



MassDEP Geographic Response Plan – 2014 Lees River GRP Exercise

After-Action Report/Improvement Plan
October 30, 2014

The After-Action Report/Improvement Plan (AAR/IP) aligns exercise objectives with preparedness doctrine to include the National Preparedness Goal and related frameworks and guidance. Exercise information required for preparedness reporting and trend analysis is included; users are encouraged to add additional sections as needed to support their own organizational needs.

EXERCISE OVERVIEW

Exercise Name	2014 Mount Hope Bay/Lees River GRP Exercise
Exercise Dates	July 31, 2014
Scope	This exercise is a Full Scale Exercise, planned for approximately six hours in Swansea and Somerset, MA and upon the waters of the Lees River. Exercise play is limited to the Lees River.
Mission Area(s)	Response
Core Capabilities	Environmental Response/Health and Safety, Operational Coordination, Operational Communications
Objectives	<p>Objective 1: Demonstrate the ability to deploy oil spill equipment from one or more MassDEP pre-positioned oil spill response trailers utilizing common Geographic Response Plan (GRP) tactics.</p> <p>Objective 2: Demonstrate the ability to assemble a spill response organization utilizing Incident Command System (ICS) principles through development and execution of an Assignment List (ICS 204) and implementation of on-site incident management and tactical operations.</p> <p>Objective 3: Demonstrate the ability to effectively communicate between multiple local, state, and federal agencies including fire departments, police departments, harbormasters, and other state and federal first responders using both UHF and VHF communications.</p>
Threat or Hazard	Discharge of oil into a navigable waterway
Scenario	An oil spill has occurred near the I-195 Bridge at the Lees River and is migrating toward the Lees River. The Somerset and Swansea Fire Departments will utilize GRP MHB-04 to deploy protective booming to protect sensitive resources in and near the Lees River.
Sponsor	Massachusetts Department of Environmental Protection. Program funds will be utilized for first responder backfill and overtime costs.

**Participating
Organizations**

Participating organizations included:

- Somerset Fire Department
- Swansea Fire Department
- Swansea Emergency Management (SEM)
- Somerset Harbormaster (SHM)
- MassDEP
- U.S. Coast Guard Sector Southeastern New England (USCG)
- Moran Environmental Recovery (MER)
- Nuka Research and Planning Group, LLC (Nuka Research)

Note: See Appendix B for participant count

Point of Contact

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ANALYSIS OF CORE CAPABILITIES

Aligning exercise objectives and core capabilities provides a consistent taxonomy for evaluation that transcends individual exercises to support preparedness reporting and trend analysis. Table 1 includes the exercise objectives, aligned core capabilities, and performance ratings for each core capability as observed during the exercise and determined by the evaluation team. Table 2 includes compiled data from the Exercise Evaluation Guide (EEG) including the organizational capability targets, associated critical tasks, and observations as observed during the exercise and determined by the evaluation team.

Objective	Core Capability	Performed without Challenges (P)	Performed with Some Challenges (S)	Performed with Major Challenges (M)	Unable to be Performed (U)
Demonstrate the ability to deploy oil spill equipment from one or more MassDEP pre-positioned oil spill response trailers utilizing common Geographic Response Plan (GRP) tactics.	Environmental Response/Health and Safety	P			
Demonstrate the ability to assemble a spill response organization utilizing Incident Command System (ICS) principles through development and execution of an Assignment List (ICS 204) and implementation of on-site incident management and tactical operations.	Operational Coordination	P			
Demonstrate the ability to effectively communicate between multiple local, state, and federal agencies including fire departments, police departments, harbor masters, and other state and federal first responders using both UHF and VHF communications	Operational Communications	P			
<p>Ratings Definitions:</p> <ul style="list-style-type: none"> • Performed without Challenges (P): The targets and critical tasks associated with the core capability were completed in a manner that achieved the objective(s) and did not negatively impact the performance of other activities. Performance of this activity did not contribute to additional health and/or safety risks for the public or for emergency workers, and it was conducted in accordance with applicable plans, policies, procedures, regulations, and laws. • Performed with Some Challenges (S): The targets and critical tasks associated with the core capability were 					

