



EF 10 –Hazardous Materials

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Tasked Agencies	
Primary County Agency(s)	County OES, Shasta Cascade Hazardous Materials Response Team Hazardous Materials Response Team (Type 2)
Supporting County Agency(s)	Local Fire Districts, Lassen County Department of Health and Social Services (Environmental Health), Hazardous Materials Response Team (Type 2)
Primary City Agency(s)	Fire Department (Hazardous Materials Response Team – Type 2)
Supporting City Agency(s)	N/A
Community Partners	National Guard 9 th Civil Support Team, Federal Emergency Management Agency Region 9 Decontamination Team, U.S. Environmental Protection Agency (EPA) Region 9 Superfund Technical Assessment and Response Team
Primary State Agency(s)	California Environmental Protection Agency, Department of Toxic Substances Control California Governor's Office of Emergency Services, Fire and Rescue Division, Hazardous Materials Section
Primary Federal Agency(s)	EPA

1 Introduction

1.1 Purpose

Emergency Support Function (EF) 10 outlines roles and responsibilities in responding effectively to a hazardous materials release or threatened release and provides a framework for response and mitigation activities to prevent or minimize injuries, environmental impact, and property damage.

Operational priorities for EF 10 include:

- Protect public and responder safety and health following releases of hazardous materials.
- Minimize environmental damage as a result of hazardous materials releases and response operations.

Preparedness, response, recovery, and mitigation activities that may be conducted to complete these priorities are listed in Appendix B.

1.2 Scope

Hazardous materials incidents may occur during the manufacture, use, storage, or transport of hazardous materials, or they may be deliberately caused by vandalism, sabotage, or terrorism.

1.3 Policies and Authorities

1.3.1 Policies

The following policies are currently in place:

- California Government Code, Title 2, Division 1, Chapter 7 (California Emergency Services Act).
- Title 2, Division 1, Chapter 7.5 (California Natural Disaster Assistance Act).
- California Code of Regulations, Title 19, Division 2 (Standardized Emergency Management System Regulations).
 - Chapter 4, Article 3
- California Health and Safety Code, Article 1.

1.3.2 Agreements

The following agreements are currently in place:

- Shasta Cascade Regional Hazardous Materials Team – Letter of Understanding

2 Situation and Assumptions

2.1 Situation

The following considerations should be taken into account and implement EF 10–related activities:

- Hazardous materials are transported through the County, creating a relatively high risk of potential hazardous materials incidents. An incident could occur anywhere, in rural and urban areas, and at any time throughout the County.
- Major roadways within the County are used for routine transportation of hazardous materials, with Highway 395 used the most heavily.
- Hazardous material incidents can threaten public health and safety, as well as the environment. While most hazardous material incidents involve smaller volumes of material, they do require specific approaches to different types of chemical and waste releases. It is important to assess the characteristics of the hazard, acquire the necessary resources, and develop a site-specific emergency response plan.
- The commencement of emergency response operations for hazardous material incidents may require multiagency and multidisciplinary responses. Disciplines involved may include fire response, law enforcement, environmental containment and cleanup, fish and wildlife, emergency medical services, environmental health, and others if needed.
- Some incidents may not have immediately obvious impacts on life, property, and the environment but may still have subtle long-term consequences for human health and the environment that will require further remediation.
- The California Governor's Office of Emergency Services, Fire and Rescue Division, Hazardous Materials Section coordinates statewide implementation of hazardous materials accident prevention and emergency response programs for all types of hazardous materials incidents and threats.
- The emergency field response to incidents including hazardous materials spills and releases is the responsibility of the fire services or in the case of State highways, the California Department of Transportation and/or California Highway Patrol.

2.2 Assumptions

EF 10 is based on the following planning assumptions:

- A natural or technological disaster could result in one or more situations in which hazardous materials are released into the environment.
- Fixed facilities (chemical plants, tank farms, laboratories, and industries operating hazardous waste sites that produce, generate, use, store, or dispose of hazardous materials) could be damaged so that existing spill control apparatus and containment measures are not effective.
- Hazardous materials that are transported may be involved in railroad accidents, highway collisions, or airline incidents.
- Damage to, or rupture of, pipelines transporting materials that are hazardous if improperly released will present serious problems.
- Emergency exemptions may be needed for disposal of contaminated materials.
- Laboratories responsible for analyzing hazardous material samples may be damaged or destroyed in a disaster.

3 Roles and Responsibilities

See Appendix B for a checklist of responsibilities by phase of emergency management.

4 Concept of Operations

4.1 General

The County Hazardous Materials Team #2 will be the primary agency responsible for coordinating oil and hazardous materials activities. Plans and procedures developed by the primary and supporting agencies provide the framework for carrying out those activities.

