

Arrow Surat Gas Expansion Project EPBC Audit

Independent Compliance Audit of EPBC 2010/5344 Approval

16-Dec-2024
Arrow Surat Gas Expansion Project
Commercial-in-Confidence

Arrow Surat Gas Expansion Project EPBC Audit

Independent Compliance Audit of EPBC 2010/5344 Approval

Client: Arrow Energy Pty Ltd

ABN: 73 078 521 936

Prepared by

AECOM Australia Pty Ltd

Turrbal and Jagera Country, Level 8, 540 Wickham Street, PO Box 1307, Fortitude Valley QLD 4006, Australia
T +61 1800 868 654 www.aecom.com
ABN 20 093 846 925

16-Dec-2024

Job No.: 60734988

AECOM in Australia and New Zealand is certified to ISO9001, ISO14001 and ISO45001.

© AECOM Australia Pty Ltd (AECOM). All rights reserved.

AECOM has prepared this document for the sole use of the Client and for a specific purpose, each as expressly stated in the document. No other party should rely on this document without the prior written consent of AECOM. AECOM undertakes no duty, nor accepts any responsibility, to any third party who may rely upon or use this document. This document has been prepared based on the Client's description of its requirements and AECOM's experience, having regard to assumptions that AECOM can reasonably be expected to make in accordance with sound professional principles. AECOM may also have relied upon information provided by the Client and other third parties to prepare this document, some of which may not have been verified. Subject to the above conditions, this document may be transmitted, reproduced or disseminated only in its entirety.

Table of Contents

Acronyms and abbreviations	i
Executive Summary	ii
1.0 Introduction	3
1.1 Background	3
1.2 Key dates:	3
1.3 Audit Team	5
1.4 Objectives and Scope	5
2.0 Audit methodology	6
2.1 Approach	6
2.2 Document review	7
2.3 Interviews	7
2.4 Site visit	8
2.5 Assumptions	8
3.0 Audit results	8
3.1 Audit findings	8
3.2 Summary of compliances and observations	34
3.2.1 Staging	34
3.2.2 Offsets	35
3.3 Limitations	36
4.0 Conclusion	37
Appendix A	
Approval Conditions	A
Appendix B	
Audit Criteria and Evaluation Table	B
Appendix C	
Audit Document Register	C
Appendix D	
Auditors' Statements	D
Appendix E	
Auditors' Curricula Vitae	E

Acronyms and abbreviations

Table 1 Acronyms and abbreviations

CSG	Coal Seam Gas
DCCEEW/the Department	Department of Climate Change, Energy, the Environment and Water (Commonwealth)
DEE	Department of Environment and Energy
EIS	Environmental Impact Statement
EOP	Environmental Offsets Policy
EPBC	Environment Protection and Biodiversity Conservation
EPBC Act	Environment Protection and Biodiversity Conservation Act 1999 (Commonwealth)
JIF	Joint Industry Framework
MNES	Matters of National Environmental Significance
OAMP	Offset Area Management Plan
SREIS	Supplementary Report to the Environmental Impact Statement
SGP	Surat Gas Project
UWIR	Underground Water Impact Reports
WMMP	Water Monitoring and Management Plan

Executive Summary

AECOM Australia Pty Ltd (AECOM) was engaged by Arrow Energy Pty Ltd (Arrow) to undertake an Independent Audit of compliance with the conditions of the Environment Protection and Biodiversity Conservation (EPBC) 2010/5344 approval of the Surat Gas Expansion Project.

Project name	Surat Gas Expansion Project, Surat Basin, QLD, EPBC 2010/5344
Auditor	AECOM Australia Pty Ltd
Proponent (Approval holder)	Arrow Energy Pty Ltd
Project contact & details	Georgina Rowe Manager, Environmental Compliance and Assurance Level 39, 111 Eagle St, Brisbane QLD 4000 T: +61 7 3012 4829
Project location	Brisbane Queensland, Site location – Surat Basin, Central Queensland
Project Description	The Surat Gas Expansion Project is a coal seam gas project comprising up to 6,500 production wells and associated infrastructure and the tenure covers an area of approximately 6,100 km ² , extending from the township of Wandoan in the north towards Millmerran in the south.
Audit Requirement	Condition 30 of the approval states that upon the direction of the Minister, the approval holder must ensure an independent audit of compliance with the conditions of approval is conducted, and a report submitted to the Minister. Approval Conditions 1 through 34 were audited.
Audit period	22 October 2020 – 28 May 2024 Period of commencement of the EPBC Action to the date of the regulators request for this audit.
Audit date	4 September to 19 November 2024
Audit location/s	Arrow Energy head office located at Level 39/111 Eagle Street Brisbane.
Members of Audit team	Rob Storrs, Holly Scoble, Orla Ferguson (Refer to Table 2)
Personnel Interviewed	Kelsey Bawden, Georgina Rowe, Matthew Pitman, Tom Casey, Daniel Potter, Paul Finn, Stephen Danner, Chris Jones, Arron Gorrie
Outcome of audit	No non-compliance
Project activities during the audit period	Clearing activities for the development of the Project.

1.0 Introduction

1.1 Background

Arrow Energy Pty Ltd (Arrow) has been operating a gas supply business since 2004 and they are expanding their coal seam gas (CSG) operations in the Surat Basin through the Surat Gas Project (SGP; the Project). Arrow lodged an Environment Protection and Biodiversity Conservation (EPBC) Referral to the now Department of Climate Change, Energy, the Environment and Water (DCCEEW, hereafter referred to as “the Department”) under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) for the Project on 27 January 2010 (EPBC 2010/5344). An Environmental Impact Statement (EIS) and Supplementary Report to the EIS (SREIS) were completed in March 2012 and June 2013 respectively. The Project was granted approval from the Queensland Government in October 2013.

The Minister for the Environment of the Department provided their EPBC approval for the Project on 19 December 2013. The Project comprises up to 6,500 coal seam gas (CSG) production wells and associated infrastructure and the tenure covers an area of approximately 6,100 km², extending from the township of Wandoan in the north towards Millmerran in the south. Land uses in the Surat Basin are dominated by agriculture. Some cattle grazing also occurs and remnant vegetation exists largely within State Forests and road reserves (see Figure 1).

Development of the Project or commencement of “the Action” started on 22 October 2020 and involves the installation of CSG wells, CSG and water gathering lines and associated infrastructure

The EPBC Act approval for the Project specifies ‘Whole of Project’ and ‘Staged’ maximum disturbance to core habitat limits for specified Matters of National Environmental Significance (MNES) and groundwater resources. The approval defines Stage 1 as “Year 1 to 3 (inclusive) of the Action, starting at the date of commencement”. The approval defines commencement as “any physical disturbance, including clearance of native vegetation, new road work and the establishment of well sites to develop the gas field project area”. The Action is defined as starting 22 October 2020.

As Arrow has progressed Stage 1 of the development slower than anticipated, the Stage 1 activities as described in some of the Arrow documents (as required by the approval conditions) are not yet complete. Arrow has been in active communications with the Department to resolve these incomplete activities (further detail in Section 3.2).

1.2 Key dates:

The following dates are of key importance throughout the audit:

- Initial EPBC approval 19/12/2013
- Commencement of the Action 22/10/2020
- Revisions to EPBC Approval 29/03/2022
- Stage 1 - 22/10/2020 – 22/10/2023 – (year 1 to 3 (inclusive) of the action)
- Audit period 22/10/2020 – 28/5/2024
- Stage 2 – 22/10/2023- 22/10/2031– (year 4 to 11 (inclusive) of the action)

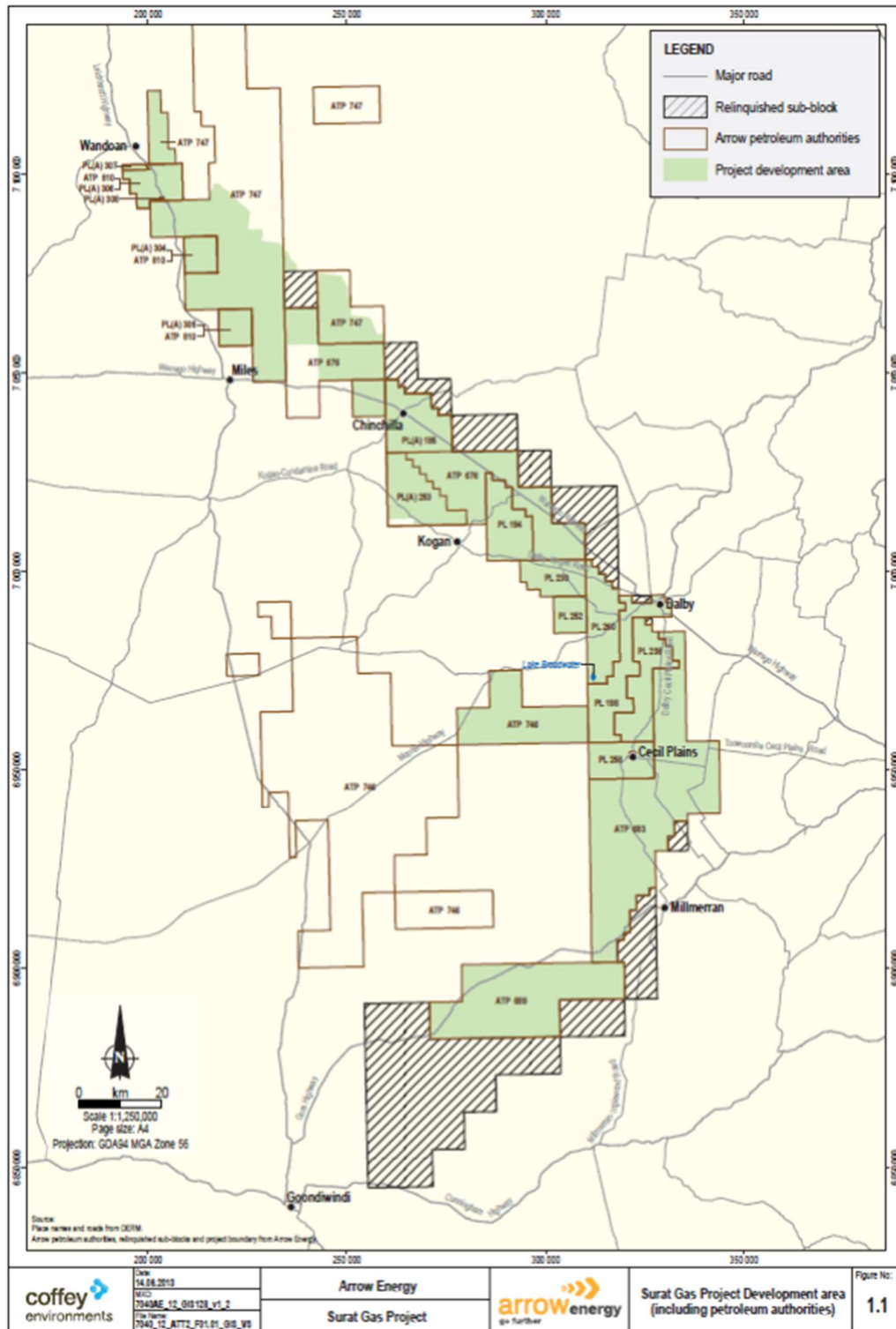


Figure 1 Surat Gas Project overview of impact areas*

*- Variation of conditions attached to approval Surat Gas Expansion Project (EPBC 2010/5344), 29 March 2022, Department of Agriculture, Water and the Environment

1.3 Audit Team

The AECOM audit team detailed in Table 2 were accepted on the 2 August 2024 by Mr Thomas Long, Director Environmental Audit, Compliance and Enforcement Branch of the Department, as suitably independent and qualified for the purpose of auditing this Project. The Audit teams Certification Statements are presented in Appendix D and the Audit teams Curriculum Vitas are presented in Appendix E.

Table 2 Audit team details and experience

Personnel	Qualifications	Role	Experience (years)
Orla Ferguson	SAI Global – Lead Auditor (C327835) MSc. in Environmental Science BSc. (Hons) in Chemistry	Lead Verifier	20
Rob Storrs	Bachelor of Environmental Science (Land Resources) Honours: First Class	Lead Auditor	28
Holly Scoble	Bachelor of Science (Biological and Earth Sciences)	Auditor	7

1.4 Objectives and Scope

The objective of the audit is to fulfil the requirements of the EPBC 2010/5344 approval Condition 30, that states an independent audit is to be undertaken when directed by the Minister.

In a letter to Arrow, dated 31 May 2024, the Minister for the Environment and Water requested an independent audit of the compliance conditions of the EPBC 2010/5344 be undertaken.

Condition 30 of the approval states that upon the direction of the Minister, the approval holder must ensure an independent audit of compliance with the conditions of approval is conducted, and a report submitted to the Minister.

The audit must be of activities undertaken during the period from commencement of the action to the date of this letter, and in accordance with conditions of the approval.

Arrow approached AECOM to undertake the audit and once the audit team was approved by the Department, the audit criteria was developed based on the methodology defined in the *Independent Audit and Audit Report Guidelines for controlled actions which have been approved under Chapter 4 of the Environment Protection and Biodiversity Conservation Act 1999* (Department of Environment and Energy (DEE), 2019). The proposed audit criteria were submitted to the Department for approval and accepted by Mr Thomas Long, Director Environmental Audit, Compliance and Enforcement Branch on the 4 September 2024.

The audit was undertaken on the EPBC approval which took effect on 29 March 2022 (refer Appendix A). The approval has 34 conditions which are categorised as follows.

- Overarching – Condition 1
- Disturbance limits – Conditions 2 to 7
- Offsets – Conditions 8 to 11 (condition 12 is revoked)
- Coal Seam Gas Water Monitoring and Management Plan – Conditions 13 to 25
- General – Conditions 26 to 34.

2.0 Audit methodology

2.1 Approach

The audit approach was in keeping with the guidance provided in the *Independent Audit and Audit Report Guidelines for controlled actions which have been approved under Chapter 4 of the Environment Protection and Biodiversity Conservation Act 1999* (Department of Environment and Energy (DEE), 2019). In determining the compliance with audit conditions, objective evidence was sought to verify the compliance status.

In delivering the audit AECOM conducted the following tasks:

Audit Criteria: AECOM developed the audit criteria for the agreed scope of the audit and submitted to the Department for approval. The audit criteria consisted of the EPBC Approval Condition and the verification method as presented in Appendix B.

Document Review: AECOM in consultation with Arrow developed a list of documents required to support the audit. This was an iterative process where Arrow on request, provided additional information to support the audit findings. In total 130 documents were reviewed as part of the audit.

Interviews: AECOM conducted five interviews with Arrow personnel between 29 October 2024 and 1 November 2024. The interviewers met with Arrow personnel from Compliance and Approval, Staging, Ecology, Groundwater, and Field Operations team. Conversation notes (minutes) from these interviews were taken and the finalised minutes have been included in evidence towards assessment of compliance in the audit.

Audit Findings and Reporting: The audit findings were classified as per Section 6.5 of the *Compliance of the Independent Audit and Audit Report Guidelines* (DEE, 2019).

Audit items were given an outcome as listed below:

- Y: Compliance
- N: Non-compliance
- NA: Not applicable at time of audit
- O: Observation.

Compliance

A rating of 'compliance' is given when the auditee has complied with a condition or element of a condition.

Non-compliance

A rating of 'non-compliance' is given when the auditee has not met a condition or an element of a condition.

Not applicable

A rating of 'not applicable' at the time of the audit is given when the condition or element of a condition falls outside the scope of the audit e.g. if an activity has not yet commenced or a requirement has not been triggered.

Observation

An 'observation' may be made about issues relevant to the protection of a matter of national environmental significance when the issue is not strictly related to compliance or non-compliance with a condition or element of a condition.

Appendix B presents in tabular form the audit outcomes per approval condition. It shows the evidence observed, the documents sighted, the determination and the compliance findings.

2.2 Document review

Once AECOM was approved as the audit team and the audit criteria agreed with the Department, a kick-off meeting was held with Arrow. At the kick off meeting the types of evidence required to confirm compliance with the approval conditions was discussed and agreed. In the weeks following, Arrow collated and submitted 135 documents for AECOM review and consideration. The list of documents provided and reviewed is presented in Appendix C.

2.3 Interviews

To assist AECOM in confirming observations made when reviewing the Arrow documents (Section 2.2) and to answer outstanding questions, a series of five interview sessions were held with Arrow at their Brisbane head office between 29 October 2024 and 1 November 2024. The list of interviewees and their company roles and responsibilities are listed in Table 3.

Table 3 Interviewees during the audit

Name	Role	Responsibility
29 October – Kick off meeting and Compliance and Assurance		
Kelsey Bawden	Manager Environment & Carbon	Overall Conditions
Georgina Rowe	Manager, Environmental Compliance and Assurance	Overall Conditions
31 October – Project Staging		
Kelsey Bawden	Manager Environment & Carbon	Overall Conditions
Georgina Rowe	Manager, Environmental Compliance and Assurance	Overall Conditions
Tom Casey	Access Approvals Manager	Offsets
Matthew Pitman	Principal Government Relations	Correspondence with the Department
31 October – Ecology		
Kelsey Bawden	Manager Environment & Carbon	Overall Conditions
Georgina Rowe	Manager, Environmental Compliance and Assurance	Overall Conditions
Tom Casey	Access Approvals Manager	Offsets
Paul Finn	Principal Ecologist	Offsets
Daniel Potter	Environmental Advisor	Regulatory Approvals, Tracking Clearing and Disturbance
31 October - Groundwater		
Kelsey Bawden	Manager Environment & Carbon	Overall Conditions
Georgina Rowe	Manager, Environmental Compliance and Assurance	Overall Conditions
Stephen Denner	Groundwater team Manager/ Hydrologist	State Water Act Obligations, EPBC Groundwater Conditions
Chris Jones	Senior Hydrogeologist	Stage 1 Water Monitoring and Management Plan (WMMP), State Water Act Obligations, EPBC Groundwater Conditions
1 November – Field operations		
Kelsey Bawden	Manager Environment & Carbon	Overall Conditions
Arron Gorrie	Senior Environmental Advisor	Compliance of field procedures

2.4 Site visit

A site visit was included within the method of verification at the time the criteria was submitted to the Department. However, based on the outcomes of the interviews, it was determined that there are currently minimal works being conducted at the site up until March 2025. It was identified that nominal value would be gained from undertaking a site visit to assess compliance of field operations as processes were satisfactorily explained via interview with site personnel. As a result, the site visit was not undertaken.

2.5 Assumptions

The audit evidence is based on samples of the available information. Therefore, there may be an element of uncertainty in the process as not all information can practically be audited. This level of uncertainty is consistent with the guidance provided in ISO 19011:2018 *Guidelines for auditing management systems*.

All documentation evidence provided by individuals during this audit was assumed to be current and accurate at the time of the audit. It was assumed that AECOM would be notified of any updates to this documentation made during the audit, included as post ordered note within this report.

Verbal communications were taken at face value unless evidence highlighted conflict or inconsistencies and warranted further investigation.

3.0 Audit results

3.1 Audit findings

The summary of audit findings are presented in Table 4 below. The detailed information on the verification method, evidence considered and documents sighted are presented in Appendix B and C respectively.

Table 4 Audit Summary Findings

Approval Condition	Condition	Determination	Finding
1	The Minister may determine that a plan, strategy or program approved by the Queensland Government satisfies a plan required under these conditions.	It was determined that there are no plans applicable to this EPBC approval that were approved by the Queensland State government. All plans were approved at the Commonwealth level.	NA
2	Disturbance Limits For the purpose of the action, the approval holder must not take any action outside the project area.	The Project is in the early stages of development. Arrow has to date drilled 264 CSG wells of which 206 were in production as of the 28 May 2024. From the figures sighted and interviews undertaken this condition for the audit period has been met.	Y
3	The action is limited to a maximum of 6,500 CSG production wells and associated infrastructure.	The Project is in the early stages of development. Arrow has to date drilled 264 CSG wells with 206 in production during the audit period, and is well within the maximum number.	Y
4	The approval holder must not undertake hydraulic fracturing.	From the review of the explanatory memo SGP EIS, Document 75, and Document 59, drilling method documentation and interviews undertaken, this condition for the audit period has been met.	Y
5	To protect EPBC listed species and EPBC communities within the project area the maximum disturbance limits in Table 1 apply to the project. The approval holder must not exceed these disturbance limits.	The Project is in the early stages of development. Arrow has to date developed the gas field and drilled 264 of the 6,500 approved CSG wells with 206 in production during the audit period. The documents sighted demonstrate that the approved maximum disturbance hectares for core habitat and EPBC communities as listed in the approval have not been exceeded. Arrow also has a robust method of tracking clearing against the approved disturbance areas. The cumulative areas of disturbance are reported annually in the Project EPBC compliance reports (Documents 52, 63 and 78) and the cumulative totals up to 28 May 2024 were reviewed and considered compliant.	Y

Approval Condition	Condition	Determination	Finding																																				
	<p>Table 1: Whole of project maximum disturbance limits</p> <table><tr><th>Terrestrial species</th><th>Maximum disturbance (hectares) to core habitat</th></tr><tr><td>Curly-bark Wattle, <i>Acacia curranii</i></td><td>1210</td></tr><tr><td>Hando's Wattle, <i>Acacia handonis</i></td><td>1210</td></tr><tr><td>Belson's Panic, <i>Homopholis belsonii</i></td><td>140</td></tr><tr><td><i>Prostanthera sp Dunmore</i></td><td>380</td></tr><tr><td>Small-leaved Denhamia, <i>Denhamia parvifolia</i></td><td>50</td></tr><tr><td><i>Calytrix gurlmundensis</i></td><td>1210</td></tr><tr><td>Ooline, <i>Cadellia pentastylis</i></td><td>No disturbance</td></tr><tr><td>Austral Toadflax, <i>Thesium australe</i></td><td>160</td></tr><tr><td><i>Acacia lauta</i></td><td>990</td></tr><tr><td><i>Xerothamnella herbacea</i></td><td>110</td></tr><tr><td>Hawkweed, <i>Picris evae</i></td><td>120</td></tr><tr><td>Austral Cornflower, <i>Rhaponticum australe</i></td><td>160</td></tr><tr><td><i>Eucalyptus virens</i></td><td>170</td></tr><tr><td>King Blue-grass, <i>Dichanthium queenslandicum</i></td><td>160</td></tr><tr><td>Queensland White-gum, <i>Eucalyptus argophloia</i></td><td>10</td></tr><tr><td><i>Macrozamia machinii</i></td><td>No disturbance</td></tr><tr><td>South-eastern Long-eared Bat, <i>Nyctophilus corbeni</i></td><td>4080</td></tr></table>	Terrestrial species	Maximum disturbance (hectares) to core habitat	Curly-bark Wattle, <i>Acacia curranii</i>	1210	Hando's Wattle, <i>Acacia handonis</i>	1210	Belson's Panic, <i>Homopholis belsonii</i>	140	<i>Prostanthera sp Dunmore</i>	380	Small-leaved Denhamia, <i>Denhamia parvifolia</i>	50	<i>Calytrix gurlmundensis</i>	1210	Ooline, <i>Cadellia pentastylis</i>	No disturbance	Austral Toadflax, <i>Thesium australe</i>	160	<i>Acacia lauta</i>	990	<i>Xerothamnella herbacea</i>	110	Hawkweed, <i>Picris evae</i>	120	Austral Cornflower, <i>Rhaponticum australe</i>	160	<i>Eucalyptus virens</i>	170	King Blue-grass, <i>Dichanthium queenslandicum</i>	160	Queensland White-gum, <i>Eucalyptus argophloia</i>	10	<i>Macrozamia machinii</i>	No disturbance	South-eastern Long-eared Bat, <i>Nyctophilus corbeni</i>	4080		
Terrestrial species	Maximum disturbance (hectares) to core habitat																																						
Curly-bark Wattle, <i>Acacia curranii</i>	1210																																						
Hando's Wattle, <i>Acacia handonis</i>	1210																																						
Belson's Panic, <i>Homopholis belsonii</i>	140																																						
<i>Prostanthera sp Dunmore</i>	380																																						
Small-leaved Denhamia, <i>Denhamia parvifolia</i>	50																																						
<i>Calytrix gurlmundensis</i>	1210																																						
Ooline, <i>Cadellia pentastylis</i>	No disturbance																																						
Austral Toadflax, <i>Thesium australe</i>	160																																						
<i>Acacia lauta</i>	990																																						
<i>Xerothamnella herbacea</i>	110																																						
Hawkweed, <i>Picris evae</i>	120																																						
Austral Cornflower, <i>Rhaponticum australe</i>	160																																						
<i>Eucalyptus virens</i>	170																																						
King Blue-grass, <i>Dichanthium queenslandicum</i>	160																																						
Queensland White-gum, <i>Eucalyptus argophloia</i>	10																																						
<i>Macrozamia machinii</i>	No disturbance																																						
South-eastern Long-eared Bat, <i>Nyctophilus corbeni</i>	4080																																						

Approval Condition	Condition	Determination	Finding
	Dunmall's Snake, <i>Furina dunmalli</i>	4400	
	Five-clawed Worm-skink, <i>Anomalopus mackayi</i>	560	
	Squatter Pigeon (Southern), <i>Geophaps scripta scripta</i>	3261	
	Regent Honeyeater, <i>Anthochaera phrygia</i>	20	
	Collared Delma, <i>Delma torquata</i>	90	
	Yakka Skink, <i>Egernia rugosa</i>	310	
	Australian Painted Snipe, <i>Rostratula australis</i>	5	
	EPBC Communities	Maximum disturbance (hectares)	
	Brigalow (<i>Acacia harpophylla</i> dominant and co-dominant)	106	
	Coolibah - Black Box Woodlands of the Darling Riverine Plains and the Brigalow Belt South Bioregions	8	
	Weeping Myall Woodlands	1	
	Natural Grasslands on basalt and fine-textured alluvial plains of northern New South Wales and southern Queensland	No disturbance	
	White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland	No disturbance	
	Semi-evergreen vine thickets of the Brigalow Belt (North and South) and Nandewar Bioregions	No disturbance	

Approval Condition	Condition	Determination	Finding																						
6	<p>To protect EPBC listed species and communities within the project area the maximum disturbance limits in Table 2 apply to Stage 1. The approval holder must not exceed these disturbance limits.</p> <p>Table 2: Maximum disturbance limits for Stage 1</p> <table><tr><th>Terrestrial species</th><th>Maximum disturbance (hectares) to core habitat</th></tr><tr><td>South-eastern Long-eared Bat, <i>Nyctophilus corbeni</i></td><td>225</td></tr><tr><td>Dunmall's Snake, <i>Furina dunmalli</i></td><td>300</td></tr><tr><td>Five-clawed Worm-skink, <i>Anomalopus mackayi</i></td><td>2</td></tr><tr><td>Squatter Pigeon (Southern), <i>Geophaps scripta scripta</i></td><td>203</td></tr><tr><td>Regent Honeyeater, <i>Anthochaera phrygia</i></td><td>1</td></tr><tr><td>Collared Delma, <i>Delma torquata</i></td><td>11</td></tr><tr><td>Yakka Skink, <i>Egernia rugosa</i></td><td>19</td></tr><tr><td>EPBC Communities</td><td>Maximum disturbance (hectares)</td></tr><tr><td>Brigalow (<i>Acacia harpophylla</i> dominant and co-dominant)</td><td>39</td></tr><tr><td>Coolibah - Black Box Woodlands of the Darling Riverine Plains and the Brigalow Belt South Bioregions</td><td>8</td></tr></table>	Terrestrial species	Maximum disturbance (hectares) to core habitat	South-eastern Long-eared Bat, <i>Nyctophilus corbeni</i>	225	Dunmall's Snake, <i>Furina dunmalli</i>	300	Five-clawed Worm-skink, <i>Anomalopus mackayi</i>	2	Squatter Pigeon (Southern), <i>Geophaps scripta scripta</i>	203	Regent Honeyeater, <i>Anthochaera phrygia</i>	1	Collared Delma, <i>Delma torquata</i>	11	Yakka Skink, <i>Egernia rugosa</i>	19	EPBC Communities	Maximum disturbance (hectares)	Brigalow (<i>Acacia harpophylla</i> dominant and co-dominant)	39	Coolibah - Black Box Woodlands of the Darling Riverine Plains and the Brigalow Belt South Bioregions	8	<p>The Project is in the early stages of development. Arrow has to date developed the gas field and drilled 264 of the 6,500 approved CSG wells with 206 in production during the audit period.</p> <p>The documents sighted demonstrate that the approved maximum disturbance hectares for core habitat and EPBC communities as listed in the approval have not been exceeded. Arrow also has a robust method of tracking clearing against the approved disturbance areas. The cumulative areas of disturbance are reported annually in the Project EPBC compliance reports and the cumulative totals up to 28 May 2024 were reviewed and considered compliant.</p>	Y
Terrestrial species	Maximum disturbance (hectares) to core habitat																								
South-eastern Long-eared Bat, <i>Nyctophilus corbeni</i>	225																								
Dunmall's Snake, <i>Furina dunmalli</i>	300																								
Five-clawed Worm-skink, <i>Anomalopus mackayi</i>	2																								
Squatter Pigeon (Southern), <i>Geophaps scripta scripta</i>	203																								
Regent Honeyeater, <i>Anthochaera phrygia</i>	1																								
Collared Delma, <i>Delma torquata</i>	11																								
Yakka Skink, <i>Egernia rugosa</i>	19																								
EPBC Communities	Maximum disturbance (hectares)																								
Brigalow (<i>Acacia harpophylla</i> dominant and co-dominant)	39																								
Coolibah - Black Box Woodlands of the Darling Riverine Plains and the Brigalow Belt South Bioregions	8																								
7A.	<p>Prior to the commencement of Stage 1, the approval holder must prepare and submit an EPBC Species Impact Management Plan (SIMP) for the Minister's written approval.</p> <p>The EPBC Species Impact Management Plan must include:</p>	<p>An EPBC SIMP has been submitted for approval by the Minister prior to the Action date (22 October 2020), including the sub clause conditions.</p>	Y																						

Approval Condition	Condition	Determination	Finding
a.	Measures that will be taken to avoid, mitigate and manage impacts to EPBC listed threatened species and their habitat during clearance of vegetation, including the involvement of a suitably qualified ecologist at all times during clearance of vegetation;	This condition is considered to have been met as the requirement is captured within Document 1 (particularly Section 3 Page 13 - Mitigation measures) and the SIMP has been approved by the Delegate of the Minister (Document 34)	Y
b.	Measures that will be taken to avoid and mitigate impacts to EPBC listed threatened species and their habitat and to EPBC communities during construction, operation and decommissioning of the action;	This condition is considered to have been met as the requirement is captured within Document 1 (particularly Section 4 Page 19 - Mitigation measures during construction, operation and decommissioning) and the SIMP has been approved by the Delegate of the Minister	Y
c.	a monitoring program to determine the success of impacts avoidance and mitigation measures and that will inform adaptive implementation of the action for the duration of this approval; and	This condition is considered to have been met as the requirement is captured within Document 1 (particularly Section 5 Page 25, Monitoring Program) and the SIMP has been approved by the Minister	Y
d.	a description of how measures proposed in the EPBC Species Impact Management Plan are consistent with the measures in relevant conservation advice, recovery plans and threat abatement plans	This condition is considered to have been met as the requirement is captured within Document 1 (particularly Section 3 Page 45 - Consistencies with relevant documents) and the SIMP has been approved by the Minister	Y
7B.	The approval holder must not commence Stage 1 until an EPBC Species Impact Management Plan has been approved by the Minister in writing. The approved EPBC Species Impact Management Plan must be implemented by the approval holder.	The EPBC SIMP has been approved by the delegate of the Minister prior to the commencement of Stage 1. Implementation of the SIMP is addressed in the Area wide Planning Process End to End Procedure (Document 122)	Y
8A.	Offsets If the approval holder has provided an offset in respect of impacts predicted for a development stage of the project which subsequently are not realised, such parts of the offset in excess of the obligation for that development stage can be applied towards offsets required for the impacts of subsequent development stages.	This condition allows Arrow to utilise unrealised Offsets from one stage to the next. Arrow is yet to legally acquire Offsets for Stage 1 as they are waiting on the approval of the Stage 1 Offset Area Management Plan (OAMP). There is also no compliance requirement in this condition.	NA
8B.	The Offset Strategy may be prepared and submitted to the Minister for approval in stages. Each stage of the Offset Strategy must provide information in respect of the subsequent development stage to commence and all earlier development stages. A development stage must not commence until an Offsets Strategy addressing offset	Arrow have submitted (Doc 38) and had approved (Doc 37) the Stage 1 Offset Strategy. The strategy defines Stage 1 as approximately 350 wells. The Project had drilled 264 CSG wells with 206 in production during the audit period.	Y

Approval Condition	Condition	Determination	Finding
	obligations for that development stage has been approved by the Minister	<p>Condition 8B says that a development stage must not commence until an Offsets Strategy addressing offset obligations for that development stage has been approved by the Minister. The definition of Commencement in the approval condition: <i>Means any physical disturbance, including clearance of native vegetation, new road work, and the establishment of well sites to develop the gasfield project area.</i></p> <p>The determination is that as the approved Stage 1 Offset Strategy says the number of approved Stage 1 wells is approx 350 and the number of wells currently developed is 264, Stage 2 despite being post 22 Oct 2023 (year 4 of the action) has not commenced. Arrow is therefore considered to be in compliance with this condition.</p> <p>As an observation - the staging definition being dependant on commencement of disturbance and time post approval is ambiguous. Arrow commenced negotiation with the Department in relation to altering the definition of the Project Stages in August 2023 to be based on wells developed. These negotiations are still ongoing.</p>	
8C.	The Offset Strategy must:	<p>The letter response from the Department dated 7 July 2019 confirms their agreement that the Surat Gas Project Stage 1 Offset Strategy, Version 6, dated 28 June 2019, meets the requirements of Condition 8C.</p> <p>As the confirmation of the Project Staging is currently under review the Condition 8C compliance was considered against the submitted and approved Stage 1 Offset Strategy.</p>	Y
a.	include a strategy to secure the offproposed for the residual significant impacts to the EPBC listed species and EPBC communities for the subsequent development stage;	This condition is considered to have been met as the requirement is captured within Surat Gas Project - Stage 1	Y

Approval Condition	Condition	Determination	Finding
		Offset Strategy (Document 37) which was approved by the Minister on 7 July 2019.	
b.	include a map of the location of each EPBC listed threatened species and its habitat and EPBC community in relation to infrastructure for the subsequent development stage;	This condition is considered to have been met as the requirement is captured within Surat Gas Project - Stage 1 Offset Strategy (Document 37) which was approved by the Minister on 7 July 2019.	Y
c.	describe potential risks to the successful implementation of the Offset Strategy, and the contingency measures that would be implemented to mitigate against these risks;	This condition is considered to have been met as the requirement is captured within Surat Gas Project - Stage 1 Offset Strategy (Document 37) which was approved by the Minister on 7 July 2019.	Y
d.	detail how the approval holder will address any residual significant impacts to any EPBC listed threatened species and its habitat and/or EPBC communities not identified in Table 1, in accordance with the EPBC Act Offsets Policy; and	This condition is considered to have been met as the requirement is captured within Surat Gas Project - Stage 1 Offset Strategy (Document 37) which was approved by the Minister on 7 July 2019.	Y
e.	specify the proposed legal mechanism and timeframe for securing the offset(s).	This condition is considered to have been met as the requirement is captured within Surat Gas Project - Stage 1 Offset Strategy (Document 37) which was approved by the Minister on 7 July 2019.	Y
8D.	The approval holder must not commence the action until the Offset Strategy for Stage 1 has been approved by the Minister in writing. The approved Offset Strategy must be implemented by the approval holder.	<p>Arrow has submitted the Stage 1 Offsets Strategy (Doc 38) which the Minister has approved (Doc 37).</p> <p>To fully implement the approved Stage 1 Offset Strategy the OAMP needs to be approved by the Department.</p> <p>The OAMP was submitted to the Department for approval in October 2021 and is still under assessment. While waiting for the approval of the OAMP it is determined that Arrow has progressed as far as practicable to legally securing the required offsets and is therefore determined to be in compliance with this condition.</p>	Y
9A.	At least 3 months prior to the commencement of any development stage after Stage 1, the approval holder must submit a revised Offset	Arrow have submitted (Doc 38) and had approved (Doc 37) the Stage 1 Offset Strategy. The strategy defines Stage 1 as	Y

Approval Condition	Condition	Determination	Finding
	Strategy for approval by the Minister. The updated Offset Strategy must include:	<p>approximately 350 wells. The project had drilled 264 CSG wells with 206 in production during the audit period. At the time of the audit there was no drilling work occurring.</p> <p>Condition 9A says that at least 3 months prior to the commencement of any development stage after Stage 1, the approval holder must submit a revised Offset Strategy for approval by the Minister. The definition of Commencement in the approval condition: Means any physical disturbance, including clearance of native vegetation, new road work, and the establishment of well sites to develop the gasfield project area.</p> <p>The determination is that as the approved Stage 1 Offset Strategy says the number of approved Stage 1 wells is approx 350 and the number of wells currently developed is 264, Stage 2 despite being post 22 Oct 2023 (year 4 of the action) has not commenced.</p> <p>As Stage 2 has not commenced Arrow is considered at the time of the audit to be in compliance with this condition.</p> <p>As an observation - the staging definition being dependant on Commencement of disturbance and time post approval is ambiguous. Arrow commenced negotiation with the Department in relation to altering the definition of the Project Stages in August 2023 to be based on wells developed. These negotiations are still ongoing.</p>	
a.	a strategy to secure the minimum offsets proposed for the residual significant impacts to the EPBC listed species and EPBC communities for the subsequent development stage;	This condition is not applicable as the revised Stage 1 Offset Strategy is under assessment and an Updated Offset Strategy for the subsequent development stage is yet to be submitted	NA

