

Annual Environmental Performance Report

Environmental Management Plan

IMP2-04 and IMP2-6.1

2 March 2020 to 1 March 2021.

Date	Revision	Reason for Issue	Author	Checked	Approved
02/06/21	0	Initial Submission	CD	JB	AU

Document title	Annual Environmental Performance Report 2020 Environmental Management Plan IMP2-6.1
EMPs Covered	<ul style="list-style-type: none"> Imperial 2019 Drilling Program NT Exploration Permit (EP) 187, IMP2-04 2020-21 Drilling Program NT Exploration Permit (EP) 187, IMP2-6.1 (Revision of IMP2-04)
Permit	EP 187
Interest holder details	Imperial Oil and Gas Pty Ltd Level 19, 20 Bond Street Sydney NSW 2000 Australia ABN: 92 002 699 578
Operator details	Imperial Oil and Gas Pty Ltd Level 19, 20 Bond Street Sydney NSW 2000 Australia ABN: 92 002 699 578
Approved by	Imperial Oil and Gas

Version	Date	Author	Changes Made
1.0	26/05/2021	Charles Dack	None
1.1	02/06/2021	Jon Bennet	Small modifications made

Signature and Certification	
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Position	Chief Executive Officer
Date	02/06/2021

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Acronyms/Abbreviations

Acronyms/Abbreviations	Description
AEPR	Annual Environment Performance Report
EMP	2020-21 Drilling Program NT Exploration Permit (EP) 187 (Revision) IMP2-6.1, dated August 202
EP187	Exploration Permit 187
Imperial	Imperial Oil and Gas Pty Ltd
NT	Northern Territory
PER	Petroleum (Environment) Regulations 2016
The Code	Code of Practice: Onshore Petroleum Activities in the Northern Territory
DEPWS	Department of Environment Protection and Water Security, previously the Department of Environment and Natural Resources
DITT	Department of Industry Tourism and Trade, previously the Department of Primary Industry and Resources
COVID-19	novel corona virus disease
IMP2-04	Imperial 2019 Drilling Program NT Exploration Permit (EP) 187 Environmental Management Plan
IMP2-6.1	Imperial 2020-21 Drilling Program NT Exploration Permit (EP) 187 Environmental Management Plan
QRIR	Quarterly Recordable Incident Report

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). The report is to consider 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 2019 Drilling Program NT Exploration Permit (EP) 187 (IMP2-04)* that was approved on the 2 March 2020 and superseded with the approval of,
- *Imperial 2020-21 Drilling Program NT Exploration Permit (EP) 187 (IMP2-6.1)* that was approved on the 30 September 2020.

The period covered by this AEPR is from the 2 March 2020 to 1 March 2021. .

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

IMPERIAL TIMELINE OF OPERATIONS

Table 1 - Imperial Timeline of Operations

Item	Date Range	March	April	May	June	July	August					September										October				November	December	January	February				
							1-7	8-14	15-21	22-28	28-31	1-7	8-14	15-21	22	23	24	25	26	27	28	29	30	1-7	8-14					15-21	22-31		
EMP Imperial 2019 Drilling Program NT Exploration Permit (EP) 187 Approval	2/03/2020																																
Civil Operations for Carpentaria-1	17/8/2020-11/09/2020																																
EMP Imperial 2020-21 Drilling Program NT Exploration Permit (EP) 187 Approval	30/09/2020																																
Drilling of Carpentaria-1	23/09/2020-23/10/2020																																

Timeline of events:

- EMP Imperial 2019 Drilling Program NT Exploration Permit (EP) 187 (IMP2-04) Approval 2/03/2020
- Civil Operations for Carpentaria-1 began 17/08/2020 and finalised on the 11/09/2020.
- EMP Imperial 2020-21 Drilling Program NT Exploration Permit (EP) 187 (IMP2-6.1) Approval 30/09/2020 superseding the IMP2-04 EMP.
- Drilling of Carpentaria-1 began 23/09/2020 and finalised on 23/10/2020.
- Suspension of Carpentaria-1

1.1 Background

The Environmental Management Plan *Imperial 2019 Drilling Program NT Exploration Permit (EP) 187 (IMP2-04)* was approved on the 2 March 2020.

The regulated activities under this EMP included:

- Civil construction of access tracks, well sites and accommodation camp during the dry season
- Drilling of two wells during the dry season

An extensive delay in operations due to the novel corona virus disease (COVID-19) outbreak resulted in operations not being undertaken in the 2020 dry season. To operate over the wet season Imperial submitted the revised EMP *Imperial 2020-21 Drilling Program NT Exploration Permit (EP) 187 (IMP2-6.1)* under regulations 15 and 17 of the Petroleum (Environment) Regulations (PER) which was approval 30 September 2020.

The regulated activities covered in this revision were the same as the previously approved EMP IMP2-04, however, allowed for operations to be undertaken over the wet season.

The below Figure 1 outlines the proposed drill sites, camp location, access tracks and the existing roads for both EMP's.

