

**NOTICE TO CARRY OUT
ENVIRONMENTAL AUDIT PROGRAM**

(Issued pursuant to Section 48(1) of the *Waste Management and Pollution Control Act 1998*)

ISSUED TO: ENI Australia B. V ("You")
ACN 092 812 023

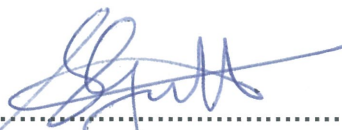
OF: ENI House, 226 Adelaide Terrace
PERTH WA 6000

WHEREAS the Northern Territory Environment Protection Authority (NT EPA) is satisfied for the reasons stated in **Attachment A** to this notice that you are a person required to carry out an Environmental Audit Program in relation to the Yelcherr Gas Plant, located at NT Portion 01637 plan(s) CP004183 Namarluk, NT, as delineated in **Purple** in **Attachment C** (the premises), comprising an environmental audit within the meaning of ss47(a), (c), and (f) of the *Waste Management and Pollution Control Act 1998*, to evaluate:

- (i) the ability of management systems at the Yelcherr Gas Plant to manage waste or prevent, reduce, control, rectify or clean up pollution or environmental harm resulting from pollution;
- (ii) the extent, nature and source of wastes generated by the Yelcherr Gas Plant (an activity, premises or process); and
- (iii) the types, amount, distribution and mobility of contaminants and wastes present in the environment at and from the Yelcherr Gas Plant as defined in **Attachment A**;

NOW TAKE NOTICE that you are required to comply with each of the requirements specified in **Attachment B** to this notice on and from the date of issue of this notice or such later date as may be specified in this notice.

ISSUE DATE: 14/10/2022


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SANDY GRIFFIN
A/EXECUTIVE DIRECTOR
ENVIRONMENTAL REGULATION
DELEGATE OF THE NT EPA

Important Notice

Failure to comply with this notice is an offence under section 52 of the *Waste Management and Pollution Control Act 1998* (**the Act**) and may incur significant penalties and/or other statutory action.

This notice takes effect on the date on which it is served upon you. Pursuant to section 108 of the Act, **you have the right to apply for a review of the decision to issue you with this Notice to carry out an Environmental Audit Program. If you intend to apply for a review, YOU MUST MAKE AN APPLICATION WITHIN 28 DAYS after the day on which this notice of the decision was given.** For information on how to lodge an application for review, contact the Northern Territory Environment Protection Authority, telephone 8924 4218.

Pursuant to section 112 of the Act the person issued with this notice must fulfil certain obligations before selling, leasing, sub-leasing, giving or exchanging land, premises, a vehicle or business, which is the subject of this Notice.

ATTACHMENT A

REASONS FOR ISSUING THIS NOTICE

1. ENI Australia B.V (ENI) occupies and controls NT Portion 01637 plan(s) CP 004183 Namarluk ('the premises'), as delineated in **Purple** in **Attachment C**;
2. The premises is located within the Northern Territory's Thamarrurr Region, approximately 8km west of Wadeye;
3. ENI occupies the premises for the operation of the Yelcherr Gas Plant (YGP), which is part of the Blacktip Gas Project (the Project), within the meaning of the *Trans-Territory Pipeline and Blacktip Gas Projects (Special Provisions) Act 2005*;
4. The Project involves the extraction and passage of natural gas from an offshore wellhead platform, (located in Commonwealth waters) beyond the three nautical mile (nm) NT Coastal Waters boundary in the Joseph Bonaparte Gulf, to the premises;
5. The premises comprises;
 - a. an onshore gas processing plant consisting of separation, gas dehydration, compression, condensate storage, ground flare, produced water treatment facilities and subsequent wastewater discharges;
 - b. a wastewater irrigation field, storm water infrastructure and groundwater monitoring bores;
 - c. an 18" carbon steel, multi-phase pipeline utilised for importing produced fluids from the offshore gas field;
 - d. a condensate offtake line from the condensate storage facilities to the Single Point Mooring location offshore; and
 - e. a processed gas export pipeline and custody transfer meter located at the premises boundary;
6. The processed gas from the YGP is exported from the transfer meter at the boundary of the premises, via an export pipeline (managed by the Australian Pipeline Trust) to the Customer, Power and Water Corporation;
7. The YGP has been in operation since 2009 and has an expected operational life of 30 years;
8. The Project was assessed under the *Environmental Assessment Act 1982* (EA Act) in 2005, with recommendations provided by the Northern Territory Office of Environment and Heritage detailed in Assessment Report 50;
9. The recommendations in Assessment Report 50 were considered in the preparation of subsequent approvals and licences issued under the Act for the operation of the YGP at the premises;
10. ENI is regulated under an Environment Protection Licence (EPL) issued pursuant to section 34 of the Act;

