

OHS IMPROVEMENT NOTICE

To: Esso Australia Pty Ltd (“EAPL”)

In conducting an OHS inspection in relation to the West Tuna facility (the facility), I, [REDACTED], a NOPSEMA inspector appointed under section 602 of *Offshore Petroleum and Greenhouse Gas Storage Act 2006* (the Act), am satisfied on reasonable grounds that:

(a) EAPL is contravening clause 9(2)(a) of Schedule 3 to the Act

AND

(b) As a result, there is, or may be, a risk to the health or safety of a person at the facility.

The reasons for my opinion are:

NOPSEMA conducted an inspection between 31 March to 1 April 2021 at West Tuna facility and made further inquiries thereafter. During the inspection, NOPSEMA Inspectors observed that some of the steel members of the helideck support structure at the facility had full penetration corrosion. EAPL also provided NOPSEMA Inspectors a detailed report dated 30-31 December 2019 which outlined at least twenty locations of full penetration corrosion of the steel helideck supporting structure over significant areas.

The critical control to prevent the failure of structural support members due to corrosion identified in EAPL’s in-force Safety Case for the facility is the ‘Targeted above water structural inspection program’ as defined in EAPL’s Structural Equipment Integrity Program Manual (SEIPM).

The SEIPM’s Appendix A - Fitness for Service (FFS) states: ‘*Helideck structural components, including helideck plate thickness, stiffeners, secondary and primary beams shall be assessed in accordance with the original design standard for Bass Strait Helidecks...*’. Table 0-4 in Appendix A of the SEIPM provides that the allowable level of thickness loss due to corrosion is 25% or less for EAPL Bass Strait Helidecks.

The full penetration corrosion seen by the inspectors and described in the detailed report dated 30-31 December 2019 indicated that the thickness loss had reached 100% in over 20 areas, and therefore did not meet EAPL’s FFS criteria. Table 0-5 in Appendix A of the SEIPM provides recommendations for responding to identified corrosion. For components not meeting FFS, it recommends replacement of the compromised component within 12 months of the inspection.

EAPL’s 2016 Platform Above Water Survey (PAWS) inspection report (OF16-STR-3.1vt) produced following an inspection conducted on 22 February 2016, recorded the results of the visual inspection for the facility helideck support structure as:

“Heavy corrosion, 3.0mm – 4.0mm metal loss. Isolated areas exist of heavy corrosion and laminar build-up to node connections of support frame. Corrosion removed where able, revealing light pitting within these areas <2.0mm. Suggest that repair coatings be completed at these locations as opportunity allows. Nil full penetration corrosion holes found post corrosion removal.”

EAPL's 2019 PAWS inspection report (WTN19-PAWS-VTE-1272) produced following an inspection conducted between 25 October to 28 December 2019, recorded that an Ultrasonic and Borescope inspection was carried out to corrosion identified on the helideck support structure. A further report (WTN19-PAWS-UT-1528) was produced dated 30-31 December 2019, which notes that numerous severe corrosion full penetration holes were identified. Detailed photographs were included in that report.

The 2019 PAWS report categorised all corrosion defects as S3. The SEIPM includes a procedure called the 'IEG Integrity Procedures Handbook – Structural Inspection Helideck IEG-FIMS-04-05' which includes the structural inspection grading system condition categories of S1, S2, S3 and S4 which are detailed in IEG-FIMS-04-01. S3 is defined as:

Condition S3 Significant deterioration

Structural loss between 10% and 25% of section/capacity, or a defect identified which has the potential to impair the structure's fitness for purpose or forms a potential safety risk.

The above findings show a significant increase in the extent and degree of corrosion of the helideck support structure between the 2016 and the 2019 PAWS inspections (3 years and 10 months). This corrosion could have been prevented by painting the affected areas as had been advised by the 2016 report.

A maintenance work order was in place for the required repair work, but was past its Latest Acceptable Completion Date (LACD) of 31 December 2020 at the time of NOPSEMA's inspection in March and April 2021. EAPL's 2019 PAWS close-out report dated February 2021 also had the LACD for the repair work as 31 December 2020.

NOPSEMA inspectors were subsequently advised by EAPL that the LACD had been revised to 12 June 2021, noting: '*LACD updated to align with planned execution dates by OMT*'. NOPSEMA Inspectors were also advised that no additional analysis took place to justify this extension, that EAPL management had deemed the LACD extension of 6 months to be acceptable, and that the helideck support structure was considered to have low corrosion rates. This contrary to the observations of the inspectors, and evidence of expanding levels of corrosion contained in the PAWS reports.

