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Civil Engineering



HAZARDOUS MATERIAL EMERGENCY PLANNING AND RESPONSE PROGRAM

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This instruction implements AFPD 32-40, *Disaster Preparedness*, by helping users plan for and respond to DoD emergencies involving hazardous materials (HAZMAT). It covers requirements for HAZMAT emergency planning, training, response, and reporting. HAZMAT requirements for overseas installations are located in AFI 32-7006, *Environmental Program in Foreign Countries*.

SUMMARY OF REVISIONS

This revision aligns the Office of the Civil Engineer under their new organizational structure; delineates Emergency Planning Community Right-to-Know Act (EPCRA) roles and responsibilities; refers to AFMAN 32-4013, *HAZMAT Emergency Planning and Response Guide*, for additional guidance on HAZMAT emergency planning; updates and clarifies training requirements for HAZMAT emergency response according to 29 CFR 1910.120, Hazardous Waste Operations and Emergency Response; and updates information on the Multi-Product Emergency Response Plan for Inhalation Hazards.

HAZMAT EMERGENCY PLANNING AND RESPONSE OVERVIEW

- **1.1. Background.** This instruction identifies procedures essential to implement federal HAZMAT emergency planning and response regulations (29 CFR 1910.120) and associated Department of Defense (DoD) directives within the United States Air Force. The Air Force HAZMAT emergency planning and response program (hereafter referred to as the HAZMAT program) does not cover the explosives or the nuclear accident response programs. See AFI 32-4001, *Disaster Preparedness Planning and Operations*.
- **1.2. Program Objectives.** Plan and respond to any HAZMAT release to protect the environment and public health. Emergency Planning Community Right-to-Know Act (EPCRA) objectives and responsibilities are listed in Chapter 2. Specific HAZMAT program objectives include:
 - 1.2.1. Protecting the Environment and Public Health. Conduct a hazard analysis at each installation to ensure the early detection of all potential HAZMAT problems and risks to the environment and public health.
 - 1.2.2. Complying with Environmental Standards. Comply by planning, reducing likelihood, and preparing for HAZMAT releases prior to a HAZMAT release to prevent noncompliance with environmental standards.
 - 1.2.3. Responding Effectively to an Accidental Release. Respond to releases that occur to limit the extent of contamination and to reduce detrimental effects to the environment, personnel, and property.
 - 1.2.4. Keeping Local Communities Informed. Inform local communities and area committees of HAZMAT emergency planning and response activities.
 - 1.2.5. Minimizing Program Costs. Use existing resources efficiently to minimize clean up costs, property loss, and staffing requirements.
- **1.3. Concept.** Provide major commands (MAJCOMs), Air Reserve Components (ARCs) and installations with a framework to comply with HAZMAT requirements according to AFPD 32-40. This instruction is not intended to duplicate federal HAZMAT emergency planning and response standards. HQ Air Force Civil Engineer Support Agency (AFCESA) provides emergency response guidance in AFMAN 32-4004, *Emergency Response Operations*, and hazardous materials emergency planning guidance in AFMAN 32-4013, *Hazardous Material Emergency Planning and Response Guide*. MAJCOMs provide additional implementing guidance in their supplemental publication(s) to this instruction.
- **1.4. Responsibilities.** Headquarters United States Air Force (HQ USAF), MAJCOMs, and field operating agencies (FOAs) work to meet HAZMAT program objectives. The Air Force Civil Engineer (HQ USAF/ILE) oversees the HAZMAT program and monitors its progress. HQ USAF two-letter offices provide assistance in their functional areas. **NOTE:** Specific EPCRA roles and responsibilities are listed in **Chapter 2**.

1.4.1. HQ USAF:

1.4.1.1. HQ USAF/ILEO. Develops policies and procedures to incorporate federal HAZMAT emergency planning and response requirements into existing Air Force Disaster Preparedness Programs.

1.4.1.2. HQ USAF/ILEV:

- Evaluates the HAZMAT program to ensure compliance with federal environmental emergency planning and response requirements.
- Notifies the Air Force Secretariat (SAF/MIQ), Air Staff, and other environmental offices as appropriate of HAZMAT incidents.
- 1.4.2. CE FOA Responsibilities. Provides technical and contracting support to achieve the following HAZMAT program objectives.
 - 1.4.2.1. The Air Force Center for Environmental Excellence (AFCEE):
 - Finds technologies to meet HAZMAT emergency planning and response requirements.
 - Provides technical and contracting support to restore and clean up HAZMAT-contaminated sites.

1.4.2.2. HQ AFCESA. Provides:

- Technical support and guidance for implementing the Air Force HAZMAT emergency planning, response, and training programs.
- Technical information to the MAJCOMs and ARCs on implementing any needed corrective actions.
- 1.4.3. MAJCOM and ARC Responsibilities. Provide the execution guidance and oversee implementation of the HAZMAT program at their installations. Compile data after HAZMAT releases, prepare reports about lessons learned from a release, and modify HAZMAT policy as required. Broad responsibilities are assigned only to 2-letter office functional areas to increase flexibility at each MAJCOM for implementing this AFI. All references to MAJCOMs in this AFI include the ANG, HQ AFRC, and other agencies designated as "MAJCOM equivalent" by HQ USAF.
 - 1.4.3.1. Civil Engineer. Helps installations comply with the HAZMAT program requirements by ensuring each installation:
 - Implements the HAZMAT program according to this AFI.
 - Submits environmental release reports as described in **Chapter 5** of this AFI.
 - Submits environmental release reports to non-Air Force agencies according to applicable regulatory requirements.
 - Collects, prepares, and transports environmental samples to approved analytical laboratories for analysis when applicable.
 - Ensures compliance with all applicable state and local HAZMAT emergency planning and response requirements.
 - Provides HAZMAT emergency response training according to this AFI.
 - Integrates the HAZMAT program into the installation's disaster preparedness program.
 - Informs local communities and state and local emergency planning committees of their emergency planning and response program activities.
 - 1.4.3.2. Services. Guides installations in handling contaminated human remains and ensures proper disposal of HAZMAT-contaminated clothing.

