

# Pluto Liquefied Natural Gas Development (Site B Option) Burrup Peninsula, Shire of Roebourne.

Date: March 2015

Status: Final

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## 1. INTRODUCTION

This Annual Compliance Report (ACR) is provided to the Western Australian Office of the Environmental protection Authority for the Pluto Liquefied Natural Gas Development (Site B Option) Burrup Peninsula, Shire of Roebourne under Ministerial Statement 757, as amended by Ministerial Statement 850. This report covers the reporting period from 1 January 2014 to end 31 December 2014.

This reporting period represents the first full year of licenced operation of the Pluto LNG Plant, which processes gas and liquids piped onshore from the offshore riser platform to produce LNG and condensate.

Licensed operation commenced from 1 August 2013 in accordance with Department of Environment Regulation (DER) (EP Act Part V) Licence L8752/2013/1 and continued through the reporting period.

## **1.1 Structure of this Document**

Section 2 of the ACR is a table that sets out the status of the Ministerial Statement conditions during the reporting period from 1 January 2014 to end 31 December 2014. Appendix 1 is a table that sets out the status of key actions contained within Environmental Management Plans.

This document is provided in accordance with the requirements of the Annual Audit Program approved by the DEC on 30 June 2008.

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# **AUDIT TABLE**

**Pluto LNG Project** 

Ministerial Statement 757 as amended by Ministerial Statement 850 Annual Compliance Report 2013

### MINISTERIAL CONDITIONS AND COMMENTS 2.

Audit Code	What action must be taken	Project phase	• To requirements of	Status <sup>1</sup> : January 2014 – December 2014
Subject	<ul> <li>How action must be taken and/or objective of action</li> <li>Objective</li> </ul>	<ul> <li>When action to be taken</li> <li>Where it is to be taken</li> </ul>	On advice from	
757:M1.1 Proposal Implementation	Evidence that action has been taken     Action Implement the proposal as documented and described in schedule     1 of this statement (Ministerial Statement 757) subject to the conditions and     procedures of this statement.     Objective To minimise environmental impact of the project.     Evidence Confirmed in Pluto LNG Project Ministerial Statement 757	Overall Ongoing	Minister for Environment	C The proposal is being implemented as documented in Schedu The plant was in licenced operation for the entire 2014 period Photos have been provided of the site in Annual Compliance
757:M2.1 Proponent Nomination and Contact Details	Compliance Report.         Action       The proponent for the time being nominated by the Minister for the Environment under sections 38(6) or 38(7) of the Environmental Protection Act 1986 (the Act) is responsible for the implementation of the proposal.         Objective       To ensure legal responsibility for the project rests with a nominated proponent.         Evidence       Confirmed in Pluto LNG Project Ministerial Statement 757 Compliance Report.	Overall Ongoing	Minister for Environment	C Woodside remains responsible for implementation of Min Environment.
757:M2.2 Proponent Nomination and Contact Details	Action Notify the Chief Executive Officer of the Department of Environment and Conservation (CEO) of any change of the name and address of the proponent for the serving of notices or other correspondence within 30 days of such change.         How In the event of change in address, notify DEC within 30 days of change.         Objective To ensure that the DEC is able to maintain contact with the proponent         Evidence Details of change of name/and or address.	Overall Ongoing	OEPA	NR Name and address of proponent remains the same as origina
757:M3.1 Time Limit of Authorisation	Action The proposal must be substantially commenced within 5 years of the date of publication of this statement. Objective To ensure that the project is implemented using the most recent information and technology available.	Overall Within 5 years	Minister for Environment	CLD Construction commenced on 15 October 2007. Proposal ha LNG Project Ministerial Statement 757 - 2008 Annual Compli
757:M3.2 Time Limit of Authorisation	Evidence       Pluto LNG Project Ministerial Statement 757 Compliance Report.         Action       Provide the CEO with written evidence which demonstrates that the proposal has substantially commenced on or before the expiration of 5 years from the date of this statement.         Objective       To ensure that the project is implemented using the most recent information and technology available.         Evidence       Confirmed in Pluto LNG Project Ministerial Statement 757	Overall Within 5 years	Minister for Environment	CLD Pluto LNG Project Ministerial Statement 757 - 2008 ACF commencement of the Project.
757:M4.1 Compliance Reporting	Compliance Report.         Action       Submit to the CEO an annual environmental compliance report relating to the previous twelve-month period, the first report to be submitted within 15 months after the commencement of operations and thereafter annually, unless required by the CEO to report more frequently.         Objective       To provide evidence that the proposal is being implemented as approved, and the relevant conditions and commitments are being met.         Evidence       Pluto LNG Project Ministerial Statement 757 Compliance Report to be submitted for the period of 15 October 2012 to end 31 December 2013 (and then calendar years). Content to include the "Evidence" listed in this audit table against each Ministerial Condition plus internal audit results.	Overall Annually Reported	OEPA	C This document completes this requirement for the 2014 period

<sup>1</sup> In accordance with Table 2 of the OEPA Post Assessment Guideline for Preparing an Audit Table dated August 2012, the following compliance status terms apply in this Report: C (compliant), CLD (completed), NR (not required at this stage), PNC (potentially non-compliant), NC (non-compliant) and IP (in process).

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edule 1. od under Licence L8752/2013/1 and L8752/2013/2. ce Reports for previous reporting periods. linisterial Statement 757 as nominated by the Minister for inal application. has been substantially commenced, as demonstrated in Pluto pliance Report (ACR). CR provided evidence which demonstrated the substantial riod of reporting

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<ul> <li>Audit Code</li> </ul>	What action must be taken	Project phase	• To requirements of	Status <sup>1</sup> : January 2014 – December 2014
<ul> <li>Subject</li> </ul>	How action must be taken and/or objective of action	When action to be taken	On advice from	
	Objective	Where it is to be taken		
	Evidence that action has been taken  Report to be submitted by 31 March each year.			
757:M4.2	Action The environmental compliance reports shall address each element	Overall	OEPA	C
Compliance Reporting	of an audit program approved by the CEO and shall be prepared and submitted in a format acceptable to the CEO.			Pluto LNG Project Annual Audit Program was submitted to DI program on 30 June 2008.
	<b>Objective</b> To provide evidence that the proposal is being implemented as approved, and the relevant conditions and commitments are being met.			This ACR follows the approved format.
	Evidence Audit Program.			
757:M4.3 Compliance	Action The environmental compliance reports shall: 1. be endorsed by signature of the proponent's Managing Director or a person, approved in	Overall	OEPA	c
Reporting	<ul> <li>writing by the CEO, delegated to sign on behalf of the proponent's Managing Director; 2. state whether the proponent has complied with each condition and procedure contained in this statement; 3. provide verifiable evidence of compliance with each condition and procedure contained in this statement; 4. state whether the proponent has complied with each key action contained in any environmental management plan or program required by this statement; 5. provide verifiable evidence of conformance with each key action contained in any environmental management plan or program required by this statement; 6. identify all non-compliances and non-conformances and describe the corrective and preventative actions taken in relation to each non-compliance or non-conformance; 7. review the effectiveness of all corrective and preventative actions taken; and 8. describe the state of implementation of the proposal.</li> <li>Objective To demonstrate compliance with Ministerial Conditions.</li> </ul>		0504	This Pluto LNG Project Ministerial Statement 757 ACR 2014 ft
757:M4.4	Action Make the environmental compliance reports required by Condition	Overall	OEPA	C
Compliance Reporting	<ul> <li>4-1 publicly available in a manner approved by the CEO.</li> <li><u>How</u> Environmental compliance reports to be made available in accordance with OEPA Post Assessment Guideline for Making Information Publicly Available (PAG 4) published August 2012.</li> <li><u>Objective</u> To ensure the public is kept informed.</li> <li><u>Evidence</u> Report available on the Woodside website or upon request.</li> </ul>	Annually		<ul> <li>Pluto LNG Project Ministerial Statement 757 ACR for 2008 to on the Woodside internet site;</li> <li><u>http://www.woodside.com.au/Our-Business/Pluto/Sustainability</u></li> <li>Pluto LNG Project Ministerial Statement 757 ACR 2008 to 201 Library of Western Australia, Karratha Public Library and Shire</li> <li>Pluto LNG Project Ministerial Statement 757 as amended by I public in accordance with the OEPA Post Assessment Guideli 2012. Specifically, the ACR was published on the Woodside internet site and This ACR will be published on the Woodside internet site and I</li> </ul>
757:M5.1	Action Submit a Performance Review report, every five years after the	Operation	EPA	NR
Performance Review	start of operations to the Environmental Protection Authority, which addresses: 1. the major environmental issues associated with implementing the project; the environmental objectives for those issues; the methodologies used to achieve these; and the key indicators of environmental performance measured against those objectives; 2. the level of progress in the achievement of sound environmental performance, including industry benchmarking, and the use of best available technology where practicable; 3. significant improvements gained in environmental management, including the use of external peer reviews; 4. stakeholder and community consultation about environmental performance and the outcomes of that consultation, including a report of any on-going concerns being expressed; and 5. the proposed environmental objectives over the next five years, including improvements in technology and management processes.	Every 5 years		The first Performance Review Report was provided to the Olyear period.
	How 5-yearly report will be submitted following commencement of operations. Objective To demonstrate compliance with Ministerial Conditions.			
	Evidence Submit 5-yearly Performance Review report to the EPA.		0.554	
757:M5.2 Performance Review	Action Make the Performance Review reports required by condition 5-1 publicly available in a manner approved by the CEO.	Operation Every 5 years	OEPA	C The 2007-2012 Performance Report was made publicly availa
	<b>How</b> Performance Review Reports to be made available in accordance with OEPA Post Assessment Guideline for Making Information Publicly Available (PAG 4) published August 2012.			http://www.woodside.com.au/Our-Business/Pluto/Sustainability

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DEC for comment on 28 May 2008. DEC approved the audit
I fulfils requirements of 757:M:4.3
to 2013 were made publicly available following submission,
ility/Pages/Environment.aspx
011 were also distributed to the DEC Perth Library, State ire of Roebourne offices as required.
y Ministerial Statement 850 ACR 2013 was distributed to the eline ' <i>Making information publicly available</i> ' published August internet site and provided to stakeholders upon request.
d provided to stakeholders upon request.
OEPA on 14 January 2013 for the 2007- October 2012 five
ilable following submission, on the Woodside internet site; ility/Pages/Environment.aspx
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Audit Code     Subject	<ul> <li>What action must be taken</li> <li>How action must be taken and/or objective of action</li> <li>Objective</li> <li>Evidence that action has been taken</li> </ul>	<ul> <li>Project phase</li> <li>When action to be taken</li> <li>Where it is to be taken</li> </ul>	To requirements of     On advice from	Status <sup>1</sup> : January 2014 – December 2014
	<b>Objective</b> To ensure the public is kept informed.			
	Evidence Report available on the Woodside website or upon request.			
757:M6.1 Marine Impacts	<ul> <li>Action Undertake all works to ensure that the Limits of Coral Loss, specified in Schedule 2 (of Ministerial Statement 757), associated with each of the designated Impact Criteria Zones described and defined in figure 3, are not exceeded.</li> <li>How - Implement Best Environmental Practice (BEP) techniques; - Implement the Dredging and Spoil Disposal Management Plan (DSDMP) specified Water Quality Monitoring Program to identify any decline in water quality and allow contingency management actions to be applied; - Implement the DSDMP specified Coral Health Monitoring Program to identify any net coral mortality and allow contingency management actions to be applied.</li> <li>Objective To minimise impact of dredging on the marine environment.</li> <li>Evidence Ongoing provision of Water Quality Reports and Coral Health Reports to the Pluto Dredge Environmental Management Group on a timely basis for review and overview of status. Results of the above captured in DEMG minutes; Compliance reports to the DEC Compliance Monitoring</li> </ul>	Construction During Construction	Minister for Environment	CLD This condition was met during the 2010 reporting period and n Dredging was completed on 21 May 2010.
	Section if Level 1, 2 or 3 trigger levels are exceeded.			
757:M6.2 Compliance Reporting	Action If any Level 1 Coral Condition Management Trigger Criterion referred to in Schedule 3 is exceeded, within 12 hours following detection of the exceedance, notify the CEO and provide details of the actions being taken to reduce turbidity generating activities which are effecting that site; and within 24 hours of the criterion being exceeded, implement management actions to keep impacts within approved limits specified in schedule 2. How Management actions taken are dependent on circumstances (dredge location, meteorological conditions, tide etc.). Appropriate contingency actions will be selected from those specified in the DSDMP in consultation with the DEMG.	Construction	DEC	CLD This condition was met during the 2010 reporting period and n
	<b>Evidence</b> Compliance reports to the DEC CEO in the event of a Schedule 3 exceedance; DEMG minutes outlining actions taken and assessment of			
757:M6.3	adequacy.           Action         If any Level 2 Coral Condition Management Trigger Criterion	Construction	DEC	CLD
Compliance Reporting	referred to in schedule 3 is exceeded at any monitoring site.; 1. Immediately suspend all dredging and dredge spoil activities that contributed to the exceedance; 2. Provide a report to the CEO on the measures to be implemented to keep impacts below the limits in schedule 2, prior to recommencing any dredging and dredge spoil activities that contributed to the exceedance which could affect that site; and 3. Provide a report, on advice of the Dredge Environmental Management Group, defining marine water quality conditions which will be met for the endorsement of the Minister for the Environment on advice of the CEO to allow for the recommencement of dredging ensuring that mortality and / or impacts will not exceed the limits specified in schedule 2.			This condition was met during the 2010 reporting period and n
	<ul> <li>How The Coral Health Monitoring Program will be maintained with the results made immediately available to the Dredging</li> <li>Environmental Coordinator and Dredging Senior Environmental Advisor. Should an exceedance be identified, the process specified by MC6-3 will be implemented.</li> <li>Objective To minimise impact of dredging on the marine environment.</li> </ul>			
	<b>Evidence</b> Notification reports to the CEO in the event of a Schedule 3 exceedance; Investigation reports analysing the exceedance; Reports required by 2 and 3 of MSt: 6.3.			
757:M6.4 Compliance Reporting	Action If any Level 3 Coral Condition Management Trigger Criterion referred to in schedule 3 is exceeded at any monitoring site, 1. Immediately suspend all dredging and dredge spoil activities that contributed to the exceedance; and 2.Provide a report to the Minister for the Environment	Construction	Minister for Environment	CLD This condition was met during the 2010 reporting period and n

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I no further action is required.

