



Annual Environment Performance Report

Imperial Oil and Gas Pty Ltd

Environment Management Plan

Imperial O&G 2021 Capentaria 1 Work Program EP187
(IMP3-4)

15 February 2021 to 14 February 2022

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Document title	Annual Environment Performance Report
EMP title	Imperial O&G 2021 Carpentaria 1 Work Program EP187 (IMP3-4)
Exploration Permit/Licence Number	EP187
Interest holder details	Imperial Oil & Gas Pty Limited Level 19, 20 Bond Street, Sydney NSW 2000 ABN 92002699578
Operator details	Imperial Oil & Gas Pty Limited Level 19, 20 Bond Street, Sydney NSW 2000 ABN 92002699578

Signature and Certification	
I certify on behalf of the <i>interest holder</i> this document is a true and accurate record of performance.	
Signature	<i>Charles Dack</i>
Position	Environmental Compliance Reporting Officer, Empire Energy
Date	02/05/22

Acronyms / Terms	Definition
AEPR	Annual Environment Performance Report
Code	Code of Practice: Onshore Petroleum Activities in the Northern Territory
DEPWS	Department of Environment, Parks and Water Security (NT)
DITT	Department of Industry, Tourism and Trade (NT)
EMP	Environment Management Plan
EP	Exploration Permit
NT	Northern Territory
Regulations	Petroleum (Environment) Regulations 2016 (NT)
NGERS	National Greenhouse Energy Reporting Scheme
WBIV	Well Barrier Integrity Validation

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1. Introduction

The Northern Territory (NT) Petroleum (Environment) Regulations 2016 (NT) (the Regulations) require an interest holder to provide a report to the Minister for Environment on an annual basis that outlines the environmental performance of the interest holder¹ (the Annual Environment Performance Report). The report 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). This report considers information required to be recorded, monitored or reported under the Regulations and any other law in force in the NT related to the conduct of the regulated activity.

This Annual Environmental Performance Report (AEPR) applies to the following EMP:

- *Imperial O&G 2021 Carpentaria 1 Work Program EP187 (IMP3-4)* that was approved on the 15 February 2021
 - *Hereafter referred to as the EMP*

The period covered by this AEPR is from , 15 February 2021 to 14 February 2022.

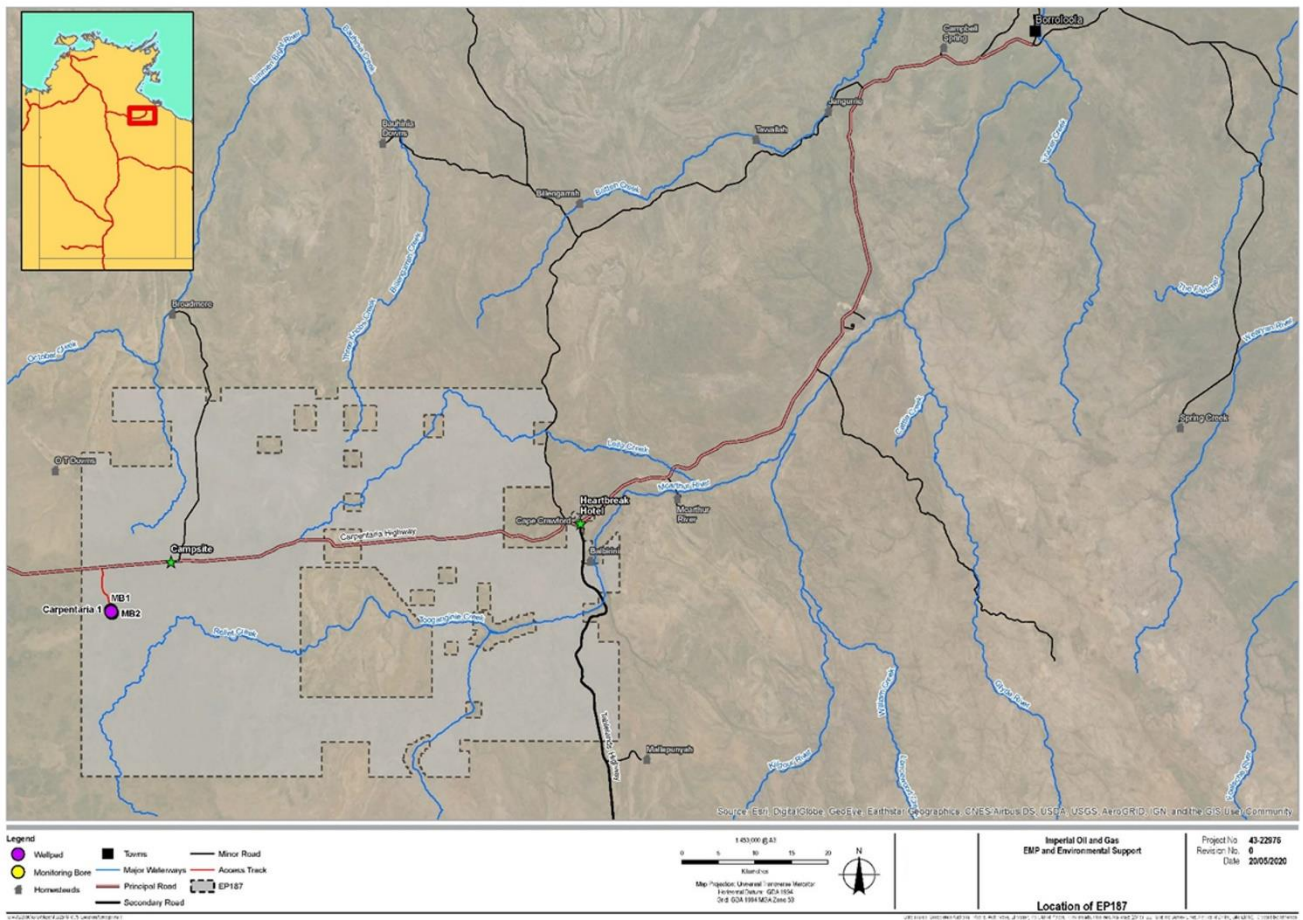
¹ Petroleum (Environment) Regulations 2016 (NT) sch 1, item 11.

