

# Annual Environment Performance Report

Imperial Oil and Gas Pty Ltd

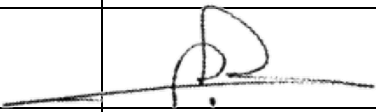
Environmental Management Plan

IMP4-3

17 October 2021 to 16 October 2022

Date	Revision	Reason for Issue	Author	Checked	Approved
16/01/2023	1	Initial Submission	CD	NF	CD
21/06/2023	2	Revision for DEPWS	RL	NF/ KW	RP
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<b>Document title</b>	Annual Environment Performance Report
<b>EMP title</b>	2021-2025 EP187 Work Program NT
<b>Exploration Permit/Licence Number</b>	EP187
<b>Interest holder details</b>	Imperial Oil & Gas Pty Limited Level 5, 6 O'Connell Street Sydney, NSW, 2000 ABN 92002699578
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<b>Signature and Certification</b>	
I certify on behalf of Imperial Pty Ltd this document is a true and accurate record of performance.	
Signature	Charles Dack
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Signature	
Position	Chief Financial Officer
Date	23/07/2024
<b>Acronyms / Terms</b>	<b>Definition</b>
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)

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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 holder<sup>11</sup> (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's:

- *Imperial 2021-2025 EP187 Work Program NT Exploration Permit (EP) 187 (IMP4-3)* that was approved on the 17 October 2021 (EMP IMP4-3)

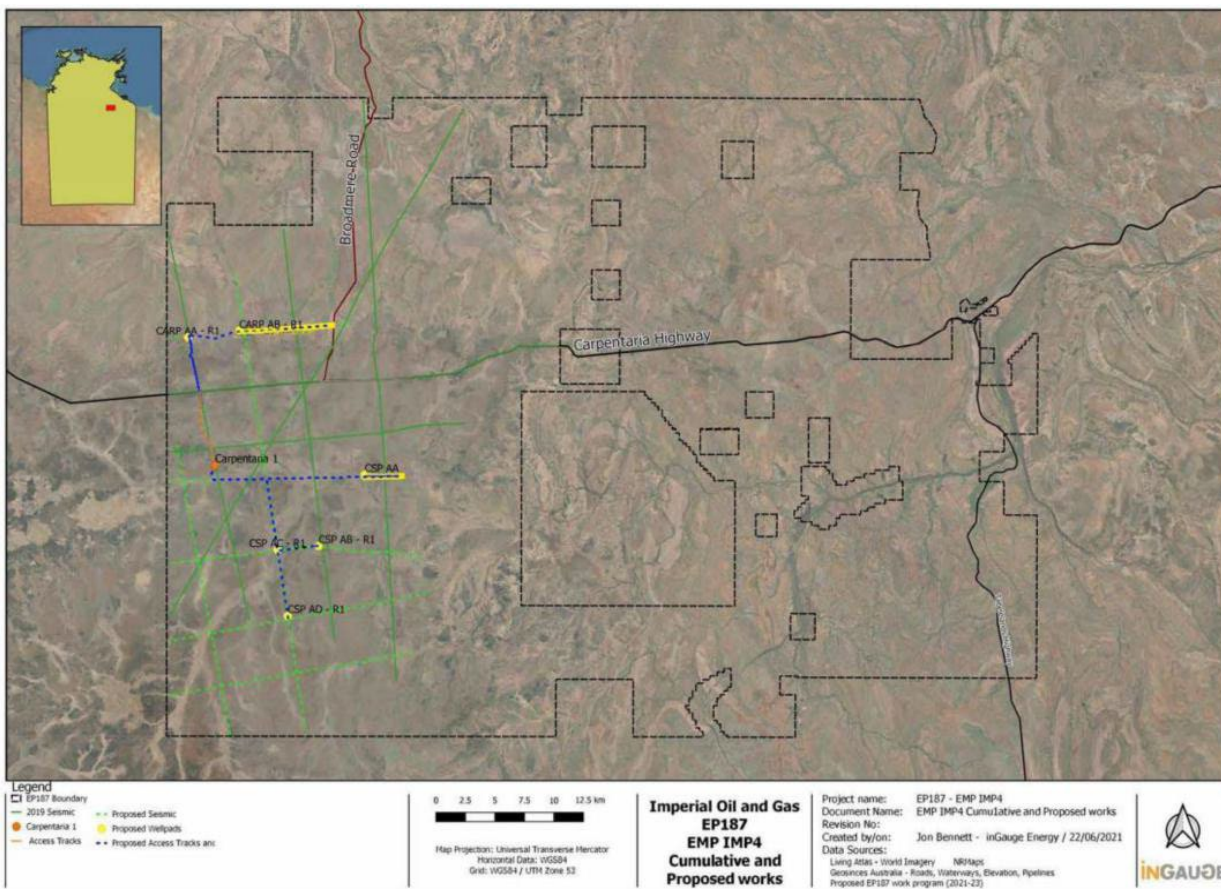
The period covered by this AEPR is from 17 October 2021 to 16 October 2022.

## 1.1. Background

The EMP (IMP4-3) was approved on the 17 October 2021.

The regulated activities under this EMP include land clearing, earthworks, establishing access ways, wastewater flowlines, gravel pits, groundwater monitoring bores and drill pads, conducting seismic surveys, drilling and hydraulic fracturing in EP187.

The below Figure 1 is the of EP187 with cumulative and proposed regulated activities under EMP IMP4-3.



<sup>11</sup> Petroleum (Environment) Regulations 2016 (NT) sch 1, item 11.

