

ENVIRONMENTAL IMPROVEMENT NOTICE

To: Esso Australia Resources Pty Ltd

In conducting a petroleum environmental inspection in relation to the Tuna petroleum activity, I, [REDACTED], a NOPSEMA inspector appointed under section 602 of the Act, am satisfied on reasonable grounds that the titleholder named above has contravened and is likely to contravene again:

- (a) regulation 7 of the Offshore Petroleum and Greenhouse Gas Storage (Environment) Regulations 2009 (the Environment Regulations)

at: Tuna platform

1. The reasons for my opinion are:

- 1.1. Esso notified NOPSEMA of hydrocarbon “spotting” on the water surface adjacent to its Tuna platform between 1 and 3 December 2017.
- 1.2. Esso’s incident investigation confirmed that the Tuna platform open drain skimmer pile (open pile) was the source of the hydrocarbon discharge and NOPSEMA’s inspection concurs with this finding.
- 1.3. Esso’s investigation report found that Esso also caused a release of hydrocarbons during an open pile function test on 4 December 2017 while trying to confirm the source of the original release.
- 1.4. The Tuna EP sets an environmental performance outcome that there will be “No discharge from pile systems containing hydrocarbons or chemicals”.
- 1.5. Based on NOPSEMA’s inspection findings and Esso’s incident investigation no single cause of the hydrocarbon release from the Tuna open pile could be identified, but rather multiple failures contributed to the release. Specifically, the inspection found that Esso failed to appropriately manage hydrocarbon levels in the Tuna open pile and failed to prevent a hydrocarbon release from the open pile due to:
 - Equipment for continuous monitoring of hydrocarbon levels in the open pile had not been maintained as required by the accepted environment plan (Table 9-1, controls and environmental performance outcomes and standards for open pile systems).
 - Procedures for monitoring hydrocarbon level trends recorded in the open pile were ineffective. Anomalies in hydrocarbon levels measured in the open pile in the days prior to the discharge did not trigger further monitoring, investigation or management actions which may have prevented the discharge.
 - The open pile did not have dual operational submersible pumps for pumping hydrocarbon liquids out of the open pile to the closed pile as specified in the accepted environment plan (Section 4.2.2.3).
 - Maintenance procedures were not adequate to confirm that the open pile submersible pumps were operating effectively.
 - Management procedures for wastes discharged to the open pile (i.e. wax solids from pipe pigging and waste diesel from the MOL pump) did not prevent inappropriate discharges to the marine environment as required by the accepted environment plan (Table 9-1, controls and environmental performance outcomes and standards for disposal of waste).
 - The planning and implementation of the open pile function test was inadequate and directly

contributed to an increase in the total hydrocarbon release from the open pile.

2. As a result of this contravention I am satisfied on reasonable grounds that there may be the following significant threat to the environment:
 - 2.1. The discharge of hydrocarbons from the Tuna open pile directly contacting a range of fauna species present in the vicinity of the platform due to species swimming through hydrocarbon sheens at the surface or sub-surface plumes. Direct contact with the hydrocarbons can cause either lethal or sub-lethal effects such as disruption to feeding or breeding behaviour, skin and eye irritations and inhalation of hydrocarbon vapours.
3. The environment that is subject to the threat is:
 - 3.1. Matters protected under Part 3 of the *Environmental Protection and Biodiversity Conservation Act 1999*, including listed species of seabirds, marine mammals and marine reptiles that may occur in the operating area and surrounds as detailed in Section 6 of the West Tuna Environment Plan which is referenced in the corresponding Section 6 of the Tuna Environment Plan.
 - 3.2. The social and economic features of the environment as defined in the Environment Regulations including commercial fishing operations.
4. The titleholder is required to take action within 90 days of the date of this notice to remove the threat.
5. The following action must be taken by the titleholder within the period specified above:
 - 5.1. Ensure that systems and equipment for monitoring and maintaining hydrocarbon levels in the Tuna open pile are fully functional and maintained in working order, and that hydrocarbon levels in the Tuna open pile do not reach levels that will result in releases to the marine environment. This should include:
 - Restoring dual functional submersible pumps.
 - Ensuring that pump testing confirms that the pump is able to flow and are able to pump hydrocarbons from the open pile down to minimum set levels.
 - Ensuring that continuous level monitoring equipment (i.e. open pile bubbler tubes) is functional.
 - Implement measures to ensure that solid debris accumulating in the open pile does not impede the functioning of the submersible pumps and continuous level monitoring equipment.
 - 5.2. Ensure that procedures for monitoring hydrocarbon levels in the Tuna open pile trigger appropriate actions in response to anomalies in level recordings or excessive hydrocarbon levels and are effective in preventing releases to the marine environment
 - 5.3. Ensure that hydrocarbon waste management practices and procedures at the Tuna platform are consistent with commitments in the accepted environment plan.
 - 5.4. Ensure that disposal of wastes to the open pile (e.g. wax and wax residue from pigging operations and waste diesel from MOL pump seal pots) does not lead to discharges of hydrocarbons to the marine environment and are in accordance with Esso's waste management procedures as required by the accepted environment plan.
 - 5.5. Ensure that procedures are in place for effectively conducting open pile function tests to reduce the risk of hydrocarbon discharges during these tests to ALARP. Ensure that open pile function tests are planned appropriately and undertaken by personnel with suitable training.
 - 5.6. Comply with Regulation 7 of the Environment Regulations by any other suitable means as required to remove the threat.

Signed:**NOPSEMA inspector****Dated:** 8 March 2018

NOTES: (Please see the last page of this notice)

When the required improvement has been completed, the NOPSEMA Inspector requires Esso Australia Resources Pty Ltd to submit the completed part of the notice under Clause 8, to the contact details below:

Name:



Position:

Environment Specialist

Address:

Send in electronic format via email to:

submissions@nopsema.gov.au

Telephone number: +61 8 6188 8700

By signing below, I confirm on behalf of Esso Australia Resources Pty Ltd that the specified action described in Improvement Notice No. 696 has been undertaken within the period specified.

Signed: _____

Date: _____

NOTES:

1. 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 (Schedule 2A, Clause 11D of the Act).
2. This notice must be displayed in a prominent place at the premises and, must not be tampered with or removed before the notice has ceased to have effect. (Schedule 2A, Clauses 11D and 12 of the Act)
3. The notice may be issued to the titleholder by being given to the titleholder's representative at the premises who is nominated for the inspection. (Schedule 2A, Clause 11C of the Act)
4. 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 (Schedule 2A, Clause 11D of the Act):
 - (a) the operator's representative at the facility if the premises are a facility, and
 - (b) the vessel master if the premises are a vessel under the command or charge of a master, and
 - (c) the owner, if the premises are owned by a person other than the titleholder or operator.
5. An improvement notice ceases to have effect when the responsible person takes the action specified in the notice.
6. NOPSEMA must publish on its website an environmental improvement notice within 21 days after the notice is issued, unless NOPSEMA is aware that the decision to issue the notice is the subject of an application for review by a court. (Schedule 2A, Clause 12A of the Act)
7. For the purposes of submitting the completed part of the notice under Clause 8, the titleholder's representative is the person to whom this notice was given.