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<ul> <li>Audit Code</li> <li>Subject</li> </ul>	<ul> <li>What action must be taken</li> <li>How action must be taken and/or objective of action</li> <li>Objective</li> <li>Evidence that action has been taken</li> </ul>	<ul> <li>Project phase</li> <li>When action to be taken</li> <li>Where it is to be taken</li> </ul>	• To requirements of • On advice from	Status <sup>1</sup> : January 2014 – December 2014
	regarding the non-compliance with condition 6-1.			
	How As per Ministerial Condition 6.3 above.			
	<b>Objective</b> To minimise impact of dredging on the marine environment.			
	<b>Evidence</b> Investigation reports analysing the exceedance. Compliance reports to the Minister for the Environment regarding the Schedule 3 exceedance.			
757:M6.5 Marine Impacts	<ul> <li>Action Prior to commencement of turbidity-generating activities, prepare a Dredge Impact Management Plan for dredge activities which demonstrates that the activities can achieve the management targets for the Marine Park as set out in the Indicative Management Plan for the Proposed Dampier Archipelago Marine Park and Cape Preston Marine Management Area, and which demonstrates that management strategies will be employed which will minimise impacts on benthic habitats and communities (including corals) outside the Marine Park, to the requirements of the Minister on advice of the Environmental Protection Authority. Further details on the content required in this Plan are provided in schedule 4.</li> <li>How DSDMP (DIMP) developed in consultation with key stakeholders (including DEC, DPA, DoF). Address the following: 1. comprehensive monitoring of water quality, sediment deposition, and coral condition; 2. best practice dredge procedures; 3. selection of a suitable location for the off-shore spoil ground which demonstrably does not cause impacts on the Marine Park; 4. optimum timing of works with respect to sea and meteorological conditions; 5. establishment of conservative 'stop work' trigger levels; 6. identification and temporal definition of key ecological windows when dredging activity will not occur, such as during coral spawning periods; and 7. contingency plans. Further details on the content required in this Plan are provided in schedule 4.</li> <li>Objective To minimise impact of dredging on the marine environment.</li> </ul>	Design	Minister for Environment EPA	CLD The Dredge and Spoil Disposal Management Plan (DSDMP) was revised in August 2009 (Revision 9) to im Exceedance Investigation Protocol approved by DEC on 10 these approved changes incorporated on 25 November 2009 of
	Evidence Dredge Impact Management Plan.			
757:M6.6 Marine Impacts	Action Implement the Dredge Impact Management Plan required by Condition 6-5.	Construction	Minister for Environment	CLD
	<ul> <li>How Communicate Legal and Other Requirements to responsible parties (training); Implement an internal audit program involving six monthly audits and Verification Plans for application/review of contractors.</li> <li>Objective To minimise impact of dredging on the marine environment.</li> <li>Evidence Internal audit schedule, audit criteria, and evidence of</li> </ul>			This condition was met during the 2010 reporting period and n
757:M6.7	completion. DEMG minutes. Action Make the Dredge Impact Management Plan required by condition	Construction	DEC	CLD
Marine Impacts	<ul> <li>6-5 publicly available in a manner approved by the CEO.</li> <li>How Dredge Impact Management Plan to be made available in the following locations: - the Local Government Authority (2 copies), Battye Library (2 copies); Karratha Public Library (2 copies); and DEC Library Perth (2 copies) - 1 hard copy, 1 cd copy) - Copies also to be freely available for download from the Woodside internet site, (availability and locations of the Dredge Impact Management Plan are to be advertised in the Local newspaper Public Notices).</li> <li>Objective To ensure that the public is kept informed.</li> </ul>			This condition was met during the 2008 reporting period. Sinc complete, the DSDMP has been removed from the Woodside
757:M6.8	<b>Evidence</b> Evidence of advertisement of Dredge Impact Management Plan. Action Resource a Dredge Environmental Management Group for the	Overall	Minister for Environment	CLD
Marine Impacts	duration of the marine works and for such time before and after the marine works so as to carry out its function, to the requirements of the Minister for the Environment. How The role of the Dredge Environmental Management Group is to provide the Minister for the Environment, the Department of Environment and Conservation and the proponent with advice including, but not limited to: 1. the marine management plans; 2. the marine monitoring programs; 3.	For the duration of the Marine Works and for such time before and after the marine works so as to carry out its function.		The final DEMG Meeting was held on 12 May 2010. Fol Workshop was held on 31 August 2010. The intention of this information and experience gained during the Pluto dre recommendations has been provided to the OEPA. The Minister for Environment and Water acknowledged that the

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) was approved by DEC on 20 March 2008 (DEC ref: 4610).
incorporate minor operational changes to the Water Quality 0 August 2009. The DSDMP was re-submitted to DEC with 9 (Woodside ref: PLU/GOV/00422).
I no further action is required.
nce dredging and the dredge monitoring programme are now le internet site.
following this a DEMG Conclusion and Recommendations is workshop was for DEMG members to summarise valuable dredging program. A final DEMG dredging report and
the DEMG has completed its function.
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<ul> <li>Audit Code</li> <li>Subject</li> </ul>	<ul> <li>What action must be taken</li> <li>How action must be taken and/or objective of action</li> <li>Objective</li> <li>Evidence that action has been taken</li> </ul>	<ul> <li>Project phase</li> <li>When action to be taken</li> <li>Where it is to be taken</li> </ul>	<ul> <li>To requirements of</li> <li>On advice from</li> </ul>	Status <sup>1</sup> : January 2014 – December 2014
	<ul> <li>impacts on marine fauna and flora, including corals; 5. reporting; 6. new management measures and 7. Level 1 and 2 Coral Condition Management Trigger Criteria for Zone C as required in Schedule 3. The membership of the Dredge Environmental Management Group may include: an independent chair appointed by the Minister for the Environment on advice from the CEO, and experts appointed by the Minister for the Environment, and the following may nominate one member each; the Department of Fisheries; the Dampier Port Authority; the Department of Environment and Conservation; and the proponent.</li> <li><b>Objective</b> To minimise impact of dredging on the marine environment.</li> <li><b>Evidence</b> Letters of appointment for the DEMG Chair and members from the Minister for the Environment. DEMG minutes.</li> </ul>			
'57:M6.9 Marine Impacts	<ul> <li>Action Prepare and submit to the Department of Environment and Conservation, a scope of Baseline Marine Habitat Survey document to the requirements of the Minister for the Environment. The objective of this document is to specify procedures to quantitatively determine the predevelopment baseline distribution, community composition and health of benthic marine habitats (see note below) within the area which may be affected by any works associated with the proposal. Note: "Marine habitats" includes hard and soft coral communities, sponge communities, seagrass and macro-algal communities.</li> <li>How Address the following: 1. survey methods; 2. location and establishment of survey sites; 3. timing and frequency of surveys; 4. habitat classification schemes; 5. treatment of survey data; and 6. mapping methodologies.</li> <li>Objective To determine the baseline distribution, community composition and health of benthic marine habitats within the area.</li> <li>Evidence DEC approval/endorsement of the Scope of Baseline Marine Habitat Survey document.</li> </ul>	Design Prior to commencement of marine works	Minister for Environment DEC	CLD This condition was met during the 2008 reporting period and no further a
57:M6.10 Compliance Reporting	<ul> <li><u>Action</u> Provide an initial report on a detailed survey of coral habitat and communities, and a map showing the general distribution of other benthic habitat types (including soft corals, sponges, algal reef communities) within and adjacent to the area of predicted effects of dredging to the Department of Environment and Conservation at least one month prior to the commencement of dredging.</li> <li><u>Objective</u> To minimise impact of dredging on the marine environment.</li> <li><u>Evidence</u> Initial report on detailed survey of coral habitat and communities and map showing general distribution of other benthic habitat types.</li> </ul>	Design 1 month prior to dredging construction	DEC	CLD This condition was met during the 2008 reporting period and no further a
57:M6.11 Compliance Reporting	<ul> <li>Action Conduct a comprehensive field survey, consistent with the approved Scope of Baseline Marine Habitat Survey document, and provide a report of the results to the Department of Environment and Conservation within twelve months following commencement of any marine works associated with the proposal.</li> <li>How This report shall 1. contain spatially accurate (e.g. rectified and geographically referenced) maps showing the locations and spatial extent of the different marine habitat types and percentage cover of each component of their associated benthic communities including corals, macro algae, non-coral macro-invertebrates and seagrass: 2. record the existing hard and soft corals, macro-algae, non-coral benthic macro invertebrates, seagrass and demersal fish observed within the communities; 3. record the population structure, as size class frequency distributions, and other population statistics, such as recruitment, survival and growth, of key hard coral species; 4. evaluate baseline pre-development health of the benthic communities at representative survey sites; and 5. include data provided in an appropriate GIS data set format.</li> </ul>	Construction Within 12 months of commencement of dredging works	DEC	CLD The final report to address specific requirements of Condition 6-11 was s ref: PLU/GOV/00154). DEC acknowledged receipt of the report on 25 Nor

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on 6-11 was submitted to DEC on 21 November 2008 (WBPL port on 25 November 2008 (DEC reference: DEC0652-04).

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Audit Code     Subject	<ul> <li>What action must be taken</li> <li>How action must be taken and/or objective of action</li> <li>Objective</li> <li>Evidence that action has been taken</li> </ul>	<ul> <li>Project phase</li> <li>When action to be taken</li> <li>Where it is to be taken</li> </ul>	To requirements of     On advice from	Status <sup>1</sup> : January 2014 – December 2014
	<b>Evidence</b> Report on the results of the comprehensive field survey that is consistent with the Scope of Baseline Marine Habitat Survey document.			
757 as amended by 850:M6.12 Compliance Reporting	Action Within three months following completion of the marine works, the proponent shall repeat the evaluation of the health of benthic communities, at the representative survey sites established by conditions 6-11(4) and 6-11(5), to the requirements of the OEPA.	Post-construction Within 3 months of dredging completion	DEC	CLD Marine works were completed in mid-July 2010 and post benth
	<b>Objective</b> To minimise impact of dredging on the marine environment.			
757 as amended by 850:M6.13 Marine Impacts	<b>Evidence</b> See M6.14. Action Repeat the survey required by condition 6-12, at the same time of the year annually for three years, or for a lesser number of years as determined by the CEO of the OEPA, on advice of the Department of Environment and Conservation and the Department of Fisheries. How A Post-Dredging Marine Habitat Survey shall be undertaken in	Post-construction At the same time of the year annually for 3 years, or until such time as determined by the Minister for Environment	Minister for Environment	CLD Marine works were completed in mid-July 2010 and post benth The findings of the post benthic habitat surveys show no patter
	accordance with the approved Scope of Baseline Habitat Survey. Objective To minimise impact of dredging on the marine environment.			Based on the post benthic habitat survey results and comp advice from the DEC, Department of Fisheries and OEPA is the no longer required.
	Evidence See M6.14.			The General Manager of the OEPA has acknowledged that this required; correspondence received 8 September 2011 (OEPA2
757 as amended by 850:M6.14 Compliance Reporting	<b>Action</b> Within three months following completion of each of the surveys required by conditions 6-12 and 6-13, the proponent shall report the findings of each of the surveys to the OEPA and the Department of Environment and Conservation.	Post-construction Within 3 months of dredging completion and annually for a following 3 years	DEC	CLD The post benthic habitat survey results were submitted to DE this condition.
	<b>Objective</b> To report progress of subsequent surveys.			
	<b>Evidence</b> 1) Findings of Post-Dredging Benthic Marine Habitat Survey initially at least 3 months following completion of marine works, then 2) Within three months following completion of each of the surveys required under condition 6-13.			
757:M7.1 Deepwater Marine Outfall	Action If a marine wastewater discharge is required by the proponent, the proponent shall construct the associated infrastructure so that wastewater is discharged into water of depth greater than 30 meters outside the Dampier Archipelago, unless otherwise determined by the CEO under Part V of the Act.	Overall	Minister for Environment	CLD Works Approval W4466/2008/1 for the Pluto LNG Project ef which provides approval to Woodside to construct the effluent Corporation's Multi-User Brine Reuse Line (MUBRL) for the p of the effluent treatment plant and the tie-in to the MUBRL is co
	<b>How</b> A Marine Treated Wastewater Discharge Management Plan will be developed and the appropriate infrastructure constructed to accommodate wastewater discharge.			Commissioning of the effluent treatment plant was carried out MUBRL managed in line with the approved Marine Treated W and effluent treatment commissioning plans approved under W
	<b>Objective</b> To minimise the environmental impact associated with wastewater discharge.			A construction compliance document was issued to DEC on 21 Works Approval W4466/2008/1 and DEC provided a compliance
	<b>Evidence</b> DEC Works Approval - if Marine Wastewater discharge is required, evidence that wastewater discharge structure is discharging into water of depth greater than 30 metres.			The effluent treatment plant is Licensed under the Enviror L8752/2013/1 from 1 August 2013. Management of marine di the Treated Wastewater Management Plan (Refer to 757:M7.2)
757:M7.2 Deepwater Marine Outfall	Action Prior to construction of the wastewater treatment plant or the marine outfall, whichever is the sooner, the proponent, in consultation with the Department of Environment and Conservation, shall prepare a Marine Treated Wastewater Discharge Management Plan to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority.	Design	Minister for Environment EPA, DEC	CLD The Marine Treated Wastewater Discharge Management Pla reference: DEC 4776). Woodside undertook an update to the Treated Wastewater
	How Address the following: 1. determination of the effect of wastewater flow rate on the number of dilutions the diffuser is predicted to achieve within the zone of initial dilution at maximum flow rate; 2. setting of environmental values, environmental quality objectives and levels of			(Revision 4) to incorporate minor amendments made based on commissioning and proving phase. Revision 4 of the plan was provided to the OEPA for informati management framework and revision process outlined in the
	ecological protection to be achieved around the outfall; 3. identification of a range of feasible and practical management options and the environmental quality indicators and associated "trigger" levels for the implementation of remedial, management and/or preventative actions to protect the water quality and the marine environment based on the guidelines and			Licence revisions L8752/2013/1 and L8752/2013/2.

