Thailand Oil Industry Tier 2 Oil Spill Response Capability Management
Topics

• Background
• Role and Responsibility Management
• Capability Improvement Management
• Summary and Way forward
Recent Thailand Oil Spill Incident in Y2013
Recent Thailand Oil Spill Incident in Y2013
• Review of National and Province Level in regard of Oil Spill Response Plan
• Review the Frequency of Oil Spill Exercise in each level
• Review of Mutual Support Process
• Develop Oil Spill Knowledge for other related parties
• Improve of Logistics Arrangement and Oil Spill Response Equipment
National OSR Plan

- Established April 24, 1995 (B.E. 2538)
- First revision proposed to the Cabinet in 2000
  - But was asked to have additional amendment
- The revision was re-submitted to the Cabinet in March 2002
  - Received approval, and effective in August 2002

- National Committee on Oil spill response was appointed by the Ministerial Regulation in 1995
- The Marine Department and the Royal Thai Navy were leading agencies
- National Oil Spill Contingency Plan of Thailand was established and approved by the Cabinet in 2002
- Capacity building at National and local level
  - Training programmes for responders and supervisors
  - Oil spill response exercise (Local and National level)
Response Organizations

Committee on the Prevention and Combating of Oil Pollution

Coordination Centre

Command Centre

Operation Unit

Support Unit

Order Line  --------  Coordination Line  -----------
DESIGNATION OF RESPONSIBLE AUTHORITY

OPERATION UNIT
- Marine Department
- Royal Thai Navy
- Provincial Administration
- IESG (Oil Industry Environmental Safety Group Association)**

SUPPORT UNIT
- Army
- Airforce
- Marine Police
- Civil Aviation
- Environment PLA
- Pollution Control
- Local Admin.
- Metrological Department
- Fishery Department
- Agricultural Aviation
- Customs
- Foreign Affair
- Immigration
- Port Authority
- etc.

** IESG – Private Sector
# Current Tier Concept

<table>
<thead>
<tr>
<th>Responsible area and amount of oil leak</th>
<th>Coordinating Centre</th>
<th>Command Centre</th>
<th>Operation Unit</th>
<th>Support Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Within Port area</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tier 1: Below 20 tons</td>
<td>Marine Department</td>
<td>-</td>
<td>Spiller/Agency</td>
<td>On requested</td>
</tr>
<tr>
<td>Tier 2: Between 20 to 1,000 tons</td>
<td>Marine Department</td>
<td>Marine Department</td>
<td>MD/RTN/IESG</td>
<td>22 Units</td>
</tr>
<tr>
<td>Tier 3: Over 1,000 tons</td>
<td>Marine Department</td>
<td>Marine Department</td>
<td>MD/RTN/IESG</td>
<td>22 Units</td>
</tr>
<tr>
<td><strong>Outside Port area</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tier 1: Below 20 tons</td>
<td>Marine Department</td>
<td>-</td>
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<td>On requested</td>
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<tr>
<td>Tier 2: Between 20 to 1,000 tons</td>
<td>Marine Department</td>
<td>Royal Thai Navy</td>
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<td>Tier 3: Over 1,000 tons</td>
<td>Marine Department</td>
<td>Royal Thai Navy</td>
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</table>
IESG Members – Oil Company In Thailand
OSR Coordination In Thailand

- Coordination Center
- Joint operation
- Operation Command Center
- Support Units
- Company ER Command Center
- IESG/OSRL Representatives
- Contractors, IESG/OSRL*

Remark: * For IESG/OSRL member companies
IESG OSR Working Committee

- Bangkok Area
- Sriracha Area
- Rayong Area
- South Area
- Offshore Area
Key Stakeholders Capability Development

Prevention

- Tanker owners/operators
- Jetty operators, Safety officers
- Government Pilots, Inspectors

Preparedness

- Equipment custodian/M&R
- Response teams (Gov/industry)
- Supporters (Gov/industry/NGO)

Response

- Field teams (Gov/Industry)
- Above fields team (Gov/Industry)
- Supporters (Gov/Industry/NGO)

Training
- Exercise
- Seminar
- Workshop

Exercise
- Seminar
- Workshop

Certification
- Seminar
- Workshop
Key issue:
Stakeholders development need to be considered in the big picture, not for just IESG
IESG Self Review