Objective	Core Capability	Performed without Challenges (P)	Performed with Some Challenges (S)	Performed with Major Challenges (M)	Unable to be Performed (U)
<p>completed in a manner that achieved the objective(s) and did not negatively impact the performance of other activities. Performance of this activity did not contribute to additional health and/or safety risks for the public or for emergency workers, and it was conducted in accordance with applicable plans, policies, procedures, regulations, and laws. However, opportunities to enhance effectiveness and/or efficiency were identified.</p> <ul style="list-style-type: none"> Performed with Major Challenges (M): The targets and critical tasks associated with the core capability were completed in a manner that achieved the objective(s), but some or all of the following were observed: demonstrated performance had a negative impact on the performance of other activities; contributed to additional health and/or safety risks for the public or for emergency workers; and/or was not conducted in accordance with applicable plans, policies, procedures, regulations, and laws. Unable to be Performed (U): The targets and critical tasks associated with the core capability were not performed in a manner that achieved the objective(s). 					

Table 1. Summary of Core Capability Performance

Core Capability	Organizational Capability Target	Associated Critical Tasks	Observation Notes
Environmental Response/ Health and Safety	Overview of Response Equipment	<ul style="list-style-type: none"> Access Mass DEP Trailer Identify boom and sorbents Connect boom together Connect towing bridle to boom Connect components of anchor system together 	<ul style="list-style-type: none"> Performed without Challenges (P) All skills successfully demonstrated during exercise Excellent Training from MER Full participation by students in demonstration portion of the instruction. Classroom training was excellent Area for Improvement: Would be useful to have demo ASTM connectors for students. Area for Improvement: Would be useful to use small sections of line for students to tie their own knots for practice.
	Basic Booming Operations	<ul style="list-style-type: none"> Transport and tow boom. <i>Critical Task:</i> Anchoring and Connecting boom to shore <i>Critical Task:</i> Safe vessel and crew operations. (Refer to ICS-208) 	<ul style="list-style-type: none"> Performed Without Challenges (P) All boat crews effectively worked together, towing and controlling boom deployment safely. Shore teams were excellent, making use of existing structures to anchor boom to shore. Area for Improvement: Deploying anchors proved a challenge for boat crews on larger boats. Instead of having individuals toss the anchor overboard recommend using a piece of plywood as chafing gear on the deck so the anchor can rest there with the anchor line tied off to a bit for towing. When anchor line is untied, anchor will slide off into the water without damaging the boat deck.

Core Capability	Organizational Capability Target	Associated Critical Tasks	Observation Notes
	Implement Tactics in GRP	<ul style="list-style-type: none"> Deploy Exclusion Boom Tactic 	Exclusion deployment, <ul style="list-style-type: none"> Performed Without Challenges (P) Boom deployed as discussed in briefing, Tactic proved to be successful however, extra boom was needed due to recent bridge renovation that widened the opening, creating the need for 400 feet of additional boom On scene adjustment for shorter chevron worked well.
Operational Coordination	Create and Execute An Assignment List (ICS 204)	<ul style="list-style-type: none"> Fill out ICS 204 Assignments in ICS 204 are followed and on-scene adjustments. Participants demonstrate command and control of exercise 	<ul style="list-style-type: none"> Team make up well defined. Enough personnel to complete assignments Excellent idea to tape ICS-204 to trailer.
Operational Communications	Effectively Communicate Using UHF and VHF equipment	<ul style="list-style-type: none"> Create Communications Plan Communicate with other participants using organic UHF equipment Communicate with other participants using organic VHF equipment 	<ul style="list-style-type: none"> Performed without Challenges (P) Communications interoperability between departments was seamless. VHF equipment was used effectively. Strong comms between shore and water crews. UHF Equipment not utilized

The following sections provide an overview of the performance related to each exercise objective and associated core capability, highlighting strengths and areas for improvement.

Objective 1: Demonstrate the ability to deploy oil spill equipment from one or more MassDEP pre-positioned oil spill response trailers utilizing common Geographic Response Plan (GRP) tactics

The strengths and areas for improvement for each core capability aligned to this objective are described in this section.

Core Capability 1: Environmental Response/Health and Safety

Strengths

The full capability level can be attributed to the following strengths:

Strength 1: Participants from multiple agencies (Swansea, Somerset, Moran Environmental, MassDEP) worked together to accomplish the goal

Strength 2: All participants conducted the deployment safely.