1.1. Background

The EMP was approved on 15 February 2021.

The regulated activities under this EMP included the hydraulic fracturing and extended production testing of the existing Carpentaria-1 vertical exploration well on EP187.

Figure 1: Location of the Carpentaria -1 well pad in relation to EP187.



1.2. Contents of performance report

This AEPR describes the environmental performance of Imperial Oil & Gas Pty Limited (Imperial) by evaluating the following:

1. compliance with Ministerial approval conditions, for the EMP
2. compliance with each environmental outcome and environmental performance standard within the approved 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 any regulatory inspections and audits and related actions to address any findings.

1.3. Assessment of performance

Table 1 shows the performance status indicators used in this AEPR.

Table 1: Performance Descriptors

Indicator	Description
Compliant	Compliant with requirement for entire 12 month reporting period
Partially Compliant	Compliant with requirement for most of year, short periods of non-compliance
Not Compliant	Interest holder did not comply with the requirement during the reporting period
Not Applicable	Requirement not applicable during the reporting period

1.4. Evidence of performance

The following sources of evidence are used to demonstrate compliance:

1. Internal assessment of compliance through verification of:
 - Daily and weekly monitoring inspection, induction, incident and landholder consultation records and reports
2. Outcome of regulatory inspections conducted by the Department of Environment, Parks and Water Security (DEPWS) and the Department of Industry Tourism and Trade (DITT):
 - June inspection conducted by the DITT.
 - July inspection conducted by the DEPWS.
 - September inspection conducted by the DEPWS.
3. Recordable and reportable and recordable incident reports submitted to DEPWS.
4. Reports provided to DEPWS, the DITT and other government agencies.

2. Demonstration of Performance

Table 2 demonstrates Imperial's compliance with Ministerial EMP approval conditions.

Table 2: Compliance with Ministerial EMP Approval Conditions

No.	Ministerial Condition	Performance Status	Evidence
1	the interest holder must submit to DEPWS via Onshoregas.DEPWS@nt.gov.au	-	-
i	notification of the commencement of hydraulic fracturing activities one week prior to planned commencement;	Compliant	Notification sent to DEPWS on 25 May 2021, one week prior to the planned commencement of facturing actives.
ii	a timetable for the regulated activity that is to be provided one week prior to the commencement of the activity and each quarter thereafter, or more frequently should other constraints, such as seasonal weather forecasts or travel restrictions energy and including: <ol style="list-style-type: none"> i. Time-bound commitments in the EMP; ii. Due dates for satisfaction of ministerial approval conditions; iii. Due dates for regulatory reporting; 	Compliant	Timetable for the regulated activity including: <ol style="list-style-type: none"> i. Time-bound commitments in the EMP; ii. due dates for the satisfaction of ministerial approval conditions; iii. due dates for regulatory reporting; Emailed to DEPWS in: <ul style="list-style-type: none"> • April 2021 • July 2021 • November 2021 • March 2021
iii	daily onsite reports indicating the status and progress of vegetation clearing and hydraulic fracturing, and the freeboard available in open wastewater tanks;	Compliant	Daily onsite reports indicating the status and progress of vegetation clearing and hydraulic fracturing and the freeboard available in open wastewater tanks provided to DEWPS.

