API Oil Spill & Emergency Preparedness and Response (OSEPR) Subcommittee Update

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Outline

API Joint Industry Task Force (JITF) Recap

EPA Dispersant Rulemaking (Subpart J) Impressions

Other Subcommittee Activities

External Engagement
  - Confident Ambassador Program

Path Forward
API Joint Industry Task Force Recap

API JITF formed in wake of DWH spill followed by IOGP/IPIECA JIP

Five-year work program (2011-15) with numerous projects under 7 work streams

- Planning
- Dispersants
- In-Situ Burning
- Mechanical Recovery
- Shoreline Protection
- Remote Sensing
- Alternative Technologies

Majority of technical projects complete

- Websites contain completed deliverables
  - API-JITF http://www.oilspillprevention.org/oil-spill-research-and-development-cente
  - OGP/IPIECA JIP http://oilspillresponseproject.org/completed-products:

- Remaining projects focused on Dispersants and In-Situ Burning

Stakeholder involvement in projects

Collaboration with IOGP/IPIECA JIP and other OSR research efforts

Focus on external communications
R & D Center

In the wake of the Gulf of Mexico spill of 2010, industry mobilized itself and launched four Joint Industry Task Forces (JITFs) to critically assess capabilities and performance. Each JITF brought forth subject matter experts to identify best practices in offshore drilling operations and oil spill response and to share that knowledge across industry. The goal is to ensure environmental protection through enhanced safety.

The Oil Spill Preparedness and Response JITF examined industry’s ability to respond to a “Spill of National Significance (SONS)” and the actual response to the Gulf of Mexico spill. This program consists of the following seven work-streams:

- Spill Response Planning
- Oil Sealing and Tracking
- Dispersant
- In-Situ Burning
- Mechanical Recovery
- Shoreline Protection
- Alternative Response Technologies

VIDEO: Dispersant’s Role in Biodegradation

Completed Products

Oil Spill Preparedness and Response: A Good Practice Framework

This document outlines the basics of Oil Spill Preparedness and Response used by industry in responding to an oil spill. It explains how the industry has developed a framework of options for responding to oil spills and shows:

- Why effective Oil Spill Preparedness and Response is so critical
- What makes an Oil Spill Preparedness and Response framework effective
- The components of our Oil Spill Preparedness and Response framework
- How to support Oil Spill Preparedness and Response effort

The Role of Dispersants in Oil Spill Response

The best scenario is the one without an oil spill. If a spill occurs, speed...
Driving Improvements in Planning & Preparedness

Guidance document on Offshore OSR Plans →
Recommended Practice on PPE
Training and Exercise Guidelines
DWH Technology Evaluation
Tracking database for R&D activities
Remote Sensing User Guide

Monitoring/supporting gov’t efforts to improve:
- Cascading resources
- OSRO Classification Program (Inland, Group V)
- PREP drill/exercise program
- Area Contingency Plans/ESI Mapping
- Effective Daily Recovery Capacity (EDRC)
- Dispersants (Subpart J)
Enhancing In-Situ Burn Burning & Shoreline Protection

In Situ Burning
- Guidance on fate of burned oil
- Research on soil heating from inland/upland burns
- Evaluation of aerial ignition devices/platforms
- Operations Manuals (operational info, checklists) for responders
- Guidelines for:
  - Safety Officers and Industrial Hygienists
  - Selection and Training of key ISB Personnel

Shoreline Protection
- Utilizing berms and tidal barriers for oil spills
- Tools and techniques for sandy beach cleanup
- Detection and delineation of subsurface buried oil
- Tidal inlet protection strategies
- Planning and response considerations for spills in marshes
Promoting Dispersant Science and Understanding

Developing improved communication tools
- Fact Sheets
- Scan and Glance Materials
- Outreach Workshops
- Stakeholder engagement

Research Tracking and Evaluation
- Interaction with research entities
- Published research evaluation

