

OHS Improvement Notice

Offshore Petroleum and Greenhouse Gas Storage Act 2006

Notice Number: 822

OHS IMPROVEMENT NOTICE

To: Esso Australia Pty Ltd ("EAPL")

In conducting an OHS inspection in relation to the West Tuna facility (the facility), I, a NOPSEMA inspector appointed under section 602 of the *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 the deck grating support structure at several locations in the well bay area of the facility was in an advanced state of corrosion, with some sections of the support structural members completely corroded away.

A fall by a person from an elevated worksite from the failure of grating or ladder due to corrosion is identified by EAPL as a major accident event (MAE) in the safety case.

The critical control to prevent the failure of grating or ladders due to corrosion identified in EAPL's in-force Safety Case is the 'Targeted above water structural inspection program' as defined in EAPL's Structural Equipment Integrity Program Manual (SEIPM).

EAPL's SEIPM document includes a section 'IEG Integrity Procedures Handbook — Structural Inspections' (Reference IEG-FIMS-04-01). Appendix A of that section includes the 'Structural Inspection Grading System'. The grading system provides consistent guidelines for the assessment of structures or structural elements. The assessment of structures and structural elements is based on visual inspection and is used to highlight those areas that require remedial action or more detailed inspection work to determine the risk level to the structural integrity of the structure/element in question.

'Condition S4 Advanced Deterioration' is described in the document as follows:

'Structural loss exceeds 25% of section/capacity, or a defect identified such that the structure has been significantly compromised. The structure may have failed or be in danger of failure under design loads/conditions.'

Figure 22 of Document IEG-FIMS-04-01 provides an example for 'Condition S4 steel' which is that it exhibits: 'Severe corrosion leading to holing of the web and thinning of the flange of the floor beam judged to be >25%. The beam load carrying capacity is almost entirely dependent on the shear capacity of the badly holed web at the support.'



EAPL's 2016 Platform Above Water Survey (PAWS) inspection report (OF16-STR-3.1vt) produced following an inspection conducted on 19 April 2016, recorded the results of the visual inspection finding for the grating support structure as:

"Heavy corrosion, 3.0mm – 4.0mm metal loss. Example location: Secondary RHS grating supports affixed at either sides of tree assembly show heavy corrosion, typical to some assemblies in both East and West side wellhead areas. Isolated areas of pitting noted <2.0mm (estimated) to some assemblies. Unknown if welded – under grating."

EAPL's 2019 PAWS inspection report (WTN19-PAWS-VTE-1272) -Cellar deck, produced following an inspection conducted between 9-11 November 2019, recorded the results of the visual inspection finding for the grating support structure as:

"Heavy corrosion, 3-4mm metal loss – full penetration hole. Tertiary RHS supports to overhead grating (cross braces) with extensive corrosion and full penetration in places through area."

EAPL had a maintenance work order in place for the repair of the grating support structure, with the Latest Acceptable Completion Date (LACD) of 30 April 2020; this date had not been met nor was there a revised LACD in the maintenance system at the time of the inspection. The inspectors were advised the LACD had been re-risked and will be completed during the 2021 shutdown, but given the absence of a revised LACD in the EAPL system, and the failure to meet previous maintenance deadlines, are of the opinion an improvement notice is required to ensure that this work is now done in a timely manner.

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 deck grating support structures in the well bay area on the facility, could result in their failure leading to serious injury or death of one or more people.

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

- conduct a fitness for service survey for grating support structures in the well bay areas;
- 2. repair or replace all corroded well bay deck grating support structures identified in the PAWS report dated 9-11 November 2019 and from the fitness for service survey; and
- 3. ensure that all steel deck grating and supporting substructure including connection points to the primary structure are fit for purpose and are safe and without risk to health; or
- 4. 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 **120** days of the date of this notice to prevent or reduce the risk.

Signed:

NOPSEMA Inspector Dated: 11th May 2021



NOTES: (Please see back of notice)

Name:

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

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. 822 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.