	iv	a seven day activity forecast for the duration of the activity during the wet season (1 October - 30 April each year);	Compliant	Seven day activity forecast for the duration of the activity during the wet season (1 October - 30 April each year provided to DEWPS.
	v	written notification of any halt to the activity due to wet season conditions, within 24 hours of the halt;	N/A	No halt due to wet season conditions occurred.
	vi	immediate written notification of any fires potentially threatening the activity from external or internal sources;	N/A	No fires potentially threatening the activity occurred.
	vii	weekly reports that detail the outcome of site inspections, and corrective actions taken, and inclusive of all commitments in the approved EMP, from the commencement of the regulated activity and continuing while the EMP remains in force.	Compliant	Weekly reports that detail the outcome of site inspections, corrective actions taken, and inclusive of all commitments in the approved EMP, from the commencement of the regulated activity and continuing while the EMP remains in force, being provided to DEWPS. .
2		in the event of any accidental release of contaminants (definition 117AAB(1) of the Petroleum Act) that exceeds 200 litres (for liquids), the interest holder must provide a written report to DEPWS within 24 hours of the incident being detected. The report must include;	N/A	No accidental release of contaminants that exceeds 200 litres (for liquids) occurred.
	i	details of the incident specifying material facts, actions taken to avoid or mitigate environmental harm; and		

	ii	the corrective actions taken including the volume and depth of impacted soil removed for appropriate disposal if required; and		
	iii	any corrective actions proposed to be taken to prevent recurrence of an incident of a similar nature		
3		the interest holder must provide to DEPWS within 6 weeks of completion of well flowback operations at the Carpentaria-1 well site on EP187 a report on the risk assessment of flowback wastewater from the hydraulic fracturing phase, via onshoregas.depws@nt.gov.au. the risk assessment must be:	Compliant	The Carpentaria-1 well site flowback risk assessment report meeting the criteria of Ministerial Condition 3 was submitted on 26 August 2021 to DEPWS.
	I	prepared by a suitably qualified person (as in the code) ; and		
	ii	prepared in accordance with the monitoring waste water analytes specified in Section C.3 of the Code of Practice: Onshore Petroleum Activities in the Northern Territory.		
4		in support of schedule 1, item 11 of the Petroleum (Environment) Regulations 2016 (NT) and clause A.3.5 of the Code, the interest holder must provide geospatial files of the land disturbance footprint(s) to DEPWS, via Onshoregas.DEPWS@nt.gov.au, within 2 months of completion of each land clearing activity.	Compliant	Geospatial files of the land disturbance footprint were sent to DEPWS on the 17 June 2021.

5	The interest holder must provide an annual report to DEPWS via onshoregas.DEPWS@nt.gov.au on its environmental performance, in accordance with item 11(1)(b) in the schedule1 of the PER. The first report must cover the 12 month period from the date of the approval, and be provided within 3 calendar months of the end of the reporting period. the annual environmental performance report must align with the template prepared by DEPWS for this purpose and be provided each year until such time a notification is made to the Minister under regulation 14 that the activity is complete, or until the EMP is revised and re-approved.	Compliant	This AEPR report submission on schedule.
6	an emissions report must be provided to DEPWS by 30 September each year, via Onshoregas.DEPWS@nt.gov.au, which summarises actual annual greenhouse gas emissions reported under the Commonwealth National Greenhouse and Energy Reporting Act 2007 versus predicted emissions in the EMP.	Compliant	Emissions report submitted to DEPWS 24 August 2021.
7	audits of compliance must be undertaken by a suitably qualified and independent person, to be approved by DEPWS, and the audit report provided to DEPWS via Onshoregas.DEPWS@nt.gov.au, no later than 2 weeks after the completion of the audits, with the focus of the audits as follows:	-	-
i	conduct a readiness audit prior to commencement of hydraulic fracturing to confirm that EMP commitments have been met and that facilities are suitable to manage all foreseen risks that could occur during hydraulic fracturing; and	Compliant	Audit of readiness prior to commencement of hydraulic fracturing submitted to DEPWS 31 May 2021.
ii	conduct an operational audit during extended production testing to confirm that EMP	Compliant	Operational Audit during extended production testing to confirm that EMP commitments in relation to