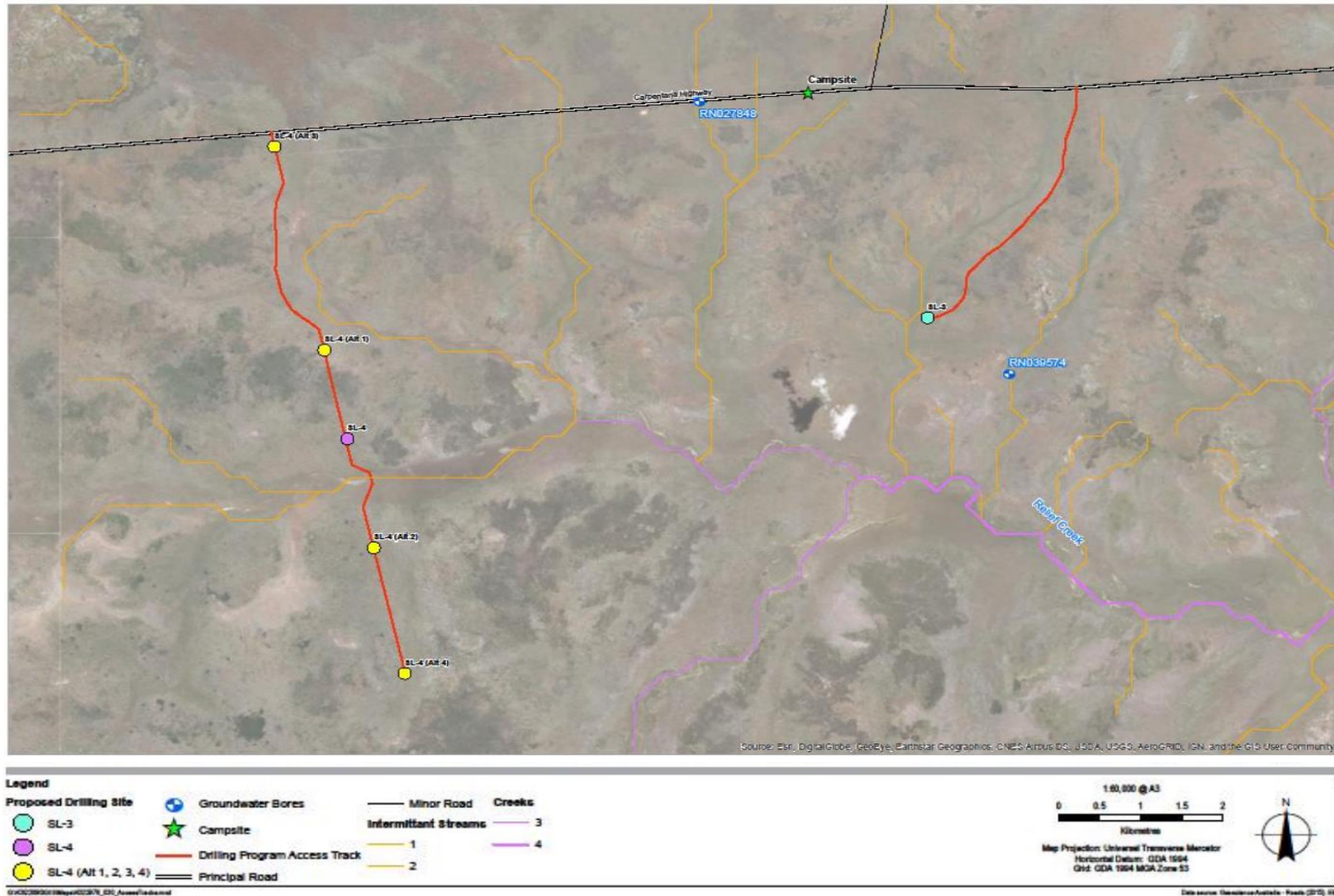


Figure 1 -Location of Proposed Drill Sites, Camp locations, Access Tracks and Existing Roads

1.2 Contents of Performance Report

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

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

1.3 Assessment of Compliance

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

Table 2 - Compliance Descriptors

Indicator	Description
Compliant	Compliant with requirement for entire 12-month reporting period
Partially Compliant	Compliant with time-bound requirement for the majority of the 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

1.3 Evidence of Compliance

The following sources of evidence are used to demonstrate compliance:

1. Internal tracking of compliance by Imperial through:
2. Internal reviews of compliance, as follows:
 - a. Review of the landholder consultation records.
 - b. Inspections and monitoring as per section 8.9.1 of EMP2-04 and 7.5.8 of EMP2-6.1.
 - c. Groundwater Monitoring as per as per section 8.9 of EMP2-6.1 and EMP2-04.
3. Outcomes from regulatory inspections conducted by DEPWS.
4. Recordable and reportable and recordable incident reports submitted to DEPWS.
5. Reports provided to DEPWS, DITT and other government agencies.

2. Demonstration of Compliance

Table 3 demonstrates Imperial’s compliance with the ministerial conditions set out in the EMP approval notice.

2.1 Compliance with Ministerial EMP Approval Conditions

Table 3 - Compliance with Ministerial EMP2-04 Approval Conditions – in place from 2/3/2020 – 30/09/2020