## 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
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:
  - i. Review of the landholder consultation records
  - ii. Inspections and monitoring as per IMP4-3
  - iii. Groundwater Monitoring as per as per IMP4-3
2. Outcome of regulatory inspections conducted by the Department of Environment, Parks, and Water Security (DEPWS).
3. Quarterly Recordable Incident reports submitted to DEPWS.
4. Reports provided to DEPWS 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 the Department of Environment, Parks and Water Security (DEPWS), via <a href="mailto:Onshoregas.DEPWS@nt.gov.au">Onshoregas.DEPWS@nt.gov.au</a> the following:		
	i. Notification of the commencement of hydraulic fracturing activities prior to commencement	Compliant	Notification of the commencement of hydraulic fracturing activities prior to commencement sent to DEPWS via the <a href="mailto:onshoregas.depws@nt.gov.au">onshoregas.depws@nt.gov.au</a> email on 4 July 2022
	ii. An updated timetable for the regulated activity that is to be provided on the last day of each quarter (being 31 March, 30 June, 30 September and 31 December each year), that identifies activities completed in the current quarter and: <ul style="list-style-type: none"> <li>regulated activities in the next quarter, including duration;</li> <li>activities in the next quarter based on commitments in the EMP relevant to the stage of the activity, including duration;</li> <li>due dates for satisfaction of Ministerial approval conditions in the next quarter; and</li> <li>due dates for regulatory reporting in the next quarter.</li> </ul>	Not Compliant	Timetables for the regulated activity were provided to DEPWS via the <a href="mailto:Onshoregas.depws@nt.gov.au">Onshoregas.depws@nt.gov.au</a> email on: <ul style="list-style-type: none"> <li>January 2022 (late submission from 31 December 2021)</li> <li>March 2022</li> <li>June 2022</li> <li>September 2022</li> </ul> <p>The December 2021 submission was late being submitted to the Department. No environmental incident or harm occurred in the late submission of this document.</p>
	iii. During civil works (and noting civil works is taken to include any type of earth moving, land clearing, installation of gravel pits, establishment of well pads, establishment of access tracks and installation of wastewater flowlines) and seismic activities, weekly reports indicating: <ul style="list-style-type: none"> <li>the status and progress of vegetation clearing and civil works at each location the activity is conducted;</li> <li>the outcome of any assessments undertaken by a suitably qualified person of geomorphic and hydrological investigations and the conclusion as to whether directional drilling is required, in advance of installing wastewater flowlines across a stream;</li> <li>the status and progress of seismic activities</li> <li>any fires potentially threatening the activity from external or internal sources</li> <li>the outcome of inspections of erosion and sediment control measures, and corrective actions taken; and</li> <li>the outcome of inspections and risk assessments for determining suitability of use of unsealed roads by any vehicle or machinery other than a light vehicle in the wet season</li> </ul>	Not Compliant	Imperial acknowledges that notice was not provided to the Minister with civil reports for the Carpentaria – 1 gravel pit. Whilst gravel pit construction status was acknowledged on weekly reports (submitted to DEPWS commencing 24 July 2022), these reports did not include all information required to be fully compliant with Ministerial Condition 1(iii).
	iv. During drilling, daily on-site reports, to be consolidated and provided weekly, indicating: <ul style="list-style-type: none"> <li>status and progress of drilling at each location;</li> <li>freeboard available in drill cutting pits (in cm); and</li> <li>the outcome of general site inspections relevant to drilling and waste, and corrective actions taken.</li> </ul>	Compliant	Daily on-site reports were consolidated and provided weekly during drilling to the Department via the <a href="mailto:onshoregas.depws@nt.gov.au">onshoregas.depws@nt.gov.au</a> email that met the Ministerial Condition 1iv.



No	Ministerial Condition	Performance Status	Evidence
	<p><b>v.</b> During the wet season, weekly reports indicating:</p> <ul style="list-style-type: none"> <li>the outcome of inspections of erosion and sediment control measures, and corrective actions taken;</li> <li>the outcome of daily inspections of any secondary containment in use, and corrective actions taken;</li> <li>any halt to the regulated activity due to wet season conditions; and</li> <li>daily measurements of freeboard available in drill cutting pits and wastewater treatment tanks (in cm) whenever operational.</li> </ul>	Compliant	Weekly reports were provided during the wet season to the Department via the <a href="mailto:onshoregas.depws@nt.gov.au">onshoregas.depws@nt.gov.au</a> that met the Ministerial Condition 1v.
	<p><b>vi.</b> For avoidance of doubt, if wastewater is present in tanks or flowlines, or drill cutting pits contain waste drill fluids and cuttings, these are considered to be operational. Reports must continue to be provided as per parts iv and v above, irrespective of whether there is manned activity occurring on site if the wastewater infrastructure is operational.</p>	Compliant	Reports have been provided as per Ministerial Condition 1v.
	<p><b>vii.</b> In the event that multiple regulated activities under the EMP are being conducted concurrently, the weekly submission of consolidated daily reports may be further consolidated to a single submission, but must clearly identify the locations and activities to which the information pertains, in relation to each item listed in conditions iii to vi above, inclusive.</p>	Not Applicable	Not applicable as a mandatory requirement
2	<p>The interest holder must provide an annual report to DEPWS, via <a href="mailto:Onshoregas.DEPWS@nt.gov.au">Onshoregas.DEPWS@nt.gov.au</a>, on its environmental performance, in accordance with item 11(1)(b) in schedule 1 of the Petroleum (Environment) Regulations 2016 (NT). With respect to the reports required to submitted in accordance with item 11(1)(b) in schedule 1 of the Petroleum (Environment) Regulations 2016 (NT):</p>	Compliant	This report meets the requirements of Ministerial Condition 2
	<p>i. 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.</p>	Compliant	This report as the first report covers the 12-month period from the date of approval and is provided within 3 calendar months of the end of the reporting period.
	<p>ii. Each report must align with the template and Guideline 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.</p>	Compliant	This report aligns with the template and guideline prepared by DEPWS and is being 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.
3	<p>In support of clause D.6.2 of the <i>Code of Practice: Onshore Petroleum Activities in the Northern Territory</i>, an emissions report must be provided to DEPWS by 30 September each year, via <a href="mailto:Onshoregas.DEPWS@nt.gov.au">Onshoregas.DEPWS@nt.gov.au</a>, which summarises actual annual greenhouse gas emissions from conduct of the regulated activity estimated and reported under the Commonwealth <i>National Greenhouse and Energy Reporting Act 2007</i> versus predicted emissions in the EMP.<sup>4</sup> The emissions report should include:</p>	Compliant	An emissions report was provided to DEPWS by 30 September each year, via <a href="mailto:onshoregas.depws@nt.gov.au">onshoregas.depws@nt.gov.au</a> , which summarizes actual annual greenhouse gas emissions from conduct of the regulated activity estimated and reported under the Commonwealth <i>National Greenhouse and Energy Reporting Act 2007</i> versus predicted emissions in the EMP
	<p>i. a summary of all regulated activities conducted which have contributed to greenhouse gas emissions during the reporting period; and</p>	Compliant	An emissions report was provided to DEPWS by 30 September each year, via <a href="mailto:onshoregas.depws@nt.gov.au">onshoregas.depws@nt.gov.au</a> , which included a summary of all regulated activities conducted which have contributed to greenhouse gas emissions during the reporting period.
	<p>ii. explanation of differences between actual and predicted emissions with reference to all parts of the regulated activity with potential to create greenhouse gas emissions.</p>	Compliant	An emissions report was provided to DEPWS by 30 September each year, via <a href="mailto:onshoregas.depws@nt.gov.au">onshoregas.depws@nt.gov.au</a> , which included an explanation of differences between actual and predicted emissions with reference to all parts of the regulated activity with potential to create greenhouse gas emissions.
4	<p>Audits of compliance must be undertaken by a suitably accredited, qualified and independent person and the audit report provided to DEPWS via <a href="mailto:Onshoregas.DEPWS@nt.gov.au">Onshoregas.DEPWS@nt.gov.au</a>, no later than 4 weeks after the completion of the audits. The following must be adhered to:</p>	Compliant	All audits of compliance undertaken by suitably accredited, qualified and independent person and the audit report provided to DEPWS via <a href="mailto:Onshoregas.DEPWS@nt.gov.au">Onshoregas.DEPWS@nt.gov.au</a> , no later than 4 weeks after the completion of the audits
	<p>i. An audit focused on implementation of the Erosion and Sediment Control Plan must be conducted no later than 2 weeks after the establishment of the first well pad, and again no later than 2 weeks after the establishment of another well pad.</p>	Compliant	ESCP audit of the well pad was conducted on the 20 September 2022 by Tom Bailey from TOPO. Final audit report was received outside reporting timeframe and will be included in following AEPR.