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thic habitat surveys commenced in mid-October 2010.

thic habitat surveys commenced in mid-October 2010.

ern of change consistent with a dredging impact.

prehensive monitoring program during the marine works, that further post dredging surveys under Condition 6-13 are

nis condition has been met and future surveys are no longer A2011/000104).

DEC, Department of Fisheries and the OEPA as required by

effluent treatment plant was issued on 3 September 2009 nt treatment plant and a tie-in from this facility to the Water purpose of disposing treated wastewater. The construction complete.

out in the 2011-2012 reporting period with discharges to the Wastewater Discharge Management Plan (Refer 757:M7.2) Works Approval W4466/2008/1.

21 March 2011 in line with the Pluto Effluent Treatment Plan nce statement on 1 April 2011.

onmental Protection Act 1986, Part V operating Licence discharges continues in line with the framework outlined in 2)

Plan was approved by the DEC on 18 March 2009 (DEC

Discharge Management Plan (TWMP) during 2013/2014 on operating experience (including testing results) during the

ation on 20 March 2014. Revision 4 remains in line with the the approved Revision 3 of the plan, and DER Operating

<ul> <li>Audit Code</li> <li>Subject</li> </ul>	What action must be taken     How action must be taken and/or objective of action	<ul> <li>Project phase</li> <li>When action to be taken</li> </ul>	To requirements of     On advice from	Status <sup>1</sup> : January 2014 – December 2014
Subject	Objective	• Where it is to be taken		
	Evidence that action has been taken			
	recommended approaches in ANZECC/ARMCANZ (2000); 4. Whole Effluent Toxicity (WET) testing of wastewater, consistent with ANZECC			
	requirements, and addressing the items in schedule 5 (attached); 5.			
	redesign and incorporation of a new diffuser, including timelines, in the			
	event that the WET testing results show that the original wastewater diffuser is not achieving sufficient dilutions to meet a high level of ecological			
	protection at the edge of the mixing zone; 6. verification of diffuser			
	performance in terms of achieving the required number of initial dilutions			
	under low energy/calm meteorological and sea-state conditions to achieve a high level of ecosystem protection (99% species protection) at the edge			
	of the approved mixing zone; 7. A monitoring program to permit			
	determination of whether the water quality objectives are being met; and 8. Protocols and schedules for reporting performance against the			
	Environmental Quality Objectives using the environmental quality trigger			
	levels.			
	Objective The objective of this Plan is to ensure that the discharge of			
	treated wastewater is managed to achieve simultaneously the following			
	Environmental Quality Objectives as described in the document, Pilbara Coastal Water Quality Consultation Outcomes: Environmental Values and			
	Environmental Quality Objectives (Department of Environment, March			
	2006): Maintenance of ecosystem integrity with spatially-assigned levels of			
	protection; Maintenance of aquatic life for human consumption assigned to all parts of the marine environment surrounding the ocean outlet;			
	Maintenance of primary contact recreation values assigned to all parts of			
	the marine environment surrounding the ocean outlet; Maintenance of			
	secondary contact recreation values assigned to all parts of the marine environment surrounding the ocean outlet; Maintenance of aesthetic values			
	assigned to all parts of the marine environment surrounding the ocean			
	outlet; Maintenance of cultural and spiritual values assigned to all parts of the marine environment surrounding the ocean outlet; and Maintenance of			
	Industrial Water Supply.			
57:M7.3	Evidence Marine Treated Wastewater Discharge Management Plan. Action Implement the Marine Treated Wastewater Discharge Management	Operation	Minister for Environment	C
Deepwater	Plan required by condition 7-2.			
Marine Outfall	Objective To minimise environmental impacts and apply relevant			Implementation continued under Licensed operation during the reportir framework outlined in the Marine Treated Wastewater Discharge Manage
	technology to the project.			
	<b>Evidence</b> Details in Appendix 1 of the ACR.			To reflect the most up to date information regarding the management of t implemented during the operational phase, Revision 4 of the TWMP w
	Evidence Details in Appendix 1 of the ACK.			made based on operating experience (including testing results) durin
				phases.
				Revision 4 of the plan was provided to the OEPA for information on 20 I
				management framework and revision process outlined in the approve
				Licence revisions L8752/2013/1 and L8752/2013/2.
57:M7.4 Deepwater	<b>Action</b> Make the Marine Treated Wastewater Discharge Management Plan required by condition 7-2 publicly available.	Construction Construction	Minister for Environment	C
Marine Outfall				The revised TWMP is publicly available on the Woodside internet site: (htt
	<b>How</b> Marine Treated Wastewater Discharge Management Plan to be made available in accordance with OEPA Post Assessment Guideline for Making			Business/Pluto/Sustainability/Pages/Environment.aspx)
	Information Publicly Available (PAG 4) published August 2012.			Any future revisions to the plan will be published on the Woodside interne
	Objective To ensure the public is kept informed.			
	Evidence Management Plan available on the Woodside website or upon request.			
'57:M7.5	Action Prior to submitting a Works Approval application for the wastewater	Design	Minister for Environment	CLD
Deepwater	treatment plant 1. characterise in detail the physical and chemical	Prior to submitting a Works		These concets were covered in the Marine Treated Westewater Discho
Marine Outfall	composition and flow rates of all wastewater streams within the site and, using the toxicity of mixtures principles, predict the theoretical toxicity of the	Approval application for the wastewater treatment plant		These aspects were covered in the Marine Treated Wastewater Dischathe DEC on 18 March 2009 (DEC reference: DEC 4776). OEPA app
	combined wastewater after treatment; 2. Determine, for all contaminants			Discharge Management Plan (2011) on 1 July 2011.
	and nutrients, the total annual loads of contaminants and nutrients in the wastewater discharge exiting the site; and 3. Determine, for normal and			
	worst-case conditions, the concentrations of contaminants and nutrients			
	(for agreed averaging periods) in the wastewater discharge exiting the site.			
	Objective To minimise the environmental impact associated with			
	wastewater discharge.			

Controlled Ref No: XA0005RF9945976

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ng the reporting period in accordance with the management charge Management Plan (TWMP).

anagement of the waste water treatment and disposal facilities the TWMP was prepared to incorporate minor amendments results) during the commissioning, proving and operations

mation on 20 March 2014. Revision 4 remains in line with the the approved Revision 3 of the plan, and DER Operating

nternet site: (http://www.woodside.com.au/Our-

odside internet site.

water Discharge Management Plan, which was approved by . OEPA approved the revised Marine Treated Wastewater

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<ul> <li>Audit Code</li> <li>Subject</li> </ul>	What action must be taken     How action must be taken and/or objective of action     Objective     Evidence that action has been taken	<ul> <li>Project phase</li> <li>When action to be taken</li> <li>Where it is to be taken</li> </ul>	To requirements of     On advice from	Status <sup>1</sup> : January 2014 – December 2014
	Evidence Approval from DEC of MTWDMP.			
757:M7.6 Deepwater Marine Outfall	Action Prior to submitting a Works Approval application for the wastewater treatment plant, demonstrate that the wastewater discharge will meet "best practicable technology" and waste minimisation principles for contaminants and nutrients.	Design Prior to submitting a Works Approval Application for the Wastewater Treatment Plant.	Minister for Environment	CLD These aspects were covered in the Marine Treated Wastewa the DEC on 18 March 2009 (DEC reference: DEC 4776). OEI Plan (2011) on 1 July 2011.
	<b>How</b> A review of current Best Environmental Practice (BEP) will be conducted to ensure that the most up to date technology is being utilised. This review will be outlined in the Marine Treated Wastewater Discharge Management Plan.			
	<b>Objective</b> To demonstrate best practice in wastewater treatment and discharge.			
	<b>Evidence</b> Approval from DEC of MTWDMP, Works Approval granted from DEC.			
757:M7.7:1 Deepwater Marine Outfall	Action Prior to submitting a Works Approval application for the wastewater treatment plant, design, and subsequently operate, plant and equipment on the site such that: 1. the contaminant concentrations in the wastewater effluent from the site, just prior to entry to the wastewater discharge system, meet (in order of preference): the ANZECC/ARMCANZ (2000) 99% species protection level: or the ANZECC/ARMCANZ (2000) 99% species protection level at the edge of an approved mixing zone; 2. The concentrations of contaminants in the wastewater effluent which can potentially bio-accumulate/bio-concentrate meet the ANZECC/ARMCANZ (2000) 80% species protection trigger levels just prior to entry into the wastewater discharge system; and 3. Mass balances and inventories of toxicants can be maintained throughout the life of the plant so that their fate can be traced.	Design	DEC	CLD These aspects were covered in the Marine Treated Wastewa the DEC on 18 March 2009 (DEC reference: DEC 4776). Discharge Management Plan (2011) on 1 July 2011.
	How The proponent shall demonstrate that the proposed discharge meets the Ministerial Condition 7-7 via modelling. This will be outlined in the Marine Treated Wastewater Discharge Management Plan. Objective To minimise the environmental impact associated with wastewater discharge.			
	Evidence Approval from DEC of MTWDMP.			
57:M7.7:2 Deepwater Marine Outfall	Action Operate the Wastewater Treatment Plant such that: 1. the contaminant concentrations in the wastewater effluent from the site, just prior to entry to the wastewater discharge system, meet (in order of preference): the ANZECC/ARMCANZ (2000) 99% species protection level: or the ANZECC/ARMCANZ (2000) 99% species protection level at the edge of an approved mixing zone; 2. The concentrations of contaminants in the wastewater effluent which can potentially bio-accumulate/bio-concentrate meet the ANZECC/ARMCANZ (2000) 80% species protection trigger levels just prior to entry into the wastewater discharge system; and 3. Mass balances and inventories of toxicants can be maintained throughout the life of the plant so that their fate can be traced.	Operation	OEPA	<ul> <li>C</li> <li>Discharges to the MUBRL commenced in October 2011. M phase was conducted as detailed in Section 6.1 of Revision 3 Plan.</li> <li>The Treated Wastewater Management Plan (Ref 757:M7.2) or and contingency measures to meet the Environmental Quality No.757</li> <li>To reflect the most up to date information regarding the mana implemented during the operational phase, Revision 4 of the made based on operating experience (including testing arra and operations phases.</li> <li>Revision 4 of the plan was provided to the OEPA for informa management framework and revision process outlined in the Licence revisions L8752/2013/1 and L8752/2013/2.</li> <li>The Treated Wastewater Management Plan was implemented Monitoring and reporting was undertaken in accordance with L8752/2013/2.</li> </ul>
757:M7.8 Compliance Reporting	<b>Action</b> Within three months following commissioning and stabilising of plant operations, conduct an analysis of effluent properties and contaminant concentrations, to an analytical limit of reporting agreed by the Department of Environment and Conservation, demonstrating that they are substantially consistent with predictions.	Operation Within 3 months following commissioning	DEC	CLD Woodside provided the Pluto Effluent Treatment Plant (ETF 2013. The report was prepared in accordance with the reporti Pluto LNG Project ETP Commissioning Plan (Commissioning Waste Water Marine Discharge Management Plan. Com
	<b>How</b> A Report will be prepared on the analysis of effluent properties and contaminant concentrations in consultation with DEC.			supporting documentation informed the licensing process three was issued 1 August 2013.