Row	Condition	Compliance Status	Evidence
1	<p>Condition 1: On selection of the final locations of the two well sites, the Interest Holder must provide to DEPWS, at least four weeks prior to commencement of the regulated activity:</p> <ul style="list-style-type: none"> a detailed map showing the final location of the two wells. a geotechnical assessment report for the final locations of the two well sites, developed by a suitably qualified independent person, that: <ul style="list-style-type: none"> includes results of 60cm soil cores, taken at three sites across the well pad area for analysis of particle size distribution. determines the amount of excavation and quantity of surface material that will be required to be stripped at the well pad to ensure a stable base. determines stockpiling requirements of stripped material; and determines the amount of suitable gravel material required to build the well pad. 	Compliant	On 30/06/2020, Four weeks prior to commencement an email was sent to DEPWS with the required information of Condition 1.
2	<p>Condition 2: The Interest Holder must provide to DEPWS:</p> <ul style="list-style-type: none"> monthly data on groundwater use until the activity is completed. data from a minimum of eight groundwater quality sampling events from RN039574 and RN027848 bores prior to completion of the drilling program 	Compliant	<p>Emails outlining the use of groundwater were sent to DEPWS daily during on ground activity.</p> <p>Eight groundwater quality sampling events from RN039574 and RN027848 bores prior to completion of the drilling program was undertaken. These were not supplied to DEPWS as Imperial is awaiting the re-release of the samples from the laboratory to the new DEPWS format.</p>
3	<p>Condition 3: The Interest Holder must provide to DEPWS within three months of completion of the regulated activity:</p> <ul style="list-style-type: none"> high resolution imagery of the disturbance footprint a digital aerial photograph or UAV imagery of the disturbed area, ortho-rectified using ground control points measured using a differential GPS(DGPS) and spatial accuracy of approximately 1-2m. a spatial assessment report on the disturbance footprint for the approved regulated activity. 	N/A	Regulated activity not completed before the 30/09/2020 when the new Approval Notice was issued
4	<p>Condition 4: In addition to the minimum methane leak detection inspection frequencies required by the Code, the Interest Holder must undertake methane leak detection within seven (7) days of commissioning equipment that is in hydrocarbon service and under pressure and record to an auditable standard.</p>	N/A	No equipment that is in hydrocarbon service and under pressure was commissioned
5	<p>Condition 5: The Interest Holder must provide to DEPWS a cementing report for the 13-3/8" and 9 5/8" casing strings as soon as practicable but not more than 14 days after completion of the cementing job for Imperial exploration wells on EP 187.</p>	Compliant	9 5/8" casing string was cemented on the 05/10/2020. The submission of the cementing reports was sent to DEPWS on the 15/10/2020.

Row	Condition	Compliance Status	Evidence
1	<p>Condition 1: Prior to commencement of activities on the Carpentaria-2 well site, the interest holder must provide to the Department of Environment, Parks and Water Security (DEPWS), at least 4 weeks prior to commencement of the regulated activity:</p> <ul style="list-style-type: none"> a detailed map and gee-reference location of the final Carpentaria-2 well site on EP187 selected, as referenced in the EMP. a geotechnical assessment report for the Carpentaria-2 well site, developed by a suitably qualified independent person, that: <ul style="list-style-type: none"> includes results of 60cm soil cores, taken at three sites across the well pad area for analysis of particle size distribution. determines the amount of excavation and quantity of surface material that will be required to be stripped at the well pad to ensure a stable base. determines stockpiling requirements of stripped material; and determines the amount of suitable gravel material required to build the well pad. 	N/A	Carpentaria-2 wellsite did not occur.
2	<p>Condition 2: The interest holder must provide to the DEPWS an updated timetable for the regulated activity prior to commencement of the activity and provide an updated timetable to the DEPWS each month following commencement.</p>	N/A	Carpentaria-2 wellsite did not occur.
3	<p>Condition 3: In support of Schedule 1, item 11 of the Regulations and clause A.3.5 of the Code, the interest holder must provide geospatial files of the land disturbance footprint(s) to DEPWS within sixty (60) days of completion of each land clearing activity or within 6 months of approval of this EMP, whichever occurs first.</p>	Compliant	DEPWS granted an extension to the submission timeline. Geospatial files were sent to DEPWS on the 30/06/2020.
4	<p>Condition 4: The interest holder must provide to DEPWS a cementing report for the 13-3/8" and 9 5/8" casing strings as soon as practicable but not more than 14 days after completion of the cementing job for the Carpentaria-1 and Carpentaria-2 wells on EP 187.</p>	Compliant	The cementing report for Carpentaria-1 was sent to DEPWS within the 14-day window on the 15/09/2020. Carpentaria 2 was never drilled.
5	<p>Condition 5: The interest holder must provide to DEPWS within six weeks of completion of drilling operations at the Carpentaria -1 well site, a laboratory analysis of drilling wastewater that may be contained in the drilling sump. The laboratory analysis must comply with the Code of Practice: Onshore Petroleum Activities in the Northern Territory, Table C.8: Wastewater chemistry analytes.</p>	Non-compliant	Imperial did not submit laboratory analysis within the six-week timeline. This was due to laboratory difficulties with the sampling requirements. No environmental harm or impact occurred due to this non-compliance
6	<p>Condition 6: In addition to the minimum methane leak detection inspection frequencies required by the Code, the interest holder must undertake methane leak detection within seven (7) days of commissioning equipment that is in hydrocarbon service and under pressure and record to an auditable standard.</p>	N/A	No equipment that is in hydrocarbon service and under pressure was commissioned
7	<p>Condition 7: The interest holder must provide an annual report to DEPWS on its environmental performance, in accordance with item 11(1)(b) in schedule 1 of the Petroleum (Environment) Regulations 2016 (NT). The first report must cover the 12-month period from the date of this approval and be provided within three 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 must include a signed declaration by the interest holder or operator.</p>	Compliant	This Annual Environment Performance Report has been provided to DEPWS in accordance with item 11(1)(b) in schedule 1 of the Petroleum (Environment) Regulations 2016 (NT). This first report covers the 12-month period from the first date of approval and is provided within three calendar months of the end of the reporting period.

2.2 Compliance with Environmental Outcomes and Environmental Performance Standards

Table 4 provides a systematic overview of Imperials compliance with the environmental outcomes and environmental performance standards within the approved EMPs. (Taken from Tables 37-48 of EMP2-6.1 and Tables 35-46 of EMP2-04)

All non-compliances and partial compliances of environmental outcomes and performance standards have been reported in full to DEPWS through the Quarterly Recordable Incident Reports. These are available for viewing on the DEPWS Recordable incident reports webpage.

