

## CHAPTER 18 SPILL PREVENTION AND RESPONSE PLANNING

### C18.1 SCOPE

This Chapter contains criteria to plan for, prevent, control, and report spills of POL and hazardous substances. It is DoD policy to prevent spills of these substances due to DoD activities and to provide for prompt, coordinated response to contain and clean up spills that might occur. Remediation beyond that required for the initial response is conducted pursuant to DoDI 4715.8, "Environmental Remediation for DoD Activities Overseas."

### C18.2 TERMS AND DEFINITIONS

Facility. See Storage, Distribution and Handling Facility definition in Chapter 5, Hazardous Materials.

Facility Incident Commander (FIC) (previously known as the Installation On-scene Coordinator). The official who coordinates and directs DoD control and cleanup efforts at the scene of a POL or hazardous substance spill due to DoD activities on or near the installation. This official is designated by the installation commander.

Facility Response Team (previously known as the Installation Response Team) (FRT). A team performing emergency functions as defined and directed by the FIC.

Hazardous Materials. Raw materials, commodities, or other manufactured products that exhibit at least one of the hazardous characteristics described in Table C5.T3 of Chapter 5, Hazardous Material. Hazardous materials do not include hazardous wastes.

Hazardous Substances. Substances that are classified as hazardous according to a range of properties (i.e., flammable, oxidizing, or representing a hazard to the environment) described in Table C5.T3 of Chapter 5, Hazardous Material. Hazardous substances include both hazardous materials and hazardous wastes.

Installation. A base, camp, post, station, yard, center, or other activity under the jurisdiction of the Secretary of a Military Department that is located outside the United States and outside any territory, Commonwealth, or possession of the United States.

Oil. POL of any kind or in any form, including, but not limited to, petroleum, fuel POL, sludge, POL refuse and POL mixed with wastes other than dredged spoil.

Operating Instructions (Betriebsanweisungen). Workplace-specific instructions that provide information on handling hazardous substances as well as information on risks for human health and the environment associated with hazardous substances handled at each specific workplace. An example of an operating instruction is provided in Appendix C5.A6 of Chapter 5, Hazardous Material.

Ordinary and Conventional Facilities (einfache und herkömmliche Anlagen). Facilities storing, distributing, and/or handling water endangering substances that are designed and constructed so that the risk of water pollution is low. See Chapter 5, Hazardous Materials.

POL. Refined petroleum, oils, and lubricants.

POL Filling Facility (Abfüllanlagen). Facilities used for the filling of containers with POL substances; these include areas in which POL substances are transferred from one container into another. POL filling facilities are considered a part of a POL facility.

Secondary Containment (Auffangvorrichtung). Leak-proof constructions, rooms in buildings (fluid retention rooms), and/or pre-fabricated building components (collecting vats/Auffangwannen) that are designed to collect leaking substances from containers or piping, and leak-proof drainage areas designed to channel off leaking substances from containers or pipelines into collection devices (e.g., holding tanks, sumps).

Significant Spill. A spill of a hazardous material that poses a threat to humans and/or the environment, regardless of volume. Additionally, any uncontained release to the land or water in excess of any of the following quantities:

- for POL or liquid or semi-liquid hazardous material, hazardous waste, or hazardous substance, in excess of 400 liters (110 gallons);
- for other solid hazardous material, in excess of 225 kilograms (500 pounds); or
- for combinations of POL and liquid, semi-liquid, and solid hazardous material, hazardous waste, or hazardous substance, in excess of 340 kilograms (750 pounds).

If a spill is contained inside an impervious berm, or on a nonporous surface, or inside a building and is not volatilized and is cleaned up, the spill is considered a contained release and is not considered a significant spill.

Water Endangering Substances. Water endangering substances are all substances classified under Water Hazard Class 1 to 3 (see definition of Water Hazard Class in Chapter 5, Hazardous Materials).

Worst Case Discharge. Maximum volume of a substance to be released before safety measures are activated to stop the release. The maximum spilled volume is determined by considering the release time and the assumed volume flow at the highest possible operating pressure. It is based on all parts of the facility.

### **C18.3 REQUIREMENTS**

#### **C18.3.1 PLAN REQUIREMENTS**

All DoD installations will prepare, maintain and implement a Spill Prevention and Response Plan, which provides for the prevention, control and reporting of all spills of POL and hazardous substances. The plan will provide measures to prevent, and to the maximum extent practicable, to remove a worst case discharge from the facility. The plan will be updated at least every 5 years or when there are significant changes to operations. The plan should be kept in a location *on the premises that is easily accessible* to the FIC and FRT. The Plan must include sections that specifically address emergency procedures (*Alarmplan*) and evacuation and rescue procedures (*Flucht- und Rettungsplan*). The Plan must also include work- and substance-related operating instructions (*Betriebsanweisung*) for all hazardous and water endangering substances.

