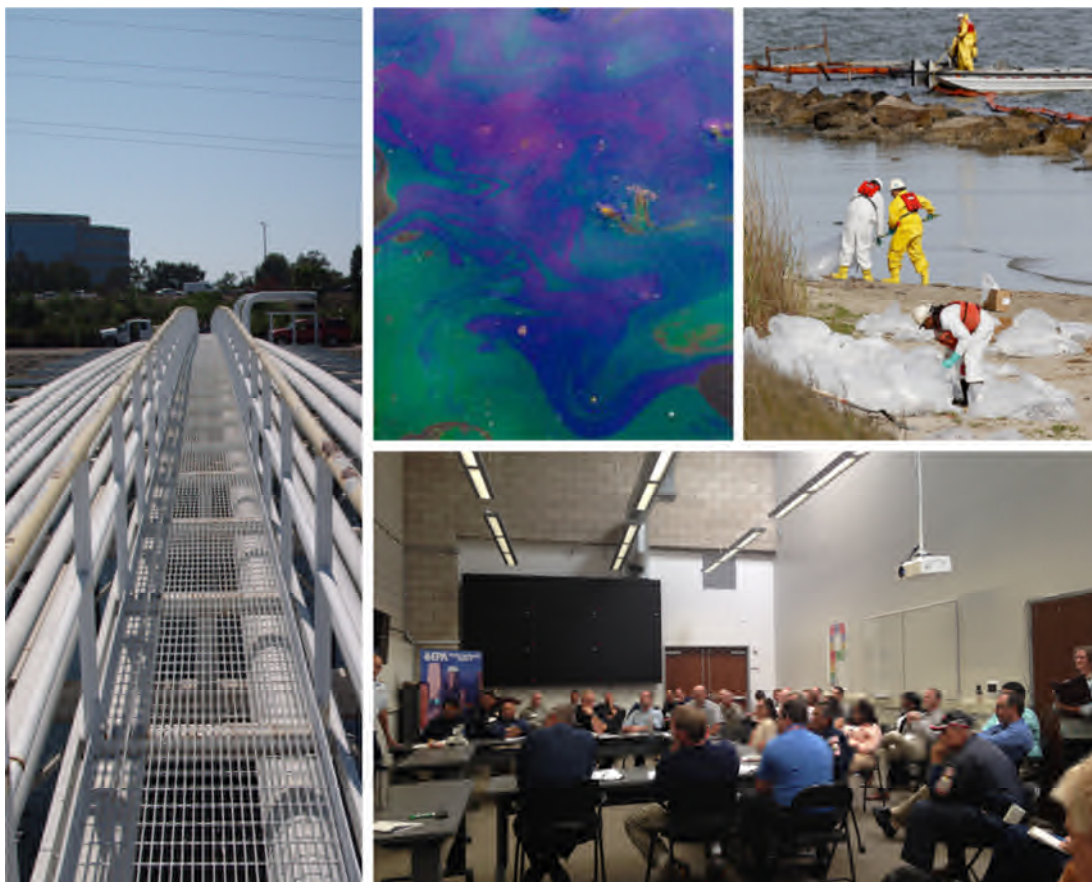


2014 LOS ANGELES BASIN PETROLEUM PIPELINE RELEASE TABLETOP EXERCISE



AFTER ACTION REPORT

AUGUST 14, 2014

US EPA SOUTHERN CALIFORNIA FIELD OFFICE
SIGNAL HILL, CA



HANDLING INSTRUCTIONS

FORMAL TITLE

“2014 LA Basin Petroleum Pipeline Release Tabletop Exercise (TTX)”

DOCUMENT DESIGNATION

FOR OFFICIAL USE ONLY/ UNCLASSIFIED (FOUO/UC)

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1. EXECUTIVE SUMMARY

The 2014 LA Basin Petroleum Pipeline Release Tabletop Exercise (TTX) was designed to evaluate the response community's ability to effectively respond to a multi-site petroleum pipeline rupture over the Dominguez Channel.