Table 4 - Compliance with Environmental Outcomes and Environmental Performance Standards

Row	Environmental Values	Environmental Outcome	Environmental Performance Standards	Compliance Status	Evidence	Environmental harm or Impact
1	Asset Integrity	Minimise impacts to ecosystem and human health values	No uncontrolled releases	Compliant	<ul style="list-style-type: none"> no uncontrolled releases were recorded in operational reports. no level 1 spills were recorded on site 	Not Applicable
2	Protection of the ecosystem and human health values from uncontrolled discharges associate with asset integrity failures		No asset integrity failures	Non-compliant	<ul style="list-style-type: none"> Mud sump liner tear above the water line. 15/10/2020 Fauna fence around the mud sump had fallen over 22/11/2020 and 17/01/2021. Mud sump liner holes above the water line 10/12/20 	No environmental harm or impact occurred due to this non-compliance
3	Chemicals and Hazardous Materials	Minimise impacts to ecosystem and human health value	No uncontrolled releases of chemicals and hazardous materials	Compliant	<ul style="list-style-type: none"> no uncontrolled releases were recorded in operational reports. no level 1 spills were recorded on site 	Not Applicable
4	Protection of the ecosystem and human health values from uncontrolled releases of chemicals and hazardous materials		No incorrect storage and use of chemicals and hazardous materials	Non-compliant	<ul style="list-style-type: none"> Mud sump liner missing freeboard marker, water volume was always below the required freeboard line.15/10/2020 Geological building missing plumbing for sink. Water on the well pad was used to wash down rock samples. 15/10/2020 Pooling water near chemical storage area, no contamination of pooled water occurred. This fresh rainwater was removed from the chemical storage area.15/10/2020 Drilling mud and cuttings from shakers ended up on the ground 15/10/2020. Secondary containment, drip trays not installed. Drip trays were installed where required. 15/10/2020. Secondary containment, pre-emptive capture bunding not installed. Secondary containment was installed where it was required. 15/10/2020. 	No environmental harm or impact occurred due to this non-compliance

Row	Environmental Values	Environmental Outcome	Environmental Performance Standards	Compliance Status	Evidence	Environmental harm or Impact
					<ul style="list-style-type: none"> Turkey's nest did not have required animal proof fencing when mud transfer occurred. 25/02/2021 	
5	Waste Management <ul style="list-style-type: none"> Maintain the integrity of ecosystems and agricultural productivity Minimise the amount of waste generated 	<ul style="list-style-type: none"> Minimise impacts on soil, surface water, groundwater, sensitive habitat, and air quality Minimise creation of food sources or habitat for pest species Minimise waste generation through reduce, reuse, recycle programs 	Absence of domestic waste remaining onsite at completion of activities (i.e., general rubbish, waste chemicals, workshop wastes including oily rags, containers etc.).	Compliant	Weekly inspections post operational activities confirmed an absence of domestic waste remaining onsite.	Not Applicable
6			No unregulated waste handling	Compliant	All waste handled as to the Northern Territory Waste Management Pollution Control Act.	Not Applicable
7			All waste certificates to be noted and accounted for	Compliant	All waste transfer certificates noted and accounted for.	Not Applicable
8			Pest species not encouraged to the site	Compliant	Inspection report by Fox and co confirmed no greater amount of pest weed species located onsite, report dated March 2021	Not Applicable
9	Erosion and Sediment Control <ul style="list-style-type: none"> Suitability and stability of land for existing uses (Erosion and Sediment Controls implemented) Stability of land to preserve existing water quality, landscapes, and ecosystems 	<ul style="list-style-type: none"> Minimise disturbance to land and land use (including soils and terrain, flora, and fauna) Minimise erosion (via water or wind) and sediment releases Protection of waterways Return disturbed areas to a stable landform such that they are returned to a condition as close as practicable to the surrounding area (or pre-disturbance state) within an acceptable time frame. Protect the productivity of the land for its intended land use 	Land disturbance equal to or less than planned	Compliant	Geospatial files sent to DEPWS on the 30/06/2021 confirm that the land disturbance was equal to or less than planned.	Not Applicable
10			Minimum incidences of erosion and sedimentation occurring	Compliant	<ul style="list-style-type: none"> Stockpiled topsoil breached fence line 15/10/2020 	No environmental harm or impact occurred
11			Areas left safe, stable, and non-polluting	Partially Compliant	<ul style="list-style-type: none"> Height of stockpiled topsoil <ul style="list-style-type: none"> Too high initially but was later reduced. 15/10/2020 Missing geotechnical cover. Geotechnical cover was replaced missing was replaced. 15/10/2020 Sedimentation fencing section missing. This was replaced and re-installed where missing. 15/10/2020. Well pad sedimentation return line not installed. Return line installed or re-installed where required. 15/10/2020. Sedimentation fence section eaten by cattle 21/02/2021 and 26/02/2021. Sedimentation fence was replaced when it was found to be missing sections. Sedimentation fence section missing 04/01/2021 and 19/01/2021 due to weather events. Sedimentation fence 	No environmental harm or impact occurred due to this partial compliance