	commitments in relation to wastewater and spill management have been met		wastewater and spill management have been met was submitted to DEPWS on 6 August 2021.
8	in support of clause 16 of the Water Act 1992 (NT) and clause B.4.2 of the Code, the interest holder must undertake groundwater level/pressure monitoring at the Carpentaria-1 impact monitoring bore using a logger to record water level for 4 weeks prior to, during and 4 weeks after completion of hydraulic fracturing operations on Carpentaria-1 well. Data logging should record at a minimum of every 4 minutes for the duration of the recording period. the logging data should be provided to DEPWS via Onshoregas.depws@nt.gov.au within 2 weeks of completion of groundwater level monitoring in the Carpentaria-1 impact monitoring bore	Compliant	Groundwater level/pressure monitoring at the Carpentaria-1 impact monitoring bore using a logger to record water level for four weeks prior to, during and four weeks after completion of hydraulic fracturing operation data recorded and submitted to DEPWS 21 July 2021.
9	a register must be provided to DEPWS via onshoregas.DEPWS@nt.gov.au, of the key service providers that will be engaged for the regulated activity, prior to undertaking the relevant scope of work	Compliant	Register of key service providers submitted to DEPWS 20 April 2021.
10	in support of clause B.4.17.2 of the code, the interest holder must provide to DEPWS, via Onshoregas.DEPWS@nt.gov.au, groundwater monitoring data and an interpretative report of groundwater quality based on the groundwater monitoring required to be conducted at the well site(s) in accordance with Table 6 of the Code. Groundwater data must be provided within one month of collection and be provided quarterly, in a format to be determined by DEPWS.	Compliant	Groundwater data provided within one month of collection and provided to DEPWS quarterly.
	The interpretative report must be provided annually within 3 months of the anniversary of the approval date of the EMP and include:	N/A	AEPR scheduled for submission prior prior to the submission

i	demonstration that there is no change to groundwater quality or level attributable to conduct of the regulated activity at the well sites(s);		deadline of the annual interpretative report.
ii	interpretation of any statistical outliers observed from baseline measured values for each of the analytes;		
iii	discussion of any trends observed; and		
iv	a summary of the results inclusive of descriptive statistics		

Table 3 provides a systematic overview of Imperial's performance against the environmental outcomes and environmental performance standards within the approved EMP.

Table 3: Compliance with Environmental Outcomes and Environmental Performance Standards

No.	Environmental Performance Outcome	Activity	Environmental Performance Standard (Performance measure)	Compliance Performance Status	Evidence	Environmental Harm or Impact
1	Human Health Conduct of the regulated activity does not create safety risks for the public or landholders	Operations resulting in the creation of dust	<ul style="list-style-type: none"> • Operations carried out in a manner that does not create excessive dust 	Compliant	<ul style="list-style-type: none"> • Community complaints register shows no complaints received concerning dust generation • Site induction records show all personnel inducted, and induction materials include consideration of the impact on air quality from dust generation 	N/A
			<ul style="list-style-type: none"> • Speed limits posted on unsealed access tracks adhered to 	Compliant	<ul style="list-style-type: none"> • Site induction records show all personnel inducted, and induction materials include requirements related to adhering to speed limits • Incident management system shows no records of non-adherence to speed limits 	N/A
			<ul style="list-style-type: none"> • Dust suppression activities undertaken on unsealed access roads during the dry season 	Compliant	<ul style="list-style-type: none"> • Onsite records show use of water cart linked to access track condition assessment and site activities. • Community complaints register shows no complaints received concerning dust generation 	N/A
		Vehicle and Plant Movement	<ul style="list-style-type: none"> • Speed limits posted on unsealed access tracks adhered to 	Compliant	<ul style="list-style-type: none"> • Site induction records show all personnel inducted, and induction materials include requirements related to adhering to speed limits • Incident management system shows no records of non-adherence to speed limits 	N/A
			<ul style="list-style-type: none"> • Vehicle movements on publicly accessible roads carried out in a safe manner 	Compliant	<ul style="list-style-type: none"> • Community complaints register shows no complaints received concerning dangerous driving • Incident management system shows no records of dangerous driving or non-adherence to road rules • Site induction records show all personnel inducted, and induction materials include requirements related to adhering to speed limits. 	
		General Operations	<ul style="list-style-type: none"> • Well site fenced and signposted permanently with the well name, well number, major hazards and details of the interest holder 	Compliant	<ul style="list-style-type: none"> • Signage that is compliant with the Code of Practice (clause B.4.15.4 (c)) was erected at the well site before commencement of the regulated activity • The name of the person-in-charge of any active well operations is displayed in writing at all approaches to the well site • Weekly checklist shows well site fence installed and intact throughout the regulated activity 	N/A
			<ul style="list-style-type: none"> • Well site remains fenced at all times to prevent access from livestock 	Compliant	<ul style="list-style-type: none"> • Weekly checklist shows well site fence installed and intact throughout the regulated activity 	
		2	Terrestrial Flora and Fauna	<ul style="list-style-type: none"> • Clearing of vegetation for conduct of the regulated activity 	<ul style="list-style-type: none"> • No vegetation cleared beyond the approved areas 	Compliant