No	Ministerial Condition	Performance Status	Evidence
	ii. An audit focused on key controls listed in the EMP relevant to drilling activities must be commenced in the 24 hours prior to commencement of drilling of the first exploration well, and again in the 24 hours prior to commencement of drilling another exploration well.	Compliant	An audit focused on key controls listed in the EMP relevant to drilling activities was commenced in the 24 hours prior to commencement of drilling of the first exploration well and was provided to DEPWS via <a href="mailto:Onshoregas.DEPWS@nt.gov.au">Onshoregas.DEPWS@nt.gov.au</a> , on the 15/12/2021
	iii. An audit focused on key controls listed in the EMP relevant to management of wastewater and containment of contaminants, including the Wastewater Management Plan and the Spill Management Plan, must be conducted during flowback and extended production testing on the first exploration well hydraulically fractured, and again on another exploration well hydraulically fractured	Compliant	An audit (Carpentaria 2 EMP Compliance Audit by TAS Group) was provided to DEPWS via <a href="mailto:Onshoregas.DEPWS@nt.gov.au">Onshoregas.DEPWS@nt.gov.au</a> , on 14 October 2022. Imperial considers the audit to be compliant with Ministerial Condition 4(iii). The audit focused on key controls listed in the EMP relevant to the management of wastewater and containment of contaminants, including the wastewater plan and spill management plan.
	iv. The first audit for each of the Erosion and Sediment Control Plan, drilling and hydraulic fracturing audits must: <ul style="list-style-type: none"> <li>a. be conducted by an independent auditor; and</li> <li>b. include a field-based inspection by the independent auditor to verify implementation of controls.</li> </ul>	Compliant	The first audit for each of the Erosion and Sediment Control Plan, drilling and hydraulic fracturing audits was conducted by an independent auditor and included a field-based inspection by the independent auditor to verify implementation of controls. See above mentioned report for evidence.
	v. Audits must focus on implementation of the EMP.	Compliant	Audits focused on implementation of the EMP. See above mentioned report for evidence.
	vi. Audit reports must be prepared in accordance with any published guidance issued by DEPWS and at a minimum must: <ul style="list-style-type: none"> <li>• include audit objectives, scope and audit methods used;</li> <li>• include the audit criteria used for determining compliance with the commitments in the EMP;</li> <li>• provide detail of the evidence used for determining compliance with the commitments in the EMP (noting for clarity, actual evidence does not need to be provided);</li> <li>• include photographic evidence from the field-based components of the audit;</li> <li>• include clear identification of opportunities for improvement, compliances and non-compliances, as determined by the audit; and</li> <li>• include recommended corrective actions for any identified non-compliances.</li> </ul>	Compliant	Audit reports must be prepared in accordance with any published guidance issued by DEPWS and met the Ministerial Condition 4(vi) dot points. See above mentioned report for evidence.
5	In support of clause B.4.17.2 of the Code of Practice: Onshore Petroleum Activities in the Northern Territory, the interest holder must:		
	i. undertake quarterly groundwater monitoring at each control and impact monitoring bore for a minimum of three years after establishment, unless otherwise advised by DEPWS;	Compliant	Quarterly groundwater monitoring has been undertaken at each control and impact monitoring bore for a minimum of three years after establishment under this EMP.
	ii. provide to DEPWS, via <a href="mailto:Onshoregas.depws@nt.gov.au">Onshoregas.depws@nt.gov.au</a> , the results of quarterly groundwater monitoring, within one month of collection, in a format to be determined by DEPWS;	Compliant	The results of quarterly groundwater monitoring was provided to DEPWS, via <a href="mailto:Onshoregas.depws@nt.gov.au">Onshoregas.depws@nt.gov.au</a> , within one month of collection, in a format to be determined by DEPWS
	iii. provide to DEPWS, via <a href="mailto:Onshoregas.depws@nt.gov.au">Onshoregas.depws@nt.gov.au</a> , 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 of Practice: Onshore Petroleum Activities in the Northern Territory. The interpretative report must be provided annually within 3 months of the anniversary of the approval date of the EMP and include: <ul style="list-style-type: none"> <li>• demonstration that there is no change to groundwater quality or level attributable to conduct of the regulated activity at the well site(s);</li> </ul>	Not Applicable	The reporting due date (January 2023) occurs outside the timeframe of this AEPR reporting period (October 2021 – October 2022).



No	Ministerial Condition	Performance Status	Evidence
	<ul style="list-style-type: none"> <li>interpretation of any statistical outliers observed from baseline measured values for each of the analytes;</li> <li>discussion of any trends observed; and</li> <li>a summary of the results including descriptive statistics.</li> </ul>		
	<p>iv. develop site-specific performance standards for groundwater quality and interquartile ranges for analytes at each of the impact monitoring bores established, based on the first 3 years of groundwater monitoring, and provide to DEPWS, via <a href="mailto:Onshoregas.depws@nt.gov.au">Onshoregas.depws@nt.gov.au</a> within 6 months of the 3 year anniversary of approval of the EMP.</p>	Not Applicable	This EMP has only been active for 1 year. 3 years of groundwater monitoring has not yet been undertaken.
6	The ground-truthing committed to in the EMP must be undertaken one week in advance of commencement of ground-disturbing activities by a qualified and experienced ecologist with experience in Gouldian finch habitat requirements to ensure alternative routes are identified in the field prior to commencement of clearing.	Not Compliant	Ground truthing for EP 187 works was undertaken by Paul Fox (a qualified and experienced ecologist with experience in Gouldian finch habitat), however it was not undertaken one week prior as per Condition 6. On this basis, status has been altered from 'compliant' to 'not compliant' during this reporting period. No environmental harm occurred due to the incorrectly timed ground truthing.
7	<p>Prior to the commencement of ground-disturbing activities, the interest holder must engage an ecologist with experience in Gouldian Finch habitat requirements to prepare a map of potential Gouldian Finch breeding habitat that could be impacted by the regulated activity. The potential Gouldian Finch breeding habitat mapping must:</p> <ul style="list-style-type: none"> <li>be provided to DEPWS via <a href="mailto:Onshoregas.dewps@nt.gov.au">Onshoregas.dewps@nt.gov.au</a> in advance of commencement of ground-disturbing activities; and</li> <li>quantify the proportion of the regulated activity footprint that consists of potential Gouldian Finch breeding habitat.</li> </ul>	Compliant	A report written by an ecologist with experience in Gouldian Finch habitat, included a map of potential Gouldian Finch breeding habitat that could be impacted by the regulated activity and quantified the proportion of the regulated activity footprint that consists of potential Gouldian Finch breeding habitat was supplied to DEPWS via <a href="mailto:Onshoregas.dewps@nt.gov.au">Onshoregas.dewps@nt.gov.au</a> in advance of commencement of ground-disturbing activities on the 10 September 2021
8	Clearing of vegetation within mapped potential Gouldian Finch breeding habitat for access tracks, wastewater flowlines, gravel pits and well pads must avoid removal of trees with hollows with a diameter of >25 cm at breast height, to the maximum extent practicable.	Compliant	Clearing of vegetation within mapped potential Gouldian Finch breeding habitat for access tracks, wastewater flowlines, gravel pits and well pads avoided the removal of trees with hollows with a diameter of >25 cm at breast height, to the maximum extent practicable. An ecologist with experience in Gouldian Finch habitat was onsite prior to all clearing operations.
9	<p>In support of schedule 1, item 11 of the Petroleum (Environment) Regulations 2016 (NT) and clause A.3.5 of the Code of Practice: Onshore Petroleum Activities in the Northern Territory, the interest holder must provide geospatial files to DEPWS, via <a href="mailto:Onshoregas.DEPWS@nt.gov.au">Onshoregas.DEPWS@nt.gov.au</a>, within 2 months of completion of each ground- disturbing or land clearing activity, as specified in Figure 3.2 of the EMP (Project schedule), which must:</p> <ul style="list-style-type: none"> <li>include information on how the data was obtained;</li> <li>meet the requirements specified by DEPWS at</li> <li><a href="https://nt.gov.au/property/land-clearing/freehold-land/apply-to-clear-freehold-land/spatial-data-for-clearing-applications">https://nt.gov.au/property/land-clearing/freehold-land/apply-to-clear-freehold-land/spatial-data-for-clearing-applications</a>;</li> <li>include riparian zones, areas of high value vegetation (which includes potential Gouldian Finch breeding habitat), areas of high density of hollow-bearing trees and the buffers applied as a result of ground-truthing activities, as polygons and with metadata indicating the area in hectares;</li> <li>include any resultant deviations to the location of the regulated activity;</li> <li>include the location of any listed species sighted during ground-truthing; and</li> <li>include the proposed and actual areas of vegetation cleared, as polygons and with metadata indicating the area in hectares.</li> </ul>	Not Compliant	Geospatial files were supplied to DEPWS via <a href="mailto:Onshoregas.DEPWS@nt.gov.au">Onshoregas.DEPWS@nt.gov.au</a> , on 16 January 2023 (outside the 2-month deadline). The submission did not include all geospatial files, which were then subsequently submitted at a later date (outside the reporting period).
10	To support clause C.7.2 of the Code of Practice: Onshore Petroleum Activities in the Northern Territory, all accidental releases of liquid contaminant or hazardous chemical must be immediately recorded in a site spill register, including all spills or leaks from the wastewater flowlines, regardless of volume. The spill	Compliant	A spill register meeting the requirements of Ministerial Condition 10 was submitted on 13/01/2023 to DEPWS via <a href="mailto:Onshoregas.DEPWS@nt.gov.au">Onshoregas.DEPWS@nt.gov.au</a> within three months of the 12 month anniversary of the approval of the EMP.

