

Guidelines for Oil Spill Response Training and Exercise Programs

Guidance for Spill Management Teams and Oil Spill Responders

API TECHNICAL REPORT 1159
JULY 2014



AMERICAN PETROLEUM INSTITUTE

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Guidelines for Oil Spill Response Training and Exercise Programs Guidance for Spill Management Teams and Oil Spill Responders

1 Introduction

1.1 Purpose

API's *Guidelines for Oil Spill Response Training and Exercise Programs* (Guide) is intended to provide organizations with information on developing an **Oil Spill Response Training and Exercise Program** for oil Spill Management Teams and operational oil spill response personnel.

A robust and comprehensive training and exercise program is an important element of an organization's oil spill preparedness and response capability. Such a program will provide personnel with the knowledge and skills necessary to safely and effectively respond to oil spills and demonstrate that capability through a variety of exercises. An effective program will be flexible and scalable to maintain an adequate level of preparedness over time as the organization's oil spill risk profile changes.

1.2 Applicability and Scope

This Guide is designed for organizations and personnel that have oil spill response plans, respond to oil spills, operate oil spill response equipment, and/or have oil spill response management or oversight responsibilities. This Guide may be applied to organizations of any size, from multi-national corporations to small businesses. It may be applied to private sector and non-governmental organizations, or any other type of organization with oil spill response requirements. Any applicable organization may use this Guide as a reference, and tailor its implementation in accordance with their own unique characteristics.

This Guide may be applied to oil spill preparedness programs, regardless of the size, scope or location of oil spill risk. This includes spills in the marine environment, inland waters, on land, or any combination of locations. This Guide may be applied to spills of any type of oil, including crude oils, refined oil products and animal/vegetable oils.

Although primarily designed around U.S. standards and terminology, this Guide should be considered useful for designing oil spill training and exercise programs for all organizations regardless of national identity or geographic location.

1.3 Regulatory Requirements

The definitions, content and suggestions in this Guide were developed to be consistent with U.S. Federal regulatory requirements based on the current revision date; however, this is not a regulatory compliance document. Organizations should review their entire regulatory environment, including International, Federal, State and Local requirements, when designing their specific training and exercise program.

1.4 Definitions of Terms Used in This Guide

Term	Meaning
Asset/Facility	Any oil well, vessel, aircraft, platform, Mobile Offshore Drilling Unit, pipeline, or oil storage/handling/processing facility covered by the organization's Oil Spill Response Plan.
Drill	A drill is a type of exercise. A drill is a focused and repetitious exercise, very disciplined, used as a means of teaching and perfecting specific response skills or procedures.
Exercise	An exercise is a structured and supervised activity used to develop or maintain fitness or increase skill. Exercises are an opportunity to validate an organization's oil spill response capabilities through simulated response to an oil spill scenario. Exercises can be used for testing and validating policies, plans, procedures, training, equipment, and third-party agreements; clarifying and training personnel in roles and responsibilities; improving team coordination and communications; improving individual performance; identifying gaps in resources; and identifying opportunities for improvement.
Crisis/Incident Management Team*	The persons identified who respond to any type of emergency event, including oil spills, at the highest level of the organization's management structure. The Crisis/Incident Management Team may assume the role of a Spill Management Team, or maintain a separate response management function that focuses on ancillary impacts to the organization.
Oil Spill Response Plan	The document(s) that contains information, procedures and guidance on how the organization would respond to an oil spill from a covered asset/facility.
Spill Management Team*	The persons identified who staff the organization responsible for leading and managing the oil spill response. The Spill Management Team is led by an Incident Commander, and typically follows the Incident Command System (ICS) organizational structure. This team may be physically co-located, or coordinate virtually.
Spill Response Operators	The persons who deploy and operate oil-spill response equipment, and/or contribute skills and services to support tactical oil spill response operations. Also known as the <i>Spill Response Operating Team</i> .
Source Control	The act of stopping the discharge of oil from the source of the spill.
Training	The process of bringing a person to an agreed standard of proficiency by practice and instruction.
Qualified Individual	As defined under the applicable regulations of the U.S. Oil Pollution Act of 1990, the person designated by the organization to initiate an oil spill response.

* The names and types of response teams will vary among different organizations, depending on their complexity and regulatory environment. It is not the intent of this Guide to suggest how organizations name their various response teams, but to generally refer to any team that is responsible for managing oil spill response as a **Spill Management Team** and the personnel that deploy spill equipment as a **Spill Response Operators**.

1.5 References

The following regulations and documents were reviewed and considered during the development of this Guide. Organizations may use these references for further guidance and suggestions when developing their oil spill response training and exercise program.

U.S. Federal Regulatory References on Oil Spill Response Training and Exercises

Agency	Citation
Bureau of Safety and Environmental Enforcement (BSEE)	30 CFR 254.41—Training your response personnel. (Offshore Oil Spill Response Plans) 30 CFR 254.42—Exercises for your response personnel and equipment. (Offshore Oil Spill Response Plans)
Environmental Protection Agency (EPA)	40 CFR 112.7(f) —Personnel training (SPCC Plans) 40 CFR 112.21—Facility response training and drills/exercises (Facility Response Plans) 40 CFR Part 300—U.S. National Oil and Hazardous Substances Pollution Contingency Plan
Occupational Safety and Health Administration (OSHA)	29 CFR 1910.120—Hazardous waste operations and emergency response (HAZWOPER)
Pipeline and Hazardous Materials Safety Administration (PHMSA)	49 CFR 194.107(c)(1)(ix)—Drill program (Response Plans for Onshore Oil Pipelines) 49 CFR 194.117—Training (Response Plans for Onshore Oil Pipelines)
U.S. Coast Guard (USCG)	33 CFR 154.1050—Training (Facility Response Plans), also see Appendix D 33 CFR 154.1055—Exercises (Facility Response Plans) 33 CFR 155.1055—Training (Tank Vessel Response Plans), also see Appendix C 33 CFR 155.1060—Exercises (Tank Vessel Response Plans) 33 CFR 155.5055—Training (Non-tank Vessel Response Plans) 33 CFR 154.5060—Exercises (Non-tank Vessel Response Plans) 33 CFR 155.5061—Alternative Training and Exercise Program (Non-tank Vessel Response Plans)

Oil Spill Response Training and Exercise Reference Publications

Organization	Publication
API	Guidelines for Offshore Oil Spill Response Plans, September 2013
IPIECA	Guide to Tiered Preparedness and Response, 2007
ITOPF	Contingency Planning for Marine Oil Spills, 2011
BONN (North Sea States)	Bonn Agreement Aerial Operations Handbook
National Fire Protection Association (NFPA)	U.S. NFPA 1600 (Standard on Disaster/Emergency Management and Business Continuity Programs), 2007
U.S. Coast Guard (USCG)	Contingency Preparedness Planning Manual Volume III Exercises (COMDINST M3010.13B)
U.S. Coast Guard (USCG)	Incident Management Handbook, 2014
U.S. Coast Guard (USCG)	U.S. National Preparedness for Response Exercise Program (PREP) Guidelines, August 2002
U.S. Department of Homeland Security (DHS)	U.S. Homeland Security Exercise and Evaluation Program (HSEEP), April 2013
U.S. Department of Homeland Security (DHS)	National Incident Management System (NIMS) Training Program, September 2011
U.S. Department of Labor Occupational Safety and Health Administration (OSHA)	3172 2001 Training Marine Oil Spill Response Workers Under OSHA's Hazardous Waste Operations
U.S. DOT/USCG/EPA	Training Reference for Oil Spill Response, August 1994

1.6 Keys Principles of This Guide

This Guide was developed in accordance with the following key principles. Organizations should adjust their application of the Guide as needed based on their unique standards and requirements.

Key Principles:

1. The term “**organization**” refers to the company or entity attempting to establish or maintain an oil spill response training and exercise program.
2. The organization is conducting operations and/or owns assets involving any of the following:
 - Oil exploration
 - Oil production
 - Oil handling/processing and/or storage
 - Oil transportation (pipeline, vessel, rail, truck, etc.)
3. The organization would be considered a “**Responsible Party**” for an oil spill originating from its covered operations, assets/facilities under applicable law and regulation.

4. The organization has developed and implemented an **Oil Spill Response Plan** for its assets and operations in accordance with applicable laws, regulations or its own prudence. If needed, source control plans or procedures may be included in the organization's Oil Spill Response Plan, or be a stand-alone document(s).
5. The organization is responsible for establishing and maintaining a trained and capable **Spill Management Team**, comprised of any combination of internal and external personnel.
6. The organization is responsible for having spill response operations personnel available who would mobilize and use any necessary spill containment, removal equipment and other spill response resources.
7. The organization uses the terminology and principles of the **Incident Command System (ICS)**, as described in **Appendix B, of the U.S. National Incident Management System, 2008**.
8. The organization follows, or may adopt, the **U.S. National Preparedness for Response Exercise Program (PREP) Guidelines**, or similar multi-year training and exercise program.
9. The organization's source control function is embedded within the Spill Management Team. Unless specifically referenced, source control personnel are included when referring to the Spill Management Team.

1.7 Tier Levels

Throughout this Guide, "tier levels" are used to describe the size and scope of a potential oil spill response. The tiered approach to oil spill planning and preparedness is used by U.S. and International governmental and non-governmental organizations in developing oil spill response strategies, response team structures, and training and exercise programs.

Note that tier levels are typically not associated with the volume of oil spilled. It is the overall impact of the spill, not the quantity alone, that dictates the types and amounts of resources required and the duration of cleanup operations.

This Guide recommends that organizations adopt a 3-tier oil spill response planning system, similar to the example below, in order to scale oil spill response training and exercise programs in an efficient manner.