1.1 PRIMARY STRENGTHS

The major strengths identified during this exercise are as follows:

- ▶ There is a solid existing response infrastructure in the Los Angeles area at the local, state and federal levels.
- ▶ A robust Joint Information System is in place. Local emergency management agencies and Public Information Officers (PIOs) are engaged in innovative public notification and warning strategies.
- ▶ The entire response community is diligent in employing a 'whole community' approach to preparedness initiatives (e.g., vulnerable populations, such as those with access or functional needs, were taken into account throughout exercise play discussions).



Figure 1- Participants attend the Module I debriefing.

1.2 PRIMARY AREAS FOR IMPROVEMENT

The primary areas for improvement identified during the exercise are as follows:

- ▶ Most of the exercise evaluation forms submitted by the participants identified exercise logistics as the biggest area for improvement.
- ▶ Confusion surrounding the jurisdictional authority of federal partners has the potential to hamstring response operations by hampering command and control decisions.
- ▶ As is the case with most large urban centers, multi-agency coordination proved to be a challenge as the participants oftentimes struggled to maintain a common operating picture.

2. EXERCISE OVERVIEW

2.1 EXERCISE SUMMARY

EXERCISE NAME	2014 L.A. Basin Petroleum Pipeline Release Tabletop Exercise
EXERCISE TYPE	Discussion-Based Tabletop Exercise
DATE AND TIME	August 14, 2014, 0800 - 1600
LOCATION	EPA Southern California Field Office
SPONSOR	US EPA Regional Response Team (RRT) 9
SCENARIO TYPE	Crude Oil and Oil-by-Product Release
CORE CAPABILITIES	Planning; Operational Coordination; Public Information and Warning; Critical Transportation; Environmental Response/Health and Safety; Operational Communications; and Situational Assessment.

2.2 ACKNOWLEDGEMENTS

2.2.1 EXERCISE DESIGN TEAM

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2.2.2 PARTICIPATING AGENCIES

- ▶ Alameda Corridor Engineering Team
- ▶ American Red Cross
- ▶ Arizona State Emergency Response Commission
- ▶ Bureau of Safety and Environmental Enforcement
- ▶ California Governor's Office of Emergency Services
- ▶ California Department of Fish & Wildlife
- ▶ California Department of Fish and Wildlife, Oil Spill Prevention and Response
- ▶ California Department of Forestry and Fire Protection
- ▶ California Department of Toxic Substances Control
- ▶ California Oil Spill Prevention and Response
- ▶ California State Military Reserves
- ▶ City of Los Angeles Fire Department
- ▶ City of Los Angeles, Department of Emergency Management
- ▶ Defense Coordinating Element IX
- ▶ Federal Emergency Management Agency
- ▶ Global Vision Consortium
- ▶ Hudson Marine Management Services
- ▶ Long Beach Fire Department
- ▶ Los Angeles County Department of Mental Health
- ▶ Los Angeles County Department of Public Works
- ▶ Los Angeles County Department of Public Works
- ▶ Los Angeles County Fire Department
- ▶ Los Angeles County Health Hazmat Division
- ▶ Los Angeles County Police Department, Gang and Narcotics Division
- ▶ Los Angeles County Sheriff's Department
- ▶ Los Angeles Port Police
- ▶ National Oceanic and Atmospheric Administration
- ▶ Patriot Environmental Services
- ▶ Regional Water Board

- ▶ Tesoro Corporation The Response Group
- ▶ United States Coast Guard
- ▶ United States Department of Agriculture/Forest Service
- ▶ United States Department of the Interior, Bureau of Land Management
- ▶ United States Environmental Protection Agency
- ▶ United States Government Services Administration
- ▶ Valero Energy Corporation

3.1 GOALS AND OBJECTIVES

3.1.1 GOALS

The goal of the exercise was to improve regional response readiness for an incidents involving hazardous materials (i.e., petroleum) by:

1. Raising awareness of local and regional capabilities
2. Building relationships and enhancing coordination amongst first responders; state and federal partners; private industry; and other community partners.
3. Identifying, but not necessarily solving, any barriers to an effective and coordinated response.

