



REGIONAL ASSOCIATION OF
OIL, GAS AND BIOFUELS SECTOR COMPANIES
IN LATIN AMERICA AND THE CARIBBEAN

ARPEL Oil Spill Response Planning and Readiness Assessment Manual V 2.1

April 2017

ARPEL PUBLICATION MP01-2017



BEST PRACTICES

International Oil Spill Conference



API • BSEE • IMO • IPECA • NOAA • PRIMSA • USCG • USFPA

IOSC



ARPEL Reference Manual MP01-2017 April 2017

Funding

This document and the accompanying upgraded Excel™ tool (RETOS™ V 2.1) have been prepared based on the original work developed for the ARPEL Governance Project (AGP) which was funded by the Canadian International Development Agency (CIDA) and co-managed by the Environmental Services Association of Alberta (ESAA) and the Regional Association of Oil, Gas and Biofuels Sector Companies in Latin America and the Caribbean (ARPEL). The funding for this upgraded version is from the International Oil Spill Conference (IOSC).

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This Manual and its accompanying Excel™ tool (RETOS™ V 2.1) (the “Product”) are intended as tools that can be used by the oil spill response community to assess its current state of readiness/preparedness to respond effectively to a spill incident for a specific program scope. NOT all criteria contained in this Manual apply in all instances, to all facilities/operations, or for all countries or governments.

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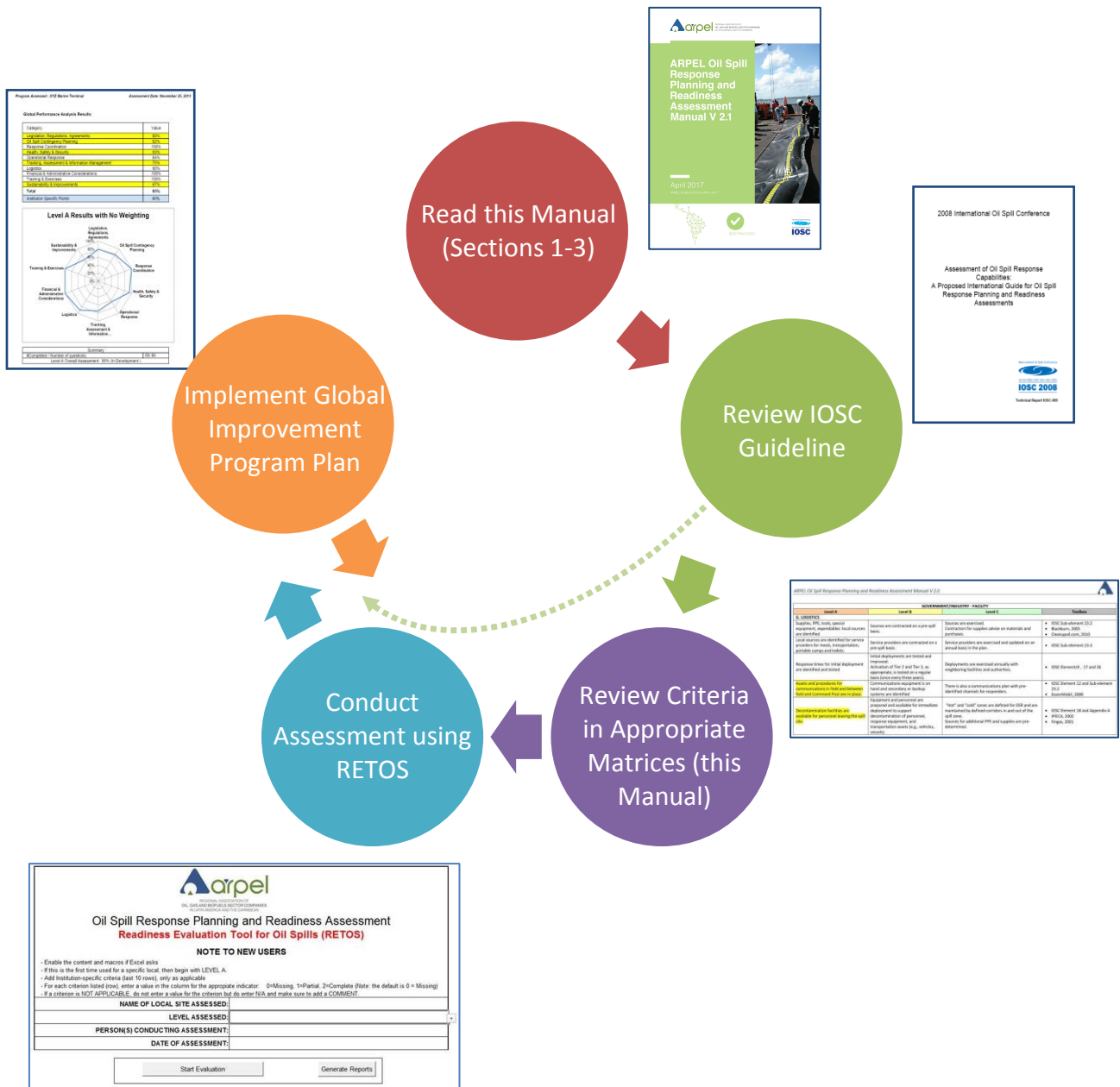
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Figure 1 - Overview of how to use this Manual and the RETOS™ application.





1. INTRODUCTION

There have been few attempts in the oil spill response community to prepare comprehensive guides for the assessment of response capability. Most guidance has been focused on the content of oil spill response (OSR) contingency plans. In 2007, organizers of the 2008 International Oil Spill Conference (IOSC) convened a workgroup to develop general guidance that could be used to assess OSR readiness. The 2008 IOSC Workshop Subcommittee prepared a broad suite of planning and readiness assessment elements to encourage improved response capacity by aiding development and maintenance of response management systems from a site level to a multi-national level and to reach beyond OSR contingency planning.

Government and industry representatives from Latin America and the Wider Caribbean Region met in Panama on 3 December 2007 to review, discuss, and provide recommendations to a document that resulted in the “Assessment of Oil Spill Response Capabilities: A Proposed International Guide for Oil Spill Response Planning and Readiness Assessment” that was published by the American Petroleum Institute (API, 2008; Taylor et al., 2008) and presented in May 2008 as a special session at the IOSC held in Savannah, Georgia, USA. This document is hereinafter called, “the 2008 IOSC Guideline”.

Subsequent feedback received from the international community deemed it desirable to transform the 2008 IOSC Guideline into a more user-friendly management tool, hence leading to the “**ARPEL Oil Spill Response Planning and Readiness Assessment Manual**” and its accompanying Excel™ tool (RETOS™), which were developed by ARPEL in 2011.

Reviews made by experts while using the original Manual and RETOS™ during field exercises for industry and governments worldwide, recognized the value and flexibility of the tool and made recommendations to improve its user-friendliness.

ARPEL decided to address these recommendations and –in December 2012- the IOSC Executive Committee decided to fund

ARPEL efforts to upgrade the Manual and RETOS™.

1.1. Objective

The objective of this Manual is to assist governments and companies in assessing their level of oil spill response planning and readiness management in relation to commonly agreed pre-established criteria considering international Best Management Practices. The foundation for the concepts and criteria presented in this Manual is the 2008 IOSC Guideline, which should be consulted for in-depth criteria and aids in developing OSR capabilities. **This Manual is accompanied by an assessment tool, the Readiness Evaluation Tool for Oil Spills (RETOS™ – translates as “challenge” in Spanish).**

Management Tool

This Manual and RETOS™ represent management tools to be used at different levels of assessment and OSR implementation (i.e., by companies at facilities and/or corporate levels) as well as an environmental governance tool for governments. The Manual and RETOS™ are intended to help in the assessment of OSR planning and readiness and to identify gaps and information needs and sources for improvement. OSR assessment criteria are provided as a foundation for a consistent approach to assessing a level of OSR planning and readiness as well as to assist in identifying areas for improvement and ensuring that integrated OSR cooperation tools and processes are in place. The Manual and RETOS™ are oriented more toward the management of OSR readiness and less toward detailed operational aspects, such as specific amounts or types of equipment. References are included on international best practices to assist in finding information to close any gaps determined by an assessment.

Self-Assessment

This Manual aims to provide a general guideline to petroleum sector operators and governments, so that they may assess their own programs and/or apply the best practices to ensure the continuous improvement of their oil spill contingency management preparedness. A self-assessment can be performed at various



levels of responsibility or scope to achieve excellence in operational and socially- and environmentally-responsible management. **The guidelines and practices in this document are suggested and not mandatory. This Manual does not reflect the legal requirements of specific jurisdictions. Governments and companies must be aware of any requirements applicable to their respective jurisdictions.**

1.2. Relationship to the 2008 IOSC Guideline

The 2008 IOSC Guideline provides a list of components that is intended to be flexible such that it can be used by government, industry, facilities, or operators and can be applied from local to international and multinational levels. The detail and content under review during an OSR management assessment may shift context or perspective depending on the needs of a user (e.g., government assessing its facilities, government reviewing industry, company reviewing facilities or operation, etc.). Some components may or may not be applicable to a particular OSR management assessment; however, the 2008 IOSC Guideline covers the breadth and depth of topics intended for global applicability. The user of this Manual and RETOS™ should have knowledge of, or have reviewed, the 2008 IOSC Guideline to gain a clear understanding of the depth of its Elements, Sub-elements, and Components, which represent a comprehensive oil spill readiness and planning management assessment program.

1.3. Overview of Manual and RETOS™

This Manual and RETOS™ are intended to be used together (Figures 1 and 2). This Manual provides the background for OSR management assessment and explains the terms used, approach to the assessment process, and the concept for a Global Improvement Program. RETOS™ is intended as a checklist-type approach and tool for a specific program evaluation. RETOS™ is a Microsoft Excel™ tool comprised of a series of spreadsheets that guide an evaluator through criteria in the evaluation process. Once the selected spreadsheet is completed, the evaluator is provided with relative OSR planning and readiness scores and a listing of gaps.

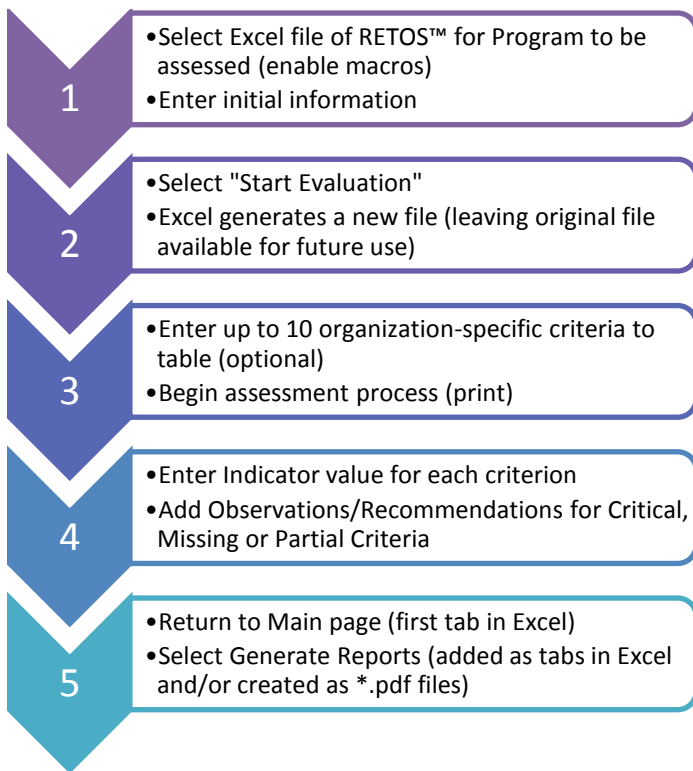
The criteria provided for assessment are oriented toward oil (hydrocarbon) spills and do not include hazardous or noxious substances, per se, although many aspects of spill readiness are equally applicable. The OSR planning and readiness assessment also is directed at any number of possible spill scenarios, including different spill sources (e.g., tank vessels, pipelines, platforms) to receiving environments (e.g., land, inland waterways, offshore, etc.).

The International Convention on Oil Pollution, Preparedness, Response and Co-operation (OPRC), adopted by consensus at the International Maritime Organization (IMO) in 1990, establishes the framework for national and regional level oil pollution preparedness and response and the platform for international cooperation in the event of a major oil spill. The authors therefore utilized the oil spill response system defined therein by the international community as a common standard. Within the framework of OPRC, Parties “undertake, individually or jointly, to take all appropriate measures in accordance with the provision of this Convention and the Annex thereto to prepare for and respond to an oil pollution incident”. Parties are thus expected to have established or be in the process of establishing, a national oil spill response system including the nomination of a national competent authority, the adoption of a national contingency plan, the pre-positioning of minimum levels of response equipment, enter into bi- or multi-lateral cooperation agreements, and the development of training programs. Within this context, each Party is also expected to define its framework for sub-national and local contingency plans and is encouraged to ratify or accede to the relevant international liability and compensation instruments (e.g., CLC, FUND, OPRC/HNS Protocol, BUNKER).

For the purpose of this Product, the authors assume industry is in compliance with pertinent legislative requirements at the national level and recognize that multinational operations may have inherent differences due to differing national legal systems and requirements, which can present particular challenges for multinational companies.



Figure 2 – Steps in using RETOS™ Version 2.1



Criteria Description	Indicator Value
Training records for on-site personnel documented compliance with required training.	0
Drill/Exercise and Spill Response Exercises are conducted within facility as part of training.	0
Annual Incident Response Exercises are held at the facility.	0
Personnel adhere to Spill Response Management Emergency plans.	0
J. SUSTAINABILITY & IMPROVEMENT	
Internal review of exercises is done.	0
Points of plans and facilities are conducted annually.	0
Plant Specific and Other Site Evaluations are conducted and incorporated into plans for OSH program improvement.	0
INSTITUTION SPECIFIC CRITERIA	
1	0
2	0
3	0
4	0
5	0
6	0
7	0
8	0
9	0
10	0
11	0
12	0
13	0
14	0
15	0
16	0
17	0
18	0
19	0
20	0
21	0
22	0
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87	0
88	0
89	0
90	0
91	0
92	0
93	0
94	0
95	0
96	0
97	0
98	0
99	0
100	0



1.4. Recommended Qualifications for Evaluators

The successful use and application of this Manual and RETOS™ is dependent on the qualifications of the user and his/her level of experience in spill response programs, audits, field implementation, and complexity of the program being assessed. Some of the qualification criteria recommended for evaluators are:

- Actual oil spill response experience
- Knowledge of spill contingency plan development and current response practices
- Current, up-to-date knowledge of applicable regulations
- Knowledge of OSR strategies, tactics, and techniques
- Sound understanding of the 2008 IOSC Guideline
- Understanding of best practices for type of operations covered by the selected OSR program Scope
- Familiarity and access to OSR manuals and reference materials
- Trained in purpose and use of tool
- Team approach. For assessments at Levels B and C is particularly important to count with multiple specialists developing the evaluation together.

1.5. Manual Implementation and Revision

The Manual and RETOS™ allow industry and government entities to compare their oil spill preparedness and response capabilities using a standard set of criteria. Users are expected to disseminate these tools widely for use by the corresponding governmental entities and/or companies, for a common/harmonized approach to OSR readiness assessment. ARPEL will provide the means to consider comments from other experts who have not participated in the development of the Manual and RETOS™ and who are using this tool. This review process will foster the interaction of the oil spill planning and response community and assist in the continuous improvement of these tools and, with it, of the oil spill preparedness and response management capabilities of both government and industry.

Comments on how to improve the Manual or RETOS™ should be sent to:

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2. GLOSSARY

This chapter contains terminology used in the Manual and RETOS.

2.1. Criteria

Detailed assessment criteria are the individual base concepts that are evaluated and form the core of the OSR management assessment matrices presented in Chapters 4 through 10.

2.2. Critical Criteria

One dictionary definition of critical is “having a decisive or crucial importance in the success, failure, or existence of something”. At a basic level, an oil spill preparedness program must address select minimum criteria to be considered complete. These critical criteria, identified by experienced spill response professionals, are highlighted in assessment matrices (Chapters 4 – 10) and in the RETOS™ application and apply to Level A only. Brief explanations for each of the critical criteria are included as Appendix A and are included in the RETOS™ Level A criteria lists.

2.3. Program

PROGRAM refers to the specific OSR program that is being assessed or evaluated. Examples are (1) Terminal ‘XXX’ OSR Planning and Readiness or (2) Country ‘YYY’ National OSR Planning and Readiness.

NOTE: The OSR Program is more than just an Oil Spill Contingency - or Response - Plan (OSCP or OSRP). An OSR Program includes spill management aspects, equipment, spills and spill response history, training and exercises, and all related components of spill preparedness and response capability.

2.4. Scopes

The seven (7) SCOPES used in this Manual represent OSR programs from two perspectives:

Government and Industry (Table 1). The common SCOPES between these two are a FACILITY and an OPERATION, given that OSR readiness for a facility or operation is essentially the same regardless of owner/operator.

The **SCOPES** used are:

Government or Industry

- **Facility** – (terminal, plant) - geographically and operationally limited
- **Facility/Asset Operation** (e.g. pipelines, vessels, fleet) – geographically extensive

Government

- **Port/City/Local** – broader in scope than Facilities but geographically-limited
- **Area** (Region, Province, State) – for governments that have defined requirements or needs for planning at sub-national levels, usually defined by administrative or geo-political boundaries
- **National** (& Multi-National) – for national OSR plans and readiness and for bi- or multi-national initiatives

Industry

- **Country or Business Line** (e.g., Production) – may include multiple facilities or operations directed from an upper management level
- **Corporate** – company-wide (policies, general procedures, and guidelines)

A description -and examples- of a given SCOPE is provided in the introduction to each chapter in the Manual.

**Table 1 - Description of Scopes used in this Manual**

Government or Industry			
Scope	Definition	Examples	Comments
Facility	<p>Government or Industry owned-and/or –operated oil production, processing, handling, transport, and storage facilities typically have emergency response plans for different eventualities, including oil spills.</p> <p>The facilities encompassed in this scope are geographically fixed and local in extent (i.e., not vessels or long pipelines).</p> <p>A key feature of this scope is the point-source aspect of the potential spill, independent of the possible spill volume or area at risk.</p>	<p>Refineries</p> <p>Well or Production Sites</p> <p>Storage facilities</p> <p>Tank farms</p> <p>Floating Storage and Offloading (FSO)/Floating Production Storage and Offloading (FPSO)</p> <p>Transfer facilities</p> <p>Privately-owned port</p>	<p>Geographically fixed, local in extent point-source spill, independent of the possible spill volume or area at risk.</p> <p>Does not encompass geographically extensive operations such as vessels, fleets or vessel routes, pipelines, or rail.</p>
Facility / Asset Operation	<p>Government or Industry owned-and/or –operated oil handling, transport, and storage facilities typically have emergency response plans for different types of incidents, including oil spills.</p> <p>The operations encompassed in this scope have a broader geographic footprint, typically as a result of oil transportation. A key feature of this scope is the broader potential spill source along established operational routes.</p>	<p>Pipeline operations</p> <p>Vessel fleets (tankers, barges)</p> <p>Rail transport</p> <p>Subsea pipelines and gathering systems</p>	<p>Geographically extensive operations</p> <p>Does not include typical fixed-point sources such as ports, plants, refineries, and tank farms.</p>



Table 1 - Description of Scopes used in this Manual (cont'd)

Government			
Scope	Definition	Examples	Comments
Port/City/ Local	<p>Government-owned and/or operated oil handling, transport, and storage facilities typically have emergency response plans for different eventualities, including oil spills.</p> <p>The operations encompassed in this scope are local in extent and associated with cities, ports, and other geographically limited but collective facilities.</p> <p>A key feature of this scope is the collective point-source aspect of the potential spills</p>	<p>Port facilities</p> <p>Municipalities</p>	<p>Broader in scope than facilities but geographically limited</p>
Area	<p>Sub-national government plans address the role of regulatory bodies and multi-agency in OSR.</p> <p>A key feature of this scope is the broader geographic coverage of plans. It can integrate several government programs (e.g., local) and has ties with industry operations and oversight.</p>	<p>State</p> <p>Province</p> <p>Multi-state/provincial</p>	<p>For planning at sub-national levels, usually defined by administrative or geo-political boundaries</p>
National	<p>National government plans addressing national legislation, regulatory bodies and authorities, and multi-agency roles. This scope also includes multi-national OSR programs such as bi-lateral plans that provide for enhance response and assistance.</p> <p>A key feature of this scope is the broad geographic coverage of plans and setting the policies and requirements for more detailed planning and readiness. National readiness for many countries represents its autonomous capability to deal with multiple worst-case situations</p>	<p>Country-wide</p> <p>National</p> <p>Joint National</p> <p>Multi-National</p>	<p>For national OSR plans and readiness and for bi- or multi-national initiatives</p>

**Table 1 - Description of Scopes used in this Manual (cont'd)**

Industry			
Scope	Definition	Examples	Comments
Country or Business Line	<p>Industry operations conducted solely within one country or operations of a single business line with wide-spread assets may have an OSR response program that integrates their response capabilities across multiple facilities or operational areas. Assessment programs should be adapted to address operations either within a single country or multiple countries, as appropriate, for company management.</p> <p>The operations encompassed in this scope may have a broad geographic footprint. Two key features are:</p> <ol style="list-style-type: none"> 1) the integration of multiple facilities and operations with context of a broader spill response program, and 2) these operations typically have the same line management and follow the same corporate policies. 	<p>Nation-wide Industry program</p> <p>Pipelines (comprehensive for multiple operations)</p> <p>Fleets</p> <p>Production</p> <p>Drilling & Exploration</p>	<p>May include multiple facilities or operations directed from an upper management level</p>
Corporate	<p>Corporate industry plans and OSR readiness address a broad area of likely operations. Corporate OSR programs set the tone for OSR capabilities and expectations at facility to operations levels.</p> <p>A key feature of this scope is how a company or corporation sets the model for more detailed readiness programs. Likewise, this program integrates OSR readiness across business lines and possible country lines. The policies, expectations, and models for response readiness and emergency management are focal aspects of Corporate OSR programs.</p>	<p>Company OSR Program</p> <p>OSR portion of Corporate HSE Programs</p> <p>OSR programs defined in ISO and adopted international practices</p>	<p>Company-wide (policies, Crisis Management, Business Continuity)</p>



2.5. Assessment Categories

Categories are general headings aspects of OSR planning and readiness. The categories in this Manual and RETOS generally match those developed and explained in the 2008 IOSG Guideline. The ten (10) categories (A through J) represent headings for the 28 OSR elements of the 2008 IOSG Guideline (NOTE: new one item 29, Claims under Category H).

A. Legislation, Regulations & Agreements

1. Legislation and Regulation
2. Multi-National Agreements

B. Oil Spill Contingency Planning

9. Plan Development
3. Spill Risk Analysis
4. Resources at Risk
5. Risk Minimization
6. Evaluation of Response Options, Equipment and Personnel
7. Net Environmental Benefit Analysis
8. Expert Information Sources

C. Response Coordination

10. Response Management Systems
11. Notification Systems
12. External Communication

D. Health, Safety & Security

13. Health and Safety for Responders and Public
14. Security

E. Operational Response

15. Source Control, Salvage, and Firefighting
16. Response Strategies
17. Waste Management
18. Wildlife Recovery, Care, and Rehabilitation

F. Tracking, Assessment, and Information Management

19. Spill Monitoring, Tracking, and Sampling
20. Cleanup Assessment
21. Data Management and Access

G. Logistics

22. Logistics
23. Communications
24. Demobilization

H. Financial and Administrative Considerations

25. Finance, Administration, and Procurement
29. Claims

I. Training & Exercises

26. Exercises
27. Training

J. Sustainability & Improvement

28. Sustainability and Improvement

2.6. Assessment Level

For each SCOPE to be assessed, the user first selects an ASSESSMENT LEVEL. In the RETOS™ file, matrices are presented for each SCOPE with increasing levels of competency for which OSR planning and readiness criteria become increasingly more demanding.

ASSESSMENT LEVELS do not correspond to tiers in the OSR planning sense. Rather, an Assessment Level indicates the maturity of that program, so that a Facility (which typically prepares for a Tier 1 response) may be quite well prepared and very capable of mounting a quick and very effective response to a Tier 1 spill. In such a case the Assessment Level C would reflect its maturity but for a Tier 1 spill response. Alternatively, a Tier 3 program, such as would be expected at a national level, may be in the early stages of development and implementation, in which case the assessment would be performed at a Level A.

The criteria progress from what may be considered fundamental aspects of OSR management capability (Level A) to very complete and/or best international practice (Level C). The three Assessment Levels are:

- **Level A:** Achieving preparedness at this level indicates all components are in place to a minimum level, which provides a reasonable OSR management capacity. Contingency plans are in place, approved, and fully implemented.
- **Level B:** Achieving this level applies to programs that have been implemented to more rigorous levels and reflects performance gains from earlier feedback and use of evaluation process for improvement and sustained management capability.
- **Level C:** Achieving the highest level reflects programs in search of excellence. These are programs that consistently implement feedback in improving sustained readiness through application of best international practices in OSR concepts, management, planning, and competency.

When an organization believes they have attained a certain level of readiness, this indicates certain key criteria have been met. Examples of these key criteria are provided for government and industry (Tables 2 and 3, respectively).

**Table 2 - Example Achievements for the Three Levels in Government OSR Programs**

Level A
<p>An OSR Program has achieved Level A competency when the responsible Government entity meets the following criteria:</p> <ul style="list-style-type: none"> • Has a response capacity commensurate to the scope of its contingency plan • Has a Plan which meets, at a minimum, the applicable regulatory requirements • Has performed a basic oil spill risk analysis and identified key sensitive areas • Has a contingency plan that clearly states the response strategies to be used in a safe manner. • Has a contingency plan which addressed logistical requirements and realistic response times based on adequate communications and reporting • Has an elementary waste management plan (temporary storage, transport, tracking and disposal options) • Has a spill response management structure which is contractible and expandable according to the needs of a response • Holds regular training of its response personnel and exercises of its contingency plan • Has financial mechanisms in place to provide emergency funds to initiate response and procedures to receive claims • Reviews and updates its contingency plan and implements recommended improvements following critiques of exercises and actual response
Level B
<p>An OSR Program has achieved Level B competency when the responsible Government entity meets all of Level A criteria plus:</p> <ul style="list-style-type: none"> • Has arrangements in place for national and regional cooperation, and/or bi-lateral plans • Has adopted or ratified international conventions on spill response and compensation • Uses oil spill trajectory modeling • Has procedures in place for communicating with the media and local communities during a spill response • Has inspection and maintenance programs for its own oil spill equipment and for assessing industry capabilities • Response personnel have clear knowledge of, and tools for performing, their assigned tasks during spill response • Includes other key stakeholders and industry in its periodic exercises using realistic scenarios • Has established procedures to review both government and industry plans, and to assure their integration at appropriate scopes
Level C
<p>An OSR Program has achieved Level C competency when the responsible Government entity meets all of Level A and Level B criteria plus:</p> <ul style="list-style-type: none"> • Its contingency plan is aligned with and supports use of best international practices and recommendations • Regional and bi-lateral planning (as applicable), including government partners, are periodically exercised and lead to improved response times and communications • Uses quantitative risk assessment procedures to develop scenarios which reflect spilled oil weathering rates, tiered response, and changes in seasonal conditions • Information management, including GIS systems, are used to maintain an up-to-date contingency plan • NEBA is commonly used to guide decision-making on acceptable response strategies; procedures are in place to streamline the decision process during a response • Multilateral agreements are in place to address the need for transboundary movement of equipment personnel for a worst-case oil spill • Training is conducted in public relations, media management and coordination/outreach with relevant communities and volunteers. A communications plan is included in the OSRP. • Financial issues (e.g., contracts, costs) and claims procedures are part of the exercises' objectives • Inspections (internal and external) are routinely used to verify that response equipment is ready for effective and immediate use, response personnel (management to field) are fully prepared to undertake their roles, and a response management process is effectively integrated with key stakeholders.


Table 3 - Example Achievements for the Three Levels in Industry OSR Programs

Level A
<p>An OSR Program has achieved Level A competency when the company meets the following criteria:</p> <ul style="list-style-type: none"> • Is able to address a Tier 1 spill with on site available resources and has identified potential external resources should escalation be needed. Response capacity is commensurate to the scope of its contingency plan • Has a Plan that meets, at a minimum, the applicable regulatory requirements • Has performed a basic oil spill risk analysis of its operations and identified the sensitive areas • Has a contingency plan that clearly states the response strategies to be used in a safe manner • Has a contingency plan that addresses logistical scenarios and requirements as well as realistic response times based on adequate communications and reporting • Has an elementary waste management plan (temporary storage, transport, tracking and disposal options) • Has a spill response management structure that is contractible and expandable according to the needs of response • Holds in-house training of its response personnel and exercises of its contingency plan • Has financial plan in place to provide emergency funds to initiate response and procedures in place to receive claims • Reviews and updates its contingency plan and implements recommended improvements following critiques of exercises and actual response
Level B
<p>An OSR Program has achieved Level B competency when the company meets all of the Level A criteria plus:</p> <ul style="list-style-type: none"> • Has agreements for mutual aid with other nearby companies, has contracts with spill response organizations, and the relationship of its contingency plan with government plans is described • Uses oil spill trajectory modeling • Has procedures in place for communicating with media and local communities during a spill response • Has inspection and maintenance programs for its own oil spill response equipment • Has external contacts and information details on equipment that can be requested to augment existing capabilities • Has resources to accurately monitor oil movement and changes in spilled oil behavior; especially for spills on surface waters • Includes key stakeholders in its periodic exercises • Conducts internal reviews of its contingency plan, its integration with local level government plans, and its response equipment and related facilities
Level C
<p>An OSR Program has achieved Level C competency when the company meets all of the Level A and Level B criteria plus:</p> <ul style="list-style-type: none"> • Operational and management aspects of its contingency plan are aligned with and support use of best international practices and recommendations • Has mutual aid agreements, which are periodically exercised • Uses quantitative risk assessment procedures to evaluate scenarios that reflect realistic spilled oil weathering rates, tiered response volumes, and changes in seasonal conditions • Information management, including GIS systems, are used to maintain an up-to-date contingency plan • NEBA is commonly used to guide decision-making on acceptable response strategies , and a process is in place to guide decision-making during a response • Conducts training in media management and on the participation of relevant communities and volunteers in a response. A communications plan is included in the OSRP. • Financial issues and claims procedures are part of the exercises' objectives and exercises include government entities • Notifications and actual equipment and personnel mobilizations are exercised routinely to achieve optimum deployment times and test response strategies and pre-planned tactics • Inspections (internal and external) are routinely used to verify response equipment is ready for effective and immediate response, response personnel (management to field) are fully prepared to undertake their respective roles, and a response management process is effectively integrated with key stakeholders



2.7. Assessment Indicators

There are three (3) options in RETOS, by which evaluators can specify an indicator for each criterion. The three assessment indicators are:

Missing – no information, inadequate information, and/or lack of confirmation found for a criterion

Partial – information, documentation, or other confirmation reveals some aspects are addressed, yet is either incomplete or does not fully satisfy a criterion

Complete – information, documentation, or other confirmation reveals aspects are fully addressed such that there is reliable evidence a criterion has been met.

2.8. Toolbox Information

The right-hand column in each of the criteria tables (see Tables 7 through 13) is labeled 'Toolbox' and provides a user with references to more information on key categories and elements. Specific cross-reference is made to Elements (or Sub-Elements) in the 2008 IOSG Guideline for each of the criteria in the matrices. The 2008 IOSG Guideline provides details on each element, sub-elements, and further considerations for OSR planning and readiness management. Like the 2008 IOSG Guideline, the Toolbox included in each matrix also cross-references selected publicly-available best international practice guidelines and manuals that can aid personnel tasked to conduct an assessment, as well as those that are subsequently assigned to fill the gaps found

during the assessment process. The Toolbox is a valuable point of reference to users as they develop plans to make OSR program enhancements based on the assessment results found during the evaluation process, as described below (Chapter 3.2). Chapter 11 BIBLIOGRAPHY, REFERENCES, AND AIDS contains the specific references described in the Toolbox column of each table.

2.9. Assessment Criteria Tables Versus RETOS™ File Matrices

Tables 7 through 13 in chapters 4 through 10 list side-by-side assessment criteria for each Level of a given Scope. The criteria listed in the columns for each Level build upon the lower level of assessment and preparedness. As an example, the criteria listed for Level A is inherently included in Level B criteria. Tables 7 through 13 provide an overview and relatively quick means to gauge the increasing complexity that is encompassed in criteria from Level A through Level C; however, the tables in this Manual are not the actual tools to be used for assessment (see Chapter 3).

The RETOS™ program consists of separate files for each SCOPE (7) and three separate spreadsheets, or matrices (tabs) that correspond to each of three levels within each SCOPE for a total of 21 individual matrices. The line-by-line assessment criteria in the RETOS™ matrices are complete for each level. That is, the user does not need to refer to the matrices at a lower level of assessment in order to have the full criteria to be evaluated.



2.10. Abbreviations and Acronyms

ADDS	Airborne Dispersant Delivery System
ADIOS	Automated Data Inquiry for Oil Spills
APELL	Awareness for the Preparedness of Emergencies at the Local Level
API	American Petroleum Institute
ARPEL	Regional Association of Oil, Gas and Biofuels Sector Companies in Latin America and the Caribbean
BIP	Best International Practice
BMP	Best Management Practice
BOP	Blow Out Preventer
CEO	Corporate Executive Officer
CIS	Critical Incident Stress
CLC	Civil Liability Convention
CM	Crisis Manager
CO	Communications Officer
EC	Emergency Coordinator
ECC	Emergency Coordination Centre
ECT	Emergency Coordination Team
ERP	Emergency Response Plan
ETA	Estimated Time of Arrival
ETD	Estimated Time of Departure
FPSO	Floating Production, Storage and Offloading Unit
FSO	Floating Storage and Offloading Unit
GIS	Geographic Information System
GPA	Global Performance Analysis
GPS	Global Positioning System
HAZOP	Hazard and Operability
HAZWOPER	Hazardous Waste Operations and Emergency Response Standard
HNS	Hazardous and Noxious Substances
HS	Health and Safety
HSC	Health and Safety Coordinator
HSE	Health, Safety and Environment
IAP	Incident Action Plan
ICS	Incident Command System
IMO	International Maritime Organization
IMS	Incident Management System
IOPC	International Oil Pollution Compensation (Funds)
IOSC	International Oil Spill Conference
IPIECA	International Petroleum Industry Environmental Conservation Association
IR	Infra-red
ISM	International Management Code for the Safe Operation of Ships and for Pollution Prevention
ISO	International Organization for Standardization
IT	Information Technology
ITOPF	International Tanker Owners Pollution Federation
Kts	Knots (nautical miles per hour)
LEL	Lower Explosive Limit
LNG	Liquefied Natural Gas
MARPOL	International Convention for the Prevention of Marine Pollution from Ships (Marine Pollution Convention 73/78)
MEPC	Marine Environment Protection Committee (IMO)
MOU	Memorandum of Understanding
MSDS	Material Safety Data Sheets
N/A	Not Applicable
NCP	National Contingency Plan



NEBA	Net Environmental Benefit Analysis
NGO	Non-Governmental Organization
NOAA	National Oceanic & Atmospheric Administration (Part of the U.S. Dept of Commerce)
OPRC	International Convention on Oil Pollution Preparedness, Response and Co-operation
OSCP	Oil Spill Contingency Plan
OSR	Oil Spill Response
OSRP	Oil Spill Response Plan
P & I Clubs	Protection and Indemnity Clubs
PPE	Personal Protective Equipment
QRA	Quantitative Risk Assessment
RAC/REMPEITC-Caribe	Regional Activity Center / Regional Marine Pollution Emergency, Information and Training Center for the Wider Caribbean
RCP	Regional Contingency Plan
RETOS	Readiness Evaluation/Excel Tool for Oil Spills
SC	Site Controller
SCAT	Shoreline Cleanup Assessment Technique
SCT	Site Control Team
SOC	Shoreline Operations Coordinator
USCG	United States Coast Guard
WMC	Waste Management Coordinator

2.11. Commonly-Used Terms

Best Available Technology: Most advanced technology available in oil spill preparedness and response at the time the contingency plan was submitted or renewed, or a response was conducted, without consideration for financial aspects (similar to Best Available Techniques)

Best Management Practice or Best International Practice: Internationally-recognized state-of-the-art actions utilized to prepare for and respond to an oil spill.

Cleanup Assessment: Evaluation of the actions to be undertaken and the techniques to be utilized on shore sides to restore them to a previously agreed upon standard (for example, SCAT)

Contingency Plan: (similar to Oil Spill Response Plan, Oil Pollution Emergency Plan [OPRC]): Entire preparedness and response system, including both public and private resources, for response to emergencies that could result in the spill of oil into the marine environment. A contingency plan can be designed to adapt to different levels/scopes (adapted from IMO Manual on Oil Pollution, Section II)

Contingency planning (similar to Oil Spill Contingency Planning): Actions undertaken to prepare the Contingency Plan

Crisis [Incident] Management Team: Team responsible for the delivery of the usual five

major functions (command, planning, operations, logistics and finance) used within the Incident Management System framework (adapted from Guidance on the Implementation of IMS, IMO 2010).

Designated Authority: Competent national authority or authorities with responsibility for oil pollution preparedness and response. The Designated Authority may need to liaise with other interested stakeholders (from OPRC, similar Lead Agency)

First Responders: Typically locally-based personnel that are first on-scene to initiate a response, which may be more defensive (safeguarding health and safety) than offensive (source control).

Geographical Information System: System that captures, stores, analyzes, manages, and presents data linked to location.

Incident Action Plan: Regularly updated collaborative plan to support the implementation of the incident management system encompassing all aspects of the response such as communication and planning (adapted from Guidance on the Implementation of IMS, IMO 2010).

Incident Command Center: Location where the incident management team directs response activities in an emergency situation (adapted



from Guidance on the Implementation of IMS, IMO 2010) (similar to Emergency Response Centre, Incident Command Post).

Incident Command: Individual or organization responsible for the overall management of an accident, the definition of objectives and priorities of the response, the external communications and media relations, the legal issues, the overall safety for the incident response and inter-agency liaison. It may comprise a number of stakeholders involved in the Incident Response (similar to Command, Joint Command, Unified Command, adapted from Guidance on the Implementation of IMS, IMO 2010). Also referred as Response Management and OSR Management in the document

Incident Management System: System used to develop a response organization that utilizes a structured and flexible process to develop an incident action (response) plan that will address and meet the agreed upon response objectives (for example Incident Command System - ICS, adapted from Guidance on the Implementation of IMS, IMO 2010)

Mutual Aid Agreement: Agreement between emergency responders to lend each other assistance across jurisdictional boundaries during emergencies/oil spills when local resources are insufficient (similar to Mutual Assistance Agreement)

Net Environment Benefit Analysis: A process by which the relative risk of the use of various response options versus a baseline of Monitor and Observe is used to provide a more rigorous decision-making approach during contingency planning and during response. It may include results from an ecological risk assessment. NEBA process is often consensus based with key response decision-makers and provides a means to examine environmental, social, and/or economic tradeoffs from response decisions.

Oil Spill Response: All general and specific actions taken to control, mitigate, remediate or clean-up an oil spill, including [broader 'corporate'] actions, such as communications (similar to Incident Response)

Personal Protective Equipment: Piece(s) of clothing and/or equipment designed to protect

the wearer's body from physical and hazardous materials hazards.

Place of Refuge: Place where a ship in need of assistance can take action to enable it to stabilize its condition and reduce the hazards to navigation, and to protect human life and the environment (from IMO Resolution A.949(23)).

Risk: Quantifiable likelihood of an oil spill according to the magnitude of its consequences.

Resources (asset) at Risk: All possible resources that could be affected by an oil spill.

Risk Assessment: Quantitative or qualitative determination of a risk related to a possible threat of oil spill.

Risk Minimization: All actions undertaken to minimize risks linked to oil spill.

Sensitive Area: Area of ecological, social, economic, cultural, scientific and/or educational significance that would greatly be affected by an oil spill and for which pollution prevention and/or cleaning is high priority.

Tier 1: An incident considered to be within the capabilities of an individual facility or harbor authority (from Guidance document on the Implementation of an IMS, IMO 2010).

Tier 2: An incident that requires the coordination of more than one source of equipment and personnel (from Guidance on IMS, IMO 2010)

Tier 3: An incident of size and complexity that regional, national or international resources are required to effectively manage the incident (from Guidance on IMS, IMO 2010)

Tiered Response: An operational concept that provides a convenient categorization of response complexity and a practical basis for planning (from Guidance document on the implementation of an IMS, IMO 2010)

Treating Agent: Product applied on spilled hydrocarbon products in order to assist in controlling, dispersing, cleaning up, biodegrading, or removing the spill and mitigating the potential negative effects.



3. HOW TO USE RETOS™

3.1. Start-up

Assessment management criteria are presented in a series of tables in the RETOS™ tool (see example in Table 4). Matrices presented in Tables 7 through 13 in this Manual are developed to allow the user to choose an appropriate SCOPE and then progress through assessment lists organized by CATEGORY and in which management assessment criteria for most of the IOSC elements are provided.

During the course of their evaluation, users may choose to assess whether some of the criteria listed as Level B or Level C have been achieved, even if only evaluating at a Level A. **However, it is recommended that the user progress step-wise, i.e., Level by Level, through the evaluation process using RETOS™ instead of using side-by-side criteria for the three Levels as presented in the Tables 7 through 13.**

3.1.1 Data Entry

The assessment process is conducted specifically by using RETOS™, which replicates and in places itemizes the criteria listed in Tables 7 through 13. The user begins the assessment process (Figure 2) by:

- Selecting the appropriate Excel file of RETOS™ with the desired SCOPE
- Entering information relative to program being assessed, Level to be assessed, and evaluator(s); then click "Start Evaluation". The application will generate a new file named per the program being assessed and will create a table for the Level selected.
- Enter optional institution-specific criteria to be assessed in addition to the standard criteria (10 rows are provided at the base of the Excel table for organization-specific criteria).
- Printing the selected spreadsheet to use as a point of reference, (Note: most evaluators will maintain field notes; however, the spreadsheet provides a column for comments for each criterion that may be useful during the assessment process)
- Completing the electronic spreadsheet. For each question or criteria (row in matrix) in a specific assessment LEVEL, the user enters a

value for the RATING (0=Missing, 1=Partial, 2=Complete) and adds observations or recommendations that help to explain why a specific RATING was selected. Specific recommendations that may help to identify actions needed to close a gap should be entered here.