water Discharge Management Plan, which was approved by EPA approved the revised Treated Wastewater Management
water Discharge Management Plan, which was approved by ). OEPA approved the revised Marine Treated Wastewater
Monitoring during start-up and commissioning and proving 3 of the Marine Treated Wastewater Discharge Management
outlines the operational monitoring, management framework, ity Objectives defined by the Minister in Ministerial Statement
nagement of the waste water treatment and disposal facilities the TWMP was prepared to incorporate minor amendments rangements and results) during the commissioning, proving
nation on 20 March 2014. Revision 4 remains in line with the the approved Revision 3 of the plan, and DER Operating
ed under Licensed operation during the reporting period. ith the DER Operating Licence revisions L8752/2013/1 and
TP) Commissioning Closeout Report to the DEC on 5 April rting commitments outlined in Table 5.1 of the DEC approved ing Plan), and Section 7.1 of the Pluto LNG Project Treated ommissioning closeout reporting and Licence application hrough the DER. The DER Operating Licence L8752/2013/1
e reserved.
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• Audit Code • Subject	<ul> <li>What action must be taken</li> <li>How action must be taken and/or objective of action</li> <li>Objective</li> <li>Evidence that action has been taken</li> </ul>	<ul> <li>Project phase</li> <li>When action to be taken</li> <li>Where it is to be taken</li> </ul>	To requirements of     On advice from	Status <sup>1</sup> : January 2014 – December 2014
	<b>Objective</b> To demonstrate that Woodside wastewater concentrations are substantially consistent with predictions.			
757:M7.9 Deepwater Marine Outfall	Evidence       Effluent characterisation report.         Action       Develop a Contingency Wastewater Management Plan which considers alternate options for wastewater disposal in the event that the Environmental Quality Objectives are not met as determined through Whole Effluent Toxicity testing, diffuser performance monitoring or environmental quality monitoring, to the requirements of the Minister for the Environment.         How       Alternative waste management plan will be designed.         Objective       To anticipate impacts and manage those which are unforeseen.         Evidence       Contingency Wastewater Management Plan.	Construction During Construction	Minister for Environment	CLD The framework for the Contingency Wastewater Management Discharge Management Plan, which was approved by the Additional detail has been provided in the 2011 revision to the approved by the OEPA on 1 July 2011. Commissioning of subsequent effluent treatment plant Licensing, were covere required as a condition of Works Approval W4466/2008/1 and Minor revisions to contingency measures have been provide Plan. The update reflects on the most up to date information and disposal facilities implemented during the operational ph Plan was prepared to incorporate minor amendments made during the commissioning, proving and operations phases.
757:M7.10 Deepwater Marine Outfall	Action       In the event that the treatment plant malfunctions or goes off-line, the proponent shall include within the Contingency Wastewater         Management Plan required by condition 7-9 alternative options for wastewater disposal to the timing and other requirements of the Minister for the Environment.         How       Practices will be changed to the methods of the Contingency Wastewater Management Plan.         Objective       Preparation for contingency events.         Evidence       Contingency Wastewater Management Plan.	Construction During Construction	Minister for Environment	CLD The Contingency Wastewater Management Plan forms part of Plan.
757:M7.11 Deepwater Marine Outfall	Action       In the event that the Environmental Quality Objectives are not being met, the proponent shall implement the Contingency Wastewater Management Plan required by condition 7-9.         How       Action will be taken from Contingency Wastewater Management Plan.         Objective       Preparation for contingency events.         Evidence       Pluto LNG Project Ministerial Statement 757 Compliance Report - Report on alternate action to the DEC.	Operation	Minister for Environment	NR The Wastewater Treatment Plant was operated to meet Envir Treated Wastewater Discharge Management Plan, and L8752/2013/2.
757:M7.12 Deepwater Marine Outfall	Action Review and revise the Contingency Wastewater Management Plan required by condition 7-9, as and when directed by the CEO. Objective Preparation for contingency events. Evidence Revised Contingency Wastewater Management Plan (if required).	Operation	OEPA	NR The Contingency Wastewater Management Plan forms part of Plan. OEPA approval of the revised 2011 Marine Treated received on 1 July 2011. Minor revisions to contingency measures have been provided the most up to date information regarding the management implemented during the operational phase, Revision 4 of the made based on operating experience (including testing res- phases.
757:M7.13 Deepwater Marine Outfall	<ul> <li>Action Make any revisions of the Contingency Wastewater Management Plan, as required by condition 7-12, publicly available in a manner approved by the CEO.</li> <li>How Revisions of the Contingency Wastewater Management Plan to be made available in accordance with OEPA Post Assessment Guideline for Making Information Publicly Available (PAG 4) published August 2012.</li> <li>Objective To ensure that the public is kept informed.</li> <li>Evidence Management Plan available on the Woodside website or upon request.</li> </ul>	Operation Ongoing	OEPA	C The Contingency Wastewater Management Plan forms part of Plan and is publically available on the Woodside internet site: <u>http://www.woodside.com.au/Our-Business/Pluto/Sustainabilit</u> Any future revisions to the plan will be published on the Woods
757:M8.1 Marine Quarantine	Action Prior to commencement of dredging, prepare and implement a Marine Quarantine Management Plan, to the requirements of the Minister for the Environment.	Design Before dredging	Minister for Environment EPA	CLD The Marine Quarantine Management Plan for the Construction

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ent Plan was included within the Marine Treated Wastewater ne DEC on 18 March 2009 (DEC reference: DEC 4776). he Marine Treated Wastewater Discharge Management Plan discharges and contingencies, prior to WET testing and red under the effluent treatment plant commissioning plan nd approved by DEC.

ided in an update to the Treated Wastewater Management on regarding the management of the waste water treatment phase, Revision 4 of the Treated Wastewater Management le based on operating experience (including testing results)

of the Marine Treated Wastewater Discharge Management

vironmental Quality Objectives in accordance with the Marine nd DER Operating Licence revisions L8752/2013/1 and

of the Marine Treated Wastewater Discharge Management ed Wastewater Discharge Management Plan (Rev 3) was

ed in an update to the TWMP (Rev 4). The update reflects on ment of the waste water treatment and disposal facilities the TWMP was prepared to incorporate minor amendments results) during the commissioning, proving and operations

of the Marine Treated Wastewater Discharge Management ility/Pages/Environment.aspx

odside internet site.

### on Phase was approved on 21 November 2007.

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<ul> <li>Audit Code</li> <li>Subject</li> </ul>	<ul> <li>What action must be taken</li> <li>How action must be taken and/or objective of action</li> <li>Objective</li> <li>Evidence that action has been taken</li> </ul>	<ul> <li>Project phase</li> <li>When action to be taken</li> <li>Where it is to be taken</li> </ul>	To requirements of     On advice from	Status <sup>1</sup> : January 2014 – December 2014
	<b>Objective</b> To prevent marine pest introduction to the waters adjacent to the proposal.			This plan was implemented for all dredge vessels and dredgir LNG Project during the dredging program, which ceased on 2
	<b>Evidence</b> Marine Quarantine Management Plan developed in consultation with DoF and DEC.			Refer to 757:M8:3 for details of quarantine management durin
757:M8.2 Marine Quarantine	<ul> <li>Action Within 48 hours following entry of dredging equipment and/or other vessels associated with dredging into the Port of Dampier, the proponent shall: 1. for vessels originating from Ports outside of State waters, arrange for an inspection and clearance by an appropriately qualified marine scientist; 2. for vessels originating from Ports within State waters, provide evidence of; a) the vessel being fully cleaned of fouling organisms and sediments immediately prior to departure for the Port of Dampier; or b) inspection of the vessel at the point of departure for the Port of Dampier immediately prior to departure; or c) a risk assessment based on the history of the vessel, its characteristics and use during the implementation of the proposal, to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority.</li> <li>Objective To prevent marine pest introduction.</li> </ul>	Construction	Minister for Environment DEC	CLD Condition is not applicable during the reporting period as dre May 2010. ACR 2010 demonstrates that Woodside has conducted Ma condition.
757:M8.3	<b>Evidence</b> See condition 8-4. <b>Action</b> Prior to commencement of operations develop and implement an	Prior to commencement of	DEC	CLD for development of protocol, C for implementation
Marine Quarantine	<ul> <li>Action Phot to confinencement of operations develop and implement an appropriate protocol for inspection and clearance of vessels during the operational phase of the proposal.</li> <li>Objective To prevent marine pest introduction.</li> <li>Evidence An Invasive Marine Species Management Plan developed in consultation with and approved by DoF and DEC.</li> </ul>	Operation	DEC	<ul> <li>Woodside manages marine quarantine during the operation of Species Management Plan (IMSMP). Woodside submitted submitted on the 12 October 2011.</li> <li>A letter was received from the OEPA 11 January 2012 appropriate Plan and its implementation at the Pluto facilities.</li> <li>This IMSMP is reviewed internally as required to ensure Commonwealth and State legislation and associated guideline (or Woodside's IMS Management Plan is ongoing. During identified in association with Pluto operations.</li> </ul>
757:M8.4 Compliance Reporting	Action       Prior to the commencement of dredging, the proponent shall report to the Department of Environment and Conservation on the results of the inspection referred to in Condition 8-2.         How       Inspections of vessels originating from outside of State waters will be reported to DEC within 48h through the process specified in the Marine Quarantine Management Plan.         Objective       To prevent marine pest introduction.	Design Prior to commencement of dredging	DEC DoF, AQIS	CLD Please refer to 757:M8.2 and 2010 ACR.
	Evidence Inspection report.			
757:M8.5 Marine Quarantine	Action Manage any sediment or fouling organisms found as a consequence of the inspection required by condition 8-2, to the timing and other requirements of the Minister for the Environment.         How The Marine Pest Management Strategy (Contingency) specified in the Marine Quarantine Management Plan will be implemented in the event that a Marine Species of Concern is identified during an arrival inspection.         Objective Minimise environmental impacts associated with potential marine pest introduction.         Evidence Marine Pest Management Strategy specified in the Marine	Construction	Minister for Environment DoF	CLD Please refer to 757:M8.2 and 2010 ACR.
	Quarantine Management Plan approved by DoF and DEC; Communication with DoF and DEC in the event a marine species of concern is identified.			
757:M8.6 Marine Quarantine	Infestation survey plans approved by DoF. Action If following the completion of dredging and disposal activities, the dredging equipment is to be transferred to another location within Western Australia's territorial waters, undertake an investigation employing an appropriately qualified marine scientist to identify the presence of/the potential for introduced marine pests, to the requirements of the Minister for	Construction	Minister for Environment DoF, AQIS	CLD Please refer to 757:M8.2 and 2010 ACR.

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ging related vessels and equipment associated with the Pluto 21 May 2010.

ing operations.

lredging was completed in a previous reporting period on 21

larine Invasive Species Inspections in accordance with this

n of the Pluto LNG Project using Woodside's Invasive Marine ed this plan to the DEC on 24 June 2010 with a revision

proving the Woodside Invasive Marine Species Management

sure inclusion and compliance with future international, ines applicable to IMS. No significant revisions of the IMSMP ring the 2014 reporting period.