Approval Condition	Condition	Determination	Finding
b.	a map of the location of each EPBC listed threatened species and its habitat and EPBC community in relation to infrastructure for the subsequent development stage;	This condition is not applicable as the revised Stage 1 Offset Strategy is under assessment and an Updated Offset Strategy for the subsequent development stage is yet to be submitted	NA
c.	the information required for the Offset Strategy at conditions 8Ca to 8Ce for the subsequent development stage;	This condition is not applicable as the revised Stage 1 Offset Strategy is under assessment and an Updated Offset Strategy for the subsequent development stage is yet to be submitted	NA
d.	demonstration of how any proposed offset builds on offsets already secured and will contribute to a larger strategic offset for whole of project impacts;	This condition is not applicable as the revised Stage 1 Offset Strategy is under assessment and an Updated Offset Strategy for the subsequent development stage is yet to be submitted	NA
e.	performance and completion criteria for evaluating the management of offset areas.	This condition is not applicable as the revised Stage 1 Offset Strategy is under assessment and an Updated Offset Strategy for the subsequent development stage is yet to be submitted	NA
f.	reconciliation of impacts predicted in the subsequent development stage and actual disturbance in preceding development stages against the maximum disturbance limits set out in Table 1.	This condition is not applicable as the revised Stage 1 Offset Strategy is under assessment and an Updated Offset Strategy for the subsequent development stage is yet to be submitted.	NA
10A.	Offsets for development stages must be provided in accordance with the mechanism identified in the approved Offset Strategy and must be registered and legally secured in accordance with Queensland legislation prior to commencement of any subsequent development stage.	<p>Arrow have submitted (Doc 38) and had approved (Doc 37) the Stage 1 Offset Strategy. The strategy defines Stage 1 as approximately 350 wells. The project had drilled 264 CSG wells with 206 in production during the audit period. At the time of the audit there was no drilling work occurring.</p> <p>Condition 10A says that Offsets for development stages must be provided in accordance with the mechanism identified in the approved Offset Strategy and must be registered and legally secured in accordance with Queensland legislation prior to commencement of any subsequent development stage.</p> <p>The definition of Commencement in the approval condition: <i>Means any physical disturbance, including clearance of native vegetation, new road work, and the establishment of well sites to develop the gasfield project area.</i></p>	Y

Approval Condition	Condition	Determination	Finding
		<p>The determination is that as the approved Stage 1 Offset Strategy says the number of approved Stage 1 wells is approx 350 and the number of wells currently developed is 264, Stage 2 despite being post 22 Oct 2023 (year 4 of the action) has not commenced.</p> <p>As Stage 2 is considered to have not commenced Arrow are determined to be in compliance with this condition.</p> <p>The final implementation of the Offset Strategy requires the approval of the Offset Area Management Plan (OAMP). At the time of the audit the OAMP (submitted for approval in October 2021) was still under Department assessment.</p> <p>Arrow has progressed as far as practical to legally obtain the project offsets while waiting for the approval of the OAMP.</p>	
10B.	Within 12 months of project commencement or the Minister approving the Offset Strategy for a subsequent development stage, the approval holder must submit for the approval of the Minister an Offset Area Management Plan which includes:	Arrow is compliant with this condition.	Y
a.	a description of the management measures that will be implemented to protect of EPBC listed threatened species and EPBC communities in each offset area,	Arrow is compliant with this condition.	Y
b.	details of how the proposed offset/s and Offset Area Management Plan are consistent with the principles of the EPBC Act Offsets Policy;	Arrow is compliant with this condition.	Y
c.	a field validation survey and baseline description of the current condition (prior to any management activities) of the offset area/s, including existing vegetation;	Arrow is compliant with this condition.	Y
d.	a description and map (including shapefile/s) to clearly define the location and boundaries of the offset area/s, accompanied by the offset attributes;	Arrow is compliant with this condition.	Y

Approval Condition	Condition	Determination	Finding
e.	information about how the offset area/s provide connectivity with other relevant habitats and biodiversity corridors including a map depicting the offset areas in relation to other habitats and biodiversity corridors;	Arrow is compliant with this condition.	Y
f.	details of how proposed management measures take into account relevant approved conservation advices and are consistent with the measures contained in relevant recovery plans and threat abatement plans;	Arrow is compliant with this condition.	Y
g.	completion criteria and performance targets for evaluating the effectiveness of Offset Area Management Plan implementation, and criteria for triggering corrective actions (if necessary);	Arrow is compliant with this condition.	Y
h.	a program to monitor, report on and review the effectiveness of the Offset Area Management Plan;	Arrow is compliant with this condition.	Y
i.	a description of potential risks to the successful implementation of the offset/s and Offset Area Management Plan, and contingency measures that would be implemented to mitigate against these risks.	Arrow is compliant with this condition.	Y
11A.	The approval holder must not commence the subsequent development stage until the OAMP for the current development stage has been approved in writing by the Minister.	<p>Arrow have submitted (Doc 38) and had approved (Doc 37) the Stage 1 Offset Strategy. The strategy defines Stage 1 as approximately 350 wells. The project had drilled 264 CSG wells with 206 in production during the audit period. At the time of the audit there was no drilling work occurring.</p> <p>Condition 11A says that: The approval holder must not commence the subsequent development stage until the Offset Area Management Plan for the current development stage has been approved in writing by the Minister. The definition of Commencement in the approval condition: <i>Means any physical disturbance, including clearance of native vegetation, new road work, and the establishment of well sites to develop the gasfield project area.</i></p> <p>As the approved Stage 1 Offset Strategy says the number of approved Stage 1 wells is approx 350 and the number of wells</p>	Y

Approval Condition	Condition	Determination	Finding
		<p>currently developed is 264, Stage 2 despite being post 22 Oct 2023 (year 4 of the action) is considered to have not commenced.</p> <p>In August 2023 Arrow requested an amendment to the definition of the approvals project staging definition. This negotiation with the Department is ongoing and at the time of the audit had not been resolved.</p> <p>The OAMP for the Project was submitted to the Minister for approval on 22 October 2021.</p> <p>Arrow is determined to be in compliance with this condition as it is considered that Stage 2 has not yet commenced.</p>	
Note 1	<i>The Minister may determine that a plan, strategy or program approved by the Queensland Government satisfies the requirements for the EPBC Species Impact Management and Offset Plan under these conditions.</i>	No Ministerial directions have been received to date so not applicable	NA
Note 2	<i>Offsets for some species may be accommodated within ecological communities or overlap State approval requirements or other species habitat requirements, as long as they meet the requirements of these conditions of approval in respect of each individual species being offset.</i>	Following interviews this note is deemed to not be applicable at the time of the audit.	NA
13	Coal Seam Gas Water Monitoring and Management Plan Stage 1 CSG Water Monitoring and Management Plan - Prior to commencement, the proponent must submit a Stage 1 Coal Seam Gas Water Monitoring and Management Plan (Stage 1 CSG WMMP) for the approval of the Minister, who may seek the advice of an expert panel. The Stage 1 CSG WMMP must include:	A CSG WMMP was submitted to and approved by the Minister before the commencement date of the project action. Therefore, Arrow is considered compliant with this condition	Y
a.	an analysis of the results of the most recent OGIA model (built or endorsed by OGIA), relevant to all of the project's tenement areas;	This condition has been considered to be met because the requirement is captured within Stage 1 Coal Seam Gas Water Monitoring and Management Plan: Appendix E - Modelling technical memorandum (Document 5)	Y

Approval Condition	Condition	Determination	Finding
b.	a fit for purpose numerical simulation to assess potential impacts on water resources arising from the action in the project area, subsequent surface water groundwater interactions in the Condamine Alluvium and impacts to dependent ecosystems;	This condition has been considered to be met because the requirement is captured within Stage 1 Coal Seam Gas Water Monitoring and Management Plan: Appendix F (Document 6)	Y
c.	an assessment of potential impacts from the action on non-spring based groundwater dependent ecosystems through potential changes to surface groundwater connectivity and interactions with the sub-surface expression of groundwater;	This condition has been considered to be met because the requirement is captured within Stage 1 Coal Seam Gas Water Monitoring and Management Plan (Document 2) Section 3.4.2, and Section 5 of Appendix D (Document 4)	Y
d.	an assessment of predicted project wide groundwater drawdown levels and pressures from the action, together with confidence levels;	This condition has been considered to be met because the requirement is captured within Stage 1 Coal Seam Gas Water Monitoring and Management Plan: Sections 3.2 & 3.3, (Document 2) and Stage 1 Coal Seam Gas Water Monitoring and Management Plan: Appendix E (Document 5) and Stage 1 Coal Seam Gas Water Monitoring and Management Plan: Appendix F (Document 6)	Y
e.	parameters and a sampling regime to establish baseline data for surface and groundwater resources that may be impacted by the action, including: surface water quality and quantity in the project area, and upstream and downstream of potential impact areas; groundwater quality, levels and pressures for areas that may be impacted by the project; and for determining connectivity between surface water and groundwater that may be impacted by the project;	This condition has been considered to be met because the requirement is captured within 'Stage 1 Coal Seam Gas Water Monitoring and Management Plan: Sections 6.1.4, 6.1.5, 6.2.2, 6.2.3 & 6.3 (Document 2) and Stage 1 Coal Seam Gas Water Monitoring and Management Plan: Appendix J Monitoring network technical memorandum (Document 10)	Y
f.	a best practice baseline monitoring network that will enable the identification of spatial and temporal changes to surface water and groundwater. This must include a proposal for aquifer connectivity studies and monitoring of relevant aquifers to determine hydraulic connectivity (including potential groundwater dependence of Long Swamp and Lake Broadwater) and must also enable monitoring of all aquatic ecosystems that may be impacted by the action;	This condition has been considered to be met because the requirement is captured within Stage 1 Coal Seam Gas Water Monitoring and Management Plan: Sections 6.1.4, 6.1.5, 6.2.2, 6.2.3 & 6.3 (Document 2) and Stage 1 Coal Seam Gas Water Monitoring and Management Plan: Appendix J Monitoring network technical memorandum (Document 10)	Y
g.	a program to monitor subsidence impacts from the action, including trigger thresholds and reporting of monitoring results in annual reporting required by condition 28. If trigger thresholds are exceeded, the approval holder must develop and implement an action plan to	This condition has been considered to be met because the requirement is captured within Stage 1 Coal Seam Gas Water Monitoring and Management Plan: Sections 7.1, 7.4, 7.5 & 9.2.3, (Document 2) and Stage 1 Coal Seam Gas Water	Y

Approval Condition	Condition	Determination	Finding
	address impacts within 90 calendar days of a trigger threshold being exceeded;	Monitoring and Management Plan: Appendix K Subsidence technical memorandum (Document 11)	
h.	provisions to make monitoring results publicly available on the approval holder's website to facilitate a greater understanding of cumulative impacts;	This condition has been considered to be met because the requirement is captured within Document 2 and Surat Gas Project Updated CSG WMMP Annual Report Reporting Period: 22 October 2020 to 21 October 2021 (Document 53), Surat Gas Project Updated CSG WMMP Annual Report Reporting Period: 22 October 2021 to 21 October 2022 (Document 70)	Y
i.	a discussion on how the approval holder is contributing to the Joint Industry Plan, including its periodic review. The approval holder must contribute to the Joint Industry Plan and comply with any part of the Joint Industry Plan, or future iterations of the Joint Industry Plan, that applies to the approval holder;	This condition has been considered to be met because the requirement is captured within Stage 1 Coal Seam Gas Water Monitoring and Management Plan: Section 8.1 (Document 2)	Y
j.	a groundwater early warning monitoring system, including:	This condition has been considered to be met because the requirement is captured within Stage 1 Coal Seam Gas Water Monitoring and Management Plan (Document 2)	Y
I	groundwater drawdown limits for all consolidated aquifers potentially impacted by the action, excluding the Walloon Coal Measures;	This condition has been considered to be met because the requirement is captured within Stage 1 Coal Seam Gas Water Monitoring and Management Plan: Sections 5.1 & 5.2, (Document 2) and Stage 1 Coal Seam Gas Water Monitoring and Management Plan: Section 3 of Appendix I (Document 9)	Y
II	for the Condamine Alluvium, appropriate triggers and groundwater limits and a rationale for their selection;	This condition has been considered to be met because the requirement is captured within Stage 1 Coal Seam Gas Water Monitoring and Management Plan: Sections 5.1 & 5.2, (Document 2) and Stage 1 Coal Seam Gas Water Monitoring and Management Plan: Section 4 of Appendix I (Document 9)	Y
III	early warning indicators and trigger thresholds, including for Lake Broadwater, Long Swamp and other groundwater dependent ecosystems that may potentially be impacted by the action, including	This condition has been considered to be met because the requirement is captured within Stage 1 Coal Seam Gas Water Monitoring and Management Plan: Sections 5.1 & 5.2,	Y

Approval Condition	Condition	Determination	Finding
	those that may occur outside the project area and may be impacted by the action;	(Document 2) and Stage 1 Coal Seam Gas Water Monitoring and Management Plan: Section 5 of Appendix I (Document 9)	
IV	investigation, management and mitigation actions, including substitution and/or groundwater repressurisation, for both early warning indicators and trigger thresholds to address flux impacts on the Condamine Alluvium.	This condition has been considered to be met because the requirement is captured within Stage 1 Coal Seam Gas Water Monitoring and Management Plan: Sections 5.1 & 5.2, (Document 2), Stage 1 Coal Seam Gas Water Monitoring and Management Plan: Section 4 of Appendix I (Document 9) and Stage 1 Stage 1 Coal Seam Gas Water Monitoring and Management Plan: Appendix G (Document 7)	Y
k.	early warning indicators and trigger thresholds, including corrective actions for both early warning indicators and trigger thresholds, for aquatic ecology and aquatic ecosystems;	This condition has been considered to be met because the requirement is captured within Stage 1 Coal Seam Gas Water Monitoring and Management Plan: Sections 5.1 & 5.2, (Document 2), Stage 1 Coal Seam Gas Water Monitoring and Management Plan: Section 4 of Appendix I (Document 9)	Y
l.	a CSG water management strategy for produced salt/brine, which discusses how co-produced water and brine will be managed for the action, including in the context of other coal seam gas activities in the Surat Basin;	This condition has been considered to be met because the requirement is captured within and Stage 1 Coal Seam Gas Water Monitoring and Management Plan: Section 4.1 (Document 2) and Stage 1 Coal Seam Gas Water Monitoring and Management Plan: Appendix G (Document 7)	Y
m.	an analysis of how the approval holder will utilise beneficial use and/or groundwater repressurisation techniques to manage produced CSG water from the action, and how any Potential adverse impacts associated with groundwater repressurisation will be managed;	This condition has been considered to be met because the requirement is captured within Stage 1 Coal Seam Gas Water Monitoring and Management Plan (Document 2) and Stage 1 Coal Seam Gas Water Monitoring and Management Plan: Appendix G (Document 7)	Y
n.	a discharge strategy, consistent with the recommendations and requirements of the Department of the Environment and Heritage Protection in its Assessment Report (pages 94 to 95 and pages 254 to 255) and that includes scenarios where discharge may be required, the quality of discharge water (including water treated by reverse osmosis), the number and location of monitoring sites (including upstream and downstream sites), frequency of monitoring	This condition has been considered to be met. It was confirmed in the interviews with Arrow staff.	Y

Approval Condition	Condition	Determination	Finding
	and how the data from monitoring will be analysed and reported, including recommendations on any changes or remedial actions that would be required;		
o.	a flood risk assessment for processing facilities and any raw co-produced water and brine dams, which addresses flood risks to the environment from the action in the case of a 1:1000 ARI event. The risk assessment should estimate the consequences if major project infrastructure was subject to such an event, including release of brine and chemicals into the environment;	This condition has been considered to be met because the requirement is captured within AND Stage 1 Coal Seam Gas Water Monitoring and Management Plan (Document 2) and Stage 1 Coal Seam Gas Water Monitoring and Management Plan: Appendix H (Document 8)	Y
p.	a cumulative impact assessment based on the outputs of the OGIA model which integrates groundwater model outputs with known and potential groundwater dependent ecosystems and presents the outputs in map form. Contribute to investigations coordinated through the OGIA to assess hydrological and ecological characteristics of impacted groundwater dependent ecosystems;	This condition has been considered to be met because the requirement is captured within Stage 1 Coal Seam Gas Water Monitoring and Management Plan (Document 2) and Stage 1 Coal Seam Gas Water Monitoring and Management Plan: Appendix H (Document 8)	Y
q.	details of performance measures; annual reporting to the Department; and publication of reports on the internet; and. an explanation of how the Stage 1 CSG WMMP will contribute to work undertaken by other CSG proponents in the Surat Basin to understand cumulative impacts, including at the local and regional scale, and maximise environmental benefit.	This condition has been considered to be met because the requirement is captured within 'Stage 1 Coal Seam Gas Water Monitoring and Management Plan: Stage 1 Coal Seam Gas Water Monitoring and Management Plan: Sections 9.2, 9.3 & 9.4 (Document 2) and Surat Gas Project Updated CSG WMMP Annual Report Reporting Period: 22 October 2020 to 21 October 2021 (Document 53), Surat Gas Project Updated CSG WMMP Annual Report Reporting Period: 22 October 2021 to 21 October 2022 (Document 70)	Y
r.	an explanation of how the Stage 1 CSG WMMP will contribute to work undertaken by other CSG proponents in the Surat Basin to understand cumulative impacts, including at the local and regional scale, and maximise environmental benefit.	This condition has been considered to be met because the requirement is captured within 'Stage 1 Coal Seam Gas Water Monitoring and Management Plan: Stage 1 Coal Seam Gas Water Monitoring and Management Plan: Section 8.6 (Document 2)	Y

Approval Condition	Condition	Determination	Finding
14	The Stage 1 CSG WMMP must be peer reviewed by a suitably qualified water resources expert/s approved by the Minister in writing. The peer review must be submitted to the Minister together with the Stage 1 CSG WMMP and a statement from the suitably qualified water resources expert/s stating that they carried out the peer review and endorse the findings of the Stage 1 CSG WMMP	Arrow is compliant with this condition.	Y
15	The approval holder must not exceed the groundwater drawdown or groundwater limits for each aquifer specified in the Stage 1 CSG WMMP.	The groundwater drawdown and comparison against the specified aquifer limits is reported annually and measured 6 monthly. Arrow has met these limits and is compliant with this condition.	Y
16	Unless otherwise agreed in writing by the Minister, the approval holder must not commence the action until the Stage 1 CSG WMMP is approved in writing by the Minister. The approved Stage 1 CSG WMMP must be implemented.	The Stage 1 and the Updated WMMP were both approved prior to the commencement of the action. The implementation of the Updated WMMP is demonstrated in the WMMP annual reports. Arrow is compliant with this condition.	Y
Note 3.	<i>to ensure efficiency the approval holder may prepare and align the Stage 1 WMMP with the requirements of the Queensland Government, as long as the relevant matters under the conditions of this approval are clearly and adequately addressed.</i>	Arrow is compliant with this condition.	Y
17	Updated CSG Water Monitoring and Management Plan The approval holder must submit an updated CSG Water Monitoring and Management Plan (Updated CSG WMMP) for the written approval of the Minister. The Updated CSG WMMP must:	Arrow is compliant with this condition.	Y
a.	include all matters in the Stage 1 CSG WMMP, and discuss how the Stage 1 CSG WMMP is informing adaptive management for the Updated CSG WMMP;	Arrow is compliant with this condition.	Y
b.	include any updated modelling for the project, including in respect of the OGIA model or any updates to the OGIA model by OGIA;	Arrow is compliant with this condition.	Y
c.	include an explanation of how the approval holder will contribute to the Condamine Interconnectivity Research Project. The Updated	Arrow is compliant with this condition.	Y

Approval Condition	Condition	Determination	Finding
	CSG WMMP must present the findings of the Condamine Interconnectivity Research project and any modelling done by the OGIA to validate predicted drawdown and a review of trigger thresholds and corrective activities for the action;		
d.	report on the potential for flow reversal from the Condamine Alluvium to underlying aquifers, based on data obtained during the Stage 1 CSG WMMP;	Arrow is compliant with this condition.	Y
e.	review and update the monitoring network in Stage 1 WMMP to reflect changes in understanding of impacts to water resources, including from baseline monitoring and relevant research;	Arrow is compliant with this condition.	Y
f.	identify any predicted changes in stream connectivity due to groundwater drawdown from the action and assess potential impacts to groundwater dependent ecosystems due to any predicted changes in stream connectivity, including to water quality, quantity and ecology;	Arrow is compliant with this condition.	Y
g.	address any uncertainty in the groundwater-dependency of ecosystems and springs with supporting evidence from field-based investigations for any groundwater-dependent ecosystems and springs confirmed in the OGIA model;	Arrow is compliant with this condition.	Y
h.	provide details of an ongoing monitoring plan that:	Arrow is compliant with this condition.	Y
I	sets out the frequency of monitoring and rationale for the frequency;	Arrow is compliant with this condition.	Y
II	includes continued collection of baseline data for each monitoring site over the life of the project;	Arrow is compliant with this condition.	Y
III	outlines the approach to be taken to analyse the results including the methods to determine trends to indicate potential impacts; and	Arrow is compliant with this condition.	Y

Approval Condition	Condition	Determination	Finding
IV	builds on the groundwater early warning system required at condition 13 (j) and sets out early warning indicators and trigger thresholds and limits for groundwater and surface water.	Arrow is compliant with this condition.	Y
i.	include a risk based exceedance response plan that details the corrective activities the approval holder will take and the timeframes in which those activities will be undertaken if: early warning indicators and trigger Threshold values contained in the Updated CSG WMMP are exceeded, or there are any emergency discharges.	Arrow is compliant with this condition.	Y
18	The Updated CSG WMMP must be peer reviewed by a suitably qualified water resources expert/s approved by the Minister in writing prior to the plan being submitted to the Minister for approval. The approval holder must, at the same time as the Updated CSG WMMP is submitted for approval, provide to the Minister:	Arrow is compliant with this condition.	Y
a.	a copy of the peer review; and	Arrow is compliant with this condition.	Y
b.	a statement from the suitably qualified water resources expert/s stating that they carried out the peer review and endorse the findings of the Updated CSG WMMP	Arrow is compliant with this condition.	Y
19	The approval holder must not exceed the groundwater drawdown or groundwater limits specified in the approved Updated CSG WMMP	Arrow is compliant with this condition.	Y
20	The Minister may direct, in writing, that the approval holder cease water or gas extraction from one or more coal seam gas production wells, or water discharge or use, if:	In interviews it was confirmed that no ministerial directions had been received so this condition is considered not applicable.	NA
a.	an early warning indicator, trigger threshold or limit is exceeded, and	In interviews it was confirmed that no ministerial directions had been received so this condition is considered not applicable.	NA
b.	the Minister is not satisfied that the corrective activities proposed or taken by the approval holder will reduce likely impacts on matters of national environmental significance (MNES) to acceptable levels.	In interviews it was confirmed that no ministerial directions had been received so this condition is considered not applicable.	NA

Approval Condition	Condition	Determination	Finding
20A.	If condition 20 applies, the Minister may direct the approval holder to implement alternative corrective activities at the expense of the approval holder, provided those corrective activities are unlikely to have a significant impact on MNES.	As Condition 20 is not applicable this condition does not apply	NA
20B.	If condition 20 applies, the approval holder must not recommence such extraction or discharge or use until the Minister has given approval in writing for the recommencement of that extraction, discharge or use.	As Condition 20 is not applicable this condition does not apply	NA
a.	Approval to recommence such extraction, discharge or use may be subject to such conditions as the Minister considers reasonably necessary to ensure that impacts on MNES will be acceptable.	As Condition 20 is not applicable this condition does not apply	NA
b.	If the Minister approves the recommencement of extraction, discharge or use subject to conditions, the approval holder must comply with such conditions.	As Condition 20 is not applicable this condition does not apply	NA
Note 4.	<i>The proponent will be provided with a reasonable opportunity to comment on any such direction from the Minister before it is required to be implemented.</i>	Comment not a condition	NA
21	The approval holder must not commence the extraction of gas from any coal seam gas production wells unless the Updated CSG WMMP has been approved by the Minister in writing. The approved Updated CSG WMMP must be implemented. The Stage 1 CSG WMMP will apply until the commencement of the approved Updated CSG WMMP	Arrow is compliant with this condition.	Y
21A.	If the Minister has approved the Updated CSG WMMP, the approval holder may commence extraction of gas from:	Arrow is compliant with this condition.	Y
a.	250 coal seam gas production wells	Arrow is compliant with this condition.	Y

Approval Condition	Condition	Determination	Finding
b.	a larger number of coal seam gas production wells as specified by the Minister if he or she is satisfied that:	As Arrow has not exceeded 250 production wells this Condition is not applicable	NA
I	the approval holder has commenced gas extraction from at least 125 coal seam gas production wells;	As Condition 21A (b) is not applicable this condition does not apply	NA
II	the approval holder has requested an increase in the number of wells from which gas can be extracted under the approved Updated CSG WMMP; and	As Condition 21A (b) is not applicable this condition does not apply	NA
III	extraction of gas from the additional number of coal seam gas production wells will not have an unacceptable impact on MNES.	As Condition 21A (b) is not applicable this condition does not apply	NA
NOTE 5.	<i>to ensure efficiency the approval holder may prepare and align the Updated CSG WMMP with the requirements of the Queensland Government, as long as the relevant matters under the conditions of this approval are clearly and adequately addressed.</i>	The Updated WMMP align with the Underground Water Impact Reports (UWIR) from the QLD government. This is a comment only and considered Not Applicable.	NA
NOTE 5A.	<i>The number of additional coal seam gas production wells requested under condition 21A(b) will be at least 200.</i>	The Updated WMMP align with the UWIR from the QLD government. This is a comment only and considered Not Applicable.	NA
23	If the OGIA model ceases to exist, the approval holder must:	As the model still exists this condition is not applicable.	NA
a.	submit an alternate model that replaces the OGIA model for the approval of the Minister;	As the model still exists this condition is not applicable.	NA
b.	revise the Updated CSG WMMP to incorporate the approved alternate model, and submit the revised plan to the Minister for approval; and	As the model still exists this condition is not applicable.	NA
c.	implement the approved revised plan.	As the model still exists this condition is not applicable.	NA
25	The Minister may, by written request to the approval holder, require the Stage 1 CSG WMMP or the Updated CSG WMMP to be revised, including to address expert advice. Any request must be acted on by the approval holder within the timeframe specified in the request.	This item is not applicable	NA

Approval Condition	Condition	Determination	Finding
NOTE 6.	<i>The Minister may throughout the life of the project life seek advice from experts, or an expert panel. As a consequence specific matters identified through such advice may need to be addressed in the CSG WMMP. Where such advice is sought the approval holder would be provided with opportunity to submit information and respond to the specific matters identified, in order to ensure the CSG WMMP is based on the best available information. Review requirements will facilitate adaptive management, align with Queensland Government approval requirements, and account for potential cumulative impacts as new scientific information becomes available over the life of the project.</i>	This item is not applicable	NA
26	General Within 20 business days after the commencement of the action, the approval holder must advise the Department in writing of the actual date of commencement.	Arrow is compliant with this condition.	Y
27	The approval holder must maintain accurate records substantiating all activities associated with or relevant to the conditions of approval, including measures taken to implement the management plans, reports or strategies required by this approval, and make them available upon request to the Department. The annual report (condition 28) must state all confirmed cases of non-compliance along with details of any remedial actions. Such records may be subject to audit by the Department or an independent auditor in accordance with section 458 of the EPBC Act, or used to verify compliance with the conditions of approval. Summaries of audits will be posted on the Department's website. The results of audits may also be publicised through the general media.	Arrow is compliant with this condition.	Y
28	Within three months of every 12 month anniversary of the commencement of the action, the approval holder must publish a report on its website for the life of the approval outlining how they have been compliant with the conditions of this approval over the previous 12 months, including implementation of any management	Arrow is compliant with this condition.	Y

Approval Condition	Condition	Determination	Finding
	plans as specified in the conditions. The approval holder must also report against disturbance limits. Documentary evidence providing proof of the date of publication and noncompliance with any of the conditions of this approval must be provided to the Department at the same time as the compliance report is published.		
29	The approval holder must notify the Department in writing of potential non-compliance with any condition of this approval as soon as practical and within no later than ten business days of becoming aware of the potential non-compliance. The notice provided to the Department under this condition must specify:	As Arrow has not identified any Non Conformance this condition is considered Not Applicable.	NA
a.	the condition which the approval holder has potentially breached;	As Arrow has not identified any Non Conformance this condition is considered Not Applicable.	NA
b.	the nature of the potential non-compliance;	As Arrow has not identified any Non Conformance this condition is considered Not Applicable.	NA
c.	when and how the approval holder became aware of the non-compliance;	As Arrow has not identified any Non Conformance this condition is considered Not Applicable.	NA
d.	how the non-compliance will affect the approved action;	As Arrow has not identified any Non Conformance this condition is considered Not Applicable.	NA
e.	how the non-compliance will affect the anticipated impacts of the approved action, in particular how the non-compliance will affect the impacts on the MNES;	As Arrow has not identified any Non Conformance this condition is considered Not Applicable.	NA
f.	the measures the approval holder will take to address the impacts of the non-compliance on the MNES and rectify the non-compliance; and	As Arrow has not identified any Non Conformance this condition is considered Not Applicable.	NA
g.	the time by when the approval holder will rectify the non-compliance	As Arrow has not identified any Non Conformance this condition is considered Not Applicable.	NA
30	Upon the direction of the Minister, the approval holder must ensure that an independent audit of compliance with the conditions of approval is conducted and a report submitted to the Minister. The	Arrow is currently completing this item	Y

Approval Condition	Condition	Determination	Finding
	independent auditor must be approved by the Minister prior to the commencement of the audit. Audit criteria must be agreed to by the Minister and the audit report must address the criteria to the satisfaction of the Minister.		
31	If the approval holder wishes to carry out any activity other than in accordance with the management plans as specified in the conditions, the approval holder must submit to the Department for the Minister's written approval a revised version of that management plan. The approval holder must not commence the varied activity until the Minister has approved the varied management plan. The Minister will not approve a varied management plan unless the revised management plan would result in an equivalent or improved environmental outcome over time. If the Minister approves the revised management plan, that management plan must be implemented in place of the management plan originally approved	As no variations have been requested to date from the Department this condition is considered Not Applicable.	NA
32	If the Minister believes that it is necessary or convenient for the better protection of listed threatened species, listed migratory species or water resources to do so, the Minister may request that the approval holder make specified revisions to the management plans specified in the conditions and submit the revised management plan for the Minister's written approval. The approval holder must comply with any such request within the timeframe specified by the Minister. The revised approved management plan must be implemented. Unless the Minister has approved the revised management plan, then the person taking the action must continue to implement the management plan originally approved, as specified in the conditions	As the Minister has not requested any changes to Arrow management plans this condition is considered Not Applicable.	NA
33	If at any time after seven years from the date of this approval, the approval holder has not commenced the action, then the approval holder must not commence the action without the written agreement of the Minister.	Arrow commenced the action within 7 years of the approval and so is compliant with this condition.	Y
34	Unless otherwise agreed to in writing by the Minister, the approval holder must publish all management plans referred to in these	Arrow is compliant with this condition.	Y

Approval Condition	Condition	Determination	Finding
	conditions of approval on their website. Each management plan must be published on the website within 1 month of being approved and remain available on that website for the life of the approval.		

3.2 Summary of compliances and observations

The outcome of the audit comprised 86 compliances and no non-compliance. 40 items were determined to be not applicable during the audit.

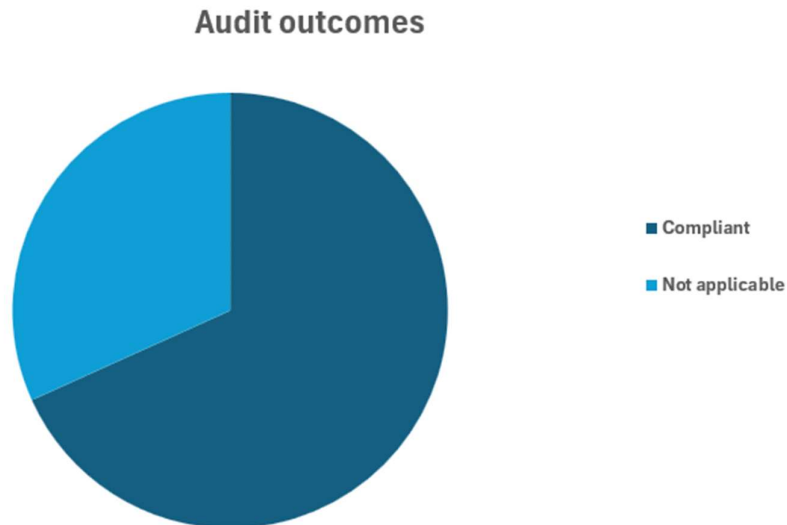


Figure 2 Pie chart breakdown of compliances and non-applicable

In the original audit report submission to the Department (26 November 2024), AECOM identified five conditions (conditions 8B, 8D, 9A, 10A and 11A) as observations. The Department subsequently clarified that each condition had to be classified as either Compliant, Non-Compliant or Not Applicable and an observation could then be made against either of these classifications.

The reasons for listing those conditions as observations in the original submission and not as compliant or not compliant was because of ambiguities in the conditions around the definition of project staging and the securing of project offsets.

Conditions 8B, 8D, 9A, 10A and 11A have been reviewed and further discussions/clarifications sort from Arrow and have now been classified as Compliant. The reasoning for these findings is detailed in Table 4 and in Appendix B and the staging and offset reasoning explained in Sections 3.2.1 and Section 3.2.2 respectively.

3.2.1 Staging

For the Project to be considered to be in the next development stage (in this audit period that would be Stage 2) it in accordance with the approval definitions has to be both:

- a) **Stage 2:** *means year 4 to 11 (inclusive) of the action.* As the action commenced on 22 October 2020 this would mean Stage 2 would commence on 22 Oct 2023
- b) **commence/commencement:** *means any physical disturbance, including clearance of native vegetation, new road work, and the establishment of well sites to develop the gasfield project area.*

Arrow have submitted and had approved in the required timeframe the Stage 1 Offset Strategy. The Stage 1 Offset Strategy defines Stage 1 as approximately 350 wells. At the time of the audit the project had drilled 264 CSG wells with 206 of those wells in production. As Conditions 8B, 9A, 10A and 11A rely on physical disturbance beyond the approved number of wells to mean commencement of the subsequent stage (Stage 2) it is considered that Stage 2 has not commenced. As Stage 2 has not commenced Arrow has met its obligations for these conditions under the approval.

On 25 August 2023, Arrow met (record of calendar meeting sighted) with Ms Nola Sloan, Assistant Director, DCCEE. At this meeting, Arrow sought advice on the Department's position to vary the staging definitions in the Approval. The proposed change was to better align with how Arrow was delivering the Project. The request was to change from 'time based' stages (i.e., years) to 'disturbance based' stages related to the 'number of wells to be drilled per stage'.

On 13 September 2023, Arrow followed up the 25 August meeting with a detailed email describing the conversation and agreed outcomes (Document 124 – sighted). This email included a request to amend the Stage 1 Offset Strategy and amendments to the proposed OAMP including a request to alter the staging definition. The request included the following text.

"This Offset Strategy will continue to apply to Stage 1, noting that the activities as described in this Offset Strategy for Stage 1 are not yet complete and will continue after year 3 under this approved Offset Strategy. Stage 2 will not commence before 31 December 2024. All other aspects of the Offset Strategy remain unchanged. Despite the Stage 1 activities continuing after year 3 of the approved Offset Strategy, Arrow will not exceed the maximum disturbance limits set out in the Offset Strategy. Offsets for Stage 1 will be legally secured before the commencement of Stage 2. The Stage 1 progress has been slower than anticipated. The Stage 1 activities described in this Offset Strategy will continue after year 3. Stage 2 will not commence until 31 December 2024."

"This OAMP demonstrates how Arrow will meet the requirements for approval condition 10A and 10B, and provide environmental offsets consistent with the Environmental Offsets Policy (EOP) to compensate for the clearing of habitat for Stage 1 of the SGP. The Stage 1 progress has been slower than anticipated. The Stage 1 activities described in the Offset Strategy will continue after year 3. Stage 2 will not commence until 31 December 2024."

Evidence was identified in the form of emails and meeting requests that show ongoing communications between Arrow and the Department to progress towards changing the definition of Project Staging. This negotiation with the Department is ongoing at the time of the audit. The latest documentation viewed was correspondence from the Department on the 30 September 2024 in the form of a draft Variation Notice for the approval to address the staging issue. In this correspondence the agreement for Stage 1 definition was for 350 wells.

