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Standard Guide for Health and Safety Training of Oil Spill Responders in the United States[1]

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1. Scope

1.1 This guide establishes minimum health and safety training standards for three types of oil spill responders: Type *A*, first responders who are responsible for initial containment and cleanup; Type *B*, longer-term shoreline cleanup personnel; and Type *C*, other necessary support personnel who have minimal contact with the contamination.

1.2 The oil covered by this guide includes light, medium, and heavy crudes, as well as hydrocarbon products, such as gasoline, light fuel oil, distillates, and bunker (heavy fuel) oil. It is not aimed at specialty chemicals and other potentially hazardous materials, although some aspects of the training program would apply to those substances.

1.3 A number of topics are not specifically addressed in this guide because they are covered by other standards or guidelines. Examples are hot work practices, maintenance and repair of equipment, fire fighting, electrical hazards, emergency medical care, disposal of wastes, and so forth. The user is expected to become familiar with standards for these areas as required.

1.4 *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.*

2. Referenced Documents

2.1 *U.S. Federal Regulations:*[2]

Title 29, Code of Federal Regulations (CFR), 1910.120 Regulations for Hazardous Waste Operations and Emergency Response (HAZWOPER)

Title 29, Code of Federal Regulations (CFR), 1910.132, General Requirements for Hazard Assessment and Training

Title 29, Code of Federal Regulations (CFR), 1910.133, Eye and Face Protection

Title 29, Code of Federal Regulations (CFR), 1910.134, Respiratory Protection

Title 29, Code of Federal Regulations (CFR), 1910.135, Head Protection

Title 29, Code of Federal Regulations (CFR), 1910.136, Foot Protection

Title 29, Code of Federal Regulations (CFR), 1910.138, Hand Protection

Title 29, Code of Federal Regulations (CFR), 1910.146, Enclosed Spaces

Title 33, Code of Federal Regulations (CFR), 154, Subpart F, Facility Response Plan Requirements

Title 33, Code of Federal Regulations (CFR), 155, Subpart F, Vessel Response Plan Requirements

Title 40, Code of Federal Regulations (CFR), 300, National Oil and Hazardous Substances Pollution Contingency Plan (NCP)

3. Terminology

3.1 *Definitions of Terms Specific to This Standard:*

3.1.1 *area contingency plan*—provides the initial governmental organization structure and mode of operation for the spill response. In the United States, it is prepared in advance by the area committee and applicable state and local response officials in accordance with 40 CFR 300, NCP.

3.1.2 *buddy system*—a requirement of 29 CFR 1910.120 that response personnel must work within sight/communication of a partner at all times.

3.1.3 *cold (support) zone*—minimal exposure area maintained as an uncontaminated location for support functions. Food service, clean equipment storage, and financial offices are examples of a cold zone. Operations in this area are generally carried out by Type *C* personnel.

3.1.4 *confined space*—an enclosed space or area, such as a tank, compartment, or pit where ventilation or access, or both, may be limited (refer to 29 CFR 1910.146).

3.1.5 *hot (early response) zone*—an area where there are potential exposure hazards. Type *A* workers are involved in containment and recovery operations in this zone. Airborne concentrations of hazardous substances may require respiratory protection in addition to other personal protective equipment.

3.1.6 *hyperthermia*—an abnormally high body temperature caused by exposure to elevated temperatures or radiant heat, or both.

3.1.7 *hypothermia*—an abnormally low body temperature caused by exposure to cold air or water.

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[2] Available from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402.

3.1.8 *on-scene coordinator (OSC)*—In the United States, the pre-designated official responsible for ensuring immediate and effective response to a discharge or threatened discharge of oil or hazardous substance (40 CFR 300). The Coast Guard designates the OSC's for coastal zones and the Environmental Protection Agency (EPA) designates OSC's for inland zones.