3.1.2 OBJECTIVES

To achieve the stated goals of the exercise the design team utilized the following response activities as the foundation for all exercise design, conduct, and evaluation activities. These objectives were as follows:

- ▶ Evaluate tasked agencies ability to notify all appropriate agencies of the incident in a timeframe consistent with established plans, policies, and procedures,
- ▶ Evaluate tasked agencies ability to identify locations for incident/unified command posts, points of logistical support, and evacuation zones within timeframes consistent with established plans, policies, and procedures.
- ▶ Evaluate and document tasked agencies ability to effectively execute the following activities/capability functions during a response: incident communications; situational awareness; and public information, notification, and warnings.

3.2 CORE CAPABILITIES

The National Preparedness Goal, released in September 2011, defines what it means for the whole community to be prepared for large-scale emergencies, disasters, or other incidents of national significance.

The National Preparedness Goal identified 31 Core Capabilities. These capabilities are high-level groupings of similar, yet distinct, critical activities required to effectively respond to complex incidents. Pursuant to Presidential Policy Directive No. 8 (PPD-8)ⁱ, this exercise was designed to evaluate plans, policies, and procedures using the “Core Capabilities List” as a guide for its design, conduct, and evaluation.

Finally, Per the US Department of Health and Human Services, the public health preparedness community utilizes a similar list of foundational capability targets refined to reflect the intricacies of the discipline. The ‘Core Capabilities’, and associated ‘Public Health Capabilities’, chosen for the exercise are as follows:

3.2.1 COMMON CORE CAPABILITIES

3.2.1.1 PLANNING

Conduct a systematic process engaging the whole response community as appropriate in the development of executable strategic, operational, and/or community-based approaches to meet defined objectives.

Related Public Health Capabilities: Planning (common)

3.2.1.2 OPERATIONAL COORDINATION

Establish and maintain a unified and coordinated operational structure and process that appropriately integrates all critical stakeholders and supports the execution of core capabilities.

Related Public Health Capabilities: Emergency Operations Coordination

3.2.1.3 PUBLIC INFORMATION AND WARNING

Deliver coordinated, prompt, reliable, and actionable information to the whole response community through the use of clear, consistent, accessible, and culturally and linguistically appropriate methods to effectively relay information regarding any threat or hazard, as well as the actions being taken and the assistance being made available, as appropriate.

Related Public Health Capabilities: Emergency Public Information and Warning

3.3.2 RESPONSE CORE CAPABILITIES

3.3.2.1 CRITICAL TRANSPORTATION

Provide transportation (including infrastructure access and accessible transportation services) for response priority objectives, including the evacuation of people and animals, and the delivery of vital response personnel, equipment, and services into the affected areas.

Related Public Health Capabilities: None

3.3.2.2 ENVIRONMENTAL RESPONSE/HEALTH AND SAFETY

Ensure the availability of guidance and resources to address all hazards, including hazardous materials, acts of terrorism, and natural disasters in support of the responder operations and the affected communities.

Related Public Health Capabilities: Responder Safety and Health

3.3.2.3 OPERATIONAL COMMUNICATIONS

Ensure the capacity for timely communications in support of security, situational awareness, and operations by any and all means available, among and between affected communities in the impact area and all responders.

Related Public Health Capabilities: Emergency Public Information and Warning; and Information Sharing

3.3.2.4 SITUATIONAL ASSESSMENT

Provide all decision makers with pertinent information regarding the nature and extent of the hazard, any cascading effects, and the status of the response.

