

An ARPEL Tool to Assist the International Oil Spill Community in Bridging Response Planning and Readiness Gaps

Miguel Moyano, ARPEL
PAJ Oil Spill Symposium 2016
"Maintaining Future Effective Preparedness against Oil Spills"
Tokyo, JAPAN - January 28-29, 2016



Presentation Outline

- What is ARPEL?
- The history of RETOS™
- RETOS™ What is it?
- Use and features
- Final remarks

What is ARPEL?



- A 50-year-old association of oil and gas companies and institutions in Latin America and the Caribbean aimed at:
 - promoting integration, growth, operational excellence and effective socio-environmental performance of the regional industry, and
 - ensuring the sector maximizes its contribution to sustainable energy development in the region.
- ARPEL's Mission is accomplished through synergies and cooperation with relevant stakeholders
- Its members represent over 90% of the upstream and downstream activities in the region.

ARPEL Member Companies

































































ARPEL Member Institutions





































2008 International Oil Spill Conference

Assessment of Oil Spill Response
Capabilities:
A Proposed International Guide for Oil Spill
Response Planning and Readiness
Assessments







What is RETOS™?

- The ARPEL "Readiness Evaluation Tool for Oil Spills (RETOS™)" and its accompanying Manual were developed to assist governments and companies to assess the level of oil spill response planning and readiness management and bridge the gaps identified
- In relation to <u>commonly agreed pre-established criteria</u>





National and International Standards

- MARPOL/OPRC
- IMO Guidelines
- Industry guidelines (IPIECA, ARPEL, API)
- ISO 9000 y 14000
- 2008 IOSC Guideline
- Laws and regulations

The guidelines and practices in the ARPEL Manual and RETOS™ are suggested; NOT mandatory

2008 International Oil Spill Conference

Assessment of Oil Spill Response
Capabilities:
A Proposed International Guide for Oil Spill
Response Planning and Readiness
Assessments





Some highlights of RETOS™

- Scope: oil spills
- Applicable to different spill scenarios:
 - spill sources (e.g., tankers, pipelines, platforms, land facilities)
 - receiving environments (e.g., land, inland waterways, offshore, etc.)





Some definitions used in RETOS™



• **Criteria** (i.e., management requirements)

Categories

Seven different oil spill response
 Scopes

- A. Legislation, Regulations & Agreements
- B. Oil Spill Contingency Planning
- C. Response Coordination
- D. Health, Safety & Security
- E. Operational Response
- F. Tracking, Assessment, and Information Management
- G. Logistics
- H. Financial and Administrative Considerations
- I. Training & Exercises
- J. Sustainability & Improvement

 Three Assessment Levels -Increasingly comprehensive criteria



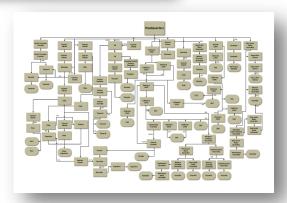
RETOS™ Application to Oil Spill Response Programs

- Government or Industry
 - 1. Facility Terminal, plant, refinery
 - **2. Facility/Asset Operation** Pipelines, vessels, fleet



- Government
 - 3. Port/City/Local
 - 4. Area Region, Province, State
 - 5. National (& Multi-National)
- Industry
 - **6. Country or Business Line** (e.g., Production)
 - 7. Corporate