Ratings provide quick, graphical feedback to the user on each element by displaying a blank, half full, or full black circle when a criterion is missing, partially met, or fully met, respectively (Table 4).

Important: In a few cases, an evaluator may need to indicate that a criterion is NOT APPLICABLE. By entering **N/A** in the INDICATOR column and **NOT APPLICABLE** (with explanation) in the COMMENT column, the spreadsheet analysis will not consider that criterion.

Any critical criterion that receives an N/A, Missing, or Partial must include a comment indicating why a critical criterion is not applicable. For example: "Addresses regulatory requirements" is a critical criterion; however, if there are no applicable regulations then the evaluator may enter N/A but has to explain the rationale in the Observations/Recommendations column.

3.1.2 Assessment Conclusions

The outcome of the assessment process is a scoring summary, which yields conclusions for the Scope and Level assessed, and a Global Performance Analysis (GPA) report. The GPA report (Table 5) provides:

- A **quantitative** conclusion for each CATEGORY and for the OVERALL PROGRAM evaluated
- A **qualitative** conclusion for the OVERALL PROGRAM.
- Highlights where critical criteria are missing or partial (for Level A only)
- A radar chart (or web diagram) of the assessment by category, and
- A quantitative conclusion for those organization-specific criteria that were added.

The idea of the assessment conclusion is that if a user is evaluating, for example, LEVEL A of a



Government Facility (SCOPE) and some RATINGS (i.e., missing, partial, complete) in some CATEGORIES/ELEMENTS are not 'complete', but most of them are, the spreadsheet provides not only an indication of where the gaps are to fully accomplish LEVEL A, but also a numerical indication of how close the facility is to meeting all LEVEL A criteria (e.g., 85% of LEVEL A). Quantitative conclusions are based strictly on the ratings of 0 (Missing), 1 (Partial), and 2 (Complete) for each criterion. An OVERALL PROGRAM quantitative conclusion would yield 100% only if all criteria are scored as COMPLETE for the level assessed (NOTE: criteria which are N/A do not count in the calculations). Computation is based on the values associated with the INDICATORS; thus, those criteria that receive a PARTIAL rating count toward program completion. **A program cannot be qualified as ACHIEVED if all the criteria of any one CATEGORY are MISSING or if any critical criterion is MISSING or PARTIAL.** This is because an OSR program is composed of interlinked components (i.e., the CATEGORIES) and incomplete or missing critical criteria, or a completely missing Category, would never ensure a consistent and efficient planning and readiness. This is particularly relevant at Level A in which all components supposedly should be in place, at least to a minimum level, to ensure a reasonable OSR management capacity.

The OVERALL PROGRAM's qualitative conclusion is a score based on the quantitative ratings given to each INDICATOR and by which the following terms correspond to a percent complete for a specific SCOPE and LEVEL. **This ARPEL project has set a high performance expectation for scoring spill response preparedness and readiness:**

- **In Development:** less than 90%

- **Achieved:** more than, or equal to, 90%

A program should not be assessed at a higher level of competency until it has achieved the previous (lower) Level. The Manual and RETOS™ are intended to encourage users to work on closing the gaps while at the same time working towards a higher LEVEL OF COMPETENCY (Levels B and C). Note that the overall quantitative

assessment does NOT include organization-specific criteria.

3.2. Global Improvement Program

Users should use the assessment results to identify specific areas in which improvements can be made. Gaps identified during the assessment should be the focus of future actions to improve spill response preparedness and readiness. Upon completion of a program assessment, a Global Improvement Program Implementation report (Table 6) can be generated that lists steps to close out each criterion missing or identified as partial. A cross-reference to additional information in the 2008 IOSC Guideline is provided in the report, as are the assessment observations and recommendations (written by the assessor) to assist with closing gaps. Additional information sources for specific criteria are listed in the Toolbox column of tables in this Manual.

Priorities for improvement can be challenging to set in advance. To assist the user in this prioritization process, the report generated for the Global Improvement Program Implementation Plan lists, as top priority, any critical criteria that are missing followed by critical criteria with partial rating, and then a listing of the remaining criteria either missing or partial. After developing a full listing of actions, users should seek synergies across several actions so they can be grouped and relative priorities can be more easily set. Personnel assigned to each action should be listed, by name. Resources required to complete actions can include information sources (see the Toolbox column in the matrices in this Manual), additional human resource needs (personnel, departments, agencies, etc.), and physical resources (transportation, computers, specialized equipment, communications, etc.).

A schedule for completion of each action within the Global Improvement Program provides personnel and management -responsible for response planning and readiness- with target dates for work completion. The schedule then becomes the tracking mechanism for the Coordinator of the Global Improvement Program implementation. The schedule should reflect the sequence of actions that lead to closing the gaps



identified in the assessment, in accordance with the priorities established. A commitment is required from management and those tasked to

complete actions in order to achieve the objectives of sustaining and improving spill response readiness.



Table 4 - Example of RETOS™ matrix ¹

GOVERNMENT - INDUSTRY: FACILITY - LEVEL A		INDICATOR	COMMENTS - RECOMMENDATIONS
for Indicator, enter 0= Missing, 1=Partial, 2=Complete; N/A= not applicable and add comment.		○ Missing; ● Partial; ● Complete	
A. LEGISLATION, REGULATIONS, AGREEMENTS			
A1	Plan references regulatory requirements.	●	
A2	Reportable amounts of spills indicated.	●	
A3	Signed agreements for local (within reasonable distance) OSR assistance are in place.	●	Agreements are verbal only. Recommend more formalized approach.
B. OIL SPILL CONTINGENCY PLANNING			
B1	Plan is readily available to OSR personnel that includes clear table of contents, pagination.	●	
B2	Plan is dated.	●	
B3	Person/position is clearly identified along with alternates within the plan for maintaining plan.	●	
B4	Applicable and related plans (company, local, and government) are identified.	●	
B5	Local expertise for OSR-related issues is listed.	●	
B6	Plan has been reviewed or revised in past 3 years.	●	
B7	Key contacts are updated as these change.	●	
B8	Potential spill sources, liquids, and volumes are identified and known to responders.	●	
B9	General area at risk is identified based on spill sources.	●	
C. RESPONSE COORDINATION			
C1	Clear procedures are included on information to report and who should receive initial spill notification and follow-up reports.	●	
C2	A spill reporting form is included.	●	
C3	A contact list specifies key personnel and alternates.	●	
C4	Spill management structure and assigned personnel are defined for all spill tiers, as appropriate.	●	
J. SUSTAINABILITY & IMPROVEMENT			
J1	Internal review of exercise is held.	●	
J2	Audits of plans and facilities are conducted annually.	●	Present audit was first; recommend audit or review be completed annually.
J3	Post-Exercise and Post-Spill Evaluations are conducted and incorporated into actions for OSR program improvements.	●	
INSTITUTION SPECIFIC CRITERIA			
1	Response contractor(s) have records of semi-annual deployment exercises.	●	
2	Management documented improvement and milestones for next year.	●	In progress. Need to finalize.
OVERALL GLOBAL ASSESSMENT - Government - Industry: Facility - Level A		94%	
Level In Development			

¹ Portions of Categories B and C and all Categories D through I are omitted for this example.



Table 5 - Example Report Generated for Global Performance Analysis

Global Performance Analysis Results

Category	Value
Legislation, Regulations, Agreements	90%
Oil Spill Contingency Planning	92%
Response Coordination	95%
Health, Safety & Security	100%
Operational Response	86%
Tracking, Assessment & Information Management	100%
Logistics	100%
Financial & Administrative Considerations	100%
Training & Exercises	94%
Sustainability & Improvements	83%
Total	94%
<i>Institution Specific Criteria</i>	<i>75%</i>

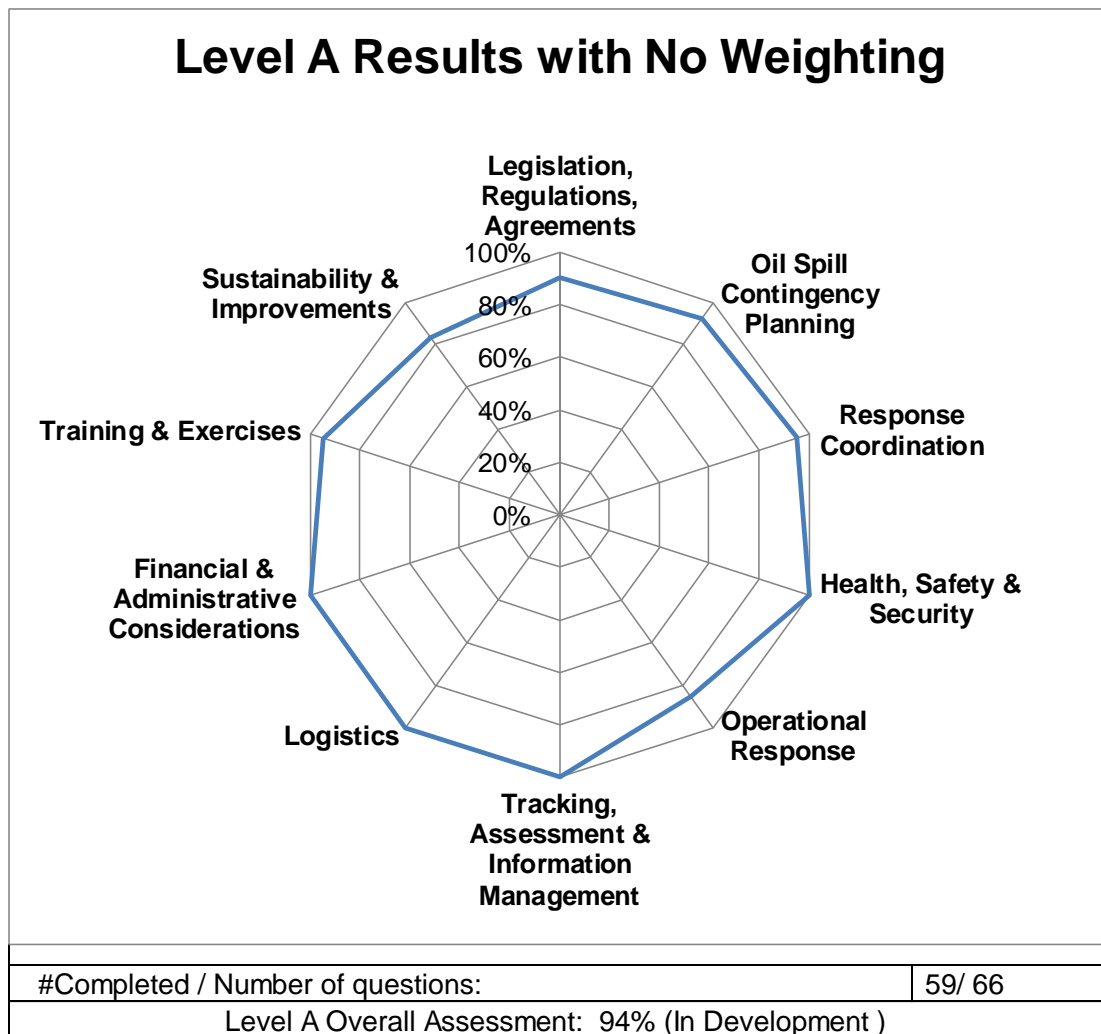




Table 6 - Example Report Generated for the Global Improvement Program - Implementation Plan

Global Improvement Program - Implementation Plan						
Priority	Task (Listed by Element and Criteria)	Comment/Recommendations	Person Responsible	Resources (Human, Physical, Info Sources)	Schedule (indicate Target Completion Date)	IOSC 2008 Guidelines Reference*
Critical Criteria Partial						
2	C6: Incident command is assigned to one or two specific individuals (by name or position) with backups identified.	Need to identify backup personnel.				IOSC Element 10, Sub-element 10.3
	E3: Equipment is properly stored, in good working condition and being properly maintained and inspected.	Recommend boom be placed under shelter-will suffer UV damage if left as is.				
A. LEGISLATION, REGULATIONS, AGREEMENTS						
	Signed agreements for local (within reasonable distance) OSR assistance are in place.	Agreements are verbal only. Recommend more formalized approach.				IOSC Sub-element 23.4
B. OIL SPILL CONTINGENCY PLANNING						
	Species at risk are listed.	Consider cross-reference to Area Plan.				
E. OPERATIONAL RESPONSE						
	A Waste Management Plan is outlined.	Standard waste plan is used; suggest Plan be reviewed and revised for OSR emergencies.				IOSC Element 18
I. TRAINING & EXERCISES						
	Regular training courses are provided on OSCP to response team personnel.	An initial class was provided to personnel at site at the time of plan rollout. New personnel have not received training on the Plan. Provide for newer personnel.				IOSC Element 9 and Element 27
J. SUSTAINABILITY & IMPROVEMENT						
	Audits of plans and facilities are conducted annually.	Present audit was first; recommend audit or review be completed annually.				
INSTITUTION SPECIFIC CRITERIA						
	Management documented improvement and milestones for next year.	In progress. Need to finalize.				

Reviewed By: _____

Approved By: _____ Date _____



4. GOVERNMENT/INDUSTRY - FACILITY

4.1. Description of Scope

Industry or government owned- and/or – operated oil handling, transport, and storage facilities typically have emergency response plans for different eventualities, including oil spills. The OSR aspect of emergency readiness is the focus of this assessment chapter.

Example facilities:

Storage facilities
 Tank farms
 Floating Storage and Offloading (FSO)/Floating Production Storage and Offloading (FPSO)
 Transfer facilities
 Production facilities
 Refineries
 Pump Stations
 Fuelling Stations
 Platform

The facilities encompassed in this scope are geographically fixed and local in extent (i.e., not vessels or long pipelines). A key feature of this scope is the point-source aspect of the potential spill, independent of the possible spill volume or area at risk. Although FSOs and FPSOs are vessels, they are included here given their relatively fixed location during standard operations.

4.2. Concept of Levels

The assessment process is conducted specifically by using RETOS, which reflects the detailed assessment criteria listed in Table 7 (highlighted in yellow are the critical criteria, only applicable to Level A); however, a separate spreadsheet is provided in RETOS™ for each LEVEL.

The use of three levels for the assessment of a facility does not reflect the complexity of an operation or facility. The level of commitment for

time and effort to ensure best practices in OSR plans and readiness will be very different for a small, single-tank facility relative to a production and refinery complex. As stated earlier (Chapter 2.5), the user should select a target level (Level A as a default) against which to assess the Facility OSR capability. **For each Category/Element, the criteria established for Level B add to those criteria for Level A, and the criteria established for Level C add to those for Levels A and B.**

ASSESSMENT LEVELS do not correspond to Tiers, in the OSR planning sense. Rather, an Assessment Level indicates the maturity of that program, so that a Facility (which typically prepares for a Tier 1 response) may be quite well prepared and very capable of mounting a quick and very effective response to a Tier 1 spill. In such a case the Assessment Level C would reflect its maturity but for a Tier 1 spill response. A facility with potentially significant spill risks (e.g., large volumes handled, very sensitive areas) may need to have a robust Tier 2 capability; however, if the OSR program is in the early stages of development and implementation, the assessment would be performed at a Level A.

4.3. Notes on OSR Categories Applicable to Facilities OSR Programs

Facility plans and readiness programs can be prepared and built upon requirements imposed by detailed and complex regulations, or they may need to be put in place in the absence of specific regulations. It is unlikely that a regulatory, regional, or national component would be a significant category in OSR programs for facilities. Major focus is on local, on-scene preparedness (Tier 1 and into Tier 2) with ties into corresponding Tiered, or upper level, government or industry plans and capabilities, as appropriate. Immediate on-scene response capabilities are the primary focus of OSR programs at the facility level.



Table 7 - Criteria Matrix and Toolbox References for OSR Assessment- SCOPE: Government/Industry Facility

GOVERNMENT/INDUSTRY - FACILITY			
Level A	Level B	Level C	Toolbox
A. LEGISLATION, REGULATIONS & AGREEMENTS			
Plan references regulatory requirements. Reportable amounts of spills indicated.	Plan meets regulations and standards.	Plan lists primary applicable regulations and standards, and overseeing agencies. Plan exceeds regulatory requirements. Content aligned with BIP recommendations.	<ul style="list-style-type: none"> • IOSC 2008 Guideline - Element 1 and Appendix A • API, 2013d • IFC, 2000a, 2000b • IMO, 1995 • IPIECA/OGP, 2013b • OGP, 2011 • USCG/EPA/DOT/MMS/OSHA, 1996
Signed agreements for local (within reasonable distance) OSR assistance are in place. Nearby or neighboring industries are identified that may assist in response.	Documented, signed agreements for Mutual Aid or assistance from other facilities or industries are in place. Membership in Tier 2 and 3 cooperatives is in place, as appropriate.	Agreements are in place for Mutual Aid at all appropriate tier levels. Clearly defined capabilities and conditions for use of Mutual Aid exist. Signed International Conventions are indicated.	<ul style="list-style-type: none"> • IOSC Sub-element 23.4 • ARPEL, 1999 • IPIECA, 2007
An Environmental Statement is included.	A signed and dated Environmental Policy exists.	Face-to-face meetings are held with regulators as part of the planning process and plan review	<ul style="list-style-type: none"> • ARPEL, 1997b



GOVERNMENT/INDUSTRY - FACILITY			
Level A	Level B	Level C	Toolbox
B. OIL SPILL CONTINGENCY PLANNING			
<p>Plan is readily available to OSR personnel that includes clear table of contents, pagination.</p> <p>Plan is dated. Person/position is clearly identified along with alternates within the plan for maintaining plan</p>	<p>Plan is clearly organized and includes distribution list, tabs for reference. Scope (facilities, geographical area, products) is included.</p> <p>Field guide/checklist indicates initial response steps.</p>	<p>Plan is readily available as controlled ISO document and is clearly organized. The plan includes checklists, graphics, maps, and tables. Scope of plan is included as well as glossary. Personnel can locate OSR Field or Emergency Response Guide for initial actions.</p>	<ul style="list-style-type: none"> • IOSC Element 9 and Appendix A • AMSA, 2013; A-NOPSEMA, 2012 • ARPEL, 1997b • IPIECA Report Series 1990-2008 • IMO, 1995
<p>Applicable and related plans (company, local, and government) are identified.</p>	<p>Relationship with other applicable plans (company, local, and government) are identified and described.</p>	<p>Equipment inventories are indicated, as applicable.</p>	<ul style="list-style-type: none"> • IOSC Sub-element 9.1
<p>Local expertise for OSR-related issues is listed.</p>	<p>Local and Regional experts are listed and are aware of OSR plan and scope.</p>	<p>Contracts or agreements with OSR experts in specialized fields are indicated who have participated in planning or exercises</p>	<ul style="list-style-type: none"> • IOSC Element -8 • Cleanupoil.com, 2010
<p>Plan has been reviewed or revised in past 3 years.</p> <p>Key contacts are updated as these change.</p>	<p>Revision log and dated pages document reviews or revisions within past 2 years.</p>	<p>Revision log and dated pages document reviews/revisions as per update procedures, including plan implementation following actual spills, and at least annually.</p> <p>Spill risks are re-assessed regularly.</p> <p>Criteria specify when plan must be reviewed, e.g., after an exercise or spill so that improvements are made to it. Contact details are up to date and verified.</p>	<ul style="list-style-type: none"> • IOSC Element 28
<p>Potential spill sources, liquids, and volumes are identified and known to responders.</p>	<p>Detailed calculations are provided for possible spill sources (tanks, lines, pump rates, etc.) and for secondary containment.</p> <p>MSDSs, properties are highlighted.</p> <p>Most probable worst-case discharge is identified for each source.</p>	<p>Spill planning is based on tiered system that uses quantitative risk assessment analysis for each tier (option: tiers reflect regulatory-defined criteria). Scenarios are used as basis for planning.</p> <p>Primary properties of products are summarized.</p> <p>Photos, specifications are included for facilities posing risk.</p>	<ul style="list-style-type: none"> • IOSC Sub-element 4.1 • ARPEL, 1998a • IPIECA, 2000a • IMO, 2010c



GOVERNMENT/INDUSTRY - FACILITY			
Level A	Level B	Level C	Toolbox
General area at risk is identified based on spill sources.	Area of potential spill influence is defined based on spill trajectories for worst-case spills. Trajectories consider prevailing and worst-case operating conditions. Graphics indicate resources at risk from spills based on trajectory analyses..	Trajectories reflect distinct product weathering rates, tiered volumes, seasonal conditions. Stochastic and worst-case trajectories shown in scenarios are basis for response planning. Seasonal concerns are included.	<ul style="list-style-type: none"> • IOSC Sub-element 4.3 • ARPEL, 1997b • ARPEL,1998b • Aurand et al., 2000 • NOAA, 2002 • Taylor et al., 2009
Sensitive areas are identified in plan. Species at risk are listed.	Sensitivity, timing, and priorities are defined. Responders have general understanding of sites and priorities. Sensitivity maps are available and regularly updated (annually).	Sensitive areas and resources at risk are clearly presented and kept up-to-date in GIS system.	<ul style="list-style-type: none"> • IOSC Element 3 • ARPEL, 1997a • IPIECA Report Series 1990-2008 • IPIECA/IMO/OGP, 2012 • IMO/IPIECA, 1996
Response strategies are clearly stated and appropriate for facility, operating conditions, and oil types.	Primary OSR equipment and personnel needs are indicated. Sensitivity maps are utilized.	Strategies and tactical details are provided for source control and immediate areas at risk. Detailed tactical plans (graphics, maps, personnel needs) are also included for priority areas within zone of spill risk and appropriate for operating conditions	<ul style="list-style-type: none"> • IOSC Sub-element 4.2 and Element 17 • API/NOS/USCG/EPA, 2001 • ARPEL, 1997a • CEDRE, 2007b • IPIECA/OGP, 2013d • NOAA, 2010a, 2010b • NOAA/API, 1994 • OSRL, 2011b, 2013a, 2013b
Alternative countermeasures, such as dispersants or in-situ burning, are evaluated as options.	Alternative countermeasures, such as dispersants or in-situ burning, are analyzed with windows of opportunity noted.	Net environmental benefits analyses have been completed for alternative countermeasures with clearly defined applicability and limitations specified.	<ul style="list-style-type: none"> • IOSC Elements 7 and 17 • API, 2013b • ARPEL, 2007b, 2007c, 2007d • IPIECA/OGP, 2012a • IPIECA, 2000b • ITOPF, 1997 • NOAA, 2010a, 2010b • OSRL, 2011c, 2011d, 2011e, 2011f, 2011i • REMPEC, 2011a, 2011b • Walker et al., 2003



GOVERNMENT/INDUSTRY - FACILITY			
Level A	Level B	Level C	Toolbox
Personnel needed to undertake operations are assessed.	Personnel and equipment needed to undertake all operations are clearly identified.	Personnel and equipment needed to undertake all operations are listed, appropriate, and qualified. Sufficient personnel are identified to enable work rotation schedules in field and in response management.	<ul style="list-style-type: none"> IOSC Elements 7 and 17



GOVERNMENT/INDUSTRY - FACILITY			
Level A	Level B	Level C	Toolbox
C. RESPONSE COORDINATION			
<p>Clear procedures are included on information to report and who should receive initial spill notification and follow-up reports. A spill reporting form is included. A contact list specifies key personnel and alternates.</p>	<p>Initial spill notification checklists/forms are readily available. Callout procedures include flow charts for internal, external parties with contact data.</p>	<p>Redundant callout procedures are based on common checklists and/or forms. Internal, external callout flow charts in place. A directory indicates internal, external contacts (primary and alternate) immediately available.</p>	<ul style="list-style-type: none"> • IOSC Element 11 • IMO, 1995, 2010b • ISO, 2000 • UNEP, 1996a, 1996b, 2000 • USCG/EPA/DOT/MMS/OSHA, 1996
<p>Spill management structure and assigned personnel are defined for all spill tiers, as appropriate.</p>	<p>Spill management organization allows easy expansion and contraction of personnel in planning levels or tiers and integration with external personnel (government, contractors).</p>	<p>Spill management organization is flexible and robust and accommodates all emergencies. Based on sound management principles (e.g., ICS).</p>	<ul style="list-style-type: none"> • IOSC Element 10 Sub-element 10.1 • IMO/MEPC, 2011 • IPIECA, 2000a • OSRL, 2012 • USCG, 2006
<p>Roles and responsibilities are evident for each functional aspect identified in OSR management organization.</p>	<p>Responsibility checklists are available and defined for each role in OSR management team.</p>	<p>OSR management personnel have checklists for their personal use during response. These are available in plan, at a Command Post, or are maintained in individual OSR response kits.</p>	<ul style="list-style-type: none"> • IOSC Element 10, Sub-element 10.2 • OSRL, 2012 • USCG, 2006
<p>Incident command is assigned to one or two specific individuals (by name or position) with backups identified.</p>	<p>Personnel appointed to a Unified or Joint Command are identified; Records of Joint or Unified Command meetings indicate working team.</p>	<p>Personnel in direct support of, a Unified or Joint Command are identified; Records show regular pattern of Joint or Unified Command meetings, exercises, and/or response</p>	<ul style="list-style-type: none"> • IOSC Element 10, Sub-element 10.2
<p>Personnel assigned to OSR management roles are identified for Tier 1 as well as company personnel who would be informed of a spill.</p>	<p>Personnel assigned to OSR management roles are identified for Tiers 1 and 2 (as appropriate).</p>	<p>Personnel assigned to OSR management roles are identified for Tier 1-3 (as appropriate). Sufficient trained personnel are available from local, contracted, and corporate sources to manage 24-hr extended worst-case spill (shifts). Approximate times are included that it will take to bring in additional personnel and equipment to arrive.</p>	<ul style="list-style-type: none"> • IOSC Element 10, Sub-element 10.3
<p>Command post location is specified.</p>	<p>Backup command post location is identified; communications and control facilities are listed.</p>	<p>Command post location is specified and backup command post location is appropriate. Redundant communications and control facilities are provided. Provisions for long-term emergencies are also specified.</p>	<ul style="list-style-type: none"> • IOSC Element 23.3.3



GOVERNMENT/INDUSTRY - FACILITY			
Level A	Level B	Level C	Toolbox
Procedures are in place and responsibility has been assigned for communications with media during a spill response.	A template press release is available for initial notice. Also a facility fact sheet is maintained and kept current. Person assigned to public information has established contact with local media outlets.	Person assigned to public information has established contact with local media, is trained in media management, and has worked with OSR command on public speaking and/or mock press conferences.	<ul style="list-style-type: none"> • IOSC Element 15
Procedures are in place and responsibility assigned for liaison with neighboring community.	Procedures are in place and responsibility assigned for liaison with local communities. Community liaison program and personnel maintain frequent contacts with neighboring community at risk.	Community education and training have been completed so that volunteer base is identified to support spill response efforts.	<ul style="list-style-type: none"> • IOSC Element 15 • POSOW, 2013c • UNEP, 1996, 2005



GOVERNMENT/INDUSTRY - FACILITY			
Level A	Level B	Level C	Toolbox
D. HEALTH, SAFETY & SECURITY			
A site map is available showing hazards, emergency equipment, and evacuation route(s).	Posted materials include evacuation routes, exits; containers are labeled; emergency placards.	Security guards are indicated and cameras, controlled access/exit, identification Security plan supplements OSR plan.	<ul style="list-style-type: none"> IOSC Elements 9 and 13, Appendix A
General risks, hazards, PPE are described. MSDS for oils handled are readily available. OSR personnel have general understanding of associated hazards. PPE is available in response kits.	MSDSs for each product handled are readily available; personnel know how to obtain data; response personnel and management demonstrate knowledge of MSDS contents.	Personnel can describe risks, safety precautions, PPE and initial response; Hazards Communications training is provided to all on-site personnel. Site assessment checklist has been developed for spills. PPE is available in kits and vehicles.	<ul style="list-style-type: none"> IOSC Sub-element 13.2 ExxonMobil, 2008 IPIECA, 2002
Responsible, accredited person(s) are identified for OSR safety assessment duties.	Generic site-safety plan template is available and used for response under direction of designated and qualified Site Safety Officer.	Site-specific safety assessment checklist and safety plan for OSR are available and have been completed by designated and qualified Site Safety Officer. A safety briefing checklist has been developed. Risk assessment includes air monitoring and night operations.	<ul style="list-style-type: none"> IOSC Sub-element 13.2 NIEHS, 2010
Mandatory safety training requirements have been established for OSR responders	Provisions have been made for training volunteers.	Roles for volunteers have been defined on a pre-spill basis. e.g., shoreline treatment; training modules are in place.	<ul style="list-style-type: none"> IOSC Sub-elements 10.5 and 27.2.3 ASTM, 2001a, 2001b IPIECA, 2002 NIEHS, 2010 POSOW, 2013c



GOVERNMENT/INDUSTRY - FACILITY			
Level A	Level B	Level C	Toolbox
E. OPERATIONAL RESPONSE			
Emergency shutoffs, remotely-controlled valves, other means are in place to reduce volume of releases.	Procedures are in place to minimize spill volumes through source control: e.g., transfers, patching, emergency lightering, etc. should emergency shutoffs be damaged/not accessible.	Procedures, emergency controls are clearly marked and determined to be functional on a regular basis. There is a designated Emergency Response Team with mobile capability.	<ul style="list-style-type: none"> • IOSC Element 5, Sub-elements 5.1 and 5.2 • IMO, 2005, 2010b • ISO, 2000 • USCG/EPA/DOT/MMS/OSHA, 1996
Equipment on site is adequate for Tier 1 risks (most likely routine spills), operating environments, and seasons.	Equipment on site exceeds Tier 1 needs as appropriate (oil types, weathering and volumes), operating environments, and seasons, and provides redundancy and compatibility with equipment identified to augment the Tier 1 capability as appropriate. Additional equipment sources identified to augment the Tier 1 capability are compatible with Tier 1 assets and operating conditions.	Equipment has been assessed to determine optimum response options for operating conditions and oil types. Dispersant application, mechanical recovery, shoreline treatment, and in-situ burning are addressed as appropriate. External resources of equipment are defined.	<ul style="list-style-type: none"> • IOSC Sub-element 6.2 and Element 17 • ADEC, 2006 • ExxonMobil, 2008 • IPIECA, 2007 • SLRoss, 2013
Equipment is properly stored, in good working condition and being properly maintained and inspected.	Maintenance and inspection records reflect routine upkeep (per OSCP requirements).	Computerized equipment maintenance and inspection program automatically issues and tracks work orders for equipment upkeep.	<ul style="list-style-type: none"> • IOSC Sub-element 23.2
Equipment locations are identified in plan, are secured, and locations allow for quick access and deployment.	Equipment locations distributed to allow quick response to key spill risk locations.	Pre-deployed equipment or permanently installed tertiary containment is in place. Equipment is properly stored, packaged, and labeled and in good excellent working condition.	<ul style="list-style-type: none"> • IOSC Element 5
Operational use of countermeasures is verified in annual drill.	Countermeasures including containment, skimming, dispersant application (as applicable) are verified and reviewed in exercises and drills.	All major countermeasures are tested twice annually and improved as needed. Upgrades with new response options are identified by management. In-house capability ensures applicable response options can be implemented including mechanical, treating agent in-situ burning, and shoreline treatment.	<ul style="list-style-type: none"> • IOSC Sub-element 26.3 • IMO, 2010c • IMO/IPIECA, 1996 • ITOFF, 1997



GOVERNMENT/INDUSTRY - FACILITY			
Level A	Level B	Level C	Toolbox
A Waste Management Plan is outlined.	Procedures are defined and adopted to minimize the potential waste stream, temporarily handle waste, and ultimately reuse or dispose of waste materials.	Pre-spill agreements and contracts are in place with waste management companies on a pre-spill basis. Intermediate and long-term storage options are defined. Oily waste treatment, recycling and final disposal are addressed.	<ul style="list-style-type: none"> • IOSC Element 18 • Arctic Council, 2008 • CEDRE, 2011 • ExxonMobil, 2008 • IPIECA, 2004a • OSRL, 2011g • REMPEC, 2011c
Wildlife recovery contacts are included.	A wildlife recovery plan is outlined.	A wildlife recovery program is part of regional cooperative capability including equipment and facilities for establishing on-site.	<ul style="list-style-type: none"> • IOSC Element 19 • IPIECA, 2004b



GOVERNMENT/INDUSTRY - FACILITY			
Level A	Level B	Level C	Toolbox
F. TRACKING, ASSESSMENT & INFORMATION MANAGEMENT			
Role or assignment is defined in OSR management to undertake spill tracking, including monitoring.	<p>Procedures are in place to provide visual tracking and monitoring of a spill (on water, land, groundwater).</p> <p>Expertise and resources available to undertake tracking.</p>	<p>Tracking and monitoring procedures include standardized assessment forms (SCAT, Overflight). Aids include digital cameras, GPS, and transport (helo, fixed- wing, vessels).</p> <p>Tracking systems for non-visual tracking identified and available (IR for night and low visibility conditions; tracking buoys; under dense foliage)</p>	<ul style="list-style-type: none"> • IOSC Element 20 • API, 2013c • CEDRE, 2004 • Fingas, 2001 • ITOPF, 2009 • Law et.al., 2011 • NOAA, 2002 • OSRL, 2011a
Forms, maps or charts are available on which to maintain record of spill track and movement.	GIS capabilities allow tracks to be integrated with other OSR planning information and data.	Computerized models are available and can be used to analyze spill trajectories and weathering. Modeling is integrated with GIS databases for OSR planning.	<ul style="list-style-type: none"> • IOSC Sub-element 3.3 • ARPEL, 1998b
Source of forecasting ability (weather, currents, river/stream flow, etc.) is defined.	The organization tasked to provide forecasting (weather, currents, river/stream flow, etc.) is defined.	The organization tasked to provide forecasting (weather, currents, river/stream flow, etc.) is staffed and available 24/7.	<ul style="list-style-type: none"> • IOSC Sub-element 20.5
A cleanup assessment capability exists.	SCAT Teams are identified that include company staff, agencies, and contractors.	Trained SCAT teams with field tools are available for OSR duties.	<ul style="list-style-type: none"> • IOSC Element 21 • CEDRE, 2006 • Environment Canada, 2010 • MCA, 2007 • NOAA, 2000 • OSRL, 2011g • Owens and Sergy, 2000; Sergy and Owens, 2007 • POSOW, 2013; REMPEC, 2009



GOVERNMENT/INDUSTRY - FACILITY			
Level A	Level B	Level C	Toolbox
G. LOGISTICS			
Supplies, PPE, tools, special equipment, expendables: local sources are identified	Sources are contracted on a pre-spill basis.	Sources are exercised. Contractors for supplies advise on materials and purchases.	<ul style="list-style-type: none"> • IOSC Sub-element 23.2 • Blackburn, 2005 • Cleanupoil.com, 2010
Local sources are identified for service providers for meals, transportation, portable camps and toilets:	Service providers are contracted on a pre-spill basis.	Service providers are exercised and updated on an annual basis in the plan.	<ul style="list-style-type: none"> • IOSC Sub-element 23.3
Response times for initial deployment are identified and tested	Initial deployments are tested and improved. Activation of Tier 2 and Tier 3, as appropriate, is tested on a regular basis (once every three years).	Deployments are exercised annually with neighboring facilities and authorities.	<ul style="list-style-type: none"> • IOSC Elements 9, 17 and 26
Assets and procedures for communications in field and between field and Command Post are in place.	Communications equipment is on hand and secondary or backup systems are identified	There is also a communications plan with pre-identified channels for responders.	<ul style="list-style-type: none"> • IOSC Element 12 and Sub-element 23.2 • ExxonMobil, 2008
Decontamination facilities are available for personnel leaving the spill site.	Equipment and personnel are prepared and available for immediate deployment to support decontamination of personnel, response equipment, and transportation assets (e.g., vehicles, vessels).	“Hot” and “cold” zones are defined for OSR and are maintained by defined corridors in and out of the spill zone. Sources for additional PPE and supplies are pre-determined.	<ul style="list-style-type: none"> • IOSC Element 18 and Appendix A • IPIECA, 2002 • Fingas, 2001



GOVERNMENT/INDUSTRY - FACILITY			
Level A	Level B	Level C	Toolbox
H. FINANCIAL AND ADMINISTRATIVE CONSIDERATIONS			
One or more individuals have authorized spending with spending limits clearly identified. Procedures in place for increasing spending limits if necessary.	Finance personnel have exercised purchasing needs with suppliers as part of training.	There is coordination and procedure review with insurers; tested; standardized forms. Personnel are familiar with forms adopted for tracking, purchasing, and deploying OSR equipment, materials, and personnel.	<ul style="list-style-type: none"> • IOSC Sub-element 24 • ARPEL, 1997b • IMO, 2009
Procedures are in place to receive claims.	Procedures are in place to receive, investigate, and resolve claims. Insurers are identified and included in exercises.	A claims filing and tracking system has been implemented. Coordinated procedures exist with insurers to expedite claim review and settlement process. Insurers have documented participation in response and/or exercises.	<ul style="list-style-type: none"> • IOSC Sub-element 24.4 • IMO, 2009 • IOPC, 2008 • IPIECA/ITOPF, 2007



GOVERNMENT/INDUSTRY - FACILITY			
Level A	Level B	Level C	Toolbox
I. TRAINING & EXERCISES			
Training requirements are defined for spill management and responders. Course outline(s) have been included in plan. Minimum initial and refresher training requirements are defined for spill management and responders.	Minimum initial and refresher training requirements are defined for spill management and responders. Health & safety training requirements are included.	Initial and refresher training requirements are defined for levels of expertise and functions (assignments) for personnel in spill management and for responders. Health & safety training and refresher programs are defined and implemented.	<ul style="list-style-type: none"> IOSC Element 27 ASTM, 2001a IFC, 2000a, 2000b OSHA, 2001
Regular training courses are provided on OSCP to response team personnel.	Courses are attended by responders and OSR management personnel.	OSR courses are held on an annual basis include external parties: other companies and authorities.	<ul style="list-style-type: none"> IOSC Elements 9 and 27 ARPEL, 1997
In-house spill training courses are available.	Contracted or company-specialists provide spill training courses	Contracted internationally-recognized or accredited spill training is provided per a schedule and documented.	<ul style="list-style-type: none"> IOSC Element 27
Training records for on-site personnel document compliance with required training.	Training records document compliance with defined training and include training materials; training is provided by qualified personnel.	Training materials and aids are available; training is provided by certified and/or qualified experts.	<ul style="list-style-type: none"> IOSC Element 27.5
Notification and Alerting Exercises are simulated within facility as part of training	Internal-External alerting and notification are exercised with actual calls as per regulatory requirements	Internal-External notification exercises include callout during off-hours. A communications system is in place and tested.	<ul style="list-style-type: none"> IOSC Sub-element 26.3 IMO/IPIECA, 1996b
Annual deployment exercises are held at the facility.	Exercises include neighboring industries.	Industry and government partners participate in annual equipment deployment and command center operations exercise.	<ul style="list-style-type: none"> IOSC Sub-element 26.4 IMO/IPIECA, 1996b
Annual tabletop (Response Management) Exercises are held.	Tabletop exercises include external parties.	Tabletop exercises are based on risk assessments including trajectories and extensive strategic planning.	<ul style="list-style-type: none"> IOSC Sub-element 26.3 Aurand et al., 2000 IMO/IPIECA, 1996b IPIECA, 2000b



GOVERNMENT/INDUSTRY - FACILITY			
Level A	Level B	Level C	Toolbox
J. SUSTAINABILITY & IMPROVEMENT			
Internal review of exercise is held.	Post-Exercise critique (plan and execution) recommends actions for OSR improvements. Recommendations are implemented and tracked.	External review supplements internal post-exercise or response critique. Steps taken for improvements are documented. Management tracks changes until these are implemented.	<ul style="list-style-type: none"> • IOSC Element 28 • CDFG, 2011 • IMO/IPIECA, 1996b • IPIECA, 2000b • ISO 14000/140001 • WDOE, 2014
Audits of plans and facilities are conducted annually.	Internal company auditors review plans, equipment, and related facilities at least once every three years.	Internal-External/Experts (Company, Contracted, Government) undertake audits. Responsibilities are assigned to implement changes. Changes are reviewed and approved.	<ul style="list-style-type: none"> • IOSC Sub-element 28.3 • ARPEL Guidelines for Conducting Environmental Audits for Onshore Petroleum Operations, undated • IMO, 2010c • Transport Canada, 2010
Post-Exercise and Post-Spill Evaluations are conducted and incorporated into actions for OSR program improvements.	Plan and equipment improvements are made as needed.	Plan and equipment improvements are included in planning and in conducting subsequent training.	<ul style="list-style-type: none"> • IOSC Sub-element 28.4 • CDFG, 2010 • IMO, 2010c • WDOE, 2014



5. GOVERNMENT – LOCAL/PORT/CITY

5.1. Description of Scope

Government-owned and/or -operated oil handling, transport, and storage facilities typically have emergency response plans for different eventualities, including oil spills. The OSR aspect of emergency readiness is the focus of this assessment chapter.

Examples:

Port facilities
Municipalities

The operations encompassed in this scope are local in extent and associated with cities, ports, and other geographically limited but collective facilities. A key feature of this scope is the collective point-source aspect of the potential spills.

5.2. Concept of Levels

The assessment process is conducted specifically by using RETOS, which reflects the detailed assessment criteria listed in Table 8 (highlighted in yellow are the critical criteria, only applicable to Level A); however, a separate spreadsheet is provided in RETOS™ for each LEVEL.

The use of three levels for the assessment for this scope does not reflect the complexity of an operation or facility. The level of commitment for time and effort to ensure best practices in OSR plans and readiness will be very different for small ports relative to multiple operations in a large port or municipality. As stated earlier (Chapter 2.5), the user should select a target level (Level A as a default) against which to assess the OSR capability. **For each Category/Element, the criteria established for Level B add to those criteria for Level A, and the criteria established for Level C add to those for Levels A and B.**

ASSESSMENT LEVELS do not correspond to Tiers, in the OSR planning sense. Rather, an Assessment Level indicates the maturity of that program, so that a Local/Port/Municipality OSR Program (which typically prepares for a Tier 1 response) may be quite well prepared and very capable of mounting a quick and very effective

response to a Tier 1 spill. In such a case the Assessment Level C would reflect its maturity but for a Tier 1 spill response. Government Local/Port/Municipal OSR programs that encompass significant risks, such as multiple facilities, shipping, rail and pipelines, may need to envision an expanded Tier 2 or even Tier 3 response capability; however, if the overall program is in the early stages of development and implementation, the assessment would be performed at a Level A.

