

SUPPLEMENTARY REPORT TO THE EIS



2 **Project Approvals**

This chapter has been developed to supplement the original Project Approvals chapter included in the EIS. The Project Approvals chapter (Section 2) of the EIS identified the approvals required for construction, operation and decommissioning of the Project under applicable pieces of Queensland legislation.

The Project Approvals chapter (Section 2) of the EIS identified the EIS as a mechanism to assist in securing the required approvals under the *Environmental Protection Act 1994* (EP Act) and the *Petroleum and Gas (Production and Safety) Act 2004* (P&G Act) and refers to the relevant planning schemes, policies and regional plans that apply to the Project.

The focus of the Project Approvals chapter (Section 2) of the SREIS is to identify:

- Additional or newly required approvals as a result of material changes to the Project since the release of the EIS; and
- Changes to the statutory environment which have occurred since the preparation of the EIS.

2.1 Environmental Framework and Coal Seam Gas Approvals Process

Unlike conventional gas resources, coal seam gas (CSG) resources are extensive, requiring widespread development to recover the resource over the life of the Project, which is expected to be 40 years. The yield from target coal seams is variable across the resource, leading to uncertainty about the number, timing and location of wells required to dewater the coal seams and extract the gas. Prior to considering environmental and social constraints, selection of the ideal location of infrastructure required to treat the CSG water and process the gas is also uncertain. This is driven by exploration results, landowner consultation and optimisation of well placement and water and gas gathering systems.

This lack of certainty about the preferred location of infrastructure is an issue for environmental impact assessment, because the impacts at a specific location cannot be fully understood, scoped and assessed at the planning phase. However, they can be described based on the typical impacts inherent to individual Project activities.

To overcome uncertainty inherent to the planning of CSG projects, Arrow has developed the Environmental Framework for the Project (Section 7 of the EIS), to identify impacts in the planning phase and manage the potential impacts in the construction and operation phases.

This is achieved through the application of environmental controls that reflect the sensitivity or vulnerability of environmental values of each development area and identifies development which is not appropriate for the area. This is achieved through the identification of constraints to development and the establishment of environmental management controls required to facilitate Project activities in constrained areas. Constraints mapping is an integral part of the environmental framework and is informed by the environmental impact assessment process undertaken in the EIS. Constraints



mapping guides site and route selection that seeks to avoid and minimise impacts, thereby protecting environmental values of each development area. Further details regarding the environmental framework are contained within the Environmental Framework chapter (Section 7) of the EIS.

The assessment process developed for the environmental framework facilitates approval of the Project through a phased approach, where more detailed Project information can be progressively incorporated to inform Project approvals subsequent to the EIS, when details such as exact locations are established for specific facilities. The approvals process for CSG and petroleum activities is depicted in Figure 2–1.

2.1.1 Environmental Impact Statement

An EIS has been prepared for the Project under Chapter 3 of the EP Act and s.133 of the *Environmental Protection and Biodiversity Conservation Act 1999* (EPBC Act). The purpose of the EIS was to inform a decision on whether the Project should proceed, and if so, under what conditions. The final EIS was submitted to the Chief Executive of EHP in February 2013 and released for public review and comment from 11 March 2013 to 23 April 2013. The Chief Executive of EHP received 53 submissions relating to the EIS during this time.

