



New information UPS's Northern Endeavour–NOGA FPSO facility was obtained Monday 8 July 2019 via a short notice inspection conducted by [REDACTED]

DROPPED OBJECTS / CORROSION ISSUES

There has recently been two incidents of corrosion related dropped objects (or potential dropped object) at the Northern Endeavour NOGA facility namely:

- Notification 6019 (30/6/2019) – Dropped object with potential fatality (5.7 kg x 5.9 m = potential fatality)
- Notification 6027 (04/7/2019) – Potential dropped object, pipe support failed and pipe slumped approximately 450 mm.

NOPSEMA [REDACTED] investigated on 8 July 2019 and could not establish that there was no immediate threat from:

1. Potential dropped objects (e.g. other pipe supports) due to severe corrosion leading to a single fatality (or severe injury),
2. Potential failure of the flare line where the pipe support is missing, leading to loss of containment and MAE.
3. Potential structural failure, due to corrosion leading to and MAE.

With respect to threat 1:

- The potential cause of the Notification 6019 was an emergency shutdown that caused severe pipe vibration; however this failure mechanism has not been eliminated by shutting down the facility until all remaining affect pipe supports have been verified as fit for purpose.
- There were insufficient mitigating measures in place to reduce the immediate threat of a dropped object, such as preventing access to areas where there is risk of a dropped object (area over coverage could be significant).
- In the event of a shutdown, the workforce is not allowed forward of the blast wall; this may mitigate the threat of dropped object due to vibration from a shutdown event.
- There did not appear to be any other defined plans to inspect all other areas on the facility, to determine if there are any other potential dropped objects due to corrosion.
- The second potential dropped object (notification 6027) has been repaired.

With respect to threat 2:

- UPS has sent people to the facility to inspect the location of the pipe failure, with rope access, and determine the follow up action (by an engineer); action is in progress.
- There are currently no other mitigating measures in place (e.g. temporary pipe support).
- UPS believe that the pipe is safe because the remaining supports are close, this has not been verified by an engineer.

With respect to threat 3:

- We believe that the two corrosion related failures are evidence of the severe corrosion on the facility and may be predictive of future more significant structural failures on the facility.
- In March 2019, NOPSEMA made recommendation 1826-20 to ensure that corrosion repairs are designed by an engineer to an appropriate standards (ISO 19901/2). [REDACTED]



Based on the threats described above, immediate enforcement may be warranted (subject to verification via the EMM process).

As an aside:

TRAINING STATUS

There is evidence that the claims made in the anonymous safety concern raised on 7 June 2019 (inspection 2029) can be substantiated, specifically:

- Compliance with training matrix training commitments appears to about 60%
- There is a significant number of individuals who have not received the training within the required refresher period.

Decision & Actions

- [REDACTED] provided a brief overview of the above findings and status.
- Currently there are 5 Improvement Notices in draft and two letters (UPS & NOGA)
- The Committee decided a Prohibition Notice to UPS is warranted along with Inspection Report which clearly documents the immediacy of the threat. The documents are to be prepared for issuing within 24-48 hours (Action: [REDACTED])
- The two letters are to be updated with the latest information, including the failure to notify of an ESD. (Action: [REDACTED])
- The two letters are to make reference to NOPSEMA looking at further enforcement actions, noting that five draft Improvements Notices are currently being pursued. The cumulative effect of the issues identified with the facility is leading toward a General Direction being issued.
- The two letters (if ready) can also be issued along with Prohibition Notice & Inspection Report.
- The Committee requested details of the immediate threat be well documented. (Action: [REDACTED])
- The Committee agreed that two versions of the General Direction be prepared for the possibility of issuing next week. (one Direction would be prepared for the scenario where the facility is voluntarily shut down and the other if voluntary action is not forthcoming) (Action: [REDACTED])
- The Committee agreed that Environment Division are to arrange an inspection for next week regarding financial assurance. (Action: [REDACTED])
- The Committee noted that the Ministers Office and Department will need to be notified and Communications team to commence a briefing note (Action: [REDACTED])