by this program.
- Report all Incidents and Near Misses as required by this program.

- Ensure all employees are informed of the location of safety shower and eyewash stations, emergency evacuation routes and assembly points, methods of alarm and any other relevant details of
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the emergency response and evacuation plan.

- E&B supervisors are to stop the work and immediately inform appropriate personnel if they witness, discover, or suspect a hazardous substance release, spill or emergency.
- E&B supervisors are to follow all instructions and directives from a Hazardous Response Team member or Incident Commander.

Employees – E&B Employees are responsible for the following:

- E&B employees shall participate in and understand HAZWOPER training and their role and responsibilities in an emergency.
- E&B employees shall know the location of safety shower and eyewash stations, emergency evacuation routes and assembly points, methods of alarm and any other relevant details of the emergency response and evacuation plan.
- E&B employees are to stop the work and immediately inform their supervisor if they witness, discover, or suspect a hazardous substance release, spill or emergency.

- E&B employees are to stop the work and immediately inform their supervisor if they suspect the work is unsafe or a hazard exists that was not identified on the JSA and control methods discussed.
- E&B employees are to follow all instructions and directives from a Hazardous Response Team member or Incident Commander.

Emergency Response

Emergency Response to Hazardous Substance Releases

Emergency Response Plan

E&B has developed a stand-alone Emergency Response and Emergency Preparedness Program which serves as the default emergency response plan satisfying responsibilities under 29 CFR 1910.38. Facility specific plans for hazardous substance releases required by 29 CFR 1910.120(q)(1) shall be the client's responsibility. Unless specific plans, actions and training have been implemented otherwise, E&B employee's participation in HAZWOPER emergency response operations will be limited to First Responder Awareness Level.

First Responder Awareness Level

First responders at the awareness level are individuals who are likely to witness or discover a hazardous substance release and who have been trained to initiate an emergency response sequence by notifying the proper authorities of the release. They would take no further action beyond notifying the authorities of the release. First responders at the awareness level shall have adequate training or have had adequate experience to objectively demonstrate competency in the following areas:

- A. An understanding of what hazardous substances are, and the risks associated with them in an incident.
- B. An understanding of the potential outcomes associated with an emergency created when hazardous

substances are present.

C. The ability to recognize the presence of hazardous substances in an emergency.

D. The ability to identify the hazardous substance, if possible.

E. An understanding of the role of the first responder awareness individual in the employer's emergency response plan including site security and control and the U.S. Department of Transportation's Emergency Response Guidebook.

F. The ability to realize the need for additional resources, and to make appropriate notifications to the communication center.

See Supplement A (Doc. No., O-SS-SPP-0066A) – "Educational Information associated with (HAZWOPER)" for additional information regarding other responder levels, responsibilities, skills and knowledge. Also included is information on OSHA required elements of the client's emergency response plan and procedures for handling emergency response.

Training

Training - E&B will provide "HAZWOPER" program training.

Training Content – Content includes:

Upon assignment to a client's facility or to a different process unit in a facility each E&B employee will be informed of the hazardous substances in their work as to:

- The physical characteristics of the substance such as being a solid, liquid or gas, the color and odor.
- The danger to health, the flammability and reactivity to other substance such as water.

All employees will also be informed of:

- The location of safety showers and alarm stations.
- The emergency response plan for the area and their role in an emergency.
- The emergency alarms for the area, the evacuation route and assembly point.

In the event an employee is assigned to an area for longer than 12 months, they will be required to attend a refresher training session.

Personnel Training

All E&B employees shall receive "HAZWOPER Program" training.

Training Frequency

“HAZWOPER Program” training shall be included in Site Specific Orientation training upon mobilization to

specific sites. “HAZWOPER Program” training shall be included in the Toolbox Safety Meeting Program and refreshed annually as part of the Emergency Response/Preparedness and HAZWOPER toolbox topic agenda.

Reporting and Recordkeeping

Custodian – The Director of HS&E or designee shall be custodian of all “HAZWOPER Program” records.

Reports – All HAZWOPER related events shall be reported.

Incident Report - All HAZWOPER related events resulting in injury, illness or direct employee exposure to a hazardous substance shall be record as Incidents on an E&B Incident Report.

Near Miss Reports – Evacuations, notifications, failures in containment, control methods, isolation, etc., not resulting in employee exposure, illness or injury, but would have resulted in employee exposure, illness or injury if an employee had been in the immediate area shall be record as near miss events on an E&B Near Miss Report.

Control – Records associated with this program shall be handled in the following manner.

Incidents and Near Misses shall be handled per the Incident Reporting and Record Keeping Program.

Retention - Records shall be retained as follows:

Training Records - shall be retained for a minimum of the employee’s duration of employment.