No	Ministerial Condition	Performance Status	Evidence
	<p>register and geospatial files specifying the location of the spill must be submitted to DEPWS via <a href="mailto:Onshoregas.DEPWS@nt.gov.au">Onshoregas.DEPWS@nt.gov.au</a> three months after the 12 month anniversary of the approval of the EMP each year while the EMP is in force. The register must include:</p> <ol style="list-style-type: none"> <li>i. the location, source and volume of the spill or leak;</li> <li>ii. volume of impacted soil removed for appropriate disposal and the depth of any associated excavation;</li> <li>iii. volume of impacted soil removed for appropriate disposal and the depth of any associated excavation;</li> <li>iv. GPS co-ordinates of the location of the spill.</li> </ol>		
11	<p>In support of clause 16 of the <i>Water Act 1992</i> (NT) and clause B.4.2 of the <i>Code of Practice: Onshore Petroleum Activities in the Northern Territory</i>, the interest holder must undertake groundwater level/pressure monitoring at each impact monitoring bore established, using a logger to record water level for 2 weeks prior to, during, and 4 weeks after completion of hydraulic fracturing operations at each new well pad established under the EMP. 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 <a href="mailto:Onshoregas.DEPWS@nt.gov.au">Onshoregas.DEPWS@nt.gov.au</a> within 2 weeks of completion of groundwater level monitoring in each impact monitoring bore.</p>	Compliant	<p>The logging data for the Carpentaria-2H well was provided to DEPWS via <a href="mailto:Onshoregas.DEPWS@nt.gov.au">Onshoregas.DEPWS@nt.gov.au</a> on the 2/09/2022 within 2 weeks of completion of groundwater level monitoring</p>
12	<p>The interest holder must undertake monthly surface water monitoring in accordance with section C.8 of the <i>Code of Practice: Onshore Petroleum Activities in the Northern Territory</i> upstream and downstream of streams which are crossed by wastewater flowlines, while those flowlines contain wastewater during the wet season. The interest holder must prepare and implement a Surface Water Sampling and Analysis Plan, 2 months in advance of commencement of any wet season during which it is proposed to use wastewater flowlines that cross streams, and include:</p> <ol style="list-style-type: none"> <li>i. the location and number of proposed monitoring points;</li> <li>ii. the method for sample collection; and</li> <li>iii. quality control and chain of custody procedures.</li> </ol>	Not Applicable	No wastewater flowlines constructed
13	<p>All freshwater used to flush the wastewater flowlines must be treated as contaminated wastewater until such time it is demonstrated that the water used to flush the flowlines has a quality consistent with uncontaminated groundwater:</p> <ol style="list-style-type: none"> <li>i. This is to be demonstrated by: <ul style="list-style-type: none"> <li>• undertaking analysis of the flushing water against the wastewater analytes in clause C.8 of the <i>Code of Practice: Onshore Petroleum Activities in the Northern Territory</i>; and</li> <li>• simultaneous measurement of electrical conductivity using calibrated field instrumentation, which must be calibrated prior to use each time; and</li> <li>• statistical analysis of data to demonstrate a significant correlation between the presence of contaminants and electrical conductivity.</li> </ul> </li> <li>ii. If part i above provides a clear demonstration that electrical conductivity can be used as a surrogate for contaminants, the interest holder may thereafter use field-based measurement of electrical conductivity, using instrumentation that must be calibrated prior to use each time, to demonstrate the flushing water is free from contaminants.</li> <li>iii. All records of measurement of the flushing water must be maintained in an auditable form.</li> <li>iv. Whenever a flowline that has been left for a period of more than 3 months with groundwater in it (post flushing) must be assumed to be contaminated and treated as wastewater.</li> </ol>	Not Applicable	No wastewater flowlines constructed