The deferral of the LACD to align with planned execution dates alone is contrary to a risk-based assessment approach and when Inspectors queried the basis for this LACD extension given the absence of a readily available FFS assessment, EAPL were unable to provide an adequate response.

As a result of a failure to address the corrosion issues in the helideck support structure, EAPL is not taking all reasonably practicable steps to provide and maintain a safe physical environment at the facility.

As a result of this contravention, I am satisfied that there is, or may be, the following risk to the health or safety of any person:

The extensive corrosion to the helideck support structures on the facility could lead to their failure resulting in injury, fatality or multiple fatalities through their inability to support the load of a helicopter.

I am satisfied on reasonable grounds that the following actions must be taken by EAPL to reduce or prevent the risk:

1. have suitably qualified persons undertake a FFS survey on the helideck support structure and produce written evidence that this has taken place; and
2. replace or repair all corroded helideck support structure identified in the FFS survey and in the PAWS WTN19-PAWS-UT-1528 Helideck corrosion report dated 31 December 2019; or
3. Implement such other controls as required to reduce risk to a level that is as low as reasonably practicable.

You are required to take the above actions within **90** days of the date of this notice to prevent or reduce the risk.

Signed:



NOPSEMA Inspector

Dated: 4th May 2021

NOTES: (Please see back of notice)

When the required improvement has been completed, return this part of the notice to the following person at the address below:

Name:



Position:

Manager Assessment and Inspection

Address:

Send in electronic format via email to:

submissions@nopsema.gov.au

Telephone number: +61 8 6188 8700

Specify the action that has been taken to comply with this notice in the space below.

Improvement Notice No. **820** has been complied with by:

Signed: _____ Date: _____

NOTES:

1. Under clause 78 of Schedule 3 to the Act, a person who fails to ensure that this notice is complied with, to the extent that it relates to a matter over which the person has control, may be liable to a penalty of 300 penalty units or a civil penalty of 400 units.
2. This notice must be displayed in a prominent place at or near each workplace at which work affected by the notice is being performed and, must not be tampered with or removed before the notice has ceased to have effect.
3. If the notice is not issued by being given to the operator's representative at the facility, the responsible person (unless the responsible person is the titleholder) must cause a copy of the notice to be given to the operator's representative.
4. If the responsible person is the operator or an employer (other than the operator) of members of the workforce, the operator's representative at the facility must give a copy of the notice to each health and safety representative for a designated work group having group members performing work that is affected by the notice.
5. If the responsible person is the titleholder, as soon as practicable after issuing the notice, the NOPSEMA inspector will take reasonable steps to give a copy of the notice to the operator and, if the NOPSEMA inspector is at the facility when the notice issued, the operator's representative at the facility.
6. If the responsible person is the titleholder, but the inspector is not at the facility when the notice is issued, the operator must give a copy of the notice to the operator's representative at the facility.
7. As soon as practicable after issuing the notice, the NOPSEMA inspector will take reasonable steps to give a copy of the notice to, where applicable:
 - (a) the employer of an employee who is a member of the workforce if the notice is issued to the employee, and in connection with work performed by the employee, and
 - (b) the owner of any workplace plant, substance or thing that the notice relates to, unless the owner is the responsible person or an employer referred to in (a), and
 - (c) if the responsible person is the owner of any workplace, plant, substance or thing because of which the contravention has occurred, or is likely to occur: the operator of the facility, and if the employer of employees who work in that workplace or who use that plant, substance or thing is a person other than the operator—that employer; and
 - (d) the titleholder, if the responsible person is the operator, and the contravention relates, or is likely to relate to, the titleholders' well related obligations.
8. Under item 8 of subclause 80A(1) of Schedule 3 to the Act, any of the following persons may in writing request the reviewing authority to review the NOPSEMA inspector's decision:
 - the operator of the facility
 - the titleholder, if the notice is issued to a titleholder;
 - any other person to whom the notice has been issued;
 - an employer, if affected by the decision;
 - a relevant health and safety representative;
 - a relevant workforce representative, if requested by a member of the workforce affected by the decision;
 - a person who owns any workplace plant, substance or thing to which the NOPSEMA inspector's decision relates.
9. An improvement notice ceases to have effect when the responsible person takes the action specified in the notice.