



Integrated Gas

BEETALOO SUB-BASIN AMUNGEE NW-1H EXPLORATION PERMIT (EP) 98 EMP (ORI7-2) Annual Environmental Performance Report

THE THREE WHATS

What can go wrong?
What could cause it to go
wrong?
What can I do to prevent it?

Amungee NW-1H Exploration Permit (EP) 98 ORI7-2 EMP AEPR


Document Details

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EMPs Covered	Beetaloo Sub-basin Amungee NW-1H Exploration Permit (EP) 98 EMP (ORI7-2)
Permit	EP 98
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0		Issued for Approval	MK	LP	MK

Signature and certification

I hereby declare that the information provided in this annual environment performance report and accompanying documents is to the best of my/our knowledge, true and correct.	
Signature	
Name	Matt Kernke
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1. Introduction

The Northern Territory (NT) Petroleum (Environment) Regulations 2016 (the Regulations) include a requirement¹ for the interest holder to provide a report to the Minister on an annual basis that outlines the environmental performance of regulated activities. The Annual Environment Performance Report (AEPR) must include sufficient information to allow the Minister to assess whether the interest holder has met the environmental outcomes and environmental performance standards included in the approved Environment Management Plan (EMP). The report is to consider information required to be recorded, monitored or reported under the Regulations and any other law in force in the Northern Territory related to conduct of the regulated activity.

This AEPR covers the regulated activities approved under the [Beetaloo Sub-basin Amungee NW-1H Exploration Permit \(EP\) 98 EMP \(ORI7-2\)](#), approved by the Minister on 15 July 2021.

The AEPR covers the reporting period of 15 July 2021 to 14 July 2022.

1.1 Acronyms and abbreviations

Table 1 Summary of acronyms and abbreviations

Acronym	Definition
AAPA	Aboriginal Area Protection Authority
CMS	Compliance management system
Code	Code of Practice: Onshore Petroleum Activities in the Northern Territory
DEPWS	Department of Environment, Parks and Water Security
DITT	Department of Industry, Tourism and Trade
FTP	File Transfer Protocol
ha	hectare
OCIS	Origins Collective Intelligence System used for managing incident data
Regulations	Petroleum (Environment) Regulations
WBIV	Well barrier integrity verification

1.2 Background

The Amungee NW-1 exploration well was stimulated and well tested in 2016. The well was subsequently suspended in November 2016, with the well being used to monitor build-up pressure in the formation since this time.²

The regulated activities that have been assessed under this AEPR, include:

- Site maintenance (completed July 2021)
- Wastewater storage tank and bund construction (completed July 2021)
- Well testing (Aug – Sept 2021)
- Wastewater storage (~0.23 ML as at July 2022)
- Appraisal well build-up testing (EPT 07/08/2021 – 21/09/2021)
- Ongoing maintenance and monitoring

The location of the regulated activities is provided in Figure 1.

¹ Petroleum (Environment) Regulations 2016 (NT) sch 1, item 11.

² Refer superseded EMP titled: *2016 Hydraulic Fracture stimulation and Well Testing EP: Amungee Nw-1 and Beetaloo W-1 or nutwood Downs SW-1 EP*