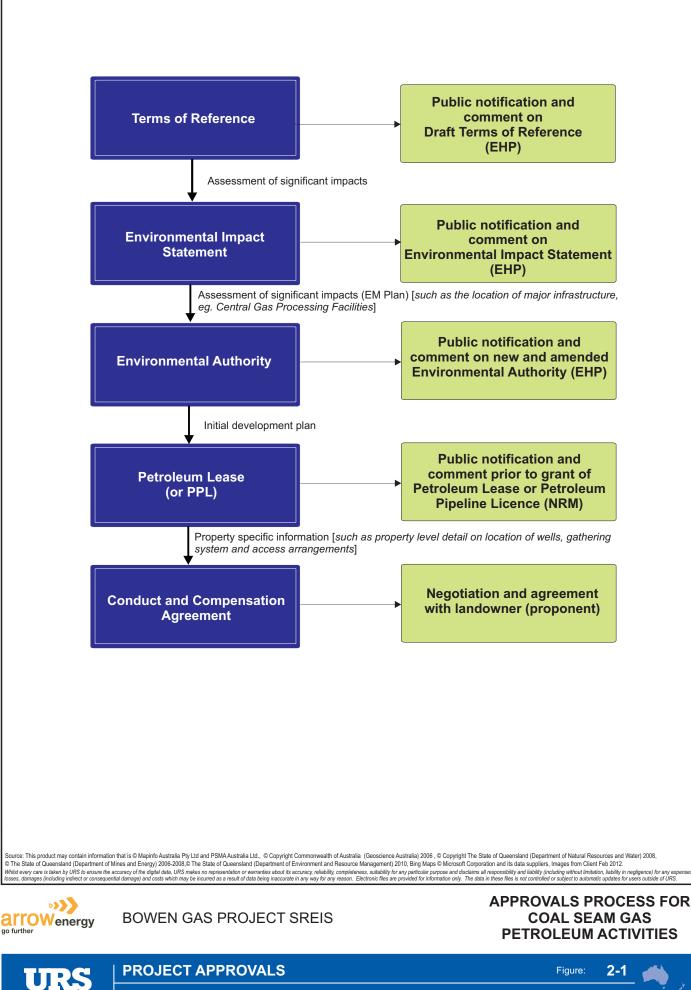
Under s.56 of the EP Act, following receipt of submissions, the proponent is required to prepare a supplementary report to address the matters raised in submissions and, based on the submissions, to include any corrections or clarifications to the EIS and provide further information and results from additional studies. This SREIS has been prepared for this purpose. Further, the SREIS presents any material changes to the conceptual project description and presents results from further impact assessment deemed necessary as a result of these changes.

As part of the EIS process the Chief Executive of EHP will prepare an assessment report, which sets out the recommendations under which the Project should proceed and provides direction to government agencies and regulatory authorities for the assessment and conditioning of environmental authorities (EAs) and permits required by the proponent to construct and operate the Project.

2.1.2 Environmental Authority

An EA is required to commence construction and operation on a petroleum lease. The proponent may apply for an EA or amend an existing EA. An EA sets out outcome focussed conditions under which a project will be constructed and operated. The application(s) for environmental authorities will be in accordance with the requirements of the EP Act and any relevant guidelines published by EHP.





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File No:42627140-g-1013.cdr Drawn: RG Approved: DS

Date: 05-03-2014

Rev.A

2.1.3 Petroleum Lease

Prior to undertaking petroleum activities associated with production, the proponent must have a petroleum lease granted by the Department of Natural Resources and Mines (NRM). Petroleum lease applications must be published and public comment sought prior to grant of the lease. An initial development plan, which typically covers the first five years of development, will be submitted with the application. The initial development plan will contain detailed information about the nature and extent of activities to be carried out under the lease or licence. Subsequent development plans are required for each stage of proposed new development and provide detailed information about subsequent development and changes to authorised development.

2.1.4 Conduct and Compensation Agreement

The proponent must negotiate a Conduct and Compensation Agreement under the P&G Act with landowners on whose land the petroleum activities are proposed. The negotiation of the agreement provides an opportunity to landowners to raise concerns specific to their property and to reach an agreement with the proponent on where, how and when development will occur on their property. The proponent is required to provide detailed information to the landowner about the proposed activities including the location, the timing, the measures to manage impacts, the rehabilitation and the compensation. Negotiation of compensation includes access to dispute resolution and the Land Court of Queensland if an agreement cannot be reached through negotiation.