3.2.2 Offsets

The Stage 1 Offset Area Management Plan (OAMP) (a requirement of the Stage 1 Offsets Strategy) for the identified offset area was submitted to the Minister on 21 October 2021 for approval but has not yet been approved. Until the OAMP is approved, the approved Stage 1 Offsets Strategy has not been fully implemented as per Condition 8D and Arrow is unable to legally secure the Offsets for Stage 1 of the Project as required by Condition 10A.

It appears that Arrow has implemented the Stage 1 Offset Strategy as far as practicable by taking the following steps.

- a. narrowed the suitable properties for land-based offsets;
- b. engaged with relevant landholders for the identified properties;
- c. engaged with the Department, including with the provision of the Stage 1 OAMP, on the mechanism for legally securing offsets.

Arrow has taken further steps to progress the strategy by executing a legally binding Call-option Agreement with a landholder to provide offsets for Stage 1 (dated 25 January 2023). (Sighted). The Agreement includes a condition precedent to exercising the call-option; which is the receipt of the Minister approved OAMP in order to apply to the state government for a Voluntary Declaration.

It is determined that Arrow has completed all of the practical steps available while waiting the approval of the OAMP and is therefore considered to be compliant with the Conditions 8D and 10A.

3.3 Limitations

AECOM Australia Pty Limited (AECOM) has prepared this report in accordance with the usual care and thoroughness of the consulting profession for the use of Arrow Energy Pty Limited to rely on this Report. It is based on generally accepted practices and standards at the time it was prepared. No other warranty, expressed or implied, is made as to the professional advice included in this Report.

It is prepared in accordance with the scope of work outlined in our proposal dated 11 July 2024

Where this Report indicates that information has been provided to AECOM by third parties, AECOM has made no independent verification of this information except as expressly stated in the Report. AECOM assumes no liability for any inaccuracies in or omissions to that information.

This Report was prepared between August and December 2024 and is based on the conditions encountered and information reviewed at the time of preparation. AECOM disclaims responsibility for any changes that may have occurred after this time.

This Report should be read in full. No responsibility is accepted for use of any part of this report in any other context or for any other purpose or by third parties.

To the extent permitted by law, AECOM expressly disclaims and excludes liability for any loss, damage, cost or expenses suffered by any third party relating to or resulting from the use of, or reliance on, any information contained in this Report. AECOM does not admit that any action, liability or claim may exist or be available to any third party.

Except as specifically stated in this section, AECOM does not authorise the use of this Report by any third party. It is the responsibility of third parties to independently make inquiries or seek advice in relation to their particular requirements and proposed use of the site.

4.0 Conclusion

The findings of the audit are that Arrow was compliant with the conditions of the EPBC 2010/5344, for the audit period.

AECOM originally identified five conditions (conditions 8B, 8D, 9A, 10A and 11A) as observations which when reviewed were considered compliant. The reason for the amendment of the findings is based primarily around the definition of Project development stages. It is believed that the Department and Arrow are close to reaching a resolution on these definitions which will make compliance easier to understand and audit in the future.

The other conditions reassessed as compliant where related to the outstanding approval of the project OAMP which is preventing full implementation of the Stage 1 Offset Strategy and the legal security of the project offsets.

Appendix A

Approval Conditions



VARIATION OF CONDITIONS ATTACHED TO APPROVAL

Surat Gas Expansion Project (EPBC 2010/5344)

This decision to vary conditions of approval is made under section 143 of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

Approved action

Approval holder Arrow Energy Pty Ltd

ABN: 73 078 521 936

Approved action To expand coal seam gas operations in the Surat Basin, Queensland, as described in the referral received under the EPBC Act on 2 February 2010; and as described in the Surat Gas Project Environmental Impact Statement (March 2012) and Supplementary Report to the Environmental Impact Statement (June 2013).

Variation

Variation of conditions attached to approval The variation is:
Delete conditions 5 and 6 attached to the approval and substitute with conditions 5 and 6 specified in the table below.

Date of effect This variation has effect on the date the instrument is signed

Person authorised to make decision

Name and position Kim Farrant
Assistant Secretary
Environment Assessments (Vic, Tas) and Post Approvals Branch

Signature

Date of decision 29 March 2022

Date of decision	Conditions attached to approval																																																		
Original dated 19/12/2013	1. The Minister may determine that a plan, strategy or program approved by the Queensland Government satisfies a plan required under these conditions.																																																		
Original dated 19/12/2013	<u>Disturbance Limits</u> 2. For the purpose of the action, the approval holder must not take any action outside the project area .																																																		
Original dated 19/12/2013	3. The action is limited to a maximum of 6,500 coal seam gas production wells and associated infrastructure.																																																		
Original dated 19/12/2013	4. The approval holder must not undertake hydraulic fracturing.																																																		
As varied on the date this instrument was signed	5. To protect EPBC listed species and EPBC communities within the project area the maximum disturbance limits in Table 1 apply to the project. The approval holder must not exceed these disturbance limits. Table 1: Whole of project maximum disturbance limits <table border="1"> <thead> <tr> <th>Terrestrial species</th><th>Maximum disturbance (hectares) to core habitat</th></tr> </thead> <tbody> <tr><td>Curly-bark Wattle, <i>Acacia curranii</i></td><td>1210</td></tr> <tr><td>Hando's Wattle, <i>Acacia handonis</i></td><td>1210</td></tr> <tr><td>Belson's Panic, <i>Homopholis belsonii</i></td><td>140</td></tr> <tr><td><i>Prostanthera sp Dunmore</i></td><td>380</td></tr> <tr><td>Small-leaved Denhamia, <i>Denhamia parvifolia</i></td><td>50</td></tr> <tr><td><i>Calytrix gurulmundensis</i></td><td>1210</td></tr> <tr><td>Ooline, <i>Cadellia pentastylis</i></td><td>No disturbance</td></tr> <tr><td>Austral Toadflax, <i>Thesium australe</i></td><td>160</td></tr> <tr><td><i>Acacia lauta</i></td><td>990</td></tr> <tr><td><i>Xerothamnella herbacea</i></td><td>110</td></tr> <tr><td>Hawkweed, <i>Picris evae</i></td><td>120</td></tr> <tr><td>Austral Cornflower, <i>Rhaponticum australe</i></td><td>160</td></tr> <tr><td><i>Eucalyptus virens</i></td><td>170</td></tr> <tr><td>King Blue-grass, <i>Dichanthium queenslandicum</i></td><td>160</td></tr> <tr><td>Queensland White-gum, <i>Eucalyptus argophloia</i></td><td>10</td></tr> <tr><td><i>Macrozamia machinii</i></td><td>No disturbance</td></tr> <tr><td>South-eastern Long-eared Bat, <i>Nyctophilus corbeni</i></td><td>4 080</td></tr> <tr><td>Dunmall's Snake, <i>Furina dunmalli</i></td><td>4 400</td></tr> <tr><td>Five-clawed Worm-skink, <i>Anomalopus mackayi</i></td><td>560</td></tr> <tr><td>Squatter Pigeon (Southern), <i>Geophaps scripta scripta</i></td><td>3261</td></tr> <tr><td>Regent Honeyeater, <i>Anthochaera phrygia</i></td><td>20</td></tr> <tr><td>Collared Delma, <i>Delma torquata</i></td><td>90</td></tr> <tr><td>Yakka Skink, <i>Egernia rugosa</i></td><td>310</td></tr> <tr><td>Australian Painted Snipe, <i>Rostratula australis</i></td><td>5</td></tr> </tbody> </table>	Terrestrial species	Maximum disturbance (hectares) to core habitat	Curly-bark Wattle, <i>Acacia curranii</i>	1210	Hando's Wattle, <i>Acacia handonis</i>	1210	Belson's Panic, <i>Homopholis belsonii</i>	140	<i>Prostanthera sp Dunmore</i>	380	Small-leaved Denhamia, <i>Denhamia parvifolia</i>	50	<i>Calytrix gurulmundensis</i>	1210	Ooline, <i>Cadellia pentastylis</i>	No disturbance	Austral Toadflax, <i>Thesium australe</i>	160	<i>Acacia lauta</i>	990	<i>Xerothamnella herbacea</i>	110	Hawkweed, <i>Picris evae</i>	120	Austral Cornflower, <i>Rhaponticum australe</i>	160	<i>Eucalyptus virens</i>	170	King Blue-grass, <i>Dichanthium queenslandicum</i>	160	Queensland White-gum, <i>Eucalyptus argophloia</i>	10	<i>Macrozamia machinii</i>	No disturbance	South-eastern Long-eared Bat, <i>Nyctophilus corbeni</i>	4 080	Dunmall's Snake, <i>Furina dunmalli</i>	4 400	Five-clawed Worm-skink, <i>Anomalopus mackayi</i>	560	Squatter Pigeon (Southern), <i>Geophaps scripta scripta</i>	3261	Regent Honeyeater, <i>Anthochaera phrygia</i>	20	Collared Delma, <i>Delma torquata</i>	90	Yakka Skink, <i>Egernia rugosa</i>	310	Australian Painted Snipe, <i>Rostratula australis</i>	5
Terrestrial species	Maximum disturbance (hectares) to core habitat																																																		
Curly-bark Wattle, <i>Acacia curranii</i>	1210																																																		
Hando's Wattle, <i>Acacia handonis</i>	1210																																																		
Belson's Panic, <i>Homopholis belsonii</i>	140																																																		
<i>Prostanthera sp Dunmore</i>	380																																																		
Small-leaved Denhamia, <i>Denhamia parvifolia</i>	50																																																		
<i>Calytrix gurulmundensis</i>	1210																																																		
Ooline, <i>Cadellia pentastylis</i>	No disturbance																																																		
Austral Toadflax, <i>Thesium australe</i>	160																																																		
<i>Acacia lauta</i>	990																																																		
<i>Xerothamnella herbacea</i>	110																																																		
Hawkweed, <i>Picris evae</i>	120																																																		
Austral Cornflower, <i>Rhaponticum australe</i>	160																																																		
<i>Eucalyptus virens</i>	170																																																		
King Blue-grass, <i>Dichanthium queenslandicum</i>	160																																																		
Queensland White-gum, <i>Eucalyptus argophloia</i>	10																																																		
<i>Macrozamia machinii</i>	No disturbance																																																		
South-eastern Long-eared Bat, <i>Nyctophilus corbeni</i>	4 080																																																		
Dunmall's Snake, <i>Furina dunmalli</i>	4 400																																																		
Five-clawed Worm-skink, <i>Anomalopus mackayi</i>	560																																																		
Squatter Pigeon (Southern), <i>Geophaps scripta scripta</i>	3261																																																		
Regent Honeyeater, <i>Anthochaera phrygia</i>	20																																																		
Collared Delma, <i>Delma torquata</i>	90																																																		
Yakka Skink, <i>Egernia rugosa</i>	310																																																		
Australian Painted Snipe, <i>Rostratula australis</i>	5																																																		

Date of decision	Conditions attached to approval	
	EPBC Communities	Maximum disturbance (hectares)
	Brigalow (<i>Acacia harpophylla</i> dominant and co-dominant)	106
	Coolibah - Black Box Woodlands of the Darling Riverine Plains and the Brigalow Belt South Bioregions	8
	Weeping Myall Woodlands	1
	Natural Grasslands on basalt and fine-textured alluvial plains of northern New South Wales and southern Queensland	No disturbance
	White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland	No disturbance
	Semi-evergreen vine thickets of the Brigalow Belt (North and South) and Nandewar Bioregions	No disturbance
As varied on the date this instrument was signed	6. To protect EPBC listed species and communities within the project area the maximum disturbance limits in Table 2 apply to Stage 1 . The approval holder must not exceed these disturbance limits.	
	Table 2: Maximum disturbance limits for Stage 1	
	Terrestrial species	Maximum disturbance (hectares) to core habitat
	South-eastern Long-eared Bat, <i>Nyctophilus corbeni</i>	225
	Dunmall's Snake, <i>Furina dunmalli</i>	300
	Five-clawed Worm-skink, <i>Anomalopus mackayi</i>	2
	Squatter Pigeon (Southern), <i>Geophaps scripta scripta</i>	203
	Regent Honeyeater, <i>Anthochaera phrygia</i>	1
	Collared Delma, <i>Delma torquata</i>	11
	Yakka Skink, <i>Egernia rugosa</i>	19
	EPBC Communities	Maximum disturbance (hectares)
	Brigalow (<i>Acacia harpophylla</i> dominant and co-dominant)	39
	Coolibah - Black Box Woodlands of the Darling Riverine Plains and the Brigalow Belt South Bioregions	8
Variation dated 31/10/2018	7. Revoked	
Variation dated 31/10/2018	7A. Prior to the commencement of Stage 1 , the approval holder must prepare and submit an EPBC Species Impact Management Plan for the Minister's written approval. The EPBC Species Impact Management Plan must include: a. measures that will be taken to avoid, mitigate and manage impacts to EPBC listed threatened species and their habitat during clearance of vegetation, including the involvement of a suitably qualified ecologist at all times during clearance of vegetation;	

Date of decision	Conditions attached to approval
	<ul style="list-style-type: none"> b. measures that will be taken to avoid and mitigate impacts to EPBC listed threatened species and their habitat and to EPBC communities during construction, operation and decommissioning of the action; c. a monitoring program to determine the success of impacts avoidance and mitigation measures and that will inform adaptive implementation of the action for the duration of this approval; and d. a description of how measures proposed in the EPBC Species Impact Management Plan are consistent with the measures in relevant conservation advice, recovery plans and threat abatement plans.
Variation dated 31/10/2018	7B. The approval holder must not commence Stage 1 until an EPBC Species Impact Management Plan has been approved by the Minister in writing. The approved EPBC Species Impact Management Plan must be implemented by the approval holder .
Variation dated 31/10/2018	8. Revoked
Variation dated 31/10/2018	<p>Offsets</p> <p>8A. If the approval holder has provided an offset in respect of impacts predicted for a development stage of the project which subsequently are not realised, such parts of the offset in excess of the obligation for that development stage can be applied towards offsets required for the impacts of subsequent development stages.</p>
Variation dated 31/10/2018	8B. The Offset Strategy may be prepared and submitted to the Minister for approval in stages. Each stage of the Offset Strategy must provide information in respect of the subsequent development stage to commence and all earlier development stages . A development stage must not commence until an Offsets Strategy addressing offset obligations for that development stage has been approved by the Minister .
Variation dated 31/10/2018	<p>8C. The Offset Strategy must:</p> <ul style="list-style-type: none"> a. include a strategy to secure the offsets proposed for the residual significant impacts to the EPBC listed species and EPBC communities for the subsequent development stage; b. include a map of the location of each EPBC listed threatened species and its habitat and EPBC community in relation to infrastructure for the subsequent development stage; c. describe potential risks to the successful implementation of the Offset Strategy, and the contingency measures that would be implemented to mitigate against these risks; d. detail how the approval holder will address any residual significant impacts to any EPBC listed threatened species and its habitat and/or EPBC communities not identified in Table 1, in accordance with the EPBC Act Offsets Policy; and e. specify the proposed legal mechanism and timeframe for securing the offset(s).
Variation dated 31/10/2018	8D. The approval holder must not commence the action until the Offset Strategy for Stage 1 has been approved by the Minister in writing. The approved Offset Strategy must be implemented by the approval holder .
Variation dated 31/10/2018	9. Revoked

Date of decision	Conditions attached to approval
Variation dated 31/10/2018	<p>9A. At least 3 months prior to the commencement of any development stage after Stage 1, the approval holder must submit a revised Offset Strategy for approval by the Minister. The updated Offset Strategy must include:</p> <ul style="list-style-type: none"> a. a strategy to secure the minimum offsets proposed for the residual significant impacts to the EPBC listed species and EPBC communities for the subsequent development stage; b. a map of the location of each EPBC listed threatened species and its habitat and EPBC community in relation to infrastructure for the subsequent development stage; c. the information required for the Offset Strategy at conditions 8Ca to 8Ce for the subsequent development stage; d. demonstration of how any proposed offset builds on offsets already secured and will contribute to a larger strategic offset for whole of project impacts; e. performance and completion criteria for evaluating the management of offset areas. f. reconciliation of impacts predicted in the subsequent development stage and actual disturbance in preceding development stages against the maximum disturbance limits set out in Table 1.
Variation dated 31/10/2018	10. Revoked
Variation dated 31/10/2018	<p>10A. Offsets for development stages must be provided in accordance with the mechanism identified in the approved Offset Strategy and must be registered and legally secured in accordance with Queensland legislation prior to commencement of any subsequent development stage.</p>
Variation dated 31/10/2018	<p>10B. Within 12 months of project commencement or the Minister approving the Offset Strategy for a subsequent development stage, the approval holder must submit for the approval of the Minister an Offset Area Management Plan which includes:</p> <ul style="list-style-type: none"> a. a description of the management measures that will be implemented to protect of EPBC listed threatened species and EPBC communities in each offset area, b. details of how the proposed offset/s and Offset Area Management Plan are consistent with the principles of the EPBC Act Offsets Policy; c. a field validation survey and baseline description of the current condition (prior to any management activities) of the offset area/s, including existing vegetation; d. a description and map (including shapefile/s) to clearly define the location and boundaries of the offset area/s, accompanied by the offset attributes; e. information about how the offset area/s provide connectivity with other relevant habitats and biodiversity corridors including a map depicting the offset areas in relation to other habitats and biodiversity corridors; f. details of how proposed management measures take into account relevant approved conservation advices and are consistent with the measures contained in relevant recovery plans and threat abatement plans;

Date of decision	Conditions attached to approval
	<ul style="list-style-type: none"> g. completion criteria and performance targets for evaluating the effectiveness of Offset Area Management Plan implementation, and criteria for triggering corrective actions (if necessary); h. a program to monitor, report on and review the effectiveness of the Offset Area Management Plan; i. a description of potential risks to the successful implementation of the offset/s and Offset Area Management Plan, and contingency measures that would be implemented to mitigate against these risks.
Variation dated 31/10/2018	11. Revoked
Variation dated 31/10/2018	11A. The approval holder must not commence the subsequent development stage until the Offset Area Management Plan for the current development stage has been approved in writing by the Minister .
Variation dated 29/3/2017	12. Revoked
Variation dated 31/10/2018	12A. Revoked
Variation dated 31/10/2018	12B. Revoked
Variation dated 31/10/2018	12C. Revoked
Original dated 19/12/2013	<i>Note 1: The Minister may determine that a plan, strategy or program approved by the Queensland Government satisfies the requirements for the EPBC Species Impact Management and Offset Plan under these conditions.</i>
Original dated 19/12/2013	<i>Note 2: Offsets for some species may be accommodated within ecological communities or overlap State approval requirements or other species habitat requirements, as long as they meet the requirements of these conditions of approval in respect of each individual species being offset.</i>
Original dated 19/12/2013	<p><u>Coal Seam Gas Water Monitoring and Management Plan</u></p> <p><i>Stage 1 CSG Water Monitoring and Management Plan</i></p> <p>13. Prior to commencement, the proponent must submit a Stage 1 Coal Seam Gas Water Monitoring and Management Plan (Stage 1 CSG WMMP) for the approval of the Minister, who may seek the advice of an expert panel. The Stage 1 CSG WMMP must include:</p> <ul style="list-style-type: none"> a. an analysis of the results of the most recent OGIA model (built or endorsed by OGIA), relevant to all of the project's tenement areas; b. a fit for purpose numerical simulation to assess potential impacts on water resources arising from the action in the project area, subsequent surface water-groundwater interactions in the Condamine Alluvium and impacts to dependent ecosystems; c. an assessment of potential impacts from the action on non-spring based groundwater dependent ecosystems through potential changes to surface-groundwater connectivity and interactions with the sub-surface expression of groundwater; d. an assessment of predicted project wide groundwater drawdown levels and pressures from the action, together with confidence levels;

Date of decision	Conditions attached to approval
	<ul style="list-style-type: none"> e. parameters and a sampling regime to establish baseline data for surface and groundwater resources that may be impacted by the action, including: surface water quality and quantity in the project area, and upstream and downstream of potential impact areas; groundwater quality, levels and pressures for areas that may be impacted by the project; and for determining connectivity between surface water and groundwater that may be impacted by the project; f. a best practice baseline monitoring network that will enable the identification of spatial and temporal changes to surface water and groundwater. This must include a proposal for aquifer connectivity studies and monitoring of relevant aquifers to determine hydraulic connectivity (including potential groundwater dependence of Long Swamp and Lake Broadwater) and must also enable monitoring of all aquatic ecosystems that may be impacted by the action; g. a program to monitor subsidence impacts from the action, including trigger thresholds and reporting of monitoring results in annual reporting required by condition 28. If trigger thresholds are exceeded, the approval holder must develop and implement an action plan to address impacts within 90 calendar days of a trigger threshold being exceeded; h. provisions to make monitoring results publicly available on the approval holder's website to facilitate a greater understanding of cumulative impacts; i. a discussion on how the approval holder is contributing to the Joint Industry Plan, including its periodic review. The approval holder must contribute to the Joint Industry Plan and comply with any part of the Joint Industry Plan, or future iterations of the Joint Industry Plan, that applies to the approval holder; j. a groundwater early warning monitoring system, including: <ul style="list-style-type: none"> i. groundwater drawdown limits for all consolidated aquifers potentially impacted by the action, excluding the Walloon Coal Measures; ii. for the Condamine Alluvium, appropriate triggers and groundwater limits and a rationale for their selection; iii. early warning indicators and trigger thresholds, including for Lake Broadwater, Long Swamp and other groundwater dependent ecosystems that may potentially be impacted by the action, including those that may occur outside the project area and may be impacted by the action; and iv. investigation, management and mitigation actions, including substitution and/or groundwater repressurisation, for both early warning indicators and trigger thresholds to address flux impacts on the Condamine Alluvium. k. early warning indicators and trigger thresholds, including corrective actions for both early warning indicators and trigger thresholds, for aquatic ecology and aquatic ecosystems; l. a CSG water management strategy for produced salt/brine, which discusses how co-produced water and brine will be managed for the action, including in the context of other coal seam gas activities in the Surat Basin; m. an analysis of how the approval holder will utilise beneficial use and/or groundwater repressurisation techniques to manage produced CSG water from the action, and how any potential adverse impacts associated with groundwater repressurisation will be managed;

Date of decision	Conditions attached to approval
	<ul style="list-style-type: none"> n. a discharge strategy, consistent with the recommendations and requirements of the Department of the Environment and Heritage Protection in its Assessment Report (pages 94 to 95 and pages 254 to 255) and that includes scenarios where discharge may be required, the quality of discharge water (including water treated by reverse osmosis), the number and location of monitoring sites (including upstream and downstream sites), frequency of monitoring and how the data from monitoring will be analysed and reported, including recommendations on any changes or remedial actions that would be required; o. a flood risk assessment for processing facilities and any raw co-produced water and brine dams, which addresses flood risks to the environment from the action in the case of a 1:1000 ARI event. The risk assessment should estimate the consequences if major project infrastructure was subject to such an event, including release of brine and chemicals into the environment; p. a cumulative impact assessment based on the outputs of the OGIA model which integrates groundwater model outputs with known and potential groundwater dependent ecosystems and presents the outputs in map form. Contribute to investigations coordinated through the OGIA to assess hydrological and ecological characteristics of impacted groundwater dependent ecosystems; q. details of performance measures; annual reporting to the Department; and publication of reports on the internet; and r. an explanation of how the Stage 1 CSG WMMP will contribute to work undertaken by other CSG proponents in the Surat Basin to understand cumulative impacts, including at the local and regional scale, and maximise environmental benefit.
Original dated 19/12/2013	14. The Stage 1 CSG WMMP must be peer reviewed by a suitably qualified water resources expert/s approved by the Minister in writing. The peer review must be submitted to the Minister together with the Stage 1 CSG WMMP and a statement from the suitably qualified water resources expert/s stating that they carried out the peer review and endorse the findings of the Stage 1 CSG WMMP.
Original dated 19/12/2013	15. The approval holder must not exceed the groundwater drawdown or groundwater limits for each aquifer specified in the Stage 1 CSG WMMP.
Original dated 19/12/2013	16. Unless otherwise agreed in writing by the Minister , the approval holder must not commence the action until the Stage 1 CSG WMMP is approved in writing by the Minister . The approved Stage 1 CSG WMMP must be implemented.
Original dated 19/12/2013	<i>Note 3: to ensure efficiency the approval holder may prepare and align the Stage 1 WMMP with the requirements of the Queensland Government, as long as the relevant matters under the conditions of this approval are clearly and adequately addressed.</i>
Variation dated 2/7/2019	<p><i>Updated CSG Water Monitoring and Management Plan</i></p> <p>17. The approval holder must submit an updated CSG Water Monitoring and Management Plan (Updated CSG WMMP) for the written approval of the Minister. The Updated CSG WMMP must:</p> <ul style="list-style-type: none"> a. include all matters in the Stage 1 CSG WMMP, and discuss how the Stage 1 CSG WMMP is informing adaptive management for the Updated CSG WMMP; b. include any updated modelling for the project, including in respect of the OGIA model or any updates to the OGIA model by OGIA;

Date of decision	Conditions attached to approval
	<ul style="list-style-type: none"> c. include an explanation of how the approval holder will contribute to the Condamine Interconnectivity Research Project. The Updated CSG WMMP must present the findings of the Condamine Interconnectivity Research project and any modelling done by the OGIA to validate predicted drawdown and a review of trigger thresholds and corrective activities for the action; d. report on the potential for flow reversal from the Condamine Alluvium to underlying aquifers, based on data obtained during the Stage 1 CSG WMMP; e. review and update the monitoring network in Stage 1 WMMP to reflect changes in understanding of impacts to water resources, including from baseline monitoring and relevant research; f. identify any predicted changes in stream connectivity due to groundwater drawdown from the action and assess potential impacts to groundwater dependent ecosystems due to any predicted changes in stream connectivity, including to water quality, quantity and ecology; g. address any uncertainty in the groundwater-dependency of ecosystems and springs with supporting evidence from field-based investigations for any groundwater-dependent ecosystems and springs confirmed in the OGIA model; h. provide details of an ongoing monitoring plan that: <ul style="list-style-type: none"> i. sets out the frequency of monitoring and rationale for the frequency; ii. includes continued collection of baseline data for each monitoring site over the life of the project; iii. outlines the approach to be taken to analyse the results including the methods to determine trends to indicate potential impacts; and iv. builds on the groundwater early warning system required at condition 13 (j) and sets out early warning indicators and trigger thresholds and limits for groundwater and surface water. i. include a risk based exceedance response plan that details the corrective activities the approval holder will take and the timeframes in which those activities will be undertaken if: early warning indicators and trigger threshold values contained in the Updated CSG WMMP are exceeded, or there are any emergency discharges.
Variation dated 2/7/2019	<p>18. The Updated CSG WMMP must be peer reviewed by a suitably qualified water resources expert/s approved by the Minister in writing prior to the plan being submitted to the Minister for approval. The approval holder must, at the same time as the Updated CSG WMMP is submitted for approval, provide to the Minister:</p> <ul style="list-style-type: none"> a. a copy of the peer review; and b. a statement from the suitably qualified water resources expert/s stating that they carried out the peer review and endorse the findings of the Updated CSG WMMP.
Variation dated 2/7/2019	<p>19. The approval holder must not exceed the groundwater drawdown or groundwater limits specified in the approved Updated CSG WMMP.</p>
Variation dated 2/7/2019	<p>20. The Minister may direct, in writing, that the approval holder cease water or gas extraction from one or more coal seam gas production wells, or water discharge or use, if:</p>

Date of decision	Conditions attached to approval
	<ul style="list-style-type: none"> a. an early warning indicator, trigger threshold or limit is exceeded, and b. the Minister is not satisfied that the corrective activities proposed or taken by the approval holder will reduce likely impacts on matters of national environmental significance (MNES) to acceptable levels.
Variation dated 2/7/2019	20A. If condition 20 applies, the Minister may direct the approval holder to implement alternative corrective activities at the expense of the approval holder , provided those corrective activities are unlikely to have a significant impact on MNES .
Variation dated 2/7/2019	<p>20B. If condition 20 applies, the approval holder must not recommence such extraction or discharge or use until the Minister has given approval in writing for the recommencement of that extraction, discharge or use.</p> <ul style="list-style-type: none"> a. Approval to recommence such extraction, discharge or use may be subject to such conditions as the Minister considers reasonably necessary to ensure that impacts on MNES will be acceptable. b. If the Minister approves the recommencement of extraction, discharge or use subject to conditions, the approval holder must comply with such conditions.
Variation dated 2/7/2019	<i>Note 4: The proponent will be provided with a reasonable opportunity to comment on any such direction from the Minister before it is required to be implemented.</i>
Variation dated 2/7/2019	21. The approval holder must not commence the extraction of gas from any coal seam gas production wells unless the Updated CSG WMMP has been approved by the Minister in writing. The approved Updated CSG WMMP must be implemented. The Stage 1 CSG WMMP will apply until the commencement of the approved Updated CSG WMMP.
Variation dated 2/7/2019	<p>21A. If the Minister has approved the Updated CSG WMMP, the approval holder may commence extraction of gas from:</p> <ul style="list-style-type: none"> a. 250 coal seam gas production wells b. a larger number of coal seam gas production wells as specified by the Minister if he or she is satisfied that: <ul style="list-style-type: none"> i. the approval holder has commenced gas extraction from at least 125 coal seam gas production wells; ii. the approval holder has requested an increase in the number of wells from which gas can be extracted under the approved Updated CSG WMMP; and iii. extraction of gas from the additional number of coal seam gas production wells will not have an unacceptable impact on MNES.
Variation dated 2/7/2019	<p><i>Note 5: to ensure efficiency the approval holder may prepare and align the Updated CSG WMMP with the requirements of the Queensland Government, as long as the relevant matters under the conditions of this approval are clearly and adequately addressed.</i></p> <p><i>Note 5A: The number of additional coal seam gas production wells requested under condition 21A(b) will be at least 200.</i></p>
Variation dated 2/7/2019	22. Revoked
Variation dated 2/7/2019	23. If the OGIA model ceases to exist, the approval holder must:

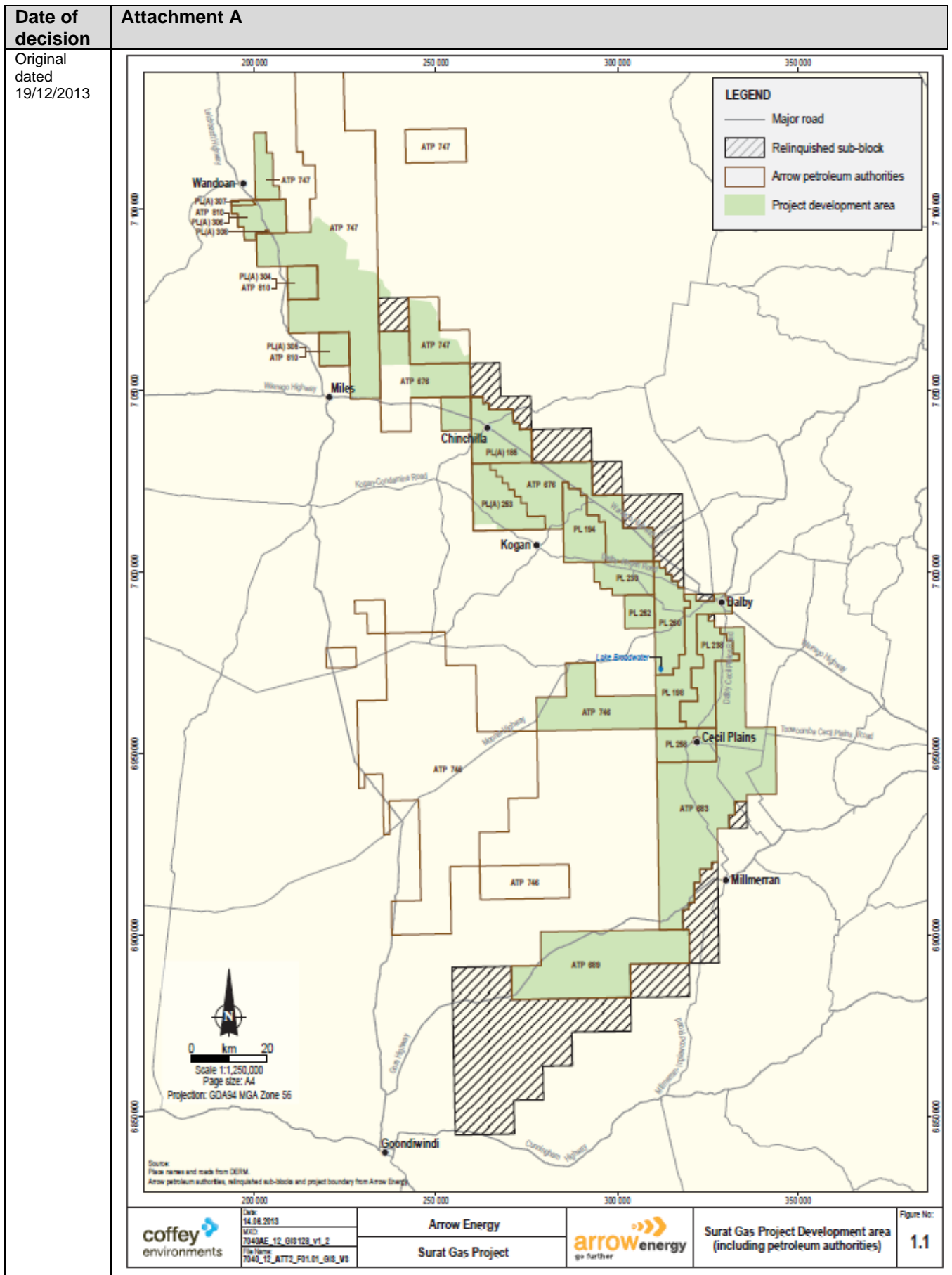
Date of decision	Conditions attached to approval
	<ul style="list-style-type: none"> a. submit an alternate model that replaces the OGIA model for the approval of the Minister; b. revise the Updated CSG WMMP to incorporate the approved alternate model, and submit the revised plan to the Minister for approval; and c. implement the approved revised plan.
Variation dated 2/7/2019	24. Revoked
Variation dated 2/7/2019	25. The Minister may, by written request to the approval holder , require the Stage 1 CSG WMMP or the Updated CSG WMMP to be revised, including to address expert advice. Any request must be acted on by the approval holder within the timeframe specified in the request.
Variation dated 2/7/2019	<i>Note 6: The Minister may throughout the life of the project life seek advice from experts, or an expert panel. As a consequence specific matters identified through such advice may need to be addressed in the CSG WMMP. Where such advice is sought the approval holder would be provided with opportunity to submit information and respond to the specific matters identified, in order to ensure the CSG WMMP is based on the best available information. Review requirements will facilitate adaptive management, align with Queensland Government approval requirements, and account for potential cumulative impacts as new scientific information becomes available over the life of the project.</i>
Original dated 19/12/2013	<p>General</p> <p>26. Within 20 business days after the commencement of the action, the approval holder must advise the Department in writing of the actual date of commencement.</p>
Original dated 19/12/2013	27. The approval holder must maintain accurate records substantiating all activities associated with or relevant to the conditions of approval, including measures taken to implement the management plans, reports or strategies required by this approval, and make them available upon request to the Department . The annual report (condition 28) must state all confirmed cases of non-compliance along with details of any remedial actions. Such records may be subject to audit by the Department or an independent auditor in accordance with section 458 of the EPBC Act , or used to verify compliance with the conditions of approval. Summaries of audits will be posted on the Department's website. The results of audits may also be publicised through the general media.
Original dated 19/12/2013	28. Within three months of every 12 month anniversary of the commencement of the action, the approval holder must publish a report on its website for the life of the approval outlining how they have been compliant with the conditions of this approval over the previous 12 months, including implementation of any management plans as specified in the conditions. The approval holder must also report against disturbance limits. Documentary evidence providing proof of the date of publication and non-compliance with any of the conditions of this approval must be provided to the Department at the same time as the compliance report is published.
Variation dated 2/7/2019	<p>29. The approval holder must notify the Department in writing of potential non-compliance with any condition of this approval as soon as practical and within no later than ten business days of becoming aware of the potential non-compliance. The notice provided to the Department under this condition must specify:</p> <ul style="list-style-type: none"> a. the condition which the approval holder has potentially breached; b. the nature of the potential non-compliance;

Date of decision	Conditions attached to approval
	<ul style="list-style-type: none"> c. when and how the approval holder became aware of the non-compliance; d. how the non-compliance will affect the approved action; e. how the non-compliance will affect the anticipated impacts of the approved action, in particular how the non-compliance will affect the impacts on the MNES; f. the measures the approval holder will take to address the impacts of the non-compliance on the MNES and rectify the non-compliance; and g. the time by when the approval holder will rectify the non-compliance.
Original dated 19/12/2013	30. Upon the direction of the Minister , the approval holder must ensure that an independent audit of compliance with the conditions of approval is conducted and a report submitted to the Minister . The independent auditor must be approved by the Minister prior to the commencement of the audit. Audit criteria must be agreed to by the Minister and the audit report must address the criteria to the satisfaction of the Minister .
Original dated 19/12/2013	31. If the approval holder wishes to carry out any activity other than in accordance with the management plans as specified in the conditions, the approval holder must submit to the Department for the Minister's written approval a revised version of that management plan. The approval holder must not commence the varied activity until the Minister has approved the varied management plan. The Minister will not approve a varied management plan unless the revised management plan would result in an equivalent or improved environmental outcome over time. If the Minister approves the revised management plan, that management plan must be implemented in place of the management plan originally approved.
Original dated 19/12/2013	32. If the Minister believes that it is necessary or convenient for the better protection of listed threatened species, listed migratory species or water resources to do so, the Minister may request that the approval holder make specified revisions to the management plans specified in the conditions and submit the revised management plan for the Minister's written approval. The approval holder must comply with any such request within the timeframe specified by the Minister . The revised approved management plan must be implemented. Unless the Minister has approved the revised management plan, then the person taking the action must continue to implement the management plan originally approved, as specified in the conditions.
Variation dated 29/5/2018	33. If at any time after seven years from the date of this approval, the approval holder has not commenced the action, then the approval holder must not commence the action without the written agreement of the Minister .
Original dated 19/12/2013	34. Unless otherwise agreed to in writing by the Minister , the approval holder must publish all management plans referred to in these conditions of approval on their website. Each management plan must be published on the website within 1 month of being approved and remain available on that website for the life of the approval.