Areas for Improvement

The following areas require improvement to achieve the full capability level:

Area for Improvement 1: As noted in table 2, deploying an anchor can be challenging, especially when the boat is towing boom into position. Having a boat crewmember holding the anchor as the line under strain is let off the cleat can cause a significant strain on the anchor. Instead of holding the anchor, it would be more preferable for the anchor to rest on a piece of plywood or some other chafing gear to prevent damage to the boat and eliminate a potentially dangerous situation.

Reference: Massachusetts GRP Tactics Guide (updated April 2012)

Analysis: The lack of detailed Standard Operating Procedures on how to deploy an anchor from a boat leaves the exercise participant to undertake a potentially dangerous situation by holding an anchor attached to a line under strain. Better, more detailed procedures can eliminate this problem and prevent damage to the boat deck.

Objective 2: Demonstrate the ability to assemble a spill response organization utilizing Incident Command System (ICS) principles through development and execution of an Assignment List (ICS 204) and implementation of on-site incident management and tactical operations.

The strengths and areas for improvement for each core capability aligned to this objective are described in this section.

Core Capability 2: Operational Coordination

Strengths

The full capability level can be attributed to the following strengths:

Strength 1: All personnel were clear on assignments during the exercise.

Strength 2: Taping the ICS-204 to the trailer made it easy for everyone to know what their role was and what was expected of them.

Areas for Improvement

The following areas require improvement to achieve the full capability level:

Area for Improvement 1: None

Reference: Homeland Security Exercise and Evaluation Program Guidance, April 2013, National Incident Management System

Analysis: N/A

Objective 3: Demonstrate the ability to effectively communicate between multiple local, state, and federal agencies including fire departments, police departments, harbor masters, and other state and federal first responders using both UHF and VHF communications

The strengths and areas for improvement for each core capability aligned to this objective are described in this section.

Core Capability 3: Operational Communications

Strengths

The full capability level can be attributed to the following strengths:

Strength 1: Clear and effective communications between all participants was maintained throughout the exercise. All participants maintained good radio discipline throughout the exercise. Extraneous communication was kept to a minimum and clear guidance and asset coordination was provided to accomplish deployment objectives.

Strength 2: Communications assistance was provided by the Swansea Emergency Manager. His trailer was impressive and provided a tremendous capability.

Areas for Improvement

The following areas require improvement to achieve the full capability level:

Area for Improvement 1: None to report. It's clear that the exercise participants were experienced with using the oil spill response equipment and they routinely work together and have an excellent working relationship.

Reference: Homeland Security Exercise and Evaluation Program Guidance, April 2013, National Incident Management System

Analysis: N/A

APPENDIX A: IMPROVEMENT PLAN

This IP has been developed specifically for Swansea and Somerset Fire Departments and Somerset Harbormaster following the Massachusetts Department of Environmental Protection 2014 Mount Hope Bay/Lees River GRP Exercise conducted on July 31, 2014.

Core Capability	Issue/Area for Improvement	Corrective Action	Capability Element ¹	Primary Responsible Organization	Organization POC	Start Date	Completion Date
Core Capability 1: Environmental Response/Health and Safety	1. Deployment of basic booming tactics and strategies by first responders.	Provide more detailed procedures on launching anchors from boats while attached to a line under strain.	Procedures	MassDEP	Steve Mahoney		
Core Capability 2: Operational Coordination	N/A						
Core Capability 3: Operational Communications	N/A						

¹ Capability Elements are: Planning, Organization, Equipment, Training, or Exercise.

APPENDIX B: EXERCISE PARTICIPANTS

Participating Organizations	
Federal	Participant Count
United States Coast Guard Sector Southeastern New England	3
State	
Massachusetts Department of Environmental Protection (MassDEP)	1
Nuka Research and Planning Group, LLC (contractor for MassDEP)	4
Moran Environmental Recovery (contractor for MassDEP)	2
Town of Swansea, MA	
Swansea Fire Department	10
Swansea Emergency Management (SEM)	1
Town of Somerset, MA	
Somerset Fire Department	7
Somerset Harbormaster	2
TOTAL	30