3.1.9 *personal protective equipment (PPE)*—equipment used to shield or insulate a person from a chemical, physical, or thermal hazard. Personal protective equipment is available for skin, eyes, face, hands, feet, head, ears, and respiratory system, as appropriate.

3.1.10 *site safety and health officer*—One who is responsible for developing training curricula and site safety and health plans. Often referred to as site safety officer.

3.1.11 *site safety and health plan*—the framework that defines safety and health considerations and strategy for a specific site.

3.1.12 *site safety and health supervisor*—an individual in the field responsible for ensuring that the site safety and health plan is implemented as prescribed. The site safety officer can fill both positions.

3.1.13 *warm (contamination reduction) zone*—an area where oil is present but in a generally weathered state. In addition to decontamination and equipment decommissioning areas, contaminated shorelines containing weathered oil with vapor levels below that requiring respiratory protective equipment are considered warm zones for purposes of this guide. Type *A* or *B* workers, or both, would operate in these zones.

4. Significance and Use

4.1 This guide summarizes required course components to be included in training programs for oil spill response personnel. Its purpose is to assist trainers in developing curricula that address the health and safety risks specific to oil spill response. This guide may be tailored by the trainer to fit unique circumstances that are present if training is conducted during an actual spill emergency and is not intended to preclude consideration of regulatory requirements.

5. Types of Response Workers

5.1 The level of training required will depend on the level of involvement for each type of worker. For purposes of this guide, the three categories or types of workers are defined in Table 1.

5.1.1 *Type A Workers*, operate in the hot zone and are the most likely to encounter the spilled oil in a fresh state. Training for Type *A* workers should emphasize methods for determining the presence of harmful vapors and proper use of respiratory protective equipment.

5.1.2 *Type B Workers*, operate in the warm zone and include decontamination support personnel and shoreline cleaning crews. The oil they encounter will be in a weathered state. Training for Type *B* workers should emphasize mechanical hazards, dermal exposure, slips, trips, falls, and so forth.

5.1.3 *Type C Workers*, operate in the cold zone and include support personnel with no probability of contacting the spilled oil (cafeteria staff, financial advisors, secretaries, and so forth).

TABLE 1 Oil Spill Response Worker Categories

Type A—Hot-Zone Personnel
Response managers
Supervisors
Equipment operators
Boom deployers
Boat operators
Skimmer crews
Dispersant handlers
Barge personnel
Tank truck operators
Bulldozer operators
Other initial response personnel
Security forces
Shoreline assessment team
Site safety and health officers
Field medical personnel
Vapor monitoring personnel
Etc.
Type B—Warm-Zone Personnel
Shoreline clean-up personnel
Decontamination personnel
Wildlife coordinators
Animal handlers
Waste management/handling personnel
Etc.
Type C—Cold-Zone Personnel
General land-based support
Historians
Legal advisors
Food service personnel
Financial services personnel
Supply personnel
Etc.

Type *C* workers do not require specialized safety and health training unless they expect to visit the spill site or take part in Type *A* or *B* activities.

6. Training Matrix

6.1 The recommended training curriculum subjects are presented in matrix form by worker types in Table 2. Though there

TABLE 2 Health and Safety Training Matrix

Subjects	Worker Types		
	Type A	Type B	Type C
General awareness	•	•	•
Exposures and chemical hazards			
Mechanical hazards	•	•	
Slips, trips, and falls	•	•	
Explosion and fire	•	•	
Biological hazards	•	•	
Physical hazards	•	•	
Water hazards	•	•	
Exposure routes (air, skin, ingestion)	•	•	
Confined space entry	•		
First aid	•	•	•
Safety and health requirements			
Industrial hygiene monitoring	•		
Respiratory protection	•		
Eye and ear protection	•	•	
Flotation devices	•	•	
Footwear	•	•	
Skin protection (gloves and protective clothing)	•	•	
Hard hats	•	•	
Personal hygiene	•	•	
Decontamination procedures	•	•	