

## **EMERGING ROLE OF NATIONAL OIL SPILL RESPONSE ORGANIZATION BEYOND BORDERS**

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### **INTRODUCTION**

Indonesia is the largest archipelagic country in the World with over 17,000 islands, 240 million people and the fourth longest coastline at 95,000 km. 85% of Indonesia's territory is ocean and has a big risk of oil spill pollution from major shipping routes, over 200 ports and oil terminal. Indonesia also has one of the largest oil activity in the World including oil production, import and export with over 3.5 million barrels per day. The impacted area of oil spill incidents are also the main concern especially many tourism and World Heritage sites in Indonesia that is extremely sensitive and need to be protected from any oil spill pollution that can harm the environment and wildlife.

Because of the risks of oil spill threatening the Indonesia natural environment, the government has established national resources under the Directorate General of Sea Transportation, SKK MIGAS, Pertamina, Private Companies along with private oil spill response organization such as Oil Spill Combat Team (OSCT) Indonesia. Indonesia's government also established bilateral and multilateral cooperation such as with Japan (PAJ & OSPAR) and Netherland

For Tier-1 response preparedness, every company must have Oil Spill Contingency Plan (OSCP) approved by Ministry of Transportation and SKK MIGAS and have minimum tier-1 Oil Spill Response Equipment and trained responders. In case an oil spill incident escalate to tier-2, SKK MIGAS has divided oil and gas operations in Indonesia into 8 (eight) main areas with mutual agreement in each area to release in average 25% of their tier-1 resources for tier-2 incident. Because of the limited amount of OSRE release from area agreement, national resources from national OSRO like OSCT Indonesia is also required to respond to major oil spills

### **EMERGING ROLE OF NATIONAL OIL SPILL RESPONSE ORGANIZATION**

National Oil Spill Response Organization (OSRO) such as OSCT Indonesia is a private organization providing membership services for emergency response to Oil & Gas companies and private companies. The establishment of OSCT Indonesia begun in 2001. In 2006, OSCT Indonesia become the largest oil spill response centre in Indonesia and one of the largest oil spill response centre in the World after moving to the new 10,000 m<sup>2</sup> facility in West Java. Aiming to improve quality of service, OSCT Indonesia became the first Oil Spill Response centre in Indonesia that meets the requirement of ISO 14001:2004 and OHSAS 18001:2007. In 2012, OSCT Indonesia signed a Memorandum of Understanding with Oil Spill Response Limited (OSRL) that acknowledged OSCT Indonesia as a capable oil spill response centre and a crucial part of any response to oil spills in Indonesia, at the same time changing the role of OSCT Indonesia to assist Tier-3 international resources to come into Indonesia when national resources have been exhausted. In 2014, as a commitment for tier-2 response preparedness, OSCT Indonesia become the first Oil Spill Response Centre in Asia to have two Giant Octopus skimmer and announced to become an IPO company.

OSCT Indonesia is supported by experts with 32 years of experience in combating oil spills all around Indonesia, Thailand, China and around the World. OSCT headquarters is located in West Java and 4 (four) bases across Indonesia located in Surabaya, Balikpapan, Sorong and soon to open in the Natuna area. Moreover, OSCT Indonesia have started operating in Thailand. OSCT Indonesia have over 10,000 meters of boom, skimmers, two giant octopus, and special purpose systems that is not commonly used for Tier-1 Oil Spills

but is crucial to have for large major oil spills. In the event of tier-2 oil spill incident escalate to tier-3, Indonesian government through Directorate General of Sea Transportation has been prepared the 15 (fifteen) Marine Disaster Prevention Ships (MDPS) that is equipped with oil spill response equipment systems on each ship. As mentioned before, Indonesia's response resources gathered from Area Assistance Agreement and National OSRO. From the 8 (eight) coordination area and 4 (four) bases of National OSRO, there about 12 km of offshore boom and 15 km of shoreline boom available as the combined national resources mobilized through the first week of incident. OSCT Indonesia maintains over 75% of the national oil spill resources for combating major oil spills and in 2015 plans to upgrade the amount of oil spill combat equipment to total 20 km of boom and with new bases in Medan and Natuna Area and also a twin propeller airplane for aerial surveillance and dispersant spraying.

OSCT Indonesia role as a National OSRO is changing not only to respond in-country, but to ensure international resources from international OSRO can arrive quickly in case of an international tier-3 incident. This can be accomplished by having a mutual cooperation with other international OSRO. OSCT Indonesia have signed a mutual cooperation MoU with OSRL (Singapore), IESG (Vietnam), NASOS (Vietnam) and CPSE (Vietnam) for the spirit of protecting the World's Natural Environment.