ing the 2014 reporting period, no introductions of IMS were

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Audit Code     Subject	<ul> <li>What action must be taken</li> <li>How action must be taken and/or objective of action</li> <li>Objective</li> <li>Evidence that action has been taken</li> </ul>	<ul> <li>Project phase</li> <li>When action to be taken</li> <li>Where it is to be taken</li> </ul>	To requirements of     On advice from	Status <sup>1</sup> : January 2014 – December 2014
	the Environment. Objective To prevent pest contamination of other Australian Ports. Evidence If required, Investigation reports prepared by a suitably qualified marine scientist for all dredging related vessels and equipment that are to			
757:M8.7 Compliance Reporting	be transferred to another location within WA territorial waters. Action In the event that any introduced marine pests are detected (see condition 8-5), the proponent shall put in place a Marine Pests Management Strategy to ensure that introduced marine pests are not transferred to other locations within Western Australia's territorial waters, to the requirements of the Minister for the Environment. Note: In the preparation of the report required by condition 8-4, and in the development of any actions required by conditions 8-4 to 8-6, the Environmental Protection Authority expects that advice of the following agencies will be obtained: Department of Fisheries; and Australian Quarantine Inspection Service.	Construction	Minister for Environment DoF, AQIS	CLD Please refer to 757:M8.2 and 2010 ACR.
	<b>Objective</b> Minimise environmental impacts associated with potential marine pest introduction to other locations in Western Australia's territorial waters.			
757.140.0	Marine Quarantine Management Plan.	Querell		
757:M8.8 Compliance Reporting	Action For the life of the project, notify the Department of Environment and Conservation, the Department of Fisheries and the Dampier Port Authority of any non-indigenous species detected in the waters adjacent to the project within 24 hours following detection.	Overall Within 24 hours of detection	DEC, DoF, DPA	NR No introduced marine pests have been detected in waters adj
	<b>Objective</b> To keep DEC, DPA and DoF informed. <b>Evidence</b> Notification reports of any non-indigenous species detected in waters adjacent to the project			
757:M8.9:1	Action In the event that non-indigenous species introduced by the	Construction	Minister for Environment	CLD
Marine Quarantine	proponent are detected during dredging, the proponent shall take immediate action to prevent establishment and proliferation and shall take action to control and eradicate them to the requirements of the Minister for the Environment.			No introduced marine pests were detected during the dredging
	<b>Objective</b> To prevent infestation of pest species. <b>Evidence</b> Immediate notifications to DoF, DEC and DPA; Report actions to prevent establishment and proliferation of non-indigenous species and			
757:M8.9:2	action to control and eradicate them. Action In the event that non-indigenous species introduced by the	Operation	Minister for Environment	NR
Marine Quarantine	proponent are detected during operation, the proponent shall take immediate action to prevent establishment and proliferation and shall take action to control and eradicate them to the requirements of the Minister for the Environment.	Operation	Minister for Environment	No introduced marine pests have been detected in waters adj
	<b><u>Objective</u></b> To prevent infestation of pest species. <b><u>Evidence</u></b> Immediate notifications to DoF, DEC and DPA. Report actions to			
	prevent establishment and proliferation of non-indigenous species and action to control and eradicate them.			
757:M9.1	Action Prepare a Turtle Management Plan.	Design	Minister for Environment	CLD
Turtle Management and Monitoring	How This Plan shall: 1. identify project-related stressors, causes of environmental impacts and potential consequences for marine turtles (including impact of noise, vibration, light overspill and glow, vessel strike, and changes to coastal processes); and 2. Identify and demonstrate the effectiveness of proposed management measures to mitigate [as defined in Environmental Protection Authority Guidance Statement 9] project-related impacts and consequences for marine turtles.	Prior to commencement of works	DEC	Letter dated 7 November 2008 (DOC68526), confirming tha substantially complete. The letter also approves the Environm is included as part of the Sea Turtle Management Plan. The Sea Turtle Management Plan was revised for the opera OEPA for approval. OEPA approval received 30 March 2012. Revision 2 of the operations phase Sea Turtle Management P
	<b>Objective</b> To provide a management framework to enable the proponent to manage the project so as to detect and mitigate as necessary ["mitigate" as defined in Environmental Protection Authority Guidance Statement 9] any impact upon marine turtles from the project and to identify darkness strategies to reduce as far as possible lights or light glow interfering with			Revision 2 of the operations phase Sea Turtle Management P 2013 following 2012 and 2013 internal reviews. Revision 3 of the Plan was provided to the OEPA for informati

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djacent to the Project by Woodside to date.

ing program. Dredging was completed on 21 May 2010.

djacent to the Project by Woodside to date.

hat the Sea Turtle Management Plan was considered to be amental Specification Lighting revision 2 October 2008, which erations phase and was submitted on 1 August 2011 to the Plan was provided to the OEPA for information on 20 August ation on 19 August 2014 following internal review.

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Audit Code     Subject	What action must be taken     How action must be taken and/or objective of action     Objective     Evidence that action has been taken     nesting female turtles and hatchlings.	<ul> <li>Project phase</li> <li>When action to be taken</li> <li>Where it is to be taken</li> </ul>	To requirements of     On advice from	Status <sup>1</sup> : January 2014 – December 2014
757:M9.2	<b>Evidence</b> See Turtle Management Plan. Action Implement the Turtle Management Plan required by condition 9-1.	Overall	Minister for Environment	c
Turtle Management and Monitoring	How Communicate Legal and Other Requirements to responsible parties (training); Implement an internal audit program involving six monthly audits and Verification Plans for application/review of contractors.			Woodside implemented the Sea Turtle Management Plan for period. Refer to Appendix 1 for specific information against rec
	<b>Objective</b> To minimise environmental impacts and apply relevant technology to the project.			
	<b>Evidence</b> Internal audit schedule, audit criteria, and evidence of completion. DEMG minutes.			
757:M9.3 Turtle Management and	Action Make the Turtle Management Plan required by condition 9-1 publicly available in a manner approved by the CEO.	Construction	OEPA	C The Sea Turtle Management Plan is publically available on the
Monitoring	How Turtle Management Plan to be made available in accordance with OEPA Post Assessment Guideline for Making Information Publicly Available (PAG 4) published August 2012.			http://www.woodside.com.au/Our-Business/Pluto/Sustainability Any future revisions to the plan will be published on the Woods
	<b>Objective</b> To ensure public is kept informed.			
757.140.4	Evidence Management Plan available on the Woodside website or upon request.	Quard	Minister for Environment	
757:M9.4 Turtle Management and Monitoring	Action Review the Turtle Management Plan required by condition 9-1 annually to the requirements of the Minister for the Environment.	Overall Annually	Minister for Environment	C The Sea Turtle Management Plan was revised for the opera OEPA for approval. OEPA approval received 30 March 2012.
	<b>Evidence</b> Report outcomes of review in Annual compliance report.			Revision 3 of the Plan was provided to the OEPA for information
				The focus of the operations phase Sea Turtle Management mitigate impact upon marine turtles for potential future e expansion or maintenance dredging has been required to da Turtle Management Plan.
757:M9.5 Compliance Reporting	Action Report any mortality of marine turtles or other threatened or specially protected marine fauna to the Department of Environment and Conservation within 24 hours following observation.	Overall Within 24 hours of an incident	DEC	NR No mortality of marine turtles has occurred as a result of the p
	<b>Objective</b> To keep DEC informed on project progress and issues.			
757:M10.1	Evidence Incident reports as per Appendix D of the STMP.	Design ( Prior to ground-	DEC	CLD
Indigenous Heritage	<b>Action</b> Prior to ground-disturbing activities, prepare, in liaison with the Department of Indigenous Affairs, and submit to the Department of Environment and Conservation, a Cultural Heritage Management Plan.	disturbing activities) Overall	DIA	Numerous versions of the Pluto Aboriginal Cultural Heritage requirements throughout the various stages of the project. Pl. Plan - Pluto LNG Project Construction Phase, Cultural Her
	<b>How</b> This Plan shall address: 1. the inclusion of cultural heritage awareness training in the workforce induction; 2. the signposting and fencing of nearby heritage sites to prevent unauthorised access; 3. the			Heritage Management Plan - Industrial Site A Coastal Dunes Cultural Heritage Management Plan - Commissioning and Ope
	monitoring of ground-disturbing activities by an anthropologist/archaeologist and representatives of the Traditional Custodians; and 4. the retrieval and relocation of heritage material which lies within the disturbance footprint in consultation with the Traditional Custodians.			The updated <i>Pluto LNG Aboriginal Cultural Heritage Manag</i> reviewed by Woodside in consultation with the Traditional Cus received from the DIA (in response to submission of the upda "the report meets the requirements of Condition 6 of the Minis Pluto LNG project on Industrial Site B". Condition 6 of the Con-
	<b><u>Objective</u></b> To minimise impact on cultural heritage.			
	<b>Evidence</b> Cultural Heritage Management Plan. (CHMP) Correspondence seeking Department of Indigenous Affairs advice.			
757:M10.2 Indigenous	Action Implement the Cultural Heritage Management Plan required by Condition 10-1.	Overall	Minister for Environment	С
Heritage	<b>How</b> Implementation will take place through inductions and management of access to nondisturbance areas.			Under Condition 13 of the Minister for Indigenous Affairs' con (WA) Woodside must report to the registrar on the extent to v land. This commitment is also a requirement in the <i>Pluto</i> <i>Commissioning and Operations Phase</i> (Section 7. 'Background
	<b>Objective</b> To prevent unnecessary impacts.			the Department of Aboriginal Affairs (DAA) may be used to sho

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an for the operations phase accordingly during the reporting
t requirements of the Sea Turtle Management Plan.
n the Woodside internet site:
bility/Pages/Environment.aspx
oodside internet site.
perations phase and was submitted on 1 August 2011 to the 12.
12.
nation on 19 August 2014 following internal review.
c c
nent Plan is to outline management measures to detect and expansion works or maintenance dredging activities. No
date since submission of Rev 0 of the operations phase Sea
ne project.
age Management Plan (CHMP) have been prepared to meet
t. Plans such as the Aboriginal Cultural Heritage Management Heritage Management Plan – Industrial Site B and Cultural
unes have now been surpassed by the Pluto LNG Aboriginal
Operations Phase (XA0000AG1002) issued 15 April 2012.
nagement Plan - Commissioning and Operations Phase was
Custodian groups and DIA. On 18 December 2012 a letter was pdated CHMP and Section 18 Site B 2012 Report) stating that
Ministers Consent issued on 26 February 2007 for Woodside's
Consent requires a Cultural Heritage Management Plan.
consent under Section 18 of the <i>Aboriginal Heritage Act 1972</i> to which works have impacted sites or objects located on the
Pluto LNG Aboriginal Cultural Heritage Management Plan -
pround'), therefore annual reports under Section 18 consent to show effectiveness of implementation of the CHMP.
are reserved.
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Audit Code     Subject	<ul> <li>What action must be taken</li> <li>How action must be taken and/or objective of action</li> <li>Objective</li> <li>Evidence that action has been taken</li> </ul>	<ul> <li>Project phase</li> <li>When action to be taken</li> <li>Where it is to be taken</li> </ul>	To requirements of     On advice from	Status <sup>1</sup> : January 2014 – December 2014
757-1440.0	<b>Evidence</b> Annual report to the DIA under Section 18 Permit for Site B, outlining if any site/object as been disturbed	Construction		On 27 March 2014 Woodside submitted to the DAA the Site the Minister for Indigenous Affairs' consent under Section 18 c
757:M10.3 Indigenous Heritage	Action Make the Cultural Heritage Management Plan required by condition 10-1 publicly available. How Cultural Heritage Management Plan to be made available in accordance with OEPA Post Assessment Guideline for Making Information Publicly Available (PAG 4) published August 2012.	Construction	OEPA	C The Cultural Heritage Management Plan is publicly available on http://www.woodside.com.au/Our-Business/Pluto/Sustainability Any future revisions to the plan will be published on the Woods
	<b>Objective</b> To ensure that the public is kept informed. <b>Evidence</b> Management Plan available on the Woodside internet site or upon request.			
757:M11.1 Compliance Reporting	Action Prior to submitting a Works Approval application for the plant, submit a detailed Front End Engineering Design Report demonstrating that the proposed works adopt best practice pollution control measures to minimise emissions from the plant.	Design Prior to submitting a Works Approval Application for the plant.	Minister for Environment EPA	CLD This condition was met during the 2008 reporting period and n
	How This report shall: 1. set out the base emissions rates for major sources for the plant and the design emission targets; and 2. address normal operations, shut-down, start-up, and equipment failure conditions. Objective To ensure best practice is applied to minimising air emissions.			
	Evidence Front End Engineering Design Report.			
757:M11.2 Air Emissions	<ul> <li>Action At least three months prior to commencement of operations prepare an Air Quality Management Plan.</li> <li>How This plan shall include: 1. cumulative air quality modelling which uses data from the Front End Engineering Design Report and includes emissions from approved industrial sources at Cape Preston and Barrow Island; 2. proposed targets and standards; 3. an emissions monitoring programme, which includes nitrogen compounds, butene, toluene, ethylene, xylene, ozone, acrylene and hydrogen sulphide emissions from the plant; 4. an ambient air monitoring programme and a nitrogen deposition monitoring programme; and 5. annual reporting.</li> <li>Evidence Air Quality Management Plan.</li> </ul>	Construction At least 3 months prior to the commencement of operations	Minister for Environment	CLD The Air Quality Management Plan was submitted on 29 Sept October 2011 (EPA reference: A337424: OEPA2010/000682-
757:M11.3 Air emissions	Action Implement the Air Quality Management Plan required by Condition 11-2. Objective To minimise environmental impacts associated with air emissions. Evidence Refer to Appendix 1 of the Annual Compliance Report.	Operation	Minister for Environment	<b>C</b> Implementation continued under Licensed operation during a framework outlined in the Air Quality Management Plan. Routine monitoring including stack emissions testing continue regenerative thermal oxidiser. Emissions monitoring results, s was undertaken in accordance with conditions outlined in the I Reporting of 12 and 24 month Ambient Air Monitoring progr completed and provided to the OEPA during the reporting peri
757:M11.4 Air Emissions	Action Make the Air Quality Management Plan required by condition 11-2 publicly available. How Air Quality Management Plan to be made available in accordance with OEPA Post Assessment Guideline for Making Information Publicly Available (PAG 4) published August 2012.	Construction	OEPA	Please refer to Appendix 1 for specific information against com         C         The Air Quality Management Plan is publicly available on the V         Business/Pluto/Sustainability/Pages/Environment.aspx         Any future revisions to the plan will be published on the Woods
	<b>Objective</b> To keep public informed. <b>Evidence</b> Management Plan available on the Woodside internet site or upon request.			
757:M12.1 Greenhouse Gas Abatement	Action Develop a Greenhouse Gas Abatement Program: to ensure that the plant is designed and operated in a manner which achieves reductions in "greenhouse gas" emissions as far as practicable; to provide for ongoing 'greenhouse gas' emissions reductions over time; to ensure that through the use of best practice, the total net "greenhouse gas" emissions and/or	Design Prior to commencement of construction of plant	Minister for Environment EPA	CLD This condition was initially met during the 2008 reporting p approval on 22 August 2011. A response from the OEPA or Gas Abatement Program satisfies the key components require

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B 2014 Compliance Report, as required by Condition 13 of	
of the Aboriginal Heritage Act 1972 (WA).	

e on the Woodside internet site: lity/Pages/Cultural-Heritage.aspx

odside internet site.

