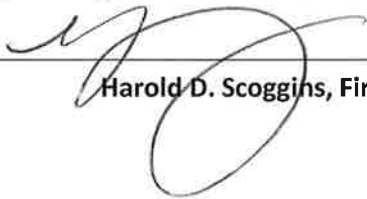


EMERGENCY SUPPORT FUNCTION #10 – OIL AND HAZARDOUS MATERIALS

RESPONSE PLANNING FUNCTION



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2-6-2017

Date



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2/7/17

Date

Note: This ESF is part of the Response Planning Function from the Comprehensive Emergency Management Plan and this version includes the 2016 updates. Seattle Fire Department acts as the ESF Coordinator and collaborated with many partners for respective updates.

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1. STAKEHOLDERS

Table 1

PRIMARY DEPARTMENT	ESF COORDINATOR
Seattle Fire Department	Seattle Fire Department

Table 2

SUPPORT DEPARTMENT AND AGENCIES	
Seattle Police Department	Seattle-King County Public Health Department
Seattle Public Utilities	King County Office of Emergency Management
Pierce County Department of Emergency Management	Washington State Emergency Management Division
Washington State Patrol	Federal Emergency Management Agency
US Coast Guard	

2. INTRODUCTION

2.1 Purpose

Emergency Support Function #10 (ESF #10) describes the policies and procedures administered by the Seattle Fire Department during disasters. It also defines the roles and responsibilities of the Seattle Fire Department Management Team during EOC activation.

2.2 Scope

This annex applies to Fire Department personnel, uniformed and non-uniformed, on and off duty. The focus is on the policies and procedures, resources, and objectives to address issues before, during and after major citywide emergencies or disasters.

3. SITUATION

3.1 Emergency Conditions and Hazards

- The City of Seattle encompasses an array of structures and occupancies engineered to serve the transportation, occupational, recreational, and residential needs of a population over 723,000.
- Among the daily activities in the City's business and industrial community, it is recognized that various amounts of hazardous materials (HazMat) are used in a myriad of processes. In addition to the normal and regulated amounts used and stored, larger bulk quantities are transported in and through the City over the highways and major arterials, the railroad system, in pipelines, and on ships through Elliott Bay and the Port of Seattle. Examples of Hazardous Materials incidents may include: Transportation incidents; Clandestine drug labs; Fixed site incidents; Spill or release; Multiple incapacitated patients; Visible environmental.
- Despite modern life safety and fire protection systems federal, state and municipal laws governing the use, transportation and storage of hazardous materials, the possibility exists that natural, mechanical or human caused disasters could result in releases, spills, fires and other catastrophic events. These events would require immediate and effective response of fire protection, emergency medical and hazardous materials services provided by the Department.
- Seattle has been designated an Emergency Planning District by the State Emergency Response Commission (SERC) as prescribed in WAC Section 118-40-150. As such, and consistent with WAC Section 118-40-170, the Fire Department is primarily responsible for administering and supporting the requirements of the City's Local Emergency Planning Committee, to include maintenance of the City's Hazardous Material Emergency Response Plan as set forth in WAC Section 118-40-180.

3.2 Planning Assumptions

- The Fire Department will be responsible for the stabilization of all hazardous materials incidents that threaten public safety except those incidents that are normally resolved by the Seattle Police Department's Explosives Disposal Unit or other federal/state response groups.
- The Fire Department maintains strategically located fire stations and equipment to address fire, medical and other emergency needs of the public. Among these resources is the Hazardous Materials Response Team. The Hazardous Materials Team is comprised of firefighters specially trained in the mitigation of hazardous materials events. Team members are trained to a Technician Level (highest possible).
- The Hazardous Materials Response Team will respond to incidents inside the city limits in support of jurisdictions where current mutual aid agreements exist with the City.
- In situations of major proportions that exceed the physical limitations of the Fire Department, help from outside the City shall be provided through other fire departments by way of mutual aid agreements, the King County Fire Resource Plan, and from other state and federal agencies arranged through the Seattle EOC.
- In addition, there should be radiological emergency, technical assistance and specialized resources from the State Department of Health, State Military Department, US Department of Energy, and the Federal Nuclear Regulatory Commission can be made available through the City of Seattle EOC or Emergency Management Staff Duty Officer. (A catalog of supplemental radiological assistance is maintained by the Seattle Office of Emergency Management.)
- Despite the best efforts of the Fire Department and other agencies that respond to assist, a catastrophic disaster could cause delays in response by emergency personnel and equipment.

4. CONCEPT OF OPERATIONS

4.1 Organization

- The Fire Department plays a vital role in City government and will be one of the most active entities during a wide area disaster. As a Department Head, the Fire Chief reports directly to the Mayor. Similarly, Assistant Chiefs report to the Fire Chief and assume various responsibilities.
- During a disaster, the Assistant Chief of Operations will have a major role in the mitigation of any significant event. Designated Fire Department members, including the Fire Chief or his designee, will respond to the EOC.
- The Operations Division of the Fire Department will be integral in the mitigation of any significant event. The foundation of any response will be Firefighters assigned to: Engines; Ladders; Medical Aid Units; Command Units; Other Specialty Units.
- In paramilitary configuration, approximately 209 Firefighters are on-duty per shift and are assigned to 33 fire stations strategically located throughout the City. There are 4 platoons. Off-duty personnel are recalled per calling plans in the event of a major emergency.