Related Public Health Capabilities: Information Sharing

3.4 EXERCISE CONDUCT

3.4.1 EXERCISE STRUCTURE

The exercise was facilitated as a group exercise. The scenario was segmented into two modules; the content within each differed based upon time and physical location. The players were pre-divided into three groups to explore different operational capabilities. Each group employed the following sequence of facilitated activities:

1. For each group and module facilitators began by providing scenario information.
2. Once the player's questions about the scenario were addressed, the facilitators utilized pre-scripted questions to lead participants through the module.
3. The groups communicated with each other through liaisons as needed to answer questions and maintain exercise continuity.

3.4.1.1 GROUP 1: RESPONSE TACTICS

- ▶ Explored the strategies needed to effectively respond to the incident during the first 96 hours post incident.

3.4.1.2 GROUP 2: OPERATIONAL COORDINATION

- ▶ Explored the implementation a Unified Command and multi-agency coordination

3.4.1.3 GROUP 3: PUBLIC INFORMATION

- ▶ Explored how public information activities might be employed (to include the establishment of a Joint Information Center).

3.5 SCENARIO SUMMARY

3.5.1 MODULE 1 SCENARIO

At 0600 hour on August 10, 2014, a 12" crude oil pipeline from XYX Oil Exploration catastrophically failed while crossing over the Dominguez Channel on a pipe bridge. The failure also damaged other pipelines on the pipe bridge resulting in three other pipelines being compromised and beginning to leak. The release dumped 10,000 gallons of crude oil, diesel,

gasoline, and produced water into the channel approximately ½ mile north of Anaheim Boulevard. The petroleum products heavily contaminated boats in the Leeward Bay Marina before being discovered at 0700 hours by a fisherman with a boat in the marina. The low tide was at 0349 hours resulting in a large amount of contamination on the rip-rap along the channel shores.

Initial response was by the United States Coast Guard, Port Police, LA Fire Department and LA County Fire Department Health Hazardous Materials Division. The spill's origin was identified at 0900 hours.

By 0930, oil was impacting Mormon Island and moving towards the Terminal Island Bridge. It has impacted all small boat marinas in its path and is beginning to impact port traffic

AGENCIES ON-SCENE: USCG, Port Police, LA Fire Department, LA County Fire Department, City of LA Watershed Protection, LA County Fire Department Health Hazardous Materials Division, LA County Public Works Flood Control, LAPD Hazardous Materials Unit, U.S. Customs and Border Patrol, California Department of Fish and Wildlife, US Fish and Wildlife Services, and representatives from several oil companies with oil pipelines in the area



Figure 2- Pipes over the Dominguez Channel



Figure 3- Module 1 "Site A"

3.5.2 MODULE 2 SCENARIO

At 0000 hour on August 10, 2014, a 12" crude oil pipeline from XYX Oil Exploration catastrophically failed while crossing over the Dominguez Channel on a pipe bridge. The failure also damaged other pipelines on the pipe bridge resulting in three other pipelines being compromised and beginning to leak. The release dumped 10,000 gallons of crude oil, diesel and produced water into the channel approximately ½ mile north of East Del Ammo Blvd. The petroleum heavily contaminated the channel before being discovered at 0400 hours by a watchman at one of the downstream petroleum refining and storage facilities. The contamination had yet to reach the Leeward Bay Marina. The low tide was at 0700 hours resulting in a large amount of contamination on the rip-rap along the channel shores.

Initial response was by the LA Fire Department and LA County Fire Department Health Hazardous Materials Division. The spill's origin was identified at 0900 hours.

By 0930, oil was impacting channel boats in the Leeward Bay Marina.

AGENCIES ON-SCENE: USCG, Port Police, LA Fire Department, LA County Fire Department, City of LA Watershed Protection, LA County Fire Department Health Hazardous Materials Division, LA County Public Works Flood Control, LAPD Hazardous Materials Unit, U.S. Customs and Border Patrol, California Department of Fish and Wildlife, US Fish and Wildlife Services, and representatives from several oil companies with oil pipelines in the area.