I no further action is required.

eptember 2010. The plan was approved by the OEPA on 10 2-1).

ng the reporting period in accordance with the management

nued during the 2014 reporting period for the gas turbines and s, smoke monitoring and RTO operation reporting to the DER ne DER Licence revisions L8752/2013/1 and L8752/2013/2.

ogrammes, and Nitrogen Deposition Monitoring Studies was period.

ommitments in the Air Quality Management Plan.

ne Woodside internet site: http://www.woodside.com.au/Our-

odside internet site

period. A revision to the plan was submitted to OEPA for on 17 January 2012 stated that "*The* (revised) *Greenhouse irred by Condition 12-1 of Ministerial Statement 757.* 

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Audit Code	What action must be taken	Project phase	To requirements of	Status <sup>1</sup> : January 2014 – December 2014
<ul> <li>Subject</li> </ul>	How action must be taken and/or objective of action	When action to be taken	On advice from	
	• Objective	Where it is to be taken		
	Evidence that action has been taken     "greenhouse gas" emissions per unit of product from the project are			
	minimised; and to manage "greenhouse gas" emissions in accordance with			
	the Framework Convention on Climate Change 1992, and consistent with			
	the National Greenhouse Strategy.			
	How This Program shall include: 1. calculation of the "greenhouse gas"			
	emissions associated with the proposal, as advised by the Environmental Protection Authority; Note: The current requirements of the Environmental			
	Protection Authority are set out in: Minimising Greenhouse Gas Emissions,			
	Guidance for the Assessment of Environmental Factors, No 12 published			
	by the Environmental Protection Authority (October 2002). This document may be updated or replaced from time to time. 2. Specific measures to			
	minimise the total net "greenhouse gas" emissions and/or the "greenhouse			
	gas" emissions per unit of product associated with the proposal using a combination of "no regrets" and "beyond no regrets" measures; 3. The			
	implementation and ongoing review of "greenhouse gas" offset strategies			
	with such offsets to remain in place for the life of the proposal; 4.			
	Estimation of the "greenhouse gas" efficiency of the project (per unit of product and/or other agreed performance indicators) and comparison with			
	the efficiencies of other comparable projects producing a similar product,			
	both within Australia and overseas. 5. Implementation of thermal efficiency			
	design and operating goals consistent with the Australian Greenhouse Office Technical Efficiency guidelines in design and operational			
	management. 6. Actions for the monitoring, regular auditing and annual			
	reporting of "greenhouse gas" emissions and emission reduction strategies. 7. a target set by the proponent for the progressive reduction of total net			
	"greenhouse gas" emissions and/or "greenhouse gas" emissions per unit of			
	product and as a percentage of total emissions over time, and annual			
	reporting of progress made in achieving this target. Consideration should be given to the use of renewable energy sources such as solar, wind or			
	hydro power. 8. A program to achieve reduction in "greenhouse gas"			
	emissions, consistent with the target referred to in (7) above. 9. entry,			
	whether on a project-specific basis, company-wide arrangement or within an industrial grouping, as appropriate, into the Commonwealth			
	Government's "Greenhouse Challenge" voluntary cooperative agreement			
	program. Components of the agreement program include.: 1. an inventory			
	of emissions; 2. opportunities for abating "greenhouse gas" emissions in the organisation; 3. a "greenhouse gas" mitigation action plan; 4. regular			
	monitoring and reporting of performance; and 5. independent performance			
	verification. 10. Review of practices and available technology; and 11.			
	"Continuous improvement approach" so that advances in technology and potential operational improvements of plant performances are adopted.			
	Note: In (2) above, the following definitions apply: 1. "no regrets" measures			
	are those which can be implemented by a proponent and which are effectively cost-neutral and 2. "beyond no regrets" measures are those			
	which can be implemented by a proponent and which involve additional			
	costs which are not expected to be recovered.			
	Objective To minimise environmental impacts associated with greenhouse			
	gas emissions.			
	Enddange Oreeshawe Ore Alastan and			
757:M12.2	<b>Evidence</b> Greenhouse Gas Abatement program. <b>Action</b> For the life of the project, the proponent shall provide a greenhouse	Overall	Minister for Environment	c
Greenhouse Gas	gas offset package which, as a minimum, offsets the reservoir carbon	Ongoing		
Abatement	dioxide released to the atmosphere.			
	<b>Objective</b> To minimise Greenhouse gas emissions.			Provision of the approved greenhouse emissions abatement
				Australia. Under this CO2 Australia, on behalf of Pluto LNG, sequestration of more than an estimated 5.1Mt CO2e (bei
	<b>Evidence</b> Formal agreement to provide offsets.			released to the atmosphere).
				Establishment of the tree plantings committed for delivery u during 2012. CO2 Australia continues to provide ongoing
				contract and the programme continued to plan during CY2014
7:M12.3 Greenhouse Gas	Action Implement the Greenhouse Gas Abatement Program required by	Construction	Minister for Environment	CLD for construction phase, C for operations phase
Abatement	s condition 12-1.	Ongoing		The Construction Phase component of the Program was com
	Objective To minimise Greenhouse gas emissions.			
				The Greenhouse Gas Abatement Program details the de

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NG, implements and manages over the life of the project, bio-being equivalent to the quantity of reservoir CO2 emissions

under the contract commenced in 2008 and was completed ng management and carbon accounting services under the )14.

ompleted during the 2010-2011 period of reporting.

design and operational aspects of the project related to

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• Audit Code • Subject	<ul> <li>What action must be taken</li> <li>How action must be taken and/or objective of action</li> <li>Objective</li> <li>Evidence that action has been taken</li> </ul>	<ul> <li>Project phase</li> <li>When action to be taken</li> <li>Where it is to be taken</li> </ul>	<ul> <li>To requirements of</li> <li>On advice from</li> </ul>	Status <sup>1</sup> : January 2014 – December 2014
	Evidence Refer to Appendix 1 of the ACR.			minimisation of the overall greenhouse footprint, and was a individual activities specified in the Greenhouse Gas Abateme
757:M12.4	Action Prior to commencement of construction of plant, make the	Design	OEPA	c
Greenhouse Gas Abatement	Greenhouse Gas Abatement Program required by condition 12-1 publicly available in a manner approved by the CEO.	Ongoing		The Greenhouse Gas Abatement Program is publically availab http://www.woodside.com.au/Our-Business/Pluto/Sustainability
	<b>How</b> Greenhouse Gas Abatement Program to be made available in accordance with OEPA Post Assessment Guideline for Making Information Publicly Available (PAG 4) published August 2012.			Any future revisions to the plan will be published on the Woods
	<b>Objective</b> To keep public informed.			
	<b>Evidence</b> Program available on the Woodside internet site or upon request.			
57:M13.1 Offsets	Action Implement the offset package set out in Schedule 6 (Ministerial Statement 757) to the requirements of the Minister for the Environment on	Overall Ongoing	Minister for Environment DEC	CLD
	advice of the Department of Environment and Conservation.			Schedule 6 specifies 7 offset components. Status of each com
	ObjectiveTo minimise environmental impacts associated with greenhousegas emissions.EvidenceDetails contained in ACR.			Offset A: Site A Management and Monitoring CLD - A revised Site A Vegetation Management P. 21 October 2011. The DEC responded on 6 Febru have been confirmed as satisfactory by the Depart Leader Nature Conservation'.
				The Site A Vegetation Management Plan is being activities undertaken during the reporting period.
				Offset B: Rehabilitation/Restoration Outside Lease CLD - A funding agreement was executed betwee (DPaW) on 16 October 2013, which included concur The funding agreement supports DPaW's impleme areas on the Burrup Peninsula, with a focus on the N Woodside received confirmation that it had comple Environmental Protection Authority (OEPA) on 24 M
				Offset C: Taxonomic studies of 37 Flora spp CLD – Minister for Environment and Water has a satisfied the requirements for this Offset.
				Offset D: Research and Monitoring Dampier Archipelago Mari CLD– Minister for Environment and Water has constitution satisfied the requirements for this Offset.
				Offset E: Managing Dredging Impacts CLD – Minister for Environment and Water has c satisfied the requirements for this Offset.
				Offset F: Genetic Work To Resolve Taxonomic Uncertainties - CLD – Minister for Environment and Water has c satisfied the requirements for this Offset.
				Offset G: Ethno-Botanical Study CLD - A letter to the General Manager of the OEP Offset. On 7 February 2012 the OEPA responded Botanical Study (December 2009) 'meets the require
757:M14.1	Action Prepare a Preliminary Decommissioning Plan for approval by the	Design	DEC	CLD
Decommissioning	CEO, which describes the framework and strategies to ensure that the site is suitable for future land uses, and provides: 1. the rationale for the siting and design of plant and infrastructure as relevant to environmental protection; 2. a conceptual description of the final landform at closure; 3. a plan for a care and maintenance phase; and 4. initial plans for the management of noxious materials.	Prior to submitting a Works Approval application for the plant.		A revised Preliminary Decommissioning Plan was subm (PLU/GOV/00429) and subsequently approved on 1 February 2
	<b>Objective</b> To outline a plan for decommissioning.			

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s active during the 2014 reporting period. Progress against nent Plan is summarised in Appendix 1.
lable on the Woodside internet site: ility/Pages/Environment.aspx
odside internet site.
component is as follows:
t Plan was submitted to the DEC for review and comment on abruary 2012 that 'the revised plan and proposed outcomes partment of Environment and Conservation's Pilbara Regional
eing implemented, with weed management and flora survey
ween Woodside and the Department of Parks and Wildlife currence by the DER. mentation of a program to rehabilitate and restore degraded e Murujuga National Park and adjacent areas. npleted its obligations under Offset B from the Office of the March 2014.
s confirmed that Woodside has met its obligations and has
arine Park confirmed that Woodside has met its obligations and has
s confirmed that Woodside has met its obligations and has
es – <i>Rhagada Sp</i> 12. s confirmed that Woodside has met its obligations and has
EPA was sent on the 7 October 2011 to seek closure of this ed with a letter to confirm that the Burrup Peninsula Ethno- uirements of Schedule 6, Offset G of Statement 757'
bmitted to the Office of the EPA on 8 January 2010 ry 2010 (DEC7069-02 - DOC 115002).
e reserved. Page 20 of 28

Audit Code     Subject	<ul> <li>What action must be taken</li> <li>How action must be taken and/or objective of action</li> <li>Objective</li> <li>Evidence that action has been taken</li> </ul>	Project phase     When action to be taken     Where it is to be taken	To requirements of     On advice from	Status <sup>1</sup> : January 2014 – December 2014
757:M14.2 Decommissioning	<ul> <li>Evidence Preliminary Decommissioning Plan.</li> <li>Action Submit a Final Decommissioning Plan, for approval of the CEO.</li> <li>How The Final Decommissioning Plan shall set out procedures and measures for: 1. removal or, if appropriate, retention of plant and infrastructure agreed in consultation with relevant stakeholders; 2. rehabilitation of all disturbed areas to a standard suitable for the agreed new land use(s); and 3. identification of contaminated areas, including provision of evidence of notification and proposed management measures to relevant statutory authorities.</li> <li>Objective To ensure that the site is suitable for future land uses.</li> </ul>	Operation At least 6 months before the date of closure or at a time approved by the CEO	OEPA	NR Final Decommissioning Plan shall be developed closer to deco
757:M14.3 Decommissioning	Evidence Final Decommissioning Plan.         Action Implement the Final Decommissioning Plan required by condition 14-2 until such time as the Minister for the Environment determines, on advice of the CEO, that the proponent's decommissioning responsibilities have been fulfilled.         Objective       To fulfil decommissioning responsibilities         Evidence       Close-out report for the Final Decommissioning Plan.	Closure Until such time as the Minister for Environment determines on advice of the CEO that the proponent's decommissioning responsibilities have been fulfilled.	Minister for Environment OEPA	NR Final Decommissioning Plan shall be developed closer to deco
757:M14.4 Decommissioning	ActionMake the Final Decommissioning Plan required by condition 14-2publicly available in a manner approved by the CEO.HowFinal Decommissioning Plan to be made available in accordance withOEPA Post Assessment Guideline for Making Information PubliclyAvailable (PAG 4) published August 2012.ObjectiveTo ensure the public is kept informedEvidencePlan available on the Woodside internet site or upon request.	Closure	OEPA	NR Final Decommissioning Plan shall be developed closer to deco

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commissioning date.

commissioning date.

commissioning date.

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## **APPENDIX 1 – PLUTO LNG PROJECT MANAGEMENT PLAN KEY ACTIONS**

The table below provides evidence of the status of key management actions contained within the Environmental Management Plans and programs required by Ministerial Statement 757.