4.2 General Response

- The foundation of any HazMat response is the Hazardous Materials Response Team. A Hazardous Materials response will place the following fire resources at the scene:
 - Hazardous Materials Team(Engine 10; Ladder 1; Aid Car 10; Battalion Chief; HazMat Van; Medic Unit); Additional Engines; Additional Ladder Trucks; Medic Unit; Additional Battalion Chief; Deputy Chief of Operations; Safety Chief; Staffing Officer; Air Support Unit; Public Information Officer; Fire Buffs
- Chemical Release with Fire-A chemical release has its own challenges. These become more complex with the addition of fire. In this situation, additional tactics will be implemented: Positioning of hose streams to cool the fire; Confinement of the fire; and Application of firefighting foam to extinguish.
- Patient Care-Patient care will be conducted after emergency decontamination per EMS guidelines. If necessary, an MCI response will be requested.
- Direction and control are maintained through the paramilitary chain of command. The FAC has the authority to dispatch the necessary response type base on the incident and available resources. The Fire Department utilizes the Incident Command System to manage and mitigate incidence with the following priorities: Life safety; Incident stabilization; Property conservation; and Environmental protection.

5. RESPONSIBILITIES

5.1 Plans

- The Fire Department Disaster Management Plan contains the detailed procedures and operational guidelines for disasters and those rare incidents of high consequence such as earthquake, pandemic, and terrorism. Those plans are maintained in the Seattle Fire Department Orange Book and the Operating Guidelines Section 5007.
- The purpose of the Orange Book is to provide members with ready access to critical information in a format that is easily accessed and reviewed.
- In order to plan, respond and mitigate the many potential emergencies, the Fire Department operates in five levels, each reflecting the severity of the incident or event.
 - LEVEL V-This is the day to day operations level where incidents can be handled with minimal resources and the number of concurrent incidents is manageable. Command and general staff positions are typically handled by the Incident Commander, written Incident Action Plans (IAPs) are not implemented, and incidents are contained within the first few hours. The Resource Management Center would typically not be activated at this level. Note that the RMC may be activated at Level V during planned events such as Seafair. Event Action Plans (EAPs) will be generated and multiple operational periods are possible.
 - LEVEL IV-The Fire Alarm Center shall implement this level when minor impacts to citywide coverage occur due to planned events such as New Year's Eve or Fourth of July, during two or three-alarm situations, or when multiple separate incidents deplete available resources. Multiple-alarm incidents may require activating some Command or General Staff functions, but a written IAP would not generally be required and the control phase of the incident would usually be resolved in a single operational period
 - At this level, the RMC may be activated and staffed as indicated in the RMC Activation Procedures and Orange Book, Annex A (Personnel Reporting Procedures). Dispatch Level 4 reduces Automatic Fire Alarms (AFAs) to a single unit, and Aid Units are left off certain fire responses to enhance EMS coverage. Limited call-back of off-duty personnel may occur in accordance with the Calling Plans.
 - Most Command and General Staff positions will be activated and mutual aid will be requested, if available. Incidents may extend into multiple operational periods requiring written IAPs. The RMC will be activated and will fill the role of Area Command for the Fire Department when needed. The City EOC may be activated. If so, it will be staffed in accordance with Orange Book, Annex A (Personnel Reporting Procedures). Call-back of off-duty personnel will occur in accordance with the Calling Plans.
 - LEVEL III-This level is implemented when citywide coverage and response capacity is severely limited, such as during four or five-alarm fires, simultaneous multiple-alarm incidents, earthquakes, or other situations with citywide impacts, such as wind/snow storms and power outages. Most fire responses will be reduced in size and Code Yellow responses will be at the discretion of the FAC. Requests for additional alarms may provide less than normal resource levels.
 - LEVEL II-This level is implemented when Department resources are catastrophically diminished but the FAC is still functional, such as during an earthquake or pandemic response. Most or all responses will be single units at the discretion of the FAC. Mutual

aid resources will be requested if available, up to and including State and Federal assets. In a regional situation, such as an earthquake, mutual aid resources are unlikely and Seattle Fire Department personnel and resources may be on their own for 24-72 hours.

- Most or all Command and General Staff positions will be filled on incidents that are not citywide in nature, i.e. a plane crash into a building or multiple IED attacks, versus an earthquake or pandemic emergency. Multiple operational periods are likely with written IAPs necessary. The RMC will be activated and will fill the role of Area Command for the Fire Department when needed. It will be staffed as indicated in the RMC Activation Procedures. The City EOC will be activated and will be staffed in accordance with Orange Book, Annex A (Personnel Reporting Procedures). Call-back of off-duty personnel will occur in accordance with the Calling Plans.
- LEVEL I-This level is implemented when the conditions of Level II are experienced and the FAC is out-of-service due to damage or loss of communications. This will result in decentralized Battalion Dispatching with the RMC coordinating citywide priorities and coverage.
- At Levels III, II, and I, certain response assets may be unavailable, such as battalion chiefs, medic units, and specialty units. Personnel must maintain situational awareness and continuously reassess priorities. Highest priority should be given to immediate life-safety actions and defensive operations to contain growing incidents.