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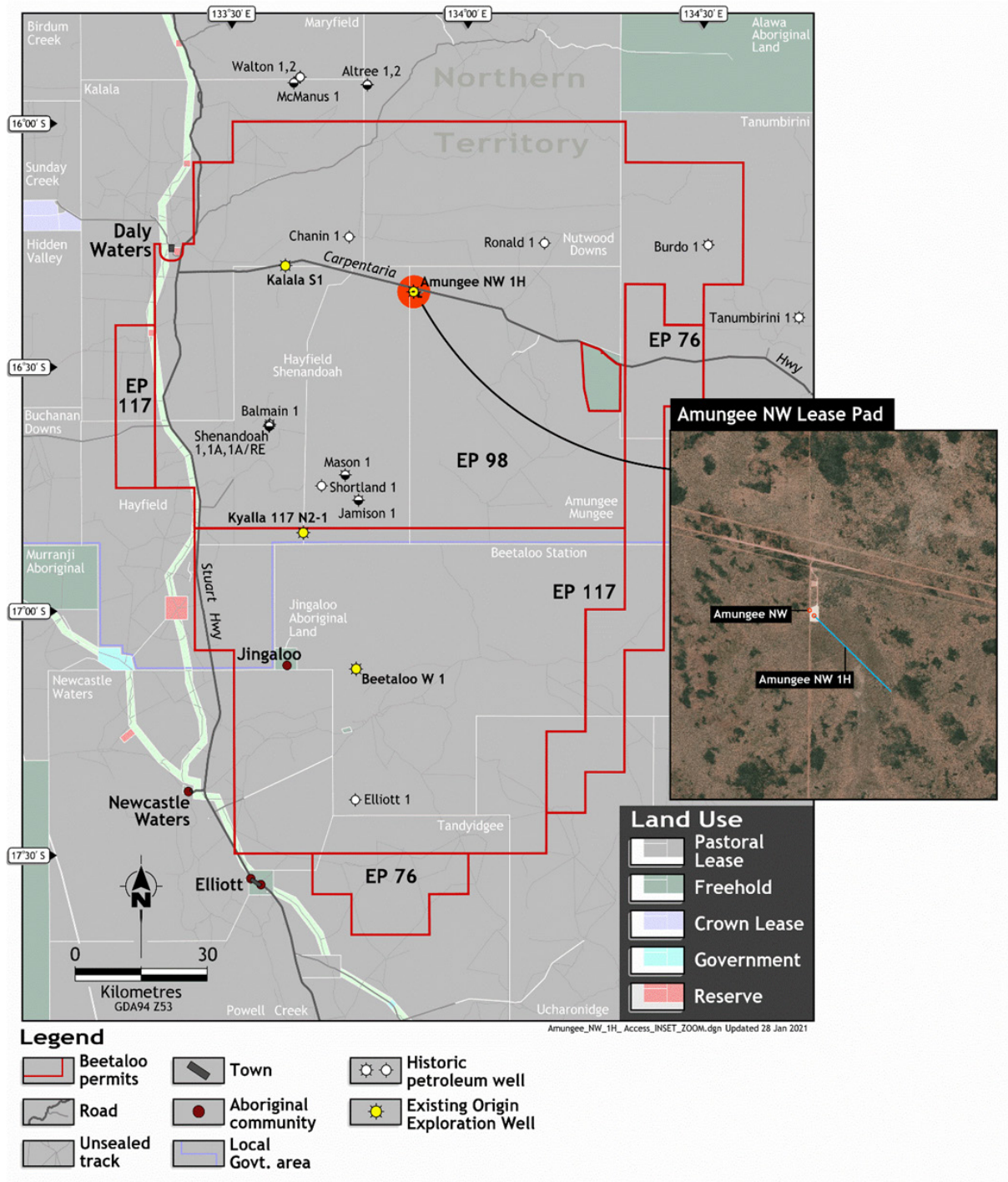


Figure 1 Amungee NW-1 location

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1.3 Contents of performance report

This AEPR describes the environmental performance of Origin by evaluation of the following:

1. compliance with Ministerial approval conditions, for each EMP
2. compliance with each environmental outcome and environmental performance standard described in the EMP
3. compliance with reporting requirements in accordance with the Code and Regulations
4. all recordable and reportable incidents, including root cause analysis and related corrective actions to prevent re-occurrence
5. findings of all regulatory inspections and audits and related actions to address any findings.

1.4 Assessment of compliance

Table 2 shows the compliance status indicators used in this AEPR which have been defined by the Department of Environment, Parks and Water Security (DEPWS).

Table 2 Compliance descriptors

Indicator	Description
Compliant	Compliant with requirement for entire 12-month reporting period
Not Compliant	Interest holder did not comply with the requirement during the reporting period
Not Applicable	Requirement not applicable during the reporting period

1.5 Evidence of compliance

The following sources of evidence are used to demonstrate compliance:

1. internal monitoring of compliance by Origin Energy through:
 - Weekly and fortnightly inspections of the lease pad an Amungee NW-1 well.
 - 6 monthly leak detection completed
 - Routine inspection and maintenance on the exploration wells
2. outcomes from regulatory inspection/s conducted by the Department of Industry, Tourism and Trade (DITT)
3. recordable and reportable incident reports submitted to DEPWS Petroleum Operations
4. reports provided to the DITT and other government agencies.