Supplement A

The following is provided for E&B Employees' Information & Educational Purposes Only)

Emergency Response to Hazardous Substance Releases

Emergency Response Plan - E&B has developed a stand-alone Emergency Response and Emergency Preparedness Program which serves as the default emergency response plan satisfying responsibilities under 29 CFR 1910.38. Facility specific plans for hazardous substance releases required by 29 CFR 1910.120(q)(1) shall be the client's responsibility.

Unless specific plans, actions and training have been implemented otherwise, E&B employee's participation in HAZWOPER emergency response operations will be limited to First Responder Awareness Level.

First Responder Awareness Level - First responders at the awareness level are individuals who are likely to witness or discover a hazardous substance release and who have been trained to initiate an emergency response sequence by notifying the proper authorities of the release. They would take no further action beyond notifying the authorities of the release. First responders at the awareness level shall have adequate training or have had adequate experience to objectively demonstrate competency in the following areas:

- A. An understanding of what hazardous substances are, and the risks associated with them in an incident.
- B. An understanding of the potential outcomes associated with an emergency created when hazardous substances are present.
- C. The ability to recognize the presence of hazardous substances in an emergency.
- D. The ability to identify the hazardous substance, if possible.
- E. An understanding of the role of the first responder awareness individual in the employer's emergency response plan including site security and control and the U.S. Department of Transportation's Emergency Response Guidebook.
- F. The ability to realize the need for additional resources, and to make appropriate notifications to the communication center.

First responder Operations Level - First responders at the operations level are individuals who respond to releases or potential releases of hazardous substances as part of the initial response to the site for protecting nearby persons, property, or the environment from the effects of the release. They are trained to respond in a defensive fashion without trying to stop the release. Their function is to contain the release from a safe distance, keep it from spreading, and prevent exposures. First responders at the operational level shall have received at least eight hours of training or have had sufficient experience to objectively demonstrate competency in the following areas in addition to those listed for the awareness level and the employer shall so certify: (see table A-1, "Skills and Knowledge Required for Employee Participation in Emergency Response Operations")

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

Hazardous materials technicians shall have received at least 24 hours of training equal to the first responder operations level and in addition have competency in the following areas and the employer shall so certify: (see table A-1,

"Skills and Knowledge Required for Employee Participation in Emergency Response Operations")

Hazardous Materials Specialist - Hazardous materials specialists are individuals who respond with and provide support to hazardous materials technicians. Their duties parallel those of the hazardous materials technician; however, those duties require a more directed or specific knowledge of the various substances they may be called upon to contain. The hazardous materials specialist would also act as the site liaison with Federal, state, local and other government authorities regarding site activities. Hazardous materials specialists shall have received at least 24 hours of training equal to the technician level and in addition have competency in the following areas and the employer shall so certify: (see table A-1 "Skills and Knowledge Required for Employee Participation in Emergency Response Operations")

On Scene Incident Commander - Incident commanders, who will assume control of the incident scene beyond the first responder awareness level, shall receive at least 24 hours of training equal to the first responder operations level and in addition have competency in the following. (see table A-1

"Skills and Knowledge Required for Employee Participation in Emergency Response Operations")

Table A-1

Skills and Knowledge Required for Employee Participation in Emergency Response Operations	1st Responder Awareness Level	1st Responder Ops Level	HAZMAT Technician	HAZMAT Specialist	On Scene Incident Commander
Understand what hazardous substances are, and risks associated with them in an incident.	X	X			
Understand the potential outcomes associated with an emergency created when hazardous substances are present.	X	X			
Ability to recognize the presence of hazardous substances in an emergency.	X	X			
Ability to identify the hazardous substances, if possible.	X	X			
Understand the role of first responder awareness individual in the facilities emergency response plan including site security and control and the U.S. Department of Transportation's Emergency Response Guidebook.	X	X			
Ability to realize the need for additional resources, and to make appropriate notifications to the communication center.	X	X			
Knowledge of the basic hazard and risk assessment techniques.		X			
Know how to select and use proper personal protective equipment provided to the first responder operational level.		X			
An understanding of basic hazardous materials terms.		X			
Know how to perform basic control, containment and/or confinement operations within the capabilities of the resources and personal protective equipment available with their unit.		X			
Know how to implement basic decontamination procedures.		X			
An understanding of the relevant standard operating procedures and termination procedures.		X			
Know how to implement the employer's emergency response plan.			X		
Know the classification, identification and verification of known and unknown materials by using field survey instruments and equipment.			X		
Be able to function within an assigned role in the Incident Command System.			X		
Know how to select and use proper specialized chemical personal protective equipment provided to the hazardous materials technician.			X		
Understand hazard and risk assessment techniques.			X		
Be able to perform advance control, containment, and/or confinement operations within the capabilities of the resources and personal protective equipment available with the unit.			X		
Understand and implement decontamination procedures.			X		
Understand termination procedures.			X		
Understand basic chemical and toxicological terminology and behavior.			X		
Know how to implement the local emergency response plan.				X	
Understand classification, identification and verification of known and unknown materials by using advanced survey instruments and equipment.				X	
Know the state emergency response plan.				X	
Be able to select and use proper specialized chemical personal protective equipment provided to the hazardous materials specialist.				X	
Understand in-depth hazard and risk techniques.				X	
Be able to perform specialized control, containment, and/or confinement operations within the capabilities of the resources and personal protective equipment available.				X	
Be able to determine and implement decontamination procedures.				X	
Have the ability to develop a site safety and control plan.				X	
Understand chemical, radiological and toxicological terminology and behavior.				X	
Know and be able to implement the facilities' incident command system.					X
Know how to implement the facilities' emergency response plan.					X
Know and understand the hazards and risks associated with employees working in chemical protective clothing.					X
Know how to implement the local emergency response plan.					X
Know of the state emergency response plan and of the Federal Regional Response Team.					X
Know and understand the importance of decontamination procedures.					X