Integrating DWH aerial dispersant learnings

Assessing and optimizing subsea injection
- Effectiveness
- Fate and Effects
- Modeling
- Monitoring

Promoting improved decision-making

Effectiveness Project Team

Preliminary testing in Sintef tower

Study objectives:
- Determine the effects on dispersed oil droplet size of
  - Dispersant-to-oil ratio
  - Dispersant injection method
  - Dispersant injection location
  - Low-solvent dispersants

Dispersant was very effective at reducing droplet size even with low DOR’s
Concerns Re: Subpart J NPRM

1. Severely restricts/eliminates an important response option from the toolbox
   • Arbitrary toxicity and effectiveness thresholds
   • Complex and onerous pre-authorization pathway

2. Promotes bias that dispersants are toxic … will only heighten public apprehension

3. Lacks NEBA perspective (minimize harm to the environment) and favors protecting water column species at the expense of other shared values (shorelines, recreation)

4. Hampers/limits long-standing role of the FOSC in operational decision-making

5. Is inconsistent with polices in other parts of the U.S. government (USCG, BSEE)

6. Fails to quantify the true costs of taking dispersants out of the toolbox
   • Market impacts (lost value of stocks, equipment, services)
   • Costs of additional environmental damages that could result without this tool
Other Subcommittee Activities

- Inland Response
  - Crude By Rail Workgroup formed
    - Development and delivery of safety course for first responders
    - Sharing information/practices
  - Recommended Practice for Pipeline Emergency Response
    - Addresses planning, communications, training, exercises, sharing learnings
    - Extensive government representation
    - Draft RP is out for comment
  - Study on Spill Behavior and Response for Oil Sands Derived Crude Oils
  - Sunken Oil Detection and Recovery: Response Guide
  - Options for Minimizing Environmental Impacts of Inland Spill Response
- Formation of Midstream Group
- Energy Resiliency/Emergency Preparedness
- Response in Arctic and other cold weather locations
- Ongoing communications and outreach (JIP, SAG, GOMRI, Conferences)
Industry supported “Scan and Glance” materials on key topics are enabling improved communication efforts

- Oil Spill Preparedness and Response Framework
- Net Environmental Benefit Analysis (NEBA)
- Role of Dispersants in Oil Spill Response
- Tiered Preparedness and Response Framework
- Incident Management System (e.g. ICS)
- Regulatory Approval and Use of Dispersants

IOGP-IPIECA and API outreach programs

- Utilizing existing Industry vehicles

‘Confident Ambassador’ Program

- Expand pool of active Industry and responder supporters
Confident Ambassador Key OSR Principles

- Prevention is a basic design and operational goal for industry. Source control is a crucial part of prevention.

- Equipment + people + planning + training + exercising + review = response capability.

- Operators should have effective and deliverable contingency plans, up to and including the worst credible case discharge.

- Plans must have detailed, executable components that can be translated into a physical spill response capability.

- Net Environmental Benefit Analysis (NEBA) should be used to select response options that will result in the least overall damage to the environment.

- As time is of the essence following a spill, pre-authorization of response tools and tactics is paramount.
Key OSR Principles (Continued)

• Picture an evolving response as a “cone”: use the most effective tool first to knock down the most oil before it gets away – think “big and quick”.
• For a large offshore spill, NEBA will often support the use of dispersants

• The Tiered Response Concept (i.e. cascading resources) remains the preferred approach for ensuring adequate resources are quickly available.

• Oils behave differently: know your oil properties and behavior as these dictate response strategy decisions in a given situation.

• An Incident Management System based on Incident Command System (ICS) principles is the preferred tool for organizing a response.

• Even the best planned and executed response will be judged to have failed if stakeholder communications are poor.
Path Forward

- Complete JITF commitments (coastal/offshore spills)
- Improve inland spill response capabilities
- Actively engage stakeholders
- Continue partnership with other OSR programs/initiatives
- Maintain Industry’s commitment to enhancing Oil Spill Preparedness and Response