

7000 HAZARDOUS MATERIALS

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7100 SCOPE

7110 Introduction

This section is intended to meet the Federal Water Pollution Control Act (FWPCA) requirement for hazardous-substance-release contingency planning. Public Law 101-380, which created the Oil Pollution Act of 1990 (OPA 90), also amended the FWPCA (codified as Title 33, United States Code, Section 1321(j)(1)). Among other things, that amendment requires contingency planning for releases of hazardous substances in the Area Contingency Plan (ACP), and requires response plans for waterfront facilities and vessels handling hazardous substances. The substances designated by the FWPCA as hazardous, and therefore requiring contingency planning in accordance with the FWPCA, are listed in Title 40 CFR 116.4. Only 3 of those substances are handled in bulk in the Marine Safety Office (MSO) San Francisco Bay (SFB) Area Of Responsibility (AOR).

While the law requires planning for “hazardous substance (HAZSUB)” releases, the developers of this section have chosen to use the broader term “hazardous materials” (HAZMAT) for plan development, as defined in ACP Volume I, section 1200. The Coast Guard has authority, jurisdiction, and resources that may be used to assist a HAZMAT incident response even if the substance released is *not* a FWPCA-designated substance, and we should, therefore, plan for assisting a HAZMAT incident response. Essentially, this section addresses response to any undesirable non-oil substance leaked into the environment.

This section outlines the jurisdictional boundaries of HAZMAT incident response between federal, state, and local agencies, and identifies some of the potentially available response assets to address a hazmat incident.

7120 Background

For the purposes of this section, the discussion will be limited to hazmat incidents occurring during marine transportation only. This approach has been taken in order to isolate the issues of jurisdiction and response procedures to one clearly defined area. However, the authorities, jurisdictions, and resources identified herein may be useful in any hazmat incident impacting waters where the CG MSO SFB has jurisdiction as On Scene Coordinator (OSC).

In accordance with the California Hazardous Materials Incident Contingency Plan (HMICP), response and management of a hazmat incident is primarily the responsibility of local government acting as the lead for public health and safety within their jurisdiction. This is especially true when an incident occurs in an inland location. Local fire and police departments and other emergency personnel who have been trained in response procedures for hazmat incidents will respond and be the first officials to begin handling the emergency. If other local assistance is required, or, due to the size of an incident, state, or federal resources are needed, a larger response network is built through the Incident Command System (ICS) and a Unified Command (UC) representing joint decision-making authority will be developed. The vast majority of relatively routine hazmat incidents are handled in this manner.

However, hazmat-incident response in the marine environment offers a unique set of variables that do not lend themselves to be defined along clear jurisdictional lines. Local government personnel may have the resources and training to respond properly to land-based incidents, but do not have expertise in dealing with marine fire fighting or emergency response on water. Conversely, the CG has the expertise to manage many marine incidents, such as fire, disabled vessel management or rescue. The method to properly respond is further complicated by the introduction of state and federal specialized response

teams that have the proper training to assist in an incident response, but must be correctly requested and then integrated into the management structure in order to properly aid the Incident Command (IC) team.

The question of who is in charge of an incident and who actually manages the incident may be two separate entities. Section 311(c)(1) of the CWA, as amended by OPA 90, gives the OSC authority to “direct or monitor all Federal, State, and private actions to remove a discharge” (emphasis added). *(Sidebar note: since the authority cited is issued in the CWA, it only creates jurisdiction over discharges of those hazardous substances designated under Section 311(b)(2) of the CWA, and published in Title 40 CFR 116.4. There are only 3 such hazardous substances carried in bulk as cargo and discharged to just 5 facilities in the MSO SFB AOR. Smaller discharges of such substances may, of course, result from other sources.)* The National Contingency Plan (NCP), states (in 40 CFR 300.135(d)) that “the OSC’s efforts shall be coordinated with other appropriate federal, state, local, and private response agencies. OSCs may designate capable persons from federal, state, or local agencies to act as their on-scene representatives.” Thus, a local government may manage a response, and the OSC’s only involvement would be notification and confidence that the local official, serving as the OSC on-scene representative, had the capabilities to conduct a safe and effective response, with OSC assistance as needed.