2. Demonstration of Compliance

2.1 Ministerial condition compliance

Table 3 demonstrates Origin's compliance with Ministerial EMP approval conditions.

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Table 3 Ministerial condition summary table

No	Ministerial condition	Compliance Status	Evidence
Beetaloo Basin Kyalla 117 N2 Civil Construction EMP			
1	<p>The Interest holder must submit to Department of Environment and Natural Resources (DEPWS)</p> <p>i. an updated timetable (including time-bound commitments) for the regulated activity prior to commencement of the activity and each month thereafter; and</p> <p>ii. weekly on-site reports indicating the status and progress of the Extended Production Test (EPT), freeboard available in wastewater tanks during operations, and monthly reports on progressive rehabilitation in progress/completed; and</p> <p>iii. written notification of any halt to the activity due to wet season conditions, within 24 hours of the halt; and</p> <p>iv. immediate written notification of any fires potentially threatening the activity from external or internal factors.</p>	Compliant	<p>1. Monthly activity reports, including schedule and weather forecasts submitted to DEPWS:</p> <ul style="list-style-type: none"> • 18/08/2021 • 19/09/2021 • 20/10/2021 • 22/11/2021 • 17/12/2021 • 19/01/2022 • 20/02/2022 • 23/03/2022 • 22/04/2022 • 19/05/2022 • 20/06/2022 • 20/07/2022 <p>2. Weekly Amungee fluid updates emailed to DEPWS.</p> <p>3. Daily operations reports for the Amungee NW-1H well test sent to DEPWS and DITT.</p> <p>4. One notification of an unrelated fire in October 2021. Annual fire mapping has been provided to DEPWS on the 17 December 2021 and 30 September 2022.</p>

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No	Ministerial condition	Compliance Status	Evidence
2	<p>To support clause C.7.2 of the Code, all accidental releases of liquid contaminant must be recorded immediately in a spill register. The register must include:</p> <ul style="list-style-type: none"> i. location, source and volume of the spill; ii. volume of impacted soil removed for appropriate disposal and the depth of any associated excavations, and iii. the corrective actions taken or proposed to be taken to prevent recurrence of an incident of a similar nature; and iv. update of a geospatial register of spills. v. timetable for implementation. 	Compliant	No spills causing material environmental harm recorded in Origin's incident management system.
3	<p>The interest holder must provide an annual report to DEPWS on its environmental performance, in accordance with item 11 (1)(b) in schedule 1 of the Petroleum (Environment) Regulations 2016. The first report must cover the 12 month period from the date of the approval, and be provided within three calendar months of the end of the reporting period. The annual environment performance report must align with the template prepared by DEPWS for this purpose and must include a signed declaration by the interest holder.</p>	Compliant	This report represents the first AEPR submitted under this EMP approval.
4	<p>To support clause A.3.9 of the Code and the EMP rehabilitation plan, the interest holder is to provide an updated rehabilitation plan to DEPWS for approval, concurrent with submission of the annual environment performance report. The amended rehabilitation plan must include:</p> <ul style="list-style-type: none"> i. auditable success criteria for rehabilitation and corrective actions in the event rehabilitation monitoring shows success criteria are not achieved ii. an annual summary of progressive rehabilitation outcomes, and iii. be accompanied by geospatial files of all surface disturbance areas, including those under rehabilitation. 	Compliant	<ul style="list-style-type: none"> i. Rehabilitation management plan (RMP) developed and approved by the Minister on 15 July 2021, as part of the EMP (Refer Appendix K <i>Exploration Permit 98 Rehabilitation Management Plan Rev 1.0 Amungee NW-1H Lease, dated 31/03/2021</i>. <p>A revised RMP is provided as Attachment A.</p> <p>The surface disturbance has been updated to reflect proposed new clearing, as approved under the <i>Beetaloo Sub-basin Multi-well Drilling, Stimulation and Well Testing Program Exploration Permit (EP) 98 & 76 EMP (ORI10-3)</i>.</p> <p>Measurable attributes and success criteria remain unchanged.</p>