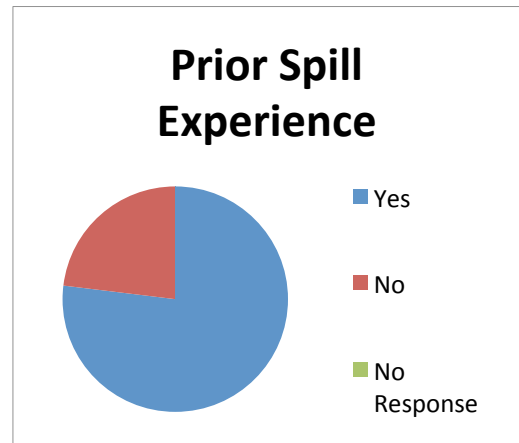
APPENDIX C: EXERCISE EVALUATION FORM

Massachusetts DEP 2014 Mount Hope Bay GRP Exercise - EVALUATION

Swansea/Somerset - Lees River GRP Exercise		Exercise date: 31JUL14	
Instructions to Participants: Complete this form based on your observations of the GRP exercise.			
Evaluator Name:		Evaluator Organization:	
What was your role in exercise? (responder, observer, facilitator, etc.)			
What was your level of spill response experience prior to this exercise? NONE TRAINING ONLY SOME SPILL RESPONSE A LOT			
Please check a box to respond to the following.		YES	NO
1. I feel more prepared to deploy oil spill response equipment now than I did prior to this exercise.			
2. I have a better understanding of spill response tactics than I did prior to this exercise.			
3. I would participate in future oil spill response equipment or Geographic Response Plan deployments at other sites.			
4. The objectives were clearly explained and the deployment exercise met the objectives.			
5. The exercise was conducted safely.			
Based on your experience today, would you feel comfortable setting a similar boom array during an actual incident? NOT AT ALL A LITTLE MODERATELY VERY			
Please evaluate how well the Lees River Drive Staging Area worked for deploying and demobilizing boom from the trailer for this deployment: <input type="checkbox"/> <u>Ideal</u> staging area for boom for this tactic. <input type="checkbox"/> <u>Sufficient</u> as a staging area for boom for this tactic. <input type="checkbox"/> <u>Not sufficient</u> as a staging area for boom for this tactic.			
Did the Exercise Plan (map diagram) provide clear direction as to how and where to deploy the boom? If not, please identify problems & suggest improvements.			

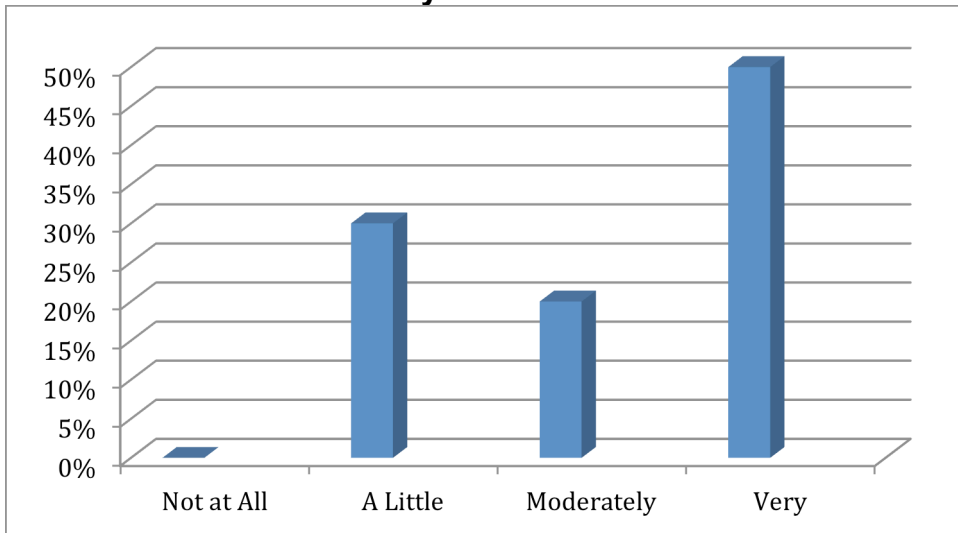
**PLEASE USE THE BACK OF THIS PAGE
FOR ANY ADDITIONAL COMMENTS**

	Yes	No
Prior Oil Spill Experience	76.9%	23.1%
More Prepared after Exercise	92.3%	7.9%
Better Understanding of Deploying Spill Response Tactics	92.3%	7.9%
Participate in Future GRP Deployments	100%	0%
Field Objectives Clearly Explained and/or Met	100%	0%



13 Respondents

Based on experience today, comfort level with setting a similar boom array in actual incident



Lee River Drive as Staging Area