Example Oil Spill Tier Level Descriptions

Tier Level	Description
Tier 1	Minor spills, including incipient spills that are quickly controlled, contained and cleaned up using local (onsite or immediately available) equipment and personnel resources. A Tier 1 spill would typically be resolved within a few hours or days.
Tier 2	Moderate spills requiring activation of significant regional oil spill response resources. A Tier 2 spill response may continue for several days or weeks.
Tier 3	Major spills requiring activation of large quantities and multiple types of response resources including those from out of the region, and possibly international sources. A Tier 3 spill response may continue for many weeks or months.

1.8 Team Organization

Organizations may use the team position titles and organizational structure of the Incident Command System (ICS), closely aligned with the **U.S. Coast Guard's Incident Management Handbook**. It is understood that organizations may modify their team structure to meet their specific needs, but still attempt to maintain consistency with ICS. ICS is scalable and modular, and can be used to organize each team tier level.

It is understood that Spill Management Team positions may be filled by any combination of employees, contractors or consultants. The training guidelines in this document are position-specific, and thus would apply to any individual filling that role, regardless of their relationship to the organization.

1.8.1 Third-Party Team Members and Responders

Organizations may integrate (by contract or other means) professional oil spill removal organizations, co-operatives, private companies, consultants, individuals, and non-governmental organizations into their tactical oil spill operations and Spill Management Team.

Personnel who are oil spill responders or managers as a profession would be expected to receive training and hands-on experience necessary to fill such roles by their employer, and not necessarily follow the training and exercise program described in this document.

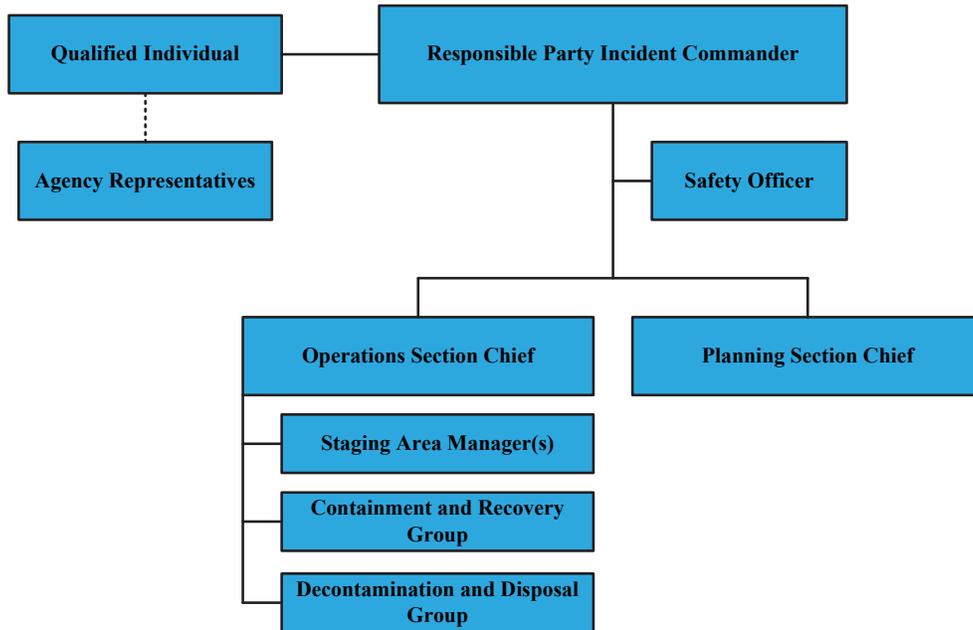
Organizations should establish or adopt a due diligence program to verify third-party personnel have adequate training and experience for the roles they will fill on the Spill Management Team or to conduct tactical oil spill operations.

1.8.2 Team Tier Levels and Training Philosophy

The following diagrams illustrate how Spill Management Teams may be organized for each Tier level, which can be used to provide the foundation for describing the organization's training program. The actual design of the organization's team levels will vary, depending on its unique requirements.

Training levels for some team positions at the Unit, Group, or Division level may not be dependent on the spill Tier, since they perform the same tasks regardless of the size and complexity of the spill. Other positions at the Command and General Staff level and Branch level require advanced training, since the complexity of managing higher tier spills requires more knowledge and skill.

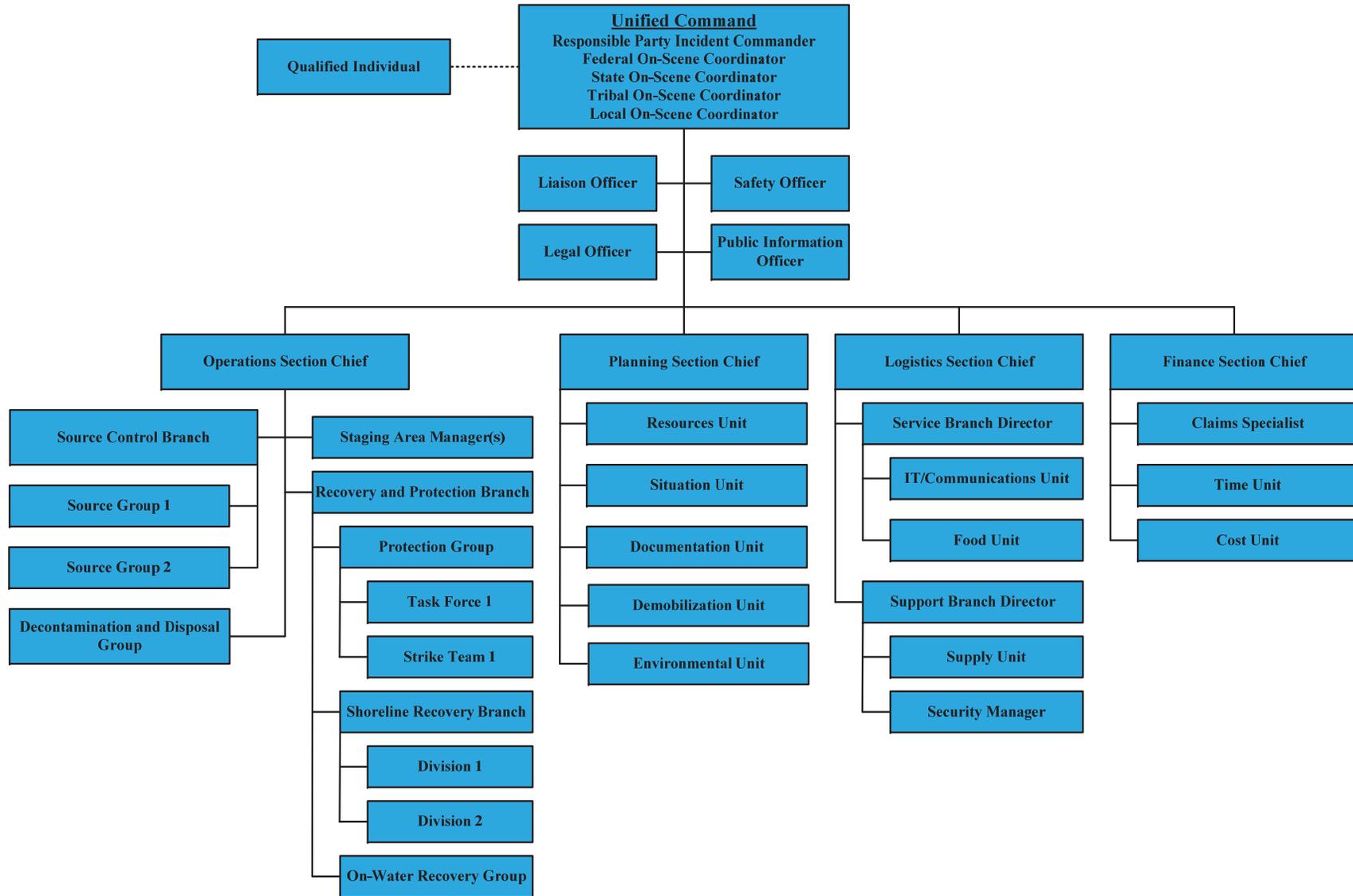
The organization should determine the organization and staffing of their Spill Management Team(s), then assign training requirements for each position based on their oil spill risk profile.

Example—Tier 1 Spill Management Team Organization

In accordance with NIMS ICS principles, the Incident Commander retains the roles and responsibilities of team positions not activated. For a Tier 1 oil spill that can be resolved with immediately available personnel and equipment, the Spill Management Team may only require a few positions. Agency personnel may briefly visit the scene for oversight, but a Unified Command may not be formally established. The Planning Section Chief, if activated, would perform all the roles of the Planning Section (Situation, Documentation, Resources, etc.) unless those Units were activated.

Training requirements for a Tier 1 team would focus on safety, basic response management skills, site-specific cleanup strategies, and tactical operations for known types of oil spills in a known operating environment. A Tier 1 team would not normally need advanced training in sustained response management techniques or a high degree of knowledge in all oil spill response strategies and tactics. Cleanup operations would typically only involve basic containment and mechanical recovery.