Figure 4- Module 2 "Site B"

ⁱ [Presidential Policy Directive No. 8 \(PPD-8\)](#)

4. EXERCISE ANALYSIS

4.1 BACKGROUND

4.1.1 ANALYSIS METHODOLOGY

This analysis is comprised of three data elements: observational statements, analysis statements, and associated recommendations. The qualitative data utilized for this report was extracted from the 'feedback forms' included within the 'Exercise Situation Manual (SITMAN)'. The individual notations contained within the feedback forms were analyzed for relevance; classified by content as one of the three aforementioned data elements; and then summarized for clarity and consistency. Note: some of the analysis statements and recommendations have been augmented with additional information by the exercise evaluation team.

4.1.1.1 DATA ELEMENT TAXONOMY

OBSERVATIONAL STATEMENTS

- ▶ Dictation of the decisions made during exercise play
- ▶ Contain information on the hazard agent
- ▶ Describe expected actions
- ▶ Detail known capability and resource shortfalls
- ▶ Are informational in nature, and show no bias

ANALYSIS STATEMENTS

- ▶ Insightful in nature
- ▶ Provide context based upon subject matter expertise
- ▶ Inherently biased, but without prejudice or agenda

RECOMMENDATIONS

- ▶ Urge post-exercise action/activity.
- ▶ Easily categorized as a type of activity/component within the DHS defined 'Preparedness Cycle' (*Figure- 5*).



Figure 5- The 'Preparedness Cycle'

4.2 EXERCISE DESIGN ANALYSIS

4.2.1 EXERCISE VALUE

4.2.1.1 OBSERVATIONS AND ANALYSIS

The majority of exercise participants, evaluators, and observers agreed the exercise was a positive experience. Respondents noted the value of discussing interagency operational coordination issues in addition to response tactics.

4.2.1.2 RECOMMENDATIONS

1. Partners from all levels of government should continue having both discussion and operations- based exercises.

4.2.2 EXERCISE LOGISTICS

4.2.2.1 OBSERVATIONS AND ANALYSIS

Many participants felt the venue was too small to accommodate the number of participants and observers making the experience uncomfortable at times. In addition, many participants commented upon the lack of refreshments, parking, or nearby eateries.

4.2.2.2 RECOMMENDATIONS

1. Future exercises should either a) limit the number of observers allowed within the exercise venue or b) anticipate a large interest and find an appropriately sized venue.
2. In the future, exercise facilitators should be sure to announce funding requirements which preclude the provision of refreshments.

4.3 OVERARCHING ANALYSIS

4.3.1 NOMENCLATURE AND TERMINOLOGY

4.3.1.1 OBSERVATIONS AND ANALYSIS

- ▶ Participants documented verbal miscommunication during the exercise itself resulting from differing interpretations of response terminology.
- ▶ Discrepancies were found for words/terms defined colloquially, as well as for those defined by doctrine (NIMS, SEMS, and ICS).

*“The word ‘isolation’ meant different things to people”
- Observer Note*

4.3.1.2 RECOMMENDATIONS

1. Response personnel at levels should participate in ongoing NIMS/SEMS and ICS training to ensure NIMS terminology is defined by doctrine

4.3.2 ENVIRONMENTAL RESPONSE TRAINING

4.3.2.1 OBSERVATIONS AND ANALYSIS

Several participants documented a perceived lack of understanding related to environmental response plans and/or operational environmental response tactics.

4.3.2.2 RECOMMENDATIONS

1. Environmental response partners at all levels should engage the larger response community when conducting preparedness activities (planning, training, and exercising).

4.4 RESPONSE TACTICS

4.4.1 SITUATION ASSESSMENTS & EXPECTED ACTIONS

4.4.1.1 OBSERVATIONS AND ANALYSIS

- ▶ A sudden drop in pipeline pressure would be detected by pipeline safety monitoring equipment. The subsequent activation of alarms, warnings, and associated notification protocols would, ostensibly, provide nearly instantaneous warning notifications to the potentially responsible party and/or partiesⁱⁱ (PRP).
- ▶ Once response activities commence local fire would support operations to a point, but largely remain on standby.