No.	Environmental Performance Outcome	Activity	Environmental Performance Standard (Performance measure)	Compliance Performance Status	Evidence	Environmental Harm or Impact
	Sensitive receptors, significant conservation areas, or listed species or their habitat, is not permanently affected by conduct of the regulated activity				<ul style="list-style-type: none"> Spatial analysis of final disturbance footprint against approved clearing areas and buffers shows that all clearing is within the cleared footprint 	
		<ul style="list-style-type: none"> Vehicle and plant movements 	<ul style="list-style-type: none"> No introduction of new weed species, or spread of existing weed populations as a result of conduct of the regulated activity 	Compliant	<ul style="list-style-type: none"> Site induction records show all personnel inducted, and induction materials include requirements related to weed impacts and prevention of spread. Weed inspections as outlined in the Weed Management Plan (Appendix 09) conducted according to the timetable indicated Weed control activities are undertaken as specified in the approved Weed Management Plan All vehicles entering the site are inspected for the presence of weed seeds/vegetative material 	N/A
		<ul style="list-style-type: none"> Ignition sources from plant and machinery 	<ul style="list-style-type: none"> No fires in surrounding areas resulting from conduct of the regulated activity 	Compliant	<ul style="list-style-type: none"> Site induction records show all personnel inducted, and induction materials include requirements related to impacts of wildfire and requirements to prevent offsite fires Monitoring records show an annual assessment of fuel load onsite undertaken Annual regional fire mapping documented and used to reassess fire risk each dry season Weekly inspection records show an assessment of fire breaks and fire access trails completed at least monthly during the dry season Community engagement records show consultation with pastoralists regarding fire management No fires occurred in surrounding areas as a result of conducting the regulated activity 	N/A
		<ul style="list-style-type: none"> Waste handling and disposal 	<ul style="list-style-type: none"> All putrescible waste stored in vermin-proof enclosed receptacles 	Compliant	<ul style="list-style-type: none"> Site induction records show that all personnel inducted and induction materials include waste segregation, storage, and disposal requirements Daily checklist records show no incidences of introduced pests in the waste storage area Daily checklist records show no incidences of putrescible waste being accessible to wildlife and/or vermin 	N/A
			<ul style="list-style-type: none"> All listed waste transported by licensed waste contractors 	Compliant	<ul style="list-style-type: none"> Listed waste transfer records show the Environment Protection Licence (EPL) number of waste contractor Waste records show the volume of wastewater removed from the well site for offsite disposal by a licensed waste contractor 	N/A
			<ul style="list-style-type: none"> No waste is disposed of on-site 	Compliant	<ul style="list-style-type: none"> Waste records show removal of all waste from site 	N/A
			<ul style="list-style-type: none"> All waste segregated onsite according to whether it is hazardous, recyclable or for general disposal 	Compliant	<ul style="list-style-type: none"> Weekly checklists confirm waste is appropriately segregated 	N/A

No.	Environmental Performance Outcome	Activity	Environmental Performance Standard (Performance measure)	Compliance Performance Status	Evidence	Environmental Harm or Impact
			<ul style="list-style-type: none"> Wastewater from drilling stored in lined wastewater sumps 	Compliant	<ul style="list-style-type: none"> Records demonstrating the lining in wastewater sumps meet the requirements of the Code of Practice (clause C.4.1.2 (b)) 	N/A
		<ul style="list-style-type: none"> Lighting, noise and vibration from vehicles, plant and equipment 	<ul style="list-style-type: none"> All vehicles, plant and equipment maintained and operated per manufacturer requirements to prevent unnecessary noise or vibration creating disturbance 	Compliant	<ul style="list-style-type: none"> Site induction records show all personnel inducted and induction materials include requirements related to minimising noise, vibration and light spill Maintenance records for vehicles demonstrate all vehicles serviced following the service schedule Maintenance records for equipment demonstrate servicing following the manufacturers' specifications and/or Imperial's maintenance and service schedule 	N/A
			<ul style="list-style-type: none"> No impacts on landholders or the community regarding from lighting, noise or vibrations 	Compliant	<ul style="list-style-type: none"> Community complaints register shows no complaints received concerning noise, vibration or light spill 	N/A
			<ul style="list-style-type: none"> All site lighting directed inward, where practicable 	Compliant	<ul style="list-style-type: none"> Site inspection conducted during operational periods confirm that lights are directed inwards where practicable 	N/A
	<p>Terrestrial Environmental Quality</p> <p>Terrestrial environmental quality, including surface waters, is not permanently affected by conduct of the regulated activity.</p>	<ul style="list-style-type: none"> Clearing of vegetation for conduct of the regulated activity 	<ul style="list-style-type: none"> No ground disturbance occurs outside of designated areas approved for ground disturbance 	Compliant	<ul style="list-style-type: none"> Site induction records show all personnel involved in clearing operations inducted, and induction materials include requirements related to clearing limits Spatial analysis of final disturbance footprint against approved clearing areas and buffers shows that all clearing is within the cleared footprint 	N/A
			<ul style="list-style-type: none"> Vehicle and plant movements 	<ul style="list-style-type: none"> No vehicle movements outside of designated areas approved for ground disturbance 	Compliant	<ul style="list-style-type: none"> Site induction records show all personnel inducted, and induction materials include the prohibition of movement outside of approved areas Incident management system has no records related to unauthorised movement offsite
				<ul style="list-style-type: none"> No unauthorised vehicle crossing of flowing creeks or watercourses 	Compliant	<ul style="list-style-type: none"> Site induction records show all personnel inducted and induction materials include the prohibition of the crossing of flowing creeks or watercourses unless approved by Site Manager Incident management system has no records related to the unauthorised crossing of flowing creeks or watercourses
			<ul style="list-style-type: none"> Storage and handling of hazardous substances, 	<ul style="list-style-type: none"> All liquid chemicals and hazardous substances stored within secondary 	Compliant	<ul style="list-style-type: none"> Site induction records show all personnel inducted, and induction materials include