5.3. Notes on OSR Categories Applicable to Local OSR Programs

Local government plans and readiness programs typically must be prepared and built upon requirements imposed by regulations. Local plans may integrate aspects of multiple facility plans and would fit within a framework or regional and/or national OSR programs. Major focus is on local government preparedness (Tier 1 and into Tier 2) with ties into corresponding tiered, or upper level, government plans and capabilities, as appropriate. Immediate on-scene response capabilities are the primary focus of OSR programs at the local level.



Table 8 - Criteria Matrix and Toolbox References for OSR Assessment- SCOPE: Government – Local/Port/City

GOVERNMENT – LOCAL/PORT/CITY			
Level A	Level B	Level C	Toolbox
A. LEGISLATION, REGULATIONS & AGREEMENTS			
Plan references regulatory requirements.	Plan meets regulations and standards. Reportable amounts of spills are indicated.	Plan lists primary applicable regulations and standards, and overseeing agencies. Plan exceeds regulatory requirements. Content is aligned with Best Industry Practices recommendations.	<ul style="list-style-type: none"> • IOSC 2008 Guideline - Element 1 and Appendix A • ARPEL, 1998 • IMO, 1995
Agreements for local OSR assistance are in place. Memoranda of Understanding are cited.	Documented, signed agreements for Mutual Aid for Tier 2 and/or 3 spills are included as appropriate. Memoranda of Understanding are also included (if/as appropriate).	<p>Agreements for Mutual Aid at all tier levels are included as appropriate. Clearly defined capabilities, conditions for use are included. Signed International Conventions are also indicated.</p> <p>Ports include vessel traffic services regulations re: in/outbound call-ins, pilot requirements, traffic zones and closures.</p> <p>Municipalities cite pollution discharge restrictions and reporting regulations.</p>	<ul style="list-style-type: none"> • IOSC Sub-element 23.4 • ARPEL, 1999 • IPIECA, 2007 • OGP, 2013
A signed and dated Environmental Policy has been prepared.	Regulations delineate penalties for pollution violations.	Structure for ensuring adequate funds for pollution response and prosecution of pollution violations has been formulated.	<ul style="list-style-type: none"> • ARPEL, 1997b



GOVERNMENT - LOCAL/PORT/CITY			
Level A	Level B	Level C	Toolbox
B. OIL SPILL CONTINGENCY PLANNING			
<p>Plan is readily available to OSR personnel.</p> <p>Clear table of contents, pagination are features.</p> <p>Date of plan is included.</p>	<p>Plan is readily available and clearly organized. It includes distribution list, tabs for reference. Scope (facilities, geographical area, products) is also included. Field guide/checklist outline initial response steps.</p>	<p>Plan is readily available as controlled ISO document and is clearly organized. It includes current distribution list, tabs, checklists, graphics, maps, and tables. Scope of plan is included as well as glossary. Personnel can locate OSR Field or Emergency Response Guide for initial actions. Emergency and Business Recovery, Security component plans are included in municipal and port planning and their relationship to spill plans is clarified.</p>	<ul style="list-style-type: none"> • IOSC Element 9 and Appendix A • AMSA, 2013; A-NOPSEMA, 2012 • ARPEL, 1997b • IPIECA Report Series 1990-2008 • IMO, 1995
<p>Applicable and related plans (company, local, and government) are identified.</p>	<p>The relationship with other applicable plans (company, local, and government) is identified and described.</p>	<p>The relationship with other applicable plans (company, local, and government) is clearly defined and described. Equipment inventories and contacts are indicated as applicable.</p>	<ul style="list-style-type: none"> • IOSC Sub-element 9.1
<p>Local expertise for OSR-related issues is listed.</p>	<p>Local and regional experts are listed and are aware of the OSR plan and scope.</p>	<p>Contracts or agreements are in place with OSR experts in specialized fields who have participated in planning or exercises.</p>	<ul style="list-style-type: none"> • IOSC Element 8 • Cleanupoil.com, 2010
<p>Plan has been reviewed or revised in past year.</p> <p>Key contacts are updated as these change.</p>	<p>Revision log and dated pages document reviews or revisions within past year.</p>	<p>Revision log and dated pages document reviews/revisions as per update procedures, including plan implementation following actual spills, and at least annually. Spill risks are re-assessed regularly.</p>	<ul style="list-style-type: none"> • IOSC Element 9
<p>Potential spill sources, materials, and volumes are identified and known to responders.</p> <p>MSDSs for all products have been included.</p>	<p>Detailed calculations have been provided for possible spill sources (e.g., oil storage facilities, oil transfer locations, vessel operations/bunkering, rail deliveries, ballast water treatment, etc.). MSDSs for all products have been included in plan their location is indicated and verified. Spill sources, materials, volumes are identified and known to responders.</p>	<p>Spill planning is based on a tiered system that uses quantitative risk assessment analysis for each tier (option: tiers reflect regulatory-defined criteria). Scenarios used as a basis for planning include beaching, collision, grounding, fire, explosion, earthquake, etc.. Primary properties of products have been summarized. Photos, specifications are included for facilities and operations posing spill risk.</p>	<ul style="list-style-type: none"> • IOSC Sub-element 4.1 • ARPEL, 1998a • IPIECA, 2000a • IMO, 2010c



GOVERNMENT - LOCAL/PORT/CITY			
Level A	Level B	Level C	Toolbox
<p>The general area at risk is identified based on spill sources.</p>	<p>Areas of potential spill influence are defined based on spill trajectories for worst-case spills. Trajectories consider prevailing and worst-case operating conditions.</p>	<p>Trajectories reflect distinct product weathering rates, tiered volumes, and seasonal conditions. Stochastic and worst-case trajectories depicted in scenarios are the basis for response planning. Detailed tidal patterns and seasonal environmental concerns are included for harbors.</p>	<ul style="list-style-type: none"> • IOSC Sub-element 4.3 • ARPEL, 1997b • ARPEL, 1998b • Aurand et al., 2000 • NOAA, 2002 • Taylor et al., 2009
<p>Sensitive areas are identified in the plan. Species at risk are listed.</p>	<p>Sensitivity, timing, and priorities are defined. Graphics (maps) indicate locations of species at risk. Responders have a general understanding of sites and priorities.</p>	<p>Sensitive areas and resources at risk are clearly presented and kept up-to-date in GIS system including, for example, estuaries, wetlands, port, park, marina and other amenities. Responders have a general understanding of sensitive sites and priorities.</p>	<ul style="list-style-type: none"> • IOSC Element 3 • ARPEL, 1997a • IPIECA Report Series 1990-2008 • IPIECA/IMO/OGP, 2012 • IMO/IPIECA, 1996
<p>Response strategies are clearly stated and appropriate for the local area, operating conditions, and oil types. Health and safety priorities are clearly indicated. Personnel and equipment needs to implement identified response strategies are indicated.</p>	<p>Strategies and tactical details are provided for source control and areas at immediate risk. Primary OSR equipment and personnel needs are indicated. Health and safety priorities are clearly delineated including concerns for toxic and flammable substances. Response equipment has been strategically positioned to be on scene within 2 hours. Primary OSR equipment and personnel needs are indicated.</p>	<p>Detailed tactical plans (graphics, maps) for priority areas within the zone of spill risk and appropriate for operating conditions are indicated. Response equipment has been strategically positioned to be on scene within 1 hour.</p>	<ul style="list-style-type: none"> • IOSC Element 17 • API/NOS/USCG/EPA, 2001 • ARPEL, 1997a • CEDRE, 2007b • IPIECA/OGP, 2013d • NOAA, 2010a, 2010b • NOAA/API, 1994 • OSRL, 2011b, 2013a, 2013b



GOVERNMENT - LOCAL/PORT/CITY			
Level A	Level B	Level C	Toolbox
<p>Non-mechanical countermeasures, such as dispersants or burning, are evaluated as options if appropriate. Personnel needed to undertake all response options have been assessed.</p>	<p>Non-mechanical countermeasures, such as dispersants or burning, have been analyzed with windows of opportunity noted if appropriate for extended port boundaries.</p>	<p>Net environmental benefits analyses have been completed for alternative countermeasures with clearly defined applicability and limitations in the context of municipal and port facilities and related concerns including the possible impacts of toxic and flammable substances.</p>	<ul style="list-style-type: none"> • IOSC Elements 7 and 17 • API, 2013b • ARPEL, 2007b, 2007c, 2007d • IPIECA/OGP, 2012a • IPIECA, 2000b • ITOPF, 1997 • NOAA, 2010a, 2010b • OSRL, 2011c, 2011d, 2011e, 2011f, 2011i • REMPEC, 2011a, 2011b • Walker et al., 2003
<p>Personnel needed to undertake operations are assessed.</p>	<p>Personnel and equipment needed to undertake all operations are clearly identified and qualified.</p>	<p>Personnel and equipment needed to undertake all operations are listed, appropriate, and qualified. Sufficient personnel are identified to enable work rotation schedules in field and in response management.</p>	<ul style="list-style-type: none"> • IOSC Elements 7 and 17



GOVERNMENT - LOCAL/PORT/CITY			
Level A	Level B	Level C	Toolbox
C. RESPONSE COORDINATION			
<p>A clear procedure is in place on information to report and who should receive initial spill notification and follow-up reports.</p> <p>A spill reporting form is included.</p> <p>A contact list indicates key personnel and alternates.</p>	<p>Initial spill notification checklists/forms are readily available. Alarms are described and callout procedures include flow charts for internal, external parties with contact data. Procedures are in place to communicate with area officials if a spill is too large or additional resources are needed.</p>	<p>Redundant callout procedures are based on common checklists and/or forms. A directory is included of internal, external contacts (primary and alternate) who are immediately available.</p>	<ul style="list-style-type: none"> • IOSC Element 11 • IMO, 1995, 2010b • ISO, 2000 • UNEP, 1996a, 1996b, 2000 • USCG/EPA/DOT/MMS/OSHA, 1996
<p>Spill management structure and assigned personnel are defined for all spill tiers, as appropriate.</p>	<p>The spill management organization allows easy expansion and contraction of personnel in planning levels or tiers and integration with external personnel (government, contractors).</p>	<p>The spill management organization is flexible and robust, accommodates all emergencies. It is based on sound incident management principles (e.g., ICS).</p>	<ul style="list-style-type: none"> • IOSC Element 10, Sub-element 10.1 • IPIECA, 2000a • OSRL, 2012 • USCG, 2006
<p>Roles and responsibilities are evident for each functional aspect identified in the OSR management organization.</p>	<p>Responsibility checklists are available and defined for each role in OSR management team.</p>	<p>OSR management personnel have checklists for their personal use during response. Checklists are available in the plan, at a Command Post, or maintained in individual OSR response kits.</p>	<ul style="list-style-type: none"> • IOSC Element 10, Sub-element 10.2 • OSRL, 2012 • USCG, 2006
<p>Incident Command is assigned to one or two specific individuals (by name or position) with backups identified</p>	<p>Personnel appointed to a Unified or Joint Command are identified; Records of Joint or Unified Command meetings indicate the working team.</p>	<p>Personnel appointed to, and in direct support of, a Unified or Joint Command are defined; Records show regular pattern of Joint or Unified Command meetings, exercises, and/or response.</p>	<ul style="list-style-type: none"> • IOSC Element 10, Sub-element 10.2
<p>Personnel assigned to OSR management roles are identified for Tier 1 incidents.</p>	<p>Personnel assigned to OSR management roles are identified for Tier 2 spills, as appropriate.</p>	<p>Personnel assigned to OSR management roles are identified for Tier 1-3 spills as appropriate. Sufficient trained personnel from local, contracted, and corporate sources are available to manage 24-hr extended worst-case spill (shifts).</p>	<ul style="list-style-type: none"> • IOSC Element 10, Sub-element 10.3
<p>Command post location is specified.</p>	<p>Backup command post location is identified; communications and control facilities are listed.</p>	<p>Redundant communications and control facilities are provided. Provisions for long-term emergencies are also specified.</p>	<ul style="list-style-type: none"> • IOSC Sub-element 23.3.3



GOVERNMENT - LOCAL/PORT/CITY			
Level A	Level B	Level C	Toolbox
A procedure is in place and responsibility has been assigned for communications with media during a spill response.	A prepared draft press release is available for initial notice. The assigned person for media communications has established contact with local media outlets.	A template press release is available for initial notice. The person assigned to media communications has established contact with local media, is trained in media management, and has worked with OSR command on public speaking and/or mock press conferences.	<ul style="list-style-type: none"> • IOSC Element 15
A procedure is in place and responsibility has been assigned for communications with local communities.	Community liaison program and personnel maintain frequent contacts with communities at risk.	Community education and training have been completed so that a volunteer base is identified to support spill response efforts.	<ul style="list-style-type: none"> • IOSC Element 15 • POSOW, 2013c • UNEP, 1996a, 2005



GOVERNMENT - LOCAL/PORT/CITY			
Level A	Level B	Level C	Toolbox
D. HEALTH, SAFETY & SECURITY			
A site map is available showing hazards and emergency equipment locations.	Site map shows evacuation route(s), and primary care facilities.	Security plan supplements OSR plan.	<ul style="list-style-type: none"> • IOSC Elements 9 and 13, Appendix A
General risks, hazards, and PPE are described. OSR personnel have general understanding of associated hazards. PPE available in OSR kits.	MSDSs for each product handled are readily available; personnel know how to obtain data; response personnel and management demonstrate knowledge of MSDSs. On-site monitoring equipment is readily available.	Personnel can also describe risks, safety precautions, PPE and initial response; Hazards Communications training has been provided to all on-site personnel. Site assessment checklist has been developed for spills. PPE are available in kits and vehicles. Fire-fighting and toxic and flammable gas response capabilities are also addressed.	<ul style="list-style-type: none"> • IOSC Sub-element 13.2 • API, 2013a • ExxonMobil, 2008 • IPIECA, 2002 • IPIECA/OGP, 2012b • REMPEC, 2012
Responsible, accredited person(s) are identified for OSR safety assessment duties.	Generic site-safety plan template is available and used for response under direction of designated and qualified Site Safety Officer. A Security plan supplements OSR plan. Responsible, accredited person(s) are identified for OSR safety assessment duties.	Site-specific safety assessment checklist and safety plan for OSR available and completed by designated Site Safety Officer. Safety briefing checklist developed. Safety risk assessment includes air monitoring and night operations. The roles of municipal and port police as well as security forces are specified.	<ul style="list-style-type: none"> • IOSC Sub-element 13.2 • NIEHS, 2010
Mandatory safety training requirements have been established for different roles and responsibilities of OSR responders.	Provisions have been made for training volunteers.	Roles for volunteers have been defined on pre-spill basis. e.g., shoreline treatment; training modules are in place.	<ul style="list-style-type: none"> • IOSC Sub-elements 10.5 and 27.3 • ASTM, 2001a, 2001b • IPIECA, 2002 • NIEHS, 2010 • POSOW, 2013c



GOVERNMENT - LOCAL/PORT/CITY			
Level A	Level B	Level C	Toolbox
E. OPERATIONAL RESPONSE			
Local procedures are in place to minimize spill volumes through operational controls (e.g., advanced vessel notifications) and source control: transfers, patching, emergency lightering, etc.	Emergency shutoffs, remotely-controlled valves, other means are in place to reduce volume of releases. Emergency anchorages are indicated, as appropriate.	Procedures, emergency controls are clearly marked and determined to be functional on a regular basis. There is a designated Emergency Response Team with mobile capability.	<ul style="list-style-type: none"> • IOSC Element 5, Sub-elements 5.1 and 5.2 • IMO, 2005, 2010b • ISO, 2000 • USCG/EPA/DOT/MMS/OSHA, 1996
Local equipment sources are identified and adequate for Tier 1 risks (most likely routine spills), operating environments, and seasons	Local equipment sources are verified and exceed Tier 1 needs as appropriate (oil types, weathering and volumes), operating environments, and seasons, and provide redundancy and compatibility with equipment identified to augment response capability, if needed.	Local and regionally available equipment has been assessed to determine optimum response options for operating conditions and oil types. Mechanical recovery and shoreline treatment are addressed as appropriate. (In- situ burning and dispersant application might not be applicable.) Additional external resources are identified to provide protection booming in particular. Response equipment utilizes the latest technology.	<ul style="list-style-type: none"> • IOSC Sub-element 6.2 and Element 17 • ADEC, 2006 • ExxonMobil, 2008 • IPIECA, 2007 • SLRoss, 2013
Local equipment is inventoried, audited, properly stored and in good working condition.	Maintenance and inspection records reflect routine upkeep (per OSCP requirements).	Local and regional equipment is properly stored, packaged, and labeled and in good excellent working condition. Computerized equipment maintenance and inspection program automatically issues and tracks work orders for equipment upkeep.	<ul style="list-style-type: none"> • IOSC Sub-element 23.2
Equipment locations are identified in the plan, are secured, and allow for quick access and deployment.	Equipment locations are distributed to allow quick response to key spill risk locations.	Pre-deployed equipment or permanently installed tertiary containment is in place.	<ul style="list-style-type: none"> • IOSC Element 5
Operational use of countermeasures is verified in annual spill exercise.	Countermeasures including containment, skimming,(dispersant application as applicable) are verified and reviewed in exercises and drills. Shoreline treatment considers techniques for natural and man-made shores.	All major countermeasures are tested twice annually and improved as needed. Upgrades with new response options are identified by management. In-house capability ensures applicable response options can be implemented including mechanical, (treating agents, in- situ burning as applicable), and shoreline treatment (man-made and natural).	<ul style="list-style-type: none"> • IOSC Sub-element 26.3 • IMO, 2010c • IMO/IPIECA, 1996 • ITOPF, 1997



GOVERNMENT - LOCAL/PORT/CITY			
Level A	Level B	Level C	Toolbox
A Waste Management Plan is outlined.	Procedures are defined and adopted to minimize the potential waste stream, temporarily handle waste, and ultimately reuse or dispose of waste materials	Agreements and contracts are in place with waste management companies and municipal authorities on pre-spill basis. Intermediate and long-term storage options for oily wastes are defined. Treatment, recycling and final disposal of oily waste are addressed including the use of municipal incinerators.	<ul style="list-style-type: none"> • IOSC Element 18 • CEDRE, 2011 • ExxonMobil, 2008 • IPIECA, 2004a • OSRL, 2011g • REMPEC, 2011c
Wildlife recovery contacts are included.	A wildlife recovery plan and local expertise are listed and aware of roles for response.	A wildlife recovery program is part of regional capability including equipment and facilities for establishing on-site facilities.	<ul style="list-style-type: none"> • IOSC Element 19 • IPIECA, 2004b



GOVERNMENT - LOCAL/PORT/CITY			
Level A	Level B	Level C	Toolbox
F. TRACKING, ASSESSMENT & INFORMATION MANAGEMENT			
<p>Role or assignment is defined in OSR management to undertake spill tracking, including monitoring. Source of forecasting ability (weather, currents, river/stream flow, etc.) is defined.</p>	<p>Procedures are in place to provide visual tracking and monitoring of a spill (on water, land, groundwater). Organization tasked to provide forecasting (weather, currents, river/stream flow, etc.) is defined. Expertise and resources available to undertake tracking.</p>	<p>Tracking and monitoring procedures include standardized assessment forms (SCAT, Overflight). Aids include digital cameras, GPS, and transport (helo, fixed- wing, vessels). Tracking systems for non-visual tracking are identified and available (e.g., IR for night and low visibility conditions; tracking buoys; under dense foliage). Organization tasked to provide forecasting (weather, currents, river/stream flow, etc.) is staffed and available 24/7. Studies document trajectories for releases into local waters (see also B. Oil Spill Contingency Planning).</p>	<ul style="list-style-type: none"> • IOSC Element 20 • API, 2013c • CEDRE, 2004 • Fingas, 2001 • ITOPF, 2009 • Law et.al., 2011 • NOAA, 2002 • OSRL, 2011a
<p>Forms, maps or charts are available on which to maintain record of spill track and movement.</p>	<p>GIS capabilities allow tracks to be integrated with other OSR planning information and data.</p>	<p>Computerized models are available and can be used to analyze spill trajectories and weathering. Results are available within suitable timeframes (e.g., 2-6 hours for on-water spills) and can be displayed in digital form (i.e., within GIS) and/or on wall maps.</p>	<ul style="list-style-type: none"> • IOSC Sub-element 3.3 • ARPEL,1998b
<p>A cleanup assessment capability exists.</p>	<p>SCAT Teams are identified that include agency personnel. Roles of the RP and contractors are acknowledged.</p>	<p>Trained SCAT teams with field tools are available for OSR duties.</p>	<ul style="list-style-type: none"> • IOSC Element 21 • CEDRE, 2006 • Environment Canada, 2010 • MCA, 2007 • NOAA, 2000. • OSRL, 2011g • Owens and Sergy, 2000; Sergy and Owens, 2007 • POSOW, 2013; REMPEC, 2009



GOVERNMENT - LOCAL/PORT/CITY			
Level A	Level B	Level C	Toolbox
G. LOGISTICS			
Supplies, PPE, tools, special equipment, expendables, towing and salvage are available. Local sources are identified.	Agreements (terms) with local sources have been established on a pre-spill basis.	Local sources have been established, contracted, and exercised on a pre-spill basis. Contractor advises on priorities, purchases. Regional logistical support has been identified.	<ul style="list-style-type: none"> IOSC Sub-element 23.2 Blackburn, 2005 Cleanupoil.com, 2010
Local sources have been identified for service providers for meals, transportation (air, land, water), portable camps and toilets:	Service providers for meals, transportation (air, land, water), portable camps and toilets have been contracted on a pre-spill basis.	Service providers for meals, transportation (air, land, water), portable camps and toilets are contracted and exercised. Sources are updated on annual basis in plan.	<ul style="list-style-type: none"> IOSC Sub-element 23.3
Response times for initial deployment have been identified and tested.	Response times for initial deployments have been tested and improved.	Deployments are exercised with combined operational and logistics support teams. Alternate routes are tried.	<ul style="list-style-type: none"> IOSC Elements 9 and 17
A Command Post is identified and has basic arrangements for coordinating a response.	A Command Post is pre-established with multiple lines of communication, space for participating personnel, and with adequate security and logistical support services to sustain the response organization.	Electronic boards are available for situation status posting with near real-time feed from field. Coordination with, and links to, port control systems are included.	<ul style="list-style-type: none"> IOSC Sub-element 23.3
Assets and procedure for communications in field and between field and Command Post are in place.	Communications equipment is on hand and secondary or backup systems are identified and available for all response personnel. Systems are compatible across response community (vessels, ground, air).	A communications plan is established with pre-identified channels for responders. Systems are integrated across response community (vessels, ground, air).	<ul style="list-style-type: none"> IOSC Element 12 and Sub-element 23.2 ExxonMobil, 2008
The availability of decontamination facilities is ensured for personnel leaving the spill site.	Equipment and personnel are prepared and available for immediate deployment to support decontamination of personnel, response equipment, and transportation assets (e.g., vehicles, vessels).	“Hot” and “cold” zones are defined for OSR and are maintained by defined corridors in and out of the spill zone. Sources for additional PPE and supplies are pre-determined.	<ul style="list-style-type: none"> IOSC Element 18 IPIECA, 2002 Fingas, 2001



GOVERNMENT - LOCAL/PORT/CITY			
Level A	Level B	Level C	Toolbox
H. FINANCIAL AND ADMINISTRATIVE CONSIDERATIONS			
Designated Authority(ies) has pre-defined spending approval limits.	Finance personnel have exercised purchasing needs with suppliers as part of training.	Designated Authority(ies) has pre-defined spending approval limits and expedited approval process for increased limits. Coordination and procedure review with insurers has been tested and relies on standardized forms. Personnel are familiar with forms adopted for tracking, purchasing, and deploying OSR equipment, materials, and personnel.	<ul style="list-style-type: none"> • IOSC Element 24 • ARPEL, 1997b • IMO, 2009
Procedures are in place to receive claims.	Procedures are in place to receive, investigate, and resolve claims including loss of business. Insurers have been identified and included in exercises.	Claims filing and a tracking system have been implemented. Coordinated procedures exist with insurers to expedite claim review and settlement process. Insurers have documented participation in response and/or exercises.	<ul style="list-style-type: none"> • IOSC Sub-element 24.4 • IMO, 2009 • IOPC, 2008 • IPIECA/ITOPF, 2007



GOVERNMENT - LOCAL/PORT/CITY			
Level A	Level B	Level C	Toolbox
I. TRAINING & EXERCISES			
Training requirements are defined for spill management and responders. Training course outline(s) or descriptions are included in plan. Minimum initial and refresher health and safety training requirements are defined for spill management and responders.	Minimum initial and refresher training requirements are defined for spill management and responders. Training course outline(s) or descriptions are included in plan. Health & Safety is also included.	Initial and refresher training requirements are defined for levels of expertise and functions (assignments) for personnel in spill management and for responders. Health & Safety is included. Training requirements for terminals and facilities within municipalities and ports are specified.	<ul style="list-style-type: none"> • IOSC Element 27 • ASTM, 2001a • IFC, 2000a, 2000b • OSHA, 2001
Regular training courses are provided on OSCP to response personnel.	Courses are attended by responders and management, and include training on Incident Management Systems (e.g., ICS).	OSR courses held on an annual basis include external parties. Train-the-trainer courses are held. Key personnel attend national and international OSR conferences and seminars. OSR preparedness and response activities are discussed with other ports and municipalities.	<ul style="list-style-type: none"> • IOSC Element 27 • ARPEL, 1997
In-house spill training courses are held.	Contracted or government specialists provide spill training courses.	Contracted internationally-recognized or accredited spill training is available.	<ul style="list-style-type: none"> • IOSC Element 27
Training records for on-site personnel document compliance with required training.	Training records document compliance with defined training and includes training materials; training is provided by qualified personnel.	Training is provided by certified and/or qualified experts.	<ul style="list-style-type: none"> • IOSC Sub-element 27.5
Notification and Alerting Exercises simulate spill response within local area as part of training.	Off-hours; Internal-External alerting and notification are exercised with actual calls as per regulatory requirements.	Off-hours; Internal-External are tested and documented as per regulatory and local requirements. Communications system is in place and tested.	<ul style="list-style-type: none"> • IOSC Sub-element 26.3 • IMO/IPIECA, 1996b
Deployment exercises are conducted at least annually with local resources.	Exercises include neighboring industries.	Industry and government partners, including port and municipal security organizations, participate in annual equipment deployment and command center operations exercise.	<ul style="list-style-type: none"> • IOSC Sub-element 26.4 • IMO/IPIECA, 1996b



GOVERNMENT - LOCAL/PORT/CITY			
Level A	Level B	Level C	Toolbox
Tabletop (Response Management) Exercises are held.	Tabletop (Response Management) Exercises are held at least annually. Tabletop exercises include external parties.	Tabletop exercises are based on risk assessments including trajectories and extensive strategic planning. Fire, explosion, and toxic releases are considered in annual exercises.	<ul style="list-style-type: none"> • IOSC Sub-element 26.3 • Aurand et al., 2000 • IMO/IPIECA, 1996b • IPIECA, 2000b



GOVERNMENT - LOCAL/PORT/CITY			
Level A	Level B	Level C	Toolbox
J. SUSTAINABILITY & IMPROVEMENT			
Internal review is conducted of exercise.	Exercise critique (plan and execution) recommends actions for OSR improvements. Recommendations made following exercises or actual response are implemented and tracked.	External review supplements internal critique. Steps taken for improvements are documented. Management tracks changes until implemented.	<ul style="list-style-type: none"> • IOSC Element 28 • CDFG, 2011 • IMO/IPIECA, 1996b • IPIECA, 2000b • ISO 14000/140001 • WDOE, 2014
Audits of plans and facilities are conducted annually.	Internal auditors review plans, equipment, and related facilities.	Internal-External / Experts (Company, Contracted, Govt.) undertake audits to specifically review improvements, repairs and upgrades to transfer facilities, emergency stops, communications, and spill response equipment. Responsibilities are assigned to implement changes. Changes are reviewed and approved.	<ul style="list-style-type: none"> • IOSC Sub-element 28.3 • ARPEL Guidelines for Conducting Environmental Audits for Onshore Petroleum Operations, undated • IMO, 2010c • Transport Canada, 2010
Post-Exercise and Post-Spill Evaluations are conducted and incorporated into actions for OSR program improvements.	Post-Exercise and Post-Spill Evaluations are conducted and incorporated into actions for OSR improvements to port and municipal as well as client-based assets. Plan and equipment revisions and improvements are implemented in a timely manner.	Plan and equipment improvements are included in subsequent training.	<ul style="list-style-type: none"> • IOSC Sub-element 28.4 • CDFG, 2011 • IMO, 2010c • WDOE, 2014



6. GOVERNMENT – AREA OR REGIONAL

6.1. Description of Scope

Regional government plans address the role of regulatory bodies and multi-agency in OSR. The management aspect of OSR readiness is the focus of this assessment chapter.

Example facilities:

State
Province
Multi-state/provincial

A key feature of this scope is the broader geographic coverage of plans. It can integrate several government programs (e.g., local) and has ties with industry operations and oversight.

6.2. Concept of Levels

The assessment process is conducted specifically by using RETOS, which reflects the detailed assessment criteria listed in Table 9 (highlighted in yellow are the critical criteria, only applicable to Level A); however, a separate spreadsheet is provided in RETOS™ for each LEVEL.

The use of three levels for the assessment for this scope does not reflect the complexities of one area relative another area nor necessarily the geographic size of areas. The level of commitment for time and effort to ensure best practices in OSR plans and readiness will be very different for areas with numerous spill sources, public infrastructures, and sensitivities relative to areas where there are limited risks or fewer sensitive receptors. As stated earlier (Chapter

2.5), the user should select a target level (Level A as a default) against which to assess the OSR capability. **For each Category/Element, the criteria established for Level B add to those criteria for Level A, and the criteria established for Level C add to those for Levels A and B.**

ASSESSMENT LEVELS do not correspond to Tiers, in the OSR planning sense. Rather, an Assessment Level indicates the maturity of that program. For example, a Government Area OSR program (which typically prepares for Tier 2 and Tier 3 response) may only be in the early stages of development and implementation, in which case the assessment would be performed at a Level A. Alternatively, the Area OSR program may have need for only a Tier 2 capability and, if mature and well-developed, could be assessed using Level C criteria.

6.3. Notes on OSR Categories Applicable to Area OSR Programs

Area plans and readiness programs typically must be prepared and built upon requirements imposed by regulations, including the National Oil Spill Contingency Plan. Plans and readiness at the regional level rely on a proper foundation at the national level and thus integrate aspects of national OSR programs. Major focus is on government preparedness (Tier 2) with strong ties into the upper Tier 3 level, government plans and capabilities. Response preparedness typically entails more policy and management perspectives and integrates multiple local capabilities into a larger comprehensive response program.



Table 9 - Criteria Matrix and Toolbox References for OSR Assessment - SCOPE: Government – Area or Regional

GOVERNMENT - AREA OR REGIONAL			
Level A	Level B	Level C	Toolbox
A. LEGISLATION, REGULATIONS & AGREEMENTS			
<p>Current legislation, either regional (State, Province or other) or national exists and establishes the purpose of the regional OSR program, stipulates requirements for OSR, and assigns responsibilities.</p> <p>Regional Lead Agency or Designated Authority is indicated (see also B Contingency Planning).</p>	<p>National legislation stipulates requirements for OSR and assigns responsibilities, with a view towards easy integration in the national contingency plan. It addresses passing tankers, innocent passage, petroleum exploration and production, and non-petroleum specific activities (e.g., non-tank vessels, power utilities, transportation). Lead Agency/Designated Authority and support agencies are indicated (see also B. Contingency Planning).</p>	<p>Lead Agency/Designated Authority and support agencies are indicated including weather and marine forecasting capability. Roles of other agencies and cooperatives are also assigned (see also B Contingency Planning) and interagency agreements, guidelines and laws listed. Relation to private industry is also defined.</p>	<ul style="list-style-type: none"> • IOSC 2008 Guidelines - Element 1 • ITOPF Country Profiles www.itopf.com • IMO, 1995
<p>Acts, regulations and guidelines support legislation.</p>	<p>Acts, regulations and guidelines support legislation with defined timeframes and specific requirements for compliance. Regulations specify regional authorities for response (operational) action, regional authorities for planning, review and approvals, and prescribed planning requirements. Areas of jurisdiction are defined, e.g., vessels, ports, platforms, SPMs, etc. (see also B. Contingency Planning).</p>	<p>Acts, regulations and guidelines support legislation with defined timeframes and specific requirements for compliance, and enforcement measures or penalties for noncompliance.</p>	<ul style="list-style-type: none"> • IOSC Sub-element 1.2 • UNEP, 2005
<p>Area has agreements and/or Regional committees to represent multiple governmental interests (from local to Province or State) for agreements on OSR and coordination.</p>	<p>Agreements represent private interests. Area or Region has actively engaged OSR efforts with neighboring geo-political entities. Liaison exists with the national level.</p>	<p>OSR efforts include developing enhanced response through joint exercises, training, and workshops. Agreements are in place for expertise and information exchanges on a regular basis.</p>	<ul style="list-style-type: none"> • IOSC Element 2 • ARPEL, 1999



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B. OIL SPILL CONTINGENCY PLANNING			
A Regional or Area Plan has been developed and approved; it identifies a Designated Regional Authority for oil spill response (and/or defines authority for specific spill cases; e.g., spill to land vs. spill to marine waters).	An approved Regional or Area Plan has been developed through partnership with collaborating agencies/departments with associated responsibilities; it identifies a Designated Authority for oil spill response and its responsibilities. A list of stakeholders' contacts is included.	Approved Regional or Area Plan has a history of development, testing, and regular revision with distribution to all responsible participating agencies/departments. A Designated Authority and roles/responsibilities of participating agencies are defined. The relation to private industry is also indicated.	<ul style="list-style-type: none"> • IOSC Element 9 and Appendix A • AMSA, 2013; A-NOPSEMA, 2012 • ARPEL, 1997b • IMO, 1995 • IMO/MEPC, 2011 • IPIECA Report Series 1990-2008
Contents of Regional or Area Plan meet all of the HIGH importance/significance planning elements defined in ARPEL Guidelines.	Contents of Regional or Area Plan meet all of the HIGH and MEDIUM importance/significance planning elements defined in ARPEL.	Contents of Regional or Area Plan meet and exceed all of the planning elements defined in ARPEL.	<ul style="list-style-type: none"> • IOSC Element 9 and Appendix A • ARPEL, 1997b, 1999
Requirements or expectations from integrated local plans are available	Local plans are integrated with Regional or Area Plan; integrated plans are available and have been tested through exercises and/or response.	Local plans are integrated with Regional or Area Plan and both are well established, have been tested through exercises and/or response, and have history of review and development. Contents and format for local/facility/shipboard/area or regional plans are specified.	<ul style="list-style-type: none"> • IOSC Element 9 • ARPEL, 1997b, 1999 • IPIECA, 2000a
Applicable and related government plans (multi-lateral, National, and local) are identified and/or linked.	The relationship with other government plans (multi-lateral, national, and local) are identified and described. Conditions of access to additional external resources (equipment and personnel) have been recently analyzed.	Signed written agreements are in place for access to additional external resources. Equipment inventories are indicated, as applicable.	<ul style="list-style-type: none"> • IOSC Sub-element 9.1
Expertise (agency/personnel) for OSR-related issues is listed.	Regional and local experts are listed and have knowledge of the OSR plan and scope.	Contracts or agreements are in place with OSR specialists who have participated in planning and exercises as well as actual spills.	<ul style="list-style-type: none"> • IOSC Element 8 • Cleanupoil.com, 2010



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<p>The plan has been reviewed or revised in past year. Key contacts are updated as these change.</p>	<p>Revision log and dated pages document reviews or revisions within past year.</p>	<p>Revision log and dated pages document reviews/revisions as per update procedures, including plan implementation following actual spills, and at least annually. Spill risks are re-assessed regularly. Post-incident review is included.</p>	<ul style="list-style-type: none"> IOSC Element 9
<p>Regional or Area Plan has defined planning levels based on National Plan requirements or on spill risks.</p>	<p>Risk-based approach is used to define priority areas of potential spills based on operations, volumes, and environmental factors. Regional, National or international statistical data used to scope or define planning tiers or concepts.</p>	<p>Risk-based approach to define priority areas of potential spills includes mapping and list of species of concern.</p>	<ul style="list-style-type: none"> IOSC Sub-element 4.1 ARPEL, 1998a IPIECA, 2000a IMO, 2010c
<p>Priority planning is focused on areas of high-risk and sensitivity.</p>	<p>At-risk areas are defined based on spill trajectories for worst-case spills. Relevant properties of oils of concern are indicated. Trajectories consider prevailing and worst-case operating conditions. Graphics indicate species at risk.</p>	<p>Trajectories reflect specific oils of concern and their weathering rates, tiered volumes, local climatology, oceanography, and seasonal conditions. Stochastic and worst-case trajectories shown in scenarios are the basis for response planning. Organizations supplying specific data (e.g., oil properties, weather, environmental) and their contact details are listed.</p>	<ul style="list-style-type: none"> IOSC Sub-element 4.3 ARPEL, 1997b ARPEL, 1998b Aurand et al., 2000 IPIECA/IMO/OGP, 2012 NOAA, 2002 Taylor et al., 2009
<p>Plan follows established National guidance for defining sensitive areas and priorities. Threatened and endangered species at risk are listed and key habitats are located.</p>	<p>Plan includes maps and lists of priority sensitive areas with species and timing of sensitivities clearly identified. Maps adhere to sensitivity indexing practices.</p>	<p>Sensitive areas mapping and resources at risk according to multiple levels of concern are clearly presented, widely available to other plan holders, and are kept up-to-date in GIS systems. An inventory of all shorelines and associated resources and amenities is prepared, including for example, endangered species wetlands, recreational facilities, mariculture, and archeological sites. Videos of shoreline are taken, archived and linked to OSR pre-planning,</p>	<ul style="list-style-type: none"> IOSC Sub-element 4.3 ARPEL, 1997a ARPEL, 1998b Aurand et al., 2000 IPIECA/IMO/OGP, 2012 NOAA, 2002 Taylor et al., 2009



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<p>Policies and/or regulations are in place to reduce the risk and/or consequences of a spill. The use of assist tugs, pilotage, calling-in, and other risk-reducing measures are included in plans, where appropriate.</p>	<p>Regulations provide clear guidance for spill prevention and are enforced to reduce accidents and to minimize oil loss if an incident occurs.</p>	<p>Trends, sources, causes of spills (e.g., vessel traffic, transfer, production, exploration, collision, grounding) are documented and provide additional foundation for required prevention measures. Spill prevention programs are detailed. These list criteria for determining sensitive areas and zones requiring protection.</p>	<ul style="list-style-type: none"> IOSC Element 5
<p>Response strategies are clearly stated consistent with applicable operating conditions and oil types. Personnel and equipment needs to implement identified response strategies are indicated.</p>	<p>Plan includes, or specifies, requirements to develop strategies and tactical details for high spill risk areas at local planning levels.</p>	<p>Plan includes, or specifies requirement to develop, local plans, detailed tactical plans (graphics, maps, equipment, and personnel) for priority areas within zones of high spill risk. Detailed tactics indicate priorities and are appropriate for operating conditions.</p>	<ul style="list-style-type: none"> IOSC Sub-element 4.2 and Element 9 API/NOS/USCG/EPA, 2001 ARPEL, 1997a IPIECA, 2008 IPIECA/OGP, 2013d NOAA, 2010a, 2010b NOAA/API, 1994 OSRL, 2011b, 2013a, 2013b
<p>Plan adheres to National Policy on use of treating agents for spill response (dispersants, cleaning agents, bioremediation agents, herders, etc.). All products are listed.</p>	<p>Plan provides additional considerations for treating agents use (e.g., dispersants, cleaners) to allow assessment and approval within a reasonable "window of opportunity" (less 12 hours). Pre-approved zones have been delineated. Decision charts are available.</p>	<p>Net Environmental Benefits Analyses have been completed for dispersants and other treating agents with clearly defined applicability and limitations. Pre-approved locations and conditions of use are indicated. Expedited procedures are in place for approvals where NEBA shows applicability.</p>	<ul style="list-style-type: none"> IOSC Elements 7 and 17 API, 2013b ARPEL, 2007d CEDRE, 2005 IMO/UNEP, 1995 IPIECA, 2000b IPIECA/OGP, 2012a ITOPF, 2005 Kirby et.al, 1996 NOAA, 2010a, 2010b Walker et al., 2003



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Plan adheres to National Policy for use of In-situ burning.	Procedures are in place for evaluation and approval of burning within a reasonable "window-of-opportunity" (less than 24 hr). The required elements of a burn plan are published that address all relevant factors.	Net Environmental Benefits Analyses have been completed for in-situ burning with a clearly defined applicability, limitations, and approval process (may include pre-approval for specific conditions) as well as monitoring role. Burn plan requirements are published with explanatory data on all relevant factors. Decision charts have been prepared.	<ul style="list-style-type: none"> • IOSC Elements 7 and 17 • ARPEL, 2007b, 2007c • IPIECA, 2000b • NOAA, 2010a, 2010b • Walker et al., 2003
Shoreline protection and treatment policies and procedures are outlined.	Shoreline protection and treatment are considered including planning factors for carrying out assessment and remediation (SCAT).	Shoreline protection and treatment policies are delineated that consider SCAT as well as specifics such as workforce, spill responder safety training, oily debris, oil removal, and cleanup standards (endpoints).	<ul style="list-style-type: none"> • IOSC Element 6 • CEDRE, 2009 • Environment Canada, 2010 • IMO/UNEP, 2009 • Owens et al., 1998 • REMPEC, 2010