4.4.1.2 RECOMMENDATIONS

1. All response personnel should be familiar with existing private sector capabilities.
2. Private sector partners should be included as partners in all appropriate planning initiatives.

4.4.2 RESPONSE PRIORITIES, GOALS, & OBJECTIVESⁱⁱⁱ

4.4.2.1 OBSERVATIONS AND ANALYSIS

- ▶ All response activities are dependent upon identification of the hazard agent (i.e., product).
 - ▶ Crude-oil and gasoline both have low vapor pressure and a possible ignition source makes for an additional threat.
 - ▶ Produced water is brine water with oil and should be treated as a hazardous material.
- ▶ Establish a response perimeter to protect the safety of both the public and responders.
- ▶ Appropriate persons are notified of the incident per established plans, policies, and procedures as required. (e.g., tribal, local, state, and federal emergency first response partners; tribal, local, state, and federal emergency management agencies; elected officials, mutual-aid partners, appropriate non-governmental organizations (e.g. American Red Cross), and others as deemed appropriate by the Incident Commander^{iv}).
- ▶ An ICS 201 ('Incident Briefing') is produced within the first 12 hours to augment formal and informal incident action planning activities. Planning activities include the following: assessing the situation; estimating resource requirements; conducting a preliminary assessment of available resources and capabilities.

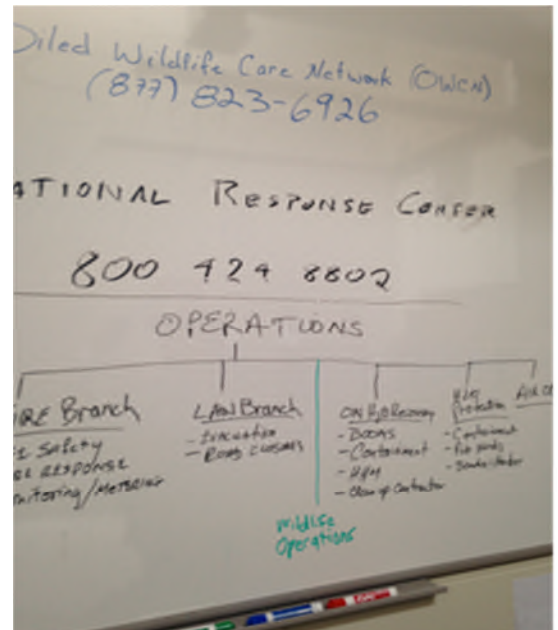


Figure 6- Notes from 'Response Tactics' Group-

4.4.2.2 RECOMMENDATIONS

1. Incident notification plans should be continually updated and evaluated.

4.4 OPERATIONAL COORDINATION

4.4.1 UNIFIED COMMAND AND MULTIAGENCY COORDINATION

4.4.1.1 OBSERVATIONS AND ANALYSIS

- ▶ The initial Incident Command structure would likely be comprised of regional fire and HAZMAT response agencies. As the incident unfolds and additional assets arrive coordination becomes more difficult requiring a transition to a Unified Command Structure.
- ▶ The Unified Command consists of:
 - ▶ US EPA
 - ▶ US Coast Guard
 - ▶ CA Office of Spill Protection and Response
 - ▶ Responsible Party
 - ▶ Local Fire
 - ▶ Local Law Enforcement
- ▶ Participants noted disagreement and/or confusion regarding which federal agency had jurisdictional authority.
- ▶ Coordination between multiple EOCs is a potential problem. Establishing a Multi-Agency Coordination Center could prove helpful.
- ▶ Should an evacuation or shelter-in-place order be issued special consideration should be given for citizens with access or functional needs.