Date of decision	Definitions attached to approval
Original dated 19/12/2013	Approval holder: means the person to whom the approval is granted.
Original dated 19/12/2013	Assessment Report: means the Queensland Department of Environment and Heritage Protection's report under the <i>Environmental Protection and Biodiversity Conservation Act 1994</i> for the action.
Variation dated 29/3/2017	<p>Commence/commencement: means any physical disturbance, including clearance of native vegetation, new road work and the establishment of well sites to develop the gas field project area. Commencement does not include:</p> <ul style="list-style-type: none"> a. minor physical disturbance necessary to undertake pre-clearance surveys or establish monitoring programs or geotechnical investigations; or b. activities that are critical to commencement that are associated with mobilisation of plant and equipment, materials, machinery and personnel prior to the start of development only if such activities will have no adverse impact on matters of national environmental significance, and only if the proponent has notified the Department in writing before an activity is undertaken.
Original dated 19/12/2013	Core habitat: means core habitat known and core habitat possible as defined in the rules for habitat mapping for each individual species in the <i>Supplementary Report to the Surat Gas Project EIS (March 2012), Attachment 1 – Matters of National Environmental Significance</i> .
Original dated 19/12/2013	Conservation advice: means an approved conservation advice under the EPBC Act for an EPBC Act listed species or community.
Original dated 19/12/2013	Core habitat known: means habitat where a spatially accurate confirmed record of a particular species exists (e.g. Herbrecks or survey record). Core habitat known is attributed to the particular habitat polygon in which it occurs, based on either regional ecosystem (RE) mapping provided by the Queensland Department of Environment and Heritage Protection (or successor agency) or high resolution habitat mapping developed for a specific purpose. Core habitat known also means a 1 km buffer around all spatially accurate (< 400 metres accuracy) species records.
Original dated 19/12/2013	Condamine Interconnectivity Research Project: means the Condamine Interconnectivity Research Project being undertaken by the Queensland Office of Groundwater Impact Assessment as part of the implementation of the Surat Underground Water Impact Report (UWIR), which was prepared by the Queensland Water Commission (QWC) in 2012.
Original dated 19/12/2013	Core habitat possible: means an area where previous records of a particular species are not known to occur within a given area or habitat, although specific habitat features are present which are known to be favoured by the species and the habitat occurs within the species known geographic range.
Original dated 19/12/2013	Department: means the Australian Government Department administering the <i>Environment Protection and Biodiversity Conservation Act 1999</i> .
Original dated 19/12/2013	<p>Department's survey guidelines: means:</p> <p>Matters of National Environmental Significance, Significant Impact Guidelines 1.1, Environment Protection and Biodiversity Conservation Act 1999 - http://www.environment.gov.au/epbc/publications/nes-guidelines.html.</p> <p>Survey Guidelines for Australia's Threatened Frogs, Threatened Birds, Threatened Fish, Threatened Mammals, Threatened Reptiles and Threatened Bats: http://www.environment.gov.au/epbc/guidelines-policies.html.</p>
Variation dated 29/3/2017	Development stage: means Stage 1, Stage 2, Stage 3 or Stage 4 of project development, as defined in these conditions.
Original dated 19/12/2013	EPBC/ EPBC Act: means the <i>Environment Protection and Biodiversity Conservation Act 1999</i> (Cth).

Date of decision	Definitions attached to approval
Original dated 19/12/2013	EPBC Act Offsets Policy: means the <i>Environment Protection and Biodiversity Conservation Act 1999</i> Environmental Offsets Policy (October 2012) including the Offsets Assessment Guide.
Original dated 19/12/2013	EPBC community: means an endangered ecological community listed under the EPBC Act.
Original dated 19/12/2013	EPBC listed threatened species: means a threatened flora or fauna species listed under the EPBC Act.
Original dated 19/12/2013	Expert panel: means an expert panel appointed by the Minister.
Original dated 19/12/2013	Fitzroy River Turtle: means the Fitzroy River Turtle, <i>Rheodytes leukops</i> , listed as vulnerable under the EPBC Act.
Original dated 19/12/2013	General habitat: means where a species has not been recorded in a given location and habitat accounts for some of the features favoured by a particular species. The habitat occurs on the margins of a species known geographic range. Otherwise, the habitat is suitable for the species
Variation dated 29/3/2017	Impact/s: has the definition assigned to it in section 527E of the EPBC Act .
Original dated 19/12/2013	Joint Industry Plan: means the <i>Joint Industry Plan for an Early Warning System for the Monitoring and Protection of EPBC Springs</i> established with other coal seam gas proponents operating within the Surat Cumulative Management Area.
Variation dated 2/7/2019	Matters of National Environmental Significance (MNES): means matters protected by a provision of Part 3 for which the approval has effect.
Original dated 19/12/2013	Minister: means the Minister administering the <i>Environment Protection and Biodiversity Conservation Act 1999</i> and includes a delegate of the Minister.
Original dated 19/12/2013	Murray Cod: means the Murray Cod, <i>Maccullochella peelii</i> , listed as vulnerable under the EPBC Act.
Variation dated 31/10/2018	Offset attributes means the offset title, status, EPBC referral number, land parcel details and relevant protected matters.
Original dated 19/12/2013	OGIA: means the Office of Groundwater Impact Assessment or its successor body
Original dated 19/12/2013	Pre-clearance surveys: means surveys that are undertaken for EPBC species and EPBC communities for all areas of the project area that may be disturbed by project activities.
Original dated 19/12/2013	Project area: means the area identified as the project area in <u>Attachment A</u> .
Variation dated 29/3/2017	Recovery plan/s: means an approved recovery plan under the EPBC Act for an EPBC listed species or EPBC community .
Variation dated 31/10/2018	Shapefile means an ESRI Shapefile containing '.shp', '.shx' and '.dbf' files and other files capturing attributes including the shape, the EPBC Act reference. ID number and EPBC Act protected matters present at the relevant site. Shapefile files must also include either a '.prj' file or specification of the projection/geographic coordinate system used.
Original dated 19/12/2013	Stage 1: means year 1 to 3 (inclusive) of the action, starting at the date of commencement.
Original dated 19/12/2013	Stage 2: means year 4 to 11 (inclusive) of the action.
Original dated 19/12/2013	Stage 3: means year 12 to 20 (inclusive) of the action
Original dated 19/12/2013	Stage 4: means year 21 to decommissioning (inclusive) of the action

Date of decision	Definitions attached to approval
Original dated 19/12/2013	Suitably qualified ecologist: means a person who has professional qualifications, training, skills or experience relevant to the nominated subject matter and can give authoritative assessment, advice and analysis to performance relative to the subject matter using relevant protocols, standards, methods and literature.
Original dated 19/12/2013	Suitably qualified water resources expert/s: means a natural person with at least a postgraduate degree (or equivalent) in a suitable area (such as hydrology or hydrogeology) and a minimum of 10 years relevant experience in water resources assessment, including at least one year of experience in Australia.
Variation dated 29/3/2017	Threat abatement plan/s: means an approved threat abatement plan under the EPBC Act .



Appendix B

Audit Criteria and Evaluation Table

Audit Criteria and Methodology Surat Gas Expansion Project, Surat Basin, QLD, EPBC 2010/5344 Client: Arrow Energy Pty Ltd DATE OF REPORT: 12 November 2024 REPORT PREPARED BY: Rob Storrs (AECOM Australia Pty Ltd) REPORT APPROVED BY: Orla Ferguson (AECOM Pty Ltd)					
CONDITIONS OF EPBC ACT APPROVAL					
EPBC Approval Condition No.EPBC 2010/5344		Verification Method	Evidence	Documents Sighted	Determination
1	The Minister may determine that a plan, strategy or program approved by the Queensland Government satisfies a plan required under these conditions.	Review of the following documentation: Advice from the Minister on QLD plans approved for use as part of this approval.	The letter dated 18 December 2018 from Chris Videroni, A/g Assistant Secretary, Assessments (WA, SA, NT) and Post Approvals Branch, Environment Standards Division, (Document 35) approves Surat Gas Project - Stage 1 CSG Water Management and Monitoring Plan (Document 2) issued 7 December 2018, as meeting the requirements of Condition 13 and 14 of the above conditions of approval. The letter dated 22 November 2019 from Declan O'Connor-Cox A/g Assistant Secretary, Environment Approvals Division of the then Department of the Environment and Energy, (Document 42) approves the EPBC 2010/5344: Surat Gas Expansion Project - Updated CSG Water Monitoring and Management Plan (Document 41) as suitable for gas extraction of up to 250 wells. The letter dated 7 July 2019 from Greg Manning, Assistant Secretary, Assessments (WA, SA, NT) & Post Approvals Branch, (Document 38) approves the EPBC 2010/5344: Surat Gas Project - Stage 1 Offset Strategy (Document 37) Interviews with the Arrow Environmental Compliance & Assurance, Groundwater and Ecology teams confirmed that there were no Queensland government plans being used to satisfy the EPBC conditions. (Documents 103, Documents 105, Document 106)	Document 35 Document 2 Document 42 Document 41 Document 38 Document 37 Document 103 Document 105 Document 106	It was determined that there are no plans applicable to this EPBC approval that were approved by the Queensland State government. All plans were approved at the Commonwealth level.
2	Disturbance Limits For the purpose of the action, the approval holder must not take any action outside the project area.	Review of the following documentation: Map of wells and supporting infrastructure overlayed on the project area. Interviews: Head Office and Site	Figure 1- Overview SGP EPBC Approval 2010/5344 Approved Action 22/10/2020-28/05/2024 (Document 96) dated 27/09/2024 shows the approved action within the SGP approved project area. Figure 2 - Map extent overview (Document 98) shows the map extents compared to Figure 3- SGP EPBC 2010/5344 Approved Action 22/10/2020-28/05/2024 (Document 97), which shows proposed well locations within the project boundary.	Document 96 Document 98 Document 97	The Project is in the early stages of development. Arrow has to date drilled 264 CSG wells of which 206 where in production as of the 28 May 2024. From the figures sighted and interviews undertaken this condition for the audit period has been met.
3	The action is limited to a maximum of 6,500 coal seam gas production wells and associated infrastructure.	Review of the following documentation: Current list of wells Plans showing wells and well numbers Interviews: Head Office and Site	Figure 1- Overview SGP EPBC Approval 2010/5344 Approved Action 22/10/2020-28/05/2024 (Document 96) dated 27/09/2024 shows the approved action within the SGP approved project area. Figure 2 - Map extent overview (Document 98) shows the map extents compared to Figure 3- SGP EPBC 2010/5344 Approved Action 22/10/2020-28/05/2024 (Document 97), which shows proposed well locations within the project boundary Spudded and Producing wells CSG Wells 22102020-28052020.xlsx (Document 100) lists 264 wells drilled and 206 producing during this time	Document 96 Document 98 Document 97 Document 100	The Project is in the early stages of development. Arrow has to date drilled 264 CSG wells with 206 in production during the audit period, and is therefore well within the 6,500 allowance.
4	The approval holder must not undertake hydraulic fracturing.	Review of the following documentation: Design drawings of installation method Well development procedure Interviews: Head Office and Site	The memo dated 04 October 2024 (Document 99) states Arrow has committed to not undertaking hydraulic fracking in the SGP EIS and that the method used for extraction is open hole slotted liner design for Surat wells. The memo also refers to CONFIDENTIAL_Standard Surat Vertical Drilling Program Rev.5.1 2023.pdf (Document 75) and CONFIDENTIAL_SURAT-COMP-ELIM-PCP-CONV-20220616 Rev1.5 - HL,JO and Zhu signed.pdf (Document 59) to detail the process for gas extraction. These documents have been sighted and demonstrate the method of drilling and extraction that do not include hydraulic fracturing. Item 6 of the interview minutes recorded on 29 October with Arrow Environmental Compliance & Assurance team (Document 103) confirms that fracking has not and will not occur and due to the design of the underground infrastructure fracking is not a suitable method for gas extraction.	Document 99 Document 75 Document 59 Document 103	From the review of the explanatory memo, SGP EIS, Document 75, and Document 59, drilling method documentation and interviews undertaken this condition for the audit period has been met.

CONDITIONS OF EPBC ACT APPROVAL																																																																						
EPBC Approval Condition No.EPBC 2010/5344		Verification Method	Evidence	Documents Sighted	Determination	Compliance Finding (Y, N, NA, O)																																																																
5	<p>To protect EPBC listed species and EPBC communities within the project area the maximum disturbance limits in Table 1 apply to the project. The approval holder must not exceed these disturbance limits</p> <table><tr><th>Terrestrial species</th><th>Maximum disturbance (hectares) to core habitat</th></tr><tr><td>Curly-bark Wattle, <i>Acacia curranii</i></td><td>1210</td></tr><tr><td>Hando's Wattle, <i>Acacia handonis</i></td><td>1210</td></tr><tr><td>Belson's Panic, <i>Homopholia belsonii</i></td><td>140</td></tr><tr><td><i>Prostanthera sp</i> Dunmore</td><td>380</td></tr><tr><td>Small-leaved Denhamia, <i>Denhamia parvifolia</i></td><td>50</td></tr><tr><td><i>Calytrix gurlumundensis</i></td><td>1210</td></tr><tr><td>Ooline, <i>Cadellia pentastylis</i></td><td>No disturbance</td></tr><tr><td>Austral Toadflax, <i>Thesium australe</i></td><td>160</td></tr><tr><td><i>Acacia laeta</i></td><td>990</td></tr><tr><td><i>Xerothamnella herbacea</i></td><td>110</td></tr><tr><td>Hawkweed, <i>Picris evae</i></td><td>120</td></tr><tr><td>Austral Cornflower, <i>Rhaponticum australe</i></td><td>160</td></tr><tr><td><i>Eucalyptus virens</i></td><td>170</td></tr><tr><td>King Blue-grass, <i>Dichanthium queenslandicum</i></td><td>160</td></tr><tr><td>Queensland White-gum, <i>Eucalyptus argophloia</i></td><td>10</td></tr><tr><td><i>Macrozamia machinii</i></td><td>No disturbance</td></tr><tr><td>South-eastern Long-eared Bat, <i>Nyctophilus corbeni</i></td><td>4 080</td></tr><tr><td>Dunmall's Snake, <i>Furina dunmalli</i></td><td>4 400</td></tr><tr><td>Five-clawed Worm-skink, <i>Anomalopus mackayi</i></td><td>560</td></tr><tr><td>Squatter Pigeon (Southern), <i>Geophaps scripta scripta</i></td><td>3261</td></tr><tr><td>Regent Honeyeater, <i>Anthochaera phrygia</i></td><td>20</td></tr><tr><td>Collared Delma, <i>Delma torquata</i></td><td>90</td></tr><tr><td>Yakka Skink, <i>Egernia rugosa</i></td><td>310</td></tr><tr><td>Australian Painted Snipe, <i>Rostratula australis</i></td><td>5</td></tr></table> <table><tr><th>EPBC Communities</th><th>Maximum disturbance (hectares)</th></tr><tr><td>Brigalow (<i>Acacia harpophylla</i> dominant and co-dominant)</td><td>106</td></tr><tr><td>Coolibah - Black Box Woodlands of the Darling Riverine Plains and the Brigalow Belt South Bioregions</td><td>8</td></tr><tr><td>Weeping Myall Woodlands</td><td>1</td></tr><tr><td>Natural Grasslands on basalt and fine-textured alluvial plains of northern New South Wales and southern Queensland</td><td>No disturbance</td></tr><tr><td>White Box-Yellow Box-Slatkely's Red Gum Grassy Woodland and Derived Native Grassland</td><td>No disturbance</td></tr><tr><td>Semi-evergreen vine thickets of the Brigalow Belt (North and South) and Nandewar Bioregions</td><td>No disturbance</td></tr></table>	Terrestrial species	Maximum disturbance (hectares) to core habitat	Curly-bark Wattle, <i>Acacia curranii</i>	1210	Hando's Wattle, <i>Acacia handonis</i>	1210	Belson's Panic, <i>Homopholia belsonii</i>	140	<i>Prostanthera sp</i> Dunmore	380	Small-leaved Denhamia, <i>Denhamia parvifolia</i>	50	<i>Calytrix gurlumundensis</i>	1210	Ooline, <i>Cadellia pentastylis</i>	No disturbance	Austral Toadflax, <i>Thesium australe</i>	160	<i>Acacia laeta</i>	990	<i>Xerothamnella herbacea</i>	110	Hawkweed, <i>Picris evae</i>	120	Austral Cornflower, <i>Rhaponticum australe</i>	160	<i>Eucalyptus virens</i>	170	King Blue-grass, <i>Dichanthium queenslandicum</i>	160	Queensland White-gum, <i>Eucalyptus argophloia</i>	10	<i>Macrozamia machinii</i>	No disturbance	South-eastern Long-eared Bat, <i>Nyctophilus corbeni</i>	4 080	Dunmall's Snake, <i>Furina dunmalli</i>	4 400	Five-clawed Worm-skink, <i>Anomalopus mackayi</i>	560	Squatter Pigeon (Southern), <i>Geophaps scripta scripta</i>	3261	Regent Honeyeater, <i>Anthochaera phrygia</i>	20	Collared Delma, <i>Delma torquata</i>	90	Yakka Skink, <i>Egernia rugosa</i>	310	Australian Painted Snipe, <i>Rostratula australis</i>	5	EPBC Communities	Maximum disturbance (hectares)	Brigalow (<i>Acacia harpophylla</i> dominant and co-dominant)	106	Coolibah - Black Box Woodlands of the Darling Riverine Plains and the Brigalow Belt South Bioregions	8	Weeping Myall Woodlands	1	Natural Grasslands on basalt and fine-textured alluvial plains of northern New South Wales and southern Queensland	No disturbance	White Box-Yellow Box-Slatkely's Red Gum Grassy Woodland and Derived Native Grassland	No disturbance	Semi-evergreen vine thickets of the Brigalow Belt (North and South) and Nandewar Bioregions	No disturbance	<p>Review of the following documentation:</p> <p>List of cumulative disturbance areas of listed habitat</p> <p>Procedure for recording disturbance areas</p> <p>Authority to clear procedure</p> <p>Qualifications of staff recording the areas of disturbance.</p> <p>Examples of reports of pre and post disturbance.</p> <p>- example Significant Residual Impact Assessment Report for Offsets (PL194 supplied)</p> <p>Site clearing procedure</p> <p>Interviews:</p> <p>With ecologist or Arrow staff member responsible for monitoring this information.</p>	<p>Report ORG-ARW-HSM-PRO-00070 Ecological Impact Assessment Procedure dated 31 March 2020 (Document 45) and report ORG-ARW-HSM-GUI-00070 Ecological Survey Guideline dated 1 October 2019 (Document 44) outline the methods taking during preclearing to limit disturbance of MNES species core habitat. ORG-ARW-HSM-GUI-00094 Land Disturbance Guideline - Section 5 Sensitive Area Protection, Appendix F and Appendix G (Document 82) and ORG-ARW-HSM-PRO-00146 Land Disturbance Procedure Section 4.3 Protection Measures for Sensitive areas and Section 4.4 Fauna and Flora Management (Document 76) outlines protection measures for threatened plant species, individual habitat trees and significant fauna habitat.</p> <p>Report ORG-ARW-HSM-PLA-00152 Environment Management Plan Section 5.2.3 Biodiversity, Chapter 6 Upstream Construction Project, Section 6.5.1 for Geospatial Data Collection - Land Management, Appendix C.6.2 Land Clearance (Document 91) dated 15 July 2024 outlines management of cleared vegetation and areas to be surveyed for purposes of maintaining core habitat.</p> <p>Report ORG-ARW-GIS-STA-00013 Geospatial Engineering Data Specifications Section 8.17 Disturbance Areas (Polygon) dated 10 May 2024 (Document 88) describes specifications for collected geospatial data for disturbed land for tracking purposes.</p> <p>Report named Species Impact Management Plan dated 2 November 2018 (Document 1) describes disturbance limits and mitigations to minimise disturbance footprint during clearing.</p> <p>Report named ORG-CNJV-ENV-PLA-00001 CNJV CEMP Section 12.2 Flora & Fauna management dated 20 February 2024 (Document 86) states that clearing of vegetation will be minimised to approved extents and that unapproved disturbance shall be avoided.</p> <p>Report named SM003 - MJS Construction Environment Management Plan Section 12.2 Land and Vegetation Management and Section 12.7 Native Fauna, dated 8 May 2022 (Document 57) states that the project contractor is responsible for minimising land disturbance, managing potential environmental harm to native fauna, their breeding places, and their habitat within and adjacent to the Site, and that they shall take reasonable and practicable management measures to avoid environmental harm and environmental nuisance to native fauna, and to known fauna habitats and breeding places.</p> <p>Report ORG-ARW-HSM-STA-00001 - Arrow HSE Management Standards dated 12 March 2021 Document 48) Biodiversity Requirements states prior to disturbing natural systems, ensure that biodiversity impacts are assessed. Assessments must be undertaken by suitably qualified and experienced persons.</p> <p>Reports ORG-ARW-HSM-PRO-00067 Fauna Management Procedure dated 20 July 2022 (Document 61) and ORG-ARW-HSM-GUI-00103 Fauna Management Guideline dated 29 July 2023 (Document 72) prescribe mitigation measures for minimised disturbance on core habitat. Reports AAP.00017 dated 12 January 2023 (Document 64), AAP.00031 dated 2 June 2021 (Document 49), AAP.00045 dated 17 July 2023 (Document 71) and AAP.00156 dated 19 July 2024 (Document 92) contain provisions for threatened species and relevant mitigations for land disturbance. AAP.00031(Document 92) contains provisions for offsets in accordance with EPBC Approval 2010/5344 (Document 56) , Stage 1 Offset Strategy (Document 37) and Stage 1 Offset Area Management Plan (Document 50)</p> <p>Interviews with the Arrow Environmental Compliance & Assurance and Ecology teams confirmed that the disturbance of core habitat or EPBC communities had not exceeded prescribed limits (Documents 103, Documents 105).</p>	<p>Document 45 Document 44 Document 82 Document 76 Document 91 Document 88 Document 1 Document 86 Document 57 Document 48 Document 48 Document 61 Document 72 Document 49 Document 92 Document 71 Document 64 Document 56 Document 37 Document 50 Document 103 Document 105</p>	<p>The Project is in the early stages of development. Arrow has to date developed the gas field and drilled 264 of the 6,500 approved CSG wells with 206 in production during the audit period.</p> <p>The documents sighted demonstrate that the approved maximum disturbance hectares for core habitat and EPBC communities as listed in the approval have not been exceeded. Arrow also have a robust method of tracking clearing against the approved disturbance areas. The cumulative areas of disturbance are reported annually in the Project EPBC compliance reports and the cumulative totals up to 28 May 2024 were viewed and deemed compliant.</p>	Y
Terrestrial species	Maximum disturbance (hectares) to core habitat																																																																					
Curly-bark Wattle, <i>Acacia curranii</i>	1210																																																																					
Hando's Wattle, <i>Acacia handonis</i>	1210																																																																					
Belson's Panic, <i>Homopholia belsonii</i>	140																																																																					
<i>Prostanthera sp</i> Dunmore	380																																																																					
Small-leaved Denhamia, <i>Denhamia parvifolia</i>	50																																																																					
<i>Calytrix gurlumundensis</i>	1210																																																																					
Ooline, <i>Cadellia pentastylis</i>	No disturbance																																																																					
Austral Toadflax, <i>Thesium australe</i>	160																																																																					
<i>Acacia laeta</i>	990																																																																					
<i>Xerothamnella herbacea</i>	110																																																																					
Hawkweed, <i>Picris evae</i>	120																																																																					
Austral Cornflower, <i>Rhaponticum australe</i>	160																																																																					
<i>Eucalyptus virens</i>	170																																																																					
King Blue-grass, <i>Dichanthium queenslandicum</i>	160																																																																					
Queensland White-gum, <i>Eucalyptus argophloia</i>	10																																																																					
<i>Macrozamia machinii</i>	No disturbance																																																																					
South-eastern Long-eared Bat, <i>Nyctophilus corbeni</i>	4 080																																																																					
Dunmall's Snake, <i>Furina dunmalli</i>	4 400																																																																					
Five-clawed Worm-skink, <i>Anomalopus mackayi</i>	560																																																																					
Squatter Pigeon (Southern), <i>Geophaps scripta scripta</i>	3261																																																																					
Regent Honeyeater, <i>Anthochaera phrygia</i>	20																																																																					
Collared Delma, <i>Delma torquata</i>	90																																																																					
Yakka Skink, <i>Egernia rugosa</i>	310																																																																					
Australian Painted Snipe, <i>Rostratula australis</i>	5																																																																					
EPBC Communities	Maximum disturbance (hectares)																																																																					
Brigalow (<i>Acacia harpophylla</i> dominant and co-dominant)	106																																																																					
Coolibah - Black Box Woodlands of the Darling Riverine Plains and the Brigalow Belt South Bioregions	8																																																																					
Weeping Myall Woodlands	1																																																																					
Natural Grasslands on basalt and fine-textured alluvial plains of northern New South Wales and southern Queensland	No disturbance																																																																					
White Box-Yellow Box-Slatkely's Red Gum Grassy Woodland and Derived Native Grassland	No disturbance																																																																					
Semi-evergreen vine thickets of the Brigalow Belt (North and South) and Nandewar Bioregions	No disturbance																																																																					
6	<p>To protect EPBC listed species and communities within the project area the maximum disturbance limits in Table 2 apply to Stage 1. The approval holder must not exceed these disturbance limits.</p> <p>Table 2: Maximum disturbance limits for Stage 1</p> <table><tr><th>Terrestrial species</th><th>Maximum disturbance (hectares) to core habitat</th></tr><tr><td>South-eastern Long-eared Bat, <i>Nyctophilus corbeni</i></td><td>225</td></tr><tr><td>Dunmall's Snake, <i>Furina dunmalli</i></td><td>300</td></tr><tr><td>Five-clawed Worm-skink, <i>Anomalopus mackayi</i></td><td>2</td></tr><tr><td>Squatter Pigeon (Southern), <i>Geophaps scripta scripta</i></td><td>203</td></tr><tr><td>Regent Honeyeater, <i>Anthochaera phrygia</i></td><td>1</td></tr><tr><td>Collared Delma, <i>Delma torquata</i></td><td>11</td></tr><tr><td>Yakka Skink, <i>Egernia rugosa</i></td><td>19</td></tr></table> <table><tr><th>EPBC Communities</th><th>Maximum disturbance (hectares)</th></tr><tr><td>Brigalow (<i>Acacia harpophylla</i> dominant and co-dominant)</td><td>39</td></tr><tr><td>Coolibah - Black Box Woodlands of the Darling Riverine Plains and the Brigalow Belt South Bioregions</td><td>8</td></tr></table>	Terrestrial species	Maximum disturbance (hectares) to core habitat	South-eastern Long-eared Bat, <i>Nyctophilus corbeni</i>	225	Dunmall's Snake, <i>Furina dunmalli</i>	300	Five-clawed Worm-skink, <i>Anomalopus mackayi</i>	2	Squatter Pigeon (Southern), <i>Geophaps scripta scripta</i>	203	Regent Honeyeater, <i>Anthochaera phrygia</i>	1	Collared Delma, <i>Delma torquata</i>	11	Yakka Skink, <i>Egernia rugosa</i>	19	EPBC Communities	Maximum disturbance (hectares)	Brigalow (<i>Acacia harpophylla</i> dominant and co-dominant)	39	Coolibah - Black Box Woodlands of the Darling Riverine Plains and the Brigalow Belt South Bioregions	8	<p>Review of the following documentation:</p> <p>Definition of Stage 1.</p> <p>List of habitat disturbance (Cumulative) in Stage 1.</p> <p>Confirm accuracy of recorded information.</p> <p>See Condition 5.</p> <p>Confirm date of action commencing.</p>	<p>Report Surat - EPBC Approval 2010/5344 Annual Compliance Report 2022/2023 Surat Gas Project 22 October 2022 to 21 October 2023 (Document 78) Section 6 states that the disturbance to MNES is well within the approved limits.</p> <p>AECOM viewed the Arrow ecology tracking spreadsheet and the PowerBI database that presented the cumulative clearing for all of the classified species and habitat in Conditions 5 and 6 of the EPBC approval. The presented information demonstrated that the maximum disturbance limits had not been exceeded. (Document 105)</p>	<p>Document 78 Document 103 Document 105</p>	<p>The Project is in the early stages of development. Arrow has to date developed the gas field and drilled 264 of the 6,500 approved CSG wells with 206 in production during the audit period.</p> <p>The documents sighted demonstrate that the approved maximum disturbance hectares for core habitat and EPBC communities as listed in the approval have not been exceeded. Arrow also have a robust method of tracking clearing against the approved disturbance areas. The cumulative areas of disturbance are reported annually in the Project EPBC compliance reports and the cumulative totals up to 28 May 2024 were viewed and deemed compliant.</p>	Y																																										
Terrestrial species	Maximum disturbance (hectares) to core habitat																																																																					
South-eastern Long-eared Bat, <i>Nyctophilus corbeni</i>	225																																																																					
Dunmall's Snake, <i>Furina dunmalli</i>	300																																																																					
Five-clawed Worm-skink, <i>Anomalopus mackayi</i>	2																																																																					
Squatter Pigeon (Southern), <i>Geophaps scripta scripta</i>	203																																																																					
Regent Honeyeater, <i>Anthochaera phrygia</i>	1																																																																					
Collared Delma, <i>Delma torquata</i>	11																																																																					
Yakka Skink, <i>Egernia rugosa</i>	19																																																																					
EPBC Communities	Maximum disturbance (hectares)																																																																					
Brigalow (<i>Acacia harpophylla</i> dominant and co-dominant)	39																																																																					
Coolibah - Black Box Woodlands of the Darling Riverine Plains and the Brigalow Belt South Bioregions	8																																																																					
7	Revoked																																																																					
7A.	<p>Prior to the commencement of Stage 1, the approval holder must prepare and submit an EPBC Species Impact Management Plan for the Minister's written approval.</p> <p>The EPBC Species Impact Management Plan must include:</p>	<p>Review of the following documentation:</p> <p>EPBC Species Impact Management Plan</p> <p>Ministers approval of the plan</p>	<p>The letter dated 18 November 2020 from Yihua Xu General Manager Asset (Surat), Arrow Energy to DAWE (Document 46) states the commencement date of the activity was 22 October 2020.</p> <p>The letter dated 24 November 2020 from Thomas Long A/g Assistant Director, Environment Audit Section, (Document 47) confirms the action commencement date of 22 October 2020.</p> <p>The letter dated 14 December 2018 from Chris Videroni, Acting Assistant Secretary, Assessments (WA, SA, NT) & Post Approvals Branch (Document 34) confirms the receipt and approval of the EPBC Species Impact Management Plan from Arrow (Document 1). This is prior to the Action commencement date.</p>	<p>Document 46 Document 47 Document 34 Document 1</p>	<p>An EPBC SIMP has been submitted for approval by the Minister prior to the Action date, including the sub clause conditions.</p>	Y																																																																
a.	<p>Measures that will be taken to avoid, mitigate and manage impacts to EPBC listed threatened species and their habitat during clearance of vegetation, including the involvement of a suitably qualified ecologist at all times during clearance of vegetation;</p>	<p>a) Evidence of use of suitably qualified ecologists during clearing - at all times.</p>	<p>Correspondence was sighted (letter dated 14 December 2018 from Chris Videroni, Acting Assistant Secretary, Assessments (WA, SA, NT) & Post Approvals Branch (Document 34) confirms the receipt and approval of the EPBC SIMP (Document 1) from Arrow. The approval by the Minister is considered evidence that the SIMP meets the requirements of Condition 7A and its sub clauses.</p>	<p>Document 1 Document 34</p>	<p>This condition has been considered to be met because the requirement is captured within Document 1 (particularly Section 3 Page 13 - Mitigation measures) and the SIMP has been approved by the Delegate of the Minister (Document 34)</p>	Y																																																																
b.	<p>Measures that will be taken to avoid and mitigate impacts to EPBC listed threatened species and their habitat and to EPBC communities during construction, operation and decommissioning of the action;</p>	<p>b) Clearing procedure</p>	<p>Correspondence was sighted (letter dated 14 December 2018 from Chris Videroni, Acting Assistant Secretary, Assessments (WA, SA, NT) & Post Approvals Branch (Document 34) confirms the receipt and approval of the EPBC SIMP (Document 1) from Arrow. The approval by the Minister is considered evidence that the SIMP meets the requirements of Condition 7A and its sub clauses.</p>	<p>Document 1 Document 34</p>	<p>This condition has been considered to be met because the requirement is captured within Document 1 (particularly Section 4 Page 19 - Mitigation measures during construction, operation and decommissioning) and the SIMP has been approved by the Delegate of the Minister</p>	Y																																																																
c.	<p>c. a monitoring program to determine the success of impacts avoidance and mitigation measures and that will inform adaptive implementation of the action for the duration of this approval; and</p>	<p>c) Monitoring program and evidence of monitoring outcomes.</p>	<p>Correspondence was sighted (letter dated 14 December 2018 from Chris Videroni, Acting Assistant Secretary, Assessments (WA, SA, NT) & Post Approvals Branch (Document 34) confirms the receipt and approval of the EPBC SIMP (Document 1) from Arrow. The approval by the Minister is considered evidence that the SIMP meets the requirements of Condition 7A and its sub clauses.</p>	<p>Document 1 Document 34</p>	<p>This condition has been considered to be met because the requirement is captured within Document 1 (particularly Section 5 Page 25, Monitoring Program) and the SIMP has been approved by the Minister</p>	Y																																																																