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C. RESPONSE COORDINATION			
<p>Clear procedure indicates information to report and who should receive initial spill notification and follow-up reports.</p> <p>A spill reporting form is included.</p> <p>A contact list specifies key personnel.</p>	<p>Initial spill notification checklists/forms are readily available. Callout procedures include flow charts for internal, external parties with contact data.</p>	<p>Redundant callout procedures are based on common checklists and/or forms. Internal, external callout flow charts are in place. A directory of internal, external contacts (primary and alternate) is immediately available.</p>	<ul style="list-style-type: none"> • IOSC Element 11 • IMO, 1995, 2010b • ISO, 2000 • UNEP, 1996a, 1996b, 2000 • USCG/EPA/DOT/MMS/OSHA, 1996
<p>A spill management structure and assigned organizations are defined for all spill Tiers.</p>	<p>The spill management organization allows easy expansion and contraction of personnel in planning levels or tiers and integration with OSR organizations and plan holders.</p>	<p>The spill management organization is flexible and robust, and accommodates all emergencies. A common incident management system is defined for all OSR plan-holders and responding participants. The system is based on sound management principles (e.g., ICS) and addresses regional responsibilities</p>	<ul style="list-style-type: none"> • IOSC Element 10, Sub-element 10.1 • IPIECA, 2000a • OSRL, 2012 • USCG, 2006
<p>Roles and responsibilities for each functional aspect are identified for the OSR management organization.</p>	<p>Responsibility checklists are available and defined for each role in the OSR management team.</p>	<p>OSR management personnel have responsibility/actions checklists for their personal use during response. Checklists are available in the plan, at a Command Post, or maintained in individual OSR response kits.</p>	<ul style="list-style-type: none"> • IOSC Element 10, Sub-element 10.2 • OSRL, 2012 • USCG, 2006
<p>Incident Command is assigned to one or two specific individuals (by name or position) with backups identified.</p>	<p>Personnel/organizations appointed to a Unified or Joint Command are defined; Records of Joint or Unified Command meetings indicate working team</p>	<p>Personnel appointed to, and in direct support of, a Unified or Joint Command are defined; Records show regular pattern of Joint or Unified Command meetings, exercises, and/or response. Specialist or contractor assistance is considered to augment the response capability.</p>	<ul style="list-style-type: none"> • IOSC Element 10, Sub-element 10.2
<p>Personnel assigned to OSR management roles are identified for Tier 1.</p>	<p>Personnel assigned to OSR management roles have been identified for Tier 1 and 2, as appropriate.</p>	<p>Personnel assigned to OSR management roles identified for Tiers 1- 3, as appropriate. Sufficient trained personnel from local, contracted, and corporate sources are available to manage 24-hr extended worst-case spill (shifts).</p>	<ul style="list-style-type: none"> • IOSC Element 10, Sub-element 10.3 • IMO/MEPC, 2011



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Procedures are in place and responsibility has been assigned for communications with media during a spill response.	A prepared draft press release is available for initial notice. Person assigned to media has established contact with local media outlets.	Communications with media during a spill includes on-site visits. Person assigned to establish contact with local media is trained in media management, and has worked with OSR command on public speaking and/or mock press conferences.	<ul style="list-style-type: none"> • IOSC Element 15
Procedures are in place and responsibility has been assigned for liaison function with other relevant parties during a spill response.	Procedure in place and responsibility has been assigned for liaison function with internal and external government parties during a spill response. Person(s) assigned to liaison role, or responsible agency, has list of key liaison contacts.	Assigned person(s) or responsible agency has a comprehensive (and regularly updated) list of liaison contacts and has record of contact with key contacts. Protocols are in place for internal communications, joint information sharing, information centers, authorized release of communications, and special web sites. Forms are included to request expertise, equipment, and materials. Receiving and sending spill response assistance has been addressed.	<ul style="list-style-type: none"> • IOSC Elements 10 and 15
Procedures are in place and responsibility has been assigned for communications with local communities.	Community liaison program and personnel maintain frequent contacts with communities at risk.	Community education and training have been completed such that volunteer base is identified to support spill response efforts.	<ul style="list-style-type: none"> • IOSC Element 15 • POSOW, 2013c • UNEP, 1996, 2005
A response center has been established and equipped.	A response center with computer links and library/references is in place. Regional options for command posts are listed.	A response centre includes communications, meetings rooms, library/references, computer links, and accommodation. Regional options for command post locations have been inspected and verified for suitability.	<ul style="list-style-type: none"> • IOSC Sub-element 15.4 • IMO/MEPC, 2011



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D. HEALTH, SAFETY & SECURITY			
<p>Safety policies and regulations are in place to protect both the public and responders from spills. Personal Protective Equipment (PPE) is available to responders.</p>	<p>Safety regulations and PPE for spill responders are in place and are actively enforced through on-site checks and in planning requirements. On-scene controls address safety of OSR volunteers and the general public (ex., air monitoring, fisheries closures).</p>	<p>International standards for responder safety are regulated, including requirements for hazard assessment, training, and on-site monitoring. Specific requirements for safety training of volunteers are defined. Penalties are clearly indicated and evidence of enforcement is available.</p>	<ul style="list-style-type: none"> • IOSC Sub-element 13.2 • API, 2013a • ARPEL, 1998a • ASTM, 2001a • IMO/FAO, 2003 • IPIECA, 2002 • IPIECA/OGP, 2012b • POSOW, 2013c • REMPEC, 2012
<p>A Designated Authority is defined to address and monitor on-site responder health and safety during response.</p>	<p>A competent Designated Authority has in place procedures and enforcement capacity to assess and define health and safety requirements for response personnel consistent with assignments.</p>	<p>A Designated Authority has trained competent personnel knowledgeable in procedures and with enforcement capacity to assess and define health and safety requirements for response personnel consistent with assignments.</p>	<ul style="list-style-type: none"> • IOSC Sub-element 13.2 • ExxonMobil, 2008 • IPIECA, 2002
<p>A Designated Authority is defined to address and provide or augment site security during response.</p>	<p>A competent Designated Authority has procedures in place and enforcement capacity enabling it to assess and define security restrictions for a response area including air, water and land access restrictions. Arrangements with outside security (e.g. local or regional police force) have been reviewed on a pre-spill basis.</p>	<p>A competent Designated Authority with a proven record of stipulating, and enforcing security restrictions for a response area including air, water or land access. Security concerns that may pose a potential conflict with spill response (e.g., vandalism, bomb threats, terrorism, etc.) are identified in the contingency plan and procedures are identified to clearly resolve any such issues. Arrangements with outside security (e.g., local or regional police force) have been reviewed on a pre-spill basis.</p>	<ul style="list-style-type: none"> • IOSC Element 14



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E. OPERATIONAL RESPONSE			
Procedures are in place to minimize spill volumes through inspections of source control: transfers, emergency lightering, etc.	Procedures are in place to minimize spill volumes through situational stabilization (e.g., rescue tugs, Places of refuge) and inspections of source control: transfers, emergency lightering, etc.	Expedited, pre-approved or assigned resources are in place to minimize spill volumes through situational stabilization (e.g., rescue tugs, places of refuge) and regular inspections of source control: transfers, emergency lightering, etc.	<ul style="list-style-type: none"> • IOSEC Element 5, Sub-elements 5.1 and 5.2 • ARPEL, 1997b, 1998a • IMO, 2010c, 2013
Minimum equipment planning levels are defined for Tier 1 risks (most likely routine spills).	Equipment levels and response times for Tiers 2 and 3, as appropriate, are generally defined for distinct potential spill source operations (terminals, pipelines, wells, etc.)	Guidelines for appropriate equipment and manpower levels are defined for Tiers 1 through 3, as appropriate, and require a Best Available Technology assessment on a recurrent basis. Mobilization of operations is considered.	<ul style="list-style-type: none"> • IOSEC Sub-element 6.2 and Element 17 • ADEC, 2006 • ExxonMobil, 2008 • IPIECA, 2007 • SLRoss, 2013
A list of locations and general amounts and types of OSR equipment is available.	A detailed listing or database of locations, amounts, and types of OSR equipment is maintained and updated on a scheduled basis. Procedures for access to oil industry equipment by the government are summarized in the plan.	A comprehensive database of locations, amounts, and types of OSR equipment is maintained with consistent information on all OSR resources (industry and government). Equipment inspections and evaluations are performed on a scheduled basis in relation to Best Available Technology criteria and the database updated accordingly. Mechanical recovery, treating agents (dispersants, cleaners, herders, etc), and in-situ burning are considered as components of equipment inventories. Protocol with cooperatives has been signed (or integrated in the RCP through the NCP)	<ul style="list-style-type: none"> • IOSEC Sub-element 23.2 • IMO, 2005b
Equipment locations are identified and secured.	Equipment locations are distributed to allow quick response to key spill risk locations.	Equipment locations are identified, secured, and distributed to allow response within defined mobilization and transit times to key spill risk locations from possible staging areas. Pre-deployed equipment or permanently installed tertiary containment is in place.	<ul style="list-style-type: none"> • IOSEC Sub-elements 20.6 and 23.2



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Operational use of countermeasures verified in an annual spill exercise.	Countermeasures including containment, skimming, dispersant application verified and reviewed in exercises and drills	All major countermeasures are tested twice annually. Upgraded or new response options are identified and considered in response enhancement. Applicable response options can be implemented by Designated Authority including mechanical, treating agent, in-situ burning, and shoreline treatment.	<ul style="list-style-type: none"> • IOSC Sub-element 26.3 • IMO, 2010c • IMO/IPIECA, 1996 • ITOPF, 1997
A Waste Management Plan has been outlined.	Procedures are defined and adopted to minimize the potential waste streams, temporarily handle waste, and ultimately reuse or dispose of waste materials.	A template Waste Management Plan is in place. Intermediate and long-term storage options and associated criteria are defined.	<ul style="list-style-type: none"> • IOSC Element 18 • Arctic Council, 2008 • CEDRE, 2011 • ExxonMobil, 2008 • IPIECA, 2004a • OSRL, 2011g • REMPEC, 2011c
Wildlife recovery contacts are included.	Wildlife recovery and rehabilitation is assigned to a Designated Authority or entity. Policies and procedures are in place to mobilize and establish wildlife response facilities for spills.	Policies and procedures are in place and have been tested to mobilize and establish wildlife response facilities for spills. International best practices have been adopted for wildlife response and personnel have been trained accordingly.	<ul style="list-style-type: none"> • IOSC Element 19 • IPIECA, 2004b
Restoration and post-spill monitoring are indicated.	Restoration and post-spill monitoring are indicated with lead and support agencies specified.	Follow-up studies of impacts and cleanup are anticipated and sources of funding and expertise noted.	<ul style="list-style-type: none"> • IOSC Sub-element 28.4 • IMO/UNEP, 2009



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F. TRACKING, ASSESSMENT & INFORMATION MANAGEMENT			
Role or assignment is defined in OSR management to undertake spill tracking, including monitoring	Standardized procedures are in place to provide tracking and monitoring of a spill (on water, land, groundwater). Expertise and resources available to undertake tracking.	Tracking systems include Best Available Technology for non-visual tracking identified and available (e.g., satellite; IR for night and low visibility conditions; laser fluoro-sensors, radar systems, tracking buoys; detecting oil under dense foliage).	<ul style="list-style-type: none"> • IOSC Element 20 • API, 2013c • CEDRE, 2004 • Fingas, 2001 • ITOPF, 2009 • Law et.al., 2011 • NOAA, 2002 • OSRL, 2011a
Forms, maps or charts are available for maintaining records of spill track and movement.	Computerized models are available and can be used to analyze and forecast spill trajectories and weathering. Resources and expertise are identified.	Computerized models are available that can be used to analyze spill trajectories and weathering for all appropriate situations (e.g., spills on water, into rivers, in groundwater, originating in deep offshore, etc.). Modeling is integrated with GIS databases for OSR planning.	<ul style="list-style-type: none"> • IOSC Sub-element 3.3 • ARPEL, 1998b
Oiling assessment, mapping, and cleanup technique advice are assigned to agency or team.	Oiling assessment, mapping, and cleanup technique teams are trained, available 24/7, and have the tools needed to input advice for cleanup priorities and operations.	Oiling assessment, mapping, and cleanup technique teams have the Best Available Technologies (e.g., digital maps, GIS, SCAT Data Coordinator, etc.) for advising on cleanup priorities and operations. Agencies with remote sensing equipment are noted along with their instrumentation.	<ul style="list-style-type: none"> • IOSC Element 21 • CEDRE, 2006 • Environment Canada, 2010 • MCA, 2007 • NOAA, 2000. • OSRL, 2011g • Owens and Sergy, 2000; Sergy and Owens, 2007 • POSOW, 2013; REMPEC, 2009



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G. LOGISTICS			
Key logistical support providers and capabilities are identified.	Terms and conditions for mobilizing, and costs, are established on a pre-spill basis and reviewed periodically.	Key logistical support providers and capabilities are tested periodically.	<ul style="list-style-type: none"> • IOSC Sub-element 23.3
Service providers for meals, transportation (including oily waste transport), portable camps and toilets are identified.	Regional sources for logistical support have been contracted on a pre-spill basis.	Service providers are exercised. Sources for logistical supplies, support services, and materials are updated on an annual basis in plan.	<ul style="list-style-type: none"> • IOSC Sub-element 23.3
Response times for initial deployment have been identified and tested.	Initial deployments have been tested and improved.	Deployments are exercised with neighboring facilities.	<ul style="list-style-type: none"> • IOSC Sub-element 5.4
Assets and procedures for communications in field and between field and Command Post are in place.	Communications equipment is on hand and secondary or backup systems are identified.	Communications plan with pre-identified channels for responders. Equipment and procedures are periodically tested.	<ul style="list-style-type: none"> • IOSC Element 12 and Sub-element 23.2
Policies are defined across geo-political lines to streamline transport and delivery of personnel and equipment and for movement of temporary waste in accordance with applicable regulations.	Procedures are in place across geo-political lines to streamline transport and delivery of personnel and equipment and for movement of temporary waste in accordance with applicable regulations.	Periodic exercises are conducted to test and streamline mobilization procedures. Key liaison agencies (or personnel) are identified to help with cross-line movements. Agencies that issue permits for specific OSR activities are listed, e.g., for hazardous material transport, dispersants, in-situ burning, land access, waste disposal, etc.	<ul style="list-style-type: none"> • IOSC Element 2 and Sub-element 23.4 • ARPEL, 2007a
The availability of decontamination facilities is ensured for personnel leaving the spill site.	Equipment and personnel for multiple stations are prepared and available for immediate deployment to support decontamination of personnel, response equipment, and transportation assets (e.g., vehicles, vessels).	“Hot” and “cold” zones are defined for OSR and are maintained by defined corridors in and out of the spill zone. Sources for additional PPE and supplies are pre-determined.	<ul style="list-style-type: none"> • IOSC Element 18.2 • IPIECA, 2002



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H. FINANCIAL AND ADMINISTRATIVE CONSIDERATIONS			
An emergency fund is available to enable immediate response actions.	Participating authorities have established financial tracking systems for roles in spill emergency response. Finance/administrative personnel have an understanding of procedures for resource ordering, purchasing, and cost tracking for emergencies.	Finance/administrative personnel are versed in emergency resource ordering, purchasing, and cost tracking and forecasting as well as compensating individuals and organizations for expenses.	<ul style="list-style-type: none"> • IOSC Sub-element 24.1 • ARPEL, 1997b • IMO, 2009
Procedures are in place to receive claims.	Procedures are in place to receive, investigate, and resolve claims. Financial personnel have contact information for oil pollution Insurers and funds (IOPC), as appropriate.	Claims filing and a tracking system have been implemented. Finance/Admin personnel have established document control system for receipt and processing of claims. Coordinated procedures exist with insurers/funds to expedite claim review and settlement process with international compensation schemes outlined as well as access to funds including P&I Clubs and relevant regional and international conventions/agreements.	<ul style="list-style-type: none"> • IOSC Sub-element 24.4 • IMO, 2009 • IOPC, 2008 • IPIECA/ITOPF, 2007
Legal aspects have been considered including sampling/collecting evidence, taking statements, and mechanisms for settling disputes and claims.	Procedures are defined for legal matters including sampling/collecting evidence, records-keeping for Unified/Joint Command, taking statements, and mechanisms for settling disputes and claims. Illegal discharges are specified.	Legal support roles have been assigned within participating agencies and assigned personnel are trained and versed in OSR issues.	<ul style="list-style-type: none"> • IOSC Sub-element 20.4 • IMO, 1998 • IMO/UNEP, 2009



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I. TRAINING & EXERCISES			
Minimum initial and refresher Health & Safety training requirements are defined for spill management and responders.	Requirements for training records are defined and records are subject to verification.	Designated Authority ensures through inspection or record-keeping that minimum initial and refresher training requirements, including Health & Safety, are completed for spill management and responders. Enforcement is enabled.	<ul style="list-style-type: none"> • IOSC Element 27 • ASTM, 2001a, 2001b • IFC, 2000a, 2000b • IPIECA, 2002 • NIEHS, 2010 • OSHA, 2001
Regular training courses are provided on OSCPs to assigned OSR management and lead response personnel.	Designated personnel for lead and participating OSR authorities have received detailed training on OSCPs, roles and responsibilities, incident management system (e.g., ICS), and procedures for implementing duties during a response.	Multi-agency training includes intergovernmental and industry initiatives.	<ul style="list-style-type: none"> • IOSC Element 27 • ARPEL, 1997
In-house spill training courses are given.	Contracted specialists provide spill training courses.	Contracted internationally-recognized or accredited spill training with course outlines and schedules specified.	<ul style="list-style-type: none"> • IOSC Sub-element 27.4
Training records for designated personnel document compliance with required training.	Training records document compliance with defined training and includes training materials; training is provided by qualified personnel.	Training is provided by certified and/or qualified experts.	<ul style="list-style-type: none"> • IOSC Sub-element 27.5
Notification and Alerting Exercises are conducted frequently (2 to 4 times per year) and are required of plan-holders	Records document that notification and alerting exercises are conducted frequently (2 to 4 times per year) and are required of plan-holders. Notification and alerting exercises are documented. Notification exercises include off-hours; Internal-External alerting; and Government-Industry, where appropriate.	Communications systems (land, air, sea, and cross-agency/industry) are in place and tested.	<ul style="list-style-type: none"> • IOSC Sub-element 26.3 • IMO/IPIECA, 1996b
Regular joint (Government-Industry) deployment exercises are required and held from Regional or multiple in-region response depots.	Deployment exercises are required and held jointly to include Regional or multiple in-region response depots and Industry.	Multi-location deployment exercises (e.g., Tier 2 or 3) are required and held jointly to test and coordinate National, Regional, and Industry joint capabilities.	<ul style="list-style-type: none"> • IOSC Sub-element 26.4 • IMO/IPIECA, 1996b • USCG, 2011



GOVERNMENT - AREA OR REGIONAL			
Level A	Level B	Level C	Toolbox
<p>Tabletop (Response Management) Exercises are required and held at prescribed frequency (1-2 times per year).</p>	<p>Tabletop (Response Management) Exercises include external parties. Exercises plans are well-developed. A standard approach for exercise evaluation is in place that allows ready implementation of changes.</p>	<p>Tabletop (Response Management) Exercises include multi-national authorities (as appropriate). Tabletop exercises based on risk assessments address distinct situations and environmental factors and are combined with industry exercises. Exercises are audited and evaluated by professional or experienced third-party OSR experts. Changes are implemented as needed.</p>	<ul style="list-style-type: none"> • IOSC Sub-element 26.3 • Aurand et al., 2000 • IMO/IPIECA, 1996b • IPIECA, 2000b • USCG, 2011
<p>Courses to be attended by government personnel are listed.</p>	<p>Courses are attended by government personnel including for example Incident Management System, basic spill response, dispersant application, shoreline treatment (SCAT), in-situ burning, and waste management.</p>	<p>Records show that designated response personnel (management and operational) receive recurrent or refresher training.</p>	<ul style="list-style-type: none"> • IOSC Sub-element 26.3 • IMO/IPIECA, 1996b



GOVERNMENT - AREA OR REGIONAL			
Level A	Level B	Level C	Toolbox
J. SUSTAINABILITY & IMPROVEMENT			
Regular exercise critique (plan and execution) recommends actions for continuous OSR improvements including prevention programs. Exercise oversight role is specified as appropriate for specific agencies	Exercises are reviewed internally. Recommendations from exercise evaluations (equipment deployment, tabletops) are implemented and tracked including prevention programs. An exercise oversight role is specified for specific agencies and a schedule of exercise requirements is noted.	An external review supplements internal critique for both exercises and actual spills. Steps taken for additional improvements are documented including prevention programs. Designated Authority for Regional or Area Plan tracks changes until implemented. Exercise oversight roles are specified as appropriate and schedule of exercise requirements noted.	<ul style="list-style-type: none"> • IOSC Element 28 • CDFG, 2011 • IMO/IPIECA, 1996b • IPIECA, 2000b • ISO 14000/140001 • WDOE, 2014
Regional Team or Work Groups are assigned to review and recommend OSR enhancements.	Regional Team or Work Group meets at least annually to review OSR plans and readiness and make recommendations that have a record of actions and implementation.	Internal-External / Experts work with Regional Team or Work Groups to undertake audits and provide recommendations. Responsibilities are assigned to implement changes. Changes are reviewed and approved.	<ul style="list-style-type: none"> • IOSC Sub-element 28.3 • ARPEL Guidelines for Conducting Environmental Audits for Onshore Petroleum Operations, undated • IMO, 2010c
Post-Spill Evaluation and Revisions to Plan are documented.	Plan and equipment improvements are made as needed.	Plan and equipment improvements are made and included in planning and conducting subsequent training. Personnel and OSR equipment needs are also addressed. Changes are adopted for oil-related transportation, exploration, and production systems as determined by review processes as these relate to preventative measures and safeguards. There is communication with other regions and participation in global actions (e.g., forums).	<ul style="list-style-type: none"> • IOSC Sub-element 28.4 • CDFG, 2011 • IMO, 2010c • IMO/IPIECA, 1996b • WDOE, 2014
Research and development is promoted to improve countermeasures such as mechanical recovery, treating agent application, shoreline treatment, in-situ burning and remote sensing.	Research and development programs are funded to improve countermeasures such as mechanical recovery, treating agent application, shoreline treatment, in-situ burning and remote sensing.	Research and development programs are carried out by various agencies to improve countermeasures such as mechanical recovery, treating agent application, shoreline treatment, in-situ burning and remote sensing. Environmental data are reviewed, updated, and compiled for resources at risk.	<ul style="list-style-type: none"> • IOSC Sub-element 28.5 • ADEC, 2006
An enforcement role is specified.	Personnel and resources are allocated to carry out enforcement role.	An enforcement program is implemented and evaluated to allow its effective application.	



7. GOVERNMENT – NATIONAL/MULTINATIONAL

7.1. Description of Scope

National government plans addressing national legislation, regulatory bodies and authorities, and multi-agency roles. This scope also includes multi-national OSR programs such as bi-lateral plans that provide for enhanced response and assistance.

Examples:

Country-wide
National
Joint National
Multi-National

Key features of this scope are the broad geographic coverage of plans and the setting of the policies and requirements for more detailed planning and readiness. National readiness for many countries represents its autonomous capability to deal with multiple worst-case situations.

7.2. Concept of Levels

The assessment process is conducted specifically by using RETOS, which reflects the detailed assessment criteria listed in Table 10 (highlighted in yellow are the critical criteria, only applicable to Level A); however, a separate spreadsheet is provided in RETOS™ for each LEVEL.

The use of three levels for the assessment of this scope does not reflect national political policies, planning levels, or risk. The level of commitment for time and effort to ensure best practices in OSR plans and readiness will be very different for small countries with limited spills and environmental risks relative to large or developed countries with higher spill risks and/or environmental or socioeconomic exposure. As stated earlier (Chapter 2.5), the user should select a target level (Level A as a default) against which to assess the OSR capability. **For each Category/Element, the criteria established for Level B add to those criteria for Level A, and the criteria established for Level C add to those for Levels A and B.**

ASSESSMENT LEVELS do not correspond to Tiers, in the OSR planning sense. Rather, an Assessment Level indicates the maturity of that program. For example, a National or Multi-National Program (which typically prepares for a Tier 3 response) may be in the early stages of development and implementation, in which case the assessment would be performed at a Level A.

7.3. Notes on OSR Categories Applicable to National OSR Programs

The regulatory aspects of the National plan typically define planning and readiness requirements for secondary geo-political areas (States, Provinces, or Departments) and for industry. Major focus is on government preparedness for Tiers 2 and 3, as well as, multi-national assistance. Response preparedness typically entails policy and management perspectives and integrates multiple regional or area capabilities into a larger comprehensive response program.

**Table 10 - Criteria Matrix and Toolbox References for OSR Assessment- SCOPE: Government – National/Multinational**

GOVERNMENT – NATIONAL/MULTINATIONAL			
Level A	Level B	Level C	Toolbox
A. LEGISLATION, REGULATIONS & AGREEMENTS			
National legislation stipulates requirements for OSR and assigns responsibilities. Designated Authority (also referred to as Competent National Authority or Lead Agency) is indicated (see also B. Contingency Planning).	National legislation addresses passing tankers, innocent passage, and non-petroleum specific activities (e.g., non-tank vessels, power utilities, transportation). Designated Authority for distinct spill situations are clearly defined and support agencies are indicated (see also B. Contingency Planning).	Lead and support agencies are indicated including weather and marine forecasting capability. Roles of other agencies and cooperatives are also assigned (see also B. Contingency Planning) and interagency agreements, guidelines and laws listed. Relation to private industry is also defined.	<ul style="list-style-type: none"> • IOSC 2008 Guidelines - Element 1 • ITOPF Country Profiles www.itopf.com • IMO, 1995
Acts, regulations and guidelines support legislation.	Acts, regulations and guidelines support legislation with defined timeframes and specific requirements for compliance.	Acts, regulations and guidelines support legislation with defined timeframes and specific requirements for compliance, and enforcement measures or penalties for noncompliance. Regulations specify National authorities for response (operational) action and for planning, review and approvals, and prescribed planning requirements. Areas of jurisdiction defined, e.g., vessels, ports, platforms, SPMs, etc (see also B. Contingency Planning).	<ul style="list-style-type: none"> • IOSC Sub-element 1.2 • UNEP, 2005
Country has ratified international agreements and conventions for oil spill response and meets the requirements of the conventions.	Country is actively engaged in bi-and multi-national OSR efforts with neighboring countries.	Requirements of the conventions include MARPOL and OPRC-90 as well as the 1992 CLC and Fund Convention and Cartagena Convention. Country has bi-national OSR plans with neighboring countries and has actively engaged developing enhanced response through joint exercises, training, and workshops. Expertise and information are exchanged on a regular basis. Linkage to other national plans specified.	<ul style="list-style-type: none"> • IOSC SElement 2 • ARPEL, 1999 • NOWPAP, 2013



GOVERNMENT - NATIONAL/MULTINATIONAL			
Level A	Level B	Level C	Toolbox
B. OIL SPILL CONTINGENCY PLANNING			
National Plan has been developed and approved; identifies Designated Authority for oil spill response (and/or defines authority for specific spill cases; e.g., spill to land vs. spill to marine waters).	Approved National Plan has been developed through partnership with collaborating agencies/departments with associated responsibilities.	Approved National Plan has history of development, testing, and revision with distribution to all responsible participating agencies/departments.; Designated Authority and roles/responsibilities of participating agencies are defined. Relationship to private industry is also indicated.	<ul style="list-style-type: none"> • IOSC Element 9 and Appendix A • ARPEL, 1997b • IMO, 1995 • IMO/MEPC, 2011 • IPIECA Report Series 1990-2008
Contents of National Plan(s) meet all of the HIGH importance/significant planning elements defined in ARPEL Guidelines.	Contents of National Plan(s) meet all of the HIGH and MEDIUM importance/significant planning elements defined in ARPEL Guidelines	Contents of National Plan(s) meet and exceed all of the planning elements defined in ARPEL Guidelines	<ul style="list-style-type: none"> • IOSC Element 9 and Appendix A • ARPEL, 1997b, 1999
Drafts of national or multi-national plans are available.	Approved national or multi-national plans are available and have been tested through exercises and/or an actual response.	Approved national or multi-national plans are well established, have been tested through exercises and/or an actual response, and have history of review and development.	<ul style="list-style-type: none"> • IOSC Sub-element 4.1 • ARPEL, 1997b, 1999 • IPIECA, 2000a
Applicable and related government plans (multi-lateral, area, and local) are identified.	Relationship with other government plans (multi-lateral, area, and local) are identified and described.	Contents and format for local/facility/shipboard/area or regional plans are specified. Signed written agreements are in place for multilateral response. Equipment inventories are indicated as applicable.	<ul style="list-style-type: none"> • IOSC Sub-element 9.1
Expertise (agency/personnel) for OSR-related issues is listed.	Regional and national experts are listed and have knowledge of the OSR plan and scope.	Contracts or agreements are in place with OSR experts in specialized fields who have participated in planning and exercises.	<ul style="list-style-type: none"> • IOSC Element 8 • Cleanupoil.com, 2010
The plan has been reviewed or revised in the past year. Key contacts are updated to reflect changes.	A revision log and dated pages documenting reviews and/or revisions has been updated within the past year.	A revision log and dated pages documenting reviews/revisions as per update procedures, including plan implementation following actual spills, are updated at least annually. Spill risks area re-assessed regularly. Post-incident reviews are included.	<ul style="list-style-type: none"> • IOSC Element 9



GOVERNMENT - NATIONAL/MULTINATIONAL			
Level A	Level B	Level C	Toolbox
National plan designates planning levels based on spill risk analysis.	Risk-based approach is used to define priority areas of potential spills based on operations, volumes, and environmental factors. National or international statistical data used to define scope and/or define planning tiers or concepts.	Risk-based approach includes mapping and list of species of concern.	<ul style="list-style-type: none"> • IOSC Sub-element 4.1 • ARPEL, 1998a • IPIECA, 2000a • IMO, 2010c • NOWPAP, 2013
Priority planning is focused on areas of high-risk and environmental sensitivity.	At-risk spill areas are defined based on spill trajectories for worst-case spills. Relevant properties of oils of concern are indicated. Trajectories consider prevailing and worst-case operating conditions. Graphics indicate species at risk.	Trajectories reflect oils of concern and specific product weathering rates, tiered volumes, local climatology, oceanography, and seasonal conditions. Stochastic and worst-case trajectories shown in scenarios are basis for response planning. Organizations supplying specific data (oil properties, weather, environmental, etc.) are listed.	<ul style="list-style-type: none"> • IOSC Sub-element 4.3 • ARPEL, 1997b • ARPEL, 1998b • Aurand et al., 2000 • NOAA, 2002 • Taylor et al., 2009
National plan specifies requirements for defining sensitive areas and priorities. Threatened and endangered species at risk are listed.	Country has maps and lists of priority sensitive areas with species and timing of sensitivities clearly identified. Maps generally adhere to sensitivity indexing practices.	Sensitive areas mapping and resources at risk according to multiple levels of concern are clearly presented, widely available to other plan holders, and are kept up-to-date in GIS systems. An inventory of all shorelines and associated resources and amenities is prepared, including for example, endangered species wetlands, recreational facilities, mariculture, and archeological sites.	<ul style="list-style-type: none"> • IOSC Sub-element 4.3 • ARPEL, 1997a • ARPEL, 1998b • Aurand et al., 2000 • IPIECA/IMO/OGP, 2012 • NOAA, 2002 • Taylor et al., 2009
Policies and/or regulations are in place to reduce the risk and/or consequences of a spill.	Regulations provide clear guidance for spill prevention and are enforced to reduce accidents and to minimize oil loss if an incident occurs.	Trends, sources, causes of spills (vessel traffic, transfer, production, exploration, collision, groundings) are documented and provide additional foundation for required prevention measures. Spill prevention programs are detailed. These include a list of criteria for determining sensitive areas and zones requiring protection.	<ul style="list-style-type: none"> • IOSC Element 5



GOVERNMENT - NATIONAL/MULTINATIONAL			
Level A	Level B	Level C	Toolbox
<p>Response strategies are clearly stated and provide for response to applicable operating conditions and oil types. Personnel and equipment needs to implement identified response strategies are indicated.</p>	<p>Plan includes, or specifies, requirements to develop strategies and tactical details for high spill risk areas at area or local planning levels, including equipment and personnel needs.</p>	<p>Plan includes, or specifies requirement to develop in area or local plans, detailed tactical plans (graphics, maps, personnel and equipment) for priority areas within zones of high spill risk. Detailed tactics have indication of priority and are appropriate for operating conditions.</p>	<ul style="list-style-type: none"> • IOSC Sub-element 4.2 and Element 9 • API/NOS/USCG/EPA, 2001 • ARPEL, 1997a • IPIECA, 2008 • IPIECA/OGP, 2013d • NOAA, 2010a, 2010b • NOAA/API, 1994 • OSRL, 2011b, 2013a, 2013b
<p>National, and multi-lateral (if applicable), plan provides policy on use of treating agents for spill response (dispersants, cleaning agents, bioremediation agents, herders, etc.).</p>	<p>A process for use of treating agents, such as dispersants, is in place so that these can be assessed and approved within a reasonable "window of opportunity" (less than 12 hours).</p>	<p>Net Environmental Benefit Analysis (NEBA) has been completed for dispersants and other treating agents with clearly defined applicability and limitations. Pre-approved locations and conditions of dispersant use are indicated, as well as a monitoring program. Expedited procedures are in place for approvals where NEBA shows applicability. A list of approved dispersants and other treating agents is updated annually.</p>	<ul style="list-style-type: none"> • IOSC Elements 7 and 17 • API, 2013b • ARPEL, 2007d • CEDRE, 2005 • IMO/UNEP, 1995 • IPIECA, 2000b • IPIECA/OGP, 2012a • ITOPF, 2005 • Kirby et al., 1996 • NOAA, 2010a, 2010b • OSRL, 2011b, 2013a, 2013b • Walker et al., 2003
<p>A policy for the implementation of in-situ burning is clearly defined.</p>	<p>Procedures are in place to evaluate and approve in-situ burning within a reasonable "window-of-opportunity" (less than 12 hours). The required elements of a burn plan are published which address all relevant factors.</p>	<p>Net Environmental Benefit Analysis has been completed for in-situ burning with clearly defined applicability, limitations, and approval process (may include pre-approval for specific conditions) as well as a monitoring program. In-situ burn plan requirements are published with explanatory data on all relevant factors.</p>	<ul style="list-style-type: none"> • IOSC Elements 7 and 17 • ARPEL, 2007b, 2007c • IPIECA, 2000b • NOAA, 2010a, 2010b • Walker et al., 2003
<p>Shoreline protection and cleanup policies are outlined.</p>	<p>Shoreline protection and treatment are considered that include planning factors for carrying out assessment and remediation (SCAT).</p>	<p>Shoreline protection and treatment policies are defined that consider SCAT as well as specifics such as workforce, spill responder safety training, debris, oil removal, and cleanup standards (endpoints).</p>	<ul style="list-style-type: none"> • IOSC Element 6 • CEDRE, 2009 • Environment Canada, 2010 • IMO/UNEP, 2009 • Owens et al., 1998 • REMPEC, 2010



GOVERNMENT - NATIONAL/MULTINATIONAL			
Level A	Level B	Level C	Toolbox
C. RESPONSE COORDINATION			
<p>A clear procedure is presented on information to report and who should receive initial spill notification and follow-up reports.</p> <p>A spill reporting form is included as well as a contact list with key personnel.</p>	<p>Initial spill notification checklists/forms are readily available. Callout procedures include flow charts for internal, external parties with contact data.</p>	<p>Redundant callout procedures are based on common checklists and/or forms. Internal, external callout flow charts are in place. A directory of internal, external contacts (primary and alternate) is immediately available.</p>	<ul style="list-style-type: none"> • IOSC Element 11 • IMO, 1995, 2010b • ISO, 2000 • UNEP, 1996a, 1996b, 2000 • USCG/EPA/DOT/MMS/OSHA, 1996
<p>The spill management structure and assigned organizations are defined for all spill tiers.</p>	<p>The spill management organization allows easy expansion and contraction of personnel in planning levels or tiers and integration with OSR organizations and plan holders.</p>	<p>The spill management organization is flexible and robust and accommodates all emergencies. A common incident management system is defined for all OSR plan-holders and responding participants. System is based on a sound Incident Management System (e.g., ICS) and addresses regional responsibilities.</p>	<ul style="list-style-type: none"> • IOSC Element 10, Sub-element 10.1 • IPIECA, 2000a • OSRL, 2012 • USCG, 2006
<p>Roles and responsibilities are evident for each functional aspect identified in the OSR management organization.</p>	<p>Responsibility checklists are available and defined for each role in the OSR management team.</p>	<p>OSR management personnel have checklists for their personal use during response. Checklists are available in the plan, at a Command Post, or maintained in individual OSR response kits.</p>	<ul style="list-style-type: none"> • IOSC Element 10, Sub-element 10.2 • OSRL, 2012 • USCG, 2006
<p>Incident Command is assigned to one or two specific individuals (by name or position) with backups identified.</p>	<p>Personnel appointed to a Unified or Joint Command are defined; Records of Joint or Unified Command meetings indicate the working team.</p>	<p>Records show regular pattern of Joint or Unified Command meetings, exercises, and/or response. Specialist or contractor assistance is considered to augment the response capability.</p>	<ul style="list-style-type: none"> • IOSC Element 10, Sub-element 10.2
<p>Personnel assigned to OSR management roles are identified for Tier 1.</p>	<p>Personnel assigned to OSR management roles identified for Tier 1 and 2, as appropriate.</p>	<p>Personnel assigned to OSR management roles are identified for Tier 3, as appropriate. Sufficient trained personnel are identified from local, regional, and national sources to manage a 24-hr extended worst-case spill (shifts).</p>	<ul style="list-style-type: none"> • IOSC Element 10, Sub-element 10.3 • IMO/MEPC, 2011
<p>Procedures are in place and responsibility has been assigned for communications with media and local communities during a spill response.</p>	<p>A prepared draft press release is available for initial notice. An assigned person has established contact with local media outlets.</p>	<p>Assigned media person is trained in media management and has worked with OSR command on public speaking and/or mock press conferences.</p>	<ul style="list-style-type: none"> • IOSC Element 15



GOVERNMENT - NATIONAL/MULTINATIONAL			
Level A	Level B	Level C	Toolbox
Procedures are in place and responsibility has been assigned for liaison function with other authorities or government parties during a spill response.	Internal and external government parties are included in liaison program. Assigned person or responsible agency has list of key liaison contacts.	Assigned person or responsible agency has a comprehensive list of liaison contacts and has record of contact with key contacts. Protocols are in place for internal communications, joint information sharing, information centers, authorized release of communications, and special web sites. Forms are included to request expertise, equipment, and materials. Receiving and sending spill response assistance have been addressed.	<ul style="list-style-type: none"> • IOSC Elements 10 and 15
Procedures are in place and responsibility has been assigned for communications with local communities.	Community liaison program and personnel maintain frequent contacts with communities at risk.	Community education and training have been completed such that a volunteer base is identified to support spill response efforts.	<ul style="list-style-type: none"> • IOSC Sub-element 10.5 and Element 15 • POSOW, 2013c • UNEP, 1996, 2005
A response center has been established.	National and Regional response centers are established, as appropriate. Response centers include computer links and library/references.	Redundant National and Regional response centers include communications, meetings rooms, library/references, computer links, and accommodation.	<ul style="list-style-type: none"> • IOSC Sub-elements 15.4 and 23.3.3 • IMO/MEPC, 2011



GOVERNMENT - NATIONAL/MULTINATIONAL			
Level A	Level B	Level C	Toolbox
D. HEALTH, SAFETY & SECURITY			
Safety policies and regulations are in place for protecting both the public and responders from spills.	Safety regulations for spill responders are in place and are actively enforced through on-site checks and in planning requirements. On-scene controls address safety of volunteers for response.	International standards for responder safety are regulated, including requirements for hazard assessment, training, and on-site monitoring. Specific requirements for safety training of volunteers are outlined. Penalties non-compliance with safety training for OSR are clearly defined and evidence of enforcement is available.	<ul style="list-style-type: none"> • IOSC Sub-element 13.2 • ARPEL, 1998a • ASTM, 2001a • IMO/FAO, 2003 • IPIECA, 2002 • POSOW, 2013c
A Designated Authority is defined to address and monitor site safety during response.	A competent Designated Authority has in place procedures and enforcement capacity to assess and define safety requirements for response personnel according to assignments.	A Designated Authority has trained competent personnel knowledgeable in procedures and with enforcement capacity to assess and define safety requirements for response personnel according to assignments.	<ul style="list-style-type: none"> • IOSC Sub-element 13.2 • ExxonMobil, 2008 • IPIECA, 2002
A Designated Authority is defined to address and provide or augment site security during response.	A competent Designated Authority has procedures in place and enforcement capacity enabling it to assess and define security restrictions for a response area including air, water and land access restrictions.	A competent Designated Authority has a proven record of designating, and enforcing, security restrictions for a response area including air, water or land access. Security concerns that may pose a potential conflict with spill response (i.e., bomb threats, terrorism, etc.) are identified in the contingency plan and procedures exist to clearly resolve designated authorities, jurisdiction, and priorities	<ul style="list-style-type: none"> • IOSC Element 14



GOVERNMENT - NATIONAL/MULTINATIONAL			
Level A	Level B	Level C	Toolbox
E. OPERATIONAL RESPONSE			
Policies are in place to prevent and minimize spill volumes through source control: transfers, emergency lightering, places of refuge, etc.	Procedures are in place to minimize spill volumes through situational stabilization (e.g., rescue tugs, places of refuge) and source control: transfers, emergency lightering, etc.	Expedited, pre-approved or assigned resources are in place to minimize spill volumes through situational stabilization (e.g., rescue tugs, places of refuge) and source control: transfers, emergency lightering, etc.	<ul style="list-style-type: none"> • IOSC Element 5, Sub-elements 5.1 and 5.2 • ARPEL, 1997b, 1998a • IMO, 2010c, 2013
Minimum equipment planning levels are defined for Tier 1 risks (most likely routine spills).	Equipment levels and response times for Tiers 2 and 3 are generally defined for distinct potential spill source operations (terminals, pipelines, wells, etc.).	Guidelines for appropriate equipment and manpower levels are defined for Tiers 1 through 3 and require a Best Available Technology assessment on a recurrent basis. Mobilization of operations is considered.	<ul style="list-style-type: none"> • IOSC Sub-element 6.2 and Element 17 • ADEC, 2006 • ExxonMobil, 2008 • IPIECA, 2007 • SLRoss, 2013
A list of locations and general amounts and types of OSR equipment is available.	A detailed listing or database of locations, amounts, and types of OSR equipment is maintained and updated on a scheduled basis.	A comprehensive database of locations, amounts, and types of OSR equipment is maintained with consistent information on all OSR resources (industry and government). Equipment inspections and evaluations are performed on a scheduled basis in relation to Best Available Technology criteria and the database updated accordingly. Mechanical recovery, treating agents (including dispersants), and in-situ burning are included in the equipment inventories.	<ul style="list-style-type: none"> • IOSC Sub-element 23.2 • IMO, 2005b
Government equipment locations are identified and secured; locations allow for quick access and deployment.	Equipment locations are distributed to allow quick response to key spill risk locations.	Equipment locations are identified, secured, and distributed to allow response within defined mobilization and transit times to key spill risk locations from possible staging areas. Pre-deployed equipment or permanently installed tertiary containment is in place.	<ul style="list-style-type: none"> • IOSC Sub-elements 20.6 and 23.2