*“The official name of this incident is: ‘The Dominguez Incident’”
- Unified Command*

4.4.1.2 RECOMMENDATIONS

1. Jurisdictional authority for this type of incident should be pre-identified.
2. Members of the Unified Command should consider developing/revising pre-scripted tactical mission assignments.
3. Response agencies should continue to provide initial and refresher Intermediate (ICS-300) and Advanced (ICS-400) Incident Command System trainings.
4. Local emergency management agencies should continue to write/revise Multi-agency Coordination Center Plans and Standard Operating Procedures.

4.4.2 INTEROPERABLE COMMUNICATIONS

4.4.2.1 OBSERVATIONS AND ANALYSIS

- ▶ Local communication technology/equipment face challenges with interoperability.

4.4.2.2 RECOMMENDATIONS

1. Local response agencies should conduct an interoperable communications analysis, and write/revise the region's Technical Interoperable Communications Plan (TIC-P).

4.4 PUBLIC INFORMATION

4.4.1 JOINT INFORMATION SYSTEM AND CENTER (JIC/JIS)

4.4.1.1 OBSERVATIONS AND ANALYSIS

- ▶ The region's Joint Information System is always active, and doesn't require physical colocation. The JIS transitions into a physical Joint Information Center when requested by Incident/Unified Command.
- ▶ The Port Authority has a facility that could be used as a JIC (Port Authority Training Center).
- ▶ Public Information Officers (PIOs) require the necessary technical training to support Incident/Unified Command (IC/UC) in drafting technical messaging

4.4.1.2 RECOMMENDATIONS

1. Public Information Officers and JIC Managers should receive 'Supervisor Level' OSHA HAZWOPER training.
2. The response community should continue revising Public Information / Joint Information System Plans (including the Joint Information Center's Standard Operating Procedures).

4.4.2 PUBLIC MESSAGING AND NOTIFICATION

4.4.2.1 OBSERVATIONS AND ANALYSIS

- ▶ Public messages may include the following types of content:
 - ▶ Protective actions
 - ▶ Environmental Impacts
 - ▶ Operational Updates (edited for public)
 - ▶ Incident Investigation Information
 - ▶ Requests for Assistance

- ▶ Social Media Management (e.g., efforts to standardize incident related #hashtags).
- ▶ The JIC pushes information to the IC/UC; however the converse is not true. The JIC would likely request the following information from IC/UC.
 - ▶ Is incident name still the same?
 - ▶ What is the operational period?
 - ▶ Are dispersants being used?
- ▶ Local jurisdictions should consider utilizing both existing (e.g., reverse 9/11) and emerging (e.g., social media) public notification methodologies.

4.4.4.2 RECOMMENDATIONS

1. Public Information Officers and staff should work with other planning partners to draft pre-scripted public messaging for these types of incidents.
2. Public Information Officers and staff should continue developing public messaging strategies to include novel and emerging technologies and trends (e.g., social media).

Public notification methodologies planning should continue striving towards increasingly greater levels of accessibility, and continue soliciting input from the whole community.

ⁱⁱⁱⁱ The term 'potentially responsible party' is derived from federal statute. [Comprehensive Environmental Response, Compensation, and Liability Act 42 U.S.C. §9601 et seq. \(1980\)](#)

ⁱⁱⁱ The term 'objectives' is used here holistically encompassing activities beyond just on-scene response/incident command. These should not be confused the results of ICS IAP development.

^{iv} It is assumed the command and control structure has not yet transitioned into a 'Unified Command'.