- 1.4.3.3. Command Surgeon. Guides installations on the proper medical care, transportation, and screening of personnel who have been or could be exposed to HAZMAT by ensuring that each installation:
 - Receives industrial hygiene, radiological health, and environmental monitoring services to support HAZMAT emergency planning and response.
 - Receives advice on the health aspects of HAZMAT incidents such as potential health hazard areas, physiological effects, and adequacy of HAZMAT personal protective equipment.
 - Collects, prepares, and transports environmental samples to approved analytical laboratories for analysis when applicable.
 - Collect exposure data in accordance with AFOSH Standard 48-8, *Controlling Exposures to Hazardous Materials*.
- 1.4.3.4. The Command Comptroller and Field Level Activities. Advise installations in the identification of reimbursable materials and services used to assist civil authorities as a result of Air Force HAZMAT releases.

EPCRA ROLES AND RESPONSIBILITIES

- **2.1. Background.** Executive Order (EO) 12856, *Federal Compliance With Right-to-Know Laws and Pollution Prevention Requirements*, 6 August 93, requires all federal facilities to comply with the Emergency Planning Community Right-to-Know Act (EPCRA) (40 CFR 355, 370, and 372) and the Pollution Prevention Act of 1990.
 - 2.1.1. The primary focus of EPCRA is to:
 - 2.1.1.1. Identify the amounts of chemicals present on or released from facilities.
 - 2.1.1.2. Understand the potential problems HAZMAT poses to the surrounding communities and environment.
 - 2.1.1.3. Provide information to the public and local emergency planning and response organizations.
 - 2.1.2. EPCRA has four major aspects:
 - 2.1.2.1. Sections 301-303, Emergency Planning. Require federal facilities that produce, store, or use any extremely hazardous substances in a quantity equal to or greater than its threshold planning quantity (TPQ) to notify state emergency response commissions (SERC) and local emergency planning committees (LEPC) of such. Require the development of a local emergency response plan. Require installations provide a copy of the local emergency response plan to the LEPC.
 - 2.1.2.2. Section 304, Emergency Notification. Requires the installation to provide immediate notification about accidental releases of any EHS or CERCLA hazardous substance that exceeds the reportable quantity for that substance that can affect the surrounding area. Notification consists of an immediate phone call to the affected LEPCs and SERCs, with written follow-up.
 - 2.1.2.3. Sections 311-312, Community Right-to-Know Reporting. Requires the installation to submit material safety data sheets and an inventory of chemicals on site to the LEPC.
 - 2.1.2.4. Section 313, Toxic Chemical Release Inventory Reporting. Requires installation-specific reporting of total releases and off-site transfers of specific chemicals which exceed threshold values for activities that are not otherwise exempted from reporting. Air Force policy and guidance on Section 313 are issued annually by memorandum prior to the 1 July data reporting deadline. Air Force policy for Section 313 will be incorporated in future revisions of AFI 32-7080.
- **2.2. Roles and Responsibilities.** The organizational roles for EO 12856 implementation reflect established relationships between Air Force organizations and their functional counterparts in the civilian community. Specifically, CE will coordinate with LEPCs, SERCs, the EPA, and state and local environmental regulatory agencies.
 - 2.2.1. HQ USAF/ILEOR (Readiness Programs). Develops and oversees implementation of Air Force policy for EPCRA Sections 301 through 304, and the LEPC and SERC reporting requirements of Sections 311 and 312. Coordinates actions related to Sections 311 and 312 with HQ USAF/ILEVV.
 - 2.2.2. HQ USAF/ILEVQ (Environmental Quality). Is the office of primary responsibility (OPR) for Section 311, 312, (except for LEPC and SERC reporting requirements) and 313, the Pollution Preven-

- tion Act. Coordinates actions related to Sections 311 and 312 with HQ USAF/ILEOR, as these sections develop information critical to both the LEPCs/SERCs and the EPA. They ensure consistency in data reported under EPCRA Section 313 and analogous data provided by the Air Force to environmental regulatory agencies under other environmental programs, e.g., Clean Water Act (CWA), Clean Air Act (CAA), and Resource Conservation and Recovery Act (RCRA).
- 2.2.3. FOA Responsibilities. The interdisciplinary nature of EPCRA requires HQ AFCESA and HQ AFCEE to coordinate closely with one another to support implementation efforts including training, guidance, and execution support. In particular, close cooperation is essential on Sections 311 and 312. FOA responsibilities are delineated as described below. This delineation is not intended to preclude any FOA from supporting requirements for any or all sections of EPCRA when warranted by unique circumstances.
 - 2.2.3.1. HQ AFCEE. Provides technical consultation, contracting, training, and guidance support for major command execution of EPCRA Sections 311 through 313 requirements. Coordinates support in Sections 311 and 312 with HQ AFCESA.
 - 2.2.3.2. HQ AFCESA. Provides technical consultation, contracting, training and guidance support for major command execution of EPCRA Sections 301 through 304 requirements. Coordinates support in Sections 311 and 312 with HQ AFCEE.
 - 2.2.3.3. HQ AFMOA/SGOE. Provides policy, procedures, and guidance for Bioenvironmental Engineer support of the EPCRA program. Bioenvironmental Engineer support is required for EPCRA Sections 301-303, 311, 312 and 313. Coordinates with HQ AFCESA and HQ AFCEE as appropriate.
- 2.2.4. Major Command Civil Engineer Responsibilities. Provides execution guidance and oversees implementation of the EPCRA program at the installations. The Readiness Division is the OPR for EPCRA Sections 301-304 and the LEPC/SERC reporting requirements of Sections 311 and 312. The Environmental Division is the OPR for EPCRA Sections 311 and 312, with the exception of LEPC/SERC reporting, and Section 313.
- 2.2.5. Base Civil Engineer Responsibilities. Executes the EPCRA program. The CE Readiness Flight is the OPR for EPCRA Sections 301 through 304 and the LEPC/SERC reporting requirements of Sections 311 and 312. The CE Environmental Flight is the OPR for EPCRA Sections 311 through 313 and the Pollution Prevention Act with the exception of LEPC/SERC reporting. If applicable, coordinates program responsibilities with the Hazardous Materials Management Process (HMMP) team.-
- 2.2.6. Base Bioenvironmental Engineer Responsibilities. Supports execution of the EPCRA program by providing the Base Civil Engineer OPR with data, documentation, and process analysis in support of Sections 301-303, 311, 312 and 313. If applicable, obtains data from the HMP to complete required reports. Also acts as a consultant to the HMP.