Row	Environmental Values	Environmental Outcome	Environmental Performance Standards	Compliance Status	Evidence	Environmental harm or Impact
					was replaced when it was found to be missing sections. <ul style="list-style-type: none"> Status as of 1/03/2021 site areas left stable and non-polluting 	
12			Commence to rehabilitate disturbed areas within 12 months of decommission	N/A	decommissioning has not occurred.	Not Applicable
13			No new erosion flow paths originated from site	Compliant	Weekly inspections post operational activities confirmed no new erosion flow paths originated from site.	Not Applicable
14			No flow on effects caused by flooding at Imperial's drilling sites	Compliant	No flooding occurred at Imperial's drilling sites.	Not Applicable
15	Decommissioning and Rehabilitation Management <ul style="list-style-type: none"> Maintain the integrity of significant ecosystems and agriculture productivity 	<ul style="list-style-type: none"> A safe, stable landform consistent with surrounding land use Rehabilitation of disturbed areas is returned to the original land use and is consistent with the adjacent analogue site 	Successful rehabilitation to a similar condition of surrounding environment	N/A	Rehabilitation has not been commenced on site.	Not Applicable
16	<ul style="list-style-type: none"> Maintain habitat elements for native flora and fauna, including species protected by EPBC Act and TPWC Act 		No further habitat loss resulting from Imperial's activities	N/A	Rehabilitation of site not undertaken.	Not Applicable
17			Decommissioning of redundant assets	Compliant	No redundant assets exist on site.	Not Applicable
18	Biosecurity Management <ul style="list-style-type: none"> Maintain the integrity of significant ecosystems and agriculture productivity 	<ul style="list-style-type: none"> Avoid the introduction of weeds and pest fauna Avoid the spread of existing weeds and pest fauna 	No introduction or spread of declared weeds and/or pest fauna resulting from Imperial's activities	Compliant	Yearly weed inspection by Fox and Co confirmed no introduction or spread of declared weeds and/or pest fauna resulting from Imperial's activities. Report Dated March 2021	Not Applicable
19	Biodiversity Management <ul style="list-style-type: none"> Maintain the integrity of significant ecosystems and agriculture productivity Maintain habitat elements for native flora and fauna, including species protected by EPBC Act and TPWC Act Avoid clearing high value habitat 	<ul style="list-style-type: none"> Minimise disturbance to flora and fauna Minimise disturbance to sensitive areas 	Monitoring EP187 area to minimise impacts to fauna habitat and sensitive vegetation.	Partially Compliant	<ul style="list-style-type: none"> Weekly inspection not undertaken 22/11/2020. This was due to Contractor personal safety. Inspections taken as soon as possible. Weekly inspection not undertaken 7/02/2021 and 14/02/2021 due to wet weather access safety concerns. Inspections taken as soon as possible. All other daily and weekly monitoring undertaken as planned. 	No environmental harm or impact occurred due to this partial compliance

Row	Environmental Values	Environmental Outcome	Environmental Performance Standards	Compliance Status	Evidence	Environmental harm or Impact
20			No native fauna impacts (injury or fatality).	Non-compliant	<ul style="list-style-type: none"> two avian fauna found deceased on site 4/1/21 and 12/01/21 post storm events 	Minimal impact on the wider biodiversity occurred due to this non-compliance
21			No loss of sensitive vegetation resulting from Imperial's activities	Compliant	<ul style="list-style-type: none"> No clearing undertaken beyond approved area. No vegetation loss outside of approved cleared areas. 	Not Applicable
22	Bushfire Prevention <ul style="list-style-type: none"> Maintain a natural fire regime of the region Protection of public, private infrastructure and equipment 	<ul style="list-style-type: none"> Minimise the risk of causing bushfires from Imperial's activities Minimise impacts on environmental habitat and fauna, soil erosion, impacts on stakeholders, impacts on culturally significant sites, public infrastructure, and community lands Prevent accidental fire risk and ensure safe storage of chemicals 	Successful fire management will be indicated by having no uncontrolled fires occurring as a result of Imperial's drilling activities	Compliant	No uncontrolled fires occurring because of Imperial's drilling activities	Not Applicable
23	Air Quality Protection Measures <ul style="list-style-type: none"> Rural air environment with qualities conducive to suitability for the life, health and wellbeing of humans and ecosystems 	<ul style="list-style-type: none"> Minimise environmental nuisance due to dust for sensitive receptors resulting from Imperial's activities Minimise greenhouse gas emissions 	No complaints regarding dust/air quality	Compliant	No complaints on the complaints register	Not Applicable
24			Amicable resolution of complaints.	Compliant	No complaints on the complaints register	Not Applicable
25	Traffic and Transport Management <ul style="list-style-type: none"> Rural air environment with qualities conducive to suitability for the life, health and wellbeing of humans and ecosystems 	<ul style="list-style-type: none"> Minimise environmental nuisance due to dust for sensitive receptors resulting from Imperial's activities Minimise greenhouse gas emissions 	An absence of issues raised by the community as indicator for successful communication	Compliant	<ul style="list-style-type: none"> No complaints on the complaints register. Ongoing consultation with community members has found no issues raised. 	Not Applicable
26			No unresolved complaints	Compliant	No complaints on the complaints register	Not Applicable
27			The community is highly consulted with and all comments provided are assessed and those viable implemented	Compliant	<ul style="list-style-type: none"> Ongoing consultation with community members has found no issues raised. No complaints on the complaints register 	Not Applicable
28			High level of satisfaction by the community	Compliant	<ul style="list-style-type: none"> Ongoing consultation with community members has found a high level of satisfaction with Imperial's operations. No complaints on the complaints register 	Not Applicable