CONDITIONS OF EPBC ACT APPROVAL						
EPBC Approval Condition No.EPBC 2010/5344		Verification Method	Evidence	Documents Sighted	Determination	Compliance Finding (Y, N, NA, O)
d.	d. a description of how measures proposed in the EPBC Species Impact Management Plan are consistent with the measures in relevant conservation advice, recovery plans and threat abatement plans	D) assessment of how the plan meets the relevant codes, conservation plans and recovery and abatement plans	Correspondence was sighted (letter dated 14 December 2018 from Chris Videroni, Acting Assistant Secretary, Assessments (WA, SA, NT) & Post Approvals Branch (Document 34) confirms the receipt and approval of the EPBC SIMP (Document 1) from Arrow. The approval by the Minister is considered evidence that the SIMP meets the requirements of Condition 7A and its sub clauses.	Document 1 Document 34	This condition has been considered to be met because the requirement is captured within Document 1 (particularly Section 3 Page 45 - Consistencies with relevant documents) and the SIMP has been approved by the Minister	Y
7B.	The approval holder must not commence Stage 1 until an EPBC Species Impact Management Plan has been approved by the Minister in writing. The approved EPBC Species Impact Management Plan must be implemented by the approval holder.	Review of the following documentation: Written approval from the Minister. Confirmation of commencement date of Stage 1. Demonstrate implementation of the Plan	The letter 24 November 2020 from Thomas Long, A/g Assistant Director, Environment Audit Section (Document 47), confirms the action commencement date of 22 October 2020. The letter dated 14 December 2018 from Chris Videroni, Acting Assistant Secretary, Assessments (WA, SA, NT) & Post Approvals Branch (Document 34) confirms the receipt and approval of the EPBC SIMP. This is prior to the Action commencement date. Interviews with the Arrow Environmental Compliance & Assurance, Staging and Ecology teams confirmed that the SIMP is implemented in field processes (Document 103, Document 104 and Document 105). Evidence provided of implementation of the SIMP included the Area Wide Planning Process End to End Procedure (Document 102).	Document 47 Document 34 Document 103 Document 104 Document 105 Document 122	The EPBC SIMP has been approved by the delegate of the Minister prior to the commencement of Stage 1. Implementation of the SIMP is addressed in the Area wide Planning Process End to End Procedure (Document 122)	Y
8	Revoked					
8A.	Offsets If the approval holder has provided an offset in respect of impacts predicted for a development stage of the project which subsequently are not realised, such parts of the offset in excess of the obligation for that development stage can be applied towards offsets required for the impacts of subsequent development stages.	Review of the following documentation: Offset Strategy and Management Plan Confirm status of plan and offsets Review offset tracking database What is the offset predicted for the development stage?	The letter dated 7 July 2019 from Greg Manning, Assistant Secretary, Assessments (WA, SA, NT) & Post Approvals Branch (Document 38) approves the EPBC 2010/5344: Surat Gas Project - Stage 1 Offset Strategy (Document 37). The memo Surat Gas Project EPBC Approval Staging Definition, Stage 1 Offset Strategy And Stage Offset Area Management Plan Amendments Current As At 15 October 2024 (Document 102) provides detail as to how Arrow has assumed current project staging. The Stage 1 Offset Area Management Plan submitted on 21 October 2021 is yet to be approved by the Department. Interviews with the Arrow Environmental Compliance & Assurance, Staging and Ecology teams confirmed that offsets provided for Stage 1 have not been realised. (Document 103, Document 104, Document 105)	Document 38 Document 37 Document 102 Document 103 Document 104 Document 105	This condition allows Arrow to utilise unrealised offsets from one stage to the next. Arrow is yet to legally acquire Offsets for Stage 1 as they are waiting on the approval of the Stage 1 OAMP. There is also no compliance requirement in the condition.	NA
8B.	The Offset Strategy may be prepared and submitted to the Minister for approval in stages. Each stage of the Offset Strategy must provide information in respect of the subsequent development stage to commence and all earlier development stages. A development stage must not commence until an Offsets Strategy addressing offset obligations for that development stage has been approved by the Minister	Review of the following documentation: Current Project offset strategy Historical strategies if available Evidence of the ministers approval of the offsets strategy for the development stage. What is the current stage of the project offsets?	The letter dated 7 July 2019 from Greg Manning, Assistant Secretary, Assessments (WA, SA, NT) & Post Approvals Branch (Document 38) approves the EPBC 2010/5344: Surat Gas Project - Stage 1 Offset Strategy (Document 37). This approved Stage 1 Offset Strategy Section 1 stipulates that <i>for the purpose of this strategy, the Stage 1 activities include the installation of approximately 350 wells and associated gathering lines and access tracks</i> . List of wells has been confirmed to be 264 total. 206 wells commenced within audit period commencement date 22 October 2020 and 28 May 2024 CSG wells as per 22102020-28052024 (1).xlsx (Document 100) Condition 8B says that A development stage must not commence until an Offsets Strategy addressing offset obligations for that development stage has been approved by the Minister. The definition of Commencement in the approval condition: <i>Means any physical disturbance, including clearance of native vegetation, new road work, and the establishment of well sites to develop the gasfield project area</i> . The memo Surat Gas Project EPBC Approval Staging Definition, Stage 1 Offset Strategy And Stage Offset Area Management Plan Amendments Current As At 4 November 2024 (Document 102) provides detail as to how Arrow has assumed current project staging and the negotiations that are ongoing with the Department.	Document 38 Document 37 Document 102 Document 100	Arrow have submitted (Doc 38) and had approved (Doc 37) the Stage 1 Offset Strategy. The strategy defines Stage 1 as approximately 350 wells. The project had drilled 264 CSG wells with 206 in production during the audit period. Condition 8B says that <i>A development stage must not commence until an Offsets Strategy addressing offset obligations for that development stage has been approved by the Minister. The definition of Commencement in the approval condition: Means any physical disturbance, including clearance of native vegetation, new road work, and the establishment of well sites to develop the gasfield project area.</i> The determination is that as the approved Stage 1 Offset Strategy says the number of approved Stage 1 wells is approx 350 and the number of wells currently developed is 264, Stage 2 despite being post 22 Oct 2023 (year 4 of the action) has not commenced. Arrow is therefore considered to be in compliance with this condition. As an observation - the staging definition being dependant on Commencement of disturbance and time post approval is ambiguous. Arrow commenced negotiation with the Department in relation to altering the definition of the Project Stages in August 2023 to be based on wells developed. These negotiations are still ongoing.	Y
8C.	The Offset Strategy must:	Review of the following documentation: Current Project offset strategy	The letter dated 7 July 2019 from Greg Manning, Assistant Secretary, Assessments (WA, SA, NT) & Post Approvals Branch (Document 38) approves the EPBC 2010/5344: Surat Gas Project - Stage 1 Offset Strategy (Document 37) as a delegate of the Minister for the Environment, I have decided to approve the Surat Gas Project Stage 1 Offset Strategy, Version 6, dated 28 June 2019, as meeting the requirements of Condition 8C The memo Surat Gas Project EPBC Approval Staging Definition, Stage 1 Offset Strategy And Stage Offset Area Management Plan Amendments Current As At 15 October 2024 (Document 102) provides detail as to how Arrow has assumed current project staging and the negotiations that are ongoing with the Department. As a result a Stage 2 Offset Strategy has not yet been submitted.	Document 38 Document 37	The letter response from the Department dated 7 July 2019 confirms their agreement that the Surat Gas Project Stage 1 Offset Strategy, Version 6, dated 28 June 2019, meets the requirements of Condition 8C. As the confirmation of the Project Staging is currently under review the Condition 8C compliance was considered against the submitted and approved Stage 1 Offset Strategy.	Y
a.	a. include a strategy to secure the offsets proposed for the residual significant impacts to the EPBC listed species and EPBC communities for the subsequent development stage;	As per 8C	Correspondence was sighted (letter dated 7 July 2019 from Greg Manning, Assistant Secretary, Assessments (WA, SA, NT) & Post Approvals Branch (Document 38) approves the EPBC 2010/5344: Surat Gas Project - Stage 1 Offset Strategy (Document 37). The approval by the Minister is considered evidence that the Stage 1 Offset Strategy meets the requirements of Condition 8C and its sub clauses.	Document 38 Document 37	This condition has been considered to be met because the requirement is captured within Surat Gas Project - Stage 1 Offset Strategy (Document 37) which was approved by the Minister on 7 July 2019.	Y

CONDITIONS OF EPBC ACT APPROVAL						
EPBC Approval Condition No.EPBC 2010/5344		Verification Method	Evidence	Documents Sighted	Determination	Compliance Finding (Y, N, NA, O)
b.	b. include a map of the location of each EPBC listed threatened species and its habitat and EPBC community in relation to infrastructure for the subsequent development stage;	As per 8C	Correspondence was sighted (letter dated 7 July 2019 from Greg Manning, Assistant Secretary, Assessments (WA, SA, NT) & Post Approvals Branch (Document 38) approves the EPBC 2010/5344: Surat Gas Project - Stage 1 Offset Strategy (Document 37). The approval by the Minister is considered evidence that the Stage 1 Offset Strategy meets the requirements of Condition 8C and its sub clauses.	Document 38 Document 37	This condition has been considered to be met because the requirement is captured within Surat Gas Project - Stage 1 Offset Strategy (Document 37) which was approved by the Minister on 7 July 2019.	Y
c.	c. describe potential risks to the successful implementation of the Offset Strategy, and the contingency measures that would be implemented to mitigate against these risks;		Correspondence was sighted (letter dated 7 July 2019 from Greg Manning, Assistant Secretary, Assessments (WA, SA, NT) & Post Approvals Branch (Document 38) approves the EPBC 2010/5344: Surat Gas Project - Stage 1 Offset Strategy (Document 37). The approval by the Minister is considered evidence that the Stage 1 Offset Strategy meets the requirements of Condition 8C and its sub clauses.	Document 38 Document 37	This condition has been considered to be met because the requirement is captured within Surat Gas Project - Stage 1 Offset Strategy (Document 37) which was approved by the Minister on 7 July 2019.	Y
d.	d. detail how the approval holder will address any residual significant impacts to any EPBC listed threatened species and its habitat and/or EPBC communities not identified in Table 1, in accordance with the EPBC Act Offsets Policy; and		Correspondence was sighted (letter dated 7 July 2019 from Greg Manning, Assistant Secretary, Assessments (WA, SA, NT) & Post Approvals Branch (Document 38) approves the EPBC 2010/5344: Surat Gas Project - Stage 1 Offset Strategy (Document 37). The approval by the Minister is considered evidence that the Stage 1 Offset Strategy meets the requirements of Condition 8C and its sub clauses.	Document 38 Document 37	This condition has been considered to be met because the requirement is captured within Surat Gas Project - Stage 1 Offset Strategy (Document 37) which was approved by the Minister on 7 July 2019.	Y
e.	e. specify the proposed legal mechanism and timeframe for securing the offset(s).		The Stage 1 SGP Offset Strategy dated 28 June 2019 (Document 37) Section 8 outlines the legal mechanism used to secure offsets in line with Queensland legislation. The timing of securing of the request for Voluntary Declaration will be submitted to the Queensland Government at least 6 months before the start of Stage 2. Arrow will legally secure the Stage 1 offsets prior to the commencement of Stage 2. Correspondence was sighted (letter dated 7 July 2019 from Greg Manning, Assistant Secretary, Assessments (WA, SA, NT) & Post Approvals Branch (Document 38) approves the EPBC 2010/5344: Surat Gas Project - Stage 1 Offset Strategy (Document 37). The approval by the Minister is considered evidence that the Stage 1 Offset Strategy meets the requirements of Condition 8C and its sub clauses.	Document 38 Document 37	This condition has been considered to be met because the requirement is captured within Surat Gas Project - Stage 1 Offset Strategy (Document 37) which was approved by the Minister on 7 July 2019.	Y
8D.	The approval holder must not commence the action until the Offset Strategy for Stage 1 has been approved by the Minister in writing. The approved Offset Strategy must be implemented by the approval holder.	Review of the following documentation: View evidence of strategy implementation of the approved plan. Ministers approval of the plan Confirm timing of offset plan approval and the start of the action	The letter dated 7 July 2019 from Greg Manning, Assistant Secretary, Assessments (WA, SA, NT) & Post Approvals Branch (Document 38) approves the EPBC 2010/5344: Surat Gas Project - Stage 1 Offset Strategy (Document 37). This approved Stage 1 Offset Strategy Section 1 stipulates that for the purpose of this strategy, the Stage 1 activities include the installation of approximately 350 wells and associated gathering lines and access tracks. <i>Officers of the Department have advised me on the Offset Strategy and the requirements of conditions for the EPBC Act approval. On this basis, and as a delegate of the Minister for the Environment, I have decided to approve the Surat Gas Project Stage 1 Offset Strategy, Version 6, dated 28 June 2019, as meeting the requirements of Condition 8C. In accordance with Condition 8D, this approved Strategy must now be implemented.</i> List of wells has been confirmed to be 264 total. 206 wells commenced within audit period commencement date 22 October 2020 and 28 May 2024 CSG wells as per 22102020-28052024 (1).xlsx (Document 100) The Stage 1 SGP Offset Strategy dated 28 June 2019 (Document 37) Section 8 outlines the legal mechanism used to secure offsets in line with Queensland legislation. The timing of securing of the request for Voluntary Declaration will be submitted to the Queensland Government at least 6 months before the start of Stage 2. Arrow will legally secure the Stage 1 offsets prior to the commencement of Stage 2. Arrow has implemented the Stage 1 Offset strategy as far as practicable by taking the following steps. a. narrowed the suitable properties for land-based offsets; b. engaged with relevant landholders for the identified properties; c. engaged with the Department, including with the provision of the Stage 1 OAMP, on the mechanism for legally securing offsets. Arrow has taken further steps to progress the strategy by executing a legally binding Call-option Agreement with a landholder to provide offsets for Stage 1 (dated 25 January 2023). (Sighted) The Agreement includes a condition precedent to exercising the call-option; which is the receipt of the Minister approved OAMP in order to apply to the state government for a Voluntary Declaration. Until the OAMP is approved Arrow is unable to complete the final step and legally secure the identified offsets. Arrow currently has the required Offsets under "Option". (Document 103) The full implementation of the Offset Strategy (Document 37) requires the approval of the Offset Area Management Plan (OAMP) (Document 50). The OAMP was submitted to the Department for approval in October 2021 and is still under assessment.	Document 38 Document 37 Document 46 Document 47	Arrow have submitted the Stage 1 Offsets Strategy (Doc 38) which the Minister has approved (Doc 37). To fully implement the approved Stage 1 Offset Strategy the OAMP needs to be approved by the Department. The OAMP was submitted to the Department for approval in October 2021 and is still under assessment. While waiting for the approval of the OAMP it is determined that Arrow has progressed as far as practicable to legally securing the required offsets and is therefore determined to be in compliance with this condition.	Y
9	Revoked					
9A.	At least 3 months prior to the commencement of any development stage after Stage 1, the approval holder must submit a revised Offset Strategy for approval by the Minister. The updated Offset Strategy must include:	Review of the following documentation: Project offset strategy - revisions and submission dates - to correspond with Minister approval. Confirm what stage the project is at - is it post Stage 1?	The letter dated 7 July 2019 from Greg Manning, Assistant Secretary, Assessments (WA, SA, NT) & Post Approvals Branch (Document 38) approves the EPBC 2010/5344: Surat Gas Project - Stage 1 Offset Strategy (Document 37). This approved Stage 1 Offset Strategy Section 1 stipulates that for the purpose of this strategy, the Stage 1 activities include the installation of approximately 350 wells and associated gathering lines and access tracks. List of wells has been confirmed to be 264 total. 206 wells commenced within audit period commencement date 22 October 2020 and 28 May 2024 CSG wells as per 22102020-28052024 (1).xlsx (Document 100) According to the Project timing defined in the Project EPBC Approval, Stage 2 was to commence on the 22 Oct 2023 (year 4 of the action), three years post the commencement of the action date 22 Oct 2020. According to the memo Surat Gas Project EPBC Approval Staging Definition, Stage 1 Offset Strategy And Stage Offset Area Management Plan Amendments - 4 November 2024 (Document 102), due to project delays Arrow has taken steps to submit a variation request (sighted) to address staging requirements and submitted revisions to the Offset Strategy and OAMP (sighted), and confirmed that Stage 1 activities will proceed beyond 22 October 2023. DCCEWW has proposed a draft variation Notice for the Approval (sighted) in line with Arrows requests. Arrow has provided feedback and is waiting for the finalised variation notice from the Department. The revised Stage 1 offsets strategy was submitted to DCCEEW for approval in March 2023 (it is still under review) and a further application to amend the Stage 1 offset strategy was submitted on 13 September 2023 (Still under review) (Document 102). Item 10 of the interview minutes recorded on 29 October 2024 with the Arrow Environmental Compliance & Assurance team (Document 103) confirms that Arrow requested variation with the Department to alter conditions to activity-based rather than time-based. The request for the change to the staging was first initiated in August 2023.	Document 102 Document 103 Document 38 Document 37 Document 100	Arrow have submitted (Doc 38) and had approved (Doc 37) the Stage 1 Offset Strategy. The strategy defines Stage 1 as approximately 350 wells. The project had drilled 264 CSG wells with 206 in production during the audit period. At the time of the audit there was no drilling work occurring. Condition 9A says that <i>At least 3 months prior to the commencement of any development stage after Stage 1, the approval holder must submit a revised Offset Strategy for approval by the Minister.</i> The definition of Commencement in the approval condition: Means any physical disturbance, including clearance of native vegetation, new road work, and the establishment of well sites to develop the gasfield project area. The determination is that as the approved Stage 1 Offset Strategy says the number of approved Stage 1 wells is approx 350 and the number of wells currently developed is 264, Stage 2 despite being post 22 Oct 2023 (year 4 of the action) has not commenced. As Stage 2 has not commenced Arrow is considered at the time of the audit in compliance with this condition. As an observation - the staging definition being dependant on Commencement of disturbance and time post approval is ambiguous. Arrow commenced negotiation with the Department in relation to altering the definition of the Project Stages in August 2023 to be based on wells developed. These negotiations are still ongoing.	Y

CONDITIONS OF EPBC ACT APPROVAL						
EPBC Approval Condition No.EPBC 2010/5344		Verification Method	Evidence	Documents Sighted	Determination	Compliance Finding (Y, N, NA, O)
a.	a. a strategy to secure the minimum offsets proposed for the residual significant impacts to the EPBC listed species and EPBC communities for the subsequent development stage;		This condition is not applicable as the revised Stage 1 Offset Strategy is under assessment and an Updated Offset Strategy for the subsequent development stage is yet to be submitted.	Document 102	This condition is not applicable as the revised Stage 1 Offset Strategy is under assessment and an Updated Offset Strategy for the subsequent development stage is yet to be submitted.	NA
b.	b. a map of the location of each EPBC listed threatened species and its habitat and EPBC community in relation to infrastructure for the subsequent development stage;		This condition is not applicable as the revised Stage 1 Offset Strategy is under assessment and an Updated Offset Strategy for the subsequent development stage is yet to be submitted.	Document 102	This condition is not applicable as the revised Stage 1 Offset Strategy is under assessment and an Updated Offset Strategy for the subsequent development stage is yet to be submitted.	NA
c.	c. the information required for the Offset Strategy at conditions 8Ca to 8Ce for the subsequent development stage;		This condition is not applicable as the revised Stage 1 Offset Strategy is under assessment and an Updated Offset Strategy for the subsequent development stage is yet to be submitted.	Document 102	This condition is not applicable as the revised Stage 1 Offset Strategy is under assessment and an Updated Offset Strategy for the subsequent development stage is yet to be submitted.	NA
d.	d. demonstration of how any proposed offset builds on offsets already secured and will contribute to a larger strategic offset for whole of project impacts;		This condition is not applicable as the revised Stage 1 Offset Strategy is under assessment and an Updated Offset Strategy for the subsequent development stage is yet to be submitted.	Document 102	This condition is not applicable as the revised Stage 1 Offset Strategy is under assessment and an Updated Offset Strategy for the subsequent development stage is yet to be submitted.	NA
e.	e. performance and completion criteria for evaluating the management of offset areas.		This condition is not applicable as the revised Stage 1 Offset Strategy is under assessment and an Updated Offset Strategy for the subsequent development stage is yet to be submitted.	Document 102	This condition is not applicable as the revised Stage 1 Offset Strategy is under assessment and an Updated Offset Strategy for the subsequent development stage is yet to be submitted.	NA
f.	f. reconciliation of impacts predicted in the subsequent development stage and actual disturbance in preceding development stages against the maximum disturbance limits set out in Table 1.		This condition is not applicable as the revised Stage 1 Offset Strategy is under assessment and an Updated Offset Strategy for the subsequent development stage is yet to be submitted.	Document 102	This condition is not applicable as the revised Stage 1 Offset Strategy is under assessment and an Updated Offset Strategy for the subsequent development stage is yet to be submitted.	NA
10	Revoked					
10A.	Offsets for development stages must be provided in accordance with the mechanism identified in the approved Offset Strategy and must be registered and legally secured in accordance with Queensland legislation prior to commencement of any subsequent development stage.	Review of the following documentation: Current Offset strategy Interviews and review of available information to show condition is met. Evidence of registration and legal security of the Offsets	<p>The letter dated 7 July 2019 from Greg Manning, Assistant Secretary, Assessments (WA, SA, NT) & Post Approvals Branch (Document 38) approves the EPBC 2010/5344: Surat Gas Project - Stage 1 Offset Strategy (Document 37). This approved Stage 1 Offset Strategy Section 1 stipulates that for the purpose of this strategy, the Stage 1 activities include the installation of approximately 350 wells and associated gathering lines and access tracks.</p> <p>List of wells has been confirmed to be 264 total. 206 wells commenced within audit period commencement date 22 October 2020 and 28 May 2024 CSG wells as per 22102020-28052024 (1).xlsx (Document 100)</p> <p>According to the Project timing defined in the Project EPBC Approval, Stage 2 was to commence on the 22 Oct 2023 (year 4 of the action), three years post the commencement of the action date 22 Oct 2020.</p> <p>The Stage 1 SGP Offset Strategy dated 28 June 2019 (Document 37) Section 8 outlines the legal mechanism used to secure offsets in line with Queensland legislation. The timing of securing of the request for Voluntary Declaration will be submitted to the Queensland Government at least 6 months before the start of Stage 2. Arrow will legally secure the Stage 1 offsets prior to the commencement of Stage 2.</p> <p>Arrow has implemented the Stage 1 Offset strategy as far as practicable by taking the following steps.</p> <p>a. narrowed the suitable properties for land-based offsets;</p> <p>b. engaged with relevant landholders for the identified properties;</p> <p>c. engaged with the Department, including with the provision of the Stage 1 OAMP, on the mechanism for legally securing offsets.</p> <p>Arrow has taken further steps to progress the strategy by executing a legally binding Call-option Agreement with a landholder to provide offsets for Stage 1 (dated 25 January 2023). (Sighted) The Agreement includes a condition precedent to exercising the call-option; which is the receipt of the Minister approved OAMP in order to apply to the state government for a Voluntary Declaration.</p> <p>2010-5344_SGP Stage 1 OAMP_A_21.10.2021.pdf (Document 50) was submitted for approval to the Department on 22 October 2021 and continues to be under assessment.</p> <p>Until the OAMP is approved Arrow is unable to complete the final step and legally secure the identified offsets. Arrow currently has the required Offsets under "Option". (Document 103)</p>	Document 37 Document 50 Document 103 Document 38 Document 100	<p>Arrow have submitted (Doc 38) and had approved (Doc 37) the Stage 1 Offset Strategy. The strategy defines Stage 1 as approximately 350 wells. The project had drilled 264 CSG wells with 206 in production during the audit period. At the time of the audit there was no drilling work occurring.</p> <p>Condition 10A says that <i>Offsets for development stages must be provided in accordance with the mechanism identified in the approved Offset Strategy and must be registered and legally secured in accordance with Queensland legislation prior to commencement of any subsequent development stage.</i></p> <p>The definition of Commencement in the approval condition: Means any physical disturbance, including clearance of native vegetation, new road work, and the establishment of well sites to develop the gasfield project area .</p> <p>The determination is that as the approved Stage 1 Offset Strategy says the number of approved Stage 1 wells is approx 350 and the number of wells currently developed is 264, Stage 2 despite being post 22 Oct 2023 (year 4 of the action) has not commenced.</p> <p>As Stage 2 is considered to have not commenced Arrow are determined to be in compliance with this condition.</p> <p>The final implementation of the Offset Strategy requires the approval of the Offset Area Management Plan (OAMP) . At the time of the audit the OAMP (submitted for approval in October 2021) was still under Department assessment.</p> <p>Arrow has progressed as far as practical to legally obtain the project offsets while waiting for the approval of the OAMP.</p>	Y
10B.	Within 12 months of project commencement or the Minister approving the Offset Strategy for a subsequent development stage, the approval holder must submit for the approval of the Minister an Offset Area Management Plan which includes:	Review of the following documentation: Offset Area Management Plan Ministers approval of the Offset Strategy and submission date	<p>The letter dated 18 November 2020 from Yihua Xu General Manager Asset (Surat), Arrow Energy to DAWE (Document 46) states the commencement date of the activity was 22 October 2020</p> <p>The letter dated 24 November 2020 from Thomas Long A/g Assistant Director, Environment Audit Section, (Document 47) confirms the action commencement date of 22 October 2020.</p> <p>The letter dated 7 July 2019 from Greg Manning, Assistant Secretary, Assessments (WA, SA, NT) & Post Approvals Branch (Document 38) approves the EPBC 2010/5344: Surat Gas Project - Stage 1 Offset Strategy (Document 37)</p> <p>The Stage 1 Offset Area Management Plan (Document 50) was submitted to the Department on 21 October 2021 satisfying the 12 month approval condition, however this plan has not yet been approved by the Minister.</p>	Document 46 Document 47 Document 37 Document 38 Document 50 Document 103	Arrow is compliant with this condition.	Y
a.	a. a description of the management measures that will be implemented to protect of EPBC listed threatened species and EPBC communities in each offset area,		A description of management measures that will be implemented to protect of EPBC listed threatened species and EPBC communities in each offset area, detailed in Stage 1 Offset Area Management Plan (Document 50) Section 8.	Document 50	Arrow is compliant with this condition.	Y
b.	b. details of how the proposed offset/s and Offset Area Management Plan are consistent with the principles of the EPBC Act Offsets Policy;		Details of how the proposed offset/s and Offset Area Management Plan are consistent with the principles of the EPBC Act Offsets Policy are set out in Stage 1 Offset Area Management Plan (Document 50) Section 2.1.	Document 50	Arrow is compliant with this condition.	Y
c.	c. a field validation survey and baseline description of the current condition (prior to any management activities) of the offset area/s, including existing vegetation;		Description of offset area from field validation survey is set out in Stage 1 Offset Area Management Plan (Document 50) Section 5, Attachment 1.3, Attachment 1.4	Document 50	Arrow is compliant with this condition.	Y
d.	d. a description and map (including shapefile/s) to clearly define the location and boundaries of the offset area/s, accompanied by the offset attributes;		Description and map of the offset area/s, accompanied by the offset attributes are set out in Stage 1 Offset Area Management Plan (Document 50) Sections 6.1 to 6.7 Figure 8 to 13	Document 50	Arrow is compliant with this condition.	Y

CONDITIONS OF EPBC ACT APPROVAL						
EPBC Approval Condition No.EPBC 2010/5344		Verification Method	Evidence	Documents Sighted	Determination	Compliance Finding (Y, N, NA, O)
e.	e. information about how the offset area/s provide connectivity with other relevant habitats and biodiversity corridors including a map depicting the offset areas in relation to other habitats and biodiversity corridors;		Information about how the offset area/s provide connectivity with other relevant habitats and biodiversity corridors is set out in Stage 1 Offset Area Management Plan (Document 50) Section 5.1	Document 50	Arrow is compliant with this condition.	Y
f.	f. details of how proposed management measures take into account relevant approved conservation advices and are consistent with the measures contained in relevant recovery plans and threat abatement plans;		Details of how proposed management measures take into account relevant approved conservation advices and are consistent with the measures contained in relevant recovery plans and threat abatement plans are set out in Stage 1 Offset Area Management Plan (Document 50) Section 2.2 and Section 8	Document 50	Arrow is compliant with this condition.	Y
g.	g. completion criteria and performance targets for evaluating the effectiveness of Offset Area Management Plan implementation, and criteria for triggering corrective actions (if necessary);		Offset completion criteria and performance targets for evaluating the effectiveness of Offset Area Management Plan implementation is set out in Stage 1 Offset Area Management Plan (Document 50) Section 10	Document 50	Arrow is compliant with this condition.	Y
h.	h. a program to monitor, report on and review the effectiveness of the Offset Area Management Plan;		Monitoring and reporting of the effectiveness of the Offset Area Management Plan is set out in is set out in Stage 1 Offset Area Management Plan (Document 50) Section 11	Document 50	Arrow is compliant with this condition.	Y
i.	i. a description of potential risks to the successful implementation of the offset/s and Offset Area Management Plan, and contingency measures that would be implemented to mitigate against these risks.		Description of potential risks to the successful implementation of the offset/s and Offset Area Management Plan, and contingency measures that would be implemented to mitigate against these risks is set out in is set out in Stage 1 Offset Area Management Plan (Document 50) Section 7	Document 50	Arrow is compliant with this condition.	Y
11	Revoked					
11A.	The approval holder must not commence the subsequent development stage until the Offset Area Management Plan for the current development stage has been approved in writing by the Minister.	Review of approval document: Confirmation of how the State and EPBC offsets are accounted for. View Procedure for Arrow not to commence further development stage until Ministerial approval given for the Offset Area Management Plan for the current stage. Written consent from the Minister	The letter dated 7 July 2019 from Greg Manning, Assistant Secretary, Assessments (WA, SA, NT) & Post Approvals Branch (Document 38) approves the EPBC 2010/5344: Surat Gas Project - Stage 1 Offset Strategy (Document 37). This approved Stage 1 Offset Strategy Section 1 stipulates that for the purpose of this strategy, the Stage 1 activities include the installation of approximately 350 wells and associated gathering lines and access tracks. List of wells has been confirmed to be 264 total. 206 wells commenced within audit period commencement date 22 October 2020 and 28 May 2024 CSG wells as per 22102020-28052024 (1).xlsx (Document 100) According to the Project timing defined in the Project EPBC Approval, Stage 2 was to commence on the 22 Oct 2023 (year 4 of the action), three years post the commencement of the action date 22 Oct 2020. The Stage 1 Offset Area Management Plan (Document 50) was submitted on 22 October 2021, this plan has not yet been approved by the Minister.	Document 50 Document 38 Document 37 Document 100	Arrow have submitted (Doc 38) and had approved (Doc 37) the Stage 1 Offset Strategy. The strategy defines Stage 1 as approximately 350 wells. The project had drilled 264 CSG wells with 206 in production during the audit period. At the time of the audit there was no drilling work occurring. Condition 11A says that: The approval holder must not commence the subsequent development stage until the Offset Area Management Plan for the current development stage has been approved in writing by the Minister. The definition of Commencement in the approval condition: Means any physical disturbance, including clearance of native vegetation, new road work, and the establishment of well sites to develop the gasfield project area. As the approved Stage 1 Offset Strategy says the number of approved Stage 1 wells is approx 350 and the number of wells currently developed is 264, Stage 2 despite being post 22 Oct 2023 (year 4 of the action) is considered to have not commenced. In August 2023 Arrow requested an amendment to the definition of the approvals project staging definition. This negotiation with the Department is ongoing and at the time of the audit had not been resolved. The OAMP for the Project was submitted to the Minister for approval on 22 October 2021. Arrow is determined to be in compliance with this condition as it is considered that Stage 2 has not yet commenced.	Y
Note 1	Note 1: The Minister may determine that a plan, strategy or program approved by the Queensland Government satisfies the requirements for the EPBC Species Impact Management and Offset Plan under these conditions.		It was confirmed in interviews that no Ministerial directions have been received to date (Document 104, Document 105)	Document 104 Document 105	No Ministerial directions have been received to date so not applicable	NA
Note 2	Note 2: Offsets for some species may be accommodated within ecological communities or overlap State approval requirements or other species habitat requirements, as long as they meet the requirements of these conditions of approval in respect of each individual species being offset.		Interviews confirmed this item is not applicable (Document 104, Document 105)	Document 104 Document 105	Following interviews this note is deemed to not be applicable at the time of the audit.	NA
12	Revoked					
12A.	Revoked					
12B.	Revoked					
12C.	Revoked					
13	Coal Seam Gas Water Monitoring and Management Plan Stage 1 CSG Water Monitoring and Management Plan - Prior to commencement, the proponent must submit a Stage 1 Coal Seam Gas Water Monitoring and Management Plan (Stage 1 CSG WMMP) for the approval of the Minister, who may seek the advice of an expert panel. The Stage 1 CSG WMMP must include:	Review of approval document: Stage 1 Coal Seam Gas Water Monitoring and Management Plan (WMMP) document Ministerial approval Review of the conditions of approval against the plan Date of commencement	The letter dated 18 December 2018 from Chris Videroni, A/g Assistant Secretary, Assessments (WA, SA, NT) and Post Approvals Branch, Environment Standards Division (Document 35), approves Surat Gas Project - Stage 1 CSG Water Management and Monitoring Plan (Document 2) issued 7 December 2018, as meeting the requirements of Conditions 13 and 14 of the approval. The letter dated 18 November 2020 from Yihua Xu General Manager Asset (Surat), Arrow Energy to DAWE (Document 46) states the commencement date of the activity was 22 October 2020 The letter dated 24 November 2020 from Thomas Long A/g Assistant Director, Environment Audit Section, (Document 47) confirms the action commencement date of 22 October 2020. Interview with the Groundwater team confirmed that the Joint Industry Framework (JIF) is being incorporated into EPBC conditions and that Arrow has been in consultation with the Department since August 2022. (Document 106)	Document 35 Document 2 Document 46 Document 47 Document 106	A CSG WMMP was submitted to and approved by the Minister before the commencement date of the project action. Therefore Arrow is considered compliant with this condition	Y

CONDITIONS OF EPBC ACT APPROVAL						
EPBC Approval Condition No.EPBC 2010/5344		Verification Method	Evidence	Documents Sighted	Determination	Compliance Finding (Y, N, NA, O)
a.	a. an analysis of the results of the most recent OGIA model (built or endorsed by OGIA), relevant to all of the project's tenement areas;	As per 13	As per Condition 13 And Stage 1 Coal Seam Gas Water Monitoring and Management Plan: Appendix E - Modelling technical memorandum (Document 5)	Document 35 Document 2 Document 46 Document 47 Document 5	This condition has been considered to be met because the requirement is captured within Stage 1 Coal Seam Gas Water Monitoring and Management Plan: Appendix E - Modelling technical memorandum (Document 5)	Y
b.	b. a fit for purpose numerical simulation to assess potential impacts on water resources arising from the action in the project area, subsequent surface water groundwater interactions in the Condamine Alluvium and impacts to dependent ecosystems;	As per 13	As per Condition 13 And Stage 1 Coal Seam Gas Water Monitoring and Management Plan: Appendix F (Document 6)	Document 35 Document 2 Document 46 Document 47 Document 6	This condition has been considered to be met because the requirement is captured within Stage 1 Coal Seam Gas Water Monitoring and Management Plan: Appendix F (Document 6)	Y
c.	c. an assessment of potential impacts from the action on non-spring based groundwater dependent ecosystems through potential changes to surface groundwater connectivity and interactions with the sub-surface expression of groundwater;	As per 13	As per Condition 13 And Stage 1 Coal Seam Gas Water Monitoring and Management Plan (Document 2) Section 3.4.2, and Section 5 of Appendix D (Document 4)	Document 35 Document 2 Document 46 Document 47 Document 4	This condition has been considered to be met because the requirement is captured within Stage 1 Coal Seam Gas Water Monitoring and Management Plan (Document 2) Section 3.4.2, and Section 5 of Appendix D (Document 4)	Y
d.	d. an assessment of predicted project wide groundwater drawdown levels and pressures from the action, together with confidence levels;	As per 13	As per Condition 13 And Stage 1 Coal Seam Gas Water Monitoring and Management Plan: Sections 3.2 & 3.3, (Document 2) and Stage 1 Coal Seam Gas Water Monitoring and Management Plan: Appendix E (Document 5) and Stage 1 Coal Seam Gas Water Monitoring and Management Plan: Appendix F (Document 6)	Document 35 Document 2 Document 46 Document 47 Document 5 Document 6	This condition has been considered to be met because the requirement is captured within Stage 1 Coal Seam Gas Water Monitoring and Management Plan: Sections 3.2 & 3.3, (Document 2) and Stage 1 Coal Seam Gas Water Monitoring and Management Plan: Appendix E (Document 5) and Stage 1 Coal Seam Gas Water Monitoring and Management Plan: Appendix F (Document 6)	Y
e.	e. parameters and a sampling regime to establish baseline data for surface and groundwater resources that may be impacted by the action, including: surface water quality and quantity in the project area, and upstream and downstream of potential impact areas; groundwater quality, levels and pressures for areas that may be impacted by the project; and for determining connectivity between surface water and groundwater that may be impacted by the project;	As per 13	As per Condition 13 And Stage 1 Coal Seam Gas Water Monitoring and Management Plan: Sections 6.1.4, 6.1.5, 6.2.2, 6.2.3 & 6.3 (Document 2), and Stage 1 Coal Seam Gas Water Monitoring and Management Plan: Appendix J Monitoring network technical memorandum (Document 10)	Document 35 Document 2 Document 46 Document 47 Document 10	This condition has been considered to be met because the requirement is captured within Stage 1 Coal Seam Gas Water Monitoring and Management Plan: Sections 6.1.4, 6.1.5, 6.2.2, 6.2.3 & 6.3 (Document 2) and Stage 1 Coal Seam Gas Water Monitoring and Management Plan: Appendix J Monitoring network technical memorandum (Document 10)	Y
f.	f. a best practice baseline monitoring network that will enable the identification of spatial and temporal changes to surface water and groundwater. This must include a proposal for aquifer connectivity studies and monitoring of relevant aquifers to determine hydraulic connectivity (including potential groundwater dependence of Long Swamp and Lake Broadwater) and must also enable monitoring of all aquatic ecosystems that may be impacted by the action;	As per 13	As per Condition 13 And Stage 1 Coal Seam Gas Water Monitoring and Management Plan: Sections 6.1.4, 6.1.5, 6.2.2, 6.2.3 & 6.3 (Document 2) and Stage 1 Coal Seam Gas Water Monitoring and Management Plan: Appendix J Monitoring network technical memorandum (Document 10)	Document 35 Document 2 Document 46 Document 47 Document 10	This condition has been considered to be met because the requirement is captured within Stage 1 Coal Seam Gas Water Monitoring and Management Plan: Sections 6.1.4, 6.1.5, 6.2.2, 6.2.3 & 6.3 (Document 2) and Stage 1 Coal Seam Gas Water Monitoring and Management Plan: Appendix J Monitoring network technical memorandum (Document 10)	Y
g.	g. a program to monitor subsidence impacts from the action, including trigger thresholds and reporting of monitoring results in annual reporting required by condition 28. If trigger thresholds are exceeded, the approval holder must develop and implement an action plan to address impacts within 90 calendar days of a trigger threshold being exceeded;	As per 13	As per Condition 13 And Stage 1 Coal Seam Gas Water Monitoring and Management Plan: Sections 7.1, 7.4, 7.5 & 9.2.3, (Document 2) and Stage 1 Coal Seam Gas Water Monitoring and Management Plan: Appendix K Subsidence technical memorandum (Document 11)	Document 35 Document 2 Document 46 Document 47 Document 11	This condition has been considered to be met because the requirement is captured within Stage 1 Coal Seam Gas Water Monitoring and Management Plan: Sections 7.1, 7.4, 7.5 & 9.2.3, (Document 2) and Stage 1 Coal Seam Gas Water Monitoring and Management Plan: Appendix K Subsidence technical memorandum (Document 11)	Y
h.	h. provisions to make monitoring results publicly available on the approval holder's website to facilitate a greater understanding of cumulative impacts;	As per 13	As per Condition 13 And Surat Gas Project Updated CSG WMMP Annual Report Reporting Period: 22 October 2020 to 21 October 2021 (Document 53), Surat Gas Project Updated CSG WMMP Annual Report Reporting Period: 22 October 2021 to 21 October 2022 (Document 70)	Document 35 Document 2 Document 46 Document 47 Document 53 Document 70	This condition has been considered to be met because the requirement is captured within Document 2 and Surat Gas Project Updated CSG WMMP Annual Report Reporting Period: 22 October 2020 to 21 October 2021 (Document 53), Surat Gas Project Updated CSG WMMP Annual Report Reporting Period: 22 October 2021 to 21 October 2022 (Document 70)	Y
i.	i. a discussion on how the approval holder is contributing to the Joint Industry Plan, including its periodic review. The approval holder must contribute to the Joint Industry Plan and comply with any part of the Joint Industry Plan, or future iterations of the Joint Industry Plan, that applies to the approval holder;	As per 13	As per Condition 13 And Stage 1 Coal Seam Gas Water Monitoring and Management Plan: Section 8.1 (Document 2)	Document 2	This condition has been considered to be met because the requirement is captured within Stage 1 Coal Seam Gas Water Monitoring and Management Plan: Section 8.1 (Document 2)	Y
j.	j. a groundwater early warning monitoring system, including:	As per 13	As per Condition 13 And Stage 1 Coal Seam Gas Water Monitoring and Management Plan (Document 2)	Document 2	This condition has been considered to be met because the requirement is captured within Stage 1 Coal Seam Gas Water Monitoring and Management Plan (Document 2)	Y
l	i. groundwater drawdown limits for all consolidated aquifers potentially impacted by the action, excluding the Walloon Coal Measures;	As per 13	As per Condition 13 And Stage 1 Coal Seam Gas Water Monitoring and Management Plan: Sections 5.1 & 5.2, (Document 2) and Stage 1 Coal Seam Gas Water Monitoring and Management Plan: Section 3 of Appendix I (Document 9)	Document 2 Document 9	This condition has been considered to be met because the requirement is captured within Stage 1 Coal Seam Gas Water Monitoring and Management Plan: Sections 5.1 & 5.2, (Document 2) and Stage 1 Coal Seam Gas Water Monitoring and Management Plan: Section 3 of Appendix I (Document 9)	Y
ll	i. for the Condamine Alluvium, appropriate triggers and groundwater limits and a rationale for their selection;	As per 13	As per Condition 13 And Stage 1 Coal Seam Gas Water Monitoring and Management Plan: Sections 5.1 & 5.2, (Document 2) and Stage 1 Coal Seam Gas Water Monitoring and Management Plan: Section 4 of Appendix I (Document 9)	Document 2 Document 9	This condition has been considered to be met because the requirement is captured within Stage 1 Coal Seam Gas Water Monitoring and Management Plan: Sections 5.1 & 5.2, (Document 2) and Stage 1 Coal Seam Gas Water Monitoring and Management Plan: Section 4 of Appendix I (Document 9)	Y