The method by which an emergency is managed is contingent upon two variables: the incident’s location and size. If at a dock, where local responders can have direct access to a site, local government will start out in the lead. If the incident is on an anchored vessel or at sea, the CG will likely begin as the incident commander. Initial response to marine hazmat emergencies will involve local government responders, the CG, and appropriate state agencies, but as the incident grows and the need for specialized personnel and resources increase, the ICS will expand and the UC will be formed with the responsible decision makers. Given the specifics of a particular incident, the lead authority in the UC team would likely be the local government or the CG, with potential involvement by the responsible party (spiller) and the state.

Communication and coordination will be paramount in any hazmat incident in order to ensure a proper response structure and clear lines of authority exist.

7200 GOVERNMENT POLICY AND RESPONSE

7210 Introduction

The response system for the governmental agencies widely differs depending on which level of government is involved. Each level has its own unique capabilities, responsibilities, response strengths, jurisdictions, and authorities. The following sections describe the response actions and systems for the federal, state, and local agencies as viewed by the agencies themselves.

7220 Federal Policy and Response

Under the NCP, the federal OSC is the senior official for all response efforts. These responsibilities are shared between the CG and the EPA. The CG provides the OSC for oil discharges and hazmat releases into or threatening the coastal zone. EPA provides OSCs for oil discharges and hazmat releases into or threatening the inland zone. The CG OSC has additional responsibility for spills, releases, and threatened spills and releases from vessels and CG-regulated marine-transportation-related facilities. The boundaries between the CG and EPA zones can be found in this Area Contingency Plan, section 1400.

The role of OSC is radically different depending on the material(s) involved in a spill or threatening to impact federal waters. In incidents involving oil, the CG OSC takes a very active role in the response. The OSC serves as the senior member of the UC and directs the response activities. For hazmat releases or threatened releases, the OSC looks after federal interests and provides support to the local, county, or state responding agency. The OSC would assume an active role only under specific circumstances, such as when an incident exceeds response capabilities of local agencies. The OSC would assist the state and local agencies with any technical advice, obtaining specialized assistance, and monitoring of the response.

There are 7 areas of CG response in the event of a hazmat release. The paragraphs in italics are from a CG Headquarters directive, and the subsequent paragraphs contain amplifying information.

(1) Conducting local contingency planning for response to hazardous chemical releases.

The MSO is not a response organization. It is not our intent to create a contingency plan for response organizations. This section will identify the resources and authorities held by the COTP, SFB, that may assist in a hazmat incident response.

(2) Conducting traditional COTP response measures such as restricting access to the affected area and controlling marine traffic; notifying facilities operating vulnerable water intakes of the release; coordinating with state and local emergency forces; and assisting as resources and capabilities permit.

In northern California, the CO, USCG MSO SFB is designated as the COTP from the California-Oregon border south to the Monterey County-San Luis Obispo County line.

USCG COTPs serve as the designated OSCs for the coastal zone. Therefore, CO, MSO SFB is the OSC for the northern California coastal zone. See section 1400 for the description of the northern California coastal zone.

The CO of the MSO is designated by the Commandant of the USCG as the COTP for the purpose of giving immediate direction to CG law enforcement within his assigned AOR.

The COTP SFB AOR comprises the land masses and waters of Utah, except for Washington, Kane, San Juan, and Garfield Counties; Nevada, except for Clark County; and all of California north of San Luis Obispo, Kern, and San Bernardino Counties. Note that the AOR for the CG COTP SFB authority is not the same as the AOR for the CG OSC authority.

The COTP can control access to an area by establishment of an safety zone. That safety zone can include waterfront facilities, vessels, and areas of water or land, or both.