Row	Environmental Values	Environmental Outcome	Environmental Performance Standards	Compliance Status	Evidence	Environmental harm or Impact
29			No vehicular accidents.	Compliant	<ul style="list-style-type: none"> No vehicular accidents on the incident register 	Not Applicable
30	Community Impact Minimisation • Livelihood and well-being of local communities and towns	<ul style="list-style-type: none"> Minimise impacts upon environmental values of the local community Minimise impacts on cultural heritage Minimise safety risks to the public and other third parties Maintain and enhance partnerships with the local community, including using local contractors No loss to the aesthetic or enjoyment factor for the community 	An absence of issues raised by the community as indicator for successful communication	Compliant	<ul style="list-style-type: none"> No complaints on the complaints register. Ongoing consultation with community members has found a high level of satisfaction with Imperial's operations. 	Not Applicable
31			No unresolved complaints	Compliant	<ul style="list-style-type: none"> No complaints on the complaints register 	Not Applicable
32			The community is highly consulted with and all comments provided are assessed and those viable implemented	Compliant	<ul style="list-style-type: none"> The community is highly consulted with as per the ongoing Imperial stakeholder consultation log. No complaints are on the complaints register. Ongoing consultation with community members has found a high level of satisfaction with Imperial's operations. 	Not Applicable
33			High level of satisfaction by the community	Compliant	<ul style="list-style-type: none"> Ongoing consultation with community members has found a high level of satisfaction with Imperial's operations. 	Not Applicable
34			No vehicular accidents	Compliant	<ul style="list-style-type: none"> No vehicular accidents on the incident register 	Not Applicable
35			No off-site release of contamination from road corridors.	Compliant	<ul style="list-style-type: none"> No incidences of off-site release of contamination from road corridors on the complaints or incident register 	Not Applicable
36	Cultural Heritage and Sacred Site Preservation • Maintain cultural heritage values of the region, both Indigenous and non-Indigenous	<ul style="list-style-type: none"> Avoid disturbance of or damage to Aboriginal or cultural heritage artefacts or Sacred Sites Minimise impacts upon or disruption to activities of Indigenous stakeholders in culturally significant areas Ensure adequate background information and training is provided to employees and contractors working in culturally significant areas 	No incidences of disturbance of archaeological sites or sites of cultural significance	Compliant	<ul style="list-style-type: none"> No incidences of disturbance of archaeological sites or sites of significance on the complaints or incident register 	Not Applicable



Row	Environmental Values	Environmental Outcome	Environmental Performance Standards	Compliance Status	Evidence	Environmental harm or Impact
		<ul style="list-style-type: none"> • Ensure that the health and safety of exploration workers and the community is not compromised through management of cultural and environmental awareness 				

2.3 Compliance with Mandatory Reporting Requirements

Table 5 demonstrates Imperial’s compliance with reporting requirements in The Code of Practice: Onshore Petroleum Activities in the Northern Territory (The Code) and Imperial’s compliance with reporting requirements under the Petroleum (Environment) Regulations 2016 (NT) schedule 1, item 11(2), which requires all information required to be recorded, monitored, or reported has been provided. Where relevant, Imperial has also confirmed that all records, monitoring or required reporting under the Petroleum (Environment) Regulations 2016 (NT)² has been provided to DEPWS or the relevant NTG agency.

Table 5 - Compliance with Mandatory Reporting Requirements

No	Reference	Requirement	Compliance Status	Evidence
1	The Code cl A.3.5	Geospatial information depicting areas cleared is to be provided to the Minister.	Compliant	Geospatial Files sent to DEPWS on 30/06/2020
2	The Code cl A.3.6 (b)	Weed management plan developed as part of the EMP must provide for ongoing weed monitoring.	Compliant	The following Weed Management Plans were developed in conjunction with the DEPWS, Weed Management Branch, Onshore Petroleum Weed Management Officer. See Appendix 6 of the approved EMPs IMP2-6.1 and, IMP2-04
3	The 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	A bushfire Management Plan was developed as part of the Exploration Program and is provided in Appendix 10 of the approved EMPs IMP2-6.1 and, IMP2-04.
4	The Code cl A.3.9(c) The 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 as per section 7.3 of the approved EMP IMP2-6.1 and EMP IMP2-04 Table 33. Rehabilitation and Closure Plan Management Environmental Actions and Monitoring Requirements outlines the timing of the commencement. Decommissioning is to commence within 12 months of the site/infrastructure closure.
5	The 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): a) total volume of hydraulic fracturing fluid pumped, b) quality of water used (tested for analytes in section C.8 of The Code. Analyses do not need to be repeated if the same water source is used for multiple stages) and typical and maximum concentrations of chemicals or other substances used	N/A	Not applicable, no Hydraulic Fracturing was undertaken as part of this operation.
6	The 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.	N/A	Not applicable, no venting was undertaken as part of this operation.
7	The 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 (WBIV) report to DITT.	Compliant	The WBIV was submitted to DITT on the 25/11/2020.
8	The 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	N/A	Not Applicable, the Carpentaria-1 well was suspended at the end of operations not decommissioned.
9	The Code cl B.4.17.2(d)	Any guidelines published by the Northern Territory Government from time to time relating to reporting and data submission, and groundwater monitoring data standards must be followed.	Compliant	Imperial followed the following guidelines: <ul style="list-style-type: none"> • NT Land Clearing Guidelines (LCG), 2019 • NT DITT Onshore Oil and Gas Guiding Principles