NOTE:

Where applicable, hazardous material inventory-related responsibilities in paragraphs **2.2.5.** and **2.2.6.** may be turned over to the Hazardous Materials Management Process (HMMP) team.

HAZMAT EMERGENCY PLANNING

- **3.1. HAZMAT Emergency Planning Team.** Each installation must have a HAZMAT emergency planning team.
 - 3.1.1. The installation commander chooses the HAZMAT emergency program manager to direct the HAZMAT emergency planning team. The HAZMAT emergency program manager will normally be the CE Readiness Flight Chief. The installation provides the name of the HAZMAT emergency program manager in writing to the SERCs and LEPCs.
 - 3.1.2. The HAZMAT emergency planning team should include members from the areas of CE readiness, fire protection, environmental management, the HAZMAT pharmacy (where applicable), bioenvironmental engineering, security police, staff judge advocate, safety, and other representatives when appropriate.
 - 3.1.3. The HAZMAT emergency planning team sets up a HAZMAT program that meets the requirements of this AFI. **Attachment 2** provides a list of applicable federal HAZMAT planning and response regulations. Installations should maintain current copies of these publications.
 - 3.1.4. The HAZMAT emergency planning team oversees installation progress in achieving the program objectives listed in paragraph **1.2.**
- **3.2. Planning Process.** The HAZMAT planning process includes hazard analysis, capability assessment, and risk management to meet the requirements of this AFI. AFMAN 32-4013 provides detailed guidance for conducting HAZMAT emergency planning and consolidating results into a HAZMAT plan.
 - 3.2.1. Hazards Analysis. Hazards analysis identifies the specific hazards a HAZMAT release might bring to the installation and local community. Hazards analysis consists of hazard identification, risk analysis, and risk vulnerability.
 - 3.2.1.1. The HAZMAT emergency planning team uses hazards analysis information to set priorities and to document HAZMAT emergency planning and response efforts. See AFMAN 32-4013 for specific information on conducting a hazards analysis.
 - 3.2.1.2. The HAZMAT emergency planning team should use computer modeling programs to support the hazards analysis process.
 - 3.2.1.3. The installation Environmental Protection Committee (EPC) reviews the data the HAZMAT emergency planning team or other working groups collect to:
 - Prevent duplication.
 - Maximize data collection.
 - Enhance pollution prevention efforts.
 - 3.2.2. Capability Assessment. The installation HAZMAT emergency planning team conducts a capability assessment that assesses personnel, training, funding, information sources, command and control, site management, evacuation, personal protective equipment, monitoring, release control and containment, decontamination, laboratory support, clean up, recovery, and local community resources.

- 3.2.3. Risk Management. Risk management involves the effective use of resources to control the total HAZMAT problem (as identified by hazards analysis) on the installation. Risk management includes the acceptance of a specific level of unprotected risk which can be reduced through a combination of prevention activities and capability enhancement. See AFMAN 32-4013 for additional information on risk management.
- **3.3. HAZMAT Plan and Disaster Preparedness OPlan Appendix.** Each installation publishes a HAZMAT emergency planning and response plan (HAZMAT plan) or a HAZMAT emergency response appendix (HAZMAT appendix) to OPlan 32-1, Annex A. (See AFI 32-4001, *Disaster Preparedness Planning and Operations.*) HAZMAT plans and HAZMAT appendixes provide guidance to base personnel on local procedures for the handling of known and unknown HAZMAT. A recommended format for the HAZMAT plan or HAZMAT appendix is at **Attachment 3**. Information in HAZMAT plans or appendixes should not duplicate information in existing plans. Units should develop procedural guidance, such as the civil engineer's Base Civil Engineer Contingency Response Plan, to implement emergency response actions.
 - 3.3.1. The HAZMAT plan or appendix must:
 - 3.3.1.1. Include emergency action plan requirements contained in 29 CFR 1910.38(a) for post-emergency clean up operations.
 - 3.3.1.2. Identify the total resources (personnel and equipment) necessary to remove to the maximum extent practicable a worst-case HAZMAT release (including releases resulting from fire or explosion). AFMAN 32-4013 provides guidance for determining the worst-case and most likely HAZMAT release.
 - 3.3.1.3. Identify the resources necessary to reduce or prevent the substantial threat of a worst-case release.
 - 3.3.1.4. Identify the qualified individual, by position, having full authority to oversee the removal of HAZMAT from a contaminated site.
 - 3.3.1.5. Be consistent with the requirements of off-base plans, such as the Federal Response Plan, the Regional Response Plan, National Contingency Plan, Regional Contingency Plans, and area and local contingency plans.
 - 3.3.1.6. Not conflict with the procedures for major accident response in OPlan 32-1.
 - 3.3.2. The installation EPC reviews and approves the HAZMAT plan or HAZMAT appendix to OPlan 32-1, Annex A at least annually.
 - 3.3.3. A professional engineer certifies the HAZMAT plan at least every 3 years or more frequently as current federal, state, and local requirements specify. Furthermore, the plan should be recertified each time major changes occur which require the plan to be updated.
 - 3.3.4. Each installation sends a current unclassified HAZMAT plan to the appropriate SERCs and LEPCs and to other non-Air Force agencies or organizations as required.

3.4. Multi-Product Emergency Response Plan for Inhalation Hazards. The Directorate of Aerospace Fuels Management, San Antonio Air Logistics Center (SA-ALC) is the OPR for this plan. This plan provides guidelines for response and communication during an emergency involving liquid dinitrogen tetroxide. The Directorate will distribute a copy of this plan to Air Force installations located along the transportation routes. The installation must maintain copies of this plan. Copies can be obtained by calling (210) 925-6937 or DSN 945-6937.