**C18.3.2 PREVENTION SECTION**

The prevention section of the plan will, as a minimum, contain the following:

- C18.3.2.1 Name, title, responsibilities, duties, and telephone number of the designated FIC and an alternate.
- C18.3.2.2 General information on the installation including name, type or function, location and address, charts of drainage patterns, designated water protection areas, maps showing locations of facilities described in paragraph C18.3.2.3, critical water resources, land uses and possible migration pathways.
- C18.3.2.3 An inventory of storage, handling and transfer sites that could possibly produce a significant spill. For each listing, using maps as appropriate include a prediction of the direction and rate of flow, and total quantity of POL or hazardous substance that might be spilled as a result of a major failure.
- C18.3.2.4 An inventory of all POL and hazardous substances at storage, handling, and transfer facilities described in paragraph C18.3.2.3.
- C18.3.2.5 Arrangements for Emergency Services. The plan will describe arrangements with installation and/or local police departments, fire departments, hospitals, contractors, and emergency response teams to coordinate emergency services.
- C18.3.2.6 Means to Contact Emergency Services. The plan will include a telephone number or other means to contact the appropriate emergency service provider (e.g., installation fire department) on a 24-hour basis.
- C18.3.2.7 A detailed description of the facility's prevention, control and countermeasures, including structures and equipment for diversion and containment of spills, for each site listed in the inventory. Measures should permit, as far as practical, reclamation of spilled substances. Chapters governing hazardous materials, hazardous waste, POL, underground storage tanks, pesticides and PCBs provide specific criteria for containment structure requirements.
- C18.3.2.8 A list of all emergency equipment (such as fire extinguishing systems, spill control equipment, communications and alarm systems (internal and external) and decontamination equipment) at each site listed in the inventory where this equipment is required. This list will be kept up-to-date. In addition, the plan will include the location and a physical description of each item on the list, and a brief outline of its capabilities.
- C18.3.2.9 An evacuation plan for each site listed in the inventory, where there is a possibility that evacuation would be necessary. This plan will describe signal(s) to be used to begin evacuation, evacuation routes, alternate evacuation routes (in cases where the primary routes could be blocked by releases of hazardous waste or fires), and a designated meeting place.
- C18.3.2.10 A description of deficiencies in spill prevention and control measures at each site listed in the inventory, to include corrective measures required, procedures to be

followed to correct listed deficiencies and any interim control measures in place. Deficiencies regarding operations or any related security systems must be promptly eliminated. If personnel detecting the deficiency(ies) are not able to implement a corrective action, the deficiency(ies) must be promptly reported to their supervisor

#### C18.3.2.11 Written Procedures

C18.3.2.11.1 Operations to preclude spills of POL and hazardous substances.

C18.3.2.11.2 Inspections.

C18.3.2.11.3 Record keeping requirements.

C18.3.2.12 Site-specific procedures should be maintained at each site on the facility where significant spills could occur.

### **C18.3.3 SPILL CONTROL SECTION**

The control section of the plan (which may be considered a contingency plan) will identify resources for cleaning up spills at installations and activities, and to provide assistance to other agencies when requested. As a minimum, this section will contain:

C18.3.3.1 Provisions specifying the responsibilities, duties, procedures and resources to be used to contain and clean up spills.

C18.3.3.2 A description of immediate response actions that should be taken when a spill is first discovered.

C18.3.3.3 The responsibilities, composition, and training requirements of the FRT.

C18.3.3.4 Procedures for FRT alert and response to include provisions for:

C18.3.3.4.1 Access to a reliable communications system for timely notification of a POL spill or hazardous substance spill.

C18.3.3.4.2 Public affairs involvement.

C18.3.3.5 A current roster of the persons, and alternates, who must receive notice of a POL or hazardous substance spill, including a Defense Energy Support Center (DESC) representative if applicable. The roster will include name, organization mailing address, and work and home telephone number. Without compromising security, the plan will include provisions for the notification of the emergency coordinator after normal working hours.

C18.3.3.6 The plan will provide for the notification of the FIC, installation commander and local authorities in the event of hazard to human health or environment.

C18.3.3.7 Assignment of responsibilities for making the necessary notifications including notification to the emergency services providers.

- C18.3.3.8 Surveillance procedures for early detection of POL and hazardous substance spills.
- C18.3.3.9 A prioritized list of various critical water and natural resources that will be protected in the event of a spill.
- C18.3.3.10 Other resources addressed in prearranged agreements that are available to the installation to clean up or reclaim a large spill due to DoD activities, if such spill exceeds the response capability of the installation.
- C18.3.3.11 Cleanup methods, including procedures and techniques used to identify, contain, disperse, reclaim and remove POL and hazardous substances used in bulk quantity on the installation.
- C18.3.3.12 Procedures for the proper reuse and disposal of recovered substances, contaminated POL and absorbent materials, and procedures to be accomplished prior to resumption of operations. Hazardous materials determined to be waste must be disposed of according to the procedures outlined in Chapter 6, Hazardous Waste.
- C18.3.3.13 A description of general health, safety and fire prevention precautions for spill cleanup actions.
- C18.3.3.14 A public affairs section that describes the procedures, responsibilities, and methods for releasing information in the event of a spill.

