OIL SPILL RESPONSE LIMITED CASE STUDY

STAGED APPROACH ON BOOSTING RESPONSE READINESS

Oil Spill Response Limited (OSRL) conducted a Capability Review for Puma Energy PNG Refining Ltd (PEPNG) for their refineries and terminals situated in Port Moresby and Lae in Papua New Guinea (PNG). This review also included a desktop study of their seaboard terminals situated across PNG.

This study revisited the implementation of OSRL recommendations on Tier 1 capability for PEPNG which was conducted in 2016 and explored the potential preparedness and response capability improvements, with focus on Tier 2 capability.

BACKGROUND

PEPNG first engaged OSRL in 2016 to conduct a capability review for their facilities in Port Moresby, PNG. The objective of that study was for PEPNG to understand the oil spill preparedness and response capability and identify areas of improvement. The findings and recommendations focused on improving their Tier 1 capability.

In 2019, OSRL was again engaged to carry out another capability review for PEPNG. This time, the objectives of the review were not only to assess the additional facilities, but also to focus on Tier 2 capability and any enhancement opportunities at this level. An analysis of the previous recommendations identified in 2016 were also carried out to look at the extent that they have been addressed.

Puma Energy is the largest entity in downstream petroleum distribution in PNG with a geographic footprint of assets covering all market sectors, including 531,500km³ storage, a presence of 11 airports and a network of 84 retail sites.



CHALLENGE

The outcome from the capability review conducted in 2016 identified that PEPNG required significant investment in time and resources to improve their overall oil spill response capability for their operations in Port Moresby, PNG. While the recommendations were focused on improving the Tier 1 capability, gaps in PEPNG's Tier 2 capability were apparent. There were no industry owned Tier 2 resources in PNG that could be made available to operators on a guaranteed basis. A need to enhance Tier 2 capabilities was therefore identified.

Three years later in 2019, PEPNG initiated another capability review to revisit enhancing their Tier 2 capabilities.





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SOLUTION

For OSRL to complete the review, an understanding of PEPNG's current operations and associated oil spill risk was essential. A site visit was conducted by OSRL to gather information via interview of relevant personnel within PEPNG's facilities, reviewing PEPNG's equipment conditions and observing a deployment exercise conducted by PEPNG's Tier 2 contractor.

The different areas of preparedness and response capability assessed as part of OSRL's review process included:

- Oil spill planning process (i.e. scenario identification, response strategy and tiered response capability);
- Adherence to legislation, regulations and agreements;
- Emergency response documents;
- Training and exercise programme;
- Sustainability and continuous improvement

Recommendations were given corresponding to the risk and taking into account the availability of tiered resources and in accordance with legislative requirements and international good practice.



RESULTS

One of the key recommendations highlighted from this review was the need to coordinate and formalize mutual aid agreements with other oil and gas operators in PNG or within area of operation. At that time, PEPNG was already in discussion with OSRL to enter a mutual aid agreement with ExxonMobil and Total in PNG. The recommendations were timely to reaffirm and give PEPNG the confidence that this step would put them in a better position to prepare for and respond to spills efficiently.

A virtual Tier 2 arrangement with PEPNG as a member was subsequently established in June 2019 with the main aim of strengthening Tier 2 oil spill response capability through the sharing of resources on a best endeavour basis.

The capability review also subsequently led to an IMO Level 3 training of selected PEPNG personnel.

CONCLUSION

A Capability Review assisted
PEPNG to understand the capacity
level of its various terminals and
refineries across PNG and to focus
at different timescales. The lack of
Tier 2 resources has been addressed
through the Virtual Tier 2 arrangement
amongst oil and gas operators within
PNG. OSRL is continuing to support
PEPNG through this mutual aid
arrangement.

Need Assistance?

Contact us at preparedness@ oilspillresponse.com for a non-obligatory discussion of your requirements.