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No	Ministerial condition	Compliance Status	Evidence
	<p>Progressive rehabilitation of significantly disturbed land, not required for the ongoing conduct of future activities, must commence as soon as practicable but no longer than 12 months following cessation of the activity.</p> <p>The rehabilitation plan must be implemented until a successful outcome is achieved and documented.</p>		<p>ii. There is no change to the rehabilitation outcomes on Amungee NW-1H lease because activities are ongoing.</p> <p>iii. No additional surface disturbance / clearing approved under this EMP.</p>
5	To support clause D.6.2 (b) of the Code, an emissions report must be provided to DEPWS by 30 September each year, which summarises actual greenhouse gas emissions reported under the Australian Government's National Greenhouse and Energy Reporting Act 2007 versus the predicted emissions in the EMP. ³	Compliant	<ul style="list-style-type: none"> Annual emission report dated 30 September 2021 submitted to DEPWS. 2021-22 annual emissions report submitted 30 September 2022.

³ Clause D.6.2(b) of the Code requires annual actual greenhouse gas emissions to be provided even where emissions are below the NGERs threshold of 25 ktCO₂-e for scope 1 and scope 2 emissions reporting.

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2.2 Environmental outcomes and performance standards

No specific environmental outcomes or performance measures were provided in the EMP. The relevant outcomes and performance standards from the EMP, have been used to demonstrate the environmental performance of operations and continual improvement. These are summarised in Table 3.

Table 4 Environmental outcomes and performance measures

Number	Environmental outcomes	Environmental Performance Standard	Compliance	Evidence
1	<ul style="list-style-type: none"> No significant impact to the ecological function and productivity of soils surrounding Amungee NW as a result of Origin's exploration activities 	<ul style="list-style-type: none"> No releases of contaminants (chemicals, hydrocarbon or flowback wastewater) outside of Origin's lease pad 	Compliant	<ul style="list-style-type: none"> Weekly inspection of lease pad completed No releases of contaminants listed in Origin Incident management system.
		<ul style="list-style-type: none"> No reportable spills resulting from Origin's exploration activities 		<ul style="list-style-type: none"> No reportable spills listed in Origin Incident management system.
		<ul style="list-style-type: none"> Erosion and sediment control in place and working effectively 		<ul style="list-style-type: none"> Weekly inspection of lease pad completed No material erosion recorded during site inspections or listed in Origin Incident management system. Minor earth works performed to rehabilitate erosion near SE pond and sediment basin
2	<ul style="list-style-type: none"> No significant impact on surface water quality as a result of Origin's exploration activities 	<ul style="list-style-type: none"> During chemical and wastewater storage activities, no off-site release of contaminants from chemical, hydrocarbon and waste storage 	Compliant	<ul style="list-style-type: none"> No offsite releases recorded in Origin incident management system. Construction of IMB RN043018 completed on 08/09/2022; collection of baseline data and analysis has yet to commence.
		<ul style="list-style-type: none"> No reportable spill, including offsite releases of contaminants resulting from Origin's exploration activities 		<ul style="list-style-type: none"> Weekly site inspections confirm no releases of chemicals, hydrocarbons and wastewater outside of the Amungee NW-1 site