11. In February 2020, ENI were issued EPL230-01 for the processing of natural gas at the premises, to a maximum of 1,055,300 tonnes of gas and 50,930 tonnes of condensate per annum;
12. The YGP operations generate a range of wastes and contaminants including wastewater from hydrocarbon processing, hazardous wastes and air emissions, resulting in discharges to the air, land and water environments, which has the potential to cause environmental harm;
13. Wastewater generated from hydrocarbon processing activities includes wastes containing dissolved oil, organic acids and heavy metals in produced formation water and residual process chemicals;
14. Under EPL230-01, wastewater is discharged to the marine environment via discharge location PW-01, located approximately 2km offshore and 12m below the ocean surface;
15. The receiving marine environment lies 500m from the Walpinthi Reef (a culturally significant site), within the Joseph Bonaparte Gulf, a relatively pristine and highly dynamic tidal environment, characterised by a broad and relatively shallow embayment with a coastline dominated by sand and mud flats, tidal creeks and estuaries of major river systems;
16. On 14 March 2022 ENI submitted an Annual Monitoring Report to the NT EPA in accordance with the requirements of EPL230-01;
17. On 26 August 2022 ENI submitted a non-compliance notification and a consolidated environmental monitoring data Microsoft® Excel® spreadsheet to the NT EPA for monitoring undertaken from May 2016 until July 2022;
18. The Annual Monitoring Report and subsequent environmental monitoring data detailed several wastewater discharge events from location PW-01 in excess of the EPL 230-1 limits for key contaminants of concern including:
 - a. Benzene reported between 2,500 ug/L and 3,200 ug/L exceeding the EPL limit of 2000 ug/L;
 - b. Toluene reported between 2,000 ug/L and 7,000 ug/L exceeding the EPL limit of 330 ug/L;
 - c. Ethylbenzene reported between 440 and 4,000 ug/L exceeding the EPL limit of 160 ug/L;
 - d. Xylene (m+p) reported between 430 ug/L and 3,500 ug/L exceeding the EPL limit of 150 ug/L;
19. The Annual Monitoring Report and subsequent environmental monitoring data reported on the following contaminants at elevated concentrations:
 - a. Total Recoverable Hydrocarbons (TRH) C6-C9 reported between 3,000ug/L and 23,000 ug/L
 - b. TRH C6-C10 reported between 8,100 ug/L and 22,000 ug/L;
 - c. TRH C6-C10 (Less BTEX) reported between 3,500 ug/L and 12,000ug/L; and

- d. Heavy metals including barium, copper, manganese, strontium and zinc;
20. Benzene, Toluene, Ethylbenzene, Xylene (m+p) (BTEX) may produce acute toxic effects in organisms such as algae, daphnids and fish when exposed to concentrations in excess of 1000 µg/L¹;
 21. Hydrocarbons are toxic to many microbial and benthic species and impact the feeding behaviour of aquatic organisms resulting in impaired growth and survival and interference with breeding habits²;
 22. The discharge of wastewater, above EPL limits in large and increasing volumes due to variations in produced formation water content within the gas reservoir, gives rise to actual and/or potential environmental harm concerns;
 23. The Annual Monitoring Report did not include environmental monitoring data for air emissions at the monitoring frequency prescribed by EPL230-01; and
 24. The absence of air emissions monitoring data means the environmental risk of the activity is not well known.