No	Ministerial Condition	Performance Status	Evidence
	v. No flushing water may be released to ground.		
14	<p>The interest holder must prepare and implement a Rapid Response Site Demobilisation and Stabilisation Plan that details the strategy for environmental risks, including management of drill cuttings and wastewater that may result in the event a flood inundates access and/or a well pad, within 2 months of approval of the EMP. The Plan should:</p> <ul style="list-style-type: none"> <li>i. include response strategies, including options for removal of drill cuttings and removal, covering and/or transfer of wastewater in open treatment tanks;</li> <li>ii. identify personnel who would implement;</li> <li>iii. identify equipment required, including pumping capacity and number of pumps for the transfer of wastewater from open to enclosed tanks;</li> <li>iv. identify access constraints that would affect the response and how this would be managed;</li> <li>v. specify the timeframes for responses and demonstrate they are as low as reasonably practicable; and</li> <li>vi. include a commitment to commence site preparation and wet season planning by 31 July each year following EMP approval.</li> </ul>	Compliant	A Rapid Response Site Demobilisation and Stabilisation Plan that included the requirements of Ministerial Condition 14 was provided to DEPWS via <a href="mailto:Onshoregas.DEPWS@nt.gov.au">Onshoregas.DEPWS@nt.gov.au</a> on the 20/12/2021
15	<p>Prior to the commencement of drilling, the interest holder must provide to DEPWS, via <a href="mailto:Onshoregas.DEPWS@nt.gov.au">Onshoregas.DEPWS@nt.gov.au</a>, bowtie-diagrams that demonstrate how potential loss of containment of wastewater will be managed, inclusive of preventative and mitigative controls, that:</p> <ul style="list-style-type: none"> <li>i. consider loss of containment from wastewater treatment and storage tanks, drill cutting pits and wastewater flowlines;</li> <li>ii. consider wet and dry season conditions; and</li> <li>iii. consider the location of a loss of containment event.</li> </ul>	Compliant	Bowtie-diagrams that demonstrate how potential loss of containment of wastewater will be managed that included the requirements of Ministerial Condition 15 was provided to DEPWS via <a href="mailto:Onshoregas.DEPWS@nt.gov.au">Onshoregas.DEPWS@nt.gov.au</a> on the 20/12/2021
16	The interest holder must provide to DEPWS, via <a href="mailto:Onshoregas.DEPWS@nt.gov.au">Onshoregas.DEPWS@nt.gov.au</a> , a cementing report for the surface casing through the Gum Ridge Formation and the Bukalara Formation, as soon as practicable but not more than 14 days after completion of the cementing job for each well.	Compliant	<p>The cementing report for the surface casing was provided to DEPWS, via <a href="mailto:Onshoregas.DEPWS@nt.gov.au">Onshoregas.DEPWS@nt.gov.au</a>.</p> <ul style="list-style-type: none"> <li>• On 26/11/2021 for the Carpentaria-2H well</li> <li>• On 17/10/2022 for the Carpentaria-3H well</li> </ul>
17	<p>In support of clause C.4.1.2 of the Code of Practice: Onshore Petroleum Activities in the Northern Territory, the interest holder must provide to DEPWS, via <a href="mailto:Onshoregas.DEPWS@nt.gov.au">Onshoregas.DEPWS@nt.gov.au</a>, no later than 3 months of completion of the drilling program on one well pad north and one well pad south of the Carpentaria Highway, a report that:</p> <ul style="list-style-type: none"> <li>i. provides the outcome of assessment and leachability testing of residual drill fluids and drill cuttings; and</li> <li>ii. provides the recommended disposal option.</li> </ul>	Compliant	A report for a northern wellpad that meets the requirement of Ministerial Condition 17 was sent on the 16/03/2022.
18	The interest holder must ensure at all times there is sufficient capacity to enclose the complete volume of flowback fluid and produced water on the well pad in above-ground infrastructure that meets the requirements of clauses A.3.8 and C.4.2.2(b) of the Code of Practice: Onshore Petroleum Activities in the Northern Territory.	Compliant	At all times there was sufficient capacity to enclose the complete volume of flowback fluid and produced water on the well pad in above-ground infrastructure that meets the requirements of clauses A.3.8 and C.4.2.2(b) of the Code of Practice: Onshore Petroleum Activities in the Northern Territory.
19	Prior to the commencement of hydraulic fracturing at any new exploration well, the interest holder must provide an updated Stakeholder Engagement Log (Appendix 11) which demonstrates engagement that was postponed as a result of COVID-19 travel restrictions has been completed. Any required amendments to the EMP resulting from assessment of an objection or claim from a stakeholder must be submitted to DEPWS via <a href="mailto:Onshoregas.DEPWS@nt.gov.au">Onshoregas.DEPWS@nt.gov.au</a> in accordance with regulation 22 or 23 of the Petroleum (Environment) Regulations 2016 (NT), as applicable.	Compliant	Prior to the commencement of hydraulic fracturing at any new exploration well, an updated Stakeholder Engagement Log (Appendix 11) which demonstrated engagement that was postponed as a result of COVID-19 travel restrictions has been completed was submitted to DEPWS via <a href="mailto:Onshoregas.DEPWS@nt.gov.au">Onshoregas.DEPWS@nt.gov.au</a> on the 27/10/2021

No	Ministerial Condition	Performance Status	Evidence
20	<p>The interest holder must provide to DEPWS within 6 weeks of completion of well flowback operations at each new exploration well established under the EMP a report on a comprehensive risk assessment of flowback wastewater from the hydraulic fracturing phase, via <a href="mailto:Onshoregas.DEPWS@nt.gov.au">Onshoregas.DEPWS@nt.gov.au</a>. The risk assessment must be:</p> <ol style="list-style-type: none"> <li>prepared by a suitably qualified person; and</li> <li>prepared in accordance with the monitoring wastewater analytes specified in section c.8 of the Code of Practice: Onshore Petroleum Activities in the NT.</li> <li>Assess degradation of hydraulic fracturing chemicals in the wastewater; and consider the impacts and risks on fauna and potential for soil and water contamination from loss of containment, based on the analytical results obtained.</li> </ol>	Not Applicable	Flowback operations from wells have not completed within permit year.

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 Outcome	Environmental Performance Standard	Performance Status	Evidence
1	<p>Conduct of the regulated activity does not create any:</p> <ul style="list-style-type: none"> <li>safety risks for the public or landholders,</li> <li>activities do not impede on the activities of stakeholders,</li> <li>activities have no negative impacts on the community and cultural heritage</li> </ul>	No complaints from the community around excessive dust	Compliant	<ul style="list-style-type: none"> <li>Community complaints register shows no complaints received concerning dust generation during the reporting period of October 2021-October 2022</li> </ul>
2		Speed limits adhered to	Compliant	<ul style="list-style-type: none"> <li>Site induction records include requirements related to adhering to speed limits</li> </ul>
3		Minimal incidence of dust created from unsealed roads (minimal being 4 incidents reported within a 2-week period)	Compliant	<ul style="list-style-type: none"> <li>Community complaints register shows no complaints received concerning dust generation during the reporting period of October 2021-October 2022</li> </ul>
4		Speed limits posted on unsealed access tracks adhered to	Compliant	<ul style="list-style-type: none"> <li>Site induction records include requirements related to adhering to speed limits</li> </ul>
5		Movements on publicly accessible roads carried out in a safe manner	Compliant	<ul style="list-style-type: none"> <li>Community complaints register shows no complaints received concerning dangerous driving during the reporting period of October 2021-October 2022</li> </ul>
6		No damage to or loss of public infrastructure and equipment or community lands	Compliant	<ul style="list-style-type: none"> <li>Site induction records include landholder protocols, weed requirements, legislation and infrastructure issues.</li> </ul>
7		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"> <li>Signage that is compliant with the Code of Practice is erected at the well pads.</li> </ul>
8		No impact on cultural heritage sites	Compliant	<ul style="list-style-type: none"> <li>AAPA certificate attained</li> <li>Employed Cultural Clearance Monitors during August 2022.</li> <li>Unexpected Heritage Discovery procedure was initiated when Cultural Monitors identified items outside the project area of Carpentaria 4 well pad in August 2022. The NLC was notified on 8 August 2022.</li> </ul>
9		No instances of overtopping of pits, Flowback Water and Produced Water tanks due to significant weather events	Compliant	<ul style="list-style-type: none"> <li>Operational checks show that wet season forecasts occur to determine whether predicted rainfall poses a risk to freeboard of pits and tanks</li> </ul>
10		No impact on the stakeholder to their use of the land	Compliant	<ul style="list-style-type: none"> <li>Site photographs of installed and maintained adequate warning signs and fences</li> </ul>