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Number	Environmental outcomes	Environmental Performance Standard	Compliance	Evidence
		<ul style="list-style-type: none"> Erosion and sediment control in place and working effectively 	Compliant	<ul style="list-style-type: none"> Weekly inspection of lease pad completed No material erosion recorded during site inspections or listed in Origin Incident management system. Minor earth works performed to rehabilitate erosion near SE pond and sediment basin
3	<ul style="list-style-type: none"> Origin's exploration activities do not reduce the environmental value (quality and quantity) of the underlying groundwater resources 	<ul style="list-style-type: none"> No failure of wastewater tank secondary liner or tank structure 	Compliant	<ul style="list-style-type: none"> No incidents of soil, surface water or groundwater contamination reported in Origin's incident management system. No secondary liner or tank failures reported in Origin's incident management system.
		<ul style="list-style-type: none"> No long term (>12 month) reduction in groundwater level observed in the impact monitoring bore that results in >1m decline in groundwater water level 		<ul style="list-style-type: none"> Construction of IMB RN043018 completed on 08/09/2022; collection of baseline data and analysis has yet to commence. Water extraction levels reported and submitted to DEPWS at least monthly via WALAPs. 0.043 ML of groundwater extracted as at 14/07/2022, which is well below Origin's WEL permit of 175 ML/annum.
4	<ul style="list-style-type: none"> No significant impact to high valued habitats and threatened flora and fauna as a result of Origin's exploration activities 	<ul style="list-style-type: none"> No releases of flowback off the lease into the surrounding vegetation 	Compliant	<ul style="list-style-type: none"> No incidents of flowback release into the surrounding vegetation reported in Origin's incident management system Wastewater transferred from Amungee NW to Kyalla without incident.

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Number	Environmental outcomes	Environmental Performance Standard	Compliance	Evidence
		<ul style="list-style-type: none"> <7 individual fauna deaths per week for 2 consecutive weeks caused by flowback water storage 		<ul style="list-style-type: none"> Weekly checks indicated not fauna deaths reported in flowback water storages No incidents reported in Origin's incident management system
		<ul style="list-style-type: none"> <0 threatened fauna deaths caused by flowback storage 		<ul style="list-style-type: none"> No fauna deaths from wastewater storages or in the vicinity of the lease pad recorded in Origin's incident management system.
		<ul style="list-style-type: none"> No uncontrolled bushfires caused by Origin's exploration activities 		<ul style="list-style-type: none"> Zero reported incidents of uncontrolled bushfire(s) caused by Origin's activities recorded in Origin's incident management system.
		<ul style="list-style-type: none"> Weed surveys completed on all Origin disturbed areas 		<ul style="list-style-type: none"> Routine weekly weed inspections and weed maintenance. Annual weed report submitted to DEPWS December 2021. Post wet season weed survey, scheduled for May 2022 did not occur due to rain issues and COVID. Results and reporting of the weed surveys undertaken in August in preparation.
		<ul style="list-style-type: none"> Year-on-year decline in the size and density of all weed infestations introduced as a result of Origin's activities 		<ul style="list-style-type: none"> Routine weekly weed inspections and weed maintenance indicates no weed infestations as a result of Origin's activities. Annual weed report submitted to DEPWS December 2021. Post wet season weed survey, scheduled for May 2022 didn't occur due to rain issues and COVID. Results

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Number	Environmental outcomes	Environmental Performance Standard	Compliance	Evidence
				and reporting of the weed surveys undertaken in August in preparation.
5	<ul style="list-style-type: none"> No significant impact on air quality and no excess greenhouse gas emissions as a result of Origin's exploration activities 	<ul style="list-style-type: none"> Venting to be eliminated as far as reasonably practicable 	Compliant	<ul style="list-style-type: none"> No incidents of uncontrolled gas emissions reported in Origin's incident management system 6 monthly leak detection on the Amungee NW-1H well completed in 17/01/2021 and 06/06/2022) No pastoralist complaints recorded during activity recorded in Origin's incident management system. No incidents regarding bushfires caused by Origin's activities recorded in Origin's incident management system.
		<ul style="list-style-type: none"> All greenhouse gasses reporting in accordance with NGERS requirements 		<ul style="list-style-type: none"> Annual emissions reporting submitted 30/09/2021. 2021-22 emissions management report submitted 30/09/2022.
		<ul style="list-style-type: none"> All leaks detected and repaired in accordance with Code 		Leak detection completed: <ul style="list-style-type: none"> 17/1/2021 02/06/2022 No leaks detected or recorded in Origin's incident management system.