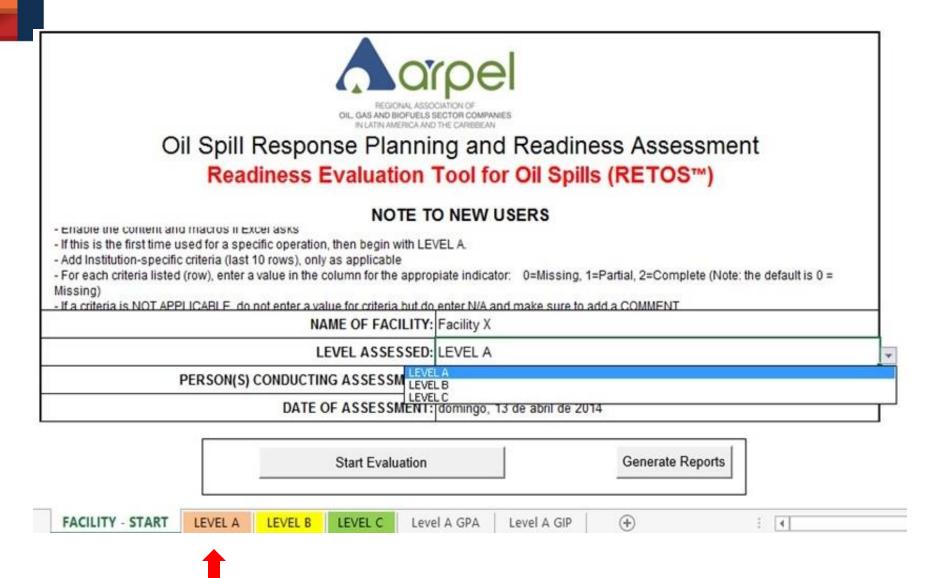


Using ARPEL RETOS™ V 2.0

An example
Facility (e.g., a refinery)
Level A



Using RETOS™ - Selecting the Level



Using RETOS™ - The evaluation



GOVERNMENT - INDUSTRY: FACILITY - LEVEL A	INDICATOR	COMMENTS - RECOMMENDATIONS
for Indicator, enter 0= Missing, 1=Partial, 2=Complete; N/A= not applicable and add comment.	O Missing; O P	artial; • Complete
A. LEGISLATION, REGULATIONS, AGREEMENTS		
1 Plan references regulatory requirements.	•	
2 Reportable amounts of spills indicated.	•	
3 Signed agreements for local (within reasonable distance) OSR assistance are in place.	0	Agreements are verbal only. Recommend more formalized approach.
Nearby or neighboring industries are identified that may assist in response.	•	
5 An Environmental Statement is included.	•	Stated in company policies.
B. OIL SPILL CONTINGENCY PLANNING	0	
1 Plan is readily available to OSR personnel that includes clear table of contents, pagination.	•	
2 Plan is dated.	•	
3 Person/position is clearly identified along with alternates within the plan for maintaining plan.	•	
4 Applicable and related plans (company, local, and government) are identified.	The OSP	plan should identify personnel on
5 Local expertise for OSR-related issues is listed.		have the appropriate background,
6 Plan has been reviewed or revised in past 3 years.		e, and experience to undertake
7 Key contacts are updated as these change.		esponse tasks.
8 Potential spill sources, liquids, and volumes are identified and known to responders.		ANALYZARIA MARANIA MAR
9 General area at risk is identified based on spill sources.	0	There has not been a proper risk assessment. Suggest this is made and see the need to adapt the OSR program
O Sensitive areas are identified in plan.	•	
1 Species at risk are listed.	0	Consider cross-reference to Area Plan.
2 Response strategies are clearly stated and appropriate for facility, operating conditions, and oil types.	•	- Daniel Commission
3 Alternative countermeasures, such as dispersants or in-situ burning, are evaluated as options.	N/A	Not applicable in bay
4 Personnel needed to undertake operations are assessed.	•	Completed at last exercise (2013)
C. RESPONSE COORDINATION		
1 Clear procedures are included on information to report and who should receive initial spill notification and follow-up reports.	•	
2 A spill reporting form is included.	•	
3 A contact list specifies key personnel and alternates.	•	
4 Spill management structure and assigned personnel are defined for all spill tiers, as appropriate.	•	
FACILITY - START LEVEL A LEVEL B LEVEL C Level A GPA Level A GIP (+)	1.4	

Using RETOS™ - The score



A D	E	F
GOVERNMENT - INDUSTRY: FACILITY - LEVEL A	INDICATOR	COMMENTS - RECOMMENDATIONS
for Indicator, enter 0= Missing, 1=Partial, 2=Complete; N/A= not applicable and add comment.	sing;) F	Partial; Complete
5 In-house spill training courses are available.	•	
16 Training records for on-site personnel document compliance with required training.	•	
17 Notification and Alerting Exercises are simulated within facility as part of training	•	
Annual deployment exercises are held at the facility.	•	
Annual tabletop (Response Management) Exercises are held.	•	
J. SUSTAINABILITY & IMPROVEMENT		
J1 Internal review of exercise is held.	•	
J2 Audits of plans and facilities are conducted annually.	0	Present audit was first; recommend audit or review be completed annually.
Post-Exercise and Post-Spill Evaluations are conducted and incorporated into actions for OSR program improvements.	•	Please enter a comment (and recommendation, as applicable) if not complete.
INSTITUTION SPECIFIC CRITERIA	H	95
Response contractor(s) have records of semi-annual deployment exercises.	•	
2 Management documented improvement and milestones for next year.	0	In progress. Need to finalize.
3		0.4 00 00 00 00 00 00 00 00 00 00 00 00 00
4		
5		
6		
7		
8		
9		
10		
		•
OVERALL GLOBAL ASSESSMENT - Government - Industry: Facility - Level A		
OVERALL GLODAL ASSESSMENT - GOVERNMENT - INGUSTRY - LEVELA	92%	
Level In Development		
Level in Development		
TANKE THE PARTY OF		
FACILITY - START LEVEL A LEVEL B LEVEL C Level A GPA Level A GIP		