No	Environmental Outcome	Environmental Performance Standard	Performance Status	Evidence
				<ul style="list-style-type: none"> <li>Community complaints register shows no complaints received in regard to the use of the land during the reporting period of October 2021-October 2022</li> </ul>
11		To deliver benefits to the local community	Compliant	<ul style="list-style-type: none"> <li>Local contractors were employed to deliver services/goods under IMP4-3 during the reporting period of October 2021-October 2022</li> </ul>
12		No impacts on landholders or on the community regarding lighting, noise or vibrations	Compliant	<ul style="list-style-type: none"> <li>Community complaints register shows no complaints received concerning noise, vibration or light spill during the reporting period of October 2021-October 2022</li> </ul>
13		No livestock on site	Compliant	<ul style="list-style-type: none"> <li>Operational checks show that well site fence installed and intact</li> </ul>
14	Ensure that sensitive receptors, significant conservation areas, or listed species or their habitat are not permanently affected by the conduct of the regulated activity.	No vegetation cleared beyond the approved areas	Not Compliant	<ul style="list-style-type: none"> <li>Clearing for Carpentaria 4 wellpad was not compliant with approved buffer zones.</li> </ul>
15		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"> <li>Site induction records show personnel inducted, and induction materials include requirements related to weed impacts and prevention of spread</li> <li>Weed control activities undertaken as specified in the approved Weed Management Plan</li> </ul>
16		No fires in surrounding areas resulting from conduct of the regulated activity	Compliant	<ul style="list-style-type: none"> <li>Quarterly recordable reports do not contain fires resulting from conduct of the regulated activity during the reporting period of October 2021 – October 2022. Q2 2022 Quarterly Recordable report records that fire access trail was not cleared September 2022, however no direct breach of environmental performance standard occurred.</li> <li>Site induction records include restricted smoking areas, emergency response plan</li> <li>Monitored weather and total fire bans during the reporting period of October 2021 – October 2022</li> </ul>
17		No vermin attracted to site due to improper storage of general wastes	Compliant	<ul style="list-style-type: none"> <li>Operational checks show no incidences of putrescible waste being accessible to vermin</li> <li>Site induction records include waste segregation and disposal</li> </ul>
18		Waste transported appropriately	Compliant	<ul style="list-style-type: none"> <li>All listed waste transported by licensed waste contractors</li> <li>Waste transfer records show Environment Protection Licence (EPL) number of waste contractor</li> </ul>
19		No leaks from flowlines	Not Applicable	<ul style="list-style-type: none"> <li>No wastewater flowlines constructed under IMP4-3 during the reporting period of October 2021 – October 2022</li> </ul>
20		All waste segregated onsite according to whether it is hazardous, recyclable or for general disposal	Compliant	<ul style="list-style-type: none"> <li>Operational checks confirm waste appropriately segregated</li> <li>Site induction records include waste segregation and disposal</li> </ul>
21		Maintain the freeboard in open- topped wastewater treatment tanks over the wet season	Compliant	<ul style="list-style-type: none"> <li>Quarterly recordable reports demonstrate that no overtopping events occurred during the wet season as a result of excessive rain during the reporting period of October 2021 – October 2022.</li> </ul>
22		Wastewater from drilling stored in lined pits	Compliant	<ul style="list-style-type: none"> <li>Documentation and site photographs available demonstrating the lining in pits meet Code requirements.</li> </ul>



No	Environmental Outcome	Environmental Performance Standard	Performance Status	Evidence
23		Disturbance to biodiversity from increased noise, vibration and light is minimized to the greatest extent possible	Compliant	<ul style="list-style-type: none"> <li>Site induction records include requirements related to minimizing noise and light spill</li> </ul>
24	Terrestrial environmental quality, including surface waters, are not permanently affected by the regulated activity's conduct.	No ground disturbance occurs outside of designated areas approved for ground disturbance	Not Compliant	<ul style="list-style-type: none"> <li>Clearing for Carpentaria 4 wellpad was not compliant with approved buffer zones.</li> </ul>
25		Actively preventing erosion and sedimentation	Compliant	<ul style="list-style-type: none"> <li>Operational checks show ESC maintenance during the reporting period of this AEPR.</li> </ul>
26		Not allowing areas to continuously erode or create ongoing sedimentation deposits	Compliant	<ul style="list-style-type: none"> <li>Operational checks show ESC maintenance during the reporting period of this AEPR.</li> </ul>
27		No vehicle movements outside of designated areas approved for ground disturbance during construction and seismic acquisition or off access tracks for all other activities	Not Compliant	<ul style="list-style-type: none"> <li>Clearing for Carpentaria 4 wellpad was not compliant with approved buffer zones.</li> </ul>
28		Vehicles on access tracks are only allowed to cross intersecting flowing creeks or watercourses with specific authorisations to do so	Compliant	<ul style="list-style-type: none"> <li>Site induction records include the prohibition of crossing flowing creeks unless approved by the Site Manager</li> </ul>
29		All hazardous chemicals or those that may cause environmental harm to be stored in secondary containment, which has sufficient capacity to hold 100% of the volume of the largest container stored unless the container has its own secondary containment.	Compliant	<ul style="list-style-type: none"> <li>Site induction records include the requirements related to the use and storage of hazardous chemicals</li> <li>Operational checks show chemical storage inspections</li> </ul>
30		No instances of loss of containment of wastewater	Compliant	<ul style="list-style-type: none"> <li>Quarterly recordable reports demonstrate that no loss of containment of wastewater occurred during the reporting period of October 2021- October 2022</li> </ul>
31		No instances of overtopping of pits, Flowback Water and Produced Water tanks due to significant weather events	Compliant	<ul style="list-style-type: none"> <li>Quarterly recordable reports demonstrate that no instances of overtopping of pits, flowback water and produced water tanks occurred due to significant weather events during the reporting period of October 2022- October 2023</li> </ul>
32		Freeboard for all pits, Flowback Water and Produced Water tanks maintained at all times	Compliant	<ul style="list-style-type: none"> <li>Operational checks confirm wastewater levels do not exceed freeboard</li> <li>Quarterly recordable reports demonstrate that no overtopping events occurred during the wet season as a result of excessive rain during the reporting period of October 2021 – October 2022.</li> <li>During a DEPWS site visit conducted on 21 September 2022 DEPWS identified that the Carpentaria 2 wastewater tank did not have freeboard markings which is a breach of the measurement criteria "Pits will be marked with the appropriate freeboard for the season." The freeboard level was maintained, but the appropriate markings on the pits/tanks were not.</li> </ul>
33		All spills remediated immediately on discovery	Compliant	<ul style="list-style-type: none"> <li>Site induction records include the requirements to remediate all spills to the ground immediately</li> <li>Operational checks show chemical storage inspections</li> <li>Spill register confirms spills remediated during the reporting period of October 2021- October 2022</li> </ul>
34		No water to be taken from surface water sources	Compliant	<ul style="list-style-type: none"> <li>Site induction records include prohibition of surface water use at any time</li> </ul>