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Number	Environmental outcomes	Environmental Performance Standard	Compliance	Evidence
6	<ul style="list-style-type: none"> No significant negative impacts to the community as a result of Origin's exploration activities 	<ul style="list-style-type: none"> All valid community complaints of nuisance investigated and resolved >60% of addressable spend to be from NT businesses i.e. 60% of services or material that can be provided by NT businesses are provided by NT business. 	Compliant	<ul style="list-style-type: none"> No pastoralist complaints recorded during activity recorded in Origin's incident management system.
7	<ul style="list-style-type: none"> No significant impact on sacred sites and environmental values as a result of Origin's exploration activities 	<ul style="list-style-type: none"> No unauthorised work within Restricted Work Areas (RWA) No impacts to sacred sites Site inductions completed on all employees and contractors which include information on RWA's and approved activity areas 	Compliant	<ul style="list-style-type: none"> No incidents of significant impacts to sacred sites recorded in Origin's incident management system.

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2.3 Mandatory reporting requirements

Table 4 demonstrates Origin Energy's compliance with reporting requirements in the [Code of Practice: Onshore Petroleum Activities in the Northern Territory](#) (the Code) and interest holder's compliance with reporting requirements under the Regulations, schedule 1, item 11(2), which requires all information required to be recorded, monitored or reported has been provided. Where relevant, Origin Energy has also confirmed that all records, monitoring or required reporting under the Regulations⁴ has been provided to DEPWS or the relevant NT government agency.

Table 5 Summary of mandatory reporting requirements

No#	Reference	Requirement	Compliance Status	Evidence
1	Code A.3.5	Geospatial information depicting areas cleared is to be provided to the Minister.	Not applicable	<ul style="list-style-type: none"> No clearing was proposed or completed under this EMP.
2	Code A.3.6 (b)	Weed management plan developed as part of the EMP must provide for ongoing weed monitoring.	Compliant	<ul style="list-style-type: none"> Weed management plan developed, with 6 monthly weed monitoring completed. Annual weed monitoring report currently in preparation and will be submitted to DEPWS on or before November 2022.
3	Code A.3.7(a)vi	The fire management plan developed as part of the EMP must provide for annual fire mapping to monitor changes to fire frequency in the relevant areas.	Compliant	<ul style="list-style-type: none"> Fire management plan implemented. Annual fire mapping has been provided to DEPWS on the 17 December 2021 and 30 September 2022.
4	Code A.3.9(c) Code A.3.9(e)	The rehabilitation plan developed as part of the EMP requires progressive rehabilitation of significantly disturbed land which is required to commence no longer than 12 months following the cessation of activities on the land. It also requires regular maintenance and annual monitoring of rehabilitated areas.	Compliant	<ul style="list-style-type: none"> Rehabilitation plan developed and approved by the Minister on 15 July 2021, as part of the EMP (Refer Appendix K Exploration Permit 98 Rehabilitation Management Plan Rev 1.0 Amungee NW-1H Lease, dated 31/03/2021). A revised RMP is provided as Attachment A. The surface disturbance has been updated to reflect proposed new clearing, as approved under the <i>Beetaloo Sub-basin Multi-well Drilling, Stimulation and Well</i>

⁴ Petroleum (Environment) Regulations 2016 (NT) sch 1, item 11(2).

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No#	Reference	Requirement	Compliance Status	Evidence
				<p><i>Testing Program Exploration Permit (EP) 98 & 76 EMP (ORI10-3).</i></p> <ul style="list-style-type: none"> Measurable attributes and success criteria remain unchanged and there is no change to the rehabilitation outcomes on Amungee NW-1H lease because activities are ongoing. No additional surface disturbance / clearing approved under this EMP. These rehabilitation requirements are not applicable as the site remains operational, with rehabilitation activities not undertaken to date.
5	Code B.4.13.2(c)	<p>As a minimum, the following must be recorded and reported for each stage (where a stage in this context means all fluids pumped at a particular depth interval):</p> <p>a) total volume of hydraulic fracturing fluid pumped,</p> <p>b) quality of water used (tested for analytes in section C.8 of this Code. Analyses do not need to be repeated if the same water source is used for multiple stages) and</p> <p>c) typical and maximum concentrations of chemicals or other substances used.</p>	Not applicable	<ul style="list-style-type: none"> No exploration well drilling, hydraulic fracturing or well testing activities were completed under this approval
6	Code B.4.13.2(k)iv	<p>Where venting is the only technically feasible option for managing produced gas, the technical considerations preventing the use of the recovered gas must be recorded and included in the operator's annual report.</p>	Compliant	<ul style="list-style-type: none"> No incidents of uncontrolled gas emissions reported in Origin's incident management system. Extended Production Test occurred 07/08/2021 – 21/09/2021. 2021-22 emissions management report submitted 30/09/2022.