4.2 Basic Priorities

- **Life Safety.** In all hazardous incidents, the primary concern is life safety, starting with the life safety of the emergency responders.
- **Protecting the Environment.** Protection of the environment should be considered ahead of protecting property and equipment because property and equipment can be replaced.
- **Protecting Property and Equipment.** Because the environment, like human life, cannot be replaced, protecting property and equipment is the lowest priority for an effective, properly handled response to a hazardous material incident.

4.3 Information Sources

4.3.1 Chemical Transportation Emergency Center

The Chemical Transportation Emergency Center (CHEMTREC) (800-424-9300) provides 24-hour immediate advice by telephone with data on 350,000 chemicals. CHEMTREC will:

- Contact the shipper and manufacturer of the hazardous materials to advise them of the spill.
- Notify the National Response Center (NRC) if requested.
- Can provide a phone link between the hazardous materials teams and several different chemical experts and send hard copy via computer or fax.

- Serve as the National Poison Antidote Center. By contacting CHEMTREC, a conference call can be established with toxicologists from several poison control centers.

4.3.2 National Response Center

The NRC (800-424-8802), which is operated by the U.S. Coast Guard, receives reports from spillers and acts as the notification, communications, technical assistance, and coordination center for the National Response Team. The NRC is a single access point for accessing all federal agencies involved with hazardous materials. Being operated by the U.S. Coast Guard, it is the contact point for accessing the Pacific Strike Team, a specially trained and equipped hazardous materials team with expertise in handling water related spills.

4.3.3 California Poison Control System

The California Poison Control System (800-222-1222) provides emergency information 24 hours a day, seven days a week on the following:

- Swallowing poison
- Eye or skin irritation from toxic substances
- Inhalation of noxious fumes or vapors
- Animal, insect, snake, and spider bites
- Food or mushroom poisoning
- Drug reactions
- Attempted suicides or drug overdoses

4.4.4 Safety Data Sheets

Safety Data Sheets are the primary communications link between chemical manufacturers and users. They provide brief information about the hazards that may be anticipated in an emergency situation involving a particular substance.

Safety Data Sheets provide a good source of information, but definitive answers on toxicity and treatment for exposed victims should be sought from the California Poison Control System.

4.4.5 Computer Aided Management of Emergency Operations

Computer Aided Management of Emergency Operations (CAMEO) is a collection of 22 integrated programs and databases developed by the National Oceanic and Atmospheric Administration for persons dealing with hazardous materials. CAMEO also has a plume-modeling program to visualize vapor dispersion patterns. Most HazMat teams have CAMEO installed in vehicles.

4.5 Training Levels

Per Occupational Safety and Hazard Administration 29 Code of Federal Regulations 1910.120, County and City employees shall not work outside their scope of training, knowledge, and skill level.

- Individuals who are likely to witness or discover a hazardous substance release will be trained to the First Responder Awareness level. This group should include police officers and Public Works field personnel.

- Individuals that respond to releases will be trained to the First Responder Operations level. This includes fire service personnel.
- Fire service agencies will have personnel trained to the On-Scene Incident Commander level. Personnel trained to this level will respond and take command of a hazardous materials incident as soon as possible. Note: the first arriving unit will take command until personnel trained to the On-Scene Incident Commander level arrive.

4.6 Access and Functional Needs

Provision of hazardous materials–related response activities will take into account populations with access and functional needs. The needs of children and adults who experience access and functional needs shall be identified and planned for as directed by policy makers and according to State and federal regulations and guidance.

4.7 Coordination with Other EFs

The following EFs support hazardous materials–related activities:

- **EF 4 – Firefighting.** Provide specialized resources to support hazardous materials operations.
- **EF 8 – Health and Medical.** Provide emergency first aid to contaminated victims.
- **EF 16 – Law Enforcement.** Provide specialized resources to support hazardous materials operations.

5 Annex Development and Maintenance

CAL FIRE will ensure that this annex and supporting plans and documents are reviewed and updated at least every two years or when changes occur, such as lessons learned from exercises or actual incidents.

6 Appendices

- Appendix A – EF 10 Resources
- Appendix B – Roles and Responsibilities

Appendix A EF 10 Resources

The following resources provide additional information regarding EF 10 and hazardous materials–related issues at the local, state, and federal level:

City

- None at this time.

County

- Hazardous Materials Response Plan (**in development**)

State

- California Public Health Medical and Health Emergency Operations Manual (2011)
- California Hazardous Materials Incident Tool Box (January 2011)
- California Emergency Plan: EF 10 – Hazardous Materials

Federal

- National Response Framework
- National Contingency Plan
- National Fire Protection Association 472/473 – Standards for Competence of Responders to Hazardous Materials Incidents/Emergency Medical Services Personnel

Appendix B Roles and Responsibilities

The following checklist identifies key roles and responsibilities for EF 10 – Hazardous Materials. It is broken out by phase of emergency management to inform tasked agencies of what activities they might be expected to perform before, during, and after an emergency to support the hazardous materials function. All tasked agencies should maintain agency-specific plans and procedures that allow them to effectively accomplish these tasks.