**Strength**

- National plan & company plan
- Co-op Assistant agreement
- Collaboration & cooperation
- Mutual aid arrangement
- Tier 1 equipment
- Tier 2 equipment
- Company response team
- Government response team
- Regular exercises
- Equipment M&R program

**Weakness**

- Experience with major spill
- In-country professional service providers
- Formal or certified training program
- Adequate response vessels
- Adequate responders in company
- Full exercise of National Plan
- Dedicated co-op/government resources
- In-country response center
- Effective equipment M&R program
- Budget to replace dated equipment
### IESG

- Re-organization of permanent staff
- Review Oil Spill capability (every 5 years)
- Stockpile management:
  - Replacement plan
  - Increase OSR equipment efficiency
- Proactive actions:
  - Exercise frequency and scope review
  - Workshop/Seminar
- Increase Regional Cooperation among Oil Spill Response Organizations - RITAG

### Members

- Cooperation among Member
- Shore line clean up plan
- OSR Equipment review
- Internal and External Exercise
- Personnel Competency development
## 5 Years Capability Review

<table>
<thead>
<tr>
<th>Area</th>
<th>Recommendation on equipment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bangkok</td>
<td>No additional equipment needed. Current equipment stockpile via mutual aid arrangement and government resources is sufficient.</td>
</tr>
<tr>
<td>Rayong</td>
<td>Need additional nearshore booms to protect sensitive areas. A more efficient and suitable at sea containment system and on water temporary storage tanks are needed to support the existing offshore equipment due to close vicinity of sensitive areas.</td>
</tr>
<tr>
<td>Sriracha</td>
<td>A more efficient and suitable at sea containment system is required to support offshore operations. Also recommended to have additional dispersant spray systems.</td>
</tr>
<tr>
<td>Songkhla</td>
<td>No additional equipment needed. However, need to consider limiting dispersant usage based on the oil properties in the areas of operations.</td>
</tr>
<tr>
<td>Offshore</td>
<td>Need additional nearshore booms to protect sensitive resources along the GOT, particularly at Northern GOT and Central GOT. For Southern GOT, it is recommended to have offshore fast current containment system, multi skimmer and on water temporary storage tanks to be stored at Songkhla.</td>
</tr>
</tbody>
</table>
Government’s OSR Stockpile Management Before Year 2013 Incident

**Marine Department**
- 2 OSR Boats with full stock pile on board
- Tier 2 stockpile at Songkhla province

**Royal Thai Navy**
- Multi functions Tug boats
- Dornia Airplane with 280 Litres dispersant pack
Government’s OSR Stockpile Management Now

**Marine Department**
- 2 OSR Boats with full stock pile on board
- Tier 2 stockpile at Songkhla province

**Royal Thai Navy**
- Multi function Tug boats
- Dornia Airplane with 280 Litres dispersant pack – out date
- OSR Equipment
- Sea Hawk Helicopters
- New Tug boat with OSR capability
The current capability of the Royal Thai Navy to oil spills response
The cooperation forum among Oil Spill Response Organizations (OSROs) within Asia Pacific Region. This working platform enhanced Technical knowledge sharing, cooperation and good practices.

Currently the member are consists of COES from China, OSCT from Indonesia, MDPC from Japan, KOEM from Korea, PIMMAG from Malaysia, OSRL from Singapore, and IESG from Thailand.

IESG is actively participate in this forum which conducted annually and Host is rotation among available member.
Gap Identification on Sea operations

- Delay of spill combat time
- Dispersant spray effectiveness
- Night time response
Improvement

- Additional OSR Boats
  - Max operation weight 1,270 kg
  - Max weight without dispersant 260 kg
- Heli-bucket
- Hawk Owls Aerostat (Overhead Wireless Lookout System)
- AFEDO Nozzles Boat Spray
- UV-Oil Spill Search Light; CL-10-02
- Fluorometer C-3
Way forward

- New Criteria for Tier determine
  - Quantity?
  - Time?
  - Impact?

- Incident Command System (ICS) Management
  - Organization?
  - Unified Command

- Expertise from Oil Industry/Capability Development

- Social Media Management
Prevention is better than cure
Thank you