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No#	Reference	Requirement	Compliance Status	Evidence
7	Code B.4.14.2(c)	All new barriers or new well operating envelopes must be verified and clearly documented and reported by submission of an updated well barrier integrity validation (WBIV) report to DPIR.	Not applicable	<ul style="list-style-type: none"> All cementing operations which occurred in 2015 were reported as part of the Amungee NW-1 Well Completion Report.
8	Code B.4.15.2(j)	Complete and accurate records of the entire decommissioning procedure must be kept, with these records submitted as part of the legislative reporting requirements for the decommissioning of petroleum wells.	Not applicable	<ul style="list-style-type: none"> The well has not been decommissioned.
9	Code B.4.17.2(d)	Any guidelines published by the Northern Territory Government from time to time relating to reporting and data submission, and groundwater monitoring data standards must be followed.	Compliant	<ul style="list-style-type: none"> Construction of IMB RN043018 completed on 08/09/2022; collection of baseline data and analysis has yet to commence. All other groundwater monitoring is undertaken in accordance with the NT's Preliminary Guideline: Groundwater Monitoring Bores for Exploration Petroleum Wells in the Beetaloo Sub-basin
10	Code C.3(e)	The components of the wastewater management framework, include: Monitor, manage and report in accordance with the Wastewater Management Plan and Spill Management Plan.	Compliant	<ul style="list-style-type: none"> The approved EMP includes a WWMP and SMP, which has been adhered to during the reporting period. No incidents of uncontrolled wastewater release or spills reported in Origin's incident management system
11	Code C.6.1(d)	Wastewater tracking documentation must be reported to the Minister at least annually in accordance with the framework provided in the EMP.	Compliant	<ul style="list-style-type: none"> All wastewater tracking reported weekly.
12	Code C.7.1(d)ii	Wastewater Management Plan must include a program for monitoring and reporting against the effectiveness of the measures for the mitigation of interaction with wildlife, stock and human receptors with wastewater.	Compliant	<ul style="list-style-type: none"> Waste management plan includes a monitoring program to detect impacts from wastewater storages on fauna and human receptors.

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No#	Reference	Requirement	Compliance Status	Evidence
13	Code D.4.3.2(f)	A written report detailing the levels of methane measured, the duration of the unusual readings and the results of the investigation (including remedial actions) must be submitted within one month of the significantly higher-level methane event being detected.	Compliant	<ul style="list-style-type: none"> Annual emissions management report submitted 30 September 2022.
14	Code D.5.9.2(c)	Emissions from exploration, well construction (including during flowback) and workovers must be measured and reports submitted.	Compliant	<ul style="list-style-type: none"> Annual emissions management report submitted 30 September 2022.
15	Code D.5.9.3(a)	Where natural gas is vented or flared at a gas processing or other downstream facility, emissions must be estimated and reported.	Compliant	<ul style="list-style-type: none"> Annual emissions management report submitted 30 September 2022.
16	Code D.6.2(a)	Reports of baseline assessments must be submitted at the conclusion of each field campaign.	Not applicable	<ul style="list-style-type: none"> The EMP was approved prior to the Code coming into force.
17	Code D.6.2(b)	Emissions reporting must be in accordance with Section D.5.6. Emissions associated with venting and flaring as described in Section D.5.9 must be provided separately to the Northern Territory Government in accordance with this Code.	Compliant	<ul style="list-style-type: none"> All flaring emissions reported in the 30 September 2022 annual emissions management report.
18	Regulations, Reg 14	A current EMP remains in force until the interest holder notifies the Minister the activity is no longer being carried out and all of the environmental outcomes and obligations under the plan have been met, and the Minister advises the interest holder the notice is accepted and the plan ceases to be in force.	Compliant	<ul style="list-style-type: none"> The EMP is valid until July 2026 with a review and approval to occur before this time.