Preparedness

Preparedness activities take place **before** an emergency occurs and include plans or preparations made to save lives and help response and recovery operations. Preparedness roles and responsibilities for EF 10 include the following:

- ☐ Develop and refine procedures to be used in hazardous materials assessments.
- ☐ Prepare and maintain plans and procedures, resource inventories, personnel rosters, and resource mobilization information necessary for the lead agency to carry out its responsibilities.
- ☐ Maintain liaison relationships with support agencies.
- ☐ Ensure that personnel are appropriately trained and equipped to deal with hazardous materials incidents.
- ☐ Conduct vulnerability analysis at critical facilities and make recommendations to improve hazardous material storage.
- ☐ Pre-position response resources when it is apparent that hazardous materials response resources will be necessary.
- ☐ Conduct, coordinate, and participate in all exercises involving hazardous materials operations.
- ☐ Develop mutual aid procedures to support response to a hazardous substance incident.
- ☐ Estimate logistical requirements (e.g., personnel, supplies and equipment, facilities, and communications) during the planning process and through exercise.
- ☐ Participate in exercises and training to validate this annex and supporting plans and procedures.
- ☐ Ensure that all hazardous materials personnel are trained in their responsibilities according to the departmental plans and procedures.

Response

Response activities take place **during** an emergency and include actions taken to save lives and prevent further property damage in an emergency situation. Response roles and responsibilities for EF 10 include the following:

- ☐ Upon notification, attempt to confirm the material involved, estimated quantity released, and location of the incident.
- ☐ Activate the Standardized Emergency Management System (SEMS) and Incident Command System (ICS) and appoint a Safety Officer.
- ☐ Establish an isolation area and move all people out of that area.
- ☐ Establish perimeter control/area security.

- ☐ Establish and identify command post and staging locations. Take measures to protect the public and the safety of responders.
- ☐ Deploy appropriately trained personnel to the incident area.
- ☐ Seek assistance, when necessary, from appropriate agencies.
- ☐ Coordinate with the California Highway Patrol on the response to oil and hazardous material incidents on State highways and County roads.
- ☐ Ensure that public health departments are advised and incorporated into the command system.
- ☐ Establish adequate zones for decontamination.
- ☐ Ensure that personnel are adequately protected and equipped to handle hazardous material incidents.
- ☐ Monitor and direct hazardous materials resources and response activities.
- ☐ Participate in Emergency Operations Center briefings, Incident Action Plans, Situation Reports, and meetings.
- ☐ Coordinate with support agencies, as needed, to support emergency activities.
- ☐ Coordinate with other agencies to obtain resources and to facilitate an effective emergency response among all participating agencies.
- ☐ Once all local resources have been utilized and expended, coordinate with the Logistics Section to assist in locating additional support resources.
- ☐ Work with appropriate agencies to determine site safety and when to declare the incident over and allow people back into the affected area.

Recovery

Recovery activities take place **after** an emergency occurs and include actions to return to a normal or an even safer situation following an emergency. Recovery roles and responsibilities for EF 10 include the following:

- ☐ Continue to provide support as required for the recovery phase of the incident through the appropriate Incident Commander.
- ☐ Continue to monitor personnel and the affected area for contamination.
- ☐ Support community recovery activities.
- ☐ Participate in after-action briefings and develop after-action reports.
- ☐ Initiate the financial reimbursement process for these activities when such support is available.
- ☐ Make necessary changes to this EF Annex and supporting plans and procedures to improve future operations.

Mitigation

Mitigation activities take place **before and after** an emergency occurs and include activities that prevent an emergency, reduce the chance of an emergency happening, or reduce the damaging effects of unavoidable emergencies. Mitigation roles and responsibilities for EF 10 include the following:

- ☐ Maintain an accurate and current listing of all fixed facilities that produce or store hazardous materials.

- ☐ Prepare site-specific plans for each facility that produces or stores extremely hazardous substances and update these plans annually or as necessary throughout the year.
- ☐ Participate in the hazard identification process and identify ways to improve the process.
- ☐ Continue to train personnel for hazardous material incidents.
- ☐ Develop radiological awareness programs for responders, the public, and industry.
- ☐ Develop emergency preparedness programs for hazardous materials incidents.
- ☐ Identify deficiencies or areas to be improved and seek funds to enhance protective measures to lessen the impact on vulnerable populations and/or minimize damage to critical facilities.