CONDITIONS OF EPBC ACT APPROVAL						
EPBC Approval Condition No.EPBC 2010/5344		Verification Method	Evidence	Documents Sighted	Determination	Compliance Finding (Y, N, NA, O)
III	iii. early warning indicators and trigger thresholds, including for Lake Broadwater, Long Swamp and other groundwater dependent ecosystems that may potentially be impacted by the action, including those that may occur outside the project area and may be impacted by the action;	As per 13	As per Condition 13 And Stage 1 Coal Seam Gas Water Monitoring and Management Plan: Sections 5.1 & 5.2, (Document 2) and Stage 1 Coal Seam Gas Water Monitoring and Management Plan: Section 5 of Appendix I (Document 9) The Updated WMMP (Document 41) outlines the investigations into Lake Broadwater, Long Swamp and other groundwater dependent ecosystems and confirmed that field investigations demonstrated that ecosystems at each of the selected sites are unlikely to be dependent on the regional groundwater systems and therefore unlikely to be at risk of impact from groundwater extraction associated with cumulative CSG development in the Surat CMA. Interview with the Groundwater team confirmed that, consistent with the Updated WMMP, Lake Broadwater and Long Swamp are unlikely to be at risk of impact from project activities, however monitoring is to continue as per the Annual WMMP reports. (Document 106, Document 101)	Document 2 Document 9 Document 41 Document 106 Document 101	This condition has been considered to be met because the requirement is captured within Stage 1 Coal Seam Gas Water Monitoring and Management Plan: Sections 5.1 & 5.2, (Document 2) and Stage 1 Coal Seam Gas Water Monitoring and Management Plan: Section 5 of Appendix I (Document 9)	Y
IV	iv. investigation, management and mitigation actions, including substitution and/or groundwater repressurisation, for both early warning indicators and trigger thresholds to address flux impacts on the Condamine Alluvium.	AS per 13	As per Condition 13 And Stage 1 Coal Seam Gas Water Monitoring and Management Plan: Sections 5.1 & 5.2, (Document 2), Stage 1 Coal Seam Gas Water Monitoring and Management Plan: Section 4 of Appendix I (Document 9) and Stage 1 Stage 1 Coal Seam Gas Water Monitoring and Management Plan: Appendix G (Document 7)	Document 2 Document 9 Document 7	This condition has been considered to be met because the requirement is captured within Stage 1 Coal Seam Gas Water Monitoring and Management Plan: Sections 5.1 & 5.2, (Document 2), Stage 1 Coal Seam Gas Water Monitoring and Management Plan: Section 4 of Appendix I (Document 9) and Stage 1 Stage 1 Coal Seam Gas Water Monitoring and Management Plan: Appendix G (Document 7)	Y
k.	k. early warning indicators and trigger thresholds, including corrective actions for both early warning indicators and trigger thresholds, for aquatic ecology and aquatic ecosystems;	As per 13	As per Condition 13 And Stage 1 Coal Seam Gas Water Monitoring and Management Plan: Section 5.3 (Document 2) Appendix I - Triggers and limits technical memorandum.pdf (Document 9)	Document 2 Document 9	This condition has been considered to be met because the requirement is captured within Stage 1 Coal Seam Gas Water Monitoring and Management Plan: Sections 5.1 & 5.2, (Document 2), Stage 1 Coal Seam Gas Water Monitoring and Management Plan: Section 4 of Appendix I (Document 9)	Y
l.	l. a CSG water management strategy for produced salt/brine, which discusses how co-produced water and brine will be managed for the action, including in the context of other coal seam gas activities in the Surat Basin;	As per 13	As per Condition 13 And Stage 1 Coal Seam Gas Water Monitoring and Management Plan: Section 4.1 (Document 2) and Stage 1 Coal Seam Gas Water Monitoring and Management Plan: Appendix G (Document 7)	Document 2 Document 7	This condition has been considered to be met because the requirement is captured within and Stage 1 Coal Seam Gas Water Monitoring and Management Plan: Section 4.1 (Document 2) and Stage 1 Coal Seam Gas Water Monitoring and Management Plan: Appendix G (Document 7)	Y
m.	m. an analysis of how the approval holder will utilise beneficial use and/or groundwater repressurisation techniques to manage produced CSG water from the action, and how any Potential adverse impacts associated with groundwater repressurisation will be managed;	As per 13	As per Condition 13 And Stage 1 Coal Seam Gas Water Monitoring and Management Plan (Document 2) and Stage 1 Coal Seam Gas Water Monitoring and Management Plan: Appendix G (Document 7)	Document 2 Document 7	This condition has been considered to be met because the requirement is captured within Stage 1 Coal Seam Gas Water Monitoring and Management Plan (Document 2) and Stage 1 Coal Seam Gas Water Monitoring and Management Plan: Appendix G (Document 7)	Y
n.	n. a discharge strategy, consistent with the recommendations and requirements of the Department of the Environment and Heritage Protection in its Assessment Report (pages 94 to 95 and pages 254 to 255) and that includes scenarios where discharge may be required, the quality of discharge water (including water treated by reverse osmosis), the number and location of monitoring sites (including upstream and downstream sites), frequency of monitoring and how the data from monitoring will be analysed and reported, including recommendations on any changes or remedial actions that would be required;	As per 13	As per Condition 13 It was confirmed in interviews with the Groundwater team (Documents 106) that discharge is not occurring and with agreements now in place with QGC there is not longer an anticipate future need for discharges.	Document 106	This condition has been considered to be met. It was confirmed in the interviews with Arrow staff.	Y
o.	o. a flood risk assessment for processing facilities and any raw co-produced water and brine dams, which addresses flood risks to the environment from the action in the case of a 1:1000 ARI event. The risk assessment should estimate the consequences if major project infrastructure was subject to such an event, including release of brine and chemicals into the environment;	As per 13	As per Condition 13 AND Stage 1 Coal Seam Gas Water Monitoring and Management Plan (Document 2) and Stage 1 Coal Seam Gas Water Monitoring and Management Plan: Appendix H (Document 8)	Document 2 Document 8	This condition has been considered to be met because the requirement is captured within AND Stage 1 Coal Seam Gas Water Monitoring and Management Plan (Document 2) and Stage 1 Coal Seam Gas Water Monitoring and Management Plan: Appendix H (Document 8)	Y
p.	p. a cumulative impact assessment based on the outputs of the OGIA model which integrates groundwater model outputs with known and potential groundwater dependent ecosystems and presents the outputs in map form. Contribute to investigations coordinated through the OGIA to assess hydrological and ecological characteristics of impacted groundwater dependent ecosystems;	As per 13	As per Condition 13 Stage 1 Coal Seam Gas Water Monitoring and Management Plan: Section 8.6 (Document 2) and Stage 1 Coal Seam Gas Water Monitoring and Management Plan: Appendix H (Document 8)	Document 2 Document 8	This condition has been considered to be met because the requirement is captured within AND Stage 1 Coal Seam Gas Water Monitoring and Management Plan (Document 2) and Stage 1 Coal Seam Gas Water Monitoring and Management Plan: Appendix H (Document 8)	Y
q.	q. details of performance measures; annual reporting to the Department; and publication of reports on the internet; and. an explanation of how the Stage 1 CSG WMMP will contribute to work undertaken by other CSG proponents in the Surat Basin to understand cumulative impacts, including at the local and regional scale, and maximise environmental benefit.	As per 13	As per Condition 13 'Stage 1 Coal Seam Gas Water Monitoring and Management Plan: Stage 1 Coal Seam Gas Water Monitoring and Management Plan: Sections 9.2, 9.3 & 9.4 (Document 2) and Surat Gas Project Updated CSG WMMP Annual Report Reporting Period: 22 October 2020 to 21 October 2021 (Document 53), Surat Gas Project Updated CSG WMMP Annual Report Reporting Period: 22 October 2021 to 21 October 2022 (Document 70)	Document 2 Document 53 Document 70	This condition has been considered to be met because the requirement is captured within 'Stage 1 Coal Seam Gas Water Monitoring and Management Plan: Stage 1 Coal Seam Gas Water Monitoring and Management Plan: Sections 9.2, 9.3 & 9.4 (Document 2) and Surat Gas Project Updated CSG WMMP Annual Report Reporting Period: 22 October 2020 to 21 October 2021 (Document 53), Surat Gas Project Updated CSG WMMP Annual Report Reporting Period: 22 October 2021 to 21 October 2022 (Document 70)	Y
r.	r. an explanation of how the Stage 1 CSG WMMP will contribute to work undertaken by other CSG proponents in the Surat Basin to understand cumulative impacts, including at the local and regional scale, and maximise environmental benefit.	As per 13	As per Condition 13 'Stage 1 Coal Seam Gas Water Monitoring and Management Plan: Stage 1 Coal Seam Gas Water Monitoring and Management Plan: Section 8.6 (Document 2) outlines the OGIA data review, research projects and industry contribution	Document 2	This condition has been considered to be met because the requirement is captured within 'Stage 1 Coal Seam Gas Water Monitoring and Management Plan: Stage 1 Coal Seam Gas Water Monitoring and Management Plan: Section 8.6	Y

CONDITIONS OF EPBC ACT APPROVAL						
EPBC Approval Condition No.EPBC 2010/5344		Verification Method	Evidence	Documents Sighted	Determination	Compliance Finding (Y, N, NA, O)
14	The Stage 1 CSG WMMP must be peer reviewed by a suitably qualified water resources expert/s approved by the Minister in writing. The peer review must be submitted to the Minister together with the Stage 1 CSG WMMP and a statement from the suitably qualified water resources expert/s stating that they carried out the peer review and endorse the findings of the Stage 1 CSG WMMP	Review of approval document: View the peer review document Peer reviewer approval by minister View evidence of submission of plan and review to the Minister	The letter dated 18 December 2018 from Chris Videroni, A/g Assistant Secretary, Assessments (WA, SA, NT) and Post Approvals Branch, Environment Standards Division (Document 35) approves Surat Gas Project - Stage 1 CSG Water Monitoring and Management Plan (Document 2) and Appendix L Independent peer reviewer enforcement letters and comments (Document 25) issued 7 December 2018, as meeting the requirements of Conditions 13 and 14 of the above conditions of approval.	Document 35 Document 2 Document 25	Arrow is compliant with this condition.	Y
15	The approval holder must not exceed the groundwater drawdown or groundwater limits for each aquifer specified in the Stage 1 CSG WMMP.	Review of approval document: How draw down is recorded Procedure for measuring drawdown Evidence of compliance with drawdown allowances	The Surat Gas Project - Stage 1 CSG Water Monitoring and Management Plan (Document 2) :Section 5.1.1 states that levels associate with the Early Warning Monitoring System (EWMS). The Arrow Energy Updated CSG Water Monitoring and Management Plan Table 7-5 presents the EWMS for the Condamine Alluvium and consolidated aquifers. (Document 41). The Surat Gas Project Updated CSG WMMP Annual Report 2021 - 22 (Document 70) Section 6 Compliance with the WMMP confirms the Early Warning Management System (EWMS) was implemented noting that there were no exceedances of early warning indicators, trigger thresholds or limits during the reporting period. Compliance was also confirmed in the 2022/23 annual report (sighted online). Monitoring is undertaken as required by the State OGIA requirements 6 monthly and fed into the UWIR modelling.	Document 2 Document 41 Document 70	The groundwater drawdown and comparison against the specified aquifer limits is reported annually and measured 6 monthly. Arrow has met these limits and is compliant with this condition.	Y
16	Unless otherwise agreed in writing by the Minister, the approval holder must not commence the action until the Stage 1 CSG WMMP is approved in writing by the Minister. The approved Stage 1 CSG WMMP must be implemented.	Review of approval document: Approval of the Stage 1 CSG WMMP - correlate with minister approval Commencement date of Stage 1 Demonstration of the Stage 1 CSG WMMP being implemented	The letter dated 18 December 2018 from Chris Videroni, A/g Assistant Secretary, Assessments (WA, SA, NT) and Post Approvals Branch, Environment Standards Division (Document 35) approves Surat Gas Project - Stage 1 CSG Water Monitoring and Management Plan (Document 2) The letter dated 18 November 2020 from Yihua Xu General Manager Asset (Surat), Arrow Energy to DAWE (Document 46) states the commencement date of the activity was 22 October 2020 The letter dated 24 November 2020 from Thomas Long A/g Assistant Director, Environment Audit Section, (Document 47) confirms the action commencement date of 22 October 2020. The Arrow Energy Updated CSG Water Monitoring and Management Plan (Document 41) was approved in October 2019 before the commencement of the Action in October 2020. (Document 42) Implementation is demonstrated in the annual WMMP compliance report. SGP-WMMP-Annual-Report_2022 (Document 70).	Document 35 Document 2 Document 46 Document 47 Document 70 Document 41 Document 42	The stage 1 and the Updated WMMP where both approved prior to the commencement of the action. The implementation of the Updated WMMP is demonstrated in the WMMP annual reports. Arrow is compliant with this condition.	Y
Note 3.	<i>Note 3: to ensure efficiency the approval holder may prepare and align the Stage 1 WMMP with the requirements of the Queensland Government, as long as the relevant matters under the conditions of this approval are clearly and adequately addressed.</i>	Review of approval document and interview: Confirm if this allowance has been implement and confirmation if it is appropriate.	The Updated Coal Seam Gas Water Monitoring and Management Plan: Section 7.3 (Document 41) is aligned with the Surat Cumulative Management Area (CMA) UWIR. The latest version of the UWIR is expected in Q1 2025.	Document 41	Arrow is compliant with this condition.	Y
17	Updated CSG Water Monitoring and Management Plan The approval holder must submit an updated CSG Water Monitoring and Management Plan (Updated CSG WMMP) for the written approval of the Minister. The Updated CSG WMMP must:	Review of approval document: Updated documents - Plan and minister approval	The letter dated 22 November 2019 from Declan O'Connor-Cox A/g Assistant Secretary, Environment Approvals Division of the then Department of the Environment and Energy (Document 42), approves the EPBC 2010/5344: Surat Gas Expansion Project - Updated CSG Water Monitoring and Management Plan (Document 41) as suitable for gas extraction of up to 250 wells. The Project has not exceeded this well limit.	Document 42 Document 41	Arrow is compliant with this condition.	Y
a.	a. include all matters in the Stage 1 CSG WMMP, and discuss how the Stage 1 CSG WMMP is informing adaptive management for the Updated CSG WMMP;		The letter dated 22 November 2019 from Declan O'Connor-Cox A/g Assistant Secretary, Environment Approvals Division of the then Department of the Environment and Energy (Document 42), approves the EPBC 2010/5344: Surat Gas Expansion Project - Updated CSG Water Monitoring and Management Plan (Document 41) as suitable for gas extraction of up to 250 wells. As the Updated CSG WMMP has been approved by the Delegate of the Minister it is assumed that satisfies the requirements of this item and its subsequent items. Required information is in Section 7.1, Appendix A of the Updated CSG Water Monitoring and Management Plan (Document 41)	Document 42 Document 41	Arrow is compliant with this condition.	Y
b.	b. include any updated modelling for the project, including in respect of the OGIA model or any updates to the OGIA model by OGIA;		The letter dated 22 November 2019 from Declan O'Connor-Cox A/g Assistant Secretary, Environment Approvals Division of the then Department of the Environment and Energy (Document 42), approves the EPBC 2010/5344: Surat Gas Expansion Project - Updated CSG Water Monitoring and Management Plan (Document 41) as suitable for gas extraction of up to 250 wells. As the Updated CSG WMMP has been approved by the Delegate of the Minister it is assumed that satisfies the requirements of this item and its subsequent items. Required information is in Section 4, Appendix C of the Updated CSG Water Monitoring and Management Plan (Document 41) Section 8.4 of the Updated CSG Water Monitoring and Management Plan (Document 41) notes that under the Surat CMA UWIR, a water monitoring report is required to be submitted at the end of March and September each year that includes details of the monitoring data collected under the Water Monitoring Strategy. In this way the EPBC approval links to the requirements of the UWIR and merges the compliance. Arrow is required to remain in compliance with the Surat CMA model - the UWIR. When the UWIR is updated Arrow is required to comply with the new requirements. The WMMP Annual Report 2022-2023 (Soo-ARW-ENV-REP-00059) outline how the latest UWIR update in 2021 has been incorporated into the monitoring network and used in modelling the long term impacts to the various aquifers. Interview with the Groundwater team (Document 106) confirms the updated WMMP was submitted in 2019 which included the 2016 UWIR model. The latest UWIR update is discussed in the Annual WMMPs (Document 53, Document 78, Document 101). Three revisions of the Updated WMMP have been submitted to the Department inline with section 8.6 of the Updated WMMP. These revisions were submitted as a result of assessments conducted using the outputs of later UWIRs released after the Updated WMMP was prepared.	Document 42 Document 41 Document 53 Document 70 Document 106 Document 101	Arrow is compliant with this condition.	Y

CONDITIONS OF EPBC ACT APPROVAL						
EPBC Approval Condition No.EPBC 2010/5344		Verification Method	Evidence	Documents Sighted	Determination	Compliance Finding (Y, N, NA, O)
c.	c. include an explanation of how the approval holder will contribute to the Condamine Interconnectivity Research Project. The Updated CSG WMMP must present the findings of the Condamine Interconnectivity Research project and any modelling done by the OGIA to validate predicted drawdown and a review of trigger thresholds and corrective activities for the action;		<p>The letter dated 22 November 2019 from Declan O'Connor-Cox A/g Assistant Secretary, Environment Approvals Division of the then Department of the Environment and Energy (Document 42), approves the EPBC 2010/5344: Surat Gas Expansion Project - Updated CSG Water Monitoring and Management Plan (Document 41) as suitable for gas extraction of up to 250 wells. As the Updated CSG WMMP has been approved by the Delegate of the Minister it is assumed that satisfies the requirements of this item and its subsequent items.</p> <p>Required information is in Section 3.2, Appendix C of the Updated CSG Water Monitoring and Management Plan (Document 41)</p>	Document 42 Document 41	Arrow is compliant with this condition.	Y
d.	d. report on the potential for flow reversal from the Condamine Alluvium to underlying aquifers, based on data obtained during the Stage 1 CSG WMMP;		<p>The letter dated 22 November 2019 from Declan O'Connor-Cox A/g Assistant Secretary, Environment Approvals Division of the then Department of the Environment and Energy (Document 42), approves the EPBC 2010/5344: Surat Gas Expansion Project - Updated CSG Water Monitoring and Management Plan (Document 41) as suitable for gas extraction of up to 250 wells. As the Updated CSG WMMP has been approved by the Delegate of the Minister it is assumed that satisfies the requirements of this item and its subsequent items.</p> <p>Required information is in Section 4.3.2, Appendix C of the Updated CSG Water Monitoring and Management Plan (Document 41)</p>	Document 42 Document 41	Arrow is compliant with this condition.	Y
e.	e. review and update the monitoring network in Stage 1 WMMP to reflect changes in understanding of impacts to water resources, including from baseline monitoring and relevant research;		<p>The letter dated 22 November 2019 from Declan O'Connor-Cox A/g Assistant Secretary, Environment Approvals Division of the then Department of the Environment and Energy (Document 42), approves the EPBC 2010/5344: Surat Gas Expansion Project - Updated CSG Water Monitoring and Management Plan (Document 41) as suitable for gas extraction of up to 250 wells. As the Updated CSG WMMP has been approved by the Delegate of the Minister it is assumed that satisfies the requirements of this item and its subsequent items.</p> <p>Required information is in Sections 3.1 and 7.1, Appendix G of the Updated CSG Water Monitoring and Management Plan (Document 41)</p>	Document 42 Document 41	Arrow is compliant with this condition.	Y
f.	f. identify any predicted changes in stream connectivity due to groundwater drawdown from the action and assess potential impacts to groundwater dependent ecosystems due to any predicted changes in stream connectivity, including to water quality, quantity and ecology;		<p>The letter dated 22 November 2019 from Declan O'Connor-Cox A/g Assistant Secretary, Environment Approvals Division of the then Department of the Environment and Energy (Document 42), approves the EPBC 2010/5344: Surat Gas Expansion Project - Updated CSG Water Monitoring and Management Plan (Document 41) as suitable for gas extraction of up to 250 wells. As the Updated CSG WMMP has been approved by the Delegate of the Minister it is assumed that satisfies the requirements of this item and its subsequent items.</p> <p>Required information is in Sections 4.4 and 5.2, Appendix C and D of the Updated CSG Water Monitoring and Management Plan (Document 41)</p>	Document 42 Document 41	Arrow is compliant with this condition.	Y
g.	g. address any uncertainty in the groundwater-dependency of ecosystems and springs with supporting evidence from field-based investigations for any groundwater-dependent ecosystems and springs confirmed in the OGIA model;		<p>The letter dated 22 November 2019 from Declan O'Connor-Cox A/g Assistant Secretary, Environment Approvals Division of the then Department of the Environment and Energy (Document 42), approves the EPBC 2010/5344: Surat Gas Expansion Project - Updated CSG Water Monitoring and Management Plan (Document 41) as suitable for gas extraction of up to 250 wells. As the Updated CSG WMMP has been approved by the Delegate of the Minister it is assumed that satisfies the requirements of this item and its subsequent items.</p> <p>Required information is in Section 5.31, Appendix D of the Updated CSG Water Monitoring and Management Plan (Document 41)</p>	Document 42 Document 41	Arrow is compliant with this condition.	Y
h.	h. provide details of an ongoing monitoring plan that:		<p>The letter dated 22 November 2019 from Declan O'Connor-Cox A/g Assistant Secretary, Environment Approvals Division of the then Department of the Environment and Energy (Document 42), approves the EPBC 2010/5344: Surat Gas Expansion Project - Updated CSG Water Monitoring and Management Plan (Document 41) as suitable for gas extraction of up to 250 wells. As the Updated CSG WMMP has been approved by the Delegate of the Minister it is assumed that satisfies the requirements of this item and its subsequent items.</p>	Document 42 Document 41	Arrow is compliant with this condition.	Y
i.	i. sets out the frequency of monitoring and rationale for the frequency;		<p>The letter dated 22 November 2019 from Declan O'Connor-Cox A/g Assistant Secretary, Environment Approvals Division of the then Department of the Environment and Energy (Document 42), approves the EPBC 2010/5344: Surat Gas Expansion Project - Updated CSG Water Monitoring and Management Plan (Document 41) as suitable for gas extraction of up to 250 wells. As the Updated CSG WMMP has been approved by the Delegate of the Minister it is assumed that satisfies the requirements of this item and its subsequent items.</p> <p>Required information is in Section 7.3, Appendix G of the Updated CSG Water Monitoring and Management Plan (Document 41)</p>	Document 42 Document 41	Arrow is compliant with this condition.	Y
ii.	ii. includes continued collection of baseline data for each monitoring site over the life of the project;		<p>The letter dated 22 November 2019 from Declan O'Connor-Cox A/g Assistant Secretary, Environment Approvals Division of the then Department of the Environment and Energy (Document 42), approves the EPBC 2010/5344: Surat Gas Expansion Project - Updated CSG Water Monitoring and Management Plan (Document 41) as suitable for gas extraction of up to 250 wells. As the Updated CSG WMMP has been approved by the Delegate of the Minister it is assumed that satisfies the requirements of this item and its subsequent items.</p> <p>Required information is in Sections 3.1 and 7.3, Appendix G of the Updated CSG Water Monitoring and Management Plan (Document 41)</p>	Document 42 Document 41	Arrow is compliant with this condition.	Y
iii.	iii. outlines the approach to be taken to analyse the results including the methods to determine trends to indicate potential impacts; and		<p>The letter dated 22 November 2019 from Declan O'Connor-Cox A/g Assistant Secretary, Environment Approvals Division of the then Department of the Environment and Energy (Document 42), approves the EPBC 2010/5344: Surat Gas Expansion Project - Updated CSG Water Monitoring and Management Plan (Document 41) as suitable for gas extraction of up to 250 wells. As the Updated CSG WMMP has been approved by the Delegate of the Minister it is assumed that satisfies the requirements of this item and its subsequent items.</p> <p>Required information is in Section 7.4, Appendix G of the Updated CSG Water Monitoring and Management Plan (Document 41)</p>	Document 42 Document 41	Arrow is compliant with this condition.	Y
iv.	iv. builds on the groundwater early warning system required at condition 13 (j) and sets out early warning indicators and trigger thresholds and limits for groundwater and surface water.		<p>The letter dated 22 November 2019 from Declan O'Connor-Cox A/g Assistant Secretary, Environment Approvals Division of the then Department of the Environment and Energy (Document 42), approves the EPBC 2010/5344: Surat Gas Expansion Project - Updated CSG Water Monitoring and Management Plan (Document 41) as suitable for gas extraction of up to 250 wells. As the Updated CSG WMMP has been approved by the Delegate of the Minister it is assumed that satisfies the requirements of this item and its subsequent items.</p> <p>Required information is in Section 7.5, Appendix G of the Updated CSG Water Monitoring and Management Plan (Document 41)</p>	Document 42 Document 41	Arrow is compliant with this condition.	Y
i.	i. include a risk based exceedance response plan that details the corrective activities the approval holder will take and the timeframes in which those activities will be undertaken if: early warning indicators and trigger Threshold values contained in the Updated CSG WMMP are exceeded, or there are any emergency discharges.		<p>The letter dated 22 November 2019 from Declan O'Connor-Cox A/g Assistant Secretary, Environment Approvals Division of the then Department of the Environment and Energy (Document 42), approves the EPBC 2010/5344: Surat Gas Expansion Project - Updated CSG Water Monitoring and Management Plan (Document 41) as suitable for gas extraction of up to 250 wells. As the Updated CSG WMMP has been approved by the Delegate of the Minister it is assumed that satisfies the requirements of this item and its subsequent items.</p> <p>Required information is in Sections 7.6 and 8.2, Appendix G of the Updated CSG Water Monitoring and Management Plan (Document 41)</p>	Document 42 Document 41	Arrow is compliant with this condition.	Y

CONDITIONS OF EPBC ACT APPROVAL						
EPBC Approval Condition No.EPBC 2010/5344		Verification Method	Evidence	Documents Sighted	Determination	Compliance Finding (Y, N, NA, O)
18	The Updated CSG WMMP must be peer reviewed by a suitably qualified water resources expert/s approved by the Minister in writing prior to the plan being submitted to the Minister for approval. The approval holder must, at the same time as the Updated CSG WMMP is submitted for approval, provide to the Minister:	Review of approval document: Peer review evidence Confirmation of the appropriate Peer reviewer approval by the minister Statement of findings	The letter dated 22 November 2019 from Declan O'Connor-Cox A/g Assistant Secretary, Environment Approvals Division of the then Department of the Environment and Energy (Document 42), approves the EPBC 2010/5344: Surat Gas Expansion Project - Updated CSG Water Monitoring and Management Plan (Document 41) as suitable for gas extraction of up to 250 wells. EPBC 2010/5344: Surat Gas Expansion Project - Updated CSG Water Monitoring and Management Plan: Appendix I Peer Review and Ministerial Endorsement (Document 41) provides evidence of this item. The Peer reviewers report states that they were approved as a suitably qualified water resources expert by the Minister of the Environment 7 July 2015.	Document 42 Document 41	Arrow is compliant with this condition.	Y
a.	a. a copy of the peer review; and		EPBC 2010/5344: Surat Gas Expansion Project - Updated CSG Water Monitoring and Management Plan: Appendix I Peer Review and Ministerial Endorsement (Document 41) provides evidence of this item.	Document 42 Document 41	Arrow is compliant with this condition.	Y
b.	b. a statement from the suitably qualified water resources expert/s stating that they carried out the peer review and endorse the findings of the Updated CSG WMMP		EPBC 2010/5344: Surat Gas Expansion Project - Updated CSG Water Monitoring and Management Plan: Appendix I Peer Review and Ministerial Endorsement (Document 41) provides evidence of this item. The Peer reviewers report states that they were approved as a suitably qualified water resources expert by the Minister of the Environment 7 July 2015.	Document 42 Document 41	Arrow is compliant with this condition.	Y
19	The approval holder must not exceed the groundwater drawdown or groundwater limits specified in the approved Updated CSG WMMP	Review of approval document: how draw down is recorded Procedure for measuring drawdown Evidence of compliance with drawdown allowances	SGP WMMP EWMS baseline water levels / pressure values (Document 51) outlines the EWMS values derived for each monitoring bore based on the framework presented in the Updated CSG WMMP (document 41) Section 3.1 and Appendix A of the CSG WMMP Annual Reports Stage 1 Coal Seam Gas Water Monitoring and Management Plan: Stage 1 Coal Seam Gas Water Monitoring and Management Plan: Sections 9.2, 9.3 & 9.4 (Document 2) and Surat Gas Project Updated CSG WMMP Annual Report Reporting Period: 22 October 2020 to 21 October 2021 (Document 53), Surat Gas Project Updated CSG WMMP Annual Report Reporting Period: 22 October 2021 to 21 October 2022 (Document 70) Surat Gas Project Updated CSG WMMP Annual Report Reporting Period: 22 October 2022 to 21 October 2023 (Document 101) summarise any changes to the monitoring network inline with the latest UWIR. No exceedances have occurred.	Document 51 Document 41 Document 2 Document 70 Document 53 Document 101	Arrow is compliant with this condition.	Y
20	The Minister may direct, in writing, that the approval holder cease water or gas extraction from one or more coal seam gas production wells, or water discharge or use, if:	Interview and doc review: Confirm if any ministerial directions have been received	Interview with the Groundwater team has confirmed that no Ministerial directions have been received to date. (Document 106)	Document 106	In interviews it was confirmed that no ministerial directions had been received so this condition is considered not applicable.	NA
a.	a. an early warning indicator, trigger threshold or limit is exceeded, and		Interview with the Groundwater team has confirmed that no Ministerial directions have been received to date. (Document 106)	Document 106	In interviews it was confirmed that no ministerial directions had been received so this condition is considered not applicable.	NA
b.	b. the Minister is not satisfied that the corrective activities proposed or taken by the approval holder will reduce likely impacts on matters of national environmental significance (MNES) to acceptable levels.		Interview with the Groundwater team has confirmed that no Ministerial directions have been received to date. (Document 106)	Document 106	In interviews it was confirmed that no ministerial directions had been received so this condition is considered not applicable.	NA
20A.	If condition 20 applies, the Minister may direct the approval holder to implement alternative corrective activities at the expense of the approval holder, provided those corrective activities are unlikely to have a significant impact on MNES.	Confirm if Condition 20 applies - review documents and interviews	Not applicable, this condition links to condition 20 which has been determined to not apply	NA	As Condition 20 is not applicable this condition does not apply	NA
20B.	If condition 20 applies, the approval holder must not recommence such extraction or discharge or use until the Minister has given approval in writing for the recommencement of that extraction, discharge or use.	Confirm if Condition 20 applies - review documents and interviews	Not applicable, this condition links to condition 20 which has been determined to not apply	NA	As Condition 20 is not applicable this condition does not apply	NA
a.	a. Approval to recommence such extraction, discharge or use may be subject to such conditions as the Minister considers reasonably necessary to ensure that impacts on MNES will be acceptable.		Not applicable, this condition links to condition 20 which has been determined to not apply	NA	As Condition 20 is not applicable this condition does not apply	NA
b.	b. If the Minister approves the recommencement of extraction, discharge or use subject to conditions, the approval holder must comply with such conditions.		Not applicable, this condition links to condition 20 which has been determined to not apply	NA	As Condition 20 is not applicable this condition does not apply	NA
Note 4.	<i>Note 4: The proponent will be provided with a reasonable opportunity to comment on any such direction from the Minister before it is required to be implemented.</i>		Comment not a condition	NA	Comment not a condition	NA
21	The approval holder must not commence the extraction of gas from any coal seam gas production wells unless the Updated CSG WMMP has been approved by the Minister in writing. The approved Updated CSG WMMP must be implemented. The Stage 1 CSG WMMP will apply until the commencement of the approved Updated CSG WMMP	Review of approval document: Ministerial approval of the Updated CSG WMMP Evidence of CSG WMMP implementation Confirmation of dates gas commenced extraction and link to the approved CSG WMMPs	The letter dated 22 November 2019 from Declan O'Connor-Cox A/g Assistant Secretary, Environment Approvals Division of the then Department of the Environment and Energy (Document 42), approves the EPBC 2010/5344: Surat Gas Expansion Project - Updated CSG Water Monitoring and Management Plan (Document 41) dated 1 October 2019 as suitable for gas extraction of up to 250 wells. The letter dated 18 November 2020 from Yihua Xu General Manager Asset (Surat), Arrow Energy to DAWE (Document 46) states the commencement date of the activity was 22 October 2020 The letter dated 24 November 2020 from Thomas Long A/g Assistant Director, Environment Audit Section, (Document 47) confirms the action commencement date of 22 October 2020.	Document 42 Document 41 Document 46 Document 47	Arrow is compliant with this condition.	Y