5.2 Prevention and Mitigation Activities

- The Fire Department will be responsible for the stabilization of all hazardous materials incidents that threaten the public safety, except those incidents that are normally resolved by the Seattle Police Department's Explosives Disposal Unit or other federal/state response group.
- The Hazardous Materials Response Team will respond to incidents inside the city limits and in support of jurisdictions where current mutual aid agreements exist with the City.
- The Fire Department maintains strategically located fire stations and equipment to address fire, medical and other emergency needs of the public. Among these resources is the Hazardous Materials Response Team. The Hazardous Materials Response Team is comprised of firefighters specially trained in the mitigation of hazardous materials events. Team members are trained to a Technician level (highest possible).
- In situations of major proportions that exceed the physical limitations of the Fire Department, help from outside the City shall be provided through other fire departments by way of mutual aid agreements, the King County Fire Resource Plan, and from other state and federal agencies arranged through the City of Seattle EOC.
- In addition, should there be a radiological emergency, technical assistance and specialized resources from the State Department of Health, State Military Department, US Department of Energy, and the Federal Nuclear Regulatory Commission can be made available through the Seattle EOC or Emergency Management Staff Duty Officer. (A catalog of supplemental radiological assistance is maintained by the Seattle Office of Emergency Management).
- Despite the best efforts of the Fire Department and other outside agencies that respond to assist, a catastrophic disaster could cause delays in response by emergency personnel and equipment.
- The Fire Department trains and plans regularly for HazMat events. Training is locally, state and federally mandated and certified.

5.3 Preparedness Activities

- The Fire Department trains and plans regularly for HazMat events. Training is locally, state and federally mandated and certified.

5.4 Response Activities

- The first arriving units (usually non-Hazardous Materials team units) will:
 - Establish command and scene control
 - Identify the product spilled or released
 - Isolate the chemical and establish control zones: Hot, Warm and Cold
 - Evacuate or shelter in place potential victims
 - Rescue those unable to evacuate themselves
 - Establish emergency decontamination procedures
 - Set-up a decon corridor and flush patients with water for 15-minutes
 - Establish command through the ICS
- Hazardous Materials team members, upon their arrival, will interface with the first-in companies and:
 - Confirm the identification of the product
 - Plot the travel of the chemical plume if applicable
 - Mitigate by: Containing, Neutralizing, Diluting, Shutting off at the source
 - Facilitate clean-up
 - Release the scene

5.5 Recovery Activities

The clean-up of a HazMat scene will be coordinated with the Fire Marshal and the City of Seattle EOC who may contact the: Washington State Department of Ecology; Washington State Emergency Management Division; Washington State Patrol; US Environmental Protection Agency; US Coast Guard; City of Seattle Fleets and Facilities Department for city-owned property; Private licensed contractors.

6. RESOURCE REQUIREMENTS

6.1 Logistical Support

- Computer Aided Management of Emergency Operations (CAMEO), a hazardous materials product identification and mitigation program is utilized by the Seattle Fire Department. The HazMat Response Van is equipped with a mobile computer that runs the CAMEO program. This program was developed through the cooperation of the Seattle Fire Department and the National Oceanic and Atmospheric Administration (NOAA) and is considered to be the standard among the Fire Service.
- Many chemicals or hazardous products produce a plume or cloud of potentially lethal gas. CAMEO is able to plot the plume based on the chemical, quantity, wind direction and speed through ALOHA (Aerial Location of Hazardous Atmospheres). Evacuation or shelter in place of the surrounding community may be accomplished with more direction and clarity of the toxic cloud travel.

7. ADMINISTRATION

7.1 Cost Accounting and Cost Recovery

The Department finance division will track all costs and submit documentation. Reimbursement of costs will be provided in coordination of declarations, EOC oversight and the City of Seattle Budget Office.

7.2 Annex Maintenance

The previous standard of updating the CEMP every five years has changed to updates being done on an ongoing basis. With information constantly changing, coupled with rapid innovations in technology and science, it only makes sense to favor a dynamic approach to planning.

The Fire Department ESF Coordinator is responsible in maintaining this annex. The annex will be reviewed and updated annually as prescribed in the Seattle CEMP or when deemed necessary by either the ESF Coordinator and/or the Seattle Office of Emergency Management.

Table 3

RECORD OF CHANGES			
DATE	TYPE	CONTACT	SUMMARY
December 2016	Update	W Barrington L Meyers	Completed annual update
May 2015	Update	K Neafcy	Completed annual update

8. TERMS AND DEFINITIONS

- HazMat: Hazardous Materials.
- Hazardous Materials Response Team: Engine 10, Ladder 1, Aid 10, Staff 10
- Decon Corridor: An on-scene, temporary structure designed to provide emergency decontamination of the victims.

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