Another role of national OSRO to support tier-3 international incident includes getting pre-arranged customs clearance permit from the Ministry of Trade and Directorate General of Customs along with bank guarantee to make sure that the international assistance equipment can come into the country quickly with all permits pre-arranged. Once the pre arrangement is settled, such documentation is already completed before and that means there is no delay at entry port or airport. After equipment has cleared customs, national logistics and infrastructure can also be pre-arranged and used to mobilize international resources to incident location. To allow seamless integration of team and equipment, standard operating procedure between national and international team and resources can be pre-arranged as well to avoid confusion in the field with clear responsibility division so the chain of command and response action does not overlap one to another.

In summary, oil spill contingency planning made by every company is essential for Tier-1 response supported with tier-2 and tier-3 response arrangement where Tier-2 and Tier-3 response centres should have a mutual cooperation to work together seamlessly by having an MOU, SOP and pre-arranged customs clearance for international assistance.

### **EMERGING ROLE OF NATIONAL OIL SPILL RESPONSE ORGANIZATION IN MAJOR OIL SPILL INCIDENTS**

OSCT Indonesia have responded to many major oil spill incidents and recently from a Japanese Chemical Carrier that spilled marine fuel oil due to a vessel collision. The vessel that carried 20 tonnes of Marine Fuel Oil (MFO) collided and OSCT Indonesia monitored the spill from our Command Centre with trajectory modelling and satellite. Live video communication between on-site team and command centre is supported by Mobile Command System via satellite as well. The oil spill impacted shoreline within 8 (eight) hours and there is no Oil Spill Response Equipment (OSRE) available on site to contain the spilled oil. OSCT was mobilized on the next day by the P&I insurance provider of the carrier “Southern Mermaid” and oil spill recovery was conducted by using support boat, solid floatation oil boom, pressure washer, oil skimmer, temporary storage tank and oil absorbent for about 12 (twelve) days.

Another recent major oil spill that OSCT Indonesia responded to is in Sumatra at Selat Panjang, Riau province caused by a well blow out from a drilling well, where 3000 barrels of light crude oil impacted rivers and sensitive areas within 1 (one) hour including mangroves and fishing ground. SKKMIGAS Area resources was deployed first but due to the limited equipment that is released, OSCT Indonesia was also deployed and the equipment was mobilized by BOEING 737 to the nearest airport and then transported to incident location within 24 hours. The oil spill was contained on the river using onshore boom and absorbent boom with deflecting the spill to a collection point and then skimmers and pressure washers was used to recover spilled oil. The operation took over 30 days to complete

OSCT Indonesia also recently responded to an international oil spill incident that impacted Koh Samed Island, Thailand with OSRL and the national oil spill response centre, IESG. To recover the spilled oil, the navy of Thailand deployed at least 300 (three hundred) soldiers to help clean up the impacted area and OSCT and OSRL was present on site to provide technical support and supervision and also assisted with oil spill containment and recovery. Due to the fact that OSCT have an MOU with OSRL and also has a base of operations in Thailand, all teams was able to integrate seamlessly to quickly support the oil spill clean-up operations

### **SUMMARY**

Based on the experiences responding to major oil spill incidents, national OSRO such Oil Spill Combat Team Indonesia role is changing and emerging to support Tier-1, Tier-2 and Tier-3 international response. From the Japanese carrier oil spill incident, in-country resources are the first response to arrive on-site to recover the spilled oil because no equipment is available on-site and hence the role of the national OSRO becomes first responders as some companies does not have Tier-1 resources. From the Sumatra, Selat Panjang tier-2 oil spill incident, it can be seen that mutual assistance from the area is limited because the oil and gas companies under SKKMIGAS itself can only release twenty five percent (25%) of its Tier-1 resources. Other mechanism that can be used to respond to tier-2 oil spill incident is from membership program by national Oil Spill Response Organization that provides more Tier-2 Resources that can be mobilized quickly, hence the role of the national OSRO is not only for Tier-1 response, but to respond to Tier-2 Major oil spill incidents. Furthermore, from international oil spill incidents, it is proven that having an MoU between Tier-2 and Tier-3 Oil Spill Response Organization allows more resources to be mobilized during an oil spill response. The role of the national OSRO by having an MOU is also Pre-arranged custom clearance that allows equipment to come into the country without delay, logistics and having a standard operating procedure for operations of national and international teams.

The role of National Oil Spill Response Organization like OSCT Indonesia are changing, emerging from providing Tier-1 and Tier-2 Response to assisting Tier-3 response beyond borders by having an cooperation (MOU) with Tier-3 Oil Spill Response centres to allow international resources to come into the country quickly by preparing pre-arranged customs clearance, local logistics, and clear standard operating procedures.