Example—Tier 2 Spill Management Team Organization



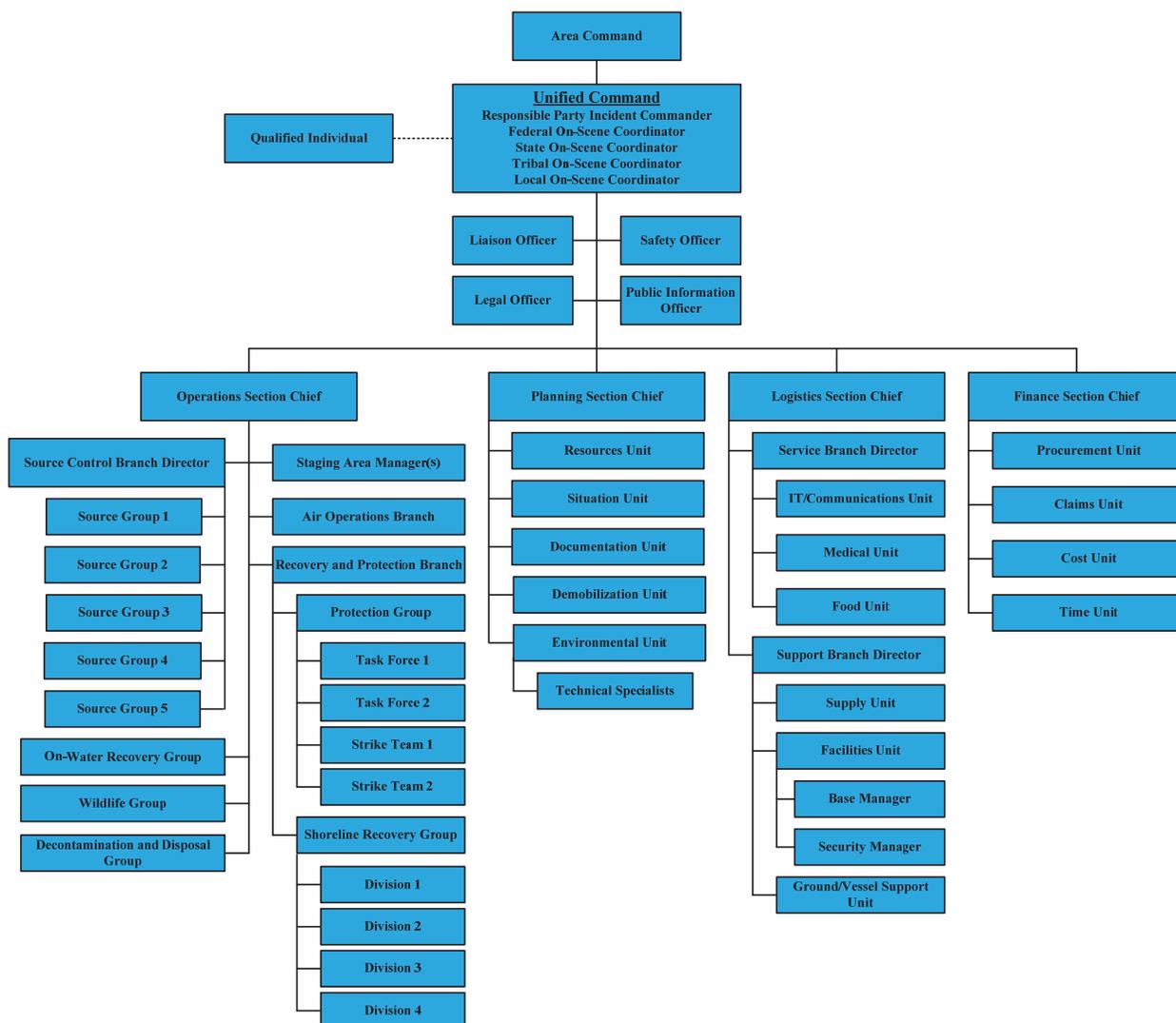
A Tier 2 oil spill response would typically require activation of all Spill Management Team Sections, along with all necessary branches, groups and units. Source control functions may be required. Additional Command Staff positions might be activated to address specific external or ancillary issues. The Unified Command would typically be formally established. This organization, fully staffed with alternates, would be capable of sustaining a response for an extended period of time.

Training for the Tier 2 team and spill responders would include advanced safety concepts and practices, the ability to sustain the response through multiple Planning Cycles and development of written Incident Action Plans, advanced skills in team organization, handling incident logistics, methods of incident procurement and cost-tracking, source control methods and strategies, knowledge and skills in all appropriate oil spill strategies and tactical operations, and application of technical specialties.

Cleanup operations for a Tier 2 response could involve complex containment strategies, mechanical recovery, use of dispersants, alternative cleanup technologies and shoreline protection strategies. Cleanup operations may occur on land, on-water and/or along shorelines. Wildlife recovery and rehabilitation may be required, as well as decontamination and disposal operations. The Environmental Unit may need to be activated to plan the best “net environmental benefit” response strategy and perform spill trajectory analysis.

The Tier 2 team training would also include managing ancillary issues such as media and public affairs, legal affairs, and liaison with external parties.

Example—Tier 3 Spill Management Team Organization



A Tier 3 spill would require the most complex Spill Management Team, with complete activation of all Command Staff and Section positions. Organization of the Operations Section could become very complex if the spill spread over a wide geographic area and involved a large number of response personnel. In addition to Unified Command, an Area Command may be established. Multiple Command Posts may be established, each with its own ICS structure.

Training for the Tier 3 team and spill responders requires in-depth knowledge and skills in highly advanced response management methods, and all disciplines of oil spill response strategies and tactics. Organizations may rely heavily on professional response entities, including public, non-governmental and private entities, to fill key positions and provide the specialized services required. Training for Tier 3 oil spill incidents should include information on how to mobilize appropriate resources and integrate them into the response efficiently.

The organization should focus on training its Spill Management Team to be aware of the issues involved in these relatively rare but complex oil spill incidents. Training should be commensurate with the organization's oil spill risk profile. If the organization has no Tier 3 oil spill risk, then such advanced training may not be required.

2 Leadership Considerations

2.1 Role of Leadership

Organizations with oil spill risk potential accept that oil spill response preparedness is a necessary function of their business. The organization's leadership plays a crucial role in establishing and maintaining an adequate level preparedness. Encouraging and motivating Spill Management Team members and spill response operators to achieve and maintain their oil spill response capabilities is the responsibility of the organization's leadership. The organization's leaders should appropriately delegate this responsibility to management personnel and periodically measure their effectiveness.

It is important for the organization's leadership to devote the time necessary for building and maintaining oil spill response capabilities and encouraging personnel to participate in training and exercises through implementation of appropriate motivational practices.

2.2 Program Evaluation

Proper evaluation of the organization's oil spill response training and exercise program includes establishing measurement for the following areas:

- Effectiveness of leadership
- Effectiveness of training courses
- Effectiveness of exercises
- Implementation of continual improvement
- Development of teamwork
- Individual team member performance

The organization's leadership should periodically evaluate the ability of designated management personnel to establish and maintain oil spill response capability, including a well-performing, motivated Spill Management Team and proficient spill response personnel.

The performance of personnel in exercises (and actual spills) should be evaluated through appropriate measurement techniques. Levels of performance should be recognized and such credit applied, as appropriate.

3 Training Guidelines

3.1 Purpose of This Section

This Section provides guidelines and suggestions for training Spill Management Team members and spill response operators, as well as other personnel associated with an oil spill response.

The possible types and levels of training opportunities for oil spill response personnel are essentially unlimited, and this Guide is not meant to be comprehensive for the needs of all organizations. Individuals recovering stranded oil on a beach require very different training than those directing aerial dispersant operations, or those leading a general staff position at the Incident Command Post. It is not possible to provide specific guidance for all conceivable roles assigned to an oil spill incident. This Section intends to provide as much information as practical to capture the basics of an oil spill response training program; however organizations should consider all potential opportunities to improve their team's capabilities.

3.2 Purpose of Training

Training is required to provide oil spill response personnel with the knowledge and skills necessary to safely and effectively respond to oil spills. Without adequate training, personnel may be exposed to unnecessary risks, and may fail to execute spill response duties effectively.

Generally, it is recommended that all personnel assigned roles in an oil spill response be adequately trained to perform their work assignments and receive safety training relative to possible hazard exposure(s).

3.3 Key Individuals and Groups

Oil spill response training requirements are unique for each individual, or groups of individuals, based on their role in the response as defined by the organization's oil spill response plan. A sample of individuals and groups are described in the following table, although organizations may identify other positions that may require specialized training as well.

Key Individuals and Groups Identified for Oil Spill Response Training

Personnel	Description
Asset/Facility Personnel	Employees or contractors of the organization assigned to an asset or facility who have responsibilities under the Oil Spill Response Plan. Such personnel would be in a position to detect an oil spill, initiate notifications, take defensive containment or source control actions, and deploy any initial oil spill response equipment at the asset/facility, if applicable.
Finance Section Chief	The person(s) designated by the organization to fill the role of Finance Section Chief, as defined in NIMS ICS. Responsible for all financial, administrative, claims and cost analysis aspects of the incident.
Finance Section Staff	Members of the Spill Management Team that fall within the Finance Section. This includes Procurement Unit, Cost Unit, Claims Unit and Time Unit.
General Oil Spill Laborers	Personnel hired, contracted, or subcontracted by the organization to provide labor in containing, recovering, and removing the oil spill, who would be in close contact with oil or other hazards related to the spill at a work site.
Incident Commander	The person(s) designated by the organization to lead the Spill Management Team, who is responsible for all aspects of the response. The Incident Commander represents the Responsible Party (organization) to the Unified Command.
Liaison Officer	The person(s) designated by the organization to fill the role of Liaison Officer, as defined in NIMS ICS, who is responsible for communicating with external stakeholders.
Logistics Section Chief	The person(s) designated by the organization to fill the role of Logistics Section Chief, as defined in NIMS ICS. Responsible for providing equipment, facilities, services, and material in support of the incident.
Logistics Section Staff	Members of the Spill Management Team that fall within the Logistics Section. This includes Support Branch (and sub-Units) and Service Branch (and sub-Units).