The COTP can enlist the aid of Federal, state, county, municipal, and private agencies to assist in the enforcement of access control. This authority also allows use of CG resources for transportation of hazmat incident responders, both government agencies and commercial.

The COTP can control marine traffic by directing vessel movements in a specified area.

The COTP can create a COTP order directing a specific vessel's operation, including anchoring, for, among other things, "temporary hazardous conditions".

The COTP can prohibit entry into U.S. waters for multiple reasons, including discharges of oil or hazardous materials.

The COTP can request a response from our Pacific Area Strike Team (PST) at Novato, California. The PST is the only west coast hazmat response organization directly controlled by the CG.

The COTP can have other CG units make marine band radio broadcasts for both informational purposes and to assist enforcement actions.

The CO, MSO SFB is also the Officer in Charge, Marine Inspection (OCMI). As OCMI he is tasked with inspection of vessels, shipyard and factory inspections, investigation of marine casualties and accidents, licensing mariners, and enforcement of vessel inspection, navigation, and seamen's laws in general.

The OCMI AOR is the same as the COTP AOR above.

(3) Conducting a preliminary assessment of the incident to: (1) evaluate the magnitude of the threat to the public health and welfare and the environment, (2) determine if response action by the spiller and/or the state and local government is adequate, (3) establish jurisdiction for a Federal response, and (4) collect the data necessary to formulate a response plan if a Federal response is warranted.

County and municipal agencies may have jurisdiction and responsibility. Their responders may require transportation, and the COTP may be able to arrange it.

If the COTP can bring expertise, personnel, or equipment to assist a problem at sea, we do not expect an offer of assistance to be declined. If the incident is at sea, the COTP can also contact Special Forces (including USCG National Strike Force (NSF), EPA Environmental Response Team (ERT), NOAA Scientific Support Coordinator (SSC), EPA Technical Assistance Team (TAT), etc.) for recommendations.

(4) Contacting the owner and/or operator of the source of the release, if known, to inform them of their potential liability for government removal costs, to explain the Coast Guard's role as OSC, and to gather information for response and port safety purposes. Administrative orders shall be used when appropriate to direct actions of the responsible party.

The state has various funding sources of their own, and should evaluate appropriate state sources before seeking CERCLA money.

While the COTP can issue an administrative order to a facility under the authority of CERCLA Section 106, the definition of facility under CERCLA section 101(9) does not include vessels. Therefore, the COTP cannot issue administrative orders to vessels. The COTP may, however, be able to use a COTP order to accomplish the same effect.

(5) Based on the findings of the preliminary assessment, carrying out first aid mitigation actions if the situation warrants immediate action. First aid mitigation actions are those response actions taken by OSC personnel necessary to address immediate concerns prior to the arrival of cleanup contractors or action by the responsible party.

(6) Monitoring cleanup actions of responsible parties or, in the case of Federal removals, providing on-scene supervision of removal activities, ensuring the employment of a sound removal

strategy. The OSC is not expected to be capable of designing and carrying out a complex removal plan. In certain situations, support from Special Forces (E.G. National Strike Force (NSF), EPA Environmental Response Team (ERT), NOAA Scientific Support Coordinator (SSC)) may be necessary to assist in the development or review of a removal strategy. In either case, the OSC shall ensure that guidelines regarding worker safety are adhered to by all parties involved in the response.

To create a site safety plan, COTP may require the assistance of the ship's agent or shipping company for providing both the hazardous materials manifest and assistance in creating a removal strategy.

(7) For Federal removals, arranging for the services of contractors and supervising their actions, ensuring that response costs are documented as required by Chapter 86 of the Marine Safety Manual.

MARINE SAFETY OFFICE SAN FRANCISCO BAY

24-hour phone: 510-437-3073 24-hour fax: 510-437-3072

The fax is attended daily from approximately 6:00 A.M. to 10:00 P.M.
If an incoming fax must be seen immediately between 10:00 P.M. and 6:00 A.M., please call the 24-hour phone number first to alert the watchstander.