HAZMAT EMERGENCY RESPONSE AND TRAINING

- **4.1. General.** Each installation must have a HAZMAT emergency response capability (29 CFR 1910.120q). This capability shouldn't differ from the Initial Response Element (IRE) and the Follow On Element (FOE) listed in AFI 32-4001 and AFMAN 32-4004. This response element must be able to respond effectively and contain a HAZMAT release to prevent or reduce human injury or death, property damage, product loss, and damage to the environment.
 - 4.1.1. Typically, an IRE consists of security police, fire department, and medical personnel. Additionally, the fire department forms the core of the HAZMAT Emergency Response Team. When HAZMAT incidents involve explosive ordnance, Explosive Ordnance Disposal (EOD) is also an IRE member. All IRE and HAZMAT Emergency Response Team members must be trained and DoD certified to the appropriate level(s) listed in **Table 4.1**.
 - 4.1.2. As a general rule, DCG and FOE members operate in the cold zone and do not need to be HAZMAT trained and DoD certified. On the other hand, if DCG and FOE members perform HAZMAT emergency response actions within the hot or warm zone, they must be trained and DoD certified to the appropriate certification levels.
 - 4.1.3. Because of their training and expertise, bioenvironmental engineers and environmental managers play a vitally important role during HAZMAT emergency response operations. Because they receive substantial technical training, bioenvironmental engineers and environmental managers may apply for certification through the DoD Certification Program Administration Center. See paragraph 4.6.3.

4.2. HAZMAT Emergency Response:

- 4.2.1. Installations must identify specific roles and responsibilities for trained/DoD certified HAZMAT responders. AFMAN 32-4004, Emergency Response Operations, contains additional guidance for responding to major accidents.
- 4.2.2. Installations are exempt from the response requirements in this instruction if they comply with the following:
 - Evacuate their personnel from the danger area when an emergency occurs,
 - Do not permit any of their personnel (including emergency responders) to assist in the emergency response, and
 - Prepare a local emergency action plan that delineates who (i.e., contractors, local community responders) is responsible for the HAZMAT incident response.
- 4.2.3. Organizations causing an accidental HAZMAT release will assist the installation's emergency response team to the maximum extent practical. However, these personnel will not be tasked beyond their current level of training or capability according to the HAZMAT emergency planning and response plan.
- 4.2.4. The senior fire official (SFO) is responsible for command and control at the immediate HAZMAT incident site (hot, warm, and cold zones).

4.2.5. The designated on-scene commander has operational control of the overall HAZMAT emergency response.

NOTE:

According to 29 CFR 1910.120, personnel, to include OSCs and SFOs, can only direct command and control operations at the immediate HAZMAT incident site (hot, warm, and cold zones) if they have been trained and DoD certified to the Awareness, Operations, and Incident Commander Levels (OSHA Levels 1, 2, and 5).

- 4.2.6. When responding to a HAZMAT incident, the IRE and HAZMAT Emergency Response Team must:
 - 4.2.6.1. Be trained and DoD certified to the appropriate level of response.
 - 4.2.6.2. Properly identify, through site analysis, all HAZMAT items and conditions at the incident site.
 - 4.2.6.3. Properly respond to provide command and control, rescue, extinguishment, and containment actions based on the conditions present. Once these actions have been accomplished the HAZMAT Emergency Response Team's involvement reverts to a support role. Recovery, neutralization, clean up, and disposition of hazardous materials are accomplished by trained experts in the related field and are not a HAZMAT Emergency Response Team function. Personnel who perform post emergency response functions must be trained in accordance with 29 CFR 1910.120e.
 - 4.2.6.4. Wear the appropriate protective clothing and equipment based on the hazards present and recommendations by base bioenvironmental engineer.
 - 4.2.6.5. Perform emergency response actions with the minimum number of trained personnel necessary to safely respond to the incident site.
 - 4.2.6.6. Make effective use of the buddy system (groups of two or more) in hazardous areas.
 - 4.2.6.7. Provide backup personnel and medical assistance during response operations.
 - 4.2.6.8. Use appropriate decontamination procedures and equipment.
 - 4.2.6.9. Assign a trained HAZMAT safety and health coordinator to monitor all response operations.
- 4.2.7. Air Force and non-Air Force personnel who can operate specialized equipment or offer specialized functional expertise (i.e. heavy equipment operators, EOD) can be brought into a HAZMAT incident when an emergency need exists for their skills. However, the OSC (or designated representative) must give an initial briefing to these personnel prior to their participation in any emergency response. The initial briefing includes:
 - 4.2.7.1. Instructions on the use of personal protective equipment.
 - 4.2.7.2. The chemical hazards involved.
 - 4.2.7.3. Decontamination procedures.
 - 4.2.7.4. The duties to be performed.
 - 4.2.7.5. Emergency evacuation procedures.