Personnel	Description
Oil Spill Response Technicians	Personnel who perform a technical role in the oil spill response such as SCAT, surveillance, trajectory modeling, chemical analysis, sampling, air monitoring, and etc.
Operations Section Chief	The person(s) designated by the organization to fill the role of Operations Section Chief, as defined in NIMS ICS, who is responsible for managing tactical field operations.
Operations Section Staff	Members of the Spill Management Team that fall within the Operations Section. This includes Staging Area Managers, Group Supervisors, Division Supervisors, Branch Directors and Strike Team/Task Force/Unit Leaders.
Planning Section Chief	The person(s) designated by the organization to fill the role of Planning Section Chief, as defined in NIMS ICS. Responsible for the collection, evaluation, and dissemination of information about the incident and use of resources.
Planning Section Staff	The person(s) designated by the organization that fall within the Planning Section. This includes Documentation Unit, Resources Unit, Situation Unit, Demobilization Unit and Technical Specialists.
Public Information Officer	The person(s) designated by the organization to fill the role of Public Information Officer, as defined in NIMS ICS.
Qualified Individual	The person(s) identified in the organization's Oil Spill Response Plan who will act as the point of contact between the organization and Government officials, who is also authorized by the organization to implement oil spill response actions.
Response Support Personnel	Personnel designated by the organization to fill other roles on the Spill Management Team not otherwise specified in this table. Such roles could include, but are not limited to, functional team positions such as Legal, Human Resources, Crisis Management, Government Affairs, Administration, Business Continuity, Volunteer Management, ICS Specialist, Response Advisor, and etc.
Safety Officer	The person(s) designated by the organization to fill the role of Safety Officer, as defined in NIMS ICS, who is responsible for safety and health hazard analysis and establishing safety procedures for the response.
Source Control Section Chief or Branch Director	Members of the Spill Management Team designated by the organization with responsibilities for leading efforts to control the source of the oil discharge.
Source Control Staff	Members of the Spill Management Team who lead and direct groups within the Source Control Section or Branch.
Spill Response Operators	Persons who engage in direct operational oil spill cleanup, including deployment of containment, recovery and removal equipment, and any supporting ancillary resources. For the purposes of this Guide, this includes members of the <i>Spill Response Operating Team</i> .

3.4 Sources of Training

There are U.S. regulations and Agency publications (see Section 1.5) that describe minimum elements of oil spill response training, but they generally lack details of what constitutes specific oil spill response training courses, except for HAZWOPER training, which is described in some detail.

It is up to each organization to determine their oil spill response training course elements and requirements in accordance with regulatory applicability, their worst-case spill potential, team complexity and prudent training principles.

Organizations may develop their training courses using in-house knowledge, or look to public and/or private sources of training opportunities. Over the long term, Spill Management Team members and spill response operators will benefit from the widest variety of training courses applicable to their positions.

Sources of oil spill response training include, but are not limited to:

- Training courses designed and executed by the organization
- Private sector training providers
- Government agency sponsored training events
- Non-governmental organization training events
- Not-for-Profit organization training events
- University or college training programs
- Local first responder organization training programs
- Training and exercise events sponsored by Regional or Area Contingency Planning Committees
- Mutual aid or cooperative training events

3.5 Principles of Oil Spill Response Training

This Section identifies training principles that apply to training Spill Management Team members and spill response operators.

3.5.1 Previous Experience and Knowledge

Team members should receive credit for any applicable prior training when joining a new Spill Management Team. Such training should be documented to demonstrate equivalence with a specific course.

An individual's previous oil spill response experience, general work experience, position in the organization and normal work duties should also be considered in evaluating their current and on-going training needs.

3.5.2 Spill Management Training Principles

Spill management training includes courses that are primarily classroom-based and designed to provide knowledge and awareness of oil spill response plans, team roles, oil spill response procedures and safety considerations. Training may also include table-top simulations of events to reinforce the learning environment.

Key Principles of Spill Management Training:

1. Spill Management Trainers should be knowledgeable and have actual oil spill response experience related to the subject(s).
2. Trainers should be knowledgeable and experienced in conducting adult-level training courses.
3. Multi-media presentations and teaching aids should be utilized to reach all types of adult learners.
4. Training should be consistent with procedures in the Oil Spill Response Plan, as applicable.
5. Training courses should provide enough detail to meet performance expectations.
6. The training facility should provide adequate visualization equipment, space and comfort to enhance the learning experience.
7. Use of photographs and/or videos is encouraged to expose trainees to oil spill conditions, equipment types, and response strategies.
8. Training should be conducted within a reasonable time period before a scheduled exercise so that knowledge can be reinforced through practice.
9. Level of detail, course duration and frequency of training courses will be determined by the organization based on its needs. Generally, more frequent and shorter training events are more effective at maintaining an adequate level of oil spill response preparedness over the long term.
10. Methods such as testing or participant demonstrations may be utilized to verify understanding or proficiency in the course topics.

3.5.3 Spill Operations Training Principles

Spill operations training includes hands-on, field-level training on operating spill response equipment or deployment and operation of technical devices. Some class-room learning occurs, but the emphasis is on practical use of equipment and technology. Field deployment of oil spill response equipment and technological devices is conducted to demonstrate proficiency.

Key Principles of Spill Operations Training:

1. Safety is the highest priority. Training methods and procedures should be carefully conducted to minimize risk to personnel. Task-specific safety analysis should be conducted prior to each training operation. Emergency procedures should be in place for the training event. Proper personnel protective equipment should be worn as needed.
2. Operations training should be conducted in a manner to minimize risk of damage to spill response equipment.
3. Adverse weather conditions, limited visibility, excessive wave heights, and fast currents should be avoided during training, unless those conditions are the point of the training.

4. Operations Trainers should:
 - Be very aware of safety and emergency procedures
 - Have knowledge and experience in operational training methods
 - Have specific knowledge and experience in using the subject equipment
 - Have experience in actual oil spill response
5. Trainees should be grouped to receive training on the specific equipment they are expected to use in an actual spill.
6. Classroom or field briefings should be provided as needed prior to operating equipment to provide trainees with safety instructions, technical specifications, operating instructions and deployment considerations.
7. When teaching operational skills, the trainer most often achieves the best results by working through a set sequence of discrete steps, as follows:
 - Show the trainees the actual skill they are to acquire
 - Demonstrate and explain, step by step, the tasks involved
 - Have trainees imitate the necessary actions
 - Have trainees practice performing the tasks
 - Devote at least 50 percent of the session to trainee practice time
8. Trainees should be allowed to practice using equipment to the extent necessary to demonstrate proficiency.
9. Training records should describe each type of equipment the trainee has received training on, and be as specific as possible without being redundant.

3.5.4 Mentoring

Filling a role on a Spill Management Team can be challenging to personnel with no previous oil spill experience. Organizations may consider developing a mentoring program for new Spill Management Team members, in addition to training and exercise participation. A new team member might “shadow” an experienced person in their position in a few exercises or real events to become more familiar with response procedures and application of their training. New team members might be allowed to participate as an alternate for a certain time period before being assigned as a primary Spill Management Team member to enhance their confidence and performance.

3.6 Oil Spill Response Training Courses

The example training courses described in this section are provided for consideration when developing an organization’s oil spill response capabilities. This list is neither all-inclusive nor definitive. There are many other types of oil-spill response training courses that exist, or will be developed over time that organizations may utilize as part of their program.

3.6.1 Course Duration and Frequency Considerations

The course descriptions, durations and frequencies noted in the table below are for comparison purposes based on typical industry practices, and are not intended in any way to establish a minimum or maximum recommendation. When evaluating the appropriate duration and frequency of training required to establish and maintain adequate oil spill response preparedness capabilities, organizations should consider the following factors, including, but not limited to:

- Regulatory requirements
- Stakeholder concern levels
- Worst-case spill scenarios
- Potential spill tier levels
- Resources at risk

The quality of the training and resulting incorporation of knowledge is more important than the duration of the training. However, the training durations indicated in this table provide some indication of the effort involved in preparing personnel for Spill Management Team positions based on current practices.

3.6.2 Suggested Oil Spill Response Training Courses

Course/Training Event	Description	Target Audience	Typical Duration (Hours)	Typical Frequency	Notes
1. Aerial Oil Spill Observation	Classroom and field instruction in the methods, terminology, and best practices in observing oil spills from aerial platforms and recording observations in a consistent manner. This course may be designed under the U.S. NOAA guidelines or North Sea Bonn Agreement guidelines.	Tier 2 and 3: Designated, Spill Response Operators, Surveillance Unit, other designated aerial observation personnel <i>Tier 2 and 3 Operations Section Chief, Planning Section Chief may benefit from this training</i>	4–8	One-time	Aerial observers may also require aircraft safety training.
2. Environmental Impact and Protection	Training course on the impact of spills on the environment, shoreline types, environmental priority/protection strategies, “Net Environmental Benefit Assessment” considerations, and advanced oil spill countermeasures. This course may include a review of sensitive areas applicable to the organization’s oil spill risk profile and their associated protection strategies.	Tier 2 and 3: Incident Commander, Operations Section Chief, Planning Section Chief, Environmental Unit, Liaison Officer	4–8	One-time	The “Science of Spills” course covers this information in more detail, and may be taken instead.
3. HAZWOPER	Occupational Safety and Health Administration (OSHA), Hazardous Waste Operations and Emergency Response (HAZWOPER) standard, Title 29 of Code of Federal Regulations (CFR) 1910.120	Tier 1, 2 and 3: See OSHA Publication 3172 for team member applicability. Each organization must determine the applicability of each team member according to their response system and potential spill scenarios	Initial: 4–40 Refresher: 8	Initial, with annual refresher	HAZWOPER training is more effective when customized for the organization to cover its specific spill-related hazards and pre-planned response operations.