7230 State Policy and Response

In California, the state's main role in any hazmat incident is to assist local government, and take part in the UC as appropriate. Certain resources exist at the state level, and if requested can be made available to assist federal and local responders in a marine hazmat incident.

A release or threatened release of a hazmat within the State of California must be reported. Hazmat includes any material that, because of its quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health or safety or to the environment, if released. There is no minimum reportable quantity. An immediate verbal report of any release or threatened release of hazardous material must be made to (1) the local emergency response agency (such as 9-1-1, or the fire or health department, as directed by local laws), then (2) to the Office of Emergency Services (OES) at 800-852-7550 or 916-262-1621. This immediate report should include: location of the release or threatened release; the name(s) of the person(s) reporting; hazardous material involved; estimates of the quantity, and potential hazards presented by the material.

OES will notify other federal and state agencies and appropriate local government contacts as specified in law. Assistance may be sought from local agencies, other state agencies, or the federal government for any incident response. Additionally, the notifier or responders may request that OES contact specialized state agencies for additional assistance. In California, the primary state agencies that will assist the incident responders are the following:

Department of Fish and Game (DFG) - the department is the "state agency coordinator" for any off-highway spill. In accordance with HMICP Figure 2.1, there is no pre-designated state IC *except* on-highway, where the CHP is the IC. DFG may be actively involved with the transition of an incident from the emergency response phase to the longer-term environmental remediation phase;

Department of Toxic Substances Control (DTSC) - as part of California's Environmental Protection Agency (Cal EPA), DTSC has expertise handling and responding to a situations involving hazmats;

Office of Environmental Health Hazard Assessment (OEHHA) - also part of Cal EPA and is concerned with researching and responding to a substance's impact to human health and the environment;

California Highway Patrol (CHP) - the state IC for any on-highway incident;

Regional Air and Water Boards - are both part of Cal EPA and have jurisdiction for air and water quality in their areas.

Hazmat responses will be conducted under the auspices of the California Standardized Emergency Management System (SEMS) (Chapter 1, Division 2, Title 19, California Code of Regulations). SEMS defines the principles of the incident-command system, incident resources and facilities, and common responsibilities. The key components of SEMS are:

(1) Five levels of emergency management will be used statewide to create uniform organization and terminology. The levels are field/incident, local government, operational area, region, and state.

(2) Five standard functions of the emergency response organization at all levels will be used. They are command/management, operations, plans/intelligence, logistics, and finance/administration.

(3) The Operational Area (generally the county) will be the central coordination point for information and resources at a major local incident.

(4) A statewide master mutual-aid system exists for coordination of operational area, regional, and state resources during major emergencies.

(5) An Operational Area Satellite Information System (OASIS) can be used to link all operational areas and OES via satellite communications.

(6) All state and local agencies must use SEMS during disaster responses and it is an eligibility requirement for local governments and agencies to receive state reimbursement following a disaster.

(7) SEMS guidelines and information on an approved course of instruction are available from state OES.

Further responsibilities and resources are contained in the California HMICP, compiled by the state OES. The HMICP contains a listing of additional federal, state, and local resources available during a response to a hazmat incident. The HMICP also outlines the policy and process that should be followed during a hazmat incident in California. The HMICP is currently being rewritten to be consistent with SEMS and other state response programs that the Legislature has created since its last edition.

For most hazmat emergencies, local-government responders will be on scene first at an incident within their jurisdiction. If not present on the scene, local-government representatives should be brought into the management of the incident as soon as possible. Generally, in any hazmat incident assisting agencies will respond from three functional areas:

(1) Fire Services - Certain fire departments have established a hazmat response team whose organizational structure will provide the necessary supervision and control for the essential functions required at a hazmat incident.

(2) Law Enforcement - The local law-enforcement agency will respond to most hazmat incidents. Depending on the incident factors, law enforcement may be a partner in the unified command of the incident, or may participate as an assisting agency. Some functional responsibilities which may be handled by law enforcement include: isolating the incident area; managing crowd control; traffic control; providing protective public action, such as evacuations or sheltering-in-place; and managing criminal investigations.