- 4.2.8. Liquid Dinitrogen Tetroxide. The Directorate of Aerospace Fuels Management, SA-ALC will notify Air Force installations located along routes of liquid dinitrogen tetroxide (N2O4) shipments of the shipment's date, origin, and destination, in message format, one week prior to each shipment.
 - 4.2.8.1. In the event of an accident or incident involving these shipments, the Air Force Operations Support Center will notify the Air Force installation nearest the scene of the accident/incident to activate their major accident response annex to OPlan 32-1.
 - 4.2.8.2. An Air Force representative will report to the scene and assume duties of the DoD On-Scene Commander/Federal On-Scene Commander for command and control of emergency actions that DoD is responsible for until recovery actions are complete.
- **4.3. Post-Emergency Response.** Each Air Force installation must have a HAZMAT post-emergency response team or capability. The post-emergency response team ensures that site clean up and remediation activities are performed safely and are consistent with all applicable environmental requirements, including the proper disposal of hazardous materials or wastes. Training and post-emergency response procedures should be carried out in accordance with AFI 32-7042, *Solid And Hazardous Waste Compliance* and 29 CFR 1910.120e.
- **4.4. Post-Incident Review and Critique.** All incidents that require a disaster control group response require a post-incident review and critique to evaluate the HAZMAT plan's effectiveness and identify response deficiencies. The HAZMAT emergency planning team then makes appropriate changes to the plan, equipment, or training as necessary.
- **4.5. HAZMAT Emergency Response Training.** The goals of the DoD HAZMAT Training and Certification Program are to comply with the Code of Federal Regulations, meet National Fire Protection Association Standard 472, to provide standardized training, and ultimately enhance DoD's HAZMAT emergency response capability. The program was also created to eliminate the need to purchase contractor provided training. Installations must ensure that all employees with a HAZMAT emergency response role (IRE, selected FOE members, and the HAZMAT Emergency Response Team) are trained and DoD certified in accordance with 29 CFR 1910.120q before they take part in an actual HAZMAT emergency response. The HAZMAT Emergency Planning Team will identify personnel requiring training that exceed **Table 4.1.**

Table 4.1. HAZMAT Emergency Response Minimum Training Requirements.

Employee Category	Training Categories				
	1	2	3	4	5
Designated OSC and Alternates	X			X	
Base Civil Engineer	X			О	
Senior Fire Officials	X	X		X	X
HAZMAT Emergency Response Team (Note 1)	X	X	X		
Fire Protection Personnel	X	X			
CE Readiness	X	О	О		О
Explosive Ordnance Disposal	X	О	О		

Employee Category		Training Categories					
Medical Personnel (Note 2)	X	X					
Security Police	X						
"X" designates mandatory training. "O" designates optional training.							

TRAINING CATEGORIES:

- 1 First Responder Awareness (29 CFR 1910.120 and NFPA 472). Typical instruction time is 10 12 hours, including time for the computer-based testing and performance test portion of the course.
- 2 First Responder Operations (29 CFR 1910.120 and NFPA 472)
- 3 First Responder Technician (29 CFR 1910.120 and NFPA 472)
- 4 On-Scene Commander (MLMDC 813 or associated mobile training team located at Maxwell AFB AL.)
- 5 First Responder Incident Commander (29 CFR 1910.120 and NFPA 472)
- NOTE 1. Based on an installation's hazards analysis, HAZMAT Emergency Response Team members may not require technician level training. This is true in instances where the installation only has a HAZMAT Operations level mission or chooses to have outside help to control the HAZMAT incident.
- NOTE 2. As a minimum, personnel that respond directly to HAZMAT incidents to provide care to the injured require First Responder Awareness level training and DoD certification (i.e. ambulance personnel, flight medicine doctors). This also includes medical personnel that provide treatment to contaminated victims from a HAZMAT incident (i.e. acute care, primary care or emergency room personnel). Additionally, medical emergency response personnel who must enter the hot or warm zone of a HAZMAT incident also require First Responder Operations level training and DoD certification. Normally, emergency medical care in the hot and warm zone is provided by the fire department. In this instance, First Responder Operations level training and DoD certification would not be required.
- **4.6. Training Sources.** At base-level, HAZMAT emergency response training is provided by graduates of the Goodfellow AFB TX HAZMAT Train-the-Trainer course. To maintain program accreditation and comply with the Code of Federal Regulations, these trainers use National Fire Protection Association (NFPA) 472, *Standard for Professional Competence of Responders to Hazardous Materials Incidents*, as the standard for the HAZMAT emergency response training and a computer-based testing program known as CerTest (Certification Testing).
 - 4.6.1. The primary target audience for fire department HAZMAT instructors are fire fighters at their home duty station. Additionally, because of the equipment required, fire department instructors are also the primary source for providing all HAZMAT operations and technician level training. Where applicable, fire department instructors should seek the assistance of qualified readiness flight HAZMAT instructors to team teach this material or to assist with required performance testing.

- 4.6.2. Conversely, readiness flight instructors are responsible for training all other personnel on base who require HAZMAT Awareness level training.
- 4.6.3. The DoD Certification Program Administration Center issues DoD certification certificates for successfully completing the certification process, which includes mandatory computer-based testing and performance testing. Personnel who have had prior HAZMAT training or receive HAZMAT training from other approved sources may still become DoD certified by successfully completing the challenge test process. See Chapter 2 of the CerTest Procedural Guide for specific challenge test procedures.
- 4.6.4. Training requirements for Air Force and non-Air Force personnel offering specialized functional expertise is outlined in paragraph **4.2.7.** and **Table 4.1.** of this AFI.
- 4.6.5. HAZMAT emergency response training and certification requirements apply only to employees who respond to the incident scene and are not intended to apply to employees that manage minor spills which are routinely within their control to effectively contain and clean up. This training is covered by the Federal Hazardous Communication (HAZCOM) Training Program.
- 4.6.6. Installations with a HAZMAT emergency response capability must exercise all aspects of this capability at least annually. See AFI 32-4001.
- 4.6.7. Installations that store, ship, or use extremely hazardous substances in excess of the TPQ should conduct their HAZMAT exercises jointly with the appropriate state or LEPC or their equivalent. Take into consideration any mutual aid agreement that the installation may have.
- **4.7. Refresher Training.** Personnel trained and DoD certified at the First Responder Awareness, Operations, Technician or Incident Commander levels require annual refresher training to comply with the law. They shall receive annual refresher training of sufficient content and duration to maintain their competencies, or shall demonstrate competency in those areas at least yearly. Examples include classroom training, briefings, self-guided training using HAZMAT multimedia courseware, or a show of competency during exercises or real world HAZMAT emergency responses.
- **4.8. Training Documentation.** Each organization must document initial and annual refresher HAZMAT Emergency Response Training.
 - 4.8.1. Initial HAZMAT Emergency Response training should be documented in accordance with the CerTest Procedural Guide.
 - 4.8.2. Documenting refresher training is an organizational responsibility. To comply with 29 CFR 1910.120 (8) (ii), a statement shall be made concerning an employee's training or competency, and if a statement of competency is made, the employee's supervisor shall keep a record of the methodology used to demonstrate such competency. HAZMAT Emergency Response refresher training should be documented in accordance with local procedures.