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No#	Reference	Requirement	Compliance Status	Evidence
19	Regulations, Reg 33	DEPWS is notified of reportable incidents within 2 hours of the interest holder becoming aware of the incident, or within 2 hours of the incident occurring. A written report must be provided within 24 hours if the initial report was made orally.	Compliant	<ul style="list-style-type: none"> No reportable incidents have been recorded.
20	Regulations, Reg 34	Reports on reportable incidents are to be provided to DEPWS as soon as practicable and within 72 hours of the event occurring. A final report must be provided to DEPWS within 30 days after remediation/clean-up of the affected area.	Compliant	<ul style="list-style-type: none"> No reportable incidents have been recorded.
21	Regulations, Reg 35	A written report of all recordable incidents must be provided to DEPWS not later than 15 days after the 90 day reporting period (unless otherwise agreed).	Compliant	<p>Quarterly recordable incidents reports were provided as follows:</p> <ul style="list-style-type: none"> Q3 2021 report provided 14/10/2021 Q4 2021 report provided 14/01/2022 Q1 2022 report provided 10/04/2022 Q2 2022 report provided 14/07/2022
22	Regulations, Reg 37A	A report about flowback fluid from hydraulic fracturing must be provided to the Minister within 6 months of the flowback occurring.	Not applicable	<ul style="list-style-type: none"> For Amungee NW, this had already been submitted in 2016/17.
23	Regulations, Reg 37B	A report about produced water from hydraulic fracturing must be provided to the Minister within 6 months of the produced water being extracted.	Not applicable	<ul style="list-style-type: none"> For Amungee NW, this had already been submitted in 2016/17.
24	Regulations, Schedule 1, item 9(2)	Interest holders are required to conduct future engagement with stakeholders, in accordance with the description in the EMP.	Compliant	<ul style="list-style-type: none"> Stakeholder engagement with immediately affected parties is ongoing, with the frequency of the engagement occurring at least quarterly
25	Regulations, Schedule 1, item 12	Interest holder must notify the Minister, occupier of the land and owner of the land on which the activity is to be carried out before commencement of activity.	Compliant	<ul style="list-style-type: none"> Notification issued to pastoralist on 24 April 2021. Notification issued to DEPWS on 16 July 2021

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No#	Reference	Requirement	Compliance Status	Evidence
26	<i>Environment Protection Act 2019</i> (NT) div 8	Duty to notify the NT EPA as soon as practicable but within 24 hours of any incident which occurs which causes or threatens to cause material or significant environmental harm	Compliant	<ul style="list-style-type: none"> No incidents which could cause or threaten to cause material or significant environmental harm occurred during reporting period.
27	<i>Waste Management and Pollution Control Act 1998</i> (NT) s 14	Duty to notify the NT EPA as soon as practicable but within 24 hours of any incident which occurs which causes or threatens to cause pollution resulting in material or significant environmental harm	Compliant	<ul style="list-style-type: none"> No incidents which could cause or threaten to cause material or significant environmental harm occurred during reporting period.

3. Summary of Compliance

3.1 Overview of Compliance

Table 5 provides a summary of the results of the compliance assessment against the EMP.

Table 6 Amungee NW-1H Exploration Permit (EP) 98 ORI7-2 EMP compliance summary

Compliance Indicator	Number	Percentage
Compliant	32	100%
Not Compliant	0	0%
Not Applicable	7	N/A

3.2 Overview of Items Found Not Compliant

The following sections describe:

- the specific compliance requirements not met for the reporting period
- an analysis of the possible potential environmental harm or impact to environmental values resulting from non-compliance using multiple lines of evidence
- a summary of the corrective actions already implemented, and further actions still required, as applicable, to ensure compliance is fully achieved in the future.

3.2.1 Ministerial Approval conditions

No non-compliances with Ministerial conditions were recorded.

3.2.2 Environmental Performance Standards

3.2.2.1 Description

No non-compliances with performance standards were identified.

3.2.3 Regulatory Reporting

3.2.3.1 Description

No non-compliances with regulatory reporting requirements were identified.

3.3 Application of Lessons Learned Across Origin's Onshore Interests

Due to the limited nature of activities under this EMP, no lessons learnt have arisen.