No	Environmental Outcome	Environmental Performance Standard	Performance Status	Evidence
				<ul style="list-style-type: none"> <li>Quarterly recordable reports demonstrate that no unauthorized use of surface water occurred during the reporting period of October 2021- October 2022</li> </ul>
35	The conduct of the regulated activity does not result in the over-extraction or contamination of groundwater resources.	Compliance with the groundwater extraction licence	Compliant	<ul style="list-style-type: none"> <li>Water extraction to be undertaken at approved registered groundwater bores.</li> <li>Groundwater taken is less than the maximum permitted volume for the activity</li> </ul>
36		No contamination of aquifers from the regulated activities	Compliant	<ul style="list-style-type: none"> <li>Quarterly groundwater monitoring</li> </ul>
37	Local inland water quality is not permanently affected by the conduct of the regulated activity	Vehicle crossing of flowing creeks or watercourses to only occur with specific authorisations	Compliant	<ul style="list-style-type: none"> <li>Site induction records include the prohibition of crossing flowing creeks unless approved by the Site Manager</li> <li>No clearing for seismic lines or Wellpads within buffer zones</li> </ul>
38		No loss of riparian flora	Not Compliant	<ul style="list-style-type: none"> <li>Clearing for Carpentaria 4 wellpad was not compliant with approved buffer zones.</li> </ul>
39		All hazardous chemicals or those that may cause environmental harm to be stored in secondary containment, which has sufficient capacity to hold 100% of the volume of the largest container stored unless the container has its own secondary containment.	Compliant	<ul style="list-style-type: none"> <li>Site induction records include the requirements related to the use and storage of hazardous chemicals</li> <li>Operational checks show chemical storage inspections</li> </ul>
40		No pit or tank failure due to flooding inundation	Compliant	<ul style="list-style-type: none"> <li>Quarterly recordable reports demonstrate that no pit or tank failure occurred due to flooding inundation during the reporting period of October 2021- October 2022</li> </ul>
41		All storage vessels for wastewater and hazardous substances are maintained at 100% integrity	Compliant	<ul style="list-style-type: none"> <li>IMP 4-3 inspection records confirm tanks and storage vessels intact during the reporting period of October 2021-October 2022</li> </ul>
42		No impact on inland water environmental quality	Compliant	<ul style="list-style-type: none"> <li>Carpentaria 3 and Carpentaria 4 were constructed following the Code requirements, and passes well acceptance criteria</li> <li>Carpentaria 3 and Carpentaria 4 have blow-out prevention equipment systems installed</li> </ul>
43	Minimise emissions, including greenhouse gases, created by the conduct of the regulated activity	Operations carried out in a manner that does not create excessive emissions	Compliant	<ul style="list-style-type: none"> <li>Community complaints register shows no complaints received concerning excessive emissions from site</li> </ul>
44		All vehicles, plant and equipment maintained and operated per manufacturer requirements to minimise emissions	Compliant	<ul style="list-style-type: none"> <li>EP 187 Equipment Servicing Register maintained during the reporting period of October 2022 – October 2023</li> </ul>
45		Flaring to be used rather than venting during production testing	Compliant	<ul style="list-style-type: none"> <li>Records kept of flaring events during production testing</li> <li>Emissions report for IMP 4.3 was submitted to <a href="mailto:Onshoregas.DEPWS@nt.gov.au">Onshoregas.DEPWS@nt.gov.au</a></li> </ul>
46		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"> <li>Site induction records include the requirements to report leaks</li> <li>Contractor onsite during EPT carried leak detection units</li> <li>No leaks detected during the reporting period of October 21- October 22 so no leak remediation records.</li> </ul>

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 Imperials 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),<sup>2</sup> 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	Geospatial information depicting areas cleared is to be provided to the Minister.	Not Compliant	Geospatial files were supplied to DEPWS via <a href="mailto:Onshoregas.DEPWS@nt.gov.au">Onshoregas.DEPWS@nt.gov.au</a> , on 16 January 2023 (outside the 2 month deadline and the reporting period). The submission did not include all geospatial files, which were then subsequently submitted later (outside the reporting period of this AEPR).
2	Code cl A.3.6 (b)	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	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)	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	Rehabilitation Management Plan of the approved EMP includes the required clause
5	Code cl B.4.13.2(c)	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): <ul style="list-style-type: none"> <li>a. total volume of hydraulic fracturing fluid pumped,</li> <li>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</li> <li>c. typical and maximum concentrations of chemicals or other substances used.</li> </ul>	Compliant	The NT Flowback Report for the Carpentaria-2H was submitted 12 December 2022
6	Code cl B.4.13.2(k)iv	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.	Not Applicable	No venting occurred.
7	Code cl 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 report to DITT.	Compliant	updated Well Barrier Integrity Validation reports sent to DITT as required
8	Code cl 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	Not in the decommissioning phase
9	Code cl 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	Waste and Wastewater Management Plan and Spill Management Plan of the approved EMP includes the required clause
10	Code cl C.6.1(d)	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	Not Applicable	The reporting due date (January 2023) occurs outside the timeframe of this AEPR reporting period (October 2021 – October 2022).

11	Code cl 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	Waste and Wastewater Management Plan of the approved EMP includes the required clause
12	Code cl D.5.9.2(c)	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 11/10/2022
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.	Not Applicable	No gas processing facility or other downstream facility is part of the EMP.
14	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.	Not Applicable	No reportable incidents occurred
15	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.	Not Applicable	No reportable incidents occurred
16	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).	Not Compliant	Recordable Incident Reports were submitted within the 90-day reporting period; however, they required resubmission due to not including all recordable incidents within the timeframe.
17	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.	Not Applicable	Requirement occurred outside reporting timeframe and will be included within the 2022/2023 AEPR
18	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.	Not Applicable	Requirement occurred outside reporting timeframe and will be included within the 2022/2023 AEPR
19	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 <b>before</b> commencement of construction, <sup>3</sup> drilling, or seismic surveys. Note, civil works are also considered 'construction' activities.	Not Compliant	Imperial provided notification of commencement of civil works to the Minister on 14 March 2022 as required by Schedule 1, item 12 of <i>Petroleum (Environment) Regulations 2016</i> . The notification included civil construction of approximately 21 days duration, however it does not specify the Carpentaria 1 gravel pit.

### 3. Overall Performance

#### 3.1. Overview of performance

Table 5 provides a summary of the results of the compliance assessment against the 104 total compliance items.

**Table 5: Performance Summary**

Compliance Indicator	Number	Percentage
Compliant	78	75%
Not Compliant	11	10.5%
Not Applicable	15	14.5%

#### 3.2. Overview of items found not compliant

The following sections describe:

- the specific compliance requirements not met for the reporting period and 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

Four non-compliances with Ministerial conditions were recorded during the reporting period. Table 6 outlines the ministerial condition non-compliances.

**Table 6 Ministerial Condition Non Compliances**

Ministerial Condition	Description of non-compliance	Was the interest holder partially compliant?	Did environmental harm occur?	Corrective Action
1(ii)	Late timetable submission.	Yes, 3 subsequent reports were submitted on time.	No environmental harm occurred. This was an administrative noncompliance.	Imperial has increased its Environmental Compliance team to attend to expanding DEPWS requirements.
1 (iii)	Complete civil report notice was not submitted.	Yes, weekly reports were submitted but they did not contain all information required to be compliant.	Imperial believes no environmental harm occurred by locating the gravel pit at its current position.	Future civil reports will contain all information required to be compliant.
6	Ground truthing was not undertaken within the required timeframe.	Yes, ground truthing was undertaken by a qualified and experienced ecologist but not within the one-week timeframe.	No environmental harm occurred due to the incorrectly timed ground truthing.	Increased awareness among environmental field staff that no ground disturbing activities are to be undertaken without an ecologist ground truthing within one week prior.  Threatened Species list of EP 187 fauna has been circulated to field staff, to increase training and awareness of threatened species likely to occur within the project area.
9	Geospatial files submitted did not include all required information.	Yes. Geospatial files were submitted but not to the required standard.	No environmental harm occurred. This was an administrative noncompliance.	Geospatial files to be quality checked prior to submission by inhouse GIS specialist.