¹ Dr Frederic Leusch and Dr Michael Bartkow, *A short primer on benzene, toluene, ethylbenzene and xylenes (BTEX) in the environment and in hydraulic fracturing fluids* (2010) accessed via [A short primer on benzene, toluene, ethylbenzene and xylenes \(BTEX\) in the environment and in hydraulic fracturing fluids \(des.qld.gov.au\)](#)

² Joshua Oluwatobi Akinola, Olamide Olaronke Olawusi-Peters, Victoria Omolara Enobong Akpambang, *Ecological hazard of total petroleum hydrocarbon in brackish water - white shrimp *Nematopalaemon hastatus** (2019) accessed via [Ecological hazards of Total petroleum hydrocarbon in brackish water white Shrimp *Nematopalaemon hastatus* \(AURIVILLUS 1898\) - ScienceDirect](#)

ATTACHMENT B NOTICE REQUIREMENTS

1. Pursuant to section 48 of the *Waste Management and Pollution Control Act 1998* (the Act), ENI is required to carry out an environmental audit program (the program) at and beyond the premises (as delineated in **Purple** in **Attachment C**) to evaluate;
 - a. the ability of management systems at the Yelcherr Gas Plant to manage waste or prevent, reduce, control, rectify or clean up pollution or environmental harm resulting from pollution;
 - b. the extent, nature and source of wastes generated by the Yelcherr Gas Plant (i.e. an activity, premises or process); and
 - c. the types, amount, distribution and mobility of contaminants and wastes present in the environment at and from the Yelcherr Gas Plant as defined in Attachment "A";
2. The audit program must be performed by a qualified person registered under section 68 of the Act (the auditor);
3. By **15 December 2022**, you must engage the auditor(s), accredited under section 68 of the Act to undertake the program;
4. You must provide the details of the auditor(s) commissioned to conduct the audit to the NT EPA via email to pollution@nt.gov.au within **10 business days** of engagement;
5. By **16 January 2023**, and prior to commencing the program, you must submit to the NT EPA via email to pollution@nt.gov.au the scope of works for the program prepared by the auditor for review to ensure the audit scope meets the Notice requirements;
6. By **30 June 2023**, you must submit to the NT EPA via email to pollution@nt.gov.au an Interim Environmental Audit Report prepared by the auditor;
7. By **16 October 2023** you must submit to the NT EPA via email to pollution@nt.gov.au the results of the program in the form of a final **Environmental Audit Report** prepared by the auditor;
8. The **Environmental Audit Report** must include an assessment of actual environmental harm and the potential risk of environmental harm from contaminants and wastes present in the environment at and discharged from the premises;
9. The **Environmental Audit Report** must include an assessment of current management systems and the suitability of the management systems to mitigate environmental impacts;
10. The **Environmental Audit Report** must assess the actual and potential risk of environmental harm from activities conducted at the premises, as determined by:
 - a. review of systems, plans, procedures, monitoring programs, data, records, reports or information that is relevant to the scope of the audit as the auditor sees fit;
 - b. review of activities, processes, plant and equipment at the premises that is relevant to the scope of the audit as the auditor sees fit; and

- c. collection and/or modelling of data that is that relevant to the scope of the audit as the auditor sees fit;

11. The **Environmental Audit Report** must:

- a. consider all relevant guidance including, but not limited to:
 - i. the National Environment Protection (Assessment of Site Contamination) Measure (ASC NEPM) 1999 (amended 2013); and
 - ii. the Northern Territory Contaminated Land Guideline (CLG) 2017;
- b. determine if the activities conducted at the premises have caused environmental harm or give rise to a potential risk of any possible harm or adverse impact to the environment;
- c. where actual harm or risk of possible harm to the environment has been identified, recommend measures necessary to reduce the actual harm and risk of harm to an acceptable level; and
- d. propose a timetable for the implementation of all recommended measures to address the findings of the Audit.

**ATTACHMENT C
THE PREMISES AND ASSOCIATED DISCHARGE POINT**