Course/Training Event	Description	Target Audience	Typical Duration (Hours)	Typical Frequency	Notes
4. Incident Command System (ICS) Introduction, ICS-100	Introduction to the ICS, including its history, terminology, principles and procedures. Course topics include: <ul style="list-style-type: none"> • ICS overview • Roles and responsibilities of the ICS team positions • ICS facilities • Overview of the Planning Cycle • Development of an Incident Action Plan through the 201 form series. 	Tier 1, 2 and 3: All Spill Management Team Members	3–8	One-time	This course is generally designed as an introduction to ICS, and focuses on the “reactive phase” of response. See the DHS NIMS Training Program—September 2011 for additional information.
5. Incident Command System (ICS) Initial Actions, ICS 200	Advanced application of the ICS principles to sustained oil spill response management. Course topics include: <ul style="list-style-type: none"> • ICS organization for complex incidents • Incident Objectives • Unified Command principles • Detailed review of the Planning Cycle and meeting purposes • Leadership and management principles • Delegation of authority • Functional areas and team positions • Transfer of command • Advanced use of ICS forms and sustained Incident Action Plan development cycle • Incident procurement system and tracking resources 	Tier 2: Spill Management Team members at the Command Staff and Section Chief level. Other positions may be included as needed	8–16	One-time	This course begins the transition to the “proactive phase” of oil spill response. See the DHS NIMS Training Program—September 2011 for additional information.

Course/Training Event	Description	Target Audience	Typical Duration (Hours)	Typical Frequency	Notes
6. Incident Command System (ICS) for Expanding Incidents, ICS 300	<p>Application of the ICS to the higher levels of sustained oil spill response management, including management of complex incidents involving multiple types of concurrent emergencies. Course topics include:</p> <ul style="list-style-type: none"> • Management of expanding incidents • Area Command concepts • ICS organization for multiple command posts • Sustained incident planning and development of multi-layered Incident Action Plans • Resource management and demobilization 	Tier 3: Spill Management Team members at the Command Staff and Section Chief level. Other positions may be included as needed	16–24	One-time	This course prepares team members for potential Tier 3 response management. See the DHS NIMS Training Program—September 2011 for additional information.
7. Incident Command System Refresher	Provides a review of ICS principles and practices. This training may include short tabletop exercises or unit-specific work sessions to improve the team's performance.	Tier 1, 2 and 3: All Spill Management Team Members	2–8	Annual	May be combined with other annual training events.
8. Incident Commander	<p>Role, responsibilities and duties of the Incident Commander, as described in the organization's Oil Spill Response Plan. Course topics include:</p> <ul style="list-style-type: none"> • Team activation and staffing • Unified Command principles • Setting objectives and delegating responsibilities • Roles of spill response technical specialists • Stakeholder management • Application and use of National, Regional, and Area contingency plans 	Tier 1, 2 and 3: Incident Commander, Deputy Incident Commander, Qualified Individuals that transition into Incident Commanders	Initial: 4–8 Refresher: 2–4	Initial, with annual refresher	Tier 2 and 3 Incident Commanders may require additional, more advanced training specific to their geographic area.
9. Media Awareness	Instruction for personnel on handling unplanned contact with the media, either on the telephone, or in person. Focus on messages and strategies for referring questions to appropriate officials and deferring answers when information is not available.	Tier 2 and 3: Team members who may encounter media reporters on-scene, or be contacted by phone during a response	2–4	One Time	

Course/Training Event	Description	Target Audience	Typical Duration (Hours)	Typical Frequency	Notes
10. Media Spokesperson	Instruction and practice for spokespersons who may be required to perform on-camera or phone news conferences.	Tier 2 and 3: Designated spokespersons of the organization	4–12	One-time, and refresher as needed	Spokesperson training for Tier 2 and 3 teams should be more advanced and/or more frequent.
11. Oil Spill Equipment Deployment and Use	Training course to teach appropriate operational personnel how to maintain, store, deploy and operate oil spill response equipment described in the organization's Oil Spill Response Plan.	Tier 1, 2 and 3: Spill Response Operators, <i>Operations Section Chiefs and other Operations Section staff may also benefit from participation</i>	4–8	Annual	This includes equipment owned by the organization, and/or equipment owned by third parties. Courses and participants would be specialized for each category of equipment.
12. Oil Spill Finance	<p>Overview course on the financial aspects of oil spill response, including, but not limited to:</p> <ul style="list-style-type: none"> • National and International oil spill treaties and conventions • Financial responsibility assurance methodology and regulations • Insurance notifications and claims procedures • Third-party claims management • Oil Spill Liability Trust Fund (USA) purpose and use • Treasury functions in an oil spill response • Resource ordering and payment procedures • Response cost analysis and reporting • Management of invoices and auditing 	Tier 2 and 3: Finance Section Chief, Cost Unit, Procurement Unit, Time Unit, Claims Unit	2–8	One-time	Tier 2 and 3 team members may require more advanced training, specific to the organization's financial obligations and requirements.

Course/Training Event	Description	Target Audience	Typical Duration (Hours)	Typical Frequency	Notes
13. Oil Spill Response Strategies and Tactics	<p>This course may include classroom-based strategic training, and/or hands-on field training in oils spill response tactics. Includes overview and/or field instruction in the major strategies and tactics related to oil spill response, including, but not limited to:</p> <ul style="list-style-type: none"> • Oil spill fate and effects (weathering) • Surveillance, monitoring and trajectory • Oil spill response equipment—types, purpose, limitations, locations and mobilization considerations • Spill containment methods • Shoreline protection and cleanup • Wildlife capture and rehabilitation • Mechanical recovery methods • Chemical dispersant use and limitations • In-situ burning operations • Fast current containment and recovery • Oil spill in ice response • Soil remediation • Alternative technologies 	<p>Tier 1, 2 and 3: All Spill Management Team Members</p>	<p>Initial: 4–24 Refresher: 2–4</p>	<p>Initial, with annual refresher</p>	<p>This annual training is designed to maintain preparedness levels, and may focus on specific topics or improvement goals from year to year. More advanced training should be provided for Tier 2 and 3 teams, commensurate to the complexity of their potential response scenarios.</p>
14. Oil Spill Site Supervisor	<p>Training for on-scene Operations and Source Control supervisory personnel. Provides skills and knowledge to safely and effectively manage field response actions, including but not limited to source control, containment, recovery, removal and monitoring of oil spills. May be divided into onshore vs. offshore courses, as applicable to each target group.</p>	<p>Tier 2 and 3: Operations Section Chief, Branch Directors, Group Supervisors, Division Supervisors, other Leaders as appropriate</p>	<p>4–12</p>	<p>One-time</p>	

Course/Training Event	Description	Target Audience	Typical Duration (Hours)	Typical Frequency	Notes
15. Qualified Individual	Role, responsibilities and duties of the Qualified Individual, as described in the organization's Oil Spill Response Plan. Overview of Federal and State oil spill laws and regulations. Organization-specific oil spill notification procedures and Government reporting requirements. Overview of applicable National, State, Regional and Area response plans, and the role of jurisdictional authorities.	Tier 1, 2 and 3: Qualified Individual	Initial: 3–8 Refresher: 2–4	Initial, with annual refresher	See the applicable regulations for specific training requirements for Qualified Individuals.
16. Response Information System	Instruction on the purpose and use of any electronic or computer-based data systems used to capture and disseminate oil spill response information, and/or develop an Incident Action Plan. Includes overview and use of the organization's Common Operating Picture (COP), if applicable.	Tier 2 and 3: Spill Management Team members who would use or interact with the data or information system	As needed	Initial, refresher as needed	Use of the system during an exercise would count as refresher training.
17. Response Management System Introduction	Overview of the organization's emergency and oil spill response capabilities, and how response to incidents are conducted. Review of applicable response plans, response teams, response facilities, response resources, and how the organization responds to Tier 1, 2, and 3 oil spills. Instruction on use of the team's resource ordering system and applicable spending authorities. Overview of National, Regional, and Area contingency plans.	Tier 1, 2 and 3: All Spill Management Team Members	2–4	One-time	This course would be specific to each organization. Organizations with very complex and multi-level response teams may expand this training into multiple courses.
18. Roles and Responsibilities of Spill Management Team Members	Training on individual roles and responsibilities specified in the Oil Spill Response Plan for each team member on the Spill Management Team. This training may be held for the team as a group, or in individual training sessions for each position or groups of positions.	Tier 1, 2 and 3: All Spill Management Team Members	2–4	Annual	Qualified Individuals and Incident Commanders may take credit for annual refresher training if included in this course.

Course/Training Event	Description	Target Audience	Typical Duration (Hours)	Typical Frequency	Notes
19. Safety and Health for Oil Spill Response	In lieu of HAZWOPER, this course provides an overview of chemical and physical hazards in oil spill response and common oil spill response safety and health practices. Overview of air monitoring strategies/tactics for oil spill response, decontamination and hazard mitigation techniques.	Tier 1, 2 and 3: Incident Commander, Safety Officer, Liaison Officer, Operations Section Chief, Operations Section staff	2–4	Annual	Personnel who receive generic HAZWOPER training may also benefit from this training, as it should be more specific to the organization's response plan and procedures.
20. Science of Spills	Training course to increase understanding of oil spills when analyzing spill behavior and making risk-based decisions. Includes both classroom and field activities. Topics include: <ul style="list-style-type: none"> • Fate and behavior of oil spilled in the environment • An introduction to oil chemistry and toxicity • A review of basic spill response options for open water and shorelines • Spill case studies • Principles of ecological risk assessment • An introduction to damage assessment techniques • Determining cleanup endpoints 	Tier 3: Qualified Individual, Incident Commander, Liaison Officer, Operations Section Chief, Planning Section Chief, Environmental Unit	28	One-time	This course is offered by the U.S. Dept. of Commerce, National Oceanic and Atmospheric Administration (NOAA), Office of Response and Restoration. Recommended for Tier 2 and 3 teams.
21. Shoreline Cleanup and Assessment Technique (SCAT)	Shoreline Cleanup and Assessment Technique (SCAT) is a systematic method for surveying an affected shoreline after an oil spill. SCAT team members are trained in the techniques, procedures, and terminology of shoreline assessment. Members are trained in oil and oil cleanup techniques, geomorphology, ecology, and in some cases, archeology.	Tier 2 and 3: Designated personnel	24	One-time	This is a very specialized course designed for personnel conducting shoreline surveys, who typically include Agency personnel, and third-party contractors.