Key Management Action	Source Ref/ Chap	Status/Evidence 2014
Marine Treated Wastewater Discharge Management Plan (Condition 7-2) (Rev 3, July 2011 - XA0000AH0029)		
Review Management Plan as required – triggers for review may include a significant change to the wastewater system, results from WET testing and Water Corporation analysis, change in regulations, or at the request of the OEPA. Minor revisions may be undertaken to ensure the plan remains current. If changes are required to be made to the plan that are material to the risk presented by the operation of the facilities, a revised plan will be provided to the OEPA and DoE for approval. Approval will be obtained prior to implementation of the revised plan and the revised plan will be made publically available to the prescribed requirements of the CEO of OEPA. Submit revised plan to OEPA and DoE for information or approval.	1.4	C In order for the plan to reflect the most up to date information regarding the manage during the operational phase, Woodside undertook an update to the Treated Was (Revision 4). This version incorporates minor amendments made based on ope commissioning and proving phase. Revision 4 of the plan was provided to the OEPA for information on 20 March 2014. R and revision process outlined in the approved Revision 3 of the plan, and DER Operatin
Monitoring during start-up and commissioning of effluent treatment plant as detailed in the <i>Pluto LNG Project Effluent Treatment</i> <i>Plant Commissioning Plan, Woodside Doc. XA0000AR0875</i> approved by the DEC under Works Approval W4466/2008/1.	6.1	<b>CLD</b> Woodside provided the Pluto Effluent Treatment Plant (ETP) Commissioning Closeour The report was prepared in accordance with the reporting commitments outlined in Commissioning Plan (Commissioning Plan), and Section 7.1 of the Pluto LNG Proje Plan. Commissioning closeout reporting and Licence application supporting documenta DER Operating Licence L8752/2013/1 was issued 1 August 2013.
Ongoing monitoring of water quality as per Table 6.1 of the Management Plan, including installed analysers and field laboratory tests.	6.2	C Monitoring was undertaken in accordance with the Treated Wastewater Discharge Mar and L8752/2013/2. Monitoring data is included in DER licence Annual Environmental report was provided to DER on 26 June 2014.
Amend table 6.1 if required, depending on results from Whole Effluent Toxicity testing. To be managed as part of Licensing process with Department of Environment and Conservation.	6.2	C Table 6.1 has been amended in Revision 4 of the Treated Waste Water Management the management of the waste water treatment and disposal facilities during the operati on operating experience (including testing results) during the commissioning and provin Revision 4 of the plan was provided to the OEPA for information on 20 March 2014. R and revision process outlined in the approved Revision 3 of the plan, and Depa L8752/2013/1 and L8752/2013/2. Results of Whole Effluent Toxicity (WET) testing conducted in the reporting period ha 6.1.
<ul> <li>Whole Effluent Toxicity (WET) testing to be carried out on treated water from final inspection tanks in accordance with ANZECC/ARMCANZ (2000).</li> <li>Initial WET test to be conducted within three months following commissioning &amp; stabilisation of the ETP as per the <i>Pluto LNG Project Effluent Treatment Plant Commissioning Plan.</i></li> <li>Ongoing WET testing within 1 month following the anniversary of the initial WET test, annually, or immediately (within 2 months) following any significant, sustained increase in the levels of contaminants of concern within treated wastewater.</li> </ul>	6.4	CLD for commissioning and stabilisation C for ongoing operations Woodside conducted a third suite of WET testing sampling on 3 and 6 October 2014 du In the absence of any sustained increase in the levels of contaminants of concern with further additional testing to be undertaken within the reporting period. Woodside undertook an update to the Treated Wastewater Management Plan during 2 based on operating experience (including 2013 WET testing information) during the c Results of Whole Effluent Toxicity (WET) testing conducted in the reporting period ha 6.1.
Commissioning Compliance Report to be completed as part of an application for a Part V Licence under the <i>Environmental Protection Act 1986</i> (WA). Reporting will be in accordance with <i>Pluto LNG Project Effluent Treatment Plant Commissioning Plan.</i>	7.1	CLD Woodside provided the Pluto Effluent Treatment Plant (ETP) Commissioning Closeour Commissioning closeout reporting and Licence application supporting documentation in Operating Licence L8752/2013/1 was issued 1 August 2013.
Operating performance data to be provided to DEC (Manager, Pilbara Region) within an Annual Licence Report.	7.1	C 2013-2014 Operating performance data was provided to the DER in section 7 of the A Operating Licence L8752/2013/1, on 26 June 2014.
Notification of DEC where effluent is discharged to ocean from the MUBRL not in accordance with either the approved discharge specifications or the Contingency Wastewater Management Plan (detailed in Section 8).	7.3	<b>NR</b> No effluent was discharge to the ocean that was not in accordance with the approx Management Plan during the reporting period.

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gement (	of the waste	water trea	tment a	nd dispo	sal facil	ities
astewate	er Discharge	Managem	ent Pla	n during	2013/2	014
perating	experience	(including	testing	results)	during	the

Revision 4 remains in line with the management framework ating Licence revisions L8752/2013/1 and L8752/2013/2.

out Report XA0000RH8753228 to the DEC on 5 April 2013. in Table 5.1 of the DEC approved Pluto LNG Project ETP pject Treated Waste Water Marine Discharge Management ntation informed the licensing process through the DER. The

Ianagement Plan and DER Operating Licence L8752/2013/1 ntal Reporting. The 2013-2014 Licence period environmental

ent Plan to reflect the most up to date information regarding rational phase incorporating minor amendments made based ving phase.

. Revision 4 remains in line with the management framework epartment of Environment Regulation Operating Licences

have not required further amendments to the TWMP Table

during the operations phase.

vithin treated wastewater, there has been no requirement for

ng 2013/2014 (Revision 4) to incorporate minor amendments commissioning, stabilisation and early operational phases. have not required further amendments to the TWMP Table

out Report XA0000RH8753228 to the DEC on 5 April 2013. n informed the licensing process through the DER. The DER

Annual Environmental Licence Report as required by DER

roved discharge specifications or Contingency Wastewater

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Key Management Action	Source Ref/ Chap	Status/Evidence 2014
Implement contingency management options in Section 8.1 of the Management Plan in the event that effluent in the final inspection tanks does not meet the approved discharge specification for whatever reason.	8.1	<b>NR</b> Treated effluent met approved discharge specifications during the reporting period Contingency Wastewater Management Plan were not required to be implemented.
Dredge Impact Management Plan (Condition 6-6)		
Coral Condition Assessments		
Refer to 2010 ACR for details.		CLD Dredging ceased on 21 May 2010. Results were presented in the ACR 2010.
Water Quality and Sediment Condition Assessments		
Refer to 2010 ACR for details.		CLD Dredging ceased on 21 May 2010. Results were presented in the ACR 2010.
BEP Techniques		
Refer to 2010 ACR for details.		CLD Dredging ceased on 21 May 2010. Results were presented in the ACR 2010.
Marine Quarantine Management Plan (Condition 8-1)		
Refer to 2010 ACR for details.		CLD Dredging ceased on 21 May 2010. Results were presented in the ACR 2010.
Sea Turtle Management Plan (Condition 9-2) (Rev 2, August 2013 – XB0005AH0006)		
OS 1 – Implement the existing Pluto Operational Environmental Lighting Specification	Table 8	C Implementation of the Operational Environmental Lighting Specification was complete plant construction.
		No changes to plant lighting with the potential to impact Holden Beach were observed period.
OS 1 – Audits of lighting during operations against the Operational Lighting Protocol (Environmental Specification Lighting XA0005SH0003) shall be conducted during the first turtle nesting season of operations. Additional audits shall be conducted every 5 years during the operational life of the Pluto Offshore Facility.	Table 8	NR Not required in the 2014 reporting period. The next survey will be undertaken in the 207
OS 2 – In the event of a hydrocarbon spill, management measures contained within the Woodside Dampier Sub-basin Oil Spill Contingency Plan shall be implemented.	Table 8	NR There were no Pluto offshore/nearshore hydrocarbon spills to sea with the potential to i reporting period.
OS 3 – Implement Waste Management Plan & Marine Discharge Management Plan (water quality to meet ANZECC / ARMCANZ (2000)).	Table 8	<b>C</b> There were no Pluto waste discharges with the potential to impact on turtles and marine Marine discharges are managed in accordance with 757:M7.3.
OS 4 – Access to Holden Beach is restricted to key personnel.	Table 8	C Access to Holden Beach through the Woodside lease is protected by a fence which through locked and security controlled gates. Procedural controls are also in place vi (refer to the Cultural Heritage Management Plan for details). To ensure access by key personnel only, a work permit system is also in place. Acc
		Authority Boating Safety Exclusion Zone: <u>http://www.dpa.wa.gov.au/Boating-Safety.as</u>
OS 4 – No vehicle access is permitted on the beach, with protocols in place for human movement along the beach to avoid nest disturbance and visual movement of human activity to approaching sea turtles.	Table 8	C See evidence listed above.
OS 5 – Evaluate future timeframes of maintenance dredging to avoid coinciding with turtle nesting and breeding season. Refer to management plan for further actions regarding dredging and soil disposal.	Table 8	NR No dredging or spoil disposal activities during the reporting period

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eriod, therefore management options as described in	the	
ted during the 2012 reporting period following completio	n of	
ed during opportunistic lighting reviews through the reporting		
2017 reporting period.		
o impact on turtles and marine mammals during the 2014	Ļ	
ine mammals during the reporting period.		
ich surrounds the Pluto LNG facilities, and restricts acc via the Heritage and disturbance footprint approval sys		
Access to the beach by sea is restricted by a Dampier	Port	

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Key Management Action	Source Ref/ Chap	Status/Evidence 2014
CS1 – CS5 – Management measures for future construction.	Table 8	<b>NR</b> No expansion construction activities occurred during the reporting period.
Monitoring at Holden Beach – to be undertaken for five years from Pluto Foundation Project start-up until 2016 i.e. once a week from 1 <sup>st</sup> September to 1 <sup>st</sup> May or more frequently if successful nesting event is identified.	5.1	C Monitoring logs are maintained to record when observations have taken place and ass The annual turtle observation report for the 2013/2014 nesting/hatching period was pro
Reporting – Turtle observation data will be compiled by the Woodside onsite Environmental Advisor and reports sent on a yearly basis, within 1 month of the end of the turtle nesting season to the DEC and DSEWPaC. Reporting of any incident that involves the injury or mortality of a sea turtle or marine mammal during construction and operation will be reported – refer to the Management Plan for details.	6.1	C The annual turtle observation report for the 2013/2014 nesting/hatching period was pro The 2014/2015 reporting will be undertaken during 2015 following completion of the tur No construction or operation incidents occurred involving injury or mortality of sea turtle
Air Quality Management Plan (Condition 11-2) (Rev 2, December 2011 – X0000AH0002)		
Complete testing as detailed in the Stack Emissions Test Plan required under Works Approval W4444/2008/1 during plant commissioning.		CLD
Results from the implementation of this plan to be provided to DEC within a compliance document required under Condition 2 of the Works Approval prior to plant Licensing.	5	Woodside undertook commissioning stack emissions tests to validate performance of 2012, and February 2013. Performance reporting permitted commissioning closeout r application for an operating licence was submitted to DER (formerly DEC).
		A Stack Emissions Monitoring Verification Report was provided to the DEC on 7 March
Point Source Emissions Monitoring on gas turbines and RTO, quarterly in first year and then annually thereafter.	7.1	C Routine monitoring including stack emissions testing was undertaken during the report
Report summarising results of point source emissions from stack sampling to be provided to DEC regional office annually – as required under Part V Licence.	7.1	RTO during June and July 2014.         C         Stack sampling results were provided to the DER in section 6.1 of the Annual L8752/2013/1, on 26 June 2014.
Smoke from flaring produced during operations to be estimated, recorded and reported as required in the Management Plan and Part V Licence once issued.	7.2	<b>C</b> Dark smoke observations were provided to the DER in section 6.2 of the Annual L8752/2013/1, on 26 June 2014.
Woodside will notify the DEC Regional Manager of regenerative thermal oxidiser (RTO) outages as detailed in the Management Plan, and report these outages in accordance with the Part V Licence once issued.	7.3	C RTO operation reporting to the DER was undertaken in accordance with arrang L8752/2013/1 and L8752/2013/2. Regenerative thermal oxidiser availability was provided to the DER in section 6.4 of the Licence L8752/2013/1, on 26 June 2014.
Implement the Pluto program of ambient air monitoring		c
		The ambient air monitoring programme progressed during the reporting period wir Benzene, Toluene, Xylene (BTX), Particulate matter (PM2.5) monitoring data, and a monitoring data both reported to the OEPA. During the period, Woodside provided reports to the OEPA on 31 July 2014, and 29 D independent review findings of the ambient air monitoring programme.
	8	The studies and review findings supported that risk assessments outlined in approva BTX, Particulate matter, and Ozone, and overstated compared to measured results for
		Woodside received a letter from the OEPA on 2 October 2014 following OEPA revi PM2.5 confirming that no further monitoring of BTX and PM2.5 is required, and that V this component of the programme.
		In December 2014, Woodside proposed the cessation of monitoring of NOx and Ozone ambient air programme prepared in accordance with MS757 Ambient Air Monitoring Ce
		OEPA consideration of the 24 Month ambient air programme for NOx and Ozone is un
	1	Ambient monitoring and reporting continued during 2014 in accordance with DER Oper

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ssociated outcomes. provided to the DER and DOE on 22 April 2014.

provided to the DER and DOE on 22 April 2014. turtle nesting season. urtles or marine mammals.

e of installed equipment during November 2012, December tr reporting, validation of design emissions estimates, and an

rch 2013.

porting period, with a full suite of tests for gas turbines and the

al Licence Report as required by DER Operating Licence

ual Licence Report as required by DER Operating Licence

angements outlined in the DER (EP Act Part V) Licence

of the Annual Licence Report as required by DER Operating

with the development and delivery of 12 month review of d a 24 month review of Oxides of Nitrogen (NOx) and Ozone

December 2014 which included data analysis, reporting and

ovals documentation are consistent with measured results for for Oxides of Nitrogen (NOx).

eview of the 12 Month ambient air programme for BTX and t Woodside are considered compliant with Condition 11-3 for

cone associated with the Pluto LNG Development, and that the g Condition 11-2, point 4 be confirmed as Completed.

underway.

perating Licence L8752/2013/1 and L8752/2013/2.