2.2 Changes to the Project Description Triggering new Approvals

It is acknowledged that a number of changes to the project description have occurred since the release of the EIS relating to the technology and engineering behind the Project. These changes to the project description are detailed in full in the Project Description chapter (Section 3) of the SREIS. The approvals triggered by these changes are outlined in the sections below. The approvals outlined are current at the time of writing. However it is noted that the approvals process will be undertaken in line with the current statutory requirements at the time of application.

2.3 Changes to the Statutory Framework

At the time of preparing this chapter (March, 2014), the Commonwealth and State regulatory frameworks which administer and regulate resource activities of this nature have recently undergone a number of reforms. At a state level, these reforms are intended to streamline and simplify the approvals process and in-turn, foster growth and development.

Changes to statute have occurred and are likely to continue during the assessment period for the Project. Examples of legislative changes that have occurred include:

• Commonwealth level changes to the EPBC Act, including:



- Changes to the EPBC Act on 22 June 2013, making water resources a matter of national environmental significance (MNES) in relation to CSG and large coal mining developments.
- State wide legislative level:
 - EP Act through the *Environmental Protection (Greentape Reduction) and Other Legislation Amendment Act 2012* (Greentape Reduction Act);
 - The repealing of the Strategic Cropping Land Act 2011 (expected to occur in early mid 2014);
 - The introduction of the Regional Planning Interests Bill 2013 to replace the Strategic Cropping Land Act 2011; and
 - New State Planning Policy (SPP) implemented on 2 December 2013 under the Sustainable Planning Act 2009 (SP Act). The single SPP replaces the 12 existing SPPs to present one cohesive policy that represents all the state's interests in planning matters.
- Regional planning:
 - Statutory Regional Plan for Central Queensland; and
 - SP Act compliant local government planning schemes being rolled out across the state.

2.3.1 Environment Protection and Biodiversity Conservation Act 1999

2.3.1.1 Water Resource Trigger

Changes made to the EPBC Act on 22 June 2013, resulted in water resources in relation to CSG and large coal mining developments now being considered as a MNES. In accordance with this legislative change, on 17 October 2013, the Commonwealth Minister for Environment decided that water resources were a controlling provision under Sections 24D and 24E of the EPBC Act for the Project. This was due to the information available to the Minister at that time, indicating that the Project may potentially directly or indirectly result in a substantial change to the hydrology and quality of water resources interfered with by Project activities.

As such, the controlling provisions under the EPBC Act which now apply to the Project include:

- Wetlands of international importance (Ramsar wetlands) (sections 16 and 17B);
- Listed threatened species and ecological communities (sections 18 and 18A);
- Listed migratory species (sections 20 and 20A); and
- Water resources (sections 24D and 24E).

2.3.1.2 Independent Expert Scientific Committee

On 14 April 2013, EHP sought advice from the Independent Expert Scientific Committee (IESC) on CSG and large coal mining developments in relation to the Project (on behalf of DSEWPaC through the bilateral agreement). Advice was sought regarding the adequacy of the draft EIS with respect to the following elements, considered in the assessment of the Project under sections 24D and 24E of the EPBC Act.

• The potential for hydraulic stimulation to enhance interconnection of groundwater aquifers and adequately address the implications of such interconnection on groundwater quality and level;



- The potential for interconnection of aquifers and/or CSG contamination in target and non-target aquifers particularly at fault lines, with or without fraccing;
- Details on groundwater impacts due to the Project taking account of cumulative impacts incorporating coal and gas projects already operating in the location; and
- The management of impacts on waterways and water quality and the management of saline groundwater extracted from the gas wells.

The final publically released EIS for the Project and this SREIS have aimed to address these specific areas of assessment through the surface water, groundwater and hydrogeological studies contained in these publications. Furthermore, this SREIS contains additional information pertaining to hydrology and geomorphology (see Hydrology and Geomorphology chapter (Section 9) and Hydrology and Geomorphology Technical Report (Appendix G) of the SREIS) which was unavailable at the time of preparing the EIS to address sections 24D and 24E of the EPBC Act and the potential impacts on MNES.