GOVERNMENT - NATIONAL/MULTINATIONAL			
Level A	Level B	Level C	Toolbox
The operational use of countermeasures is verified in an annual spill exercise.	Countermeasures including containment, skimming, dispersant application and In-situ burning are verified and reviewed in annual exercises and drills.	All major countermeasures are tested twice annually. Upgraded or new response options are identified and considered in response enhancement. Applicable response options can be implemented by a Designated Authority including mechanical, treating agents, in-situ burning, and shoreline treatment.	<ul style="list-style-type: none"> • IOSC Sub-element 26.3 • IMO, 2010c • IMO/IPIECA, 1996 • ITOPF, 1997
A Waste Management Plan is outlined.	Procedures are defined and adopted to minimize potential waste streams, temporarily handle waste, and ultimately reuse or dispose of waste materials.	A model Waste Management Plan is provided. Intermediate and long-term storage options and associated criteria are defined. Trans-boundary waste movement policies and procedures are defined.	<ul style="list-style-type: none"> • IOSC Element 18 • Arctic Council, 2008 • CEDRE, 2011 • ExxonMobil, 2008 • IPIECA, 2004a • OSRL, 2011g • REMPEC, 2011c
Contacts and expertise for wildlife recovery are included.	Wildlife recovery and rehabilitation are assigned to a Designated Authority or entity. Policies and procedures are in place to mobilize and establish wildlife response facilities for spills.	Wildlife recovery and rehabilitation are assigned to a Designated Authority or equivalent. Policies and procedures are in place and have been tested to mobilize and establish wildlife response facilities for spills. International best practices have been adopted for wildlife response and personnel have been trained accordingly.	<ul style="list-style-type: none"> • IOSC Element 19 • IPIECA, 2004b
Restoration and post-spill monitoring are indicated.	Restoration and post-spill monitoring are indicated with lead and support agencies specified.	Follow-up studies of impacts and cleanup are anticipated and sources of funding and expertise are noted.	<ul style="list-style-type: none"> • IOSC Sub-element 3.3 • IMO/UNEP, 2009



GOVERNMENT - NATIONAL/MULTINATIONAL			
Level A	Level B	Level C	Toolbox
F. TRACKING, ASSESSMENT & INFORMATION MANAGEMENT			
Role or assignment is defined in OSR management to undertake spill tracking, including monitoring.	Standardized procedures are in place to provide tracking and monitoring of a spill (on water, land, groundwater). Expertise and resources available to undertake tracking.	Tracking systems include Best Available Technology for non-visual tracking which are identified and available (e.g., satellite; IR for night and low visibility conditions; tracking buoys; under dense foliage). Agencies with remote sensing equipment are listed along with their instrumentation.	<ul style="list-style-type: none"> • IOSC Element 20 • API, 2013c • CEDRE, 2004 • Fingas, 2001 • ITOPE, 2009 • Law et.al., 2011 • NOAA, 2002 • OSRL, 2011a
Maps or charts are available for maintaining spill tracking and movement.	Computerized models are available to analyze and forecast spill trajectories and weathering.	Computerized models are available to analyze spill trajectories and weathering for all appropriate situations (e.g., spills on water, into rivers, in groundwater, originating in deep offshore, etc.).	<ul style="list-style-type: none"> • IOSC Sub-element 3.3 • ARPEL, 1998b
Oiling assessment, mapping, and cleanup technique advice are assigned to agency or team.	Oiling assessment, mapping, and cleanup technique teams are trained, available 24/7, and have the tools needed to input advice for cleanup priorities and operations.	Best available response options include digital maps, GIS, SCAT Data Coordinator, etc. for advising on cleanup priorities and operations.	<ul style="list-style-type: none"> • IOSC Element 21 • CEDRE, 2006 • Environment Canada, 2010 • MCA, 2007 • NOAA, 2000. • OSRL, 2011g • Owens and Sergy, 2000; Sergy and Owens, 2007 • POSOW, 2013; REMPEC, 2009



GOVERNMENT - NATIONAL/MULTINATIONAL			
Level A	Level B	Level C	Toolbox
G. LOGISTICS			
Key logistical support providers and capabilities are identified.	Terms and conditions for mobilizing, and costs, are established pre-spill and reviewed periodically.	Key logistical support providers and capabilities are tested periodically.	<ul style="list-style-type: none"> • IOSC Sub-element 23.3
Sources are identified for service providers for meals, transportation, portable camps and toilets.	Service providers are contracted on pre-spill basis.	Service providers are exercised and sources for services are updated annually in plan.	<ul style="list-style-type: none"> • IOSC Sub-element 23.3
Response times for initial deployment have been identified and tested	Initial deployments have been tested and improved.	Deployments are exercised with neighboring facilities and regions.	<ul style="list-style-type: none"> • IOSC Element 5.4
Assets and procedure for communications in the field and between the field and Command Post are in place.	Communications equipment is on hand and secondary or backup systems are identified.	A communications plan has been prepared with pre-identified channels for responders.	<ul style="list-style-type: none"> • IOSC Element 12 and Sub-element 23.2
Customs and immigration policies are defined to streamline transport and delivery of personnel and equipment between regions/areas	Customs and immigration procedures are in place to expedite the temporary export or import of OSR personnel and equipment.	Periodic exercises are conducted to test and streamline procedures. Key liaison agencies (or personnel) are identified to help with trans-border movements. Agencies that must issue permits for specific OSR activities are listed, e.g., for hazardous material transport, dispersants, in-situ burning, land access, waste disposal, etc.	<ul style="list-style-type: none"> • IOSC Element 2 and Sub-element 23.4 • ARPEL, 2007a
The availability of decontamination facilities is ensured for personnel leaving the spill site.	Equipment and personnel for multiple stations are prepared and available for immediate deployment to support decontamination of personnel, response equipment, and transportation assets (e.g., vehicles, vessels).	Regional sources for additional PPE and supplies are pre-determined.	<ul style="list-style-type: none"> • IOSC Sub-element 18.2 • IPIECA, 2002



GOVERNMENT - NATIONAL/MULTINATIONAL			
Level A	Level B	Level C	Toolbox
H. FINANCIAL AND ADMINISTRATIVE CONSIDERATIONS			
An emergency fund is available to enable immediate response actions.	Participating authorities have established financial tracking systems for roles in spill emergency response. Finance/administrative personnel have an understanding of procedures for resource ordering, purchasing, and cost tracking for emergencies.	Finance/administrative personnel are versed in emergency resource ordering, purchasing, and cost tracking and forecasting as well as compensating individuals and organizations for expenses. Participating authorities have established financial tracking systems for roles in spill emergency response.	<ul style="list-style-type: none"> • IOSC Sub-element 24.1 • ARPEL, 1997b • IMO, 2009
Procedures are in place to receive claims.	Procedures are in place to receive, investigate, and resolve claims. Financial personnel have contact information for oil pollution Insurers and funds (IOPC), as appropriate.	A claims filing and tracking system has been implemented. Finance/Admin personnel have established a document control system for receipt and processing of claims. Coordinated procedures exist with insurers/funds to expedite claim review and settlement processes with international compensation schemes outlined as well as access to funds including P&I Clubs and treaties.	<ul style="list-style-type: none"> • IOSC Sub-element 24.4 • IMO, 2009 • IOPC, 2008 • IPIECA/ITOPF, 2007
Legal aspects have been considered including sampling/collecting evidence, taking statements, and mechanisms for settling disputes and claims.	Procedures are defined for legal matters including sampling/collecting evidence, records-keeping for Unified/Joint Command, taking statements, and mechanisms for settling disputes and claims. Illegal discharges are specified.	Legal support roles have been assigned within participating agencies and assigned personnel are trained and versed in OSR issues.	<ul style="list-style-type: none"> • IOSC Sub-element 20.4 • IMO, 1998 • IMO/UNEP, 2009



GOVERNMENT - NATIONAL/MULTINATIONAL			
Level A	Level B	Level C	Toolbox
I. TRAINING & EXERCISES			
Minimum initial and refresher training requirements, including Health & Safety, are defined for spill management and responders.	Requirements for training records are defined and records are subject to verification.	Designated Authority ensures through inspection or record-keeping that minimum initial and refresher training requirements, including Health & Safety, are completed for spill management and responders. Enforcement has been enabled.	<ul style="list-style-type: none"> • IOSC Element 27 • ASTM, 2001a, 2001b • IFC, 2000a, 2000b • IPIECA, 2002 • NIEHS, 2010 • OSHA, 2001
Regular training courses are provided on OSCPs to assigned OSR management and lead response personnel.	Designated personnel for lead and participating OSR authorities have received detailed training on OSCPs, roles and responsibilities, incident management system (e.g., ICS), and procedures for implementing duties during a response.	Multi-agency training includes intergovernmental and industry initiatives.	<ul style="list-style-type: none"> • IOSC Element 27 • ARPEL, 1997
In-house spill training courses are attended.	Contracted specialists provide spill training courses.	Contracted internationally-recognized or accredited spill training is conducted with course outlines specified.	<ul style="list-style-type: none"> • IOSC Sub-element 27.4
Training records for designated personnel document compliance with required training.	Training records include training materials; training is provided by qualified personnel.	Training materials and aids are available; training is provided by certified and/or qualified experts.	<ul style="list-style-type: none"> • IOSC Sub-element 27.5
Notification and Alerting Exercises are conducted frequently (2 to 4 times per year) and are required of plan-holders	Documentation (records) indicates that notification and alerting exercises are conducted. Notification exercises include Off-hours; Internal-External alerting; and Multi-lateral, where appropriate.	Communications systems (land, air, sea, and cross-agency/industry) are in place and tested.	<ul style="list-style-type: none"> • IOSC Sub-element 26.3 • IMO/IPIECA, 1996b
Deployment exercises are required and held including mobilized Tier 2 response assets from national response depots.	Deployment exercises are required and held jointly to include national response depots and Industry.	Multi-location deployment exercises (e.g., Tier 2 or 3 as and if appropriate) are required and held jointly to test and coordinate National, Multi-National, and Industry joint capabilities.	<ul style="list-style-type: none"> • IOSC Sub-element 26.4 • IMO/IPIECA, 1996b • USCG, 2011



GOVERNMENT - NATIONAL/MULTINATIONAL			
Level A	Level B	Level C	Toolbox
<p>Tabletop (Response Management) Exercises are required and held at a prescribed frequency (2 to3 times per year).</p>	<p>Tabletop (Response Management) Exercises include external parties. Exercises plans are well-developed. A standard approach for exercise evaluation is In place that allows ready implementation of changes.</p>	<p>Tabletop (Response Management) Exercises include multi-national authorities (as appropriate). Tabletop exercises based on risk assessments and address distinct situations and environmental factors. Exercises are audited and evaluated by professional or experienced third-party OSR experts. Changes are implemented as needed.</p>	<ul style="list-style-type: none"> • IOSC Sub-element 26.3 • Aurand et al., 2000 • IMO/IPIECA, 1996b • IPIECA, 2000b • USCG, 2011
<p>Courses to be attended by government personnel are listed.</p>	<p>Courses are attended by government personnel including for example Incident Management System, basic spill response, dispersant application, shoreline treatment (SCAT), in-situ burning, and waste management.</p>	<p>Records show that designated response personnel (management and operational) receive recurrent or refresher training.</p>	<ul style="list-style-type: none"> • IOSC Sub-element 26.3 • IMO/IPIECA, 1996b



GOVERNMENT - NATIONAL/MULTINATIONAL			
Level A	Level B	Level C	Toolbox
J. SUSTAINABILITY & IMPROVEMENT			
Critiques of exercises and actual response (plan and execution) are documented with recommended actions for OSR improvements. Exercise oversight role is specified for specific agencies.	An internal review is conducted of exercises and actual responses. Recommendations from exercise and actual response evaluations (equipment deployment, tabletops) are implemented and tracked. An exercise and response oversight role is specified for specific agencies and a schedule of exercise requirements is noted.	External reviews supplement internal critiques for both exercises and actual spills. Steps taken for improvements are documented. Designated Authority for National/Multi-National plan(s) track changes until these are implemented. Exercise oversight roles are specified and a schedule of exercise requirements is defined for all relevant plan holders.	<ul style="list-style-type: none"> • IOSC Element 28 • CDFG, 2011 • IMO/IPIECA, 1996b • IPIECA, 2000b • ISO 14000/140001 • WDOE, 2014
National (or Multi-National) Team or Work Groups are assigned to review and recommend OSR enhancements	National (or Multi-National) Team or Work Groups meet at least annually to review OSR plans and readiness capability. Recommendations are made including a record of actions and implementation.	Internal-External / Experts work with National (or Multi-National) Team or Work Groups to undertake OSR capability audits and provide recommendations. Responsibilities for implementing audit recommendations are assigned. Changes are reviewed and approved.	<ul style="list-style-type: none"> • IOSC Sub-element 28.3 • ARPEL Guidelines for Conducting Environmental Audits for Onshore Petroleum Operations, undated • IMO, 2010c
Post-Spill Evaluation and Revisions to OSR Plan are documented.	OSR Plan, organization, strategies, and response equipment improvements are made as needed.	Plan and equipment improvements are made and included in planning and conducting subsequent training. Personnel and OSR equipment needs are also addressed. Changes are adopted for oil-related transportation, exploration, and production systems as determined by review processes relating to preventative measures and safeguards.	<ul style="list-style-type: none"> • IOSC Sub-element 28.4 • CDFG, 2011 • IMO, 2010c • IMO/IPIECA, 1996b • WDOE, 2014
Research and development programs are promoted through various sources of funding to improve countermeasures such as mechanical recovery, treating agent application, in-situ burning, and remote sensing.	Research and development programs are funded to improve countermeasures such as mechanical recovery, treating agent application, in-situ burning, and remote sensing.	Research and development programs are carried out by various agencies to improve countermeasures such as mechanical recovery, treating agent application, in-situ burning and remote sensing. Environmental data are compiled for resources at risk including current environmental sensitivity maps.	<ul style="list-style-type: none"> • IOSC Sub-element 28.5 • ADEC, 2006
An OSR planning and readiness assessment enforcement role is specified or defined for a specific government authority.	Personnel and resources are allocated to carry out enforcement role.	An enforcement program is implemented and evaluated to allow its effective application.	



8. GOVERNMENT/INDUSTRY - FACILITY OR ASSET OPERATIONS

8.1. Description of Scope

Government or Industry owned- and/or – operated oil handling, transport, and storage facilities typically have emergency response plans for different types of incidents, including oil spills. The OSR aspect of emergency readiness is the focus of this assessment chapter.

Examples:

Pipeline operations
Vessel fleets (tankers, barges)
Rail transport
Subsea pipelines and gathering systems

The operations encompassed in this scope have a broader geographic footprint, typically as a result of oil transportation. A key feature of this scope is the broader potential spill source along established operational routes.

8.2. Concept of Levels

The assessment process is conducted specifically by using RETOS, which reflects the detailed assessment criteria listed in Table 11 (highlighted in yellow are the critical criteria, only applicable to Level A); however, a separate spreadsheet is provided in RETOS™ for each LEVEL.

The use of three levels for the assessment for this scope does not reflect the complexity of an operation. The level of commitment for time and effort to ensure best practices in OSR plans and readiness can be quite different for more local operations relative to geographically extensive operations. Exposure risks (for spill and associated impacts) can also add to the complexity. As stated earlier (Chapter 2.5), the user should select a target level (Level A as a default) against which to assess the OSR capability. **For each Category/Element, the criteria established for Level B add to those criteria for Level A, and the criteria established for Level C add to those for Levels A and B.**

ASSESSMENT LEVELS do not correspond to Tiers, in the OSR planning sense. Rather, an Assessment Level indicates the maturity of that program. For example, an OSR Program of an

Operation with a limited spill risk may be quite well prepared and very capable of mounting a quick and very effective Tier 1 (local) response and Tier 2 (regional) response. In such a case the Assessment Level C would reflect its maturity but for a Tier 1 and 2 spill response. Alternatively, a complex Operation with significant spill risks and/or broad geographic footprint may need a Tier 3 capability; however, if the program is in the early stages of development, or not mature, the assessment should be started at Level A.

8.3. Notes on OSR Categories Applicable to Operations OSR Programs

Typically, industry operations plans and readiness programs must be prepared and built upon requirements imposed by regulations. Plans and response capabilities may integrate aspects of multiple facilities and should fit within a framework of regional and/or national OSR programs. Major focus is on local and regional preparedness (Tier 1 and Tier 2) with ties into Tier 3 and overarching plans and capabilities, as appropriate. Immediate on-scene response capabilities are the primary focus of OSR programs at this level.



Table 11 - Criteria Matrix and Toolbox References for OSR Assessment- SCOPE: Government or Industry – Facility or Asset Operations

GOVERNMENT/INDUSTRY – FACILITY OR ASSETS OPERATIONS			
Level A	Level B	Level C	Toolbox
A. LEGISLATION, REGULATIONS & AGREEMENTS			
Plan references regulatory requirements.	Plan meets regulations and standards. Reportable amounts of spills are indicated.	Plan lists primary applicable regulations and standards, and overseeing agencies. Plan exceeds regulatory requirements and guidelines. Content is aligned with BIP recommendations. Reportable amounts of spills are indicated.	<ul style="list-style-type: none"> • IOSC 2008 Guideline - Element 1 and Appendix A • API, 2013d • IFC, 2000a, 2000b • IMO, 1995 • IPIECA/OGP, 2013b • OGP, 2011 • USCG/EPA/DOT/MMS/OSHA, 1996
Agreements for local to regional OSR assistance are in place. Memoranda of Understanding, Mutual Aid, or similar agreements are cited.	Documented, signed agreements for Mutual Aid or regional assistance are included for Tier 2 and/or 3 spills, as appropriate.	Agreements have been signed for Mutual Aid or regional assistance at all Tier levels, as appropriate, with clearly defined capabilities and conditions for use. Operations are defined within context of International Agreements. Agreements are periodically exercised.	<ul style="list-style-type: none"> • IOSC Sub-element 23.4 • ARPEL, 1999 • IPIECA, 2007 • OGP, 2013
Plan notes context of geo-political boundaries and corresponding legislation.	Plan and readiness are appropriately framed in context of geo-political boundaries and corresponding legislation.	Plan and readiness clearly reference and adhere to applicable geo-political boundaries and corresponding legislation and agreements.	<ul style="list-style-type: none"> • IOSC Element 2 • ARPEL, 1999
An Environmental Statement is included.	A signed and dated Environmental Policy exists.	A signed and dated Environmental Policy exists. Face-to-face meetings are held with regulators as part of the planning process and plan review	<ul style="list-style-type: none"> • ARPEL, 1997b



GOVERNMENT/INDUSTRY - FACILITY OR ASSETS OPERATIONS			
Level A	Level B	Level C	Toolbox
B. OIL SPILL CONTINGENCY PLANNING			
<p>The plan is readily available to OSR personnel throughout the operational area and to those persons responsible for local OSR planning.</p> <p>There is a clear table of contents, pagination. The plan is dated.</p>	<p>The plan is readily available and clearly organized. It includes a distribution list and tabs for easy reference. A scope (facilities, geographical area, products) is clearly outlined. Field guide/checklists, by area or operation, are provided for initial response steps.</p>	<p>The plan includes a current distribution list, tabs, checklists, graphics, maps, and tables. The scope of the plan is included as well as a glossary. A broad-based plan provides guidance for detailed local planning so that all pertinent plans are integrated including OSR Field or Emergency Response Guides for initial actions.</p>	<ul style="list-style-type: none"> • IOSC Element 9 and Appendix A • AMSA, 2013; A-NOPSEMA, 2012 • ARPEL, 1997b • IPIECA Report Series 1990-2008 • IMO, 1995
<p>Applicable and related plans (company, local, and government) are identified.</p>	<p>Relationship with other applicable plans (company, local, and government) are identified and described.</p>	<p>The relationship with other applicable plans (company, local, and government) is clearly defined and described. Equipment inventories and contacts are indicated as applicable.</p>	<ul style="list-style-type: none"> • IOSC Sub-element 9.1
<p>Available in-company or outsourced expertise is listed for OSR-related issues.</p>	<p>In-company and outsourced experts are listed in plan and have knowledge of OSR plan and scope.</p>	<p>In addition to in-house expertise, contracts or agreements are in place with OSR experts in specialized fields who have participated in planning or exercises.</p>	<ul style="list-style-type: none"> • IOSC Element 22 • Cleanupoil.com, 2010
<p>Plan has been reviewed or revised in past 3 years.</p> <p>Key contacts are updated.</p>	<p>Revision log and dated pages document reviews or revisions within the past 2 years.</p>	<p>Revision log and dated pages document reviews/revisions as per update procedures, including plan implementation following actual spills, and at least annually. Spill risks are re-assessed regularly.</p>	<ul style="list-style-type: none"> • IOSC Element 9
<p>Potential spill sources, materials, and volumes have been identified and are known to responders.</p> <p>An active prevention program is indicated.</p>	<p>Spill sources, materials, and volumes are identified and are known to responders. Detailed calculations are provided for possible spill sources (e.g., oil storage facilities, oil transfer locations, vessel operations/bunkering, rail deliveries, pipelines, etc.). Prevention is addressed for facilities, operations, and procedures.</p>	<p>Spill planning has been based on a tiered system that uses quantitative risk assessment analysis for each tier (option: tiers reflect regulatory-defined criteria). Scenarios are used as basis for planning. Oil characteristics and weathering properties of products have been summarized. Photos and specifications are included for facilities and operations posing spill risk, with the details of an implemented prevention program that reduces OSR risks.</p>	<ul style="list-style-type: none"> • IOSC Sub-element 4.1 • ARPEL, 1998a • IPIECA, 2000a • IMO, 2010c



GOVERNMENT/INDUSTRY - FACILITY OR ASSETS OPERATIONS			
Level A	Level B	Level C	Toolbox
General areas at risk are identified based on spill sources.	Spill scenarios and area(s) of potential spill influence have been defined based on spill trajectories for worst-case spills. Trajectories consider prevailing and worst-case operating conditions. Graphics or maps indicate priority areas and/or species at risk.	For spill scenarios at sea, trajectories reflect distinct product weathering rates, tiered volumes, and seasonal conditions. Stochastic and worst-case trajectories shown in scenarios are the basis for sensitive area protection and response planning. Seasonal concerns are included.	<ul style="list-style-type: none"> • IOSC Sub-element 4.3 • ARPEL, 1997b • ARPEL, 1998b • Aurand et al., 2000 • NOAA, 2002 • IPIECA/IMO/OGP, 2012 • Taylor et al., 2009
Critical sensitive areas are identified in the plan. Guidelines define expectations to identify key species at risk in detailed local plans.	An operations plan sets the framework for identifying area sensitivities, timing, and priorities. Response management has an understanding of priority protection sites.	Sensitive areas and resources at risk are clearly presented and are kept up-to-date in a GIS system; maps are readily available to reference their location(s).	<ul style="list-style-type: none"> • IOSC Element 3 • ARPEL, 1997a • IPIECA Report Series 1990-2008 • IPIECA/IMO/OGP, 2012 • IMO/IPIECA, 1996
Response strategies are clearly stated and appropriate for the range of operational areas, environmental conditions, and oil types. Personnel and equipment needs for adopted response strategies are addressed.	Strategies and tactical details are provided for source control and immediate areas at risk. Primary OSR equipment and personnel needs for adopted OSR strategies are indicated.	Detailed tactical plans (graphics, maps) for priority areas within the zone of spill risk are indicated and are appropriate for operating conditions.	<ul style="list-style-type: none"> • IOSC Sub-element 4.2 and Element 9 • API/NOS/USCG/EPA, 2001 • ARPEL, 1997a • IPIECA/OGP, 2013d • NOAA, 2010a, 2010b • NOAA/API, 1994 • OSRL, 2011b, 2013a, 2013b
Non-mechanical countermeasures, such as dispersants or in-situ burning, are evaluated as options.	Guidelines for non-mechanical countermeasures, such as dispersants or in-situ burning, have been analyzed and are provided with windows of opportunity noted. Previous authorization is available for all countermeasures strategies in plan.	Net Environmental Benefits Analyses have been completed (with stakeholder participation) for alternative countermeasures with clearly defined applicability and limitations.	<ul style="list-style-type: none"> • IOSC Elements 7 and 17 • API, 2013b • ARPEL, 2007b, 2007c, 2007d • IPIECA, 2000b • IPIECA/OGP, 2012a • ITOPE, 1997 • NOAA, 2010a, 2010b • OSRL, 2011c, 2011d, 2011e, 2011f, 2011i • REMPEC, 2011a, 2011b • Walker et al., 2003



GOVERNMENT/INDUSTRY - FACILITY OR ASSETS OPERATIONS			
Level A	Level B	Level C	Toolbox
<p>Personnel needed to undertake operations are assessed.</p>	<p>Personnel and equipment needed to undertake all operations are clearly identified and qualified.</p>	<p>Personnel and equipment needed to undertake all operations are listed, appropriate, and qualified. Sufficient personnel are identified to enable work rotation schedules in field and in response management.</p>	<ul style="list-style-type: none"> • IOSC Elements 7 and 17



GOVERNMENT/INDUSTRY - FACILITY OR ASSETS OPERATIONS			
Level A	Level B	Level C	Toolbox
C. RESPONSE COORDINATION			
<p>Clear procedures outline information to report and who should receive initial spill notification and follow-up reports.</p> <p>A spill reporting form is included.</p> <p>A contact list with key personnel is included.</p>	<p>Initial spill notification checklists/forms are readily available. Callout procedures include flow charts for internal, external parties with contact data. A</p>	<p>Redundant callout procedures are based on common checklists and/or forms. Internal, external callout flow charts are in place.</p> <p>A directory of internal, external contacts (primary and alternate) is immediately available. A spill reporting form is included.</p>	<ul style="list-style-type: none"> • IOSC Element 11 • IMO, 1995, 2010b • ISO, 2000 • UNEP, 1996a, 1996b, 2000 • USCG/EPA/DOT/MMS/OSHA, 1996
<p>A spill management structure and assigned personnel are defined for all spill tiers.</p>	<p>A spill management organization allows easy expansion and contraction of personnel in planning levels or tiers and integration with external personnel (government, contractors).</p>	<p>The spill management organization is flexible and robust, accommodates all emergencies, and is based on sound Incident Management System principles (e.g., ICS).</p>	<ul style="list-style-type: none"> • IOSC Element 10, Sub-element 10.1 • IMO/MEPC, 2011 • IPIECA, 2000a • OSRL, 2012 • USCG, 2006
<p>Roles and responsibilities are evident for each functional aspect identified in the OSR management organization.</p>	<p>Responsibility checklists are available and defined for each role in the OSR management team.</p>	<p>OSR management personnel have checklists for their personal use during response. Checklists are available in the plan, at a Command Post, or maintained in individual OSR response kits.</p>	<ul style="list-style-type: none"> • IOSC Element 10, Sub-element 10.2 • OSRL, 2012 • USCG, 2006
<p>Incident Command is assigned to one or two specific individuals (by name or position) with backups identified.</p>	<p>Personnel appointed to a Unified or Joint Command are defined; Records of Joint or Unified Command meetings indicate the working team.</p>	<p>Personnel in direct support of a Unified or Joint Command are defined; Records show regularly held Joint or Unified Command meetings, exercises, and/or response.</p>	<ul style="list-style-type: none"> • IOSC Element 10, Sub-element 10.2
<p>Personnel have been assigned to OSR management roles identified for Tier 1.</p>	<p>Personnel have been assigned to OSR management roles identified for Tier 1 and 2.</p>	<p>Personnel have been assigned to OSR management roles identified for Tiers 1 - 3, as appropriate. There are sufficient trained personnel from local, contracted, and corporate sources to manage 24-hr extended worst-case spill (shifts).</p>	<ul style="list-style-type: none"> • IOSC Element 10, Sub-element 10.3
<p>Command post location is specified.</p>	<p>Backup command post locations are identified; communications and control facilities are listed.</p>	<p>Backup command post locations have been verified as appropriate for emergency management; redundant communications and control facilities are provided. Provisions for long-term emergencies are also specified.</p>	<ul style="list-style-type: none"> • IOSC Sub-element 23.3.3



GOVERNMENT/INDUSTRY - FACILITY OR ASSETS OPERATIONS			
Level A	Level B	Level C	Toolbox
Procedures are in place and responsibility has been assigned for communications with media during a spill response.	A prepared draft press release is available for initial notice. An assigned person has established contact with local media outlets.	A template press release is available for initial notice. Personnel assigned to media relations are trained in media management, and have worked with OSR command on public speaking and/or mock press conferences.	<ul style="list-style-type: none"> • IOSC Element 15
Procedures are in place and responsibility has been assigned for communications with local communities.	A community liaison program and personnel maintain frequent contacts with communities at risk.	Community education and training have been completed so that a volunteer base is identified to support spill response efforts.	<ul style="list-style-type: none"> • IOSC Element 15 • POSOW, 2013c • UNEP, 1996, 2005



GOVERNMENT/INDUSTRY - FACILITY OR ASSETS OPERATIONS			
Level A	Level B	Level C	Toolbox
D. HEALTH, SAFETY & SECURITY			
Diagrams or maps are available showing general locations of hazards and emergency equipment.	Operations maps are available showing major hazards, emergency equipment locations, and primary care facilities. Operations-specific maps or requirements are noted for detailed maps at a local level.	Maps are available from Operations level to facility level in hard copy or GIS/electronic versions. Operations maps show primary logistical support facilities and overland routes and alternates. A security plan supplements the OSR plan.	<ul style="list-style-type: none"> IOSC Element 9 and 13, Appendix A
General risks, hazards, PPE are described. OSR personnel have general understanding of associated hazards. MSDSs for all products have been included or are available as referenced. PPE is available in kits.	An MSDS for each product handled is readily available; personnel know how to obtain information; response personnel and management demonstrate knowledge of MSDSs.	Personnel can describe risks, safety precautions, PPE and initial response; Hazards Communications training is provided to all on-site personnel. A site assessment checklist has been developed for spills. PPE is available in kits and vehicles.	<ul style="list-style-type: none"> IOSC Sub-element 13.2 API, 2013a ExxonMobil, 2008 IPIECA, 2002 IPIECA/OGP, 2012b REMPEC, 2012
Responsible, accredited person(s) are identified for OSR safety assessment duties.	A generic site-safety plan template is available and used for response under direction of a designated and qualified Site Safety Officer.	A site-specific safety assessment checklist and OSR safety plan are available and completed by a designated Site Safety Officer. A safety briefing checklist has been developed. Risk assessment includes air monitoring and night operations.	<ul style="list-style-type: none"> IOSC Sub-element 13.2 NIEHS, 2010
Mandatory safety training requirements have been established for OSR responders.	Procedures are in place to provide minimum safety training to volunteers.	Roles for volunteers are defined on a pre-spill basis. e.g., shoreline treatment.	<ul style="list-style-type: none"> IOSC Sub-element 5.3 ASTM, 2001a, 2001b IPIECA, 2002 NIEHS, 2010 POSOW, 2013c



GOVERNMENT/INDUSTRY - FACILITY OR ASSETS OPERATIONS			
Level A	Level B	Level C	Toolbox
E. OPERATIONAL RESPONSE			
An operations-wide policy is in place to minimize spill volumes through specific controls (e.g., advanced vessel notifications, assist tugs, pilots) and source control: transfers, patching, emergency lightering, etc.	Operations-wide procedures are in place to minimize spill volumes through specific controls (e.g., advanced vessel notifications, assist tugs, pilots) and source control: transfers, patching, emergency lightering, etc. Emergency shutoffs, remotely-controlled valves, and other means are in place to reduce volume of releases.	Procedures and emergency controls are clearly marked and determined to be functional on regular basis. An Emergency Response Team with mobile capability has been designated.	<ul style="list-style-type: none"> • IOSC Element 5, Sub-elements 5.1 and 5.2 • IMO, 2005, 2010b • ISO, 2000 • USCG/EPA/DOT/MMS/OSHA, 1996
OSR equipment sources are identified and recommended for Tier 1 risks (most likely routine spills) at key locations and appropriate for environmental conditions and seasonal aspects.	OSR equipment sources are verified and exceed Tier 1 needs (oil types, weathering and volumes) for key operational areas, operating environments, and seasons. Tier 2 OSR resources are identified and provide redundancy and compatibility with equipment identified to augment the Tier 1 capability, as appropriate.	Contracts or agreements are in place for local (Tier 1) and regional (Tier 2) OSR equipment and personnel. OSR resources are determined to be optimum response options for operating conditions and oil types. Dispersant application, mechanical recovery, shoreline treatment, and in-situ burning are addressed as appropriate. Additional external (Tier 3) resources are identified, as appropriate.	<ul style="list-style-type: none"> • IOSC Sub-element 6.2 and Element 17 • ADEC, 2006 • ExxonMobil, 2008 • IPIECA, 2007 • SLRoss, 2013
Procedures are defined to ensure local equipment is inventoried, audited, properly stored and in good working condition.	Audits show checks of maintenance and inspection records reflect routine upkeep (per OSCP requirements).	Local and regional equipment is properly stored, packaged, and labeled and in excellent working condition. A computerized equipment maintenance and inspection program automatically issues and tracks work orders for equipment upkeep. An audit verifies equipment in ready condition and packaged to effective response.	<ul style="list-style-type: none"> • IOSC Sub-element 23.2
Equipment locations are secured and allow for quick access and deployment.	Equipment locations are identified in plan, secured, and distributed to allow quick response to key spill risk locations throughout the operational area.	Pre-deployed equipment or permanently installed tertiary containment is in place for most-likely spill locations (e.g., points of transfer; geographical hazards).	<ul style="list-style-type: none"> • IOSC Sub-element 20.6



GOVERNMENT/INDUSTRY - FACILITY OR ASSETS OPERATIONS			
Level A	Level B	Level C	Toolbox
Operational use of countermeasures has been verified in an annual spill exercise.	Countermeasures including containment, skimming, protection, dispersant application, in-situ burning and other pertinent countermeasures have been verified and are reviewed in exercises and drills.	All major countermeasures are tested twice annually and improved as needed. Upgrades with new response options have been identified by management. An in-house capability ensures applicable response options can be implemented to optimize their effectiveness including mechanical, treating agent, in-situ burning, and shoreline treatment.	<ul style="list-style-type: none"> • IOSC Sub-element 26.3 • IMO, 2010c • IMO/IPIECA, 1996 • ITOPF, 1997
A Waste Management Plan is outlined that conforms with applicable regulations.	Procedures are defined and adopted to minimize the potential waste stream, temporarily handle waste, and ultimately reuse or dispose of waste materials in accordance with all applicable regulations.	Agreements and contracts are in place with waste management companies on pre-spill basis. Intermediate and long-term storage options have been defined. Treatment, recycling and final disposal are addressed.	<ul style="list-style-type: none"> • IOSC Element 18 • Arctic Council, 2008 • CEDRE, 2011 • ExxonMobil, 2008 • IPIECA, 2004a • OSRL, 2011g • REMPEC, 2011c
Wildlife recovery and rehabilitation contacts are included in plan.	Wildlife recovery and rehabilitation contacts are identified in plan, have pre-existing arrangement or contract, and are aware of OSR role.	Wildlife recovery and rehabilitation contacts are identified in plan, have pre-existing arrangement or contract, and have practiced or trained with the spill management team in their OSR role. A wildlife recovery program is part of regional capability including equipment and facilities for establishing on-site.	<ul style="list-style-type: none"> • IOSC Element 19 • IPIECA, 2004b



GOVERNMENT/INDUSTRY - FACILITY OR ASSETS OPERATIONS			
Level A	Level B	Level C	Toolbox
F. TRACKING, ASSESSMENT & INFORMATION MANAGEMENT			
<p>Role or assignment is defined in OSR management to undertake spill tracking, including monitoring. Source of forecasting ability (weather, currents, river/stream flow, etc.) is defined.</p>	<p>Procedures are in place to provide visual tracking and monitoring of a spill (on water, land and groundwater). Expertise and resources available to undertake tracking are identified. The organization tasked to provide forecasting (weather, currents, river/stream flow, etc.) is defined.</p>	<p>Tracking and monitoring procedures include standardized assessment forms (SCAT, Overflight). Aids include digital cameras, GPS, and transport (helo, fixed-wing, vessels). Tracking systems for non-visual tracking identified and available from sources, e.g., government (IR for night and low visibility conditions; laser fluorosensor, radar systems, tracking buoys; oil detection under dense foliage). The organization tasked to provide forecasting (weather, currents, river/stream flow, etc.) is staffed and available 24/7.</p>	<ul style="list-style-type: none"> • IOSC Element 20 • API, 2013c • CEDRE, 2004 • Fingas, 2001 • ITOPF, 2009 • Law et al., 2011 • NOAA, 2002 • OSRL, 2011a
<p>Maps or charts are available to maintain a record of spill tracking and movement.</p>	<p>Forms and maps or charts have been developed for tracking spills on paper and digital systems.</p>	<p>For sea spill scenarios, computerized models are available from government, university or other sources and can be used to analyze spill trajectories and weathering. Oil trajectory and weathering model results are available within suitable timeframes (e.g., 2-6 hours for on-water spills) and can be displayed in digital form (e.g., within GIS) and/or on wall maps.</p>	<ul style="list-style-type: none"> • IOSC Sub-element 3.3 • ARPEL, 1998b
<p>A cleanup assessment capability exists.</p>	<p>SCAT Teams are identified that include company or contracted lead personnel and acknowledges roles of local and national government representatives.</p>	<p>Trained SCAT teams with field tools are available for OSR duties.</p>	<ul style="list-style-type: none"> • IOSC Element 21 • CEDRE, 2006 • Environment Canada, 2010 • MCA, 2007 • NOAA, 2000. • OSRL, 2011g • Owens and Sergy, 2000; Sergy and Owens, 2007 • POSOW, 2013; REMPEC, 2009



GOVERNMENT/INDUSTRY - FACILITY OR ASSETS OPERATIONS			
Level A	Level B	Level C	Toolbox
G. LOGISTICS			
Local sources along routes or areas within potential spill region are identified for supplies, PPE, tools, special equipment, and expendables.	Contracts or terms with local logistical sources have been established on pre-spill basis. Access roads and infrastructure have been assessed to deploy response and shoreline clean up equipment.	Local logistical sources have been contracted and exercised. Access roads and infrastructure have been tested to deploy response and shoreline clean up equipment. Regional logistical support has been identified for areas in potential spill region.	<ul style="list-style-type: none"> • IOSC Sub-element 23.2 • Blackburn, 2005 • Cleanupoil.com, 2010
Local sources have been identified for service providers for meals, transportation, portable camps and toilets:	Service providers for meals, transportation, portable camps and toilets have been contracted on pre-spill basis.	Service providers for meals, transportation, portable camps and toilets are contracted and exercised. Sources for logistical services are updated and verified on annual basis in plan.	<ul style="list-style-type: none"> • IOSC Sub-element 23.3
Response times for initial deployment are identified and tested.	Response times for initial deployment are tested and improved.	Deployments are exercised with combined operational and logistics support teams. Improved response times are routinely part of exercise or deployment objectives.	<ul style="list-style-type: none"> • IOSC Elements 9 and 17, Sub-element 5.4
An operation-wide Command Post is identified and has basic arrangements for coordinating a response.	An operation-wide Command Post is pre-established with multiple lines of communication, space for participating personnel, and with adequate security and logistical support services to sustain the response organization. Effective communication and links to local Command Posts exist.	An alternate Command Post site is indicated. Electronic boards are available for situations status with near real-time feed from field. Effective communication and links to local Command Posts have been proven through exercises and/or actual response.	<ul style="list-style-type: none"> • IOSC Sub-element 23.3.3
Assets and procedures for communications between local Command Post and Operations-wide Command Post are in place.	Communications equipment is on hand and secondary or backup systems are identified. Communications systems are compatible across response assets (vessels, ground, air).	A communications plan has been established with pre-identified channels for responders. Systems are integrated across response community (vessels, ground, air, industry-government).	<ul style="list-style-type: none"> • IOSC Element 12 and Sub-element 23.2 • ExxonMobil, 2008



GOVERNMENT/INDUSTRY - FACILITY OR ASSETS OPERATIONS			
Level A	Level B	Level C	Toolbox
Decontamination facilities are available for personnel leaving the spill site.	Equipment and personnel for multiple stations are prepared and available for immediate deployment to support decontamination of personnel, response equipment, and transportation assets (e.g., vehicles, vessels).	“Hot” and “cold” zones are defined for OSR and are maintained by corridors in and out of the spill zone. Regional sources for additional PPE and supplies are pre-determined.	<ul style="list-style-type: none"> • IOSC Sub-element 18.2 • IPIECA, 2002 • Fingas, 2001



GOVERNMENT/INDUSTRY - FACILITY OR ASSETS OPERATIONS			
Level A	Level B	Level C	Toolbox
H. FINANCIAL AND ADMINISTRATIVE CONSIDERATIONS			
Designated company Incident Commander and emergency management personnel have pre-defined spending approval limits.	Finance personnel have exercised purchasing needs with suppliers as part of training. Financial process uses standardized forms.	Coordination and procedures for financial tracking are reviewed with insurers and tested. Personnel are familiar with forms adopted for tracking, purchasing, and deploying OSR equipment, materials, and personnel.	<ul style="list-style-type: none"> • IOSC Sub-element 24.2 • ARPEL, 1997b • IMO, 2009
Procedures are in place to receive claims.	Procedures are in place to receive, investigate, and resolve claims. Insurers are identified and included in exercises.	A claims filing and tracking system has been implemented. Coordinated procedures exist with insurers to expedite claim review and settlement process. Insurers have documented participation in response and/or exercises.	<ul style="list-style-type: none"> • IOSC Sub-element 24.4 • IMO, 2009 • IOPC, 2008 • IPIECA/ITOPF, 2007



GOVERNMENT/INDUSTRY - FACILITY OR ASSETS OPERATIONS			
Level A	Level B	Level C	Toolbox
I. TRAINING & EXERCISES			
<p>Training requirements have been defined for spill management and responders.</p> <p>Course outline(s) are included in the plan.</p> <p>Minimum initial and refresher Health & Safety training requirements are defined for spill management and responders.</p>	<p>Minimum initial and refresher training requirements are defined for spill management and responders.</p>	<p>Initial and refresher training requirements are defined for levels of expertise and functions (assignments) for personnel in spill management and for responders.</p>	<ul style="list-style-type: none"> • IOSC Element 27 • ASTM, 2001a • IFC, 2000a, 2000b • OSHA, 2001
<p>Regular training courses are provided on OSCP to response operations personnel.</p>	<p>Courses are attended by operational responders and OSR response management.</p>	<p>OSR courses are held on annual basis include external parties. Train-the-trainer courses are held.</p>	<ul style="list-style-type: none"> • IOSC Element 27 • ARPEL, 1997
<p>In-house spill training courses are offered.</p>	<p>Contracted or government specialists provide spill training courses.</p>	<p>Contracted internationally-recognized or accredited spill training is held regularly.</p>	<ul style="list-style-type: none"> • IOSC Sub-element 27.4
<p>Training records for personnel document compliance with required training.</p>	<p>Training records document compliance with defined training and includes training materials. Training records, curricula, and materials confirm that training is provided by qualified personnel.</p>	<p>Training aids are available for self-paced study. Training records, curricula, and materials confirm that training is provided by certified and/or qualified experts.</p>	<ul style="list-style-type: none"> • IOSC Sub-element 27.5
<p>Notification and Alerting Exercises are simulated within local area and to operations-wide level as part of training, as per regulatory requirements where defined.</p>	<p>Off-hours; Internal-External alerting and notification are exercised with actual calls as per regulatory requirements where defined. Callouts include local and area-wide notifications.</p>	<p>Off-hours; Internal-External External alerting and notification are tested and documented as per regulatory and local requirements. Backup communications system for emergency notification is in place and tested.</p>	<ul style="list-style-type: none"> • IOSC Sub-element 26.3 • IMO/IPIECA, 1996b
<p>Deployment exercises are conducted at least annually with local resources.</p>	<p>Deployment exercises are conducted regularly (2 to 4 times per year) with regional resources. Exercises include neighboring industries.</p>	<p>Industry and government partners participate in annual equipment deployment and area-level command center operations exercise.</p>	<ul style="list-style-type: none"> • IOSC Sub-element 26.4 • IMO/IPIECA, 1996b



GOVERNMENT/INDUSTRY - FACILITY OR ASSETS OPERATIONS			
Level A	Level B	Level C	Toolbox
<p>Tabletop (Response Management) Exercises are conducted at prescribed frequency or at least annually.</p>	<p>Tabletop exercises include interface with local response personnel and with external parties (e.g., government, mutual aid -- industry and community organizations).</p>	<p>Tabletop exercises are based on risk assessments including trajectories and extensive strategic planning. Exercises include interface with local response personnel, external parties (e.g., government, mutual aid), and regional response community.</p>	<ul style="list-style-type: none"> • IOOSC Sub-element 26.3 • Aurand et al., 2000 • IMO/IPIECA, 1996b • IPIECA, 2000b



GOVERNMENT/INDUSTRY - FACILITY OR ASSETS OPERATIONS			
Level A	Level B	Level C	Toolbox
J. SUSTAINABILITY & IMPROVEMENT			
Exercise critique (plan and execution) recommends actions for OSR improvements at local and/or area-wide operations level.	Internal reviews are conducted for all exercises and actual spill response. Recommendations from reviews are implemented and tracked	External review supplements internal critique. Steps are taken for improvements are documented. Management tracks changes until implemented.	<ul style="list-style-type: none"> • IOSC Element 28 • CDFG, 2011 • IMO/IPIECA, 1996b • IPIECA, 2000b • ISO 14000/140001 • WDOE, 2014
Audits of operation-wide plan and capabilities are conducted annually.	Internal company auditors review plan, integration with local level plans, equipment, and related facilities	Internal-External / Experts (Company, Contracted, Government) undertake audits. Responsibilities are assigned to implement changes. Changes are reviewed and approved.	<ul style="list-style-type: none"> • IOSC Sub-element 28.3 • ARPEL Guidelines for Conducting Environmental Audits for Onshore Petroleum Operations, undated • IMO, 2010c • Transport Canada, 2010
Post-Exercise and Post-Spill Evaluations are made and incorporated into actions for OSR program improvements.	Plan and equipment revisions and improvements are implemented in a timely manner.	Post-Exercise and Post-Spill improvements are included in planning and conducting subsequent training. A business continuity plan is included.	<ul style="list-style-type: none"> • IOSC Sub-element 28.4 • CDFG, 2011 • IMO, 2010c • WDOE, 2014



9. INDUSTRY – COUNTRY OR BUSINESS LINE

9.1. Description of Scope

Industry operations conducted solely within one country or operations of a single business line with wide-spread assets may have an OSR response program that integrates their response capabilities across multiple facilities or operational areas. Assessment programs should be adapted to address operations either within a single country or multiple countries, as appropriate, for company management.