ATTACHMENT A: IMPROVEMENT PLAN FOR EXECUTION

ANALYSIS & OBJECTIVE	RESULTING RECOMMENDATION	PRIORITY	PREPAREDNESS CYCLE PROGRAM ELEMENT	RESPONSIBLE AGENCY	TIMEFRAME
4.3 RESPONSE TACTICS					
4.4.1.2 Situation Assessments & Expected Actions	2. Private sector partners should be included as partners in all appropriate planning initiatives.		<ul style="list-style-type: none"> ▪ Planning 	<ul style="list-style-type: none"> ▪ RRT 9 (EPA-USCG) ▪ Private Sector Partners 	Ongoing
4.4.2.2 Response Priorities, Goals, & Objectives	1. Incident notification plans should be continually updated and evaluated.		<ul style="list-style-type: none"> ▪ Planning 	<ul style="list-style-type: none"> ▪ Local Emergency Management Agencies 	Ongoing
4.4 OPERATIONAL COORDINATION					
4.4.1.2 Unified Command & Multiagency Coordination	1. Jurisdictional authority for this type of incident should be pre-identified.		<ul style="list-style-type: none"> ▪ Planning 	<ul style="list-style-type: none"> ▪ US EPA ▪ US Coast Guard 	1-6 Months

ANALYSIS & OBJECTIVE	RESULTING RECOMMENDATION	PRIORITY	PREPAREDNESS CYCLE PROGRAM ELEMENT	RESPONSIBLE AGENCY	TIMEFRAME
4.4.1.2 Unified Command & Multiagency Coordination	3. Response agencies should continue to provide initial and refresher training in Intermediate (ICS-300) and Advanced (ICS-400) Incident Command System.		<ul style="list-style-type: none"> ▪ Training 	<ul style="list-style-type: none"> ▪ Response Community 	Ongoing
4.4.1.2 Unified Command & Multiagency Coordination	4. Local emergency management agencies should continue to write/revise Multi-agency Coordination Center Plans and Standard Operating Procedures.		<ul style="list-style-type: none"> ▪ Planning 	<ul style="list-style-type: none"> ▪ Local Emergency Management Agencies 	Ongoing
4.4.2.2 Interoperable Communications	1. Local response agencies should conduct an interoperable communications analysis, and write/revise the region's Technical Interoperable Communications Plan (TIC-P).		<ul style="list-style-type: none"> ▪ Planning 	<ul style="list-style-type: none"> ▪ Response Community 	1-2 years
4.4 PUBLIC NOTIFICATION AND WARNING					
4.4.1.2 Joint Information System and Center	1. Public Information Officers and JIC Managers should receive 'Supervisor Level' OSHA HAZWOPER training.		<ul style="list-style-type: none"> ▪ Training 	<ul style="list-style-type: none"> ▪ Local Public Information Officers 	1-2 years
4.4.1.2 Joint Information System and Center	2. The response community should continue planning/revising Public Information / Joint Information System Plans (including the Joint Information Center's Standard Operating Procedures).		<ul style="list-style-type: none"> ▪ Training 	<ul style="list-style-type: none"> ▪ Local Public Information Officers 	Ongoing

ANALYSIS & OBJECTIVE	RESULTING RECOMMENDATION	PRIORITY	PREPAREDNESS CYCLE PROGRAM ELEMENT	RESPONSIBLE AGENCY	TIMEFRAME
<p>4.4.2.2 Public Messaging and Notification</p>	<p>1. Public Information Officers and staff should work with other planning partners to draft pre-scripted public messaging for these types of incidents.</p>		<ul style="list-style-type: none"> ▪ Planning 	<ul style="list-style-type: none"> ▪ Local Public Information Officers ▪ Response Community 	<p>1-2 years</p>
<p>4.4.2.2 Public Messaging and Notification</p>	<p>2. Public Information Officers and staff should continue to develop public messaging strategies to include novel and emerging technologies and trends (e.g., social media).</p>		<ul style="list-style-type: none"> ▪ Planning ▪ Training 	<ul style="list-style-type: none"> ▪ Local Public Information Officers 	<p>Ongoing</p>
<p>4.4.2.2 Public Messaging and Notification</p>	<p>3. Public notification methodologies planning should continue striving towards increasingly greater levels of accessibility, and continue soliciting input from the whole community.</p>		<ul style="list-style-type: none"> ▪ Planning ▪ Training ▪ Exercising 	<ul style="list-style-type: none"> ▪ Local Public Information Officers ▪ Local Emergency Management Agencies ▪ Whole Community Engagement 	<p>Ongoing</p>