This SREIS, through the bilateral agreement between the State and Commonwealth Governments, is accredited as one of the accepted assessment pathways to satisfy Section 8 of the EPBC Act.

2.3.2 Environmental Protection Act 1994

Recent amendments to the EP Act have streamlined the approvals pathway of some environmental approvals and activities regulated under the EP Act. These changes were introduced through the Greentape Reduction Act, which commenced on 31 March 2013 and results in the following relevant changes:

- Replacement of Chapters 4, 5, 5A and 6 with a new Chapter 5 to create a single approval process for EAs; and
- Introduction of a licensing model proportionate to environmental risk.

The changes introduced through the Greentape Reduction Act have not changed the requirements for Arrow to secure environmental approvals for the Project. It has however, provided specific requirements for either an Amalgamated Project EA or an Amalagamated Corporate EA. In either of these options Arrow can seek a single EA encompassing all of the activities and tenures of the Project.

2.3.2.1 Environmental Authorities

An EA is a regulatory document that provides the environmental conditions under which Arrow must operate the petroleum activities proposed as part of the Project. An EA is required to carry out any resource activity in Queensland. Activities authorised under the P&G Act are considered resource activities (petroleum activities) under Chapter 5 of the EP Act.

Chapter 5, Part 2 of the EP Act outlines the process of applying for an EA for a resource activity.

Resource activities like this Project, and authorised under Chapter 5 of the EP Act, generally include other incidental activities and other forms of development, for example, concrete batching or the treatment of wastewater, amongst other things. These activities, when sought as part of a resource



activity are incidental activities; however they may also be recognised as prescribed activities under Chapter 4 of the EP Act.

There are three types of EA applications available for resource activities:

- Standard application the activity can meet the eligibility criteria and comply with the standard conditions;
- Variation application the activity can meet the eligibility criteria, but one or more variations to the standard conditions are sought; and
- Site-specific application the activity does not have eligibility criteria or cannot meet the eligibility criteria.

Arrow will apply for an EA under the legislation current at the time of application. Currently a Standard Application is not available for petroleum leases. If at the time of application there is no Standard Applications available, a Site Specific application will be sought. A Site Specific application must include an assessment of the likely impact of each relevant activity on the environmental values within the Project area and include:

- A description of the environmental values likely to be affected by each relevant activity;
- A description of the proposed measures for minimising and managing the potential impacts generated by each relevant activity; and
- Any other document relating to the application prescribed under relevant legislation and regulations at the time of preparing the application.

2.3.2.2 Incidental Activities

As stated in Section 2.3.2.1 above, incidental activities that are part of a resource activity would be known as an ERA if not for being a resource activity (in a legislative and approval sense). For the purpose of this document the method of describing these activities is to identify them as if they still were ERAs, the difference is in how they are applied for and sought under the EP Act.

As a result of changes to the EP Act and EP Regulation under the Greentape Reduction Act, the revised list of incidental activities expected to be applicable to the Project will likely include:

- Electricity generation;
- Fuel burning;
- Extractive and screening activities;
- Regulated waste storage;
- Regulated waste treatment;
- Waste disposal;
- Sewage treatment; and
- Water treatment.

2.3.3 Sustainable Planning Act 2009

The following section identifies the current understanding of the proposed changes to the SP Act and other subordinate statutory planning instruments under this Act.



It should be noted that development for an activity authorised under P&G Act and subject to a Petroleum Lease, is exempt development in accordance with section 232(2) of the SP Act and therefore not subject to the provisions of the statutory planning instruments administered under the SP Act, including SPPs, Regional Plans and Local Government Planning Schemes.

However, the ToR for the Project requires the EIS to assess the Project's consistency with existing land uses or long-term policy framework for the Project area. The SP Act is the principal planning legislation in Queensland. The SP Act provides a focussed and streamlined approach to the development framework. The provisions of this Act extend to approval for development that is proposed for sites not covered by the provisions of the P&G Act as well as for certain development (including building works, reconfiguration of a lot and operational works (including bulk earthworks, clearing vegetation and road works)) associated with petroleum activities.