Examples:

Nation-wide Industry program
 Pipelines (comprehensive for multiple operations)
 Fleets
 Production
 Drilling & Exploration

The operations encompassed in this scope may have a broad geographic footprint. Two key features are:

- The integration of multiple facilities and operations with context of a broader spill response program, and
- These operations typically have the same line management and follow the same corporate policies.

9.2. Concept of Levels

The assessment process is conducted specifically by using RETOS, which reflects the detailed assessment criteria listed in Table 12 (highlighted in yellow are the critical criteria, only applicable to Level A); however, a separate spreadsheet is provided in RETOS™ for each LEVEL.

The use of three levels for the assessment for this scope does not reflect the complexity of a business line or operations in a country. The level of commitment for time and effort to ensure best practices in OSR plans and readiness can be quite different for more local operations or with limited geographic exposure. Exposure risks (for spill and associated impacts) can also add to the complexity. As stated earlier (Chapter 2.5), the user should select a target level (Level A as a default) against which to assess the OSR

capability. For each Category/Element, the criteria established for Level B add to those criteria for Level A, and the criteria established for Level C add to those for Levels A and B.

ASSESSMENT LEVELS do not correspond to Tiers, in the OSR planning sense. Rather, an Assessment Level indicates the maturity of that program. A Country- or Business Line OSR Program may be large and complex, encompassing multiple operations and widespread spill risks, and hence would likely need to address a Tier 3 capability. If that Tier 3 capability is just being developed, the Program may be at a Level A. Alternatively, a Country- or Business Line Program for limited operations and spill risks may only have need for Tier 1 and Tier 2 capabilities. Such a program may be at a Level C, however, if it is mature and well developed.

9.3. Notes on OSR Categories Applicable to Country or Business-line OSR Programs

Industry Country or Business-line plans and readiness programs typically are prepared to provide a common base to operational and facility plans and capabilities. Country or Business-line OSR plans and response capabilities may integrate aspects of multiple facility plans and geographically-wide operations. This OSR capability should fit within a framework or regional and/or national OSR programs. Major focus is on regional to national preparedness (Tier 2 and Tier 3).



Table 12 - Criteria Matrix and Toolbox References for OSR Assessment- SCOPE: Industry – Country or Business Line

INDUSTRY – COUNTRY OR BUSINESS LINE			
Level A	Level B	Level C	Toolbox
A. LEGISLATION, REGULATIONS & AGREEMENTS			
Business-line or Country Plan adheres to National and Corporate policies and requirements for OSR and assigns responsibilities.	OSR program encompasses all oil handling, storage, and transport phases including offshore exploration and production. Lead OSR responsibility has been assigned at Corporate or Operational levels.	Roles of other company or industry support are identified. The relation to government planning requirements is clearly defined.	<ul style="list-style-type: none"> • IOSC 2008 Guideline - Element 1 and Appendix A • API, 2013d • IFC, 2000a, 2000b • IMO, 1995 • IPIECA/OGP, 2013b • OGP, 2011 • USCG/EPA/DOT/MMS/OSHA, 1996
Business-line or Country Plan references applicable international standards and guidelines.	Business-line or Country Plan defines timeframes and specific requirements for operational and/or facility plans.	The OSR organization is defined for business line, regional, country, or operating areas.	<ul style="list-style-type: none"> • IOSC Element 2 • IFC, 2000a and 2000b • IPIECA/OGP, 2013b • OGP, 2011 • UNEP, 2005
The company is actively engaged in OSR planning efforts in the countries where it has operations.	Company has mutual aid and/or international agreements to augment its oil spill response capabilities within the countries it operates.	The company has mutual aid (and possibly) international agreements and capacity for oil spill response applicable to the Business-line spill risk and country(ies) in which it operates. The Company actively enhances response capability through joint exercises, training, and workshops. OSR expertise and information are exchanged on a regular basis with other programs of similar scope. Linkage to other national plans is specified, as appropriate.	<ul style="list-style-type: none"> • IOSC Sub-element 2.3 • ARPEL, 1999 • OGP, 2013



INDUSTRY – COUNTRY OR BUSINESS LINE			
Level A	Level B	Level C	Toolbox
B. OIL SPILL CONTINGENCY PLANNING			
A business-line or Country OSR plan has been developed and approved; identifies organization and Designated Authorities for oil spill response (and/or defines authority for specific spill cases (e.g., spill to land vs. spill to marine waters).	An approved Business-line or Country OSR plan has been developed through partnership with collaborating agencies/departments with associated responsibilities.	An approved Business-line or Country OSR plan has a history of development, testing, and revision with distribution to all responsible participating agencies/departments.; Designated Authority and roles/responsibilities of participating agencies are defined. The relation between government and private industry planning is also indicated.	<ul style="list-style-type: none"> • IOSC Element 9 and Appendix A • ARPEL, 1999 • IPIECA, 2008
An approved Corporate OSR Plan is available.	The relation between the Corporate Plan and the Business-line or Country OSR Plan has been tested through exercises and/or response.	An approved Corporate Plan is well established and its relation to the Business-line or Country OSR Plan has been tested through exercises and/or response. The business-line or Country OSR Plan has a history of review and development.	<ul style="list-style-type: none"> • IOSC Element 9 and Appendix A • ARPEL, 1999
Business-line or Country OSR adheres to designated planning levels set by National, Regional, or Corporate requirements.	Planning levels also consider a risk-based approach and define priority areas of potential spills based on operations, volumes, and environmental factors. Corporate or international statistical data are used to scope or define planning tiers or concepts.	Contents and format for facility/shipboard/area plans are specified.	<ul style="list-style-type: none"> • IOSC Sub-elements 4.1 and 9.1 • ARPEL, 1997b, 1999 • IPIECA, 2000a
Applicable and related government, Corporate, and facility plans are identified.	The relationship with other corporate and facility-specific plans and with pertinent government plans (National, area/regional, and local), is identified and described.	Signed written agreements are in place for mutual aid and to cascade resources. Equipment inventories which could be accessed are indicated as applicable.	<ul style="list-style-type: none"> • IOSC Sub-elements 9.1 and 23.2
Expertise (government/industry) for OSR-related issues is listed.	Corporate and regional/country experts who have knowledge of the OSR plan and scope, and can support a response, are listed	Contracts or agreements are in place with local, regional and international OSR experts in specialized fields who have participated in planning and exercises.	<ul style="list-style-type: none"> • IOSC Element 8 • Cleanupoil.com, 2010
Plan has been reviewed or revised in past year. Key contacts are updated as they change.	Revision log and dated pages document reviews or revisions within past year.	Revision log and dated pages document reviews/revisions as per update procedures, including plan implementation following actual spills, and at least annually. Spill risks are re-assessed regularly. A post-incident review is included.	<ul style="list-style-type: none"> • IOSC Element 28.4



INDUSTRY – COUNTRY OR BUSINESS LINE			
Level A	Level B	Level C	Toolbox
<p>Priority planning is focused on geographic areas or operations of higher spill risk and environmental sensitivity.</p>	<p>Business-line or Country planning policy establishes requirements to define at-risk areas based on spill trajectories for worst-case spills. Relevant properties of oils of concern are considered when identifying sensitive natural resources. Guidelines stipulate use of trajectories and sensitivity mapping at regional to local levels.</p>	<p>Stochastic and worst-case trajectories are required for response planning. Guidelines stipulate integration with sensitivity mapping at regional to local levels. Organizations supplying specific data (oil properties, weather, environmental, etc.) are listed.</p>	<ul style="list-style-type: none"> • IOSC Sub-element 4.3 • ARPEL, 1997b • ARPEL,1998b • Aurand et al., 2000 • IPIECA/IMO/OGP, 2012 • NOAA, 2002 • Taylor et al., 2009
<p>Plan describes key sensitive areas and priorities.</p>	<p>Plan lists and defines key sensitive areas and priorities. Policy for use, reference or development of sensitivity maps adhere to sensitivity indexing practices.</p>	<p>Plan specifies criteria to define key sensitive areas. Key areas are mapped with identification/protection of resources at risk. Standards are in place for mapping and GIS databases for sensitive areas including, for example, endangered species, wetlands, recreational facilities, mariculture, and archeological sites.</p>	<ul style="list-style-type: none"> • IOSC Sub-element 3.1 • ARPEL, 1997a • ARPEL,1998b • Aurand et al., 2000 • IPIECA/IMO/OGP, 2012 • NOAA, 2002 • Taylor et al., 2009
<p>Plan defines policies to reduce the risk and/or consequences of a spill and indicates existing prevention programs.</p>	<p>Plan defines standards for spill prevention. Mechanisms are in place to verify implemented prevention procedures to reduce accidents and to minimize oil loss if an incident occurs.</p>	<p>Trends, sources, causes of spills (vessel traffic, transfer, production, exploration, collision, grounding) are documented and provide additional foundation for required prevention measures. Requirements for spill prevention are detailed and exceed stipulated regulatory prevention requirements.</p>	<ul style="list-style-type: none"> • IOSC Element 5
<p>Response strategies are clearly stated and provide for response to applicable operating conditions and oil types. Personnel and equipment needs for adopted strategies are indicated.</p>	<p>Plan specifies requirements to develop strategies and tactical details for high spill risk areas at area or local planning levels, including equipment and personnel needs.</p>	<p>Plan specifies requirement to develop detailed tactical plans (graphics, maps, personnel and equipment) for priority areas within zones of high spill risk in facility and operational OSR plans. Detailed tactics are prioritized and are appropriate for operating conditions.</p>	<ul style="list-style-type: none"> • IOSC Sub-element 4.2 and Element 9 • API/NOS/USCG/EPA, 2001 • ARPEL, 1997a • IPIECA/OGP, 2013d • NOAA, 2010a, 2010b • NOAA/API, 1994 • OSRL, 2011b, 2013a, 2013b



INDUSTRY – COUNTRY OR BUSINESS LINE			
Level A	Level B	Level C	Toolbox
Plan reflects National and/or Corporate policy on use of treating agents for spill response (dispersants, cleaning agents, bioremediation agents, herders, etc.).	A process for the use of dispersants, herders, beach cleaners, etc is in place that allows assessment and approval within a reasonable "window of opportunity" (less than 12 hours)	A procedure for Net Environmental Benefits Analyses is in place for dispersants and other treating agents with clearly defined applicability and limitations. A cooperative program assesses alternative countermeasures involving companies and governments.	<ul style="list-style-type: none"> • IOSC Elements 7 and 17 • API, 2013b • ARPEL, 2007d • CEDRE, 2005 • IMO/UNEP, 1995 • IPIECA, 2000b • IPIECA/OGP, 2012a • ITOPF, 2005 • Kirby et.al, 1996 • NOAA, 2010a, 2010b • OSRL, 2011c, 2011d, 2011e, 2011f, 2011i • REMPEC, 2011a, 2011b • Walker et al., 2003
A policy for the use of In-situ burning is clearly defined.	Procedures are in place to evaluate and approve in-situ burning within a reasonable "window-of-opportunity" (less than 24 hr). The required elements of a burn plan are published which address all relevant factors.	A procedure for net environmental benefits analyses is in place for in-situ burning with clearly defined applicability, limitations, and approval process (may include pre-approval for specific conditions) as well as monitoring role. The company actively engages in the assessment of in-situ burning in conjunction with governments.	<ul style="list-style-type: none"> • IOSC Elements 7 and 17 • ARPEL, 2007b, 2007c • IPIECA, 2000b • NOAA, 2010a, 2010b • OSRL, 2011i • Walker et al., 2003
Shoreline protection and cleanup policies are outlined.	Shoreline protection and treatment are considered that include planning factors for carrying out assessment and remediation (SCAT).	Shoreline protection and treatment policies are delineated that consider SCAT as well as specifics such as workforce, spill responder safety training, debris, oil removal, and cleanup standards (endpoints).	<ul style="list-style-type: none"> • CEDRE, 2009 • Environment Canada, 2010 • IMO/UNEP, 2009 • Owens et al., 1998 • REMPEC, 2010



INDUSTRY – COUNTRY OR BUSINESS LINE			
Level A	Level B	Level C	Toolbox
C. RESPONSE COORDINATION			
<p>A clear procedure outlines what types of information are to be reported on a response and who should receive initial spill notification and any follow-up reports.</p> <p>A spill reporting form is included.</p> <p>A contact list includes key personnel.</p>	<p>Initial spill notification checklists/forms are readily available. Callout procedures include flow charts for internal and external parties with their contact data.</p>	<p>Redundant callout procedures are based on common checklists and/or forms. A directory lists internal, external contacts (primary and alternate) that are immediately available.</p>	<ul style="list-style-type: none"> • IOSC Element 11 • IMO, 1995, 2010b • ISO, 2000 • UNEP, 1996a, 1996b, 2000 • USCG/EPA/DOT/MMS/OSHA, 1996
<p>A spill management structure has been established and defined for all spill types and tiers including land- and sea-based incidents.</p>	<p>The spill management organization is designed to allow easy expansion and/or contraction of personnel and equipment per tiers, plus smooth integration with other OSR organizations and plan holders, as appropriate.</p>	<p>The spill management organization is flexible, robust, and accommodates response needs for all tiers. A common incident management system is defined for all related OSR plan-holders and responding participants. The incident management organization is based on sound Incident Management System principles (e.g., ICS) and addresses regional responsibilities.</p>	<ul style="list-style-type: none"> • IOSC Element 10, Sub-element 10.1 • IPIECA, 2000a • OSRL, 2012 • USCG, 2006
<p>Roles and responsibilities evident for each functional aspect are identified in OSR management organization.</p>	<p>Responsibility checklists are available and defined for each role in the OSR management team.</p>	<p>OSR management personnel have checklists for their personal use during response. Checklists are available in the plan, at a Command Post, or maintained in individual OSR kits.</p>	<ul style="list-style-type: none"> • IOSC Element 10, Sub-element 10.2 • OSRL, 2012 • USCG, 2006
<p>The role of Business-line/Country Team in Incident Command and in Crisis Management is defined.</p>	<p>Personnel appointed to a Unified or Joint Command are specified; Records of Joint or Unified Command meetings and interface with Crisis Management indicate a working team.</p>	<p>Business-line/Country OSR support team and Crisis Management Team roles are assigned to specific individuals (by name or position) with backups identified; Personnel appointed to, and in direct support of, a Unified or Joint Command are defined; Records show regular pattern of Joint or Unified Command meetings, exercises, and/or response. Specialist or contractor assistance is considered to augment the response capability.</p>	<ul style="list-style-type: none"> • IOSC Element 10, Sub-element 10.2
<p>Positions (and/or personnel) assigned to OSR management roles are identified.</p>	<p>Personnel assigned to OSR management roles as part of a Business-line or Country Support teams are listed.</p>	<p>Trained OSR support personnel are available to manage 24-hr extended worst-case spill (shifts).</p>	<ul style="list-style-type: none"> • IOSC Element 10, Sub-element 10.3 • IMO/MEPC, 2011



INDUSTRY – COUNTRY OR BUSINESS LINE			
Level A	Level B	Level C	Toolbox
Procedures are in place and responsibility has been assigned for communications with media during a spill response.	A template release is available for initial notice. Person assigned for media communications has established contact with local media outlets.	Assigned person is trained in media management, and has worked with OSR command on public speaking and/or mock press conferences.	<ul style="list-style-type: none"> • IOSC Element 15
Procedures are in place and responsibility has been assigned for liaison function with other business units, authorities or government parties during a spill response.	The Crisis Management team has list of key liaison contacts.	<p>The Crisis Management team has a comprehensive list of liaison contacts and has record of communications with key contacts.</p> <p>Protocols are in place for internal communications, joint information sharing, information centers, authorized release of communications, and special web sites.</p> <p>Forms are included to request expertise, equipment, and materials.</p> <p>Receiving and sending spill response assistance has been addressed.</p>	<ul style="list-style-type: none"> • IOSC Sub-element 10.1
Standards are defined for minimum requirements of response centers. A Country-wide or Business-line response or emergency center has been established.	A response center with computer and communications links and library/references is in place. Ties have been established with corresponding government response center(s).	A response center is in place with computer and communications links, library/references, briefing and PR break out rooms, and accommodations. Tested linkages have been established with corresponding government response center(s).	<ul style="list-style-type: none"> • IOSC Sub-element 23.3.3 • IMO/MEPC, 2011



INDUSTRY – COUNTRY OR BUSINESS LINE			
Level A	Level B	Level C	Toolbox
D.HEALTH, SAFETY & SECURITY			
Health and safety policies and corporate standards are in place that meet or exceed government requirements for protecting both the public and responders from the effects of spills.	Health and safety corporate standards for spill responders are in place, meet or exceed government requirements, and are actively enforced through on-site checks and in planning requirements. On-scene controls are in place to address safety of volunteers for response.	Health and safety corporate standards for spill responders meet or exceed best international practices. Standards include requirements for hazard assessment, training, and on-site monitoring. Specific requirements for safety training of volunteers are defined.	<ul style="list-style-type: none"> • IOSC Sub-element 13.2 • API, 2013a • ARPEL, 1998a • ASTM, 2001a • IMO/FAO, 2003 • IPIECA, 2002 • IPIECA/OGP, 2012b • POSOW, 2013c • REMPEC, 2012
A company authority is designated to address and monitor site safety during response.	A designated company authority has procedures in place and enforcement capacity to assess and define safety requirements for response personnel according to assignments.	A designated company authority has trained competent personnel knowledgeable in procedures and with enforcement capacity to assess and define safety requirements for response personnel according to assignments.	<ul style="list-style-type: none"> • IOSC Sub-element 13.2 • ExxonMobil, 2008 • IPIECA, 2002
A company authority is designated to address and provide or augment site security during response.	An assigned company authority has procedures in place and enforcement capacity enabling it to assess and define security restrictions for a response area including air, water and land access restrictions.	There is an assigned company authority with a proven record of designating, and enforcing, security restrictions for a response area, including air, water, or land access. Security concerns which may pose a potential conflict with spill response priorities (e.g., bomb threats, terrorism, etc.) are identified in the plan and procedures are identified to clearly resolve conflicts.	<ul style="list-style-type: none"> • IOSC Element 14



INDUSTRY – COUNTRY OR BUSINESS LINE			
Level A	Level B	Level C	Toolbox
E. OPERATIONAL RESPONSE			
Country or Business Line establishes policies and procedures to minimize spill volumes through pre-planning for source control: transfers, emergency lightering, etc.	Country or Business Line establishes policies and procedures to minimize spill volumes through situational stabilization (e.g., rescue tugs, places of refuge) and source control: transfers, emergency lightering, etc.	Country or Business Line has a clearly defined spill prevention program with procedures that meet international standards and practices to minimize the frequency of spills, spill volumes, and spill spreading.	<ul style="list-style-type: none"> • IOSC Element 5, Sub-elements 5.1 and 5.2 • ARPEL, 1997b, 1998a • IMO, 2010c, 2013
Minimum response equipment planning levels are defined for Tier 1 risks (most likely routine spills).	Equipment levels and response times for Tiers 2 and 3, as appropriate, are generally defined for distinct potential spill source operations (terminals, pipelines, wells, etc.).	Guidelines for appropriate equipment and manpower levels are defined for Tiers 1 through 3, as appropriate, and require a Best Available Technology assessment on a recurrent basis. Mobilization of operations is considered.	<ul style="list-style-type: none"> • IOSC Sub-element 6.2 and Element 17 • ADEC, 2006 • ExxonMobil, 2008 • IPIECA, 2007 • SLRoss, 2013
A list of OSR equipment locations and general amounts and types is available.	A detailed listing or database of locations, amounts, and types of OSR equipment is maintained and updated on a scheduled basis.	A comprehensive database of locations, amounts, and types of OSR equipment is maintained with consistent information on all OSR resources (industry and government). Equipment inspections and evaluations are performed on a scheduled basis in relation to Best Available Technology criteria and the database updated accordingly. Mechanical recovery, treating agent and dispersion, and in-situ burning are considered.	<ul style="list-style-type: none"> • IOSC Sub-element 23.2 • IMO, 2005b
Equipment locations are identified, and secured; locations allow for quick access and deployment.	Equipment locations are distributed to allow quick response to key spill risk locations.	Equipment locations are identified, secured, and distributed to allow response within defined mobilization and transit times to key spill risk locations from possible staging areas. Pre-deployed equipment or permanently installed tertiary containment is in place.	<ul style="list-style-type: none"> • IOSC Sub-element 23.2



INDUSTRY – COUNTRY OR BUSINESS LINE			
Level A	Level B	Level C	Toolbox
Operational use of countermeasures has been verified in an annual exercise.	Countermeasures including containment, skimming, protection, and other options as applicable (e.g., dispersants, burning) have been verified and reviewed in exercises and drills.	All major countermeasures are tested twice annually. Upgraded or new response options are identified and considered in response enhancement. Applicable response options can be implemented within applicable windows of opportunity, including mechanical, treating agents, in-situ burning, and shoreline treatment.	<ul style="list-style-type: none"> • IOOSC Sub-element 26.3 • IMO, 2010c • IMO/IPIECA, 1996 • ITOPIF, 1997
A Waste Management Plan is outlined.	Procedures are defined to minimize potential waste streams, temporarily handle oily waste, and ultimately reuse or dispose of waste materials.	Procedures are defined and adopted to minimize potential waste streams, temporarily handle waste, and ultimately reuse or dispose of waste materials including oily debris. Intermediate and long-term storage options and associated criteria are defined. Trans-boundary waste movement policies and procedures are defined.	<ul style="list-style-type: none"> • IOOSC Element 18 • Arctic Council, 2008 • CEDRE, 2011 • ExxonMobil, 2008 • IPIECA, 2004a • OSRL, 2011g • REMPEC, 2011c
Wildlife recovery contacts are included.	Agreements or contracts with wildlife recovery and rehabilitation contractors are in place. Policies and procedures are in place to mobilize and establish wildlife response facilities for spills.	Policies and procedures are in place and have been tested to mobilize and establish wildlife response facilities for spills. International best practices have been adopted for wildlife response. Select personnel have been trained accordingly.	<ul style="list-style-type: none"> • IOOSC Element 19 • IPIECA, 2004b
Business-line or Country planning includes a policy for restoration and post-spill monitoring.	Corporate support for restoration and post-spill monitoring is indicated.	Follow-up studies of impacts and cleanup are anticipated using best international practices, and sources of funding and expertise are noted.	<ul style="list-style-type: none"> • IOOSC Sub-element 28.4 • IMO/UNEP, 2009



INDUSTRY – COUNTRY OR BUSINESS LINE			
Level A	Level B	Level C	Toolbox
F. TRACKING, ASSESSMENT & INFORMATION MANAGEMENT			
<p>Role or assignment is defined in OSR management to undertake spill tracking, including monitoring. Source of forecasting ability (weather, currents, river/stream flow, etc.) is defined.</p>	<p>Standardized procedures are in place to provide tracking and monitoring of a spill (on water, land, groundwater).</p>	<p>Trained personnel with expertise to undertake spill tracking, including monitoring, are assigned to roles in Company OSR support team. Tracking systems include private and government sources of best available technology for non-visual tracking identified and available (e.g., satellite; IR for night and low visibility conditions; tracking buoys; under dense foliage)</p>	<ul style="list-style-type: none"> • IOSC Element 20 • API, 2013c • CEDRE, 2004 • Fingas, 2001 • ITOPI, 2009 • Law et.al., 2011 • NOAA, 2002 • OSRL, 2011a
<p>A company response center maintains access to maps or charts for tracking spill movement and response operations.</p>	<p>A company response center has mapping links with operational sites and immediate access to computerized models for weather, current, river flow, and oil fate and trajectory forecasting.</p>	<p>A company response center has mapping links with operational sites and provides computerized models and expertise to analyze spill trajectories and weathering for all appropriate situations (e.g., spills on water, into rivers, in groundwater, originating in deep offshore, etc.).</p>	<ul style="list-style-type: none"> • IOSC Sub-element 23.3.3 • ARPEL, 1998b
<p>A company support team can provide oiling assessment, mapping, and cleanup technique advice.</p>	<p>A company support team provides oiling assessment, mapping, and cleanup technique teams. Personnel are trained, available 24/7, and have the tools needed to input advice for cleanup priorities and operations.</p>	<p>Company oiling assessment, mapping, and cleanup technique teams have the best available response options (e.g., digital maps, GIS, SCAT Data Coordinator, etc.) for advising on cleanup priorities and operations. Corporate Planning, Country Planning, or Business Line Planning includes procedures and tools for restoration and post-spill monitoring.</p>	<ul style="list-style-type: none"> • IOSC Element 21 • CEDRE, 2006 • Environment Canada, 2010 • MCA, 2007 • NOAA, 2000. • OSRL, 2011g • Owens and Sergy, 2000; Sergy and Owens, 2007 • POSOW, 2013; REMPEC, 2009 •



INDUSTRY – COUNTRY OR BUSINESS LINE			
Level A	Level B	Level C	Toolbox
G. LOGISTICS			
Key logistical support providers and capabilities are identified to support response from Company teams.	A company response team provides logistical support to operating regions. Logistical service providers and capabilities are identified for wide response. Terms and conditions for mobilizing, and costs, are established on a pre-spill basis.	Logistical support services are tested and reviewed periodically for all operations encompassed within the Country or Business-line plan.	<ul style="list-style-type: none"> • IOSC Sub-element 23.2 • Blackburn, 2005 • Cleanupoil.com, 2010
Company planning provides guidelines to local operations/facilities for logistical planning needs.	Tier 2 and 3 support services are identified, as appropriate, and key logistical sources are contracted on pre-spill basis.	Company planning provides standards to local operations/facilities for logistical planning. Tier 2 and 3 support services are incorporated across planning levels. Should key Tier 3 logistical sources be needed, these are contracted on pre-spill basis and participate in exercises. Sources for tiered response support are updated on annual basis in plan.	<ul style="list-style-type: none"> • IOSC Sub-element 8.1 • IPIECA, 2007
Response times for Company OSR Spill Management or Support Team deployment are identified and tested.	Team integration with local/facility/operations teams is tested.	Team integration with local/facility/operations teams is tested, evaluated, and improved.	<ul style="list-style-type: none"> • IOSC Elements 9 and 17
Assets and procedures for communications between field and Company OSR Spill Management or Support Team are in place.	Communications equipment is on hand and secondary or backup systems are identified.	Communications (voice, digital, common planning tools) are tested for integration with sites.	<ul style="list-style-type: none"> • IOSC Element 12 and Sub-element 23.2 • ExxonMobil, 2008
Customs and immigration procedures are defined to streamline transport and delivery of personnel and equipment between regions/areas.	Customs and immigration expediting procedures are in place to temporarily export or import Company OSR Spill Management or Support Team personnel, contracted experts and technical support, and Tier 2 or 3 equipment, as appropriate.	Periodic exercises are conducted to test and streamline procedures. Key liaison agencies (or personnel) are identified to help with trans-border movements. Agencies that must issue permits for specific OSR activities are listed, e.g., for hazardous material transport, dispersants, in-situ burning, land access, waste disposal, etc.	<ul style="list-style-type: none"> • IOSC Element 2 and Sub-element 23.4 • ARPEL, 2007a
Decontamination policies and responsibilities are defined.	Decontamination facilities are available for personnel and equipment.	National and international sources for additional PPE and supplies are pre-determined.	<ul style="list-style-type: none"> • IOSC Sub-element 18.2 • IPIECA, 2002



INDUSTRY – COUNTRY OR BUSINESS LINE			
Level A	Level B	Level C	Toolbox
H. FINANCIAL AND ADMINISTRATIVE CONSIDERATIONS			
An emergency fund is available to support augmentation of OSR actions as required by a spill.	An emergency fund is available to support increasing response actions as demanded by a spill. Company planning has established financial tracking systems for roles in spill emergency response. Company finance and administrative personnel have tools for resource ordering, purchasing, and cost tracking for emergencies.	Company finance/administrative personnel have practiced their support role by training at local/facility/operational levels in resource ordering, purchasing, and cost tracking and forecasting as well as compensating individuals and organizations for expenses.	<ul style="list-style-type: none"> • IOOSC Sub-element 24.2 • ARPEL, 1997b • IMO, 2009
Procedures are in place to receive claims.	Procedures are in place to receive, investigate, and resolve claims with Company OSR Spill Management or Support Team. Financial personnel have contact information for oil pollution insurers and funds, as appropriate.	Claims filing and tracking system implemented with Corporate-level support. Corporate Finance/Admin personnel have established procedure to work with local personnel in receipt and processing of claims. Coordinated procedures exist with insurers to expedite claim review and settlement process consistent with international compensation schemes (e.g., P&I Clubs and treaties).	<ul style="list-style-type: none"> • IOOSC Sub-element 24.4 • IMO, 2009 • IOPC, 2008 • IPIECA/ITOPF, 2007
Company policies are defined for legal support and related matters including sampling/collecting evidence, taking statements, and mechanisms for settling disputes and claims.	Legal investigations are considered including sampling/collecting evidence, taking statements, and mechanisms for settling disputes and claims. Illegal discharges are specified.	Personnel assigned to legal support are trained and versed in OSR operations and issues.	<ul style="list-style-type: none"> • IOOSC Sub-element 20.4 • IMO, 1998 • IMO/UNEP, 2009



INDUSTRY – COUNTRY OR BUSINESS LINE			
Level A	Level B	Level C	Toolbox
I. TRAINING & EXERCISES			
A company policy for minimum initial and refresher training requirements, including Health & Safety, is defined for spill management and responders.	Training meets international standards. Requirements for training records are defined and records are subject to verification.	Training exceeds international standards. Company audits or reviews and training records are routinely checked, verified, and subject to feedback to local/facility/operations levels.	<ul style="list-style-type: none"> • IOSC Element 27 • ASTM, 2001a, 2001b • IFC, 2000a, 2000b • IPIECA, 2002 • NIEHS, 2010 • OSHA, 2001
Regular training courses are provided on OSCP's to assigned OSR management and lead response operational personnel.	Designated personnel for lead and participating Company OSR Spill Management or Support Team members have received detailed training on OSCP's, roles and responsibilities, incident management system (e.g., ICS), and procedures for implementing duties during a response.	Cross-training with local/facility/operations teams includes interface with intergovernmental and industry initiatives.	<ul style="list-style-type: none"> • IOSC Element 27 • ARPEL, 1997
In-house spill training courses are provided.	Contracted specialists provide spill training courses.	Contracted internationally-recognized or accredited spill training with course outlines are specified.	<ul style="list-style-type: none"> • IOSC Sub-element 27.4
Training records for designated personnel document compliance with required training.	Training records include training materials; training is provided by qualified personnel.	Training aids are available; training is provided by certified and/or qualified experts.	<ul style="list-style-type: none"> • IOSC Sub-element 27.5
Notification and Alerting Exercises are conducted frequently (2 to 4 times per year) and are required of plan-holders	Records document that notification and alerting exercises are conducted frequently (2 to 4 times per year) and are required of plan-holders. Notification exercises include Off-hours; Internal-External alerting; and Multi-lateral, where appropriate.	Notification exercises include Cross-operational/Facilities, where appropriate. Communications systems (land, air, sea, and cross-agency/industry) are in place and tested.	<ul style="list-style-type: none"> • IOSC Sub-element 26.3 • IMO/IPIECA, 1996b
Deployment exercises are required and held including mobilized Tier 2 response assets.	Deployment exercises are held jointly to include Tier 2 and 3 response depots and Industry, as appropriate.	Multi-location deployment exercises (e.g., Tier 2 or 3, as appropriate) are held jointly to test and coordinate Corporate/Company and joint Industry/Government capabilities.	<ul style="list-style-type: none"> • IOSC Sub-element 26.4 • IMO/IPIECA, 1996b • USCG, 2011



INDUSTRY – COUNTRY OR BUSINESS LINE			
Level A	Level B	Level C	Toolbox
<p>Tabletop (Response Management) Exercises are required and held at prescribed frequency (1-2 times per year).</p>	<p>Tabletop (Response Management) Exercises include external parties. Exercises plans are well developed. A standard approach for exercise evaluation is in place that allows ready implementation of changes.</p>	<p>Tabletop (Response Management) Exercises include multi-national authorities (as appropriate). Tabletop exercises are based on risk assessments and address distinct situations and environmental factors. Exercises are audited and evaluated by professional or experienced third-party OSR experts. Changes are implemented as needed.</p>	<ul style="list-style-type: none"> • IOSC Sub-element 26.3 • Aurand et al., 2000 • IMO/IPIECA, 1996b • IPIECA, 2000b • USCG, 2011
<p>Courses to be attended by Company OSR Spill Management or Support Team personnel are listed.</p>	<p>Courses are attended by Company OSR Spill Management or Support Team personnel including for example ICS, SCAT, basic spill response, dispersant application, in-situ burning, and waste management.</p>	<p>Specialized courses are organized for Company OSR Spill Management and Support Team to provide in-house expertise to local/facility/operational teams. Company specialists (or contracted personnel) have documented ongoing and refresher training or equivalent experience.</p>	<ul style="list-style-type: none"> • IOSC Sub-element 26.3 • IMO/IPIECA, 1996b



INDUSTRY – COUNTRY OR BUSINESS LINE			
Level A	Level B	Level C	Toolbox
J. SUSTAINABILITY & IMPROVEMENT			
Exercise critiques (plan and execution) recommend actions for OSR improvements. An exercise oversight role is specified as appropriate for integrated exercises at local/facility/operational levels.	Internal reviews are conducted of past spills and exercises. Recommendations from exercise evaluations (equipment deployment, tabletops) are implemented and tracked. Exercise participation and oversight role are specified as appropriate for integrated exercises at local/facility/operational levels.	External review supplements internal critique for both exercises and actual spills. Steps taken for improvements are documented. Government representatives, Mutual Aid, and Tier 3 support, as appropriate, form part of evaluation and feedback.	<ul style="list-style-type: none"> • IOSC Element 28 • CDFG, 2011 • IMO/IPIECA, 1996b • IPIECA, 2000b • ISO 14000/140001 • WDOE, 2014
A Company Team or Work Group is assigned to review and recommend OSR enhancements at local/regional/national levels.	A Company Team or Work Group meets at least annually to review OSR plans and readiness and make recommendations that have a record of actions and implementation.	Internal-External / Experts work with Company Team or Work Group to undertake audits and provide recommendations. Responsibilities are assigned to implement changes. Changes are reviewed and approved.	<ul style="list-style-type: none"> • IOSC Sub-element 28.3 • ARPEL Guidelines for Conducting Environmental Audits for Onshore Petroleum Operations, undated • IMO, 2010c
Post-Spill Evaluation and Revisions to Plan are documented.	Post-Spill Evaluation and Revisions to Plan are documented. Plan and equipment revisions and improvements are implemented in a timely manner.	Plan and equipment improvements are made and included in planning and conducting subsequent training. Personnel and OSR equipment needs are also addressed. Changes are adopted for oil-related transportation, exploration, and production systems as determined by review processes of preventative measures and safeguards. A business continuation plan is in place that can be implemented.	<ul style="list-style-type: none"> • IOSC Sub-element 28.4 • CDFG, 2011 • IMO, 2010c • IMO/IPIECA, 1996b • WDOE, 2014
Research and development is promoted to improve countermeasures such as mechanical recovery, treating agent application, shoreline treatment, in-situ burning and remote sensing.	Research and development programs are funded to improve countermeasures such as mechanical recovery, treating agent application, shoreline treatment, in-situ burning and remote sensing.	Research and development programs are carried out by various agencies to improve countermeasures such as mechanical recovery, treating agent application, shoreline treatment, in-situ burning and remote sensing. Environmental data are reviewed, updated and compiled for resources at risk.	<ul style="list-style-type: none"> • IOSC Sub-element 6.2 • ADEC, 2006



10. INDUSTRY – CORPORATE

10.1. Description of Scope

Corporate industry plans and OSR readiness address a broad area of likely operations. Corporate OSR programs set the tone for OSR capabilities and expectations at facility to operations levels.

Examples:

Company OSR Program
OSR portion of Corporate HSE Programs
OSR programs defined in ISO and adopted international practices

A key feature of this scope is how a company or corporation sets the model for more detailed readiness programs. Likewise, this program integrates OSR readiness across business lines and possible country lines. The policies, expectations, and models for response readiness and emergency management are focal aspects of Corporate OSR programs.

10.2. Concept of Levels

The assessment process is conducted specifically by using RETOS, which reflects the detailed assessment criteria listed in Table 13 (highlighted in yellow are the critical criteria, only applicable to Level A); however, a separate spreadsheet is provided in RETOS™ for each LEVEL.

The use of three levels for the assessment for this scope does not reflect regulatory policies, planning levels, or risk. The level of commitment for time and effort to ensure best practices in OSR plans and readiness will be very different for small companies with limited spills and environmental risks relative to large or developed corporations with higher spill risks and/or environmental or socioeconomic exposure. As stated earlier (Chapter 2.5), the user should select a target level (Level A as a default) against which to assess the OSR capability. **For each Category/Element, the criteria established for Level B add to those criteria for Level A, and the criteria established for Level C add to those for Levels A and B.**

ASSESSMENT LEVELS do not correspond to Tiers, in the OSR planning sense. Rather, an

Assessment Level indicates the maturity of that program. A Corporate OSR Program may be large and complex, encompassing multiple operations worldwide, and hence would likely need to address a Tier 3 capability. If that Tier 3 capability is just being developed, the Corporate Program may be at a Level A. Alternatively, a Corporate Program for a small operation may only have need for Tier 1 and Tier 2 capabilities. Such a program may be at a Level C, however, if it is mature and well developed.