No.	Environmental Performance Outcome	Activity	Environmental Performance Standard (Performance measure)	Compliance Performance Status	Evidence	Environmental Harm or Impact
		including HF fluid and flowback fluid wastewater	impermeable containment at all times or bunded areas that can hold 110% of the largest container		requirements related to the use and storage of hazardous chemicals <ul style="list-style-type: none"> Weekly inspection records confirm all hazardous materials stored in compliance with relevant SDS and are stored in bunded areas where required 	
			<ul style="list-style-type: none"> All storage vessels for wastewater and hazardous substances are maintained at 100% integrity 	Compliant	<ul style="list-style-type: none"> Daily inspection records confirm tanks and storage vessels are intact and free from defects or tears Incident management system includes no records of failures of the integrity of storage vessels 	N/A
			<ul style="list-style-type: none"> No instances of loss of containment of wastewater 	Compliant	<ul style="list-style-type: none"> Incident management system has no records of loss of containment of wastewater 	N/A
			<ul style="list-style-type: none"> Freeboard for all wastewater sumps, flowback water tanks and produced water tanks maintained at all times 	Compliant	<ul style="list-style-type: none"> Site induction records show all personnel inducted, and induction materials include requirements related to storage of wastewater All tanks marked with freeboard levels as per seasonal requirements Daily inspections confirm wastewater levels do not exceed freeboard 	N/A
			<ul style="list-style-type: none"> All spills remediated immediately on discovery 	Compliant	<ul style="list-style-type: none"> Site induction records show all personnel inducted, and induction materials include requirements to immediately remediate all spills to ground No records of a spill on the incident register Weekly inspections show the hazardous materials and storage area are clean and free from spills and leaks Daily inspections show bunds inspected and contents removed on a daily basis during the wet season Hazardous materials register maintained during site operations SDS register compliant with NT WorkSafe requirements and kept at the location of chemicals at all times Daily inspections show spill kits appropriate to the chemicals in use are available at the location of use 	N/A
		<ul style="list-style-type: none"> Surface water usage 	<ul style="list-style-type: none"> No water to be taken from surface water sources 	Compliant	<ul style="list-style-type: none"> Site induction records show all personnel inducted and induction materials include the prohibition of the use of surface water at any time Incident management system has no records of unauthorised use of surface water 	N/A