CONDITIONS OF EPBC ACT APPROVAL						
EPBC Approval Condition No.EPBC 2010/5344		Verification Method	Evidence	Documents Sighted	Determination	Compliance Finding (Y, N, NA, O)
21A.	If the Minister has approved the Updated CSG WMMP, the approval holder may commence extraction of gas from:	Review of approval document: Updated CSG WMMP Ministerial approval and direction Definition of production and extraction well	<p>The letter dated 22 November 2019 from Declan O'Connor-Cox A/g Assistant Secretary, Environment Approvals Division of the then Department of the Environment and Energy (Document 42), approves the EPBC 2010/5344: Surat Gas Expansion Project - Updated CSG Water Monitoring and Management Plan (Document 41) dated 1 October 2019 as suitable for gas extraction of up to 250 wells.</p> <p>The letter dated 18 November 2020 from Yihua Xu General Manager Asset (Surat), Arrow Energy to DAWE (Document 46) states the commencement date of the activity was 22 October 2020</p> <p>The letter dated 24 November 2020 from Thomas Long A/g Assistant Director, Environment Audit Section, (Document 47) confirms the action commencement date of 22 October 2020.</p> <p>List of wells has been confirmed to be 264 total. 206 wells commenced within audit period commencement date 22 October 2020 and 28 May 2024 CSG wells as per 22102020-28052024 (1).xlsx (Document 100)</p> <p>Item 14 of the interview minutes recorded on 29 October with the Arrow Environmental Compliance & Assurance team (Document 103) confirms 264 wells have been sputtered but only 206 wells are currently producing. Item 12 of interview minutes recorded on 31 October with the Arrow Groundwater team confirms that extraction of gas has not exceeded 250 wells. (Document 106)</p>	Document 42 Document 41 Document 46 Document 47 Document 100 Document 103 Document 106	Arrow is compliant with this condition.	Y
a.	a. 250 coal seam gas production wells	Number of wells in production under the approved plan for each stage	<p>The letter dated 22 November 2019 from Declan O'Connor-Cox A/g Assistant Secretary, Environment Approvals Division of the then Department of the Environment and Energy (Document 42), approves the EPBC 2010/5344: Surat Gas Expansion Project - Updated CSG Water Monitoring and Management Plan (Document 41) dated 1 October 2019 as suitable for gas extraction of up to 250 wells.</p> <p>The letter dated 18 November 2020 from Yihua Xu General Manager Asset (Surat), Arrow Energy to DAWE (Document 46) states the commencement date of the activity was 22 October 2020</p> <p>The letter dated 24 November 2020 from Thomas Long A/g Assistant Director, Environment Audit Section, (Document 47) confirms the action commencement date of 22 October 2020.</p> <p>List of wells has been confirmed to be 264 total for the Audit period. 206 wells were in production within audit period commencement date 22 October 2020 and 28 May 2024 CSG wells as per 22102020-28052024 (1).xlsx (Document 100)</p> <p>Item 14 of the interview minutes recorded on 29 October with the Arrow Environmental Compliance & Assurance team (Document 103) confirms 264 wells have been sputtered but only 206 wells are currently producing. Item 12 of interview minutes recorded on 31 October with the Arrow Groundwater team confirms that extraction of gas has not exceeded 250 wells. (Document 106)</p>	Document 100 Document 103 Document 106	Arrow is compliant with this condition.	Y
b.	b. a larger number of coal seam gas production wells as specified by the Minister if he or she is satisfied that:		<p>List of wells has been confirmed to be 264 total for the Audit period. 206 wells were in production within audit period commencement date 22 October 2020 and 28 May 2024 CSG wells as per 22102020-28052024 (1).xlsx (Document 100).</p> <p>Item 12 of interview minutes recorded on 31 October with the Arrow Groundwater team confirms that extraction of gas has not exceeded 250 wells. (Document 106).</p> <p>As the number of producing wells is below 250 this condition is not applicable.</p>	Document 100 Document 103 Document 106	As Arrow has not exceeded 250 production wells this Condition is not applicable	NA
I	i. the approval holder has commenced gas extraction from at least 125 coal seam gas production wells;		Not applicable, this condition links to Condition 21A (b) which has been determined to not apply	NA	As Condition 21A (b) is not applicable this condition does not apply	NA
II	ii. the approval holder has requested an increase in the number of wells from which gas can be extracted under the approved Updated CSG WMMP; and		Not applicable, this condition links to Condition 21A (b) which has been determined to not apply	NA	As Condition 21A (b) is not applicable this condition does not apply	NA
III	iii. extraction of gas from the additional number of coal seam gas production wells will not have an unacceptable impact on MNES.		Not applicable, this condition links to Condition 21A (b) which has been determined to not apply	NA	As Condition 21A (b) is not applicable this condition does not apply	NA
NOTE 5.	<i>Note 5: to ensure efficiency the approval holder may prepare and align the Updated CSG WMMP with the requirements of the Queensland Government, as long as the relevant matters under the conditions of this approval are clearly and adequately addressed.</i>	Interviews: to see if this option has been pursued and documentation to go with that decision.	This comment is not a condition. Interviews with the Ground team confirm that the WMMP has been kept aligned with the UWIR requirements from the State Government and EPBC requirements. (Document 106)	Document 106	This is a comment only and considered Not Applicable.	NA
NOTE 5A.	<i>Note 5A: The number of additional coal seam gas production wells requested under condition 21A(b) will be at least 200.</i>	Confirm gas wells numbers.	This is a comment not a condition. As Arrow has not exceeded 250 wells and Condition 21A(b) has not come into effect this condition is considered not applicable Interviews with the groundwater team confirm this item. (Document 106)	Document 100 Document 106	The Updated WMMP align with the UWIR from the QLD government. This is a comment only and considered Not Applicable.	NA
22	Revoked					
23	If the OGIA model ceases to exist, the approval holder must:	Interview and document review to confirm OGIA and its model still exists	The OGIA model still exists as per the Underground Water Impact Report 2021 for the Surat Cumulative Management Area. The current modelling is presented in the 2021 UWIR. The next UWIR is scheduled to be released in 2025.	NA	As the model still exists this condition is not applicable.	NA
a.	a. submit an alternate model that replaces the OGIA model for the approval of the Minister;		The OGIA model still exists as per the Underground Water Impact Report 2021 for the Surat Cumulative Management Area. The current modelling is presented in the 2021 UWIR. The next UWIR is scheduled to be released in 2025.	NA	As the model still exists this condition is not applicable.	NA
b.	b. revise the Updated CSG WMMP to incorporate the approved alternate model, and submit the revised plan to the Minister for approval; and		The OGIA model still exists as per the Underground Water Impact Report 2021 for the Surat Cumulative Management Area. The current modelling is presented in the 2021 UWIR. The next UWIR is scheduled to be released in 2025.	NA	As the model still exists this condition is not applicable.	NA
c.	c. implement the approved revised plan.		The OGIA model still exists as per the Underground Water Impact Report 2021 for the Surat Cumulative Management Area. The current modelling is presented in the 2021 UWIR. The next UWIR is scheduled to be released in 2025.	NA	As the model still exists this condition is not applicable.	NA
24	Revoked					
25	The Minister may, by written request to the approval holder, require the Stage 1 CSG WMMP or the Updated CSG WMMP to be revised, including to address expert advice. Any request must be acted on by the approval holder within the timeframe specified in the request.	Documentation and interview to confirm if correspondence from the Minister has been received.	Interview with the Groundwater team has confirmed that no Ministerial directions have been received to date. (Document 106)	Document 106	This item is not applicable	NA

CONDITIONS OF EPBC ACT APPROVAL						
EPBC Approval Condition No.EPBC 2010/5344		Verification Method	Evidence	Documents Sighted	Determination	Compliance Finding (Y, N, NA, O)
NOTE 6.	<i>Note 6: The Minister may throughout the life of the project life seek advice from experts, or an expert panel. As a consequence specific matters identified through such advice may need to be addressed in the CSG WMMP. Where such advice is sought the approval holder would be provided with opportunity to submit information and respond to the specific matters identified, in order to ensure the CSG WMMP is based on the best available information. Review requirements will facilitate adaptive management, align with Queensland Government approval requirements, and account for potential cumulative impacts as new scientific information becomes available over the life of the project.</i>	Documentation and interview to confirm if correspondence from the Minister has been received.	Interview with the Groundwater team has confirmed that no Ministerial directions have been received to date. (Document 106)	Document 106	This item is not applicable	NA
26	General Within 20 business days after the commencement of the action, the approval holder must advise the Department in writing of the actual date of commencement.	Review of the following documentation: Evidence of Arrow correspondence informing the Minister that the action has commenced.	The letter dated 18 November 2020 from Yihua Xu General Manager Asset (Surat), Arrow Energy to DAWE (Document 9) states the commencement date of the activity was 22 October 2020 The letter dated 24 November 2020 from Thomas Long A/g Assistant Director, Environment Audit Section, (Document 10) confirms the action commencement date of 22 October 2020.	Document 9 Document 10	Arrow is compliant with this condition.	Y
27	The approval holder must maintain accurate records substantiating all activities associated with or relevant to the conditions of approval, including measures taken to implement the management plans, reports or strategies required by this approval, and make them available upon request to the Department. The annual report (condition 28) must state all confirmed cases of non-compliance along with details of any remedial actions. Such records may be subject to audit by the Department or an independent auditor in accordance with section 458 of the EPBC Act, or used to verify compliance with the conditions of approval. Summaries of audits will be posted on the Department's website. The results of audits may also be publicised through the general media.	Review of approval document: Documentation review of files held to demonstrate all plans and systems required by the approval conditions for example, offset strategy, WMMP, ministerial correspondence, annual reports, non compliance and remedial actions Procedure for keeping records View records from the beginning of the Action Any audits undertaken on behalf of the regulator. Interview: To occur in the Arrow head office and in the field. Review of website: see if there are any non-conformances listed.	EPBC Annual compliance report 2020/2021 (Document 52), EPBC Annual compliance report 2021/2022 (Document 63), and EPBC compliance report 2022/2023 (Document 78) report no non-conformances to date. Item 15 of the interview minutes recorded on 29 October with the Arrow Environmental Compliance & Assurance team (Document 103) confirms all records are kept including evidence of submission (Document 55 , Document 67, Document 81,) and receipt of compliance (Document 50, Document 68, Document 84) to the Department. No further external audits have occurred. The Arrow website https://www.arrowenergy.com.au/publicnotices/reports-and-plans was reviewed to confirm availability of the EPBC related annual reports. EPBC Annual Compliance Reports Offset Strategy Species Impact Management Plan Water Monitoring and Management Plan Water Monitoring and Management Report	Document 52 Document 63 Document 78 Document 50 Document 103 Document 55 Document 67 Document 81 Document 50 Document 68 Document 84 Arrow Website	Arrow is compliant with this condition.	Y
28	Within three months of every 12 month anniversary of the commencement of the action, the approval holder must publish a report on its website for the life of the approval outlining how they have been compliant with the conditions of this approval over the previous 12 months, including implementation of any management plans as specified in the conditions. The approval holder must also report against disturbance limits. Documentary evidence providing proof of the date of publication and noncompliance with any of the conditions of this approval must be provided to the Department at the same time as the compliance report is published.	Website review: Compliance and disturbance limits History of condition compliance on company website. Timing of the posts - 12 months after the action commencing. Review of documents: Records of disturbance Proof of the information being provided to the regulator at the time of posting Interviews	Screenshot 2024-09-12 at 11.37.39 AM_Annual Compliance Report 2021.png (Document 54) shows that the show that EPBC Annual Compliance Report 2020/2021 (Document 52) was uploaded to Arrow website 20 January 2022. Notification of submission was made to the Department on 23 January 2022 (Document 55) Screenshot 2024-09-12 at 11.37.15 AM_Annual Compliance Report 2022.png (Document 66) shows that EPBC Annual Compliance Report 2021/2022 (Document 63) was uploaded to Arrow website on 18 January 2023. Notification of submission was made to the Department on 18 January 2023 (Document 67). Screenshot 2024-09-12 at 11.36.55 AM_Annual Compliance Report 2023.png (Document 79) shows that EPBC compliance report 2022/2023 (Document 78) was published on the Arrow website on 9 January 2024. Notification of submission was made to the Department on 9 January 2024 (Document 81). The annual compliance reports document the cumulative disturbance limits.	Document 54 Document 52 Document 55 Document 66 Document 63 Document 67 Document 79 Document 78 Document 81	Arrow is compliant with this condition.	Y

CONDITIONS OF EPBC ACT APPROVAL						
EPBC Approval Condition No.EPBC 2010/5344		Verification Method	Evidence	Documents Sighted	Determination	Compliance Finding (Y, N, NA, O)
29	The approval holder must notify the Department in writing of potential non-compliance with any condition of this approval as soon as practical and within no later than ten business days of becoming aware of the potential non-compliance. The notice provided to the Department under this condition must specify:	Review of approval documents: internal compliance documents and correspondence with the regulator on non - compliance Confirm if there have been any non-conformances If there has a notice been provided to the regulator and the notice timing	EPBC Annual compliance report 2020/2021 (Document 52), EPBC Annual compliance report 2021/2022 (Document 63), and EPBC compliance report 2022/2023 (Document 78) report no non-conformances to date. Item 16 of the interview minutes recorded on 29 October with the Arrow Environmental Compliance & Assurance team (Document 103) confirms that Arrow has notified the Department about the approval conditions in a meeting held with Ms Nola Sloan on 25 August 2023. Interview held with the Arrow Staging team on 31 October confirms this meeting and provides evidence in the form of a meeting invite (Document 104, Document 121) Memo provided by Arrow details the staging process and discussions held with the Department (Document 108). Email correspondence confirms discussions were held with the Department about the staging conditions ongoing from September 2023 (Document 124, Document 125, Document 126, Document 127)	Document 52 Document 63 Document 78 Document 103 Document 104 Document 121 Document 108 Document 124 Document 125 Document 126 Document 127	As Arrow has not identified any Non Conformance this condition is considered Not Applicable.	NA
a.	a. the condition which the approval holder has potentially breached;		Currently considered as not applicable as Arrow has not identified any Non Conformance.	NA	As Arrow has not identified any Non Conformance this condition is considered Not Applicable.	NA
b.	b. the nature of the potential non-compliance;		Currently considered as not applicable as Arrow has not identified any Non Conformance.	NA	As Arrow has not identified any Non Conformance this condition is considered Not Applicable.	NA
c.	c. when and how the approval holder became aware of the non-compliance;		Currently considered as not applicable as Arrow has not identified any Non Conformance.	NA	As Arrow has not identified any Non Conformance this condition is considered Not Applicable.	NA
d.	d. how the non-compliance will affect the approved action;		Currently considered as not applicable as Arrow has not identified any Non Conformance.	NA	As Arrow has not identified any Non Conformance this condition is considered Not Applicable.	NA
e.	e. how the non-compliance will affect the anticipated impacts of the approved action, in particular how the non-compliance will affect the impacts on the MNES;		Currently considered as not applicable as Arrow has not identified any Non Conformance.	NA	As Arrow has not identified any Non Conformance this condition is considered Not Applicable.	NA
f.	f. the measures the approval holder will take to address the impacts of the non-compliance on the MNES and rectify the non-compliance; and		Currently considered as not applicable as Arrow has not identified any Non Conformance.	NA	As Arrow has not identified any Non Conformance this condition is considered Not Applicable.	NA
g.	g. the time by when the approval holder will rectify the non-compliance		Currently considered as not applicable as Arrow has not identified any Non Conformance.	NA	As Arrow has not identified any Non Conformance this condition is considered Not Applicable.	NA
30	Upon the direction of the Minister, the approval holder must ensure that an independent audit of compliance with the conditions of approval is conducted and a report submitted to the Minister. The independent auditor must be approved by the Minister prior to the commencement of the audit. Audit criteria must be agreed to by the Minister and the audit report must address the criteria to the satisfaction of the Minister.	Review of the following documentation: Letter from the Minister to Arrow Auditor approval from the Minister Audit Criteria to be agreed with Minister	The letter dated 31 May 2024 from Thomas Long Director Environmental Audit Section Department of Climate Change, Energy, the Environment and Water (Document 89) requests that an independent audit be undertaken of compliance with EPBC Act project Conditions of Approval The letter dated 02 August 2024 from Thomas Long Director Environmental Audit Section Department of Climate Change, Energy, the Environment and Water (Document 93) approves the independent audit team to audit the conditions against the Independent Audit and Audit Report Guidelines for controlled actions which have been approved under Chapter 4 of the Environment Protection and Biodiversity Conservation Act 1999	Document 89 Document 56 Document 93	Arrow is currently completing this item	Y
31	If the approval holder wishes to carry out any activity other than in accordance with the management plans as specified in the conditions, the approval holder must submit to the Department for the Minister's written approval a revised version of that management plan. The approval holder must not commence the varied activity until the Minister has approved the varied management plan. The Minister will not approve a varied management plan unless the revised management plan would result in an equivalent or improved environmental outcome over time. If the Minister approves the revised management plan, that management plan must be implemented in place of the management plan originally approved	Review of approval document: Review management plan variations Minister approvals and requests Requests to vary management plans	In the interviews with Arrow (Document 103, Document 104, Document 105, Document 106, Document 107) it was confirmed that no variations have been requested to date from the Department.	Document 103 Document 104 Document 105 Document 106 Document 107	As no variations have been requested to date from the Department this condition is considered Not Applicable.	NA
		Interviews				
32	If the Minister believes that it is necessary or convenient for the better protection of listed threatened species, listed migratory species or water resources to do so, the Minister may request that the approval holder make specified revisions to the management plans specified in the conditions and submit the revised management plan for the Minister's written approval. The approval holder must comply with any such request within the timeframe specified by the Minister. The revised approved management plan must be implemented. Unless the Minister has approved the revised management plan, then the person taking the action must continue to implement the management plan originally approved, as specified in the conditions	Review of approval document: Review management plan variations Minister approvals and requests to vary management plans	In the interviews with Arrow (Document 103, Document 104, Document 105, Document 106, Document 107) it was confirmed that the Minister has not requested any changes to Arrow management plans.	Document 103 Document 104 Document 105 Document 106 Document 107	As the Minister has not requested any changes to Arrow management plans this condition is considered Not Applicable.	NA
		Interviews				

CONDITIONS OF EPBC ACT APPROVAL						
EPBC Approval Condition No.EPBC 2010/5344		Verification Method	Evidence	Documents Sighted	Determination	Compliance Finding (Y, N, NA, O)
33	If at any time after seven years from the date of this approval, the approval holder has not commenced the action, then the approval holder must not commence the action without the written agreement of the Minister.	Review of approval document:	The EPBC approval was originally provided 19 December 2013 as per Variation of Conditions attached to approval Surat Gas Expansion (EBC 2010/5344) (Document 56). The letter dated 18 November 2020 from Yihua Xu General Manager Asset (Surat), Arrow Energy to DAWE (Document 46) states the commencement date of the activity was 22 October 2020 The letter dated 24 November 2020 from Thomas Long A/g Assistant Director, Environment Audit Section, (Document 47) confirms the action commencement date of 22 October 2020.	Document 56 Document 46 Document 47	Arrow commenced the action within 7 years of the approval and so is compliant with this condition.	Y
		Action commencement verification: Confirm the date of approval and commencement of the action not being more than 7 years. If more view approval from the Minister.				
		Correspondence with the Minister				
		Interviews				
34	Unless otherwise agreed to in writing by the Minister, the approval holder must publish all management plans referred to in these conditions of approval on their website. Each management plan must be published on the website within 1 month of being approved and remain available on that website for the life of the approval.	Website review: All approved and latest management plans from this approval are to be on the company website. Confirm they were on the website within 1 month of being approved and are still on the website. Date of approval and posting on the website.	Screenshot 2024-10-02 at 9.33 AM_SIMP.png (Document 36), Screenshot 2024-09-16 at 10.38.07 AM_Stage 1 Offset Strategy.png (Document 39), Screenshot 2024-09-12 at 11.36.25 AM_Updated WMMP.png (Document 43), Screenshot 2024-09-12 at 11.32.32 AM_Stage 1 WMMP.png (Document 60), show that the Species Impact Management Plan (Document 1), Offset strategy (Document 37), Stage 1 CSGWMMP (Document 2) and Updated CSGWMMP (Document 41) are available on the Arrow website. https://www.arrowenergy.com.au/publicnotices/reports-and-plans	Document 36 Document 39 Document 43 Document 60 Document 1 Document 37 Document 2 Document 41 Arrow Website	Arrow is compliant with this condition.	Y

Appendix C

Audit Document Register

Document list	Date	type	Document Title	Description
1	20/11/2018	REPORT	Species Impact Management Plan	Species Impact Management Plan
2	7/12/2018	REPORT	Stage 1 CSG Water Monitoring and Management Plan	Stage 1 CSG Water Monitoring and Management Plan
3	7/12/2018	APPENDIX	Appendix C Project Description.pdf	APPENDIX to Arrow Energy Stage 1 CSG WMMP
4	7/12/2018	APPENDIX	Appendix D - GDE and Aquatic Ecosystem technical memorandum.pdf	APPENDIX to Arrow Energy Stage 1 CSG WMMP
5	7/12/2018	APPENDIX	Appendix E - Modelling technical memorandum.pdf	APPENDIX to Arrow Energy Stage 1 CSG WMMP
6	7/12/2018	APPENDIX	Appendix F - Condition 13b modelling report.pdf	APPENDIX to Arrow Energy Stage 1 CSG WMMP
7	7/12/2018	APPENDIX	Appendix G - Impacts and management technical memorandum.pdf	APPENDIX to Arrow Energy Stage 1 CSG WMMP
8	7/12/2018	APPENDIX	Appendix H - Flood risk assessment technical memorandum.pdf	APPENDIX to Arrow Energy Stage 1 CSG WMMP
9	7/12/2018	APPENDIX	Appendix I - Triggers and limits technical memorandum.pdf	APPENDIX to Arrow Energy Stage 1 CSG WMMP
10	7/12/2018	APPENDIX	Appendix J - Monitoring network technical memorandum.pdf	APPENDIX to Arrow Energy Stage 1 CSG WMMP
11	7/12/2018	APPENDIX	Appendix K - Subsidence technical memorandum.pdf	APPENDIX to Arrow Energy Stage 1 CSG WMMP
12	7/12/2018	APPENDIX	Appendix L - Peer reviewer endorsement letters and comments register.pdf	APPENDIX to Arrow Energy Stage 1 CSG WMMP
13	7/12/2018	APPENDIX	41620043.xlsx	APPENDIX to Arrow Energy Stage 1 CSG WMMP
14	7/12/2018	APPENDIX	42230209.xlsx	APPENDIX to Arrow Energy Stage 1 CSG WMMP
15	7/12/2018	APPENDIX	42231370.xlsx	APPENDIX to Arrow Energy Stage 1 CSG WMMP
16	7/12/2018	APPENDIX	42231463.xlsx	APPENDIX to Arrow Energy Stage 1 CSG WMMP
17	7/12/2018	APPENDIX	Carn Brea 23.xlsx	APPENDIX to Arrow Energy Stage 1 CSG WMMP
18	7/12/2018	APPENDIX	Carn Brea-19.xlsx	APPENDIX to Arrow Energy Stage 1 CSG WMMP
19	7/12/2018	APPENDIX	Carn Brea-20.xlsx	APPENDIX to Arrow Energy Stage 1 CSG WMMP
20	7/12/2018	APPENDIX	Daandine-121xlsx	APPENDIX to Arrow Energy Stage 1 CSG WMMP
21	7/12/2018	APPENDIX	Kedron-570.xlsx	APPENDIX to Arrow Energy Stage 1 CSG WMMP
22	7/12/2018	APPENDIX	Macalister 7.xlsx	APPENDIX to Arrow Energy Stage 1 CSG WMMP
23	7/12/2018	APPENDIX	Macalister 5.xlsx	APPENDIX to Arrow Energy Stage 1 CSG WMMP
24	7/12/2018	APPENDIX	Meenawarra-21.xlsx	APPENDIX to Arrow Energy Stage 1 CSG WMMP
25	7/12/2018	APPENDIX	Pampa 18.xlsx	APPENDIX to Arrow Energy Stage 1 CSG WMMP

Document list	Date	type	Document Title	Description
26	7/12/2018	APPENDIX	Plainview-25.xlsx	APPENDIX to Arrow Energy Stage 1 CSG WMMP
27	7/12/2018	APPENDIX	Stratheden63.xlsx	APPENDIX to Arrow Energy Stage 1 CSG WMMP
28	7/12/2018	APPENDIX	Tipton 204.xlsx	APPENDIX to Arrow Energy Stage 1 CSG WMMP
29	7/12/2018	APPENDIX	Tipton 221.xlsx	APPENDIX to Arrow Energy Stage 1 CSG WMMP
30	7/12/2018	APPENDIX	Tipton-153.xlsx	APPENDIX to Arrow Energy Stage 1 CSG WMMP
31	7/12/2018	APPENDIX	Tipton195.xlsx	APPENDIX to Arrow Energy Stage 1 CSG WMMP
32	7/12/2018	APPENDIX	Wyalla-16.xlsx	APPENDIX to Arrow Energy Stage 1 CSG WMMP
33	7/12/2018	APPENDIX	Wyalla-17.xlsx	APPENDIX to Arrow Energy Stage 1 CSG WMMP
34	14/12/2018	Letter- DCCEEW	Arrow Surat Gas Project, QLD (EPBe 2010/5344)	Approval of Species impact management plan
35	18/12/2018	Letter- DCCEEW	Surat Gas Expansion Project (EPBC 2010/5344) - Approval of the Surat Gas Project Stage 1 CSG Water Management and Monitoring Plan	Approval of stage 1 WMMP
36	14/01/2019	Screenshot	evidence of upload of Species impact management plan	evidence of upload of Species impact management plan
37	28/06/2019	REPORT	Stage 1 Offset Strategy	Stage 1 Offset Strategy
38	7/07/2019	Letter- DCCEEW	EPBC 2010/5344: Surat Gas Project - Stage 1 Offset Strategy	Approval of project Stage 1 offset strategy version 6
39	18/07/2019	Screenshot	evidence of upload of Offset Strategy for Phase 1	evidence of upload of Offset Strategy for Phase 1
40	9/09/2019	Work activity	Work activity procedure - clear and grade	Work activity procedure - clear and grade
41	1/10/2019	REPORT	Updated CSG Water Monitoring and Management Plan	Updated WMMP
42	22/11/2019	Letter- DCCEEW	EPBC 2010/5344: Surat Gas Expansion Project - Updated CSG Water Monitoring and Management Plan	Approval of Project updated CSG WMMP
43	26/11/2019	Screenshot	evidence of upload of Updated CSG WMMP	evidence of upload of Updated CSG WMMP
44	31/03/2020	REPORT	Ecological survey	Ecological survey
45	31/03/2020	REPORT	Ecological Impact Assessment	Ecological Impact Assessment
46	18/11/2020	Letter- Arrow	Commencement of Arrow Surat Gas Project - EPBC 2010/5344	Announcement of commencement date of 22/10/2020, description of clearing for drill pads
47	24/11/2020	Letter- DCCEEW	Commencement of Action – Surat Gas Expansion Project (EPBC 2010/5344)	Acknowledgement of commencement, Notification of annual compliance reporting
48	12/03/2021	REPORT	HSE Management Standards Compendium	Management standards compendium
49	2/06/2021	REPORT	ACCESS & APPROVAL PACKAGE David Daandine Connections - ERM Land Holdings	Landholder agreement David Daandine Connections - ERM Land Holdings
50	21/10/2021	REPORT	Offset Area Management Plan - Surat Gas Project Stage 1EPBC approval 2010/5344	offset area management plan stage 1

Document list	Date	type	Document Title	Description
51	1/12/2021	File Note	SGP WMMP EWMS baseline water levels / pressure values	Overview of the baseline water levels / ressure values in the Surat Gas Project (SGP) Updated Water Monitoring and Management Plan (WMMP)
52	20/12/2021	REPORT	EPBC-Approval-20105344-Annual-Compliance-Report-202020.pdf	Annual Compliance Report 2020/2021
53	17/01/2022	REPORT	Surat Gas Project Updated CSG WMMP Annual Report Reporting Period: 22 October 2020 to 21 October 2021	Annual water monitoring and management plan 2020/2021
54	20/01/2022	Screenshot	evidence of upload Annual compliance report 2020-2021	evidence of upload Annual compliance report 2020-2021
55	23/01/2022	Email	Surat Gas Project approval (EPBC 2010/5344) Annual Compliance Report Publication Advice [SEC=OFFICIAL]	Confirmation of submission of annual compliance report 2020/2021
56	29/03/2022	EPBC CONDITIONS	Variation of Conditions attached to approval Surat Gas Expansion (EBC 2010/5344)	Variation of EPBC Conditions
57	8/05/2022	REPORT	MJ Smith Surat Off Plot Civils Construction Environmental Management Plan	Off Plot CEMP
58	16/05/2022	REPORT	Surat Gas Project – Wari Djunben - Kogan North Joint Venture (PLs 194 and 230) and Tong Park (PL 194) Significant Residual Impacts to Prescribed Environmental Matters EPPG00972513	Significant Residual Impacts to Prescribed Environmental Matters
59	22/06/2022	REPORT	Arrow Energy PCP Completion Standard Program Surat Rev 1.5	Drilling program- Complete
60	18/07/2022	Screenshot	evidence of upload of Stage 1 CSG WMMP	evidence of upload of Stage 1 CSG WMMP
61	20/07/2022	REPORT	Arrow Energy - Fauna Management Procedure	Fauna Management procedure
62	21/09/2022	REPORT	Arrow Energy Offsets Tracking Dashboard Guideline Matters of National Environmental Significance & Prescribed Environmental Matters	Offsets tracking dashboard
63	12/01/2023	REPORT	Surat - EPBC Approval 2010/5344 Annual Compliance Report 2021/2022	Annual Compliance Report 2021/2022
64	12/01/2023	REPORT	ACCESS & APPROVAL PACKAGE 1243.Duleen Kupunn West - MURPHY, John	Landholder agreement John Murphy, Duleen Kupunn West
65	13/01/2023	REPORT	Offset Area Management Plan - Surat Gas Project Stage 1 EPBC approval 2010/5344 - Version D	Offset Area Management Plan Stage 1 - Version D
66	18/01/2023	Screenshot	evidence of upload Annual compliance report 2021-2022	evidence of upload Annual compliance report 2021-2022
67	18/01/2023	Email	Surat Gas Project approval (EPBC 2010/5344) Annual Compliance Report Publication Advice	Submission of Annual compliance report 2021/2022
68	18/01/2023	Email	Surat Gas Project approval (EPBC 2010/5344) Annual Compliance Report Publication Advice	Confirmation of publication of Annual Compliance Report 2021-2022
69	20/01/2023	Screenshot	evidence of upload of WMMP AR 2022	evidence of upload of WMMP AR 2022
70	20/01/2023	REPORT	Surat Gas Project Updated CSG WMMP Annual Report Reporting Period: 22 October 2021 to 21 October 2022	Annual water monitoring and management plan 2021/2022
71	17/07/2023	REPORT	ACCESS & APPROVAL PACKAGE 1241.Broadwater Rd & Nandi South SGP (Dennis Commens)	Landholder agreement Dennis Commens, Broadwater Rd & Nandi South SGP
72	29/07/2023	REPORT	Arrow Energy - Fauna Management	Fauna Management Guideline
73	1/08/2023	REPORT	MJ SMith Land Disturbance Procedure	MJ SMith Land Disturbance Procedure
74	18/09/2023	REPORT	Environmental Management Plan Doc No: SER ENV PLN 001	Environmental Management Plan
75	30/10/2023	REPORT	Arrow Energy Standard Drilling Program Surat Vertical Well ELM Gen 3 MAX PCP Wellhead	Drilling program
76	2/11/2023	REPORT	Arrow Energy - Land Disturbance Guideline	Land disturbance guideline

Document list	Date	type	Document Title	Description
77	15/11/2023	Audit criteria checklist	Audit Criteria (checklist) of MJ Smith Audit 19 September -15 November 2023	Audit checklist for MJ Smith
78	22/12/2023	REPORT	Surat - EPBC Approval 2010/5344 Annual Compliance Report 2022/2023 Surat Gas Project 22 October 2022 to 21 October 2023	Annual compliance report 2022/2023
79	9/01/2024	Screenshot	evidence of upload Annual compliance report 2022-2023	evidence of upload Annual compliance report 2022-2023
80	9/01/2024	Email	Surat Gas Project approval (EPBC 2010/5344) Annual Compliance Report Publication Advice	Confirmation of publication of Annual Compliance Report 2022-2023
81	9/01/2024	Email	Surat Gas Project approval (EPBC 2010/5344) Annual Compliance Report Publication Advice	Submission of Annual compliance report 2022/2023
82	16/01/2024	REPORT	Arrow Energy - Land Disturbance	Land disturbance
83	19/01/2024	Screenshot	evidence of upload of WMMP AR 2023	evidence of upload of WMMP AR 2023
84	24/01/2024	Email	RE_Surat Gas Project approval (EPBC 2010/5344) Annual Compliance Report Publication Advice	Acknowledgement of receipt of annual compliance report 2020/2021
85	17/02/2024	REPORT	Arrow Energy - HSE Competence and Induction Procedure	HSE plan
86	20/02/2024	REPORT	Off Plot Construction Master Services Agreement Construction Environmental Management Plan	CEMP
87	29/02/2024	REPORT	HSE Schedule - Mode 2	HSE Schedule - Mode 2
88	10/05/2024	REPORT	Geospatial Engineering Data Specifications Arrow Energy's GIS requirements for engineering data	GIS specifications
89	31/05/2024	Letter- DCCEEW	Surat Gas Expansion Project, Surat Basin, QLD, EPBC 2010/5344	Request for independent Audit
90	21/06/2024	REPORT	Surat - EPBC Approval 2018/8223 Annual Compliance Report 2023/2024	Annual Compliance Report 2023/2024
91	15/07/2024	REPORT	Arrow Energy - Environment Management Plan	EMP
92	19/07/2024	REPORT	ACCESS & APPROVAL PACKAGE Grassdale Rd Part 1 - TIPALEA PARTNERS RURAL PTY LTD	Landholder agreement Tipalea Partners Rural PTY LTD
93	2/08/2024	Letter- DCCEEW	Independent audit of Surat Gas Expansion Project, Surat Basin, Queensland, EPBC 2010/5344	Correspondence regarding audit team
94	2/08/2024	Email	RE: EPBC 2010/5344 - Surat Gas Expansion Project - Independent Audit [SEC=OFFICIAL]	Email correspondence regarding audit team
95	12/09/2024	Screenshot	evidence of upload of WMMP AR 2021	evidence of upload of WMMP AR 2021
96	27/09/2024	Figure	Figure 1- Overview SGP EPBC Approval 2010/5344 Approved Action 22/10/2020-28/05/2024	Figure - Project boundary
97	30/09/2024	Figure	Figure 3 - SGP EPBC Approval 2010/5344 Approved Action 22/10/2020- 28/05/2024	Figure - Well locations
98	2/10/2024	Figure	Figure 2- Map extents overview	Figure - Project extent
99	4/10/2024	Memo	SGP EPBC Approval 2010/5344 Independent Audit Response to hydraulic fracturing	response to fracking
100	4/10/2024	Document	Spudded and Producing CSG wells	Spudded and Producing CSG wells
101	20/01/2024	REport	Surat Gas Project Updated CSG WMMP Annual Report Reporting Period: 22 October 2022 to 21 October 2023	Updated CSG WMMP annual report 2022/2023
102	4/11/2024	Memo	Surat Gas Project Epcb Approval Staging Definition, Stage 1 Offset Strategy And Stage Offset Area Management Plan Amendments Current As At 15 October 2024	Staging memo
103	29/10/2024	Interview record	Minutes Compliance and Assurance Interview	Interview with Arrow C&A team 29/10

Document list	Date	type	Document Title	Description
104	31/10/2024	Interview record	Minutes Staging interview	Interview with Arrow Staging team 31/10
105	31/10/2024	Interview record	Minutes Ecology Interview	Interview with Arrow Ecology team 31/10
106	31/10/2024	Interview record	Minutes Groundwater Interview	Interview with Arrow Groundwater team 31/10
107	1/11/2024	Interview record	Minutes Field Interview	Interview with Arrow Field team 1/11
108	4/11/2024	Memo	SURAT GAS PROJECT EPBC APPROVAL STAGING DEFINITION, STAGE 1 OFFSET STRATEGY AND STAGE OFFSET AREA MANAGEMENT PLAN AMENDMENTS CURRENT AS AT 4 NOVEMBER 2024	Staging memo Updated
109	4/11/2024	Field Checklist	Construction Environmental inspection Checklist- A175 David Daandine connections (Braemar SF, Chapmans, Manly Downs)	Field checklist 08/05/2021
110	4/11/2024	Field Checklist	Construction Environmental inspection Checklist- Longswamp 290	Field checklist 08/09/2023
111	4/11/2024	REPORT	Access and approval package - David Daandine Connections - Braemar State Forest	Access and approval package - David Daandine Connections - Braemar State Forest V7
112	4/11/2024	REPORT	Access and approval package - 1241.Broadwater Rd & Nandi South SGP (Arrow Land Holdings)	Access and approval package - 1241.Broadwater Rd & Nandi South SGP (Arrow Land Holdings)
113	4/11/2024	EMAIL	Email correspondence regarding Updated WMMP versions submitted to DCCEEW	Email correspondence regarding updates to WMMP
114	4/11/2024	Memo	Memo regarding disturbance data capture process	Memo regarding disturbance data capture process
115	4/11/2024	Field Checklist	Construction Environmental inspection Checklist- SSE 210 MWP	Field checklist 20/08/2021
116	4/11/2024	Letter	Request for variation of conditions to EPBC Approval (EPBC 2010/5344) for the Surat Gas Expansion Project (SGP)	Letter requesting variation to change staging definitions to Hon Tanya Plibersek
117	4/11/2024	Letter	Request for variation of conditions to EPBC Approval (EPBC 2010/5344) for the Surat Gas Expansion Project (SGP)	Letter requesting variation to change staging definitions to Ms Nola Sloan
119	4/11/2024	Excel spreadhseet	Register of fauna interactions - CNJV Project Surat Basin	Register of fauna interactions - CNJV Project Surat Basin
120	4/11/2024	Letter	Letter regarding attached draft variation notice	Letter regarding attached draft variation notice
121	4/11/2024	Screenshot	Screenshot of meeting scheduled between ARROW/DCCEEW to discuss Arrows staging definitinos as per EPBC approval 25/08	Screenshot of meeting scheduled between ARROW/DCCEEW to discuss Arrows staging definitinos as per EPBC approval 25/08
122	4/11/2024	REPORT	Access and approvals Package end to end procedure	Access and approvals Package end to end procedure
123	4/11/2024	REPORT	FAUNA MANAGEMENT REPORT Pre-clearance Survey and Fauna Spotter Catcher Services David Daandine Connections 04 – 13 May 2021	Fauna management report by Biodiverse Environmental - David Daandine connections
124	4/11/2024	Email correspondence	Email correspondence regarding changes to the EPBC Approval conditions and staging	Email correspondence regarding changes to the EPBC Approval conditions and staging
125	4/11/2024	Email correspondence	Continued Email correspondence regarding changes to the EPBC Approval conditions and staging	Continued Email correspondence regarding changes to the EPBC Approval conditions and staging
126	4/11/2024	Email correspondence	Email correspondence regarding changes to staging conditions	Email correspondence regarding changes to staging conditions
127	4/11/2024	Email correspondence	Email requesting meeting to discuss variation 3 June 2024	Email requesting meeting to discuss variation 3 June 2024
128	4/11/2024	REPORT	Surat Gas Project approval (EPBC 2010/5344) Annual Compliance Report Publication Advice [SEC=OFFICIAL]	Email correspondence regarding reciept of annual compliance report 2020/2021
129	4/11/2024	REPORT	Tracking spreadsheet of disturbed area	Tracking spreadsheet of disturbed area
130	4/11/2024	REPORT	SMWS for clearing and grubbing including fauna spotter catcher activties	SMWS for clearing and grubbing including fauna spotter catcher activties
131	7/11/2024	REPORT	Site Assessment procedure	Site Assessment procedure

Document list	Date	type	Document Title	Description
132	7/11/2024	Memo	Area Wide Planning Procedure and Site Assessment Procedure.jpg	Area Wide Planning Procedure and Site Assessment Procedure.jpg
133	7/11/2024	REPORT	Subject: Proposed variation of conditions of EPBC Act Approval 2010/5344 for the Surat Gas Expansion Project (SGP Approval)	proposed EPBC Conditions
134	7/11/2024	memo	Arrow’s position against Condition 9A reported against in Arrow’s annual compliance report on 22 December 2023.	Arrow’s position against Condition 9A reported against in Arrow’s annual compliance report on 22 December 2023.
135	7/11/2024	Report	Area Wide Planning Procedure	Area Wide Planning Procedure

Appendix D

Auditors' Statements

Appendix A—Auditor’s Declaration of Independence

I, Holly Scoble of AECOM Australia Pty Ltd, Level 8/540 Wickham Street, Fortitude Valley, QLD, 4006 declare that to the best of my knowledge and belief I and my organisation do not have any conflicting or competing interests with:

The Auditee Arrow Energy Pty Ltd, the Auditee’s staff or representatives or other persons associated with the Auditee, including any personal, financial, business or employment relationship, except to the extent detailed below.