RELEASE NOTIFICATION AND REPORTING

5.1. Release Notification and Reporting .

- 5.1.1. Execute all release notification and reporting requirements according to applicable federal, state, and local regulations. (See **Attachment 2** for federal regulations.) Notification and reporting requirements must be fully complied with for reportable environmental releases that occur on Air Force property (including Government-Owned, Contractor-Operated), or that an Air Force activity has caused.
 - 5.1.1.1. Submit environmental release notification within the Air Force using the Air Force Operational Reporting System, Operational Status Reports (OPREP-3) according to AFMAN 10-206, *Operational Reporting*. Notify appropriate MAJCOM offices and HQ USAF/ILEV/ILEO of any release that meets one or more of the following criteria:
 - results in injury or loss of life,
 - results in loss of aircraft or facility,
 - causes interruption of flying operations,
 - causes environmental contamination extending beyond installation boundaries,
 - creates financial impact exceeding \$50,000,
 - may result in litigation, publicity, or media coverage, or
 - other reasons, as specified by local commander.
 - 5.1.1.2. Include in the OPREP-3 report the following information:
 - date and approximate time of release,
 - location of release,
 - chemical description or common name of released hazardous material(s),
 - approximate amount(s) released, and
 - primary, situation-specific reason for notifying MAJCOM or HQ USAF/ILEV/ILEO, e.g., contaminant entered public drinking water supply, or media coverage anticipated.
 - 5.1.1.3. A separate OPREP-3 report is not required to transmit the information listed above. Take action to eliminate duplicate reporting by consolidating the above information in a single OPREP-3 report to meet all notification requirements, including environmental, readiness, and others. Unless a release meets one or more of the criteria listed above, notification of HQ USAF/ILEV is not required when response and clean up are completed in a routine manner.
- 5.1.2. Provide follow-up reports on incidents meeting any of the criteria listed above to the MAJ-COM by telephone, e-mail, or OPREP-3 as required by the situation. MAJCOMs submit follow-up information to HQ USAF/ILEV/ILEO on an exception basis to fulfill HQ USAF information requirements.
- **5.2. EPCRA Requirements.** The installation must have the mechanism in place to provide:

- 5.2.1. Immediate notification about accidental releases of certain chemicals above a specific quantity that can affect the surrounding area. Notification consists of an immediate phone call to the affected LEPCs and SERCs, with written follow-up (EPCRA, section 304).
- 5.2.2. Reporting of material safety data sheets (EPCRA, section 311) and emergency and hazardous chemical inventory forms (EPCRA, section 312) to the appropriate state and local emergency planning committees.

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Attachment 1

GLOSSARY OF REFERENCES, ABBREVIATIONS, ACRONYMS, AND TERMS

References

AFI 10-206, Operational Reporting

AFPD 32-40, Disaster Preparedness

AFI 32-4001, Disaster Preparedness Planning and Operations

AFMAN 32-4004, Emergency Response Operations

AFMAN 32-4013, HAZMAT Emergency Planning and Response Guide

AFI 32-7006, Environmental Program in Foreign Countries

AFI 32, 7042, Solid And Hazardous Waste Compliance

AFI 32-7086, Hazardous Materials Management

AFI 36-401, Civilian Training and Development

Emergency Management Institute, *Overview of the Incident Command System* (SM305.7), The National Emergency Training Center, 1992

EPA/FEMA/DOT, Technical Guidance for Hazards Analysis, Emergency Planning for Extremely Hazardous Substances, December 1987

FEMA/DOT/EPA, Handbook of Chemical Hazards Analysis Procedures

National Fire Academy, The Incident Command System, The National Emergency Training Center, 1989

National Fire Protection Association (NFPA) 472, Standard for Professional Competence of Responders to Hazardous Materials Incidents, 1997

National Response Team, Criteria for Review of Hazardous Materials Emergency Plans (NRT-1A), May 1988

National Response Team, *Developing a Hazardous Materials Exercise Program* (NRT-2), September 1990National Response Team, *Hazardous Materials Emergency Planning Guide* (NRT-1), March 1987

Abbreviations and Acronyms

AFCEE—Air Force Center for Environmental Excellence

AFCESA—Air Force Civil Engineer Support Agency

AFI—Air Force Instruction

AFRES—Air Force Reserve

BCE—Base Civil Engineer

CERCLA—The Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended.

CFR—Code of Federal Regulations

DCG—Disaster Control Group

DoD—Department of Defense

DoE—Department of Energy

EPCRA—Emergency Planning and Community Right-To-Know Act of 1986

FOA—Field Operating Agency

FOE—Follow-on Element

HAZMAT—Hazardous Material

IRE—Initial Response Element

LEPC—Local Emergency Planning Committee

MAJCOM—Major Command

OSC—On-Scene Commander

RCRA—Resource Conservation and Recovery Act of 1976

SAF—Secretary of the Air Force

SARA—Superfund Amendments and Reauthorization Act of 1986

SPCC—Spill Prevention, Control and Countermeasures

TPQ—Threshold Planning Quantity

Terms

Cold Zone—The zone encompassing the warm zone and is used to carry out all other support functions of the incident. Workers in the cold zone are not required to wear personal protective clothing because the zone is considered safe. The mobile command post, DCG, staging area, and the triage/treatment area are located within the cold zone.

Disaster Control Group—The disaster response force element that goes to the scene of a major accident or natural disaster to provide command and control under the direction of the on-scene commander.

Disaster Response Force—The organization used for disaster response, command and control, and recovery.

Emergency Coordinator—Person responsible for handling hazardous waste releases and emergencies under the Resource Conservation and Recovery Act. May be a member of the HAZMAT emergency planning team.

Emergency Response Coordinator—Person responsible for managing an oil release under the Spill Prevention, Control and Countermeasures Plan. May be a member of the HAZMAT emergency planning team.