#### **C18.3.4 REPORTING SECTION**

The reporting section of the plan will address the following:

- C18.3.4.1 Recordkeeping when emergency procedures are invoked.
- C18.3.4.2 Any significant spill will be reported to the FIC immediately. Immediate actions will be taken to eliminate the source and contain the spill.
- C18.3.4.3 The FIC will immediately notify the appropriate In-Theater Component Commander and/or Defense Agency and the executive agent and submit a follow-up written report when:
- C18.3.4.3.1 A spill occurs inside a DoD installation and cannot be contained within any required berm or secondary containment; or
  - C18.3.4.3.2 The spill exceeds 400 liters (110 gallons) of POL; or
  - C18.3.4.3.3 A water resource has been polluted; or
  - C18.3.4.3.4 The FIC has determined that the spill is significant.
- C18.3.4.4 When a significant spill occurs inside a DoD installation that cannot be contained within the installation boundaries or threatens the local Host Nation drinking water resource, the appropriate In-Theater Component Commander and/or Defense Agency, executive agent and Host Nation authorities (*Aufsichtbehörde*) will be

notified immediately. In addition, an explosion, fire, and/or accident resulting in human injury at a facility handling flammable liquids must be reported to the competent German authorities (*Aufsichtbehörde*).

**C18.3.4.4.1 Baden-Württemberg**

Personnel operating, filling or emptying, servicing, cleaning, monitoring, or inspecting facilities containing hazardous materials must immediately notify the competent authorities (*untere Wasserbehörde*) in the event of a release of water endangering substances in which the threat of pollution or a hazard to a water body cannot be excluded. If the competent authority cannot be reached, the nearest police station must be notified.

**C18.3.4.4.2 Bayern**

Personnel operating, filling or emptying, discontinuing, dismantling or disposing of, servicing, cleaning, monitoring, or overhauling a facility containing hazardous materials must immediately notify the competent authorities or the nearest police station in the event of a significant release (*nicht nur unbedeutende Menge*) of water endangering substances that have filtered into a surface water body, a sewage treatment plant, or the ground, or, for other reasons, the threat to a body of water cannot be excluded. The obligation for notification also applies when the release of water endangering substances is only suspected to have occurred from a facility and the impact to a water body has occurred. The obligation for notification applies to the party responsible for the release and the party that implemented measures to investigate, reduce or dispose of the contamination generated by the facility.

**C18.3.4.4.3 Hessen**

Personnel operating, filling or emptying, servicing, cleaning, monitoring, or inspecting a facility must immediately notify the competent authorities or the nearest police station in the event of a release of water endangering substances that have filtered into a surface water body, a sewage treatment plant, or the ground, or, if for other reasons, the threat to a water body cannot be excluded. The obligation for notification also applies when the release of water endangering substances is only suspected to have occurred from a facility and the impact to a water body has occurred. The obligation for notification does not apply if only minor (*unbedeutende*) quantities of substances have been released.

**C18.3.4.4.4 Rheinland-Pfalz**

The competent authorities or the nearest police station must be immediately notified in the event of a release of water endangering substances during operation or transport activities if substances have filtered, or are going to filter, into a water body, a sewage treatment plant, or into the ground, or, if for other reasons, a threat to a water body cannot be excluded. This requirement applies to:

- anyone who operates facilities handling and/or transporting water endangering substances; and
- anyone who stores, fills, and transports these substances outside the confinement of an approved facility.

Furthermore, the notification requirement applies to the operator, the driver, the personnel servicing, cleaning, monitoring, or inspecting the facility, and to the party responsible for the release of the water endangering substance.

C18.3.4.5 If a significant spill occurs outside of a DoD installation, the person in charge at the scene will immediately notify the authorities listed in section C18.3.4.4, and, additionally, will notify the local police and obtain necessary assistance.

### **C18.3.5 TRAINING AND SPILL RESPONSE DRILLS**

Installations will provide necessary training and spill response drills to ensure the effectiveness of personnel and equipment.

### **C18.3.6 REMOVAL AND MANAGEMENT OF CONTAMINATED SOIL**

After completion of the initial response, any remaining free product and/or obviously contaminated soil will be appropriately removed and managed. Further action will be governed by DoDI 4715.8, "Environmental Remediation for DoD Activities Overseas." Contaminated soil and any remaining free product must be analyzed before final disposal and may require disposal as waste requiring special supervision (see Chapter 6, Hazardous Waste).

### **C18.3.7 IMMEDIATE RESPONSE ACTION IN EMERGENCY CASES**

A facility operator must immediately discontinue operations in the event of damage or a breakdown in operations that may impact a body of water, unless it is possible to prevent or contain a hazard or damage from impacting the body of water. If necessary, the facility must be evacuated.

### **C18.3.8 SPECIAL REQUIREMENTS FOR OFF-SITE PIPELINES**

A 24-hour spill emergency service must be maintained for off-site pipelines (*Fernleitungen*). Emergency service personnel must be qualified and equipped with proper vehicles, devices, and tools to contain the spill and, when feasible, make necessary repairs.