Course/Training Event	Description	Target Audience	Typical Duration (Hours)	Typical Frequency	Notes
22. Source Control Strategies and Tactics	<p>Training course on the organization's oil spill source control procedures and plans, as appropriate. Source Control training courses should be designed as appropriate for the organization's possible spill scenarios, and include training source control procedures for each type of scenario. These could include, but are not limited to:</p> <ul style="list-style-type: none"> • Pipeline leak/rupture • Storage tank or piping leak/rupture • Well blowout (surface and subsea) • Operational spills (overfills, transfers and process equipment) • Natural disaster impact • Vessel salvage 	<p>Tier 1, 2 and 3: Incident Commander, Operations Section Chief (if appropriate), Source Control Branch Director (or Source Control Section Chief), Source Control staff <i>Planning Section Chief and Logistics Section Chief may benefit from a condensed version of this course</i></p>	<p>Initial: 8–40 Refresher: 4–8</p>	<p>Initial, with annual refresher</p>	<p>Training for specific members of the Source Control Section or Branch should be customized for their role and include any technical or operational information as needed.</p>
23. Spill Detection and Initial Response	<p>Includes training on asset-specific oil spill detection and initial response actions to be taken by on-site personnel. For assets/facilities with on-site spill equipment, this would include deployment training. Course objectives may include:</p> <ul style="list-style-type: none"> • Information on the oil products handled at the site, and their hazards • Detecting spills • Notification procedures • Initial site safety and personal protection • Defensive source control measures • Initial containment procedures • Equipment deployment considerations and practice 	<p>Tier 1, 2 and 3: Asset/Facility personnel, Qualified Individual, Operations Section Chief</p>	<p>Initial: 2–6 Refresher: 1–4</p>	<p>Initial, with annual refresher</p>	<p>This training may be combined with the Oil Spill Equipment Deployment and Use course(s), if applicable.</p>

Course/Training Event	Description	Target Audience	Typical Duration (Hours)	Typical Frequency	Notes
<p>24. Wildlife Recovery and Rehabilitation</p>	<p>Wildlife training programs for oil spill response include issues surrounding oiled wildlife recovery and rehabilitation, laws that govern the handling of affected animals, biology, capture techniques, triage and the actual cleaning of oiled wildlife.</p> <p>For Spill Management Team members, this course would provide awareness of the tactical operations and resources required to conduct wildlife recovery and rehabilitation.</p> <p>Licensing and hands-on training may be required for those actually handling wildlife.</p>	<p>Tier 2 and 3: Planning Section Chief, Environmental Unit, Wildlife Group/Unit staff</p>	<p>4–8</p>	<p>One-time</p>	<p>An overview of this information could be included in the annual Oil Spill Response Strategies and Tactics course.</p>

3.7 Oil Spill Response Training Applicability by Team Position

Each organization should identify the specific training courses required for their circumstances, and then identify the applicable positions for each training course. After identifying the training and applicability, the organization should develop a training matrix, or similar system, to communicate the requirements to the organization.

The following table is an example of how an organization could specify and document the training requirements for their team members. This example is not intended to establish a minimum standard for every organization.

3.7.1 Sample Training Matrix

X—represents training applicable to this position (also check for Tier Level applicability)

O—Optional, or dependent on applicability

Position	Course numbers below correspond to the training course list in Section 3.6.2																							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Asset/Facility Personnel	O		O	O	O	O	O		O				O				O	O	X				X	
Finance Section Chief				X	X	X	X		O			X	X			O	X	X						
Finance Section Staff				X	X	O	X					X	X			O	X	X						
General Oil Spill Laborers			O																					
Incident Commander		X	O	X	X	X	X	X	X	O			X			O	X	X	X	X				
Liaison Officer		X		X	X	X	X		X				X			O	X	X	X	X				
Legal Officer									X				X			O	X	X						
Logistics Section Chief				X	X	X	X		O				X			O	X	X	O					
Logistics Section Staff				X	X	O	X		O				X			O	X	X						
Oil Spill Response Technicians			O	O	O	O	O		O				O	O		O		O	X	O	O			O
Operations Section Chief	O	X	O	X	X	X	X		X		O		X	X		O	X	X	X	X	O		X	O
Operations Section Staff			O	X	X	O	X		X		O		X	X		O	X	X	X					O
Planning Section Chief	O	X		X	X	X	X		O				X			O	X	X	O	X	O			X
Planning Section Staff		X		X	X	O	X		O				X			O	X	X						
Public Information Officer				X	X	X	X		X				X			O	X	X						
Qualified Individual			O	X	O	O	X	O	X	O			X		X	O	X	X	X	X			X	
Response Support Personnel			O	X	O	O	X		O				O			O	X	O						
Safety Officer			O	X	X	O	X		X				X			O	X	X	X					
Source Control Section Chief or Branch Director			O	X	X	O	X		X							O	X	X	X				X	
Source Control Staff			O	X	O	O	X									O	X	X	O				X	
Spill Response Operators	O		O	O			O				X		O	O					X		O			

4 Exercise Guidelines

4.1 Purpose of this Section

This Section provides guidelines and suggestions for establishing an oil spill response exercise program. Exercises provide Spill Management Team members and spill response operators, as well as any other supporting personnel associated with an oil spill response, with the experience necessary to execute the Oil Spill Response Plan.

This Section does not include procedures to design, conduct and evaluate exercises. Guidance for executing specific exercises can be found in the following sources:

- U.S. Coast Guard Contingency Preparedness Planning Manual Volume III Exercises (COMDINST M3010.13B)
- U.S. Homeland Security Exercise and Evaluation Program (HSEEP)
- U.S. National Preparedness for Response Exercise Program (PREP) Guidelines

4.2 Purpose of Exercises

Oil spill response preparedness requires the development of personal skills and knowledge gained through hands-on experience in actual spills or during exercises. Exercises play a crucial role in oil spill response preparedness, providing opportunities for response teams to practice and assess their collective capabilities in a risk-reduced, controlled learning environment.

Exercises allow response personnel to validate the effectiveness of their training program and identify areas where additional training is required. Exercises are the primary tool for assessing response preparedness and identifying areas for improvement, while demonstrating resolve to prepare for oil spills.

Well-designed and well-executed exercises are an effective means of:

- Assessing and validating policies, plans, procedures, training, equipment, assumptions, and contract or mutual aid agreements;
- Clarifying team roles and responsibilities;
- Improving response coordination and communications internally and externally;
- Identifying gaps in resources;
- Measuring response team performance; and
- Identifying opportunities for improvement in planning, training and exercise programs.

4.3 Types of Exercises

In accordance with the references in Section 4.1, there are eight basic types of exercises. The type of exercise chosen for a specific project is identified through analysis of:

- The purpose for the exercise;
- Regulatory compliance requirements;

- The capabilities the team is attempting to validate;
- The training and exercises already conducted;
- The limitations (e.g., physical, operational) of conducting exercises that apply to the location of the operations; and,
- The resources available for exercise planning, conduct, and evaluation.

Exercises can be categorized as **Discussion-based** or **Operations-based**.

4.3.1 Discussion-Based Exercises

Discussion-based exercises are normally used as a starting point in the building-block approach of escalating exercise complexity, or to refresh knowledge and experience. Discussion-based exercises include seminars, workshops, tabletop exercises, and games. These types of exercises typically involve a walk-through or review of existing plans, policies, and procedures. Discussion-based exercises are valuable tools for familiarizing personnel with current or expected capabilities. Discussion-based exercises typically focus on strategic issues. Facilitators and/or presenters usually lead the discussion, keeping participants on track toward meeting exercise objectives.

Communications or Notification

A check of the notification flowcharts, call-down list, and response resource lists, which is performed to confirm that the appropriate positions or persons are identified and to verify the contact numbers or other contact details are accurate. This is accomplished by making each notification listed in the plan and confirming their contact information.

Seminars

Seminars are informal discussions, unconstrained by real-time portrayal of events and led by a presenter. They are generally employed to orient participants to, or provide an overview of, authorities, strategies, plans, policies, procedures, protocols, response resources, and/or concepts and ideas. Seminars provide a good starting point for entities that are developing or making major changes to their plans and procedures.

Workshops

After seminars, workshops represent the second tier of exercises in the building-block approach. They differ from seminars in two important respects: participant interaction is increased, and the focus is on achieving or building a product (such as a draft plan or policy). Workshops are often employed in conjunction with exercise development to determine objectives, develop scenarios, and define evaluation criteria.

A workshop may also be used to produce new response plans. To be effective, workshops must be highly focused on a specific issue, and the desired outcome or goal must be clearly defined.