### 3.2.2. Environmental Performance Standards

Five non-compliances with Environmental Performance Standards were recorded during the reporting period.

**Table 7: Environmental Performance Standard Non-Compliances**

Environmental Performance Standard	Description of non-compliance	Was the interest holder partially compliant?	Did environmental harm occur?	Corrective Action
#14 No vegetation cleared beyond the approved areas	Clearing for the Carpentaria 4 well pad was not compliant with approved buffer zones.	T The NT Land Clearing Guidelines recommend that a 100 m buffer be maintained from the edge of riparian vegetation. One corner of the Carpentaria 4 well pad impinged on the 100 m buffer.	Environmental disturbance occurred inside the LCG recommended riparian buffer zone. The areas of greatest disturbance at Carpentaria 4 (sumps, wellhead etc) are all located outside of the NT Land Clearing 100 m buffer.	Imperial proposes to rehabilitate the corner section of the Carpentaria 4 well pad that impinges on the buffer and re-fence the disturbed area.  All future civil construction works require a 'Civil Disturbance Authorisation Checklist' which includes sign off from the Environmental Compliance team and the Project Manager, prior to any ground disturbance being undertaken.
#24 No ground disturbance occurs outside of designated areas approved for ground disturbance	Clearing for Carpentaria 4 wellpad was not compliant with approved buffer zones.	The NT Land Clearing Guidelines recommend that a 100 m buffer be maintained from the edge of riparian vegetation. One corner of the Carpentaria 4 well pad impinged on the 100 m buffer.	Environmental disturbance occurred inside the LCG recommended riparian buffer zone. The areas of greatest disturbance at Carpentaria 4 (sumps, wellhead etc.) are all located outside of the NT Land Clearing 100 m buffer.	Imperial proposes to rehabilitate the corner section of the Carpentaria 4 well pad that impinges on the buffer and re-fence the disturbed area.  All future civil construction works require a 'Civil Disturbance Authorisation Checklist' which includes sign off from the Environmental Compliance team and the Project Manager, prior to any ground disturbance being undertaken.
#27 No vehicle movements outside of designated areas approved for ground disturbance during construction and seismic acquisition or off access tracks for all other activities	Clearing for Carpentaria 4 wellpad was not compliant with approved buffer zones.	The NT Land Clearing Guidelines recommend that a 100 m buffer be maintained from the edge of riparian vegetation. One corner of the Carpentaria 4 well pad impinged on the 100 m buffer.	Environmental disturbance occurred inside the LCG recommended riparian buffer zone. The areas of greatest disturbance at Carpentaria 4 (sumps, wellhead etc) are all located outside of the NT Land Clearing 100 m buffer.	Imperial proposes to rehabilitate the corner section of the Carpentaria 4 well pad that impinges on the buffer and re-fence the disturbed area.  All future civil construction works require a 'Civil Disturbance Authorisation Checklist' which includes sign off from the Environmental Compliance team and the Project Manager, prior to any ground disturbance being undertaken.
#38 No loss of riparian flora	Clearing for Carpentaria 4 wellpad was not compliant with approved buffer zones.	The NT Land Clearing Guidelines recommend that a 100 m buffer be maintained from the edge of riparian vegetation. One corner of the Carpentaria 4 well pad impinged on the 100 m buffer.	Environmental disturbance occurred inside the LCG recommended riparian buffer zone. The areas of greatest disturbance at Carpentaria 4 (sumps, wellhead etc) are all located outside of the NT Land Clearing 100 m buffer.	Imperial proposes to rehabilitate the corner section of the Carpentaria wellpad and re-fence the disturbed area.  All future civil construction works require a 'Civil Disturbance Authorisation Checklist' which includes sign off from the Environmental Compliance team and the Project Manager, prior to any ground disturbance being undertaken.

### 3.2.3 Regulatory Reporting

Two non-compliances with Reporting Requirements were recorded during the reporting period. Table 7 outlines the regulatory reporting non-compliances.

**Table 8: Regulatory Reporting Non-Compliances**

Reporting Requirement	Description of non-compliance	Was the interest holder partially compliant?	Did environmental harm occur?	Corrective Action
Code cl A.3.5	Geospatial files submitted did not include all required information.	Yes. Geospatial files were submitted but not to the required standard.	No environmental harm occurred. This was an administrative noncompliance.	Geospatial files to be quality checked prior to submission by inhouse GIS specialist.
Reg 35	Recordable Incident Reports did not include all required information.	Yes, Recordable Incident Reports were submitted but they did not require full information required to be compliant.	No environmental harm occurred. This was an administrative noncompliance.	As of July 2023, Recordable Incident Reports are cross checked with all site audits and correspondence prior to submission to DEPWS.
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 <b>before</b> commencement of construction, drilling, or seismic surveys. Note, civil works are also considered 'construction' activities.  A notification was not provided to the Minister which outlined the gravel pit civil construction details.	Yes, Imperial provided notification of commencement of civil works to the Minister on 14 March 2022 as required by Schedule 1, item 12 of <i>Petroleum (Environment) Regulations 2016</i> . The notification included civil construction of approximately 21 days duration, however it does not specify gravel pits.	Carpentaria 1 and Carpentaria 4 gravel pits were not constructed in full compliance with the EMP. Imperial believes no environmental harm occurred by locating the gravel pits at their current position.	Future notification reports will contain all information required to be compliant.  Gravel pit maintenance has been undertaken to update erosion sediment controls.  All future civil construction works require a 'Civil Disturbance Authorisation Checklist' which includes sign off from the Environmental Compliance team and the Project Manager, prior to any ground disturbance being undertaken.

### 3.3. Application of lessons learned across Imperial's operations

Imperial reaffirms its commitment to adhering to the Ministerial Approval Conditions and Environmental Outcomes and Performance Standards as prescribed in Environmental Management Plan EMP IMP4-3 – Imperial OG 2021-2025 EP187 Program, Rev 3.

The identification and response to non-compliances allows Imperial to improve procedures, processes, and its environmental compliance team, to achieve increasingly positive outcomes on site. Imperial is dedicated to working collaboratively with DEPWS to achieve this.

To ensure that all approval conditions, performance standards and regulatory reporting is achieved in a timely manner in the future, the following processes are underway:

- Increasing qualified personnel in Imperials Environmental Compliance team to add to current capacity.
- Quality check by GIS specialist prior to spatial file submission to DEPWS.
- Additional cross referencing of site audits and DEPWS correspondence with Recordable Quarterly Incident Reports prior to submission.
- Reviewing induction materials to ensure there is clear communication of reporting responsibilities during civil works.
- Increased use of activity trackers to future plan and meet upcoming reporting schedules.
- Weekly Environmental Compliance meetings with the office based Environmental Compliance Team and field based Environmental Team to ensure information is being freely shared across the organisation and discuss upcoming requirements.
- An internal process update now includes a 'Civil Disturbance Authorisation Checklist' to ensure civil works are approved by the environmental compliance team prior to any works being undertaken on the ground.