(3) Environmental-Health Agencies - In most cases, the local or state environmental-health agency will be at the scene as a partner in the command of the incident. Some functional responsibilities which may be handled by environmental-health agencies include: determining the nature and identity of the hazardous material; establishing the criteria for cleanup and disposal of the material; declaring the site safe for reentry by the public; providing the medical history of exposed individuals; monitoring the surrounding environment; assisting in the cleanup of the site; and providing technical advice.

These three functional areas will be addressed through local, state and federal officials responding to the incident utilizing ICS. The design of the ICS structure and the makeup of the UC will be determined by the specifics of a particular incident.

A system of hazmat mutual aid is being developed in California. A specific subset of the master mutual-aid program, it will simplify and organize procedures for responding agencies to share personnel and resources during an incident, however large.

7240 Local Government Policy and Response

Pursuant to the California Health and Safety Code Chapter 6.95, local governments have developed local area plans (which differ from the Federal ACPs) documenting policies and procedures for responding to hazmat incidents. These policies and procedures include sections on notification and coordination, communications, utilization of the incident-command system, pre-emergency planning, public safety and information, supplies and equipment, and responsibilities of responding organizations. The main responsibilities of the response agencies are to rescue and treat victims, perform fire suppression, isolate contaminated areas from the general public, control and contain hazardous materials, and facilitate any public evacuations or shelter-in-place operations. The area plan delineates who is responsible for management of the incident. Local area plans may differ on the designee of the incident commander. Representatives from local police, fire, or offices of emergency services may be the incident commander. Due to the proximity of these public safety agencies to potential hazmat sites on land they can respond quickly and adequately within their jurisdiction.

In regards to jurisdiction, area plans specify what locations would be covered for response by hazardous materials agencies. Jurisdictions may include one or more counties, one or more cities, unincorporated areas or any combination thereof. Jurisdictions may include all areas within city or county limits, which may include adjacent waters. Area plans may or may not discuss jurisdictions and response for the adjacent waters. Many local governments may not have considered response to hazardous materials for incidents which occur at docks, at adjoining bays or inlets, and at coastal waters. Their response in these waters may not have been considered due to a perception of the role of the CG and the California DFG in spills of oil and other petroleum-related products. Also, a local government's ability to respond to waterborne incidents may be limited.

In the coastal zone the legal OSC resides with the CG. However, the on-scene management of the incident may reside with the appropriate local government agency responder.

Local agencies may have a number of limitations in handling hazardous materials in waters and vessels. These include:

- Access to marine vessels;
- Communications with the master of the vessel;
- Hazardous materials experience with vessels;
- Experience with vessel operations;
- Knowledge and access to booming resources; and,
- Experience with marine contractors.

Therefore, the ability of representatives of local agencies to respond and be the incident commanders for hazmat marine incidents is limited.

Local agencies will vary in their ability to respond to incidents which occur in waters. The following is a general summary of local agency capabilities.

Docked Vessels - Most local agencies should be able to respond and take charge of incidents which occur at docked vessels. They may still require assistance from the CG to control vessel traffic, notify facilities with vulnerable intakes, and conduct booming.

Vessels at Anchorage - Some local agencies may be able to respond to incidents on vessels at anchor in bays or inlets. They may have the transportation and communication capabilities to handle the incident. There will probably be a greater need of assistance from the CG.

Vessels Underway - Few, if any, local agencies will be able to respond to incidents which occur off the coastal waters in the Pacific. For most incidents, the CG will be the primary response agency.

In all cases where hazmat incidents may impact local jurisdictions, local agencies must be notified. Even if local agencies cannot take mitigation actions at the vessel, they will still need to respond. Local governments will be responsible for the public safety of its citizens and property. They can control public access to contaminated areas. Local agencies can notify and possibly protect coastside facilities which may be impacted. Local agencies can provide logistical help to the lead agency. They can also provide personnel and other resources to the lead agency. Most local governments will provide mutual aid on request.