No.	Environmental Performance Outcome	Activity	Environmental Performance Standard (Performance measure)	Compliance Performance Status	Evidence	Environmental Harm or Impact
4	Hydrological Process The conduct of the regulated activity does not result in the over extraction or contamination of groundwater resources	• Groundwater extraction for project activities	• Compliance with the groundwater extraction licence	Compliant	<ul style="list-style-type: none"> • Groundwater extraction volumes recorded onsite and provided to Water Resources. • Groundwater taken is was less than the maximum permitted volume for the activity • Water extraction undertaken at approved registered groundwater bores 	N/A
		• Drilling and Hydraulic Fracturing of wellbore/s	• No contamination of aquifers from the regulated activities	Compliant	<ul style="list-style-type: none"> • Groundwater monitoring per the Preliminary Guideline: Groundwater Monitoring Bores for Exploration Petroleum Wells in the Beetaloo Sub-Basin • Groundwater monitoring results do not show contamination of the local aquifers from the regulated activities 	N/A
5	Inland Environmental Water Quality Local inland water quality is not permanently affected by conduct of the regulated activity.	• Vehicle and plant movements	• No unauthorised vehicle crossing of flowing creeks or watercourses	Compliant	<ul style="list-style-type: none"> • Site induction records show all personnel inducted, and induction materials include the prohibition of the crossing of flowing creeks or watercourses unless approved by Site Manager • Incident management system has no records related to the unauthorised crossing of flowing creeks or watercourses 	N/A
		• Storage and handling of hazardous substances, including HF fluid and flowback fluid wastewater	• All liquid chemicals and hazardous substances stored within secondary impermeable containment at all times or bunded areas that can hold 110% of the largest container	Compliant	<ul style="list-style-type: none"> • Site induction records show all personnel inducted, and induction materials include requirements related to the use and storage of hazardous chemicals • Weekly inspection records confirm all hazardous materials stored in compliance with relevant SDS and are stored in bunded areas where required 	N/A
			• All storage vessels for wastewater and hazardous substances are maintained at 100% integrity	Compliant	<ul style="list-style-type: none"> • Daily inspection records confirm tanks and storage vessels are intact and free from defects or tears 	N/A
			• No instances of loss of containment of wastewater	Compliant	<ul style="list-style-type: none"> • Incident management system has no records of loss of containment of wastewater 	N/A
			• Freeboard for all wastewater sumps, flowback water tanks and produced water tanks maintained at all times	Compliant	<ul style="list-style-type: none"> • Site induction records show all personnel inducted and induction materials include requirements related to storage of wastewater • All tanks marked with freeboard levels as per seasonal requirements • Daily inspections confirm wastewater levels do not exceed freeboard 	N/A
			• All spills remediated immediately on discovery	Compliant	<ul style="list-style-type: none"> • Site induction records show all personnel inducted, and induction materials include requirements to immediately remediate all spills to the ground 	N/A

No.	Environmental Performance Outcome	Activity	Environmental Performance Standard (Performance measure)	Compliance Performance Status	Evidence	Environmental Harm or Impact	
					<ul style="list-style-type: none"> No records of a spill on the incident register Weekly inspections show the hazardous materials and storage area is clean and free from spills and leaks Daily inspections show bunds inspected and contents removed on a daily basis during the wet season SDS register compliant with NT WorkSafe requirements and kept at the location of chemicals at all times Daily inspections show spill kits appropriate to the chemical in use are available at the location of use 		
				<ul style="list-style-type: none"> All storage vessels for wastewater and hazardous substances are maintained at 100% integrity 	Compliant	<ul style="list-style-type: none"> Daily inspection records confirm tanks and storage vessels are intact and free from defects or tears 	N/A
			<ul style="list-style-type: none"> Surface water usage 	<ul style="list-style-type: none"> No water to be taken from surface water sources 	Compliant	<ul style="list-style-type: none"> Site induction records show all personnel inducted and induction materials include the prohibition of the use of surface water at any time 	N/A
			<ul style="list-style-type: none"> General project activities creating emissions 	<ul style="list-style-type: none"> Operations carried out in a manner that does not create excessive emissions 	Compliant	<ul style="list-style-type: none"> Community complaints register shows no complaints received concerning excessive emissions from the site Site induction records show all personnel inducted and induction materials include consideration of the impact on air quality from emissions 	N/A
6	Air Quality and Greenhouse Gasses Minimise emissions, including greenhouse gases, created by conduct of the regulated activity.	<ul style="list-style-type: none"> Vehicle and plant emissions 	<ul style="list-style-type: none"> All vehicles, plant and equipment maintained and operated per manufacturer requirements to minimise emissions 	Compliant	<ul style="list-style-type: none"> Records and schedules were managed for machinery and vehicles maintenance as per manufacturer's requirements 	N/A	
		<ul style="list-style-type: none"> Production testing creating fugitive emissions 	<ul style="list-style-type: none"> Flaring to be used rather than venting during production testing 	Compliant	<ul style="list-style-type: none"> All venting and flaring during production testing will be measured using flow meters compliant with NGERS Records kept of venting and flaring events and volumes during production testing 	N/A	
			<ul style="list-style-type: none"> Gas leak detection, repair and notification to be conducted throughout all phases of the project that have live equipment 	Compliant	<ul style="list-style-type: none"> Site induction records show all production and evaluation personnel inducted, and induction materials include leak detection, repair and notification requirements Weekly inspection reports confirm leak detection carried out on live equipment 	N/A	

Table 4 demonstrates Imperial's compliance with reporting requirements in the *Code of Practice: Onshore Petroleum Activities in the Northern Territory* (Code of Practice) and Imperial's compliance with reporting and monitoring requirements under the Petroleum (Environment) Regulations 2016 (NT) schedule 1, item 11(2), which requires the EMP to include all information required to be recorded, monitored or reported. Where relevant, Imperial has also confirmed that all records, monitoring or required reporting under the Petroleum (Environment) Regulations 2016 (NT),² or under a commitment made in the EMP, has been provided to DEPWS or the relevant NTG agency.

