

(TIER 2) PRACTICAL EMERGENCY EXERCISE

“Port of Durban Oil Spill Equipment Deployment at Island View”

To : Distribution list
From : Sapref Emergency Services
Date : 17 February 2023
Subject : *Executive Summary* – Island View Tier 2 Oil Spill Equipment deployment exercise

Dear Stakeholders.

The Tier 2 Marine Oil spill equipment deployment exercise hosted by SAPREF, was successful conducted on the 30th November 2022. The collective teamwork of all stakeholders who ensured compliance and readiness for this exercise contributed to the success. The outcomes of this exercise are highlighted below.

Participants of the live exercise – Many thanks to all whom have contributed and participated in the exercise which includes SAPREF, AMSOL, TNPA Fire, TNPA Pollution, Spill Tech, Cutler Management, Cutler Security, SAPS, SAMSA, Harbor Master, Total and Blendcor.

EXERCISE PURPOSE: To test the Spill Preparedness Control framework, capability of our stakeholders to respond to a tier 2 oil spill and the Service level agreement (SLA) with Spill Tech for SAPREF

Kindly Note: A planned exercise Live Drill (Product simulated with AFFF foam Approved by Transnet Environmental Department) for Berth 10 of BGO (Bunker fuel oil) /MFO Marine Fuel Oil) - Approximately 82.50m³ of product spilled on water in the bay.

THE SCENARIO:

BGO or MFO is sprayed under pressure into the air and envelops the ship's manifold. A shore contractor delivering goods to the ship noticed the leak and alerted the ship deck operator, the leak resulted in an escalation to a fire (BGO or MFO) on the deck and the ships lines were damaged causing an LOPC on the Quay side spilling onto the harbor seaside

Pictogram Satellite View on the day North Easterly Winds:

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The exercise had the following established objectives that were used to test the response:

1. How would SAPREF be alerted to this emergency? **Jetty operator to site 3**
2. Testing SLA with Spilltech – “Pollution Response Equipment Readiness test on deployment”
3. Stakeholder notification to internal and external resources (TNPA Fire /Pollution, FIT, EThekweni Fire, Cutler Security) – **Site 3 control panel emergency contact list simulated.**
4. Competencies of participants for the incident Simulated.
5. Functioning of the Incident Command system (**Introduced via Planning meetings**).
6. Efficiencies of the Oil spill response plan (SAPREF Gap analysis - [HSSE.PR.7016.docx](#)).

The exercise reflected the following significant positive aspects:

1. The exercise tested the set 6 objectives.
2. Good stakeholder engagement identified from De-briefing of exercise with Significant learnings noted below.
3. SAPREF handed the incident over to the IC's to kick off the exercise, Spilltech sets their plan in motion with Incident commanders which is communicated to all teams.
4. The FCP manned by the stakeholders operated well and dealt with the Oil Spill.
5. The communication from the FCP to the Response Teams were established and successful
6. Spilltech's management of the incident with other stakeholders went well, adverse weather conditions with strong currents below grade under water was encountered, the teams attempted to set up primary containment on the seaside, 35 minutes into the drill from deployment of equipment onto the seaside of the quay side for initial containment it was found not to be effective due to heavy winds and the team allowed the product (MFO /BFO) to land on the identified sacrificial beach areas presented onto pictogram above...
7. Floating skimmers and Vacuum Truck were effectively deployed and operational with land containment vessel, skips, vacuum trucks and fast tanks.
8. Back-up strategy advised in FCP by Spilltech and confirmed that if required additional resources can be pulled in from satellite branches in KZN at any given time.
9. Cutler Security access and permits issued in good time.
10. Booming of canals upstream were completed.
11. The SAPREF adopted International ICS introduced during planning meetings with basic training to stakeholders (Cutler uses IMS), proved to be effective at the Forward control post for the management of the incident and the following documents were used during this incident; 201 IAP, 202 Incident Objectives ,217 Activity log. **ICS was not implemented on the 2020 exercise,**

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12. An Aerial Nautical chart was present in the FCP and used by all IC's, supplied BY SAPREF Marine department to cutler FCP and worked well. **Cutler FCP did not have an aerial nautical chart in 2020 to effectively manage Emergency response,**
13. Two-way radios were used that improved on the management of the incident from the FCP to Branch directors followed by the field responders, **Communication medium in 2020 had no hardware that resulted in communication breakdown,**
14. No actual exercise related injuries.

Although all set objectives that were identified for the exercise were tested, feedback received from the respective stakeholders and observers highlighted the following as significant concerns.

1. Communication gaps:
 - Communication medium used (Radio's) – battery low on power resulted in poor communication for the branch directors to field response to IC in FCP during the exercise (4hr drill).
 - IC's in the Unified command were not together at all times at the FCP as IC's left FCP to communicate to branch directors to inform action to be carried out by field responders due to failure of communication medium (Radio).
2. **TNPA Reported Bubble screen prior to exercise out of service** due to severe damages caused by incoming ship to berth and currently in process of being repaired by Transnet port authorities. Exercise helped to identify shortfall off communication from TNPA that was not in operation until stakeholder's engagement of the exercise during the pre-planning sessions for the live drill. **Mitigation in place by TNPA are fence booms for primary and secondary containment deployed by tugs with fixed monitors on standby to manage a worst-case scenario.**
3. Field Responders on land or water, not using hand protection gloves, other safety gear used.
4. FCP has no clock to assist Incident management on activity planning or logging of the incident accurately.

Final Report will be shared for a comprehensive understanding of the exercise findings. The detailed actions/learnings report will follow within **Quarter 1 2023**.

Kind Regards
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