Tabletop Exercises

Tabletop exercises involve personnel discussing hypothetical scenarios in an informal setting. This type of exercise can be used to assess plans, policies, and procedures or to assess the systems needed to guide the prevention of, response to, and recovery from a defined incident. They are typically aimed at facilitating understanding of concepts, identifying strengths and shortfalls, and achieving changes in the approach to a particular situation. Participants are encouraged to discuss issues in depth and develop decisions through slow-paced problem solving, rather than the rapid, spontaneous decision making that occurs under actual or simulated emergency conditions.

Games

A game is a simulation of operations that often involves two or more teams and uses rules, data, and procedures to depict an actual or assumed real-life situation. The goal of a game is to explore decision-making processes and the consequences of those decisions. A game does not require use of actual resources, and the sequence of events affects, and is in turn affected by, decisions made by players.

4.3.2 Operations-Based Exercises

Operations-based exercises represent a higher level of exercise complexity. They are used to validate the plans, policies, agreements, and procedures solidified in discussion-based exercises. Operations-based exercises include drills, functional exercises, and full-scale exercises. They can clarify roles and responsibilities, identify gaps in resources needed to implement plans and procedures, and improve individual and team performance. Operations-based exercises are characterized by actual reaction to simulated intelligence; response to emergency conditions; mobilization of apparatus, resources, and/or networks; and commitment of personnel, usually over an extended period of time.

Drills

A drill is a coordinated, supervised activity usually employed to validate a single, specific operation or function in a single agency or organizational entity. Drills are commonly used to provide training on new equipment, develop or validate new response procedures, or practice and maintain current skills.

Functional Exercises

A functional exercise is designed to validate and evaluate individual capabilities, multiple functions, activities within a function, or interdependent groups of functions. Events are projected through an exercise scenario with event updates that drive activity at the management level. A functional exercise simulates the reality of operations in a functional area by presenting complex and realistic problems that require rapid and effective responses by trained personnel in a highly stressful, time-constrained environment.

Functional exercises generally concentrate on exercising the organization's plans, policies, procedures, and response team staff. Movement of personnel and equipment is simulated.

Full-Scale Exercises

The full-scale exercise is the most complex type of exercise. They can be multi-agency, multi-jurisdictional, multi-organizational exercises that validate many facets of preparedness. They focus on implementing and analyzing the plans, policies, procedures, and cooperative agreements developed in discussion-based exercises and practiced in previous, smaller, operations-based exercises.

In a full-scale exercise, the reality of operations in multiple functional areas presents complex and realistic problems that require critical thinking, rapid problem solving, and effective responses by trained personnel. Full-scale exercises are conducted in real time, creating a stressful, time-constrained environment that closely mirrors real events.

Response-focused full-scale exercises include many first responders operating under the principles of their response plans to effectively and efficiently respond to an incident. Personnel and resources are mobilized and deployed to the scene where they conduct their activities as if a real incident had occurred (with minor exceptions). A full-scale exercise also may include functional play from participants not located at the exercise incident response site.

4.4 Oil Spill Response Exercises

The following types of exercises should provide a foundation to establish and maintain oil spill response capability for an organization. Any combination of exercises may be used to target specific improvement goals.

The exercise type descriptions, durations and frequencies noted in the table below are for comparison purposes only and are based on typical industry practices. They are not intended in any way to establish a minimum or maximum standard. Each organization should consider their unique response team organization(s), worst-case spill scenarios, potential spill tier levels, nearby resources at risk, and other factors to determine the appropriate types, duration and frequency of exercises required to establish and maintain adequate oil spill response preparedness capabilities.

Oil Spill Response Exercise Types

Exercise Type	Description	Attendees	Typical Duration (Hours)	Typical Frequency*
Oil Spill Response Strategy Workshop	Workshop dedicated to specific oil spill response or source control strategies and procedures. Each workshop would include discussion of the timing, resources, tasks, and safety considerations of the subject strategy.	<ul style="list-style-type: none"> Applicable Spill Management Team Members, including Source Control team members as needed 	2–8	As needed to develop or validate the Oil Spill Response Plan and/or Source Control Plan/Procedures.
Spill Management Team Tabletop Exercise	“Walk-through” of the Oil Spill Response Plan or Source Control Plan/Procedures by the Spill Management Team to become familiar with content and layout. Provides overview of all spill response strategies, resources and identifies any planning gaps.	<ul style="list-style-type: none"> Qualified Individuals Incident Commanders Command Staff Section Chiefs Source Control team members Other team members as appropriate 	2–4	As needed for new Spill Management Team Members or to present major changes to the Oil Spill Response Plan or Source Control Plan/Procedures.
Oil Spill Response Equipment Full-Scale Exercise	Full-Scale exercise to test/practice deployment and operation of selected oil spill response equipment. A representative sample of each type of oil spill equipment should be deployed and operated.	<ul style="list-style-type: none"> Spill Response Operators Other team members as appropriate 	4–24	Annual or semi-annual
Spill Management Team Functional Exercise	Functional exercise to test/practice the spill management team's implementation of the Oil Spill Response Plan in a controlled learning environment.	<ul style="list-style-type: none"> Spill Management Team Members 	4–16	Annual

Exercise Type	Description	Attendees	Typical Duration (Hours)	Typical Frequency*
Source Control Functional Exercise	Functional exercise to test/practice implementation of the organization's source control procedures and plans, as appropriate. This could include spill sources such as well blowouts, pipeline leaks, vessel salvage, storage tank leaks, and etc.	<ul style="list-style-type: none"> • Source Control team members 	4–16	Annual
Source Control Equipment Full-Scale Exercise	Full-Scale exercise to test/practice deployment and operation of selected source control equipment.	<ul style="list-style-type: none"> • Source Control operating personnel • Source Control team members • Other team members as appropriate 	As needed	Tri-annual
Notification Drill	Drill to test/practice the ability of asset/facility personnel and the Spill Management Team to execute internal and external oil spill notification and reporting requirements, as described in the organization's Oil Spill Response Plan. A notification drill is always unannounced.	<ul style="list-style-type: none"> • Asset/Facility Personnel, as appropriate • Qualified Individuals • Liaison Officers • Incident Commanders • Other appropriate Spill Management Team members 	1	Quarterly
Joint Public/Private Exercise	Tabletop or Functional Exercise to enhance interaction between the organization and applicable Government entities.	<ul style="list-style-type: none"> • Spill Management Team • Appropriate public officials 	4–8	Tri-annual
Unannounced Exercise	Any of the exercises above may be initiated as an unannounced exercise to test the readiness of the response teams.	<ul style="list-style-type: none"> • As designated 	As needed	One unannounced exercise should be held annually.
Actual Spill Event	An organization may take credit for any of the exercises above if it responds to an actual spill event, to the extent the actual event required implementation of exercise elements.	<ul style="list-style-type: none"> • Spill Management Team • Spill response operators 	As needed	Per occurrence

4.5 Principles of Oil Spill Response Exercises

This Section identifies principles that apply to the organization's oil spill response exercise program.

1. Seminars should be conducted when developing or changing the organization's Oil Spill Response Plan and/or Source Control Plans/Procedures, and should focus on building the strategies and tactics of the response. Participants should include the team members assigned to those strategies, and representatives from any supporting entities.
2. Source control workshops are valuable in developing the organization's response specific procedures for well control, pipeline emergencies, production process control procedures, and other source control measures. Such workshops include each Group or Unit within the Source Control Branch.
3. Other specific workshop topics for functional areas of the Spill Management Team could include:
 - Surveillance and trajectory strategies
 - Spill containment strategies
 - Shoreline protection and cleanup strategies
 - Mechanical recovery strategies
 - Chemical dispersant strategies
 - In-situ burning strategies
 - Safety and health strategies
4. Exercise frequencies should be established to allow as much participation as possible by all team members, including alternates. Goals should be established to maintain a minimum exercise participation rate within the organization. For example, the organization may establish a policy that additional exercises should be conducted when more than 20% of the Spill Management Team has not participated in an exercise within the last 12 months (or other ratio/timeframe as appropriate).
5. In order to properly evaluate the Spill Management Team's performance, exercise scenarios should only be known by the Exercise Design Team prior to conducting an operations-based exercise.
6. Exercises are also identified as "**announced**" or "**unannounced**", depending on if the participants will be notified in advance when the exercise will be held. In an unannounced exercise, no one except the Exercise Planning Team is informed of the exercise date/time. Unannounced oil spill exercises are typically used to test spill notification procedures and team mobilization procedures.
7. Proper attention to exercise design and planning will result in exercises that meet the intended objectives and are well documented.
8. Adequate exercise evaluation procedures ensure that lessons are properly documented for improvement purposes.
9. An organization that responds to an actual oil spill may use that event to take the place of an exercise, to the extent that the event tested the required exercise elements. This event should be properly documented, including all elements of exercise documentation, with a statement of intent to use the event in lieu of a specific exercise.

10. Multiple exercises may be combined to gain efficiency, reduce time burden on Spill Management Team members, minimize costs, and challenge multiple plan elements concurrently. For example, the annual Spill Management Team exercise may be held concurrently with a Notification Drill and a Source Control Functional exercise. Any combination of exercises may be conducted, as long as the purpose and goals of the exercises are achieved and adequate time is allowed for each exercise element. However, conducting one “super exercise” per year has limitations on the organization’s preparedness level. Spreading several exercise types over the course of the year gives individual members greater chance of participation, and helps retain knowledge and skills learned.

5 Multi-Year Training and Exercise Program

By using a **Multi-Year Oil Spill Response Training and Exercise Program**, an organization can efficiently develop, improve and maintain oil spill response capabilities through training and exercise activities that vary in type and complexity over a multi-year cycle.

This program can help attain preparedness goals, verify response capability, and maintain response preparedness over an extended time period. The program establishes the organization’s policy and procedures that lead to a schedule of specific training courses and exercises that establish and validate oil spill response capabilities. An effective program maximizes efficiency in resources, time, and costs with an integrated approach to building, delivering, and sustaining core oil spill response capabilities.