Key Management Action	Source Ref/ Chap	Status/Evidence 2014
All monitoring stations will be checked and maintained as per the Ambient Air Monitoring Programme: Maintenance and Breakdown Response Plan.	8.3	C Calibration and maintenance of monitoring stations is undertaken as required, and is maparty. Ambient Air Monitoring Programme and Review reports provided to OEPA during t
		aspects.

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managed through Woodside's contract with a specialist third the reporting period include calibration and maintenance

Key Management Action	Source Ref/ Chap	Status/Evidence 2014
Woodside will implement a nitrogen deposition monitoring programme for a period of 24 months of data collection between end 2011 and end 2013. Monthly samples of TSP and NO2 will be collected and weekly size resolved particulate samples will be collected at one location for three weeks during the 2012-2013 calendar years. Upon completion of the data collection phase, a report will be prepared and provided to EPA.	9.2	<ul> <li>C</li> <li>The 24 month Nitrogen Deposition Monitoring Study detailed in the Air Quality Mana five of the stations in operation since (or before) June 2012, and the sixth (background During May 2014, Woodside requested OEPA endorsement of an amendment to the Methodology to before 31 December 2014. This amendment was endorsed by the OEI Analysis of the Nitrogen Deposition monitoring data was undertaken during 2014 b Golder Associates.</li> <li>During the period, Woodside provided reports to the OEPA on 30 December 2014 review findings of the nitrogen deposition monitoring programme.</li> <li>These documents support that risk assessments outlined in approvals documentation a deposition due to Pluto LNG emissions is insignificant. Woodside proposed the cessa of the programme prepared in accordance with MS757 Condition 11-2 point 4 be confi</li> <li>OEPA consideration of the nitrogen deposition programme is underway.</li> </ul>
Regular review of ongoing emissions monitoring and ambient air monitoring programs. Results will be compared to previously completed sampling and monitoring results and risk/impact assessments. If actual emission levels are found to be significantly higher than predicted, this difference will be communicated concurrent with Part V Licence requirements.	10	C Reviews of operational monitoring results were undertaken and compared agains assessments.Stack sampling results and analysis was provided to the DER in secti Operating Licence L8752/2013/1, on 26 June 2014.
Ambient air monitoring review – 12 month review of PM2.5 and BTX monitoring data and 24 month review of NOx and ozone monitoring data using independent peer reviewer.         12 month review period 1 Jan 2012 – 31 Dec 2012. 24 month review period 1 Jan 2012 – 31 Dec 2013.         Decision to be made on continuation of monitoring following review periods.         Following the 24 month nitrogen deposition monitoring period a review of the data will be conducted.	10.1	<ul> <li>C Independent peer review of 12 months of PM2.5 and BTX monitoring was completed d Independent peer review of 24 months of NOx and Ozone monitoring was completed 2014.</li> <li>Woodside received a letter from the OEPA on 2 October 2014 following OEPA revi PM2.5. The letter confirmed that no further monitoring of BTX and PM2.5 is required, a 11-3 for this component of the programme.</li> <li>In December 2014, with consideration of programme results, Woodside proposed the of the Pluto LNG Development, and that the ambient air programme prepared in accord point 4 be confirmed as Completed.</li> <li>OEPA consideration of the 24 Month ambient air programme for NOx and Ozone is und C</li> <li>Independent peer review of the nitrogen deposition monitoring programme was completed on 30 December 2014 which included data analysis, reporting and independent review These documents support that risk assessments outlined in approvals documentation a deposition due to Pluto LNG emissions is insignificant. Woodside proposed the cessa of the programme prepared in accordance with MS757 Condition 11-2 point 4 be confir OEPA consideration of the nitrogen deposition programme is underway.</li> </ul>
Greenhouse Gas Abatement Program (Condition 12-2) (Rev 2, July 2011 – XA0005AH0010)		
Offset reservoir CO <sub>2</sub> emissions for the life of the project using allocation from the Woodside market abatement portfolio, to meet the environmental approval abatement conditions.	9.1	<b>C</b> A contract with CO2 Australia to bio-sequester carbon dioxide is in place as the mecha obligations. Refer to 757:M12.2 in the earlier content of this report.
Reporting in accordance with the National Greenhouse and Energy Reporting Act 2007 (Cth).	10.4	<b>C</b> Annual reporting to the Clean Energy Regulator occurred as required.

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nagement Plan concluded in the 2014 reporting period, with nd) station operating since April 2013.

e reporting date of the approved Nitrogen Deposition Review EPA on 14 May 2014.

by CSIRO, and an independent review report prepared by

14 which included data analysis, reporting and independent

n are consistent with measured results, and that any nitrogen sation of the monitoring programme and that this component nfirmed as Completed.

inst previously completed sampling results and risk/impact ction 6.1 of the Annual Licence Report as required by DER

I during 2014 and reported to the OEPA on 31 July 2014.

ted during 2014 and reported to the OEPA on 29 December

eview of the 12 Month ambient air programme for BTX and , and that Woodside are considered compliant with Condition

e cessation of monitoring of NOx and Ozone associated with ordance with MS757 Ambient Air Monitoring Condition 11-2,

underway.

pleted during 2014. Woodside provided reports to the OEPA ew findings of the nitrogen deposition monitoring programme.

n are consistent with measured results, and that any nitrogen sation of the monitoring programme and that this component nfirmed as Completed.

chanism by which the Pluto LNG Project will discharge offset

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	1	
Greenhouse Gas Improvement Plan Action 1 – Monitor atmospheric emissions, energy consumption and LNG production.		C
		Monitoring of atmospheric emissions, energy consumption and LNG production w emissions intensity of 0.40 tCO2e/tLNG produced was established during a period operations. (August 2013 to end October 2014).
		The Pluto LNG plant experienced a period of high reliability during 2014 following the p throughput, continuous LNG production rate and reduced flaring due to the stable ope the estimated design efficiency was achieved from May 2014 onwards.
	Table 11-1	Periods of lower than predicted design efficiency were associated with short term unpla in the early months of 2014. The planned maintenance shutdown in April 2014 show shutdown and requirement to maintain base electrical power generation. Higher thar maintenance activities, and subsequent LNG process restart occurred during April. emissions of reservoir CO2 prior to applying offset credits through tree plantation CO2
		Variances from estimated baseline design emissions intensity were reviewed. Analysis expected AGRU and flaring emissions.
Greenhouse Gas Improvement Plan Action 2 – Undertake a Leak Detection and Repair Program.		CLD
	Table 11-1	A leak detection and repair program was undertaken during November 2013. This su leak detection processes. The detection survey was undertaken by a specialist cor where practicable, and through maintenance systems with due consideration of safe ac
Greenhouse Gas Improvement Plan Action 3 – Undertake a Flare Gas Recovery Study.		C
		As part of the facility Energy Efficiency Opportunity (EEO) study undertaken during known vulnerabilities causing flaring, and potential rectification options. These opporture
	Table 11-1	One opportunity was the evaluation a flare gas recovery system (FGRS) on the warn data).
		Review of the study in late 2014 identified substantial reduction in continuous flare flo Further, potential process safety stability impacts, combined with capital costs, cons FGRS not being carried for further detailed study.
Greenhouse Gas Improvement Plan Action 4 – Undertake an energy efficiency review of the plant.		C
		An Energy Efficiency Opportunity Review was undertaken during March 2014, in accord suite of background material, trends, prompts and register of existing opportunities work of recommended opportunities for further screening.
	Table 11-1	A total of 35 opportunities were presented, grouped for assessment as opportunities fo flaring improvement.
		Analysis of opportunities continues for a number of opportunities in line with Woods (ORIP) and Technical Change Management System (TCMS) processes.
		Woodside uses ORIP to support plant optimisation and long term sustainability. Th document issues, vulnerabilities and opportunities to optimise plant reliability and per are developed and progressed through TCMS.
Greenhouse Gas Improvement Plan Action 5 – Identify energy efficiency gains and improved greenhouse emissions intensity by integrating systems for future expansion.	Table 11-1	NR Expansion plans were not substantially progressed during the reporting period.
Greenhouse Gas Improvement Plan Action 6 – Continue to monitor market abatement opportunities.		c
	Table 11-1	Woodside continues to monitor market greenhouse gas abatement opportunities, and LNG emissions as part of broader consideration of emerging federal government green

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was undertaken during the reporting period. A baseline riod which included the first year of steady state licensed he planned shutdown in April. This period was typified by high operational state. Emissions intensity (efficiency) at or below planned LNG plant trips and associated flaring during restart owed a higher emissions intensity due to LNG process train han average flaring associated with ensuring safe shutdown ril. Note: intensity includes Acid Gas Removal Unit (AGRU) 02 carbon sequestration. sis indicated more efficient power generation and higher than supplemented the designed instrumentation and operational contractor, with identified emissions addressed immediately access, planning, isolation and shutdown requirements. ing 2014, investigation included analysis of flaring sources, tunities were raised in the EEO process for screening. arm-wet flare (initially based on the available 2013 flare flow

flows, reducing the feasibility of pursuing a recovery system. onstruction safety risks and low value return resulted in the

ccordance with the Energy Efficiency Opportunities Act 2006. was expanded on during the workshop to compile a register

for efficiency gains, flaring reduction, and both efficiency and

odside's Opportunities and Reliability Improvement Process

The process includes the use of an electronic database to performance. Once suitably assessed in ORIP, project plans

and continues to assess the applicability of offsets for Pluto enhouse policy and framework.

Greenhouse Gas Improvement Plan Action 7 – Review Greenhouse Gas Improvement Plan and incorporate any identified actions.		C
		The Pluto LNG facility improvement plan targets opportunities to continually optimise reliability, and minimise emissions intensity. This improvement plan is achieved through normal business of monitoring, maintenance execution and the identification, analysis and implementation of plant opportunities in accordance with Woodside's processes, which provide a "live plan".
	Table 11-1	The improvement plan was reviewed following the EEO process during 2014. A number of opportunities have been substantially progressed, with numerous improvements implemented during 2014, implementation commenced, or planned for implementation.
		As part of this analysis and consideration of benchmark performance, a reduction (below baseline of 0.40 tCO2e/tLNG) emissions intensity of 0.37 tCO2e/tLNG is defined as a long term target for periods of stable operation.
Greenhouse Gas Improvement Plan Action 8 – Review and update the Greenhouse Gas Abatement Program.		NR
	Table 11-1	Not required in the 2014 reporting period.
		Updated Greenhouse Gas Abatement Program will be completed 5 years from achieving steady state operations (i.e. by 1 August 2018), or prior to commissioning of new trains.
Woodside Energy Limited Invasive Marine Species Management Plan (Condition 8-3) (Rev 2, October 2011 – A3000AH43455	70)	
Risk Assessment Process detailed in Section 4 of the Management Plan is to be applied to all vessels, rigs and immersible equipment under Woodside contract that plan to enter and operate within the identified Invasive Marine Species Management Area (IMSMA), other than those exceptions identified in Section 4.1 of the Management Plan.	4	C The Invasive Marine Species Management Plan is implemented for Pluto vessel operations, including provision of Tankers and Carrier Guidelines during vessel contracting processes. Where required by the plan, risk assessments (VRASS) are carried out for support vessels to prevent the introduction of invasive species.
Ensure that management options following the risk assessment process comply with Section 5.1 of the Management Plan	5	C Management options implemented following the risk assessment process may include information confirmation, application of the limit of three entrants into the IMSMA, treatment of vessel internal seawater systems or inspection (for example).
Preliminary Decommissioning Plan		
Ensure a preliminary decommissioning plan is approved, in accordance with the requirements of condition 14-1.		CLD
		A revised preliminary decommissioning plan was submitted to DEC for approval on 8 January 2010 and was approved on 1 February 2010.
Final Decommissioning Plan		
Not applicable at this stage. The Final Decommissioning Plan will be developed closer to decommissioning date. Key actions to satisfy this commitment will be identified once plan has been approved.		NR
		Not required during the 2014 reporting period.

\* Note: Wording of actions here may not be representative of the exact wording in the relevant management plan

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