7300 SCENARIOS

7310 Major Threats

The scope of this section is confined to marine transportation-related hazmat incidents, and 7310 is reserved for risks from bulk shipments of hazardous materials. There are just three substances on the 40 CFR 166.4 list transferred across the shoreline in bulk in the COTP SFB AOR (liquid caustic soda

solution, sulfuric acid, and liquified anhydrous ammonia).

7320 Scenarios

The required scenarios for 7320 are: At Dock; Underway Inland Waters; and Underway High Seas. The scope of section 7000 is confined to marine transportation-related hazmat incidents, and 7320 is reserved for containerized or intermodal shipments of hazardous materials.

7400 RESPONSE ASSETS

This section identifies response organizations, beginning with regionwide (generally nongovernmental) organizations. These include chemical mutual-aid organizations, individual companies with response units, and information sources. Then county and municipal organizations are listed, spreadsheet-style, with the applicable home county, which is usually the SEMS Operational Area, listed on each page

Included with each response unit entry is a FIREScope description of that unit's capability. FIREScope is the Firefighting Resources of California Organized for Potential Emergencies, a mutual-aid organization originally based on fire response, but also involved with ICS development and, now, hazmat response.

Their hazmat-response unit descriptions are as follows:

	HAZMAT COMPANY TYPE I	HAZMAT COMPANY TYPE II
Capability:	Unknown Chemical Entry	Known Chemical Entry
PPE Level:	Level "A" (fully encapsulated suiting)	Level "B" (splash suiting w/SCBAs)
Equipment:	All of Type II company equipment, plus: Chemical references Computer air modeling Capabilities for sampling Special detection & monitoring (combustible monitoring gas/ oxygen concentration/radiological/pH/ heat sensing/oxidation)	In-suit communications
	Chemical-hazard categorizing	Plugging & patching (liquid only)
	Plugging & patching (vapor)	Diking, absorption, neutralization
	Large leak intervention	
Personnel:	5*	5*

* At least one company member trained to minimum level of Assistant Safety Officer, Hazmat (ICS-HM-222-5).

7410 Regionwide Resources

CHEMTREC (Emer: 1-800-424-9300, Nonemer: 1-800-262-8200) -

a 24-hour public service of the Chemical Manufacturers' Association; can provide:

- (1) immediate emergency action information for spill, leak, exposure, or fire control measures;
- (2) precautionary information;
- (3) assistance in identification of a hazardous substance if the manufacturer is known or if shipping papers are present; and,
- (4) immediate notification of manufacturers or shippers through their emergency contacts or notification of industry mutual-aid networks.

CHEMTREC can also assist with the following specific actions:

- (1) They operate the National Poison Antidote Center (NPAC) with immediate information of most known poisons and communications to all major hospitals.
- (2) They can contact the chemical manufacturer for detailed technical information, and, in some cases, activation of the manufacturer's response team.
- (3) They can contact carriers for technical information, waybill or cargo manifest printouts, and some carriers can assist with chemical- and wreckage-removal operations.
- (4) While the Chlorine Emergency Plan (CHLOREP) is organized by the Chlorine Institute, it is activated by CHEMTREC.

CHEMICAL COMPANIES WITH ASSISTANCE OR INFORMATION RESOURCES

AMERICAN CYANAMIDE 201-835-3100 (24 hours)	Will assist & provide information on their products.
B.A.S.F. WYANDOTTE 313-282-3300	Will provide information on their products.
DOW CHEMICAL CO. 517-636-4400	Will assist & provide information on their products, advise available for chlorine incidents.
DU PONT 302-774-7500	Will assist & provide information on their products, advice & response available for chlorine & hydrogen fluoride incidents on or off site.
NATIONAL AGRICULTURAL CHEMICALS ASSOCIATION 513-961-9300	Will provide information on pesticides.
UNION CARBIDE 212-551-2345	Will assist & provide information on their products.