Multi-Year Oil Spill Response Training and Exercise Programs are encouraged by many regulatory authorities, and examples of such programs include:

- U.S. Homeland Security Exercise and Evaluation Program (**HSEEP**)
- U.S. National Preparedness for Response Exercise Program (**N-PREP**)

The API **Multi-Year Oil Spill Response Training and Exercise Program** model seeks to incorporate the best elements of **HSEEP**, **N-PREP**, industry best practices and international guidance into a guideline that can be implemented by organizations of any size and type with oil spill response responsibilities.

The key steps of managing an effective **Multi-Year Oil Spill Response Training and Exercise Program** include:

1. Establish the organization’s individual responsibilities and assign personnel to committees as necessary to develop the **Multi-Year Oil Spill Response Training and Exercise Program**
2. Assess current oil spill preparedness level(s)
3. Determine preparedness priorities and required oil spill response capabilities
4. Review specific training and exercise requirements that apply to the organization
5. Develop a **Multi-Year Oil Spill Response Training and Exercise Program** based on the organization’s priorities
6. Integrate the **Multi-Year Oil Spill Response Training and Exercise Program** into the organization’s business systems to provide management accountability, funding, tracking and record-keeping
7. Develop the **Multi-Year Training and Exercise Plan** that lists specific training and exercise activity, their timing, required participants, and required resources

8. Arrange adequate resources and funding for training and exercise events
9. Conduct training courses and exercises in accordance with the schedule
10. Develop improvement plans and implement corrective actions based on training and exercise feedback
11. Monitor and adjust the **Multi-Year Training and Exercise Plan** as needed

5.1 General Contents

The organization's **Multi-Year Emergency Oil Spill Response Training and Exercise Program** would typically contain the following sections, although contents may vary based on the size and complexity of the organization's Oil Spill Response Plan(s) and geographic operational area(s).

Typical Contents of the Multi-Year Emergency Oil Spill Response Training and Exercise Program

I. Introduction

Provide introductory language as necessary. Consider specifying or describing:

- The purpose and role of the Program
- The timeframes of the Program (years covered)
- Delegation of responsibility for developing and administering the Program
- Applicability of the Program (teams, facilities, geographic areas, etc.)
- References (internal and external)

II. Points-of-Contact and Responsibilities

List each person responsible for management and/or review of the Program, and include their contact information. This would include internal contacts, and possibly external contacts needed to coordinate specific training or exercise events.

List the responsibilities of each person and how they contribute to the Program.

III. Program Priorities

Briefly describe how the organization decided upon its oil spill response priorities and Program elements, including methodologies such as:

- Studies of historical oil spills from industry-wide operations and sources
- Strategy, policy or guidance documents (National, Area, and/or Local oil spill contingency plans; regulations; internal organization policies; etc.)
- Threat and hazard identification and risk assessments
- Actual incidents, or near-misses

- The organization’s Oil Spill Response Plan
- Capabilities assessments conducted by the organization or external parties
- After-Action Reports (AARs) and Improvement Plans (IPs) from previous exercises

Identify and briefly describe the specific priorities for the Program. For each priority, identify and describe corresponding core response capabilities that support each priority. Discuss the rationale for each capability, and any supporting training courses or exercises that enhance that capability.

Example Priorities List

Priority	Core Response Capability	Rationale	Training Support	Exercise Support

IV. Methodology and Tracking

Describe the specific training and exercise events chosen to achieve the goals of the Program, and describe how they are delivered and tracked.

Training Methodology

- Identify the training courses by name, and describe the agenda, content, duration, location(s) and target audience. Specify if the training course is required by regulation, or company policy. Describe the required frequency of the course for each type of participant, including any periodic refresher.
- Describe the business systems used to track training events and produce training records for individuals. Explain how the records can be accessed for review.
- Describe the resources available, internally and/or externally, to provide the required training.
- Describe the organization’s training budget process, responsibility, and funding authority for training support.

Exercise Methodology

- Identify each exercise by name, and describe its type, purpose, frequency, and duration. Specify if the exercise is required by regulation, and/or by company policy. Specify who is required to participate in the exercise, including any internal and external participants.
- Describe the methodology the organization will use to design, plan, conduct and evaluate exercises. Specify if the organization uses the HSEEP methodology, or adopts a customized methodology. If a customized methodology is used, include that material in the Program document or reference if stand-alone. Specify if the organization follows N-PREP guidelines, or adopts a customized methodology, and describe that methodology as part of the Program, or refer to the stand-alone document.
- Describe the resources available, internally and/or externally, to provide the required exercise support.
- Describe the organization's exercise budget process, responsibility and funding authority for exercise support.

V. Multi-Year Training and Exercise Plan

The Multi-Year Training and Exercise Plan is typically presented as a matrix, and lists each training course and exercise scheduled over the upcoming multi-year timeframe.

This document may be stand-alone, or included as an appendix to the Program document.

Example Multi-Year Training and Exercise Plan

Year 1							
Ref #	Year (Quarter)	Proposed Date	Activity Type Training or Exercise	Activity Description (Highlight if regulatory requirement)	Participating Teams and Organizations	Resources Required	Status
Year 2							
Ref #	Year (Quarter)	Proposed Date	Activity Type Training or Exercise	Activity Description (Highlight if regulatory requirement)	Participating Teams and Organizations	Resources Required	Status
Year 3							
Ref #	Year (Quarter)	Proposed Date	Activity Type Training or Exercise	Activity Description (Highlight if regulatory requirement)	Participating Teams and Organizations	Resources Required	Status

6 Records and Continual Improvement

Proper documentation of training and exercises is essential for program management, improvement planning, verification of compliance, and audit purposes. It is necessary for organizations to develop controlled recordkeeping systems that provide accurate information for analysis of the training and exercise program.

6.1 Recordkeeping

6.1.1 Retention Duration

The organization should clearly state the minimum duration that training and exercise records should be maintained. Record retention timeframes may be specified by applicable regulations, and/or determined by company policy. For purposes of a **Multi-Year Emergency Oil Spill Response Training and Exercise Program**, training and exercise records should be retained through the last complete cycle, at a minimum.

6.1.2 Storage of Records

The organization should describe where training, drill and exercise records are stored and maintained. Describe who, or what department, in the company is responsible for maintaining these records.

If paper records are used, identify their storage location, access restrictions and custodian(s). Paper training and exercise records should be stored in a protected location, and/or duplicated and stored in two separate locations, to prevent loss in the event of a fire or other disaster.

Records stored electronically should be protected against accidental deletion or corruption, and be part of the organization's electronic information backup system. If electronic records are used, the organization should identify their computer file folder location, access restrictions, backup location(s), and custodian(s).

6.2 Responsibility for Records

The responsibility for creating, maintaining and storing training and exercise records should be clearly assigned to individuals within the organization so there is no ambiguity about who is accountable for preserving those records and providing such information as requested.

6.3 Training Documentation

Documentation of each training event should be comprehensive and provide adequate information for program managers, inspectors and auditors to validate the training program. Documentation of each training event should include:

- Course Name
- Date/Time
- Instructor Name, affiliation, contact information
- Duration
- Location

- List of Participants (including sign-in sheet with individual signatures)
- Training objectives
- Topics covered
- Copies of any handouts, presentations or course materials
- Training certificates for individuals (optional)
- Post-training review and course evaluations (if applicable)

6.4 Exercise Documentation

Written documentation of each exercise is essential for auditing, improvement planning and program management. Each exercise should be documented to capture how it was designed and conducted, as well as the results of the exercise. The response actions simulated or executed by the exercise participants should be documented either by the participants through their own response documentation procedures, or by the exercise evaluators. Post-exercise de-briefings and lessons learned should be documented and incorporated in the Improvement Plan.

At the end of the exercise, the Exercise Controllers/Evaluators collect all documents developed during the exercise, including the Incident Action Plan (if any) and individual documentation. Other documents related to the exercise are collected including sign-in sheets, maps, oil spill trajectories, permit applications, tactical response plans, lessons-learned questionnaires, and exercise evaluation reports.

After all exercise documentation has been collected and sorted, an **After Action Report/Improvement Plan** is developed and routed for approval by the organization's management.

A comprehensive **After Action Report/Improvement Plan** would include, but is not limited to, the following components:

- Exercise Summary
- Exercise Purpose, Ground Rules, and Safety Considerations
- Exercise Scenario(including scenario summary and event list)
- Participant Manual or pre-exercise materials distributed
- Exercise sign-in sheet(s)
- Incident Action Plan (if developed by exercise participants)
- Individual participant documentation (Unit or Individual Logs and Conversation/Action Forms)
- Resource Requests (i.e. ICS 213RR forms)
- Exercise Evaluation Reports
- Lessons Learned
- Photographs
- Improvement Plan

6.5 Continual Improvement

Continual improvement is an essential element of the organization's Oil Spill Response Training and Exercise Program. While training and exercises provide personnel with knowledge and experience, they are also opportunities to learn valuable lessons that lead to improvements in oil spill response preparedness.

The action items generated during training events or exercises should be captured in the organization's improvement tracking system to ensure they are implemented.

Improvement action items may involve:

- Plan revisions
- Changes to training or drill/exercise formats or processes
- Changes to company response procedures/processes
- Changing training and exercise requirements or frequencies
- Amendments to the Multi-Year Emergency Oil Spill Response Training and Exercise Program
- Purchase of additional equipment or supplies
- Changes in oil spill response strategies and tactics

Tracking such items to completion will ensure that the organization continues to improve as spill response resources, technology, and strategies evolve over time.



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