10.3. Notes on OSR Categories Applicable to Corporate OSR Programs

Policies, general procedures, and measures taken to meet adopted industry practices are defined in Corporate Programs. Aspects of the corporate program typically define planning and readiness requirements for secondary OSR programs (Operations, Facilities). Major focus is on establishing readiness expectations and direction for Tiers 2 and 3 as well as mutual-aid and international assistance. Response preparedness typically entails policy and management perspectives and integrates multiple regional or operational capabilities into a larger comprehensive response program.



Table 13 - Criteria Matrix and Toolbox References for OSR Assessment - SCOPE: Industry– Corporate

INDUSTRY – CORPORATE			
Level A	Level B	Level C	Toolbox
A. LEGISLATION, REGULATIONS & AGREEMENTS			
A corporate policy stipulates requirements for OSR and assigns responsibilities.	Corporate policy and procedures stipulate requirements for OSR and assigns responsibilities. OSR program encompasses all oil handling, storage, and transport phases. Lead OSR responsibility assigned at Corporate or Operational levels.	Roles of other company or industry support are identified. The relation to government planning requirements is defined.	<ul style="list-style-type: none"> • IOSC 2008 Guideline - Element 1 and Appendix A • IFC, 2000a, 2000b • IMO, 1995 • USCG/EPA/DOT/MMS/OSHA, 1996
Corporate plan references applicable international standards and guidelines.	Corporate plan references defined timeframes and specific requirements for operational and/or facility plans.	Corporate OSR organization defined for business line, regional, country, and operating areas, as applicable.	<ul style="list-style-type: none"> • IOSC Element 2 • IFC, 2000a and 2000b • UNEP, 2005
Company has, or is actively engaged in seeking, Mutual Aid policies and agreements for OSR.	Company has mutual aid, regional and possibly international agreements in place and capacity as regards personnel, equipment and experience relating to OSR. The company is actively engaged in OSR planning efforts in developing countries, as appropriate.	It is actively engaged in developing enhanced response through joint exercises, training, and workshops. Expertise and information are exchanged on a regular basis. Linkage to other national and corporate plans (domestic and foreign) is specified as appropriate.	<ul style="list-style-type: none"> • IOSC Sub-element 2.3 • ARPEL, 1999



INDUSTRY – CORPORATE			
Level A	Level B	Level C	Toolbox
B. OIL SPILL CONTINGENCY PLANNING			
<p>A corporate OSR plan has been developed and approved.</p> <p>The plan identifies a Designated Authority for OSR.</p>	<p>An approved Corporate OSR plan has been developed through partnership with collaborating agencies/departments with associated responsibilities. The plan identifies organization and Designated Authorities for OSR (and/or defines an authority for specific spill cases; e.g., spill to land vs. spill to marine waters).</p>	<p>An approved Corporate OSR plan has a history of development, testing, and revision with distribution to all responsible participating agencies/departments. A Designated Authority and roles/responsibilities of participating agencies are defined. The relation between private industry and government is also clearly delineated.</p>	<ul style="list-style-type: none"> • IOSC Element 9 and Appendix A • ARPEL, 1997b • IPIECA, 2008 • IMO, 1995
<p>An approved corporate plan is readily available.</p>	<p>An approved corporate plan has been distributed and tested through exercises and/or response.</p>	<p>An approved corporate plan is well established, has been tested through exercises and/or response, and has a history of review and development.</p>	<ul style="list-style-type: none"> • IPIECA, 2008 • IMO, 1995
<p>Applicable and related government and other corporate plans (multi-lateral, area, and local) are identified.</p>	<p>The relationship with other corporate and operations/business line plans as well as government plans (multi-lateral, area, and local) are identified and described.</p>	<p>Signed written agreements for mutual aid and to cascade resources are in place. Equipment inventories which could be applied are indicated as applicable. Contents and format for facility/shipboard/area or business line plans are specified.</p>	<ul style="list-style-type: none"> • IOSC Sub-element 9.1
<p>Expertise (personnel) for OSR-related issues is listed.</p>	<p>Corporate experts are listed who have knowledge of the OSR plan and scope and can support a response.</p>	<p>Contracts or agreements are in place with OSR specialists who have participated in planning and exercises and have actual spill experience.</p>	<ul style="list-style-type: none"> • IOSC Element 8 • Cleanupoil.com, 2010
<p>The plan has been reviewed or revised in the past year.</p> <p>Key contacts are updated as these change.</p>	<p>A revision log and dated pages document reviews or revisions within the past year.</p>	<p>A revision log and dated pages document annual reviews/revisions as per update procedures, including plan implementation following actual spills and “near misses”. Spill risks are re-assessed regularly. Post-incident review is included.</p>	<ul style="list-style-type: none"> • IOSC Element 9, Sub-element 28.4



INDUSTRY – CORPORATE			
Level A	Level B	Level C	Toolbox
A corporate plan designates planning levels based on spill risks.	A risk-based approach is used to define priority areas of potential spills based on operations, frequencies, volumes, and environmental factors. Corporate or international statistical data are used to scope or define planning tiers or concepts, as appropriate.	The risk-based approach includes mapping and consideration for sensitive areas (ecological, economic, historical, etc.).	<ul style="list-style-type: none"> • IOSC Sub-element 4.1 • ARPEL, 1998a • IPIECA, 2000a • IMO, 2010c
Priority planning is focused on geographic areas or operations of higher spill risk and environmental sensitivity.	A corporate policy establishes requirements to define at-risk areas based on trajectories for worst-case spills. Relevant properties of oils of concern are considered when identifying sensitive natural resources. Guidelines stipulate the use of trajectories and sensitivity mapping at regional to local levels.	Stochastic and worst-case trajectories are required for response planning. Identification of sensitive areas requires stakeholder participation. Organizations identified for supplying specific data (oil properties, weather, environmental, etc.) are listed.	<ul style="list-style-type: none"> • IOSC Sub-element 4.3 • ARPEL, 1997b • ARPEL, 1998b • Aurand et al., 2000 • NOAA, 2002 • Taylor et al., 2009
A corporate plan specifies requirements for defining sensitive areas and priorities.	A corporate plan specifies requirements for identifying and defining sensitive areas and response priorities. A policy for use, reference or development of sensitivity maps adheres to sensitivity indexing practices.	A corporate plan specifies requirement for sensitive areas mapping and identification/protection of resources at risk. Corporate standards are in place for mapping and GIS databases for sensitive areas including, for example, endangered species, wetlands, recreational facilities, mariculture, and archeological sites.	<ul style="list-style-type: none"> • IOSC Element 3 • ARPEL, 1997a • IPIECA Report Series 1990-2008 • IPIECA/IMO/OGP, 2012 • IMO/IPIECA, 1996



INDUSTRY – CORPORATE			
Level A	Level B	Level C	Toolbox
Policies are in place to reduce the risk and/or consequences of a spill.	Corporate standards provide clear guidance for spill prevention and are enforced to reduce accidents and to minimize oil loss if an incident occurs.	Trends, sources, causes of spills (e.g., vessel traffic, transfer, production, exploration, collision, grounding) are documented and together with inspection programs, audits, and checklists provide additional foundation for required prevention measures. Requirements for spill prevention are detailed and exceed stipulated regulatory prevention requirements (as per fire, electrical, worker health and safety, and building codes).	<ul style="list-style-type: none"> IOSC Element 5
A corporate plan provides guidelines on response strategies, equipment and personnel needs relative to applicable operating conditions and oil types.	A corporate plan includes, or specifies, requirements to develop strategies and tactical details, including equipment and personnel needs, for high spill risk areas at area or local planning levels.	A corporate plan includes or specifies requirement to develop for area or local plans, detailed, prioritized tactics (graphics, maps, equipment and personnel) for priority areas within zones of high spill risk appropriate for operating conditions.	<ul style="list-style-type: none"> IOSC Sub-element 4.2 and Element 9 API/NOS/USCG/EPA, 2001 ARPEL, 1997a IPIECA/OGP, 2013d NOAA, 2010a, 2010b NOAA/API, 1994 OSRL, 2011b, 2013a, 2013b
A corporate plan provides policy on use of treating agents for spill response (dispersants, cleaning agents, bioremediation agents, herders, etc.).	Procedures for the use of treating agents, such as dispersants, are in place to facilitate decision-making and approval within a reasonable "window of opportunity" (less than 12 hours).	Company procedures for Net Environmental Benefits Analyses (NEBA) are in place for dispersants and other treating agents with clearly defined applicability and limitations. The company actively engages in assessment of alternative countermeasures in conjunction with governments.	<ul style="list-style-type: none"> IOSC Elements 7 and 17 API, 2013b ARPEL, 2007d CEDRE, 2005 IMO/UNEP, 1995 IPIECA, 2000b IPIECA/OGP, 2012a ITOPF, 2005 Kirby et.al, 1996 NOAA, 2010a, 2010b OSRL, 2011c, 2011d, 2011e, 2011f, 2011i REMPEC, 2011a, 2011b Walker et al., 2003



INDUSTRY – CORPORATE			
Level A	Level B	Level C	Toolbox
A policy for the application of In-situ burning is clearly defined.	Procedures are in place to evaluate and approve in-situ burning within a reasonable "window-of-opportunity" (less than 24 hr). The required elements of a published burn plan address all relevant factors.	Company procedures for NEBA are in place for in-situ burning with clearly defined applicability, limitations, and approval process (may include pre-approval for specific conditions) as well as monitoring role. The company actively engages in the assessment of In-situ burning in conjunction with governments	<ul style="list-style-type: none"> • IOSC Elements 7 and 17 • ARPEL, 2007b, 2007c • IPIECA, 2000b • NOAA, 2010a, 2010b • OSRL, 2011i • Walker et al., 2003
Shoreline protection and treatment policies are outlined.	Shoreline protection and treatment are considered including planning factors for carrying out assessment and remediation (SCAT).	Shoreline protection and treatment policies are delineated that consider SCAT as well as factors such as workforce, spill responder safety training, debris, oil removal, and cleanup standards (endpoints).	<ul style="list-style-type: none"> • CEDRE, 2009 • Environment Canada, 2010 • IMO/UNEP, 2009 • Owens et al., 1998 • REMPEC, 2010



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Level A	Level B	Level C	Toolbox
C. RESPONSE COORDINATION			
<p>Clear procedures outline what types of information are to be reported on a response, and who should receive initial spill notification and any follow-up reports.</p> <p>A spill reporting form is included.</p> <p>A contact list notes key personnel.</p>	<p>Initial spill notification checklists/forms are readily available. Callout procedures include flow charts for internal and external parties with their contact data.</p>	<p>Redundant callout procedures are based on common checklists and/or forms. Internal, external callout flow charts are in place. A directory indicates internal, external contacts (primary and alternate) who are immediately available.</p>	<ul style="list-style-type: none"> • IOSC Element 11 • IMO, 1995, 2010b • ISO, 2000 • UNEP, 1996a, 1996b, 2000 • USCG/EPA/DOT/MMS/OSHA, 1996
<p>A spill management structure has been established for all spill tiers, as appropriate.</p>	<p>A spill management organization is designed to allow easy expansion and/or contraction of personnel and equipment per tiers, as appropriate, plus smooth integration with other OSR organizations and plan holders.</p>	<p>A spill management organization is flexible, robust, and accommodates response needs for all tiers, as appropriate. A common Incident Management System is defined for all related OSR plan-holders and responding participants. The organization is based on sound management principles (e.g., ICS) and addresses regional responsibilities.</p>	<ul style="list-style-type: none"> • IOSC Element 10, Sub-element 10.1 • IPIECA, 2000a • OSRL, 2012 • USCG, 2006
<p>Roles and responsibilities are defined for each functional aspect identified in the OSR management organization.</p>	<p>Responsibility checklists are available and defined for each role in the OSR management team.</p>	<p>OSR management personnel have checklists for their personal use during response. Checklists are available in plan, at a Command Post, or maintained in individual OSR response kits.</p>	<ul style="list-style-type: none"> • IOSC Element 10, Sub-element 10.2 • OSRL, 2012 • USCG, 2006
<p>The role of a Corporate Team in Incident Command and in Crisis Management is defined.</p>	<p>The responsibilities of personnel assigned to a Unified or Joint Command are defined; Records of Joint or Unified Command meetings and interface with Crisis Management indicate the decision-making process.</p>	<p>Records show regular Joint or Unified Command meetings, exercises, and/or response.</p>	<ul style="list-style-type: none"> • IOSC Element 10, Sub-element 10.2
<p>Positions (and/or Personnel) assigned to OSR management roles are identified.</p>	<p>Personnel assigned to OSR management roles as part of Corporate or Regional Response Support teams are listed.</p>	<p>A corporate OSR support team and Crisis Management Team roles are assigned to specific individuals (by name or position) with backups identified; Trained OSR support personnel are available to manage 24-hr extended worst-case spill (shifts). Specialist or contractor assistance is considered to augment the response capability.</p>	<ul style="list-style-type: none"> • IOSC Element 10, Sub-element 10.3 • IMO/MEPC, 2011



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Level A	Level B	Level C	Toolbox
Procedures are in place and responsibility has been assigned for communications with media during a spill response.	A template press release text is available for initial distribution. The person assigned to media communications has established contact with local media outlets in advance.	The person assigned to media communications is trained in media management and has worked with OSR Command on public speaking and/or mock press conferences.	<ul style="list-style-type: none"> IOSC Element 15
Procedures are in place and responsibility has been assigned for liaison function with other business units, authorities or government parties during a spill response.	The Crisis Management Team has a list of key liaison contacts.	The Crisis Management Team has a comprehensive list of liaison contacts and maintains a record of communications with key contacts. Protocols are in place for internal communications, joint information sharing, information centers, authorized release of communications, and special web sites. Forms are included to request expertise, equipment, and materials. Receiving and sending spill response assistance has been addressed.	
Corporate standards are defined for minimum technical and communication requirements of response centers. A corporate response or emergency center has been established.	The response center has computer and communications links and library/references.	The response center has briefing and PR break out rooms, and accommodations. An alternate site is indicated.	<ul style="list-style-type: none"> IOSC Sub-element 23.3.3 IMO/MEPC, 2011



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Level A	Level B	Level C	Toolbox
D. HEALTH, SAFETY & SECURITY			
Corporate health and safety policies and standards are in place for protecting the public and responders from spill hazards.	Corporate health and safety policies and standards for spill responders are in place and are actively enforced through on-site checks and in planning requirements. On-scene controls address the safety of volunteers during response.	Corporate health and safety standards for spill responders meet or exceed best international practices. Standards include requirements for hazard assessment, training, and on-site safety monitoring. Specific requirements for safety training of volunteers are defined.	<ul style="list-style-type: none"> • IOSC Sub-element 13.2 • API, 2013a • ARPEL, 1998a • ASTM, 2001a • IMO/FAO, 2003 • IPIECA, 2002 • IPIECA/OGP, 2012b • POSOW, 2013c • REMPEC, 2012
A designated corporate authority addresses and monitors site safety during response.	A designated corporate authority has procedures in place and enforcement capacity to assess and define safety requirements for response personnel according to assignments.	A designated corporate authority has trained competent personnel knowledgeable in procedures and with enforcement capacity to assess and define safety requirements for response personnel according to their assignments.	<ul style="list-style-type: none"> • IOSC Sub-element 13.2 • ExxonMobil, 2008 • IPIECA, 2002
A designated corporate authority addresses and either provides or augments site security during response, as required.	A designated corporate authority has procedures to assess and define access and security restrictions for a response area including air, water and land.	The designated corporate authority has a proven record of designating, and enforcing, access and security restrictions for a response area. This includes air, water and land. Security concerns which may pose a potential conflict with spill response priorities (e.g., vandalism, bomb threats, terrorism, etc.) are identified in the contingency plan along with the procedures to resolve any such issues.	<ul style="list-style-type: none"> • IOSC Element 14



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E. OPERATIONAL RESPONSE			
A corporate policy establishes procedures to minimize spill volumes through, for example, source control: transfers, emergency lightering, etc.	A corporate policy establishes procedures to minimize spill volumes through situational stabilization (e.g., rescue tugs, places of refuge) and emergency procedures such as source control: transfers, emergency lightering, etc.	Expedited, pre-approved or assigned resources are in place to minimize spill volumes through situational stabilization (rescue tugs, places of refuge) and source control: transfers, emergency lightering, etc.	<ul style="list-style-type: none"> • IOSC Element 5, Sub-elements 5.1 and 5.2 • ARPEL, 1997b, 1998a • IMO, 2010c, 2013
Minimum equipment planning levels are defined for Tier 1 risks (most likely routine spills).	Equipment levels and response times for Tiers 2 and 3 (as appropriate) are generally defined for distinct potential spill source operations (terminals, pipelines, wells, etc.).	Guidelines for appropriate equipment and personnel levels are defined for Tiers 1 through 3, as appropriate, and require a Best Available Technology assessment on a recurrent basis. Mobilization of operations is considered.	<ul style="list-style-type: none"> • IOSC Sub-element 6.2 and Element 17 • ADEC, 2006 • ExxonMobil, 2008 • IPIECA, 2007 • SLRoss, 2013
A list of locations and general amounts and types of Tier 3 OSR equipment is available, if appropriate.	A detailed listing or database of locations, amounts, and types of OSR Tier 3 equipment is maintained and updated on a scheduled basis, as appropriate.	A comprehensive database of locations, amounts, and types of Tier 3 OSR equipment, as appropriate, is maintained with consistent information on all OSR resources (industry and government). Equipment inspections and evaluations are scheduled and performed in relation to Best Available Technology criteria, and the database is updated accordingly. Mechanical recovery, treating agents including dispersants, and in-situ burning are considered.	<ul style="list-style-type: none"> • IOSC Sub-element 23.2 • IMO, 2005b
Equipment locations are identified, and secured; locations allow for quick access and deployment.	Equipment locations are distributed to allow quick response to key spill risk locations.	Equipment locations are identified, secured, and distributed to allow response within defined mobilization and transit times to key spill risk locations from possible staging areas. Pre-deployed equipment or permanently installed tertiary containment is in place.	<ul style="list-style-type: none"> • IOSC Sub-element 23.2



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The operational use of countermeasures is verified in an annual drill.	Countermeasures including containment, skimming, dispersant application are verified and reviewed in exercises and drills.	All major countermeasures are tested twice annually. Upgraded or new response options are identified and considered. Applicable response options can be implemented within applicable windows of opportunity, including mechanical, treating agents, in-situ burning, and shoreline treatment.	<ul style="list-style-type: none"> • IOSC Sub-element 26.3 • IMO, 2010c • IMO/IPIECA, 1996 • ITOPF, 1997
Corporate policy for development of OSR Waste Management Plans is defined and requires that plans conform to local regulatory requirements.	Corporate policy and procedures are defined to minimize potential waste streams, temporarily handle waste, and ultimately reuse or dispose of oily waste materials in conformance with applicable regulations.	Waste management procedures meet international best practices for OSR. Intermediate and long-term storage options and associated criteria are defined. Trans-boundary waste movement policies and procedures are defined.	<ul style="list-style-type: none"> • IOSC Element 18 • Arctic Council, 2008 • CEDRE, 2011 • ExxonMobil, 2008 • IPIECA, 2004a • OSRL, 2011g • REMPEC, 2011c
Sources for wildlife recovery and rehabilitation are identified and contacts are included.	Agreements or contracts with wildlife hazing, recovery, and rehabilitation contractors are in place. Policies and procedures are in place to mobilize and establish wildlife response facilities for spills.	Policies and procedures have been written and tested to mobilize and establish wildlife response facilities for spills. International best practices have been adopted for wildlife response. Select personnel have been trained to undertake and manage oiled wildlife response.	<ul style="list-style-type: none"> • IOSC Element 19 • IPIECA, 2004b
The corporate plan includes a policy for restoration and post-spill monitoring.	Corporate support for restoration and post-spill monitoring is indicated.	Corporate planning identifies policy and procedures for restoration and post-spill monitoring. Restoration and post-spill monitoring has corporate support. Follow-up studies of impacts and cleanup are anticipated using best international practices, and sources of funding and expertise are noted.	<ul style="list-style-type: none"> • IOSC Sub-element 28.4 • IMO/UNEP, 2009



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Level A	Level B	Level C	Toolbox
F. TRACKING, ASSESSMENT & INFORMATION MANAGEMENT			
The corporate plan includes procedures and tools for spill tracking, including monitoring.	Role or assignment is defined in a corporate OSR support team to undertake spill tracking, including monitoring. Standardized procedures provide tracking and monitoring of a spill (on water, land, groundwater).	Trained personnel with expertise to undertake spill tracking, including monitoring, are assigned to roles in corporate OSR support team. Tracking systems include Best Available Technology for non-visual tracking (e.g., satellite; IR for night and low visibility conditions; tracking buoys; detecting oil under dense foliage) as available from government and other sources.	<ul style="list-style-type: none"> • IOSC Element 20 • API, 2013c • CEDRE, 2004 • Fingas, 2001 • ITOPF, 2009 • Law et.al., 2011 • NOAA, 2002 • OSRL, 2011a
A corporate response center maintains access to maps or charts for tracking spill movement and response operations.	A corporate response center has mapping links with operational sites and immediate access to computerized models for weather, current, river flow, and oil fate and trajectory forecasting.	A corporate response center has mapping links with operational sites and provides computerized models and expertise to analyze spill trajectories and weathering for all appropriate situations (e.g., spills on water, into rivers, in groundwater, originating in deep offshore, etc.).	<ul style="list-style-type: none"> • IOSC Sub-element 23.3.3 • ARPEL, 1998b
A corporate support team can provide oiling assessment, mapping, and cleanup technique advice.	A corporate support team provides oiling assessment, mapping, and cleanup technique teams. Personnel are trained, available 24/7, and have the tools needed to input advice for cleanup priorities and operations.	Corporate oiling assessment, mapping, and cleanup technique teams have the Best Available Technologies (digital maps, GIS, SCAT Data Coordinator, etc.) for advising on cleanup priorities and operations.	<ul style="list-style-type: none"> • IOSC Element 21 • CEDRE, 2006 • Environment Canada, 2010 • MCA, 2007 • NOAA, 2000. • OSRL, 2011g • Owens and Sergy, 2000; Sergy and Owens, 2007 • POSOW, 2013; REMPEC, 2009



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Level A	Level B	Level C	Toolbox
G. LOGISTICS			
Key logistical support providers and capabilities are identified to support response from corporate teams.	A corporate response team provides logistical support to operating regions. Logistical service providers and capabilities are identified for wide response. Terms and conditions for mobilizing, and costs, are established on a pre-spill basis.	Capabilities of key logistical providers are tested and reviewed periodically.	<ul style="list-style-type: none"> • IOSC Sub-element 23.3
Corporate planning provides guidelines to areas/regions/facilities for logistical planning needs.	Tier 2 and 3 support services are identified, as appropriate, and key logistical service providers are contracted on pre-spill basis.	Corporate planning provides standards to areas/regions/facilities for logistical planning. Tier 2 and 3 support services are incorporated across planning levels. Key logistical service providers participate in exercises. Sources for logistical support and services are updated on annual basis in plan.	<ul style="list-style-type: none"> • IOSC Sub-element 23.3
Response times for OSR Corporate Support Team deployment are identified and tested.	OSR Corporate Support Team deployments are tested. Team integration with local/regional/country teams is tested.	Team integration with local/regional/country teams is tested, evaluated and improved.	<ul style="list-style-type: none"> • IOSC Sub-element 5.4
Assets and procedures for communications between field and Corporate Support are in place.	Communications equipment is on hand and secondary or backup systems are identified.	Communications (voice, digital, common planning tools) are tested for integration with all OSR sites.	<ul style="list-style-type: none"> • IOSC Element 12 and Sub-element 23.2
Customs and immigration procedures are defined to streamline transport and delivery of personnel and equipment between regions/areas.	Customs and immigration procedures are in place to expedite the temporary export or import of Corporate Support team personnel, contracted experts and technical support, and Tier 2 or 3 equipment, as appropriate.	Periodic exercises are conducted to test and streamline procedures. Key liaison agencies (or personnel) are identified to help with trans-border movements. Agencies that issue permits for specific OSR activities are listed, e.g., for hazardous material transport, dispersants, in-situ burning, land access, waste disposal, etc.	<ul style="list-style-type: none"> • IOSC Element 2 and Sub-element 23.4 • ARPEL, 2007a
Decontamination policies and responsibilities are defined.	Assets for decontamination programs are provided.	Requirements are defined for minimum recommended decontamination assets for operations and pre-designated sources of decontamination consumables, supplies, PPE, and equipment are ensured by agreement and/or contract.	<ul style="list-style-type: none"> • IOSC Sub-element 18.2 • IPIECA, 2002



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Level A	Level B	Level C	Toolbox
H. FINANCIAL AND ADMINISTRATIVE CONSIDERATIONS			
An emergency fund is available for augmenting response actions.	Corporate planning has established financial tracking systems for roles in spill emergency response. Corporate finance/administrative personnel have tools for resource ordering, purchasing, and cost tracking for emergencies.	Corporate finance/administrative personnel have also practiced their support role with local/regional/country levels in resource ordering, purchasing, and cost tracking and forecasting as well as compensating individuals and organizations for expenses.	<ul style="list-style-type: none"> • IOSC Sub-element 24.2 • ARPEL, 1997b • IMO, 2009
Procedures are in place to receive claims.	Procedures are in place to receive, investigate, and resolve claims with Corporate Team support. Financial personnel have contact information for oil pollution insurers and funds, as appropriate.	Claims filing and tracking system are implemented with Corporate-level support. Corporate Finance/Administrative personnel have established procedures to work with local personnel in the receipt and processing of claims. Coordinated procedures exist with insurers to expedite claim review and settlement in line with international compensation schemes (e.g., P&I Clubs and treaties).	<ul style="list-style-type: none"> • IOSC Sub-element 24.4 • IMO, 2009 • IOPC, 2008 • IPIECA/ITOPF, 2007
Corporate policies are defined for legal support and related matters including sampling/collecting evidence, taking statements, and mechanisms for settling disputes and claims.	Legal investigation procedures consider sampling and collecting evidence, taking statements, and mechanisms for settling disputes and claims. Illegal discharges are specified.	Personnel assigned to legal support are trained and versed in OSR operations and issues.	<ul style="list-style-type: none"> • IOSC Sub-element 20.4 • IMO, 1998 • IMO/UNEP, 2009



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Level A	Level B	Level C	Toolbox
I. TRAINING & EXERCISES			
A corporate policy for minimum initial and refresher training requirements, including health & safety, is defined for spill management and responders.	Training meets international standards. Requirements for training records are defined and records are subject to verification.	Training exceeds international standards. Corporate audits or reviews show training records are routinely checked, verified, and subject to feedback to local/regional/country levels.	<ul style="list-style-type: none"> • IOSC Element 27 • ASTM, 2001a, 2001b • IFC, 2000a, 2000b • IPIECA, 2002 • NIEHS, 2010 • OSHA, 2001
Regular training courses are provided on OSCP to assigned OSR management and lead response operational personnel.	Designated personnel for lead and participating Corporate Support team members have received detailed training on OSCP, roles and responsibilities, incident management system (e.g., ICS), and procedures for implementing duties during a response.	Corporate Support Team members receive refresher training on procedures for implementing duties during a response. Records show Corporate team cross-training with local/regional/national teams includes interface with intergovernmental and industry initiatives.	<ul style="list-style-type: none"> • IOSC Element 9 and Element 27 • ARPEL, 1997
In-house spill training courses are provided.	Contracted specialists provide spill training courses.	Contracted internationally-recognized or accredited spill training with course outlines and schedules are specified.	<ul style="list-style-type: none"> • IOSC Sub-element 27.4
Training records document compliance with required training for designated personnel.	Training records include training materials. Training is provided by qualified personnel.	Updated training materials and aids are available to Corporate OSR team; training is provided by certified and/or qualified experts.	<ul style="list-style-type: none"> • IOSC Sub-element 27.5
Notification and Alerting Exercises are conducted frequently (2 to 4 times per year) and are required of plan holders	Records document that notification and alerting exercises are conducted at least 2 to 4 times per year. Notification exercises include Off-hours; Internal-External alerting; and Multi-lateral, where appropriate.	Notification exercises are used to confirm that all communications systems (land, air, sea, and cross-agency/industry) are in place and tested.	<ul style="list-style-type: none"> • IOSC Sub-element 26.3 • IMO/IPIECA, 1996b
Deployment exercises are required and held at national response depots.	Deployment exercises are held jointly to include national response depots and Industry.	Multi-location deployment exercises (e.g., Tier 2 or 3, as appropriate) test and coordinate National, Multi-National, and Industry joint capabilities.	<ul style="list-style-type: none"> • IOSC Sub-element 26.4 • IMO/IPIECA, 1996b • USCG, 2011



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<p>Tabletop (Response Management) Exercises are required and held at prescribed frequencies (2-3 times per year).</p>	<p>Tabletop (Response Management) Exercises and include external parties. Exercises plans are well-developed. A standard approach for exercise evaluation is In place that allows ready implementation of changes.</p>	<p>Tabletop (Response Management) Exercises include external parties and multi-national authorities (as appropriate). Tabletop exercises are based on risk assessments and address distinct situations and environmental factors. Exercises are audited and evaluated by professional or experienced third-party OSR experts. Changes are implemented as needed.</p>	<ul style="list-style-type: none"> • IOSC Sub-element 26.3 • Aurand et al., 2000 • IMO/IPIECA, 1996b • IPIECA, 2000b • USCG, 2011
<p>Courses to be attended by Corporate Support team personnel are listed.</p>	<p>Courses are attended by Corporate Support team personnel including for example Incident Management Systems, SCAT, basic spill response, dispersant application, in-situ burning, and waste management.</p>	<p>Specialized courses are organized for Corporate Support Team to provide in-house expertise to augment local/regional/country teams. Corporate specialists (or contracted personnel) have documented refresher training or equivalent experience.</p>	<ul style="list-style-type: none"> • IOSC Sub-element 26.3 • IMO/IPIECA, 1996b



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Level A	Level B	Level C	Toolbox
J. SUSTAINABILITY & IMPROVEMENT			
Exercise critiques (plan and execution) recommend actions for OSR improvements.	Internal review is conducted of exercises. Recommendations from exercise evaluations (equipment deployment, tabletops) are implemented and tracked. Exercise oversight roles are specified, as appropriate, for integrated exercises at local/regional/national levels.	External review supplements internal critique for both exercises and actual spills. Steps taken for improvements are documented. Government representatives, Mutual Aid, and Tier 3 support (as and if appropriate) form part of evaluation and feedback.	<ul style="list-style-type: none"> • IOSC Element 28 • CDFG, 2011 • IMO/IPIECA, 1996b • IPIECA, 2000b • ISO 14000/140001 • WDOE, 2014
A Corporate Team or Work Group is assigned to review and recommend OSR enhancements at local/regional/national levels.	A Corporate Team or Work Group meets at least annually to review OSR plans and readiness and to make recommendations that have a record of actions and implementation.	Internal-External / Experts work with the Corporate Team or Work Group to undertake audits and provide recommendations. Responsibilities are assigned to implement changes. Changes are reviewed and approved.	<ul style="list-style-type: none"> • IOSC Sub-element 28.3 • ARPEL Guidelines for Conducting Environmental Audits for Onshore Petroleum Operations, undated • IMO, 2010c
Post-Spill Evaluation and Revisions to Plan are documented.	Plan and equipment improvements are made as needed.	Plan and equipment improvements are made and are included in planning and conducting subsequent training. Personnel and OSR equipment needs are also addressed. Changes are adopted for oil-related transportation, exploration, and production systems as determined by review processes as these relate to preventative measures and safeguards. A business continuation plan is in place and can be implemented.	<ul style="list-style-type: none"> • IOSC Sub-element 28.4 • CDFG, 2011 • IMO, 2010c • IMO/IPIECA, 1996b • WDOE, 2014
OSR research and development is promoted through various sources of funding.	Research and development programs are funded to improve countermeasures such as mechanical recovery, treating agent application, in-situ burning, and remote sensing.	Active research and development programs are funded and tasked to improve countermeasures such as mechanical recovery, treating agent application, in-situ burning, communications, and remote sensing. Data are reviewed, updated and compiled for environmental resources at risk to ensure appropriate countermeasures are developed.	<ul style="list-style-type: none"> • ADEC, 2006



11. BIBLIOGRAPHY, REFERENCES, AND AIDS

References to bibliographic aids, manuals, and other materials described in this Manual are provided in this chapter. These materials represent the best available knowledge and/or internationally accepted practices as of the date of this Manual. To the extent feasible, references are provided to materials readily and publically available via the internet although some may require a purchase.

Disclaimer: The listing of reference materials available only through purchase is provided for completeness but does not imply an endorsement to buy. Use of these reference materials must respect copyrights.

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12. Appendix A – Critical criteria for all Scopes

The following chapters describe the critical criteria of the ten Categories for Level A of all seven Scopes including a rationale of their criticality (Balloon text as it appears in RETOS™).

12.1. GOVERNMENT - INDUSTRY: FACILITY - LEVEL A

Code	Critical criterion	Balloon Text
A. LEGISLATION, REGULATIONS, AGREEMENTS		
A1	Plan references regulatory requirements.	OSR plans may be required by regulation. If so, the plan should indicate what regulations apply and that these are appropriately addressed.
A2	Reportable amounts of spills indicated.	Plans should indicate or recognize the spill volume threshold that requires notification to authorities, usually implying a "reportable spill".
B. OIL SPILL CONTINGENCY PLANNING		
B1	Plan is readily available to OSR personnel that includes clear table of contents and pagination.	The spill plan should be readily available to responders and management and include a clean and updated Table of Contents that references appropriate page numbers for easy reference and use.
B5	Local expertise for OSR-related issues is listed.	The OSR plan should identify personnel on site that have the appropriate background, knowledge, and experience to undertake key spill response tasks.
B7	Key contacts are updated as these change.	Primary and alternate telephone numbers, and possibly email, fax, etc., must be kept current for key contacts, including but not limited to spill management team, agencies/authorities, and spill response contractors.
B8	Potential spill sources, liquids, and volumes are identified and known to responders.	Spill response personnel should have easy and quick reference to what liquids are handled and stored on site and volumes contained in storage.
B9	General area at risk is identified based on spill sources.	OSR plan should identify the potential area of spill influence from a worst case release
B10	Sensitive areas are identified in plan.	Environmental (ecological) and socioeconomic sites that are sensitive and vulnerable to spills within the potential zone of spill spreading or influence should be documented.



Code	Critical criterion	Balloon Text
B12	Response strategies are clearly stated and appropriate for facility, operating conditions, and oil types.	Sensitive site protection and spill containment, recovery, and removal strategies should be described and appropriate to oil types (i.e., strategies would be expected to vary from a refined, non-persistent product such as gasoline, to a heavy oil) and local operating conditions (i.e., sites in extreme cold conditions may include ice/snow strategies for winter season).
B14	Personnel needed to undertake operations are assessed.	The OSR plan has considered the number of personnel (site and/or contracted) that would be needed to implement the strategies identified in the plan.
C. RESPONSE COORDINATION		
C1	Clear procedures are included on information to report and who should receive initial spill notification and follow-up reports.	The plan should identify who is to receive notification of a spill and what information about the spill is to be relayed at the time of notification. As appropriate, the plan should identify to whom and when a report must be filed following response to a spill.
C3	A contact list specifies key personnel and alternates.	A telephone listing of agencies and/or people to be contacted at the time of a spill should be easy to find and telephone numbers should be accurate (see B7).
C4	Spill management structure and assigned personnel are defined for all spill Tiers, as appropriate.	The spill response team organization should be described and preferably illustrated in a diagram. The organization should note who is to fill the spill management roles. The spill management organization should note if and how it may change depending on the complexity and size of the necessary response (Tiers), as applicable.
C5	Roles and responsibilities are evident for each functional aspect identified in OSR management organization.	There should be descriptions of the responsibilities at least for top level spill response management roles.
C6	Incident command is assigned to one or two specific individuals (by name or position) with backups identified.	The person(s) that are charged to lead and coordinate the overall response to a spill should be evident, either in name or by their job title (see B7 and C3).
D. HEALTH, SAFETY & SECURITY		
D1	A site map is available showing hazards, emergency equipment, and evacuation route(s).	The plan should have a map or diagram that is sufficiently clear identifying where oil is stored in bulk (tanks), location(s) of spill response equipment, and emergency evacuation routes (with muster or gathering



Code	Critical criterion	Balloon Text
		locations for evacuated personnel) in case of a major spill or fire.
D4	OSR personnel have general understanding of associated hazards.	Spill or emergency responders know what oil products are stored in different tanks and major piping systems.
D5	PPE is available in response kits.	Personal protective equipment to allow emergency responders to enter and work in a hot zone (exposure to oil and fumes) should be complete in packages and readily retrievable.
D7	Mandatory safety training requirements have been established for OSR responders	Safety training for responders should be mandatory and identified as such in the plan. Spill responders should know and have received safety training regarding oil spill response hazards and proper prevention measures to mitigate those risks.
E. OPERATIONAL RESPONSE		
E1	Emergency shutoffs, remotely-controlled valves and other means are in place to reduce volume of releases.	The plan should note what emergency controls are in place to stop transfers, possibly included in facility diagrams.
E2	Equipment on site is adequate for Tier 1 risks (most likely routine spills), operating environments, and seasons	Spill response equipment should be easy to locate and adequate to address most spills that would remain within the facility. Equipment should be appropriate for the oil type(s) handled and allow for response under the range of normal weather or environmental conditions that can be expected to occur at the facility.
E3	Equipment is properly stored, in good working condition and being properly maintained and inspected.	An inspection should find that spill response equipment is clean, well maintained with inspection and maintenance records, and in working order. Note if select equipment is started, assembled, or tested to verify working condition.
E5	Operational use of countermeasures is verified in annual spill exercise.	The plan should indicate a requirement for at least a partial equipment deployment on an annual basis. Actual deployment should be confirmed via exercise documentation or records.
F. TRACKING, ASSESSMENT & INFORMATION MANAGEMENT		
F2	Forms, maps or charts are available on which to maintain record of spill track and movement.	Spill response management personnel should have ready access to materials to document the extent of a spill and response actions: easy to use map or facility/area diagram.



Code	Critical criterion	Balloon Text
G. LOGISTICS		
G4	Assets and procedure for communications in field and between field and Command Post are in place.	Radios, telephones (cell or land lines), should be available to allow for direct communications between a spill command management location and personnel deployed in spill response work zones. Radios or phones that may be used in hot zones should be intrinsically safe.
G5	Decontamination facilities are available for personnel leaving the spill site.	Equipment such as wash down pools, detergent, and sorbents should be readily available to clean responders exiting oiled areas.
H. FINANCIAL & ADMINISTRATIVE CONSIDERATIONS		
H1	One or more individuals have authorized spending with spending limits clearly identified.	The plan or other documentation should indicate that personnel assigned to manage a spill response (e.g., incident commander) have the authority to engage actions that incur costs without having to wait for other authorization.
I. TRAINING & EXERCISES		
I3	Minimum initial and refresher Health & Safety training requirements are defined for spill management and responders.	Health and safety risks and hazards associated with spill response actions must be a part of the training program for all responders. Documentation should exist detailing the training health and safety training provided for spill personnel.
I8	Annual deployment exercises are held at the facility.	Records should exist to verify that spill response equipment is or has been deployed annually at the facility. This may be a part of training and should encompass use of representative equipment for on-site response (Tier 1) (see E5).
J. SUSTAINABILITY & IMPROVEMENT		
J3	Post-Exercise and Post-Spill Evaluations are conducted and incorporated into actions for OSR program improvements.	Programs improve when they are evaluated AND when recommendations are implemented. Records should show post-exercise or post-spill critiques and action items. Check for action items or recommendations that were implemented following the critiques.



12.2. GOVERNMENT: LOCAL / PORT / CITY - LEVEL A

Code	Critical criterion	Balloon Text
A. LEGISLATION, REGULATIONS, AGREEMENTS		
A1	Plan references regulatory requirements.	OSR plans may be required by regulation. If so, the plan should indicate what regulations apply and that these are appropriately addressed.
A2	Agreements for local OSR assistance are in place.	A clearly defined OSR response capability (contractors, operators, and equipment) must be arranged and formalized to ensure timely response.
B. OIL SPILL CONTINGENCY PLANNING		
B1	Plan is readily available to OSR personnel.	The Local/Port spill response plan should be readily available to responders and management.
B5	Local expertise for OSR-related issues is listed.	The OSR plan should identify personnel on site and/or immediate areas that have the appropriate background, knowledge, and experience to undertake key spill response tasks.
B7	Key contacts are updated as these change.	Primary and alternate telephone numbers, and possibly email, fax, etc., must be kept current for key contacts, including but not limited to spill management team, agencies/authorities, and spill response contractors.
B8	Potential spill sources, materials, and volumes are identified and known to responders.	Spill response personnel should have easy and quick reference to what liquids are handled and stored in the local area/port and volumes contained in storage.
B10	The general area at risk is identified based on spill sources.	OSR plan should identify the potential area of spill influence from a worst case release
B11	Sensitive areas are identified in the plan.	Environmental (ecological) and socioeconomic sites that are sensitive and vulnerable to spills within the potential zone of spill spreading or influence should be clearly identified in the plan and/or on maps.
B13	Response strategies are clearly stated and appropriate for the local area, operating conditions, and oil types.	Sensitive site protection and spill containment, recovery, and removal strategies should be described and appropriate to oil types (i.e., strategies would be expected to vary from a refined, non-persistent product such as gasoline, to a heavy oil) and local operating conditions (i.e., sites in extreme cold conditions may include ice/snow strategies for winter season).