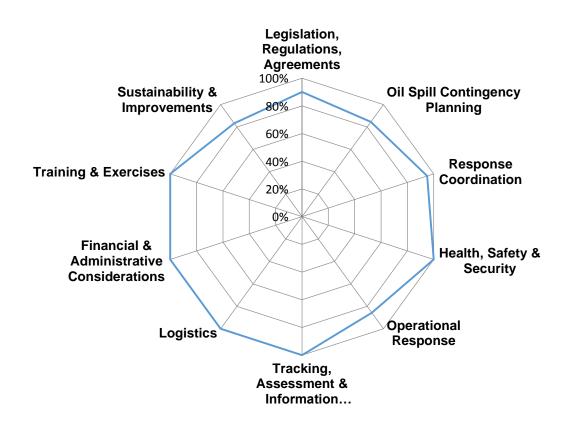
Using RETOS™ - Global Performance Analysis



Global Performance Analysis Results

11004110				
Category	Value			
Legislation, Regulations,	90%			
Agreements	90%			
Oil Spill Contingency	85%			
Planning	83%			
Response Coordination	95%			
Health, Safety & Security	100%			
Operational Response	86%			
Tracking, Assessment &	1000/			
Information Management	t 100%			
Logistics	100%			
Financial & Administrative	2 100%			
Considerations	100%			
Training & Exercises	100%			
Sustainability &	020/			
Improvements	83%			
Total	92%			
Institution Specific Criterio	75%			
	•			
#Completed / Number				
of questions: 58/66				
Level A Overall Assessment: 92% (In				
Development)				

Level A Results with No Weighting



Using RETOS™ - Global Improvement Program



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 Mi	issing					
1	B9: General area at risk is identified based on spill sources.	There has not been a proper risk assessment. Suggest this is made and see the need to adapt the OSR program				IOSC Sub-element 4.3
<mark>Critical Criteria Pa</mark>	rtial					
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
2	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, R	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
. TRAINING & EXE	RCISES					
	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

neviewed by.		
Approved By:	Date	

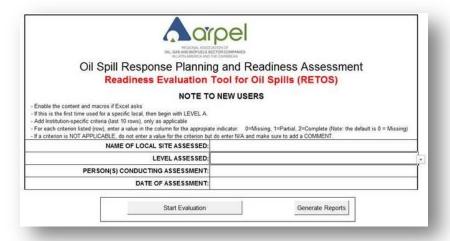
ARPEL Manual and RETOS™



The Manual provides the background for OSR management assessment and explains the terms used, the approach to the assessment process, the concept for a Global Improvement Program and +150 references

Freely available at www.arpel.org

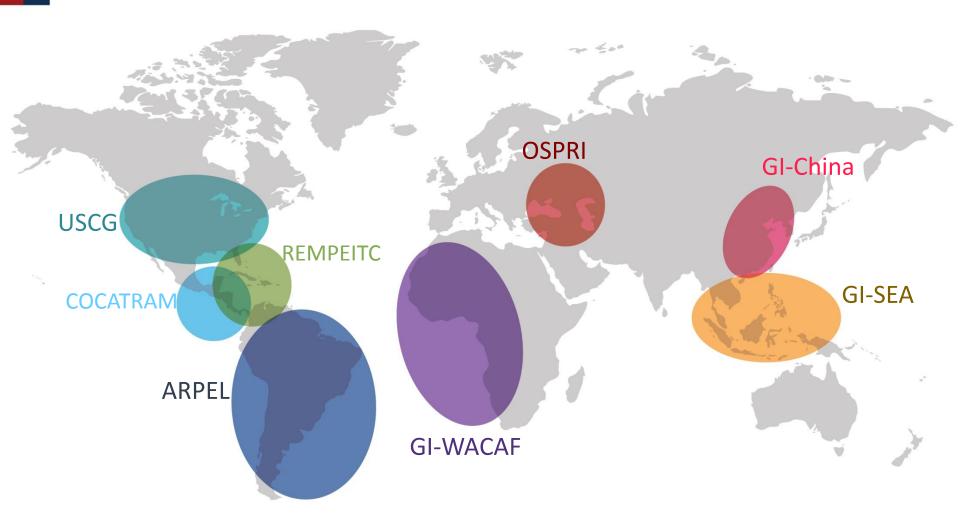




The Tool (RETOS™) is the Excel™ application intended as a checklist-type approach for a specific program and level of evaluation.



International use by Government and Industry



Final Remarks



- International government/industry effort
 - Critical criteria for Level A Ensuring basic management
 - Institution-specific criteria Flexibility
 - Global Performance Analysis Sub-scores per assessment category and simple display of results by category
 - Auto-generation of a Global Improvement Program / Implementation Plan - Priorities for improvement / synergies
 - The Manual has over 150+ Internet selected references on best practices
- ARPEL support in RETOS training
 - National/regional courses with participants from different institutions
 - Tailor-made training + gap analysis of a single OSR Program



Arigató!!! Questions?



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

www.arpel.org - info@arpel.org.uy

Javier de Viana 1018, Montevideo, Uruguay –

Tel.: (598) 2410 6993 - Fax: (598) 2410 9207