The project to be audited Surat Gas Expansion Project, Surat Basin, QLD, EPBC 2010/5344.

I shall notify the Department of the Environment within seven days of any change in these circumstances or any other change that may affect my independent status.

I shall at all times observe any professional code of conduct and/or ethics applicable to undertaking audits (i.e. – as prescribed by the agency with which I hold accreditation/membership). I take full responsibility for any factual inaccuracy or mistake made in giving this declaration, particularly to the extent that others rely upon the truth of this declaration. I acknowledge that the Department of the Environment may request further information to verify my independence at any time.

Details of any personal, financial, business or employment relationship with the Auditee, the Auditee’s staff, representatives or associated persons. (This is in the context of both the person making the declaration and the organisation that they are employed by – specify ‘nil’ if none):

Nil

Details of any personal, financial, business or employment relationship with the project to be audited. (This is in the context of both the person making the declaration and the organisation that they are employed by - specify ‘nil’ if none):

Nil

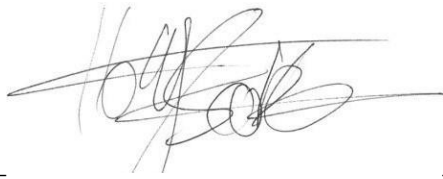
Details of audit qualifications and professional accreditations/memberships. (Include copies of current audit qualifications and current professional accreditations/memberships):

-Clean Air Society of Australia and New Zealand- Member since 2019

Resume attached.

In making this declaration, I am aware that section 491 of the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) makes it an offence in certain circumstances to knowingly provide false or misleading information or documents to specified persons who are known to be performing a duty or carrying out a function under the EPBC Act or the regulations. The offence is punishable on conviction by imprisonment for not more than 1 year,

a fine not more than 60 penalty units, or both. An extract of section 491 of the EPBC Act is attached



Signed _____

Full name (please print) _Holly Louise Scoble_____

Organisation (please print) AECOM Australia Pty Ltd_____

Date _10_ / _07_ / _2024_

Footnote:

1. Where an organisation or a team of auditors is nominated to undertake the audit, each individual that is nominated is to complete a separate declaration.
2. The curriculum vitae of all audit team members are to be submitted with the declaration outlining their relevant experience and qualifications.

Appendix A—Auditor’s Declaration of Independence

I, Orla Ferguson_____ of AECOM Australia Pty Ltd, Level 21, 420 George Street, Sydney, NSW, 2000 declare that to the best of my knowledge and belief I and my organisation do not have any conflicting or competing interests with:

The Auditee Arrow Energy Pty Ltd_____, the Auditee’s staff or representatives or other persons associated with the Auditee, including any personal, financial, business or employment relationship, except to the extent detailed below.

The project to be audited Surat Gas Expansion Project, Surat Basin, QLD, EPBC 2010/5344_____.

I shall notify the Department of the Environment within seven days of any change in these circumstances or any other change that may affect my independent status.

I shall at all times observe any professional code of conduct and/or ethics applicable to undertaking audits (i.e. – as prescribed by the agency with which I hold accreditation/membership). I take full responsibility for any factual inaccuracy or mistake made in giving this declaration, particularly to the extent that others rely upon the truth of this declaration. I acknowledge that the Department of the Environment may request further information to verify my independence at any time.

Details of any personal, financial, business or employment relationship with the Auditee, the Auditee’s staff, representatives or associated persons. (This is in the context of both the person making the declaration and the organisation that they are employed by – specify ‘nil’ if none):

Orla has not worked as a key team member on any Arrow Energy projects.

It is noted that AECOM has worked on numerous projects for Arrow Energy at the Brisbane Office. The audit team members have been selected as they have the experience and technical skill and do not have any conflicts of interest with the client (Arrow). To mitigate future potential conflict of interest, the project and all project information and reports will be confidentially managed and only accessible to the audit team and the client.

Details of any personal, financial, business or employment relationship with the project to be audited. (This is in the context of both the person making the declaration and the organisation that they are employed by - specify ‘nil’ if none):


Nil

Details of audit qualifications and professional accreditations/memberships. (Include copies of current audit qualifications and current professional accreditations/memberships) :

- *Certified Environmental Practitioner Site Contamination Specialist CEnvP SC – Certification received in November 2023*
- *Environmental Management Systems Auditor Training Course 2021*

Resume attached.

In making this declaration, I am aware that section 491 of the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) makes it an offence in certain circumstances to knowingly provide false or misleading information or documents to specified persons who are known to be performing a duty or carrying out a function under the EPBC Act or the regulations. The offence is punishable on conviction by imprisonment for not more than 1 year, a fine not more than 60 penalty units, or both. An extract of section 491 of the EPBC Act is attached

Signed  _____

Full name Orla Ferguson

Organisation AECOM Australia Pty Ltd

Date 10 / 07 / 2024

Footnote:

1. Where an organisation or a team of auditors is nominated to undertake the audit, each individual that is nominated is to complete a separate declaration.
2. The curriculum vitae of all audit team members are to be submitted with the declaration outlining their relevant experience and qualifications.

Appendix A—Auditor’s Declaration of Independence

I, Robert Storrs _____ of AECOM Australia Pty Ltd, Level 8, 540 Wickham Street, Fortitude Valley, QLD, 4006 _____ declare that to the best of my knowledge and belief I and my organisation do not have any conflicting or competing interests with:

The Auditee Arrow Energy Pty Ltd _____, the Auditee’s staff or representatives or other persons associated with the Auditee, including any personal, financial, business or employment relationship, except to the extent detailed below.

The project to be audited Surat Gas Expansion Project, Surat Basin, QLD, EPBC 2010/5344 _____.

I shall notify the Department of the Environment within seven days of any change in these circumstances or any other change that may affect my independent status.

I shall at all times observe any professional code of conduct and/or ethics applicable to undertaking audits (i.e. – as prescribed by the agency with which I hold accreditation/membership). I take full responsibility for any factual inaccuracy or mistake made in giving this declaration, particularly to the extent that others rely upon the truth of this declaration. I acknowledge that the Department of the Environment may request further information to verify my independence at any time.

Details of any personal, financial, business or employment relationship with the Auditee, the Auditee’s staff, representatives or associated persons. (This is in the context of both the person making the declaration and the organisation that they are employed by – specify ‘nil’ if none):

Rob has not worked as a key team member on any Arrow Energy projects.

It is noted that AECOM has worked on numerous projects for Arrow Energy at the Brisbane Office. The audit team members have been selected as they have the experience and technical skill and do not have any conflicts of interest with the client (Arrow). To mitigate future potential conflict of interest, the project and all project information and reports will be confidentially managed and only accessible to the audit team and the client.

Details of any personal, financial, business or employment relationship with the project to be audited. (This is in the context of both the person making the declaration and the organisation that they are employed by - specify ‘nil’ if none):

Nil

Details of audit qualifications and professional accreditations/memberships. (Include copies of current audit qualifications and current professional accreditations/memberships) :

- *Environment Institute of Australia and New Zealand – Member since 2009*
- *Environmental Management Systems Auditor Training Course 2002*

- *RABQSA Environmental Auditor 2003 – 2018*
 - o *Environmental Management Systems (EMS)*
 - o *Site Contamination Assessment – Phase 1, 2 and 3 Audits*
 - o *Environmental Report Verification*

Resume attached.

In making this declaration, I am aware that section 491 of the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) makes it an offence in certain circumstances to knowingly provide false or misleading information or documents to specified persons who are known to be performing a duty or carrying out a function under the EPBC Act or the regulations. The offence is punishable on conviction by imprisonment for not more than 1 year, a fine not more than 60 penalty units, or both. An extract of section 491 of the EPBC Act is attached

Signed  _____

Full name Robert Charles Andrew Storrs

Organisation AECOM Australia Pty Ltd

Date 04 / 06 / 2024

Footnote:

1. Where an organisation or a team of auditors is nominated to undertake the audit, each individual that is nominated is to complete a separate declaration.
2. The curriculum vitae of all audit team members are to be submitted with the declaration outlining their relevant experience and qualifications.

Appendix E

Auditors' Curricula Vitae

Holly Scoble (*she/her*)
Air Quality Scientist

Qualifications

Master of Philosophy (Climate and Aerosol Science), expected graduation 2027

Bachelor of Science (Biological and Earth Sciences), graduated 2018

Diploma of Business Management, graduated 2015

Affiliations

Member, Clean Air Society of Australia, and New Zealand (CASANZ) Member, joined 2019

Member, Clean Energy Council, joined 2022

Member, Environmental Institute of Australia, and New Zealand (EISANZ), joined 2023

Volunteer, International Conference on Nucleation and Atmospheric Aerosols (ICNAA), attended 2023

Training

Generic Induction Coal Surface Program, 2019 (Pinnacle Safety and Training)

Workplace Health and Safety Queensland Construction Induction, 2019 (Bluedog Training)

RIIWH204D Work safely at heights, 2019 (Pinnacle Safety and Training)

RIIVEH305F Operate and maintain a four wheel drive vehicle, 2023 (Australian 4WD and Advanced Education Pty Ltd)

Standard MHFA, 2024 (Mental Health First Aid Australia)

Publication History

Ryan M, & Scoble H, 2022, '*Construction Dust Management for the Cross River Rail Project*', paper presented at the bi-annual CASANZ conference, Adelaide, SA, Australia, 12-14 September 2022.



Career History

Holly Scoble is a professional-level environmental scientist within AECOM's Air Quality Team in Brisbane. She has a Bachelor of Science majoring in Biological and Earth Sciences and is currently undertaking a master's degree, researching climate and atmospheric aerosols.

Holly commenced her career in air quality and greenhouse gas consulting at AECOM in 2019. She has experience in environmental management, reporting and project and client management, having recently completed a long-term environmental audit for two windfarm projects. Holly also has experience with numerous environmental assessments, specialising in air quality and greenhouse gas, for major infrastructure projects in multiple industries in Queensland and Australia.

Holly is comfortable communicating with a range of technical and non-technical stakeholders, and has experience managing work programs, scheduling activities, and performing extended site visits and on-site monitoring programs.

Holly has worked on multiple large scale environmental monitoring projects in Australia. Projects span across a variety of sectors including:

- oil and gas
- mining and refining
- renewable energy, including:
 - wind farms
 - pumped hydro
- major transport infrastructure, including:

- road
- rail
- shipping
- aviation
- quarrying
- commercial and industrial developments
- defence

Her key skills and responsibilities as an air quality scientist include:

- environmental audit experience
- environmental policy and legislation interpretation
- data collection and statistical analysis of collected data.
- report writing.
- strong fieldwork experience in remote locations
- project and client management.
- geospatial data analysis (using ArcPro GIS)
- focus on safety, environmental and cultural heritage objectives.

Detailed experience

Holly has completed or offered input to various projects. Recent examples include:

- Internal environmental audit for construction of Wambo Wind Farm Stage 2, Diamondy, Queensland (2024)
- Internal environmental audit for construction of Wambo Wind Farm Stage 1, Diamondy, Queensland (2023- current)
- project management, data validation and support for the air quality monitoring and management project (AQMMP) at Rio Tinto Alcan Gove bauxite mine and refinery, Northern Territory (2020 - current)
- project management, dispersion modelling, reporting and interpretation of policy as part of air quality advisory team for construction and operation of Cross River Rail Project, Brisbane, Queensland (2019-current)
- fieldwork coordinator for targeted ecology survey team on TMR linear infrastructure project, Queensland (2022-2023)
- dispersion modelling, reporting, interpretation of policy and air quality monitoring for several packages of the Inland Rail Project, Queensland (2019-2023)
- dispersion modelling, reporting, and interpretation of policy for construction and operation of Darwin Shiplift, Darwin, Northern Territory (2019-2023)
- dispersion modelling, reporting, and interpretation of policy for Nerimbera Quarry, Central Queensland (2020-2023)
- greenhouse gas inventories for expansion of Origin gas fields, Queensland (2021-2022)
- greenhouse gas inventories for expansion of Sweetpea gas fields, Western Australia (2021-2022)
- Internal AECOM Client Account Manager (CAM) Coordinator for platinum level defence client (2021-2022)
- project management, air quality monitoring, reporting and interpretation of policy for the Meandu coal mine in south-eastern Queensland (2019 to 2022)

CLEAN AIR SOCIETY OF AUSTRALIA AND NEW ZEALAND

Holly Scoble

Corporate - T2 - Member Member

ALL MEMBERS OF THE CLEAN AIR SOCIETY OF AUSTRALIA AND NEW ZEALAND ARE BOUND BY THE
PROFESSIONAL CODE OF ETHICS, DEVELOPED BY THE SOCIETY AS A PRINCIPLE FOR PROFESSIONAL
CONDUCT AND AGREE TO ABIDE BY THE STATEMENTS TO THE BEST OF THEIR ABILITY.



Francine Manansala
SOCIETY PRESIDENT



CASANZ
CLEAN AIR SOCIETY
OF AUSTRALIA & NEW ZEALAND

ORLA FERGUSON

Associate Director - Environment

Qualifications

MSc. in Environmental Science
BSc. (Hons) in Chemistry
Diploma in Computing
Lead Auditor ISO19011:2018,
ISO14001:2016
Certified Environmental Practitioner Site
Contamination Specialist (CEnvP SC)

Affiliations

Active Member of Australian Land
Groundwater Association (ALGA)



Orla is an Environmental Scientist and Lead Auditor that specialises in contaminated land investigation/ remediation and compliance auditing for assessment of environmental risks and liabilities for various sectors including power, defence, energy, technology, transport, industrial and property development. She is an experienced project manager and has great communication skills that enables effective collaboration within multi- disciplinary projects.

Career history

Orla has over twenty years' experience in the Environmental industry, having worked in Australia, Ireland and the Middle East. Orla is a Lead Auditor of Environmental Management Systems and is currently conducting audits of construction sites for large scale data centre facilities in NSW, at renewable and coal fired power stations in NSW and Victoria to assess compliance with relevant local, state and federal legislation, and development consent conditions, licences and permits, and at airport facilities to meet their specific regulations.

Orla also works as a Site Auditor Assistant with numerous EPA Accredited Auditors in the Sydney office across various jurisdictions within Australia. Her technical knowledge and understanding of contaminated land legislation is at a high level and has resulted in her being a Lead Verifier within the Environment business group at AECOM.

Selected project experience

Confidential Power Sector client - Environmental Compliance Uplift (ECU) Program (ECU), 2020 – 2024

Orla has been one of the Lead Verifiers for the ECU program at various gas, wind and hydroelectric power generation facilities in NSW and VIC. Orla was involved in the setup of the program to provide information on the client's compliance obligations with legal requirements relating to the protection of the environment. At this stage, works have been completed at eleven sites, with four more sites in progress.

Infrabuild, Rooty Hill, Annual Environmental Monitoring Report, 2021-2024

Orla has been Lead Verifier for the annual reporting of Infrabuild facilities environmental monitoring and compliance assessment to the NSW Department of Planning which involves collation and assessment of data to demonstrate compliance and address any areas of concern identified by the Department.

Project Zeus (confidential high technology client), Environmental Health and Safety (EHS) services of data centre facility, 2020 – current

Orla project manages and is both Lead Auditor and Lead Verifier for compliance audits during the construction and handover of two data centre facilities in NSW, prior to the occupation of the site by the facility manager and client. During this project, Orla has overseen the Environmental Health and Safety (EH&S) technical advisory services provided to the client and conducted construction compliance site audits to limit any potential future liability for the client.

Compliance Audits of Desalination plant at Wonthaggi in Victoria, 2023

Orla conduct quarterly audits of Watersure who operate the Desalination plant at Wonthaggi in Victoria's south east and AquaSure who manage the contract for operation of the plant on behalf of the Victorian Department of Energy, Environment and Climate Action (DECCA). The audits are based on ISO14001 and assess whether project activities conducted by Watersure and AquaSure have been undertaken in accordance with the environmental management system (EMS), the environmental management plan (EMP) and project requirements.

Damar Compliance Audit of Wetherill Park facility, 2021

Orla led the compliance audit and provision of a baseline assessment for the lease of the DAMAR facilities at two properties in Wetherill Park, NSW to identify potential areas of concern based on evaluation of on-site and off-site practices that could have had an environmental impact on soil, groundwater or surface water quality at or near the sites.

AGL Proposed Battery Energy Storage Station (BESS), AGL, New South Wales, 2021–Present

Orla has recently been the Lead Verifier for the contamination component of the proposed AGL BESS facility at Broken Hill where remediation and validation works were required to meet development consent conditions. All deliverables were reported to the client in a timely manner to meet their objectives.

Eraring Power Station, Origin, New South Wales, 2014–Present

Orla is currently the project manager for Contamination Advisory at Eraring Power Station project. She provides technical advice on contamination aspects for the Site, including Due Diligence, PFAS investigations, human health and ecological risk assessments, development of PFAS Management Plan, supporting documents for submission of Environmental Impact Statement (EIS) to the department of Planning Infrastructure and the Environment (DPIE), communications with NSW EPA and review of ongoing monitoring data of surface water, sediments, and groundwater to assess temporal trends of contaminants from the Power Station.

Various Due Diligence Sites, Various Clients, New South Wales, 2013–Present

Orla has led the contaminated land team for the Environmental Due Diligence for the purchase of various large infrastructure projects in NSW. Orla has managed and liaised with clients for the vendor environmental due diligence for the sale of 80 (over two transactions) retail service station properties across Australia in a very tight time frame to meet client requirements and objectives. She has also been involved with managing the environmental due diligence for the purchase of over 500 retail service station properties across Australia. She has been providing contaminated land advice as part of the due diligence for proposed warehouse facilities across NSW.

Koppers Chemical Manufacturing, Koppers, New South Wales, Australian Capital Territory, South Australia, Western Australia, 2011–Present

Orla has assisted NSW EPA, SA EPA and WA DEC accredited Site Auditors, to undertake audits of various contaminated sites in NSW, ACT, SA and WA. In this role, Orla conducted a detailed review of the consultant's investigation and remediation planning work in accordance with NSW contaminated site legislation. This experience has been invaluable in developing her strong understanding of relevant NSW guidelines and regulations. This is an industrial chemical property in Newcastle for ongoing industrial use following a Voluntary Management Proposal (VMP) and large-scale remediation works.

Regional Contamination Investigation Program, Department of Defence, New South Wales and Australian Capital Territory, 2017–2020

Orla was the Region Lead for RCIP across Defence estate in NSW and ACT as part of a three-year program to assist Defence to manage their contamination risk. Orla led a large team in NSW to conduct work safely and deliver numerous contamination investigation and remediation projects to Defence to enable them to manage their contamination risk and protect human health and the environment.



*The CEnvP Scheme Certification Board
hereby attests that*

Orla Ferguson

*having fulfilled all the requirements of the Board
has been certified as a*

*Certified Environmental Practitioner
Site Contamination Specialist*

with Registration Number

SC41212

on the date

01-Nov-2023

Chairperson of the Board

30/06/2026

Certification Expiry Date



Certificate Number

C328395

Issued on

07/10/2021



SAI GLOBAL

Statement of Attendance

This is to certify that

Orla Ferguson (Monahan)

has attended

Lead Auditor Training ISO 19011:2018

Rod Beath

Head Of Product Compliance And Learning

Certificate Number

C327835

Date Attained

24/08/2021

Certificate Issue Date

23/09/2021



Certificate of Attainment

This is to certify that

Orla Ferguson (Monahan)

has been assessed as having fulfilled the following requirements

Exemplar Global-EM

Environmental Management Systems

By attending the training course

**Auditing an Environmental Management System
ISO 14001:2015**



Rod Beath

Head Of Product Compliance And Learning

A handwritten signature in black ink, appearing to read "R Beath", positioned below the printed name and title.

Robert Storrs
Technical Director



Qualifications

Bachelor of Environmental Science (Land Resources)
Honours: First Class University of Wollongong, NSW,
Australia, 1995

Affiliations

Member of the AECOM NWA Leadership Team

Queensland committee for economic development of
Australia (CEDA) trustee

Member of the Environment Institute of Australia and
New Zealand (EIANZ)

Awards

URS Asia Pacific Pyramid Awards for Project
Management and Business Development in 2011

Career History

Rob Storrs is a Technical Director Environmental Scientist and Group Director for Environment QNT with over 24 years' experience in managing and investigating environmental issues and project managing environmental approvals processes. He has worked with the mining, oil and gas and chemical industries across Asia Pacific and the UK for the past 18 years. Rob has extensive experience managing projects through the EIA and EPBC process, having led over 6 EIAs over 6 years, including project managing the successful Santos GLNG Gas Field Development Project EIS.

Detailed Experience**AECOM***Environmental Impact Assessment / Approvals
Environment Manager, ARTC Inland Rail EIS's, 2017 - 2023*

Rob is the Environment Manager for the Future Freight JV (FFJV) responsible for the delivery of four Qld EIS's and one NSW EIS for the ARTC Inland Rail project. In this role Rob is responsible for the overall EIS delivery and meeting the client and regulator expectations. Rob is part of the project leadership team and reports to the board. For this project FFJV are delivering both the engineering and environment components requiring careful coordination between all disciplines, the client and affected stakeholders.

*Environmental Impact Assessment
Project Director/ Technical advisor, Idemitsu Expansion EIS, 2019– ongoing*

Rob was the Project Director and is the ongoing technical advisor/reviewer for the preparation of an underground coal mine expansion EIS in the Bowen Basin. This project is seeking approval under the EP Act.

*Environmental Impact Assessment
Project Sponsor, Rio Tinto Residue Disposal Area Pre-Feasibility Study, 2017– 2019*

Rob was project sponsor and overseer for this environmental and engineering project for the Rio Tinto operations in Gove NT. A PFS for the decommissioning of expansive red mud dams has never been completed before and was closely scrutinised to get the best result.

*Environmental Impact Assessment
Project Director/ Technical advisor, BMA Saraji East Project EIS, 2016– ongoing*

Rob is the Project Director and is the ongoing technical advisor/reviewer for the preparation of an underground coal mine expansion EIS in the Bowen Basin. This project is seeking approval under the EP Act.

*Environmental Impact Assessment / Approvals
Project Manager, Senex Western Surat Gas Project EIS, 2015– ongoing*

Rob was the Project Manager for the preparation of an EIS for the development of up to 1,000 coal seam gas wells over approximately 1,000 km², gathering lines and treatment facilities. In this role Rob was responsible for the overall EIS delivery and meeting the client and regulator expectations.

Project Manager, Santos GLNG Gas Field Development Project EIS, 2013–2015

Rob was the Project Manager for the preparation of a state significant EIS for the expansion of the Santos GLNG gas field to increase the number of coal seam

gas wells (6,100 over greater than 10,000 km²), gathering lines and treatment facilities. The EIS was successfully submitted on time and budget and received the least comments to the Coordinator General from any CSG project to date resulting in not supplementary report being required.

Expert Witness, Confidential Project, Queensland, 2014 - 2015

Rob assisted a coal mining client respond to Land Court requirements by providing expert witness services for the area of cumulative impact assessment.

Project Manager, Alpha Coal Mine Project EIS, Galilee Basin Queensland, Hancock/GVK, 2010 - 2012

Rob was the Project Manager for this state-significant project coal mine EIS, the first in the Galilee Basin to receive state and federal approval. The project is a 30 Mtpa greenfield open-cut coal mine and 500 km rail line and Rob was responsible for all aspects of the mine EIS and the overall delivery and combination of the mine and rail components. During the project, Rob was heavily involved in government (local, state and federal) and community liaison and negotiating approval conditions. In recognition of his work on this project Rob was awarded the Project Management and Business Development Pyramid Awards from URS for the Asia Pacific region in 2011.

Project Manager, Kevin's Corner Coal Mine Project EIS, Galilee Basin Queensland, Hancock/GVK, 2011 - 2013

Rob was the Project Manager for this state-significant project coal mine EIS. The Project a 30 Mtpa greenfield underground and open-cut coal mine has received both federal and state approval. Rob was responsible for all aspects of the EIS and SEIS including deliverable, schedule and budget. During the project, Rob was heavily involved in government (local, state and federal) and community liaison. Rob played an important role in developing the environmental authority conditions for the project allowing them to be tabled in the Coordinator-Generals report as stated conditions so reducing the risk to Hancock/GVK of court appeals.

Project Manager, MIM Environmental Authority Transition Process, Xstrata Copper, 2009 - 2011

Rob was the Project Manager on this challenging environmental approvals project. The then 85 year old Mount Isa Mine was required to develop a new Environmental Management Plan and Environmental Authority conditions, due to legislation changes brought under the Queensland EP Act in 2009. Rob managed over eight specialist sub-consultants who worked on areas from human health risk assessments, and hydrological modelling, to particulate and noise modelling. Additionally a program of expert peer review was developed and engaged to confirm the findings and add rigour to the process. The end result was a

new EA for the site and transitional conditions allowing MIM to achieve both business and environmental goals.

Project Manager, Caval Ridge Coal Mine Project EIS, Central Queensland, BMA, 2009 - 2010

Rob was the Project Manager for the state-significant Caval Ridge EIS, an 8 Mtpa greenfield open-cut coal mine situated near Moranbah in central Queensland. Rob was responsible for all aspects of the EIS including deliverables, schedule, budgets and sub-consultants. In addition to the EIS, Rob was involved in the change applications submitted to the Coordinator-General for the project's accommodation village. The project was the centre of community concerns about dust impacts and the introduction of 100% FIFO. URS played a key role in assisting to negotiate an acceptable outcome for BMA on these issues. This project has been approved and is currently being constructed.

Project Manager / Project Director, Ellensfield Coal Mine Project EIS, Central Queensland, Vale, 2007 - 2013

Rob was the initial Project Manager (2007 – 2010) for the Ellensfield EIS, a 5 Mtpa greenfield underground coal mine situated near Moranbah in central Queensland before assuming the role of Project Director on this project in 2011. This project included aspects of coal seam gas, power generation and desalination. Rob was responsible for all aspects of the EIS including deliverables, schedule, budgets and sub-consultants. Over the course of the EIS, Rob participated in protracted regulator negotiations and project changes. This project was a voluntary EIS under the EP Act and is in the final stages of approval.

Baseline Study Manager, Large Oil Shale Deposit EIS, Queensland, Confidential Client, 2007 - 2008

Rob was the Assistant Project Manager and responsible for thirteen study components of a confidential major EIS baseline project in Queensland including a mine, power station, pipelines and port. The study areas and sub-consultants that Rob was responsible for included air and noise, surface water, marine water quality, coastal processes and acid sulphate soils. The project was unique for Queensland and required the management of a wide variety of studies in difficult to access areas.

Project Director, Environmental Approvals - Micro LNG Facility, Condamine Region, BOC, 2010 - 2014

Rob was the Project Director for the environmental approvals process for a micro LNG facility to be located in the Condamine Region. The project included the development of an EM Plan, EA conditions and financial assurance information to support a Petroleum Licence application.

Other Projects:

- Assisted in review and summary of Environmental Management Plans and legal requirements for a Greenfield gold mine in NSW, Australia (2004).
- Development of Environmental Management Plans (EMPs) for EMS implementation at central Queensland Coal Mine sites.
- Soil and rehabilitation component of the Alcan Gove (Northern Territory Aluminum Refinery) expansion EIS.

Auditing

Project Director, LNG Project Compliance Audit (Pipeline, Gas Field and Plant), Australia Pacific LNG, 2012

Rob as a certified environmental auditor was the Project Director for the Australia Pacific LNG environmental authority compliance audits. These audits covered the entire project (pipeline, gas field and plant) and addressed the state and federal approval conditions. The audit reports received favourable feedback from both the regulator and APLNG and assisted APLNG to update their compliance program for future audits.

Project Manager, Contaminated Site Phase I Auditing, Southern Queensland, Department of Defence, 2009-2010

Rob was the Project Manager and auditor for a phase I environmental assessment of the Oakey air base in southern Queensland. The site dates from pre-WWII and the project included desktop assessments, site inspections and report writing. The project involved getting the required security clearances and working closely with defence personnel to build an accurate picture of the sites' varied history and identify key risks for further investigation.

Auditor, Xstrata Copper Sustainability Auditing, 2009

As part of their corporate sustainable development procedures, Xstrata developed a Sustainable Development Charter, which is routinely audited at selected sites. Xstrata Copper Mount Isa is a large mine and smelting operation in central Queensland and Rob was one of five auditors who were based on-site for a week undertaking the assessment. The audit required the rapid assimilation of new and varied information and delivery of findings at the end of the audit period.

Phase I Auditor, Various Petroleum Sites, Australia and the Pacific Islands, 2002 - 2009

In his time at URS, Rob has undertaken a large number of phase I investigations at petroleum sites, including sites throughout Queensland, New Caledonia and Western Samoa. He has managed the vast majority of these projects.

Other Projects:

- QNI Ore Supplier Environmental Review, New Caledonia, Nickel Mines.
- Pisces Coal Project EIS review (Central Queensland).
- Corporate sustainability report verification of mining, smelting and construction sites in Australia and South Africa.
- Project Manager of numerous Shell Engineering and Exxon Mobil phase 1 and phase 2 contaminated site investigations and validation assessments within Australia and the Pacific Islands (Samoa, New Caledonia and PNG).
- Engaged in the development of an ISO14001 certified EMS for multiple sites for an international mining company and a national meat producer.
- Project Manager and field auditor for an Australia wide abattoir environmental benchmarking project. This included ten sites covering five states.
- Capping and contamination assessment of the historical Toowoomba landfill, Queensland, Australia.

Other*Client Account Manager for Hancock/GVK 2010–ongoing*

Rob was the URS client account manager for Hancock GVK. He held that position since developing the relationship as part of the Alpha Coal EIS. Rob was the primary contact for all URS work with Hancock GVK. Through growing this mutually beneficial relationship URS has undertaken approvals, engineering, planning, monitoring and compliance work packages.

Project Manager, Chlorinated Solvent Site Investigation, Brisbane, Confidential Client, 2006 - 2007

Rob was the Project Manager on confidential chlorinated solvent site investigation and remediation project in Brisbane. Rob planned, supervised and undertook drilling and groundwater investigations as well as soil vapour testing to determine potential levels of impact and risk at more than one industrial site. In this role Rob engaged and liaised with regulator third party reviewers.

Other Projects:

- Thalanga Copper Mine and highway reward mine environmental risk assessment. Central Queensland.
- Thalanga Copper Mine West rock waste dump drainage and erosion control design.
- James Hardie sand mining lease relinquishment criteria and licencing.

URS Corporation Ltd (UK)*URS Commercial Manager and UK Scheduler, Retail Site Remediation, Exxon Mobile, UK Midlands, 2005 - 2006*

Rob was responsible for coordinating the Exxon Mobil retail site work for the UK Midlands and was URS commercial manager and UK (Wales, Scotland and England) scheduler for the project decommissioning and risk assessment activities (over 70 sites). Rob was required to know the progress on all sites, submit variation requests and maintain the portfolio schedule. Rob was one of two key client contacts and ensured that the program stayed on track.

Project Manager and Auditor, Various Industrial Site Phase I and Phase II Environmental Audits, UK, 2005 - 2006

During his time in the UK, Rob undertook phase I and phase II contaminated site investigations at a variety of business types including chemical, packaging, environmental laboratory, engineering and petroleum sites. This assisted in giving Rob a broad background and understanding of a wide variety of industry types and their potential issues.

Project Manager, Pollution Prevention and Control (PPC) Permit Support and Application Site Report at BP Wytch Farm, Dorset, England, 2005 - 2006

Rob was the Project Manager and principal author of the Pollution Prevention and Control (PPC) permit application and the Application Site Report at BP Wytch Farm oilfield (largest land-based oilfield in Western Europe). Site work included review of site infrastructure, procedures and risk assessment. This was Rob's first real exposure to upstream oil gathering on a large scale and has assisted position his understanding for future oil and gas work.

Project Manager, PPC permit and Application Site Report, Vopak Terminal Windmill, Barry, Wales, 2005 - 2006

Rob was the Project Manager and principal author of the Pollution Prevention and Control (PPC) permit Report for Vopak Terminal Windmill, Barry – operations at the site include large-scale methanol storage, ship unloading and material transfer. This project required and in-depth knowledge of the process and control processes to manage a large industrial facility.

*PPC Support, Rhodia and Thermphos Chemical Plants, Birmingham, 2006**Project Manager and Co-author, Verification Scoping Study, International Council on Mining and Metals, London, 2005***Other Projects:**

- QNI Ore supplier review – 4 nickel mines in New Caledonia

- Contaminated site investigation of a sewage spill at the Rio Tinto Weipa mine site.
- Soil and rehabilitation component of the Alcan Gove (Northern Territory Aluminium Refinery) expansion EIS.

Training

- Certified RABQSA Environmental Auditor, 2003 - 2018
- Certified Project Manager, 2008
- Certificate in Training Small Groups, "Assessment & Workplace Training".
- Defensive driving
- Environmental Management Systems Auditor Training Course 2002
- Health and Safety 24hr course

Professional History

2001 - Present

AECOM Australia (previous URS Australia)

Technical Director – Environment

Group Director Environment QNT

1999- 2000

Cooks River Environmental Assessment & Education

Project (Stormwater Trust – NSW)

Environmental Assessment Officer

1997 - 1999

BHP Coal

Environmental Officer

1996

Dames & Moore

Environmental Planner/Waste Audit Leader



RABQSA International
Certifies
Robert Storrs

has satisfied all of the requirements for the grade of
Auditor
in the Qualification Based
Environmental Auditor Scheme

with the following Scope of Certification
02,03,04.

01. Environmental Management Audit
03. Site Contamination Assessment
05. Compliance Audit
08. CONAMA 306/02

02. Environmental Management Systems (EMS) Audit
04. Environmental Report Verification
06. Waste Auditing

14774

Certificate Number

March 2003

Certificate Date

March 2018

Expires

Peter Holtmann

President & Chief Executive Officer