Elements of Emergency Response Plan - Elements of the clients' emergency response plan shall include as a minimum, the following:

- Pre-emergency planning and coordination with outside parties.
- Personnel roles, lines of authority, training, and communication.
- Emergency recognition and prevention.
- Safe distances and places of refuge.
- Site security and control.
- Evacuation routes and procedures.
- Decontamination.
- Emergency medical treatment and first aid.
- Emergency alerting and response procedures.
- Critique of response and follow-up.
- PPE and emergency equipment.

Procedures for handling emergency response

Incident Command System (ICS) - All emergency responders and their communications shall be coordinated and controlled through the individual in charge of the ICS assisted by the senior official present for each employer.

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 the position is passed up the line of authority which has been previously established.

PPE - Based on the hazardous substances and/or conditions present, the individual in charge of the ICS shall implement appropriate emergency operations and assure that the personal protective equipment worn is appropriate for the hazards to be encountered. PPE must be properly denominated after exposure.

Respiratory Protection - Employees engaged in emergency response and exposed to hazardous substances presenting an inhalation hazard or potential inhalation hazard shall wear positive pressure self-contained breathing apparatus 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 exposures to employees.

Limited Access & Buddy System - The individual in charge of the ICS shall limit the number of emergency response personnel at the emergency site, in those areas of potential or actual exposure to incident or site hazards, to those who are actively

performing emergency operations. However, operations in hazardous areas shall be performed using the buddy system in groups of two or more.

Stand-by Back-up - Back-up personnel shall be standing by with equipment ready to assist or rescue. Qualified basic life support personnel, as a minimum, shall also be standing by with medical equipment and transportation capability.

Safety Officer - The individual in charge of the ICS shall designate a safety officer, who is knowledgeable in the operations being implemented at the emergency response site, with specific responsibility to identify and evaluate hazards and to provide direction with respect to the safety of operations for the emergency at hand.

Termination of Activities - When the safety officer deems activities to be an IDLH and/or to involve an imminent danger condition, the safety officer shall have the authority to alter, suspend, or terminate those activities. The safety official shall immediately inform the individual in charge of the ICS of any actions needed to be taken to correct these hazards at the emergency scene.

Decontamination - After emergency operations have terminated, the individual in charge of the ICS shall implement appropriate decontamination procedures.

Medical Surveillance - Medical surveillance will be provided to all company responders potentially exposed to hazardous substances.

SCBAs - When deemed necessary for meeting the tasks at hand, approved self-contained compressed air breathing apparatus may be used with approved cylinders from other approved self-contained compressed air breathing apparatus provided that such cylinders are of the same capacity and pressure rating. All compressed air cylinders used with self-contained breathing apparatus shall meet U.S. Department of Transportation and National Institute for Occupational Safety and Health criteria.

Skilled Support Personnel - Personnel, not necessarily an employer's own employees, who are skilled in the operation of certain equipment, such as mechanized earth moving or digging equipment or crane and hoisting equipment, and who are needed temporarily to perform immediate emergency support work that cannot reasonably be performed in a timely fashion by an employer's own employees, and who will be or may be exposed to the hazards at an emergency response scene, are not required to meet the training required in this paragraph for the employer's regular employees. However, these personnel shall be given an initial briefing at the site prior to their participation in any emergency response.

The initial briefing shall include instruction in the wearing of appropriate personal protective equipment, what chemical hazards are involved, and what duties are to be performed. All other appropriate safety and health precautions provided to the employer's own employees shall be used to assure the safety and health of these personnel.

Specialist Employees - Employees who, during their regular job duties, work with and are trained in the hazards of specific hazardous substances, and who will be called upon to provide technical advice or assistance at a hazardous substance release incident to the

individual in charge, shall receive training or demonstrate competency in the area of their specialization annually.

Training - Training shall be based on the duties and function to be performed by each responder of an emergency response organization. The skill and knowledge levels required for all new responders, those hired after the effective date of this standard, shall be conveyed to them through training before they are permitted to take part in actual emergency operations on an incident. Employees who participate, or are expected to participate, in emergency response, shall be given training.