Table 4: Compliance with Reporting and Monitoring Requirements

No	Reference	Requirement	Performance Status	Evidence
1	Code cl A.3.5 EMP s10.4	Geospatial information depicting areas cleared is to be provided to the Minister.	Compliant	Geospatial files of the land disturbance footprint were sent to DEPWS on the 17 June 2021
2	Code cl A.3.6 (b) EMP s10.5 & Appendix 09	Weed management plan developed as part of the EMP must provide for ongoing weed monitoring.	Compliant	Weed Management Plan of the approved EMP includes the required clause
3	Code cl A.3.7(a)vi EMP s10.6 – Appendix 08	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	Fire Management Plan of the approved EMP includes the required clause
4	Code cl A.3.9(c) Code cl A.3.9(e) EMP Appendix 12	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	Compliant	Rehabilitation Management Plan of the approved EMP includes the required clause

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

No	Reference	Requirement	Performance Status	Evidence
		cessation of activities on the land. It also requires regular maintenance and annual monitoring of rehabilitated areas.		
5	Code cl B.4.13.2(c) EMP s11.15.2	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): a) total volume of hydraulic fracturing fluid pumped, 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 c) typical and maximum concentrations of chemicals or other substances used.	Compliant	The NT Flowback Report for the EMP was submitted 10 December 2021 and met the required clause
6	Code cl B.4.13.2(k)iv EMP s11.15.4	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.	N/A	No venting occurred.
7	Code cl B.4.14.2(c)	All new barriers or new well operating envelopes must be	Compliant	WBIV report sent to DITT on 24 January 2022

No	Reference	Requirement	Performance Status	Evidence
	EMP s3.1.1 & 11.4	verified and clearly documented and reported by submission of an updated well barrier integrity validation (WBIV) report to DITT.		
8	Code cl B.4.15.2(j) EMP s11.17	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.	N/A	Not in the decommissioning phase
9	Code cl C.3(e) EMP Appendix 06 & 07	The components of the wastewater management framework, include: Monitor, manage and report in accordance with the Wastewater Management Plan and Spill Management Plan.	Compliant	Waste and Wastewater Management Plan and Spill Management Plan of the approved EMP includes the required clause
10	Code cl C.6.1(d) EMP Appendix 06 & 07	Wastewater tracking documentation must be reported to the Minister at least annually in accordance with the framework (Spill Management Plan and Wastewater Management Plan) outlined in the EMP	Compliant	Wastewater Report for the EMP sent to DEPWS on the 19 April 2022
11	Code cl C.7.1(d)ii EMP Appendix 06	Wastewater Management Plan must include a program for monitoring and reporting against the effectiveness of the measures for the mitigation of interaction	Compliant	Waste and Wastewater Management Plan of the approved EMP includes the required clause

No	Reference	Requirement	Performance Status	Evidence
		with wildlife, stock and human receptors with wastewater.		
12	Code cl D.5.9.2(c) EMP s16 & Appendix 10	Emissions from exploration, well construction (including during flowback) and workovers must be measured and reports submitted. <i>Note: the interest holder must provide to DEPWS a report on actual versus predicted greenhouse gas emissions in the EMP, and cumulative emissions.</i>	Compliant	Emissions report submitted to DEPWS 24 August 2021
13	Code cl 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.	N/A	No gas processing facility or other downstream facility is part of the EMP.
15	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.	N/A	No reportable incidents occurred
16	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	N/A	No reportable incidents occurred

No	Reference	Requirement	Performance Status	Evidence
		remediation/clean-up of the affected area.		
17	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	All recordable incident reports were provided to DEPWS no later than 15 days after the 90-day reporting period. Reports were submitted on the below dates. Q3 – 13 April 2021 Q4 – 14 July 2021 Q1 – 15 October 2021 Q2 – 11 January 2022
18	Reg 37A EMP Appendix 06	A report about flowback fluid from hydraulic fracturing must be provided to the Minister within 6 months of the flowback occurring.	Compliant	Reg 37A and 37B report submitted 10 December 2021
19	Reg 37B EMP Appendix 06	A report about produced water from hydraulic fracturing must be provided to the Minister within 6 months of the produced water being extracted.	Compliant	Reg 37A and 37B report submitted 10 December 2021
20	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 construction, ³ drilling, or seismic surveys.	Compliant	The Minister, occupier of the land and owner of the land on which the activity is to be carried out on were notified on the 10 May 2021

³ Note, civil works are also considered 'construction' activities.

3. Overall Performance

3.1. Overview of performance

Table 5 provides a summary of the results of the compliance assessment against the 77 total compliance items.

Table 5: Performance Summary

Compliance Indicator	Number	Percentage
Compliant	68	88.31%
Partially Compliant	0	0%
Not Compliant	0	0%
Not Applicable	9	11.69%