Entry Crew—Performs the physical reconnaissance of the problem area, if safely possible. Documents and reports the presence of potential life hazards and environmental factors. Assists in plan formulation for control actions. Dons proper protective clothing and equipment and enters the cordoned off hazardous area to perform product control.

Extremely Hazardous Substance—Any substance listed in appendix A or appendix B of 40 CFR 355.

Appendix A is an alphabetical listing of extremely hazardous substances. Appendix B lists extremely hazardous substances in order of each substance's Chemical Abstracts Service registry number.

Facility—For emergency planning purposes, the term "facility" in 40 CFR 355, as it applies to the Air Force, is considered equivalent to an "installation."

Follow-on Element—The non-emergency response elements of a disaster response force that deploy to the accident scene after the initial response element to expand command and control and perform support functions.

Hazards Analysis—Used to obtain a clear understanding of what hazards exist and what risk they pose to people, property, missions, and the environment. It consists of determining where hazards are likely to exist, what places would most likely be adversely affected, what hazardous materials could be involved, and what conditions might exist during a spill or release. This section also assesses the probability of damage or injury. The information developed in a hazards analysis provides the basis for establishing priorities and subsequent planning and also provides the documentation to support hazardous materials planning and response efforts.

Hazard Identification—The first phase in the Hazards Analysis process where facilities handling, storing or disposing of hazardous materials above specific screening levels are identified.

Hazardous Material (HAZMAT)—All hazardous substances, petroleum, natural gas, synthetic gas, acutely toxic chemicals, and other toxic chemicals including hazardous waste.

Hazardous Material (HAZMAT) Awareness Training—HAZMAT Awareness Training is not synonymous with the Awareness Ancillary Training Programs definition found in AFCAT 36-2223, USAF Formal Schools. Ancillary Awareness Training Programs do not require attendance at formal training sessions. Ancillary training requirements are satisfied informally through newspaper articles, read-and-sign items, pamphlets, bulletins, or commanders call. On the other hand, HAZMAT Awareness Training is for individuals who are likely to witness or discover a hazardous release and who have been trained to initiate an emergency response sequence by notifying the proper authorities of the release. This training is very comprehensive and requires the trainee to understand and demonstrate specific tasks in a formal training session . HAZMAT Awareness Training takes at least eight hours to teach the course material, complete the required performance tests, and administer the computer-based final exam.

Hazardous Material (HAZMAT) Emergency Response Capability—Administrative term used to identify disaster response force personnel assigned and trained to the appropriate level (Awareness, Operations, Technician, and Incident Command) to respond to HAZMAT incidents.

Hazardous Substance—Any substance listed in 40 CFR 302, table 302.4.

Hot Zone—The area immediately surrounding a hazardous materials incident, which extends far enough to prevent adverse effects from HAZMAT releases to personnel outside the zone.

Immediate HAZMAT Incident Site (Hot And Warm Zones)—The area around the HAZMAT incident which extends far enough to prevent adverse effects from HAZMAT releases to personnel outside the zone. It also includes the areas where personnel and equipment decontamination takes place.

Incident Commander—For the purpose of this AFI, the senior fire official (SFO) responsible for command and control at the immediate HAZMAT incident site (hot and warm zones).

Initial Response Element—The disaster response force element that deploys immediately to the disaster scene to provide initial command and control, to save lives, and to suppress and control hazards.

Installation Hazardous Material (HAZMAT) Emergency Planning and—Response Program Manager The person assigned as the base point of contact for the HAZMAT program. The HAZMAT emergency program manager takes part in local emergency planning and must ensure the base Emergency Planning and Community Right-To-Know Act requirements are implemented.

Local Emergency Planning Committee—A committee established by the state commission for each emergency planning district to plan and coordinate local emergency response actions.

Major Installation—In the Air Force, a self-supporting center of operations for actions of importance to Air Force combat, combat support, or training. It is operated by an active, reserve, or guard unit of group size or larger with all land, facilities and organic support needed to accomplish the unit mission. It must have real property accountability through ownership, lease, permit, or other written agreement for all real estate and facilities. Agreements with foreign governments which give the Air Force jurisdiction over real property meet this requirement. Shared use agreements (as opposed to joint use agreements where the Air Force owns the runway) do not meet the criteria to be major installations. This category includes Air Force bases, Air Force Reserve bases, and Air National Guard bases.

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

On-Scene Commander—The person designated to coordinate the rescue efforts at the rescue site (Joint Publication 1-02). The senior member, normally the installation or support group commander, of the disaster control group. All disaster response force members at an accident scene are under the operational command and control of the on-scene commander. The senior fire official will serve as the OSC until a designated OSC arrives and is briefed on the situation. Under 40 CFR 300, the National Contingency Plan, the term OSC designates a federal on-scene coordinator. Because DoD provides their own coordinator, the on-scene commander fills this role.

Release—Any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment (including the abandonment or discarding of barrels, containers, and other closed receptacles) of any hazardous chemical, extremely hazardous substance, or toxic chemical.

Reportable Quantity—For any CERCLA (*The Comprehensive Environmental Response*, *Compensation, and Liability Act of 1980*, as amended) hazardous substance, the reportable quantity is that listed in the "Final RQ" column of table 302.4 in 40 CFR 302. For an EPCRA (*Emergency Planning and Community Right-To-Know Act*) extremely hazardous substance, the reported quantity is that listed in the "Reportable Quantity" column of appendix A or appendix B in 40 CFR 355. A copy can be obtained by calling the Environmental Protection Agency hotline at 1-800-535-0202.

Risk Analysis—The third phase in the Hazards Analysis process which assesses the likelihood of an accidental release of a hazardous material and the consequences that might result, based on the estimated vulnerable zones. The analysis is based on the history of previous incidents, experience at the installation, and the best available information.

Risk Assessment—Activity to assess the risks of hazardous materials (HAZMAT) present on an installation. Assess all HAZMAT and their accidental worst case release scenario.