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

No	Reference	Requirement	Compliance Status	Evidence
				<ul style="list-style-type: none"> • Draft Guideline for the preparation of an Environmental Management Plan under the Petroleum (Environment) Regulations (draft Guidelines) (Northern Territory Government, 2019) • International Erosion Control Association Australasia: Erosion and Sediment Control Guidelines IECA 2008 • Guidelines for Assessment of Impacts on Terrestrial Biodiversity. • Guidelines for the Preparation of an Economic and Social Impact Assessment. • Guideline Dep't of Health Environmental Health Guidelines for Private Water supplies January 2012 • Environmental Assessment Guidelines – Development proposals submitted under the Planning Act. • APPEA Environmental Incident Database Guidelines, November 2001 • Australian Petroleum Production and Exploration Association (APPEA) Code of Conduct and Environmental Practice (2008). • Vegetation Retention Technical Note No. 12 Erosion and Sediment Control Guidelines. DLRM • Clearing Methodology Technical Note No. 18 Erosion and Sediment Control Guidelines DLRM • NT Petroleum (Environment) Regulations 2019: Explanatory Guide • Code of Practice: Petroleum Activities in the Northern Territory (May 2019) • NT EPA Environmental Factors and Objectives (NT EPA, 2018)
10	The 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	The Wastewater Management Plan under Section 7.5 of EMP IMP2-6.1 and EMP IMP2-04 include a wastewater Management Framework and monitoring, management, and reporting requirements in accordance with the Wastewater Management Plan (Appendix 13 of EMP IMP2-6.1 and EMP IMP2-04) and Spill Management Plan (Appendix 18 of EMP IMP2-6.1 and Attachment 3 of EMP IMP2-04)
11	The 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	N/A	No Wastewater has left site.
12	The 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	Appendix 13 of EMP IMP2-6.1 and IMP2-04 is the Wastewater Management Plan. Under section 6.3.3, titled wildlife, and human interaction the plan includes for monitoring and reporting against the effectiveness of the measures for the mitigation of interaction with wildlife, stock, and human receptors with wastewater.
13	The Code cl D.4.3.2(f)	If fixed monitoring shows statistically significantly higher methane levels compared to the usual levels measured at the site, the operator must undertake an investigation to determine the source of the higher methane levels and, if necessary, rectify the leak or induced natural seepage. A written report detailing the levels of methane measured, the duration of the unusual readings and the results of the investigation (including remedial actions) must be submitted within one month of the significantly higher-level methane event being detected.	N/A	Not Applicable, this item is not applicable to the scope of the AEPR. This condition is associated with production and not exploration.
14	The Code cl D.5.9.2(c)	Emissions from exploration, well construction (including during flowback) and workovers must be measured, and reports submitted. These emissions should be measured using methods consistent those specified under the National Greenhouse and Energy Reporting (Measurement) Determination 2008. Other methods may be used if approved in an EMP.	Compliant	Emissions reported on 02/06/2021 by Imperial. The emissions were measured using methods consistent those specified under the EMP and the National Greenhouse and Energy Reporting (Measurement) Determination 2008.
15	The 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	Not Applicable, this EMP included no gas processing or other downstream facility.
16	Reg 14	A current EMP remains in force until the interest holder notifies the Minister the activity is no longer being carried out and all of the environmental outcomes and obligations under the plan have been	Compliant	The Current EMP remains in force

No	Reference	Requirement	Compliance Status	Evidence
		met, and the Minister advises the interest holder the notice is accepted, and the plan ceases to be in force.		
17	Schedule 1, item 9(2) EMP s9 Stakeholder Engagement	Interest holders are required to conduct future engagement with stakeholders, in accordance with the description in the EMP.	Compliant	EMP conditions met. Imperial has undertaken prior, during and post consultation with stakeholders and continues to meet with stakeholders. Post operational on country meeting was had with Traditional Owners the week starting 9 November 2020. No objections or issues was raised from this interaction. Pastoralist interactions ongoing.
18	EMP IMP2-6.1 and IMP2-04 s8.8 Incident Reporting 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	Not Applicable as no reportable incidents occurred.
19	EMP IMP2-6.1 and IMP2-04 s8.8 Incident Reporting Reg 34	Reports on reportable incidents are to be provided to DEPWS as soon as practicable and within 3 days of the event occurring. A final report must be provided to DEPWS within 30 days after remediation/clean-up of the affected area.	N/A	Not Applicable as no reportable incidents occurred.
20	EMP IMP2-6.1 and IMP2-04 s8.8 Incident Reporting 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).	Partially Compliant	This item has been marked as partially compliant as reports were not submitted. This was because there were no recordable incidents to report on. The common understanding of Regulation 35 developed between DEPWS and Imperial has changed and now requires Imperial to submit reports even if no recordable incidents have occurred. Due to this development, there were no Quarterly reports submitted for the periods of 1 January to 31 March 2020, and 1 April to 30 June 2020 The Quarterly Recordable Incident Reports as follows were all submitted on time: 2020-21 Quarter 1: July to September 2020 - 30/11/2020 2020-21 Quarter 2: October to December 2020 - 13/01/2021
21	Reg 37A	A report about flowback fluid from hydraulic fracturing must be provided to the Minister within 6 months of the flowback occurring.	N/A	Not Applicable as no Hydraulic Fracturing was undertaken.
22	Reg 37B	A report about produced water from hydraulic fracturing must be provided to the Minister within 6 months of the produced water being extracted.	N/A	Not Applicable as no Hydraulic Fracturing was undertaken.
23	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, drilling, or seismic activity.	Compliant	Emails were sent on commencement prior to operations to DEPWS, DITT and the landowners on the 12/08/2020 and again on the 1/10/2020.
24	EMP s8.9	Annual Weed Monitoring Report	Compliant	Annual weed monitoring inspection undertaken with DEPWS Beetaloo Weed Officer on the 9-12/03/2021. The resultant report was published in March 2021
25	Rehabilitation monitoring	Rehabilitation Monitoring Management Plan	N/A	Not Applicable as no rehabilitation was planned or undertaken.

3. Summary of Compliance

3.1. Overview of Compliance

Table 6 provides a summary of the results of the compliance assessment against the 73 total compliance items.

Table 6 - Overview of Compliance

Indicator	Number	Percentage
Compliant	52	71.2%
Partially Compliant	2	2.7%
Not Compliant	4	5.4%
Not Applicable	15	20.5%

Total of 73.

3.2. Overview of Items Found Not Compliant or Partially Compliant

The following sections describe:

- the specific compliance requirements not met for the reporting period.
- an analysis of the possible potential environmental harm or impact to environmental values resulting from non-compliance or partial 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

Table 3 demonstrates Imperial's compliance with the ministerial conditions set out in the EMP approval notice.