Code	Critical criterion	Balloon Text
B14	Health and safety priorities are clearly indicated.	Written commitment by Plan owner confirms that safety and health of responders and the public are top response priorities.
B16	Personnel needed to undertake operations are assessed.	The OSR plan has considered the number of personnel (site and/or contracted) that would be needed to implement the strategies identified in the plan.
C. RESPONSE COORDINATION		
C1	A clear procedure is in place on information to report and who should receive initial spill notification and follow-up reports.	The plan should identify who is to receive notification of a spill and what information about the spill is to be relayed at the time of notification. As appropriate, the plan should identify to whom and when a report must be filed following response to a spill.
C3	A contact list indicates key personnel and alternates.	A telephone listing of agencies and/or people to be contacted at the time of a spill should be easy to find and telephone numbers should be accurate (see B7).
C4	Spill management structure and assigned personnel are defined for all spill Tiers, as appropriate.	The spill response team organization should be described and preferably illustrated in a diagram. The organization should note who is to fill the spill management roles. The spill management organization should note if and how it may change depending on the complexity and size of the necessary response (Tiers), as applicable.
C5	Roles and responsibilities are evident for each functional aspect identified in the OSR management organization.	There should be descriptions of the responsibilities at least for top level spill response management roles.
C6	Incident Command is assigned to one or two specific individuals (by name or position) with backups identified.	The person(s) that are charged to lead and coordinate the overall response to a spill should be evident, either in name or by their job title (see B7 and C3).
D. HEALTH, SAFETY & SECURITY		
D1	A site map is available showing hazards and emergency equipment locations.	The plan should have a map or diagram that is sufficiently clear identifying where oil is stored in bulk (tanks), location(s) of spill response equipment, and emergency evacuation routes (with muster or gathering locations for evacuated personnel) in case of a major spill or fire.
D3	OSR personnel have general understanding of associated hazards.	Spill or emergency responders know what oil products are stored in different tanks and major piping systems.



Code	Critical criterion	Balloon Text
D4	PPE available in OSR kits.	Personal protective equipment to allow emergency responders to enter and work in a hot zone (exposure to oil and fumes) should be complete in packages and readily retrievable.
D6	Mandatory safety training requirements have been established for different roles and responsibilities of OSR responders.	Safety training for responders should be mandatory and identified as such in the plan. Spill responders should know and have received safety training regarding oil spill response hazards and proper prevention measures to mitigate those risks (see I3).
E. OPERATIONAL RESPONSE		
E1	Local procedures are in place to minimize spill volumes through operational controls (e.g., advanced vessel notifications) and source control: transfers, patching, emergency lightering, etc.	The plan should note what emergency controls are in place to stop or minimize spill loss at the source (source control) and who is responsible to activate such procedures.
E2	Local equipment sources are identified and adequate for Tier 1 risks (most likely routine spills), operating environments, and seasons	Spill response equipment should be easy to locate and adequate to address most spills that would remain in the local area (or Port). Equipment should be appropriate for the oil type(s) handled and allow for response under the range of normal weather or environmental conditions that can be expected to occur in the area (see B13).
E3	Local equipment is inventoried, audited, properly stored and in good working condition.	An inspection should find that spill response equipment is clean, well maintained with inspection and maintenance records, and in working order. Note if select equipment is started, assembled, or tested to verify working condition.
E5	Operational use of countermeasures is verified in annual spill exercise.	The plan should indicate a requirement for at least a partial equipment deployment on an annual basis. Actual deployment should be confirmed via exercise documentation or records. Deployments should be representative of the various response strategies and tactics noted in the plan (see I8).
F. TRACKING, ASSESSMENT & INFORMATION MANAGEMENT		
F3	Forms, maps or charts are available on which to maintain record of spill track and movement.	Spill response management personnel should have ready access to materials to document the extent of a spill and response actions: easy to use map(s) or local area/port diagram.



Code	Critical criterion	Balloon Text
G. LOGISTICS		
G5	Assets and procedure for communications in field and between field and Command Post are in place.	Radios and telephones (cell or land lines) should be available to allow for direct communications between a spill command management location and personnel deployed in spill response work zones. Radios or phones that may be used in hot zones should be intrinsically safe.
G6	The availability of decontamination facilities is ensured for personnel leaving the spill site.	An inspection should find that decontamination equipment such as wash down pools, detergent, and sorbents are readily available and in good conditions to clean responders exiting oiled areas.
H. FINANCIAL & ADMINISTRATIVE CONSIDERATIONS		
H1	Designated Authority(ies) has pre-defined spending approval limits.	The plan or other documentation should indicate that personnel assigned to manage a spill response (e.g., incident commander) have the authority to engage actions that incur costs without having to wait for other authorization.
I. TRAINING & EXERCISES		
I3	Minimum initial and refresher Health & Safety training requirements are defined for spill management and responders.	Health and safety risks and hazards associated with spill response actions must be a part of the training program for all responders. Documentation should exist detailing the training health and safety training provided for spill personnel (see D6).
I8	Deployment exercises are conducted at least annually with local resources.	Records should exist to verify that spill response equipment is or has been deployed annually in the local area or port. This may be a part of training and should encompass use of representative equipment for on-site response (Tier 1) (see E5).
J. SUSTAINABILITY & IMPROVEMENT		
J3	Post-Exercise and Post-Spill Evaluations are conducted and incorporated into actions for OSR program improvements.	Programs improve when they are evaluated AND when recommendations are implemented. Records should show post-exercise or post-spill critiques and action items. Check for action items or recommendations that were implemented following the critiques.



12.3. GOVERNMENT: AREA – LEVEL A

Code	Critical criterion	Balloon Text
A. LEGISLATION, REGULATIONS, AGREEMENTS		
A1	Current legislation, either regional (State, Province or other) or national exists and establishes the purpose of the regional OSR program, stipulates requirements for OSR, and assigns responsibilities.	Oil Spill Response (OSR) plans should indicate the current legislation applicable to oil spill response and that these are appropriately addressed in the Area OSR Plan and program.
A2	Regional Lead Agency or Designated Authority is indicated (see also B Contingency Planning).	The OSR plan should clearly identify the lead authority(ies) and participating agencies and their jurisdiction, roles, and responsibilities in the area oil spill response framework (see B1).
B. OIL SPILL CONTINGENCY PLANNING		
B1	A Regional or Area Plan has been developed and approved; it identifies a Designated Regional Authority for oil spill response (and/or defines authority for specific spill cases; e.g., spill to land vs. spill to marine waters).	The approved OSR Area plan should the government authority(ies) that would take lead or co-lead roles in management of emergency response to spills. If authorities differ depending on the local area, region, or environmental setting, these distinctions should be clearly explained.
B4	Applicable and related government plans (multi-lateral, National, and local) are identified and/or linked.	The context of the Area OSR Plan should be clearly identified with respect to other plans that may be activated (i.e., local and/or National) and to other responders and management team members could be incorporated. Often a good diagram helps to explain this context.
B5	Expertise (agency/personnel) for OSR-related issues is listed.	The OSR plan should identify agencies, oil spill response organizations, subject matter experts, and possibly NGOs (if applicable) that have the appropriate background, knowledge, and experience to undertake key spill response management tasks.
B7	Key contacts are updated as these change.	Primary and alternate telephone numbers, and possibly email, fax, etc., must be kept current for key contacts, including but not limited to spill management team, agencies/authorities, and spill response contractors (see C3).
B8	Regional or Area Plan has defined planning levels based on National Plan requirements or on spill risks.	Regional or OSR Area Plans should fit in context of applicable National or Multi-national plans and stipulate the planning response standards (guidelines) for tiered response within the scope of the



Code	Critical criterion	Balloon Text
		program. Standards (or guidelines) should provide an indication of tiered response times and response capabilities, such as oil recovery, boom deployment, oily liquids storage, and other aspects of response, as applicable (see E2).
B9	Priority planning is focused on areas of high-risk and sensitivity.	Priority environmental (ecological) and socioeconomic sites that are sensitive and vulnerable to spills should be identified or documented. The primary sensitive sites may be noted in general but preferably mapped and available as part of the OSR plan or referenced in the plan and readily available.
B16	Plan adheres to National Policy on use of treating agents for spill response (dispersants, cleaning agents, bioremediation agents, herders, etc.).	The plan should be updated with the latest national agreements on the use of treating agents, including list of products, operational requirements, use criteria and conditions.
B17	Plan adheres to National Policy for use of In-situ burning.	The plan should be updated with the latest national agreements on the use of in-situ burning, including time-window of opportunity, accelerator-products allowed, use criteria and conditions.
B18	Shoreline protection and treatment policies and procedures are outlined.	The plan should be updated with the latest national agreements, including list of treatment products, time-window of opportunity, operational requirements, use criteria and conditions.
C. RESPONSE COORDINATION		
C1	Clear procedure indicates information to report and who should receive initial spill notification and follow-up reports.	The plan should identify which agency is to receive notification of a spill, the communication method (e.g., phone, fax, e-mail) and what information about the spill is to be relayed at the time of notification. As appropriate, the plan should identify to whom and when a report must be filed following response to a spill.
C3	A contact list specifies key personnel.	A telephone listing of agencies and/or people to be contacted at the time of a spill should be easy to find and telephone numbers should be accurate (see B7).
C4	A spill management structure and assigned organizations are defined for all spill Tiers.	The spill response team organization structure should be described and preferably illustrated in a diagram. The organization should note who is to fill the



Code	Critical criterion	Balloon Text
		spill management roles. The spill management organization should note if and how it may change depending on the complexity and size of the necessary response (Tiers), as applicable.
C5	Roles and responsibilities for each functional aspect are identified for the OSR management organization.	The plan should describe the agencies (or authorities) assigned to key roles and their associated responsibilities for OSR management (see B1).
C6	Incident Command is assigned to one or two specific individuals (by name or position) with backups identified	The person(s) that are charged to lead and coordinate the overall response to a spill should be evident, either in name or by their job title (see B7, C3, and C5).
D. HEALTH, SAFETY & SECURITY		
D1	Safety policies and regulations are in place to protect both the public and responders from spills.	The OSR Area Plan should identify all safety policies and preferably reference any regulations applicable to OSR activities, including identification of the enforcing agencies.
D2	Personal Protective Equipment (PPE) is available to responders.	The plan should identify the agencies in charge of ensuring PPE is available to onsite responders. The plan should define agencies jurisdiction when several local plans may be activated.
E. OPERATIONAL RESPONSE		
E1	Procedures are in place to minimize spill volumes through inspections of source control: transfers, emergency lightering, etc.	The OSR Plan or related documentation should indicate that there are spill management controls (procedures) that are adopted or in preparation to help stop or minimize spill loss at the source (source control) and who is responsible to activate such procedures.
E2	Minimum equipment levels are defined for Tier 1 risks (most likely routine spills).	The plan should identify minimum equipment levels for local planning that would allow for response under the range of normal weather or environmental conditions that can be expected. Documentation should specify how agency and local authorities would verify and/or enforce these minimums (i.e., through inspections, plan reviews and approvals, exercises, or combinations thereof) (see B8).
E3	A list of locations and general amounts and types of OSR equipment is available.	Documentation should be available that shows where major caches of OSR equipment are maintained, who operates



Code	Critical criterion	Balloon Text
		and maintains the cache, general capacity of each cache. Documentation may be quite variable and range from OSR contractor lists or information sheets to detailed comprehensive inventories.
E5	Operational use of countermeasures is verified in an annual spill exercise.	The plan should indicate a requirement for at least a partial equipment deployment on an annual basis. Actual deployment should be confirmed via exercise documentation or records. Deployments should be representative of the various response strategies and tactics noted in the plan and test response throughout the operating area (see I6).
F. TRACKING, ASSESSMENT & INFORMATION MANAGEMENT		
F2	Forms, maps or charts are available for maintaining records of spill track and movement.	Spill response management personnel, in charge of ensuring area capability program, should have ready access to materials to document the extent of a spill and response actions: easy to use map or facility/area diagram.
G. LOGISTICS		
G4	Assets and procedures for communications in field and between field and Command Post are in place.	Radios and telephones (land lines, cell, and/or satellite) should be available to allow for direct communications between a spill command management location and personnel deployed in spill response work zones. Communications assets may be government-owned and operated or a combination of government (area and local) and industry resources.
G6	The availability of decontamination facilities is ensured for personnel leaving the spill site.	An inspection should find that Area oil spill response organizations have decontamination and equipment such as wash down pools, detergent, and sorbents should be readily available to clean responders exiting oiled areas.
H. FINANCIAL & ADMINISTRATIVE CONSIDERATIONS		
H1	An emergency fund is available to enable immediate response actions.	The plan or other documentation should indicate that personnel assigned to manage a spill response (e.g., incident commander) have the authority to engage actions that incur costs without having to wait for other authorization.



Code	Critical criterion	Balloon Text
H3	Legal aspects have been considered including sampling/collecting evidence, taking statements, and mechanisms for settling disputes and claims.	The OSR Plan or associated documentation should describe sampling procedures and guidelines (and note applicable regulations, as applicable). Documentation should describe the mechanisms for settling disputes and claims and identify the decision-making authorities that would be involved (including reference to applicable regulations).
I. TRAINING & EXERCISES		
I1	Minimum initial and refresher Health & Safety training requirements are defined for spill management and responders.	The minimum health and safety training requirements for OSR management and responders should be clearly stated and reference made to applicable regulations. The agency(ies) assigned to enforce responders to have met minimum H&S training should be specified (see D1).
I6	Regular joint (Government-Industry) deployment exercises are required and held from Regional or multiple in-region response depots.	Records should exist to verify that joint (Government-Industry) spill response equipment is or has been deployed annually according to the Area Plan. This may be a part of training and should encompass use of Area oil spill response organizations (Tier 2) and representative equipment for on-site response (Tier 1) (see E5).
J. SUSTAINABILITY & IMPROVEMENT		
J4	Post-Spill Evaluation and Revisions to Plan are documented.	Programs improve when they are evaluated AND when recommendations are implemented. Records should show post-exercise or post-spill critiques and action items. Check for action items or recommendations that were implemented following the critiques.



12.4. GOVERNMENT: NATIONAL/MULTINATIONAL - LEVEL A

Code	Critical criterion	Balloon Text
A. LEGISLATION, REGULATIONS, AGREEMENTS		
A1	National legislation stipulates requirements for OSR and assigns responsibilities.	A legal framework that support the National Contingency Plan (NCP) is clearly define indicating agencies jurisdiction, roles and responsibilities in case of oil spill events.
A2	Designated Authority (also referred to as Competent National Authority or Lead Agency) is indicated (see also B1 Contingency Planning).	Legislation or a National Plan should define the authority identified to lead spill response, either or both as the coordinating entity and lead in actual response and/or as the entity charged with maintaining, activating, and implementing the National Plan.
B. OIL SPILL CONTINGENCY PLANNING		
B1	National Plan has been developed and approved; identifies Designated Authority for oil spill response (and/or defines authority for specific spill cases; e.g., spill to land vs. spill to marine waters).	The National Plan for spill response should be completed, approved or adopted, and meeting the oil spill response framework defined in legislation. The National Plan should be available to other government entities and industry to provide a basis for coordinating planning. The designated or lead authority(ies) should be clearly identified (see A2).
B4	Applicable and related government plans (multi-lateral, area, and local) are identified.	Regional or Multi-National OSR plans that may integrate with the NCP should be clearly identified such that other potential responders and management team members could be incorporated. Often a good diagram helps to explain this context.
B5	Expertise (agency/personnel) for OSR-related issues is listed.	The NCP should identify government agencies and oil spill response expertise (government and/or industry) that have the appropriate background, knowledge, and experience to undertake key national spill response tasks.
B7	Key contacts are updated to reflect changes.	Primary and alternate telephone numbers, and possibly email, fax, etc., must be kept current for key contacts in the NCP; including but not limited to spill management team, agencies/authorities, and national oil spill response organizations.
B9	Priority planning is focused on areas of high-risk and environmental sensitivity.	The NCP should either identify major environmental (ecological) and socioeconomic sites that are sensitive and vulnerable to spills within the potential zone of spill spreading or influence. These may be incorporated by reference and may include sensitivity maps.
B12	Policies and/or regulations are in place to reduce the risk and/or consequences	The NCP and/or legislation define spill prevention measures and procedures for rapid



Code	Critical criterion	Balloon Text
	of a spill.	allocation of resources of source control and stabilization resources equipment to mitigate spill consequences. Examples include expected tug, salvage, and firefighting capabilities, places of refuge, pre-booming, and additional containment measures (see E1).
B13	Response strategies are clearly stated and provide for response to applicable operating conditions and oil types.	Sensitive site protection and spill containment, recovery, and removal strategies should be described and appropriate to oil types (i.e., strategies would be expected to vary from a refined, non-persistent product such as gasoline, to a heavy oil) and local operating conditions (i.e., sites in extreme cold conditions may include ice/snow strategies for winter season).
C. RESPONSE COORDINATION		
C1	A clear procedure is presented on information to report and who should receive initial spill notification and follow-up reports.	The plan should identify which agency is to receive notification of a spill, the communication method (e.g., phone, fax, e-mail) and what information about the spill is to be relayed at the time of notification. As appropriate, the plan should identify to whom and when a report must be filed following response to a spill.
C3	The spill management structure and assigned organizations are defined for all spill tiers.	The National spill response team organization should be described and preferably illustrated in a diagram. The organization should note who is to fill the spill management roles. The spill management organization should note if and how it may change depending on the complexity and size of the necessary response (tiers), as applicable. Description of tier 2 and 1, and their alignment with National requirements should also be included.
D. HEALTH, SAFETY & SECURITY		
D1	Safety policies and regulations are in place for protecting both the public and responders from spills.	The NCP or appropriately referenced supporting documentation should include all National safety policies and regulations as applicable to OSR responders, including identification of the enforcing agencies (see I1).
E. OPERATIONAL RESPONSE		
E1	Policies are in place to prevent and minimize spill volumes through source control: transfers, emergency lightering, potential places of refuge for maritime casualties, etc.	The OSR Plan or related documentation should indicate that there are spill management controls (procedures) that are adopted or in preparation to help stop or minimize spill loss at the source (source control) and who is responsible to activate such procedures (see B12)



Code	Critical criterion	Balloon Text
E4	Government equipment locations are identified, and secured; locations allow for quick access and deployment.	Documentation should be available that shows where major caches of OSR equipment are maintained, who operates and maintains the cache, general capacity of each cache. Documentation may be quite variable and range from OSR contractor lists or information sheets to detailed comprehensive inventories.
E5	The operational use of countermeasures is verified in an annual spill exercise.	The NCP or related planning documentation should indicate a requirement for equipment deployment exercises on an annual basis. Actual deployment should be confirmed via exercise documentation or records. Deployments should be representative of the various response strategies noted in the plan and test response throughout the operating area (see I6).
F. TRACKING, ASSESSMENT & INFORMATION MANAGEMENT		
F1	Role or assignment is defined in OSR management to undertake spill tracking, including monitoring.	NCP defines the agency responsible for oil spill tracking and monitoring. The NCP or related documentation should describe the methods or protocols adopted for spill monitoring, sampling, and data collection.
G. LOGISTICS		
G4	Assets and procedure for communications in the field and between the field and Command Post are in place.	Radios and telephones (land lines, cell, and/or satellite) should be available to allow for direct communications between a spill command management location and personnel deployed in spill response work zones. Communications assets may be government-owned and operated or a combination of government (area and local) and industry resources.
H. FINANCIAL & ADMINISTRATIVE CONSIDERATIONS		
H1	An emergency fund is available to enable immediate response actions.	The NCP or referenced documentation should indicate the agencies assigned to manage a spill response of national significance and with the authority to engage actions that incur costs without having to wait for other authorization. Procedures to activate national emergency funds should also be indicated.
H3	Legal aspects have been considered including sampling/collecting evidence, taking statements, and mechanisms for settling disputes and claims.	The NCP or associated documentation should describe sampling procedures and guidelines (and note related regulations, as applicable). Documentation should describe the mechanisms for settling disputes and claims and identify the decision-making authorities that would be involved (including reference to applicable regulations).



Code	Critical criterion	Balloon Text
I. TRAINING & EXERCISES		
I1	Minimum initial and refresher training requirements, including Health & Safety, are defined for spill management and responders.	The minimum health and safety training requirements for OSR management and responders should be clearly stated and reference made to applicable regulations. The agency(ies) assigned to enforce responders to have met minimum H&S training should be specified (see D1).
I6	Deployment exercises are required and held including mobilized Tier 2 response assets from national response depots.	Records should exist to verify that joint (Government-Industry) spill response equipment is or has been deployed annually according to the national contingency plan (NCP). This may be a part of required training and should encompass use of National (or multiple Areas / regional) oil spill response organizations (tier 3) and representative equipment for key response strategies (see E5).
J. SUSTAINABILITY & IMPROVEMENT		
J6	An OSR planning and readiness assessment enforcement role is specified or defined for a specific government authority.	The NCP or referenced documentation should indicate the requirements for national oil spill response organizations and national spill management organizations to demonstrate readiness. The government authority in charge of enforcing such requirements should have clear role and responsibilities defined in the NCP.



12.5. GOVERNMENT - INDUSTRY: FACILITY OR ASSETS OPERATIONS - LEVEL A

Code	Critical criterion	Balloon Text:
A. LEGISLATION, REGULATIONS, AGREEMENTS		
A1	Plan references regulatory requirements.	OSR Plan and preparedness requirements may be required by legislation and/or regulation. The OSR Plan should list or reference the current applicable regulations and show that these are appropriately addressed.
A2	Agreements for local to regional OSR assistance are in place.	Contractual agreements exist and are in place to support oil spill response operations throughout the area encompassed by the scope of the OSR Plan and program.
A4	Plan notes context of geo-political boundaries and corresponding legislation.	As appropriate, the OSR Plan should indicate if and where geopolitical boundaries between States, Provinces, and/or Countries may be included in the scope of the program and note legislation or regulations that may apply to OSR across those boundaries.
B. OIL SPILL CONTINGENCY PLANNING		
B1	The plan is readily available to OSR personnel throughout the operational area and to those persons responsible for local OSR planning.	The plan should be readily available to responders and management, at a centralized location and at sites in the operational area manned for spill response.
B3	Applicable and related plans (company, local, and government) are identified.	The context of the OSR Plan should be clearly identified with respect to other plans that may be activated and to other responders and management team members could be incorporated. Often a good diagram helps to explain this context.
B4	Available in-company or outsourced expertise is listed for OSR-related issues.	The plan should identify personnel that have the appropriate background, knowledge, and experience to undertake key spill response tasks: e.g., source control, site safety, containment, removal, security.
B6	Potential spill sources, materials, and volumes have been identified and are known to responders.	Spill response personnel should have easy and quick reference to what liquids are handled and stored on site, in pipelines, and/or handled on vessels and the volumes contained in storage.
B8	General areas at risk are identified based on spill sources.	OSR plan should identify the potential area of spill influence from a worst case release
B9	Critical sensitive areas are identified in the plan.	Environmental (ecological) and socioeconomic sites that are sensitive and vulnerable to spills within the potential zone of spill spreading or influence should be documented.



Code	Critical criterion	Balloon Text:
B11	Response strategies are clearly stated and appropriate for the range of operational areas, environmental conditions, and oil types.	Sensitive site protection and spill containment, recovery, and removal strategies should be described and appropriate to oil types (i.e., strategies would be expected to vary from a refined, non-persistent product such as gasoline, to a heavy oil) and applicable for the range of conditions throughout the operational areas (i.e., sites in extreme cold conditions may include ice/snow strategies for winter season).
B14	Personnel needed to undertake operations are assessed.	The OSR plan has considered the number of personnel (site and/or contracted) that would be needed to implement the strategies identified in the plan.
C. RESPONSE COORDINATION		
C1	Clear procedures outline information to report and who should receive initial spill notification and follow-up reports.	The plan should identify who is to receive notification of a spill and what information about the spill is to be relayed at the time of notification. As appropriate, the plan should identify to whom and when a report must be filed following response to a spill.
C3	A contact list with key personnel is included.	A telephone listing of agencies and/or people to be contacted at the time of a spill should be easy to find and telephone numbers should be accurate. The contact list should include agencies and management team (command and general staff members) (see B4).
C4	A spill management structure and assigned personnel are defined for all spill Tiers.	The spill response team organization should be described and preferably illustrated in a diagram. The organization should note who is to fill the spill management roles. The spill management organization should note if and how it may change depending on the complexity and size of the necessary response (Tiers), as applicable.
C5	Roles and responsibilities are evident for each functional aspect identified in the OSR management organization.	There should be descriptions of the responsibilities at least for top level spill response management roles.
C6	Incident Command is assigned to one or two specific individuals (by name or position) with backups identified.	The person(s) that are charged to lead and coordinate the overall response to a spill should be evident, either in name or by their job title (see B1 and C4).
D. HEALTH, SAFETY & SECURITY		
D1	Diagrams or maps are available showing general locations of hazards and emergency equipment.	The plan should have maps or diagrams that are sufficiently clear identifying where oil is stored in bulk (tanks), location(s) of spill response equipment, and emergency



Code	Critical criterion	Balloon Text:
		evacuation routes (with muster or gathering locations for evacuated personnel) in case of a major spill or fire.
D3	OSR personnel have general understanding of associated hazards.	Spill or emergency responders know what oil products are stored in different tanks and major piping systems.
D5	PPE is available in kits.	Personal protective equipment that allows emergency responders to enter and work in a hot zone (exposure to oil and fumes) should be complete in packages and readily retrievable.
D7	Mandatory safety training requirements have been established for OSR responders.	Safety training for responders should be mandatory and identified as such in the plan. Spill responders should know and have received safety training regarding oil spill response hazards and proper prevention measures to mitigate those risks (see I13).
E. OPERATIONAL RESPONSE		
E1	An operations-wide policy is in place to minimize spill volumes through specific controls (e.g., advanced vessel notifications, assist tugs, pilots) and source control: transfers, patching, emergency lightering, etc.	The plan should indicate that there is a spill prevention program that includes maintenance protocols and management controls (procedures). Emergency controls should be identified that help stop or minimize spill loss at the source (source control) and who is responsible to activate such procedures.
E2	OSR equipment sources are identified and recommended for Tier 1 risks (most likely routine spills) at key locations and appropriate for environmental conditions and seasonal aspects.	Spill response equipment should be easy to locate and adequate to address most spills that would remain in a localized area. Equipment should be appropriate for the oil type(s) handled and allow for response under the range of normal weather or environmental conditions that can be expected to occur in the area (see B11).
E5	Operational use of countermeasures has been verified in an annual spill exercise.	The plan should indicate a requirement for at least a partial equipment deployment on an annual basis. Actual deployment should be confirmed via exercise documentation or records. Deployments should be representative of the various response strategies and tactics noted in the plan and test response throughout the operating area (see I8).
F. TRACKING, ASSESSMENT & INFORMATION MANAGEMENT		
F3	Maps or charts are available to maintain a record of spill tracking and movement.	Spill response management personnel should have ready access to materials to document the extent of a spill and response actions: easy to use map(s) or area diagram(s).



Code	Critical criterion	Balloon Text:
G. LOGISTICS		
G5	Assets and procedures for communications between local Command Post and Operations-wide Command Post are in place.	Radios and telephones (land lines, cell, and/or satellite) should be available to allow for direct communications between a spill command management location and personnel deployed in spill response work zones. Radios or phones that may be used in hot zones should be intrinsically safe.
G6	Decontamination facilities are available for personnel leaving the spill site.	An inspection should find that decontamination equipment such as wash down pools, detergent, and sorbents are readily available and in good conditions to clean responders exiting oiled areas.
H. FINANCIAL & ADMINISTRATIVE CONSIDERATIONS		
H1	Designated company Incident Commander and emergency management personnel have pre-defined spending approval limits.	The plan or other documentation should indicate that personnel assigned to manage a spill response (e.g., incident commander) have the authority to engage actions that incur costs without having to wait for other authorization.
I. TRAINING & EXERCISES		
I1	Training requirements have been defined for spill management and responders.	The minimum training requirements for spill response and management personnel should be clearly defined: type of training, initial and refresher (as applicable), and frequency.
I3	Minimum initial and refresher Health & Safety training requirements are defined for spill management and responders.	Health and safety risks and hazards associated with spill response actions must be a part of the training program for all responders. Documentation should exist detailing the training health and safety training provided for spill personnel (see D7).
I7	Deployment exercises are conducted at least annually with local resources.	Records should exist to verify that spill response equipment is or has been deployed annually. This may be a part of training and should encompass use of representative equipment for on-site response (Tier 1) and to a representative range of working environments within the scope of operations (see E5).
J. SUSTAINABILITY & IMPROVEMENT		
J3	Post-Exercise and Post-Spill Evaluations are made and incorporated into actions for OSR program improvements.	Programs improve when they are evaluated AND when recommendations are implemented. Records should show post-exercise or post-spill critiques and action items. Check for action items or recommendations that were implemented following the critiques.



12.6. INDUSTRY: COUNTRY OR BUSINESS LINE - LEVEL A

Code	Critical criterion	Balloon Text
A. LEGISLATION, REGULATIONS, AGREEMENTS		
A1	Business-line or Country Plan adheres to National and Corporate policies and requirements for OSR and assigns responsibilities.	OSR Plan and preparedness requirements reference applicable oil spill planning legislation and/or regulations and Corporate planning policies. The OSR Plan should list or reference the current applicable regulations or policies and show how and where these are addressed.
B. OIL SPILL CONTINGENCY PLANNING		
B1	A business-line or Country OSR plan has been developed and approved; identifies organization and Designated Authorities for oil spill response (and/or defines authority for specific spill cases (e.g., spill to land vs. spill to marine waters).	As appropriate, the OSR Plan should indicate if and where geopolitical boundaries between States, Provinces, and/or Countries may be included in the scope of the program and note legislation or regulations that may apply to OSR across those boundaries.
B3	Business-line or Country OSR adheres to designated planning levels set by National, Regional, or Corporate requirements.	While in compliance with corporate requirements, Plan follows national or regional requirements. Spill response management structure allocates government participation. Tiers are consistent with Company policies and applicable country regulations.
B4	Applicable and related government, Corporate, and facility plans are identified.	There are no discrepancy issues between this Plan and applicable government or Corporate Plan at different levels. The scope of the Plan is clear and when the Plans are activated. Agencies jurisdiction and chain of command is clear. A good diagram helps to explain this context.
B5	Expertise (government/industry) for OSR-related issues is listed.	The plan should identify personnel at the Country - Business line level that have the appropriate background, knowledge, and experience to undertake key spill response tasks.
B7	Key contacts are updated as they change.	Primary and alternate telephone numbers, and possibly email, fax, etc., must be kept current for key contacts, including but not limited to spill management team, agencies/authorities, and spill response contractors.
B8	Priority planning is focused on geographic areas or operations of higher spill risk and environmental sensitivity.	The plan must include environmental (ecological) and socioeconomic priorities to be protected, based on operational capabilities.
B9	Plan describes key sensitive areas and priorities.	Environmental (ecological) and socioeconomic sites that are sensitive and vulnerable to spills within the potential zone of spill spreading or influence should be documented.



Code	Critical criterion	Balloon Text
B11	Response strategies are clearly stated and provide for response to applicable operating conditions and oil types.	Sensitive site protection and spill containment, recovery, and removal strategies should be described and appropriate to oil types (i.e., strategies would be expected to vary from a refined, non-persistent product such as gasoline, to a heavy oil) and local operating conditions (i.e., sites in extreme cold conditions may include ice/snow strategies for winter season).
C. RESPONSE COORDINATION		
C1	A clear procedure outlines what types of information are to be reported on a response and who should receive initial spill notification and any follow-up reports.	The plan should identify who is to receive notification of a spill and what information about the spill is to be relayed at the time of notification. As appropriate, the plan should identify to whom and when a report must be filed following response to a spill.
C3	A contact list includes key personnel.	A telephone listing of key personnel (and alternatives) to be contacted at the time of a spill should be easy to find and telephone numbers should be accurate (see B7).
C4	A spill management structure has been established and defined for all spill types and Tiers including land- and sea-based incidents.	The spill response team organization should be described and preferably illustrated in a diagram. The organization should note who is to fill the spill management roles. The spill management organization should note if and how it may change depending on the complexity and size of the necessary response (Tiers), as applicable.
C6	The role of Business-line/Country Team in Incident Command and in Crisis Management is defined.	The plan describes how the business-line/Country team would interact with the local / Operations team and with corporate support.
C7	Positions (and/or personnel) assigned to OSR management roles are identified.	Country-Business lines positions are clearly defined and Plan has corporate approval and support to sustain such spill management roles.
D. HEALTH, SAFETY & SECURITY		
D1	Health and safety policies and corporate standards are in place that meet or exceed government requirements for protecting both the public and responders from the effects of spills.	The plan, or referenced documents, should include all safety policies and regulations applicable in the area for oil spill response and including identification of the enforcing agencies.
E. OPERATIONAL RESPONSE		
E1	Country or Business Line establishes policies and procedures to minimize spill volumes through pre-planning for source control: transfers, emergency lightering, etc.	There are Country / Business line spill prevention programs in place that include maintenance protocols, management controls (procedures) and engineering controls.



Code	Critical criterion	Balloon Text
E5	Operational use of countermeasures has been verified in an annual drill.	Annual exercise requirements include deployment of representative equipment (quantities and type) to test Country / Business line capabilities to implement countermeasures (see I6)
F. TRACKING, ASSESSMENT & INFORMATION MANAGEMENT		
F1	Role or assignment is defined in OSR management to undertake spill tracking, including monitoring.	OSR plan or related documentation identifies the positions responsible to support oil spill tracking and monitoring. It should reference industry best practices to conduct spill tracking and describe a consistent methodology collecting data.
G. LOGISTICS		
G1	Key logistical support providers and capabilities are identified to support response from Company teams.	Plan or related documents or database includes notification and activation procedures for key country / Business line logistical support team and services.
G4	Assets and procedures for communications between field and Company OSR Spill Management or Support Team are in place.	The Country / Business Line plan or referenced documents show clear guidelines on expected communications guidelines and protocols between the spill management team and Corporate management, sometimes referred to as crisis management.
H. FINANCIAL & ADMINISTRATIVE CONSIDERATIONS		
H1	An emergency fund is available to support augmentation of OSR actions as required by a spill.	The OSR plan or a written procedure should indicate that existing Country / Business line emergency funds can be made available immediately and describe the activation procedures. It should show that the incident commander has the authority to engage actions that incur costs without having to wait for other authorization.
H3	Company policies are defined for legal support and related matters including sampling/collecting evidence, taking statements, and mechanisms for settling disputes and claims	OSR Plan or referenced documents should describe sampling procedures and guidelines according to Country / Business line policies. Policies should identify responsible support from Corporate/Country management personnel that can aid in decision-making with authorities and describe the mechanisms for settling disputes and claims.
I. TRAINING & EXERCISES		
I1	A company policy for minimum initial and refresher training requirements, including Health & Safety, is defined for spill management and responders.	The plan or related documents should include company training requirements for minimum H&S training applicable for Country / Business line spill management and responders.



Code	Critical criterion	Balloon Text
I6	Deployment exercises are required and held including mobilized Tier 2 response assets.	Records should exist to verify that joint (Tier 1 augmented with Tier 2) spill response equipment is or has been deployed annually according to the Country / Business line Plan. This may be a part of training and should encompass use of Country / Business line oil spill response organizations and representative equipment for on-site response (see E5).
J. SUSTAINABILITY & IMPROVEMENT		
J4	Post-Spill Evaluation and Revisions to Plan are documented.	Programs improve when they are evaluated AND when recommendations are implemented. Records should show post-exercise or post-spill critiques and action items. Check for action items or recommendations that were implemented following the critiques.



12.7. INDUSTRY: CORPORATE - LEVEL A

Code	Critical criterion	Balloon Text
A. LEGISLATION, REGULATIONS, AGREEMENTS		
A1	A corporate policy stipulates requirements for OSR and assigns responsibilities.	A written Corporate spill response philosophy should specify company oil spill planning and preparedness policies and procedures and responsibilities for development and implementation.
B. OIL SPILL CONTINGENCY PLANNING		
B1	A corporate OSR plan has been developed and approved.	The review should verify that a corporate OSR plan has been developed and that the policies and expectations for more detailed planning has been implemented, or is in process of being implemented (if relatively new) per corporate leadership team requirements
B5	Expertise (personnel) for OSR-related issues is listed.	The Corporate plan should identify Corporate personnel or from business unit that have the appropriate background, knowledge, and experience to undertake key spill response tasks. This corporate support groups capabilities and the activation procedures should be clearly identified in the Corporate plan.
B6	Key contacts are updated as these change.	Primary and alternate telephone numbers, and possibly email, fax, etc., must be kept current for key contacts, including but not limited to spill management team, agencies/authorities, and spill response contractors.
B10	Policies are in place to reduce the risk and/or consequences of a spill.	Corporate policies, requirements, and incentives are in place to either reduce the probability of spill occurrence and to mitigate their possible consequences.
B11	A corporate plan provides guidelines on response strategies, equipment and personnel needs relative to applicable operating conditions and oil types.	Corporate guidelines include how to determine sensitive site protection and spill containment, recovery, and removal strategies; including net environmental benefit analysis appropriate to oil types (i.e., strategies would be expected to vary from a refined, non-persistent product such as gasoline, to a heavy oil) and local operating conditions (i.e., sites in extreme cold conditions may include ice/snow strategies for winter season).
C. RESPONSE COORDINATION		
C1	Clear procedures outline what types of information are to be reported on a response, and who should receive initial spill notification and any follow-up reports.	The Corporate response plan should identify who is to receive notification of a spill and what information about the spill is to be relayed at the time of notification, according to Corporate and public affair policies. As appropriate, the plan should identify to whom and when a



Code	Critical criterion	Balloon Text
		report must be filed following response to a spill, and who has the authority / responsibility to report accurate spill information.
C3	A contact list notes key personnel.	A telephone listing of key personnel (and alternatives) to be contacted at the time of a spill should be easy to find and telephone numbers should be accurate (see B7).
C4	A spill management structure has been established for all spill tiers, as appropriate.	The corporate spill support team organization should be described and preferably illustrated in a diagram. The organization should note who is to be the main point of contact with the spill management roles. The spill management organization should note if and how it may change depending on the complexity and size of the necessary response (tiers), as appropriate.
C6	The role of a Corporate Team in Incident Command and in Crisis Management is defined.	The corporate plan defines the differences between the role, scope, and responsibilities of the incident command and the crisis management functions.
C7	Positions (and/or personnel) assigned to OSR management roles are identified.	The corporate plan identifies who has the primary responsibility to define strategic objectives, allocate resources, assess incident potential, define incident action plan and follow-up on the response performance.
D. HEALTH, SAFETY & SECURITY		
D1	Corporate health and safety policies and standards are in place for protecting the public and responders from spill hazards.	Corporate program states H&S policies and indicates how hazards should be identified, and countermeasures implemented, to protect the public and responders in case of a spill or threat of major release.
E. OPERATIONAL RESPONSE		
E1	A corporate policy establishes procedures to minimize spill volumes through, for example, source control: transfers, emergency lightering, etc.	The plan indicates Corporate policies and spill prevention programs that include maintenance management controls (procedures) and engineering controls.
E3	A list of locations and general amounts and types of Tier 3 OSR equipment is available, if appropriate.	The plan or related documentation indicates that Corporate agreements with Tier 3 oil spill response organizations (OSRO) are in place, as applicable. It also includes OSR equipment location and estimated time to mobilize from Tier 3 sites to main business unit field locations.
E6	Corporate policy for development of OSR Waste Management Plans is defined and requires that plans conform with local regulatory requirements.	The Corporate OSR Plan or supporting documentation includes waste management guidelines to define transport, disposal, decontamination, and environmental stewardship requirements.



Code	Critical criterion	Balloon Text
F. TRACKING, ASSESSMENT & INFORMATION MANAGEMENT		
F1	The corporate plan includes procedures and tools for spill tracking, including monitoring.	The Corporate OSR Plan or supporting documentation defines the corporate support available and responsibility for oil spill tracking and monitoring. It should reference industry best practices to conduct spill tracking and describe a consistent methodology collecting data.
G. LOGISTICS		
G2	Corporate planning provides guidelines to areas/regions/facilities for logistical planning needs.	The Corporate OSR Plan or supporting documentation includes an incident management system with resources allocation procedures consistent with business line procedures, in order to leverage on the onsite capability. Corporate support for logistical planning need is identified.
G4	Assets and procedures for communications between field and Corporate Support are in place.	The corporate plan provides clear guidelines to establish communications procedures and protocols. Inspection confirms that radios, telephones (cell or land lines), are available to allow for direct communications between Corporate support and the spill command management location.
H. FINANCIAL & ADMINISTRATIVE CONSIDERATIONS		
H1	An emergency fund is available for augmenting response actions.	The Corporate OSR Plan or supporting documentation should indicate that existing Corporate emergency funds are immediately available and describe the activation procedures. It should show that the incident commander has the authority to engage actions that incur costs without having to wait for other authorization.
H3	Corporate policies are defined for legal support and related matters including sampling/collecting evidence, taking statements, and mechanisms for settling disputes and claims.	The Corporate OSR Plan or supporting documentation should describe sampling procedures and guidelines according to Corporate requirements. Documentation should identify the Corporate support to work with local teams to assist with decision-making, communications with authorities, and assistance for settling disputes and claims.
I. TRAINING & EXERCISES		
I1	A corporate policy for minimum initial and refresher training requirements, including health & safety, is defined for spill management and responders.	The Corporate OSR Plan or supporting documentation should include company training requirements, including incident management procedures to address stakeholders needs, crisis management training, how to assess the incident potential to prevent an emergency to become a crisis, etc.



Code	Critical criterion	Balloon Text
J. SUSTAINABILITY & IMPROVEMENT		
J2	A Corporate Team or Work Group is assigned to review and recommend OSR enhancements at local/regional/national levels.	Documentation should indicate that a Corporate OSR preparedness and assessment review team is in place to aid with implementing corporate OSR policies at regional to local levels. Assessment team members should have the appropriate background, knowledge, and experience to provide leadership in spill response preparedness.



BEST PRACTICES

ARPEL Oil Spill Response Planning and Readiness Assessment Manual V 2.1



REGIONAL ASSOCIATION OF
OIL, GAS AND BIOFUELS SECTOR COMPANIES
IN LATIN AMERICA AND THE CARIBBEAN

ARPEL is a non-profit association gathering oil, gas and biofuels sector companies and institutions in Latin America and the Caribbean. Founded in 1965 as a vehicle of cooperation and reciprocal assistance among sector companies, its main purpose is to actively contribute to industry integration and competitive growth, and to sustainable energy development in the region.

Its membership currently represents over 90% of the upstream and downstream activities in Latin America and the Caribbean and includes national, international and independent operating companies, providers of technology, goods and services for the value chain, and national and international sector institutions.



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