Risk Management—The effective use of available resources (i.e., time, manpower, and funding) to prioritize and complete actions required to reduce risk, either through preventive actions or increased response capability. Risk management concepts include engineering controls, institutional controls,

training requirements, and operational procedures.

Safety and Health Monitor—Monitors the safety and health of all personnel within the cordoned hazardous area. Consults with Medical, Bioenvironmental Engineer personnel and other technical specialists on the safety and health aspects of the hazardous material incident. Observes operations for unsafe conditions. The Safety and Health monitor has the authority to alter, suspend, or terminate activities which pose an imminent danger condition or are immediately dangerous to life or health. The Safety and Health monitor should remain in constant contact with the senior fire official. Additionally, the Safety and Health monitor maintains a log of exposure times for each person in the hazard zone.

Threshold Planning Quantity (TPQ)—For any extremely hazardous substances, the quantity listed in the "Threshold Planning Quantity" column in appendix A or appendix B of 40 CFR 355.

Vulnerability Analysis—The second phase in the Hazards Analysis process which assesses the areas potentially affected by the release of a hazardous material, including on and off the installation; includes gathering information on the extent of the vulnerable zone, conditions that influence the zone, size and type of population within the zone, missions and critical systems that may be impacted, property that might be damaged, and the environment that might be affected.

Warm Zone—The area of a hazardous material incident where personnel and equipment decontamination and hot zone support takes place. It includes control points for the access thus assisting in reducing the spread of contamination.

Attachment 2

FEDERAL REQUIREMENTS FOR HAZMAT PLANNING AND RESPONSE

- 29 CFR 1910.38, Emergency Action Plans and Fire Prevention Plans
- 29 CFR 1910.119, Process Safety Management of Highly Hazardous Chemicals
- 29 CFR 1910.120, Hazardous Waste Operations and Emergency Response
- 29 CFR 1910.146, Confined Space
- 29 CFR 1910.1200, Hazard Communication
- 29 CFR 1910.1450, Occupational Exposure to Hazardous Chemicals in the Laboratory
- 33 CFR 153, Control of Pollution by Oil and Hazardous Substance Discharge Removal
- 33 CFR 154, Facilities Transferring Oil or Hazardous Material in Bulk
- 40 CFR 68, Risk Management Plans for a Chemical Accident Release Prevention (Proposed)
- 40 CFR 109, Criteria for State, Local and Regional Oil Removal Contingency Plans
- 40 CFR 110, Discharge of Oil
- 40 CFR 112, Oil Pollution Prevention (SPCC & Facility Response Plans)
- 40 CFR 117, Reportable Quantities for Hazardous Substances
- 40 CFR 122, National Pollutant Discharge Elimination System (NPDES) Permit Application Regulations for Storm Water Discharges
- 40 CFR 125, Criteria and Standards for Best Management Practices
- 40 CFR 262, Generators of Hazardous Waste
- 40 CFR 264 & 265, Contingency Plan and Emergency Procedures for Permitted and Interim Status Standards
- 40 CFR 280, Technical Standards and Corrective Action Requirements for Owners and Operators of Underground Storage Tanks
- 40 CFR 300, Oil and Hazardous Substance Pollution Contingency Plan (National Contingency Plan)
- 40 CFR 302, Designation of Reportable Quantities (RQs) and Notification Requirements for Hazardous Substances Under CERCLA
- 40 CFR 355, Emergency Planning and Notification Under CERCLA
- 40 CFR 372, Toxic Chemical Release Reporting
- 40 CFR 761, Polychlorinated Biphenyls (PCBs) Manufacturing, Processing, Distribution in Commerce and Use Prohibitions
- 44 CFR 302, Emergency Operations Plans Requirements
- 49 CFR 171-178, DOT HAZMAT Regulations
- 49 CFR 194, Response Plans for Onshore Oil Pipelines (PS-130)

Attachment 3

RECOMMENDED HAZMAT PLAN OR OPLAN 32-1 APPENDIX FORMAT

- 1. Introduction
 - a. Emergency Action Plan
 - b. Telephone Roster
 - c. Mission Statement
 - d. Legal Authority and Responsibility for Responding
 - e. Abbreviations and Definitions
 - f. Assumptions/Environmental Setting
 - g. Concept of Operations
 - (1) Governing Principles
 - (2) Organizational Roles and Responsibilities
 - (3) Relationship to Other Plans
 - h. Instructions on Plan Use
 - (1) Purpose
 - (2) Plan Distribution
 - i. Record of Amendments
- 2. Hazards Analysis
 - a. Hazards Identification
 - b. Vulnerability Analysis
 - c. Risk Analysis
- 3. Capability Assessment
 - a. Base Resources
 - b. Off-base Resources
- 4. Response Functions
 - a. Initial Notification of Response Agencies
 - b. Direction and Control
 - c. Communication (among responders)
 - d. Warning Systems and Emergency Public Notification
 - e. Public Information/Community Relations
 - f. Resource Management (including training)
 - g. Medical Support

- h. Environmental Management
- i. Decontamination Procedures
- j. Personal Protection of Citizens
 - (1) Indoor Protection
 - (2) Evacuation Procedures
 - (3) Other Public Protection Strategies
- k. Fire and Rescue Support
- 1. Security Police Support
- m. Civil Engineer Support
- n. Other Support Services
- 5. Containment and Clean Up
- 6. Documentation and Investigative Follow-up
- 7. Procedures for Testing and Updating the Plan
- 8. References

RECOMMENDED OPLAN 32-1 APPENDIX FORMAT

- 1. Purpose
- 2. Assumptions (Summary of Hazards Analysis)
 - a. Vulnerable Facilities
 - b. Pre-emergency Planning
- 3. Concept of Operations
 - a. Relationship of OPlan to HAZMAT Plan
 - b. Roles and Responsibilities
 - c. Federal, State, and Local Relationship
- 4. Emergency Response Phase
 - a. Notification Procedures
 - b. Site Management Practices
 - c. Evacuation Procedures
- 5. Recovery Phase
 - a. After Action Reports
 - b. Incident Review and Follow-up