3.2.1.1 Description

Ministerial EMP2-6.1 Ministerial Condition 5

The interest holder must provide to DEPWS within six weeks of completion of drilling operations at the Carpentaria -1 well site, a laboratory analysis of drilling wastewater that may be contained in the drilling sump. The laboratory analysis must comply with the Code of Practice: Onshore Petroleum Activities in the Northern Territory, Table C.8: Wastewater chemistry analytes.

3.2.1.2 Analysis of Potential Environmental Harm or Impact

Ministerial EMP2-6.1 Ministerial Condition 5

No potential environmental harm or impact occurred as a result of this non-compliance.

3.2.1.3 Corrective Actions

Ministerial EMP2-6.1 Ministerial Condition 5

The initial time frame for submission of documentation was not met.

Through the Imperial Oil and Gas incident investigation process it was determined that the reason for the missing testing results was a miscalculation by the Laboratory as to the total sample volume required to run the tests, and therefore the size of the containers supplied to Imperial. This calculation has been updated in the Laboratories systems to ensure that the appropriate containers for sampling will be sent to the field in the future.

Environmental Outcomes and Performance Standards

Review of environmental outcomes and performance standards from the partial and non-compliances from Table 4.

Row number	Description	Analysis of Environmental Harm or Impact	Corrective Actions
2 No asset integrity failures	<ul style="list-style-type: none"> Mud sump liner tear, 15/10/2020 Fauna fence around the mud sump had fallen over 22/11/2020 and 17/01/2021. Mud sump liner holes, 15/10/2020 	No environmental harm or impact occurred due to these partial compliances.	<ul style="list-style-type: none"> The daily checklist for operations has been updated to include liner verification as an item for review. A copy of the checklist updated and used in the program was provided to DEPWS. Extra fencing panels were ordered and installed to re-enforce the fence line. This was done to ensure that the fence line would not fall over again in future storm events.
4 No incorrect storage and use of chemicals and hazardous materials	<ul style="list-style-type: none"> Mud sump liner missing freeboard marker, 15/10/2020 Geological building missing plumbing for sink, 15/10/2020 Pooling water near chemical storage area, 15/10/2020 Drilling mud and cuttings from shakers ended up on the ground, 15/10/2020. Secondary containment, drip trays not installed, 15/10/2020. 	No environmental harm or impact occurred due to these partial compliances.	<ul style="list-style-type: none"> Any issues with the liner were repaired. The pre-spud management checklist has been updated to include the explicit installation and mandatory review of installation prior to spudding of the well. Also included as an item to inspect in the daily check list. Operation staff inductions to give greater focus to the management, storage, and controls in place for chemical management. Daily site checks to include the review of chemical management and spills.

Row number	Description	Analysis of Environmental Harm or Impact	Corrective Actions
	<ul style="list-style-type: none"> Secondary containment, pre-emptive capture bunding not, installed 15/10/2020. Turkey's nest did not have required animal proof fencing when mud transfer occurred 25/02/2021 		<ul style="list-style-type: none"> Icebreakers to include the appropriate management of chemical management and spills. Educational and visual reminders to be posted in the operational workspaces to ensure that the management of chemicals and what to do to report and manage spills is an easily available and read material. Imperial's wastewater freeboard management plan was reviewed and updated to include a check of the fencing requirements of supplementary storage before pumping operations.
19 Monitoring EP187 area to minimise impacts to fauna habitat and sensitive vegetation	<ul style="list-style-type: none"> Weekly inspection not undertaken 22/11/2020, Weekly inspection not undertaken 7/02/2021 and 14/02/2021 due to wet weather access safety concerns. All other daily and weekly monitoring undertaken as planned. 	No environmental harm or impact occurred due to these partial compliances.	<ul style="list-style-type: none"> Due to the environmental weather patterns for EP187, it may not be possible for all weekly site inspections to occur if they cannot be undertaken in a safe and secure manner. To assist with remote site monitoring Imperial has upgraded its remote telemetry capability to include pond level telemetry in addition to the photographic telemetry system. Imperial contractors have trained up more inducted members of the 3rd party contractors' staff to undertake weekly site monitoring when the main contractor is unable to or is called away from undertaking these monitoring and reporting requirements
20 No native fauna impacts (injury or fatality).	Two avian fauna found deceased on site 4/1/21 and 12/01/21 post storm events	No impact on the wider biodiversity occurred due to this non-compliance	<ul style="list-style-type: none"> The immediate action undertaken by the Imperial was to remove the birds from the sump for identification and disposal. It was determined that no fauna of importance, endangered status or significance was impacted.

Regulatory Reporting

Table 5 demonstrates Imperial's compliance with reporting requirements in The Code of Practice: Onshore Petroleum Activities in the Northern Territory (The Code) and Imperial's compliance with reporting requirements under the Petroleum (Environment) Regulations 2016 (NT) schedule 1, item 11(2)

Description

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).

Analysis of Potential Environmental Harm or Impact

No potential environmental harm or impact occurred as a result of the recordable incident reports not being provided to DEPWS within 15 days after the 90-day reporting period.

Corrective Actions

Imperial has re-scheduled all quarterly reporting for all active EMPs to ensure that all quarterly reporting is undertaken.

3.3. Application of Lessons Learned Across Imperial Onshore Interests

Lessons learnt and applicable across Imperial operations include the following:

- Requirements of 3rd parties such as laboratories is to be clearly laid out and cross checked.
- Quarterly annual reporting is a requirement for all Active EMPs and should be reported on even if there are no incidences or active operations.
- The development of future EMP environmental outcomes and performance standards is to be worded in a way which achieves the merit of the outcome or standard but is not an over-reaching statement which causes non-environmental impact items to be caught as non-compliances.

The high level of reporting requirements from non-environmental impact focused outcomes results in the wasted resources of both DEPWS officers and Imperial staff.