2.3.3.1 Queensland Government Planning Reform

The Queensland Government is currently reviewing the SP Act, *Sustainable Planning Regulation 2009* (SP Regulation) and associated development assessment frameworks to improve the delivery of streamlined assessment and approval processes, remove unnecessary red tape and re-empower local governments. To do so the State government has initiated a process of planning reform since the issuing of the EIS that has included:

- The Sustainable Planning and Other Legislation Amendment Act 2012 and the State Assessment and Referral Agency already implemented;
- A single SPP already implemented; and
- Changes to the local infrastructure contributions framework due mid-2014.

In addition to the aforementioned initiatives, the State Government is currently developing the proposed Planning for Queensland's Development Act, which is intended to replace the SP Act and focus on facilitating the economic growth and prosperity of Queensland through an efficient, effective, integrated, transparent and accountable development assessment system.

Whilst this piece of legislation is still being prepared and a Bill is yet to be drafted, it is noted that the land use planning and development assessment framework applicable to the Project is currently undergoing review.

2.3.3.2 Single State Planning Policy

The new single SPP sets out policies on matters of state interests in relation to planning and development and provides a key framework for the government's broader commitment to planning reform. The new single SPP was adopted on 2 December 2013 and replaces the 12 existing SPPs to present one comprehensive policy that represents all the state's interests in planning matters.

The draft SPP was released for consultation in April 2013 and the timeframe for formal submissions closed on 12 June 2013. The submissions received were considered by the Department of State Development, Infrastructure and Planning in developing the final SPP.

The new single SPP is intended to provide tools to empower and support local governments to make the planning decisions for their community and to implement state interests in a way that best suits



their communities' needs. The new single SPP identifies the following five broad themes and 16 State interests:

- Liveable communities and housing:
 - Liveable communities; and
 - Housing supply and diversity.
- Economic growth:
 - Agriculture;
 - Development and construction;
 - Mining and extractive resources; and
 - Tourism.
- Environment and heritage:
 - Biodiversity;
 - Coastal development;
 - Cultural heritage; and
 - Water quality.
- Hazards and safety:
 - Emissions and hazardous activities; and
 - Natural hazards.
- Transport and infrastructure:
 - Energy and water supply;
 - State transport infrastructure;
 - Strategic airports and aviation facilities; and
 - Strategic ports.

The new single SPP recognises that the resource industry is a key driver of the Queensland economy. It also acknowledges that mining and petroleum activities are not regulated under the SP Act and, by virtue of the exemptions afforded beneath the regulatory framework and the relationship between certain acts, aims to harmonise land use planning considerations and the assessment of resource projects. In doing so, the new single SPP identifies that the location of mineral and petroleum resource deposits and the issues and opportunities generated by resource development must be appropriately considered in land use planning.

The new single SPP recognises that the State has significant interests in ensuring that mining and extractive resource activities are considered in strategic land use planning and the assessment of development for any number of reasons. The most pertinent of these reasons being the economic benefits of resource sector development to Queensland and the competition the mining and resource sector often create between other displaced land uses. This interest acknowledges that decisions regarding the approval of certain development and its proceeding through construction and operation require the following where such complementing can be achieved:



- The balancing of competing land use and development interests, with particular relevance to the effect of reverse amenity impacts and resource sterilisation; and
- The importance of maximising the opportunities for coexistence between resource extraction and other types of land uses and development.

The new single SPP identifies all State interests that authorities are statutorily obliged to take into account when preparing or amending local government planning schemes and in assessing development applications proposed beneath the SP Act, and certain other development as prescribed by State authorities. It also includes matters that the Queensland State Government must consider before designating land for community infrastructure and in preparing the 'next generation' statutory regional plans (these 'next generation' regional plans are detailed in Section 2.3.3.3).

The new single SPP contains interim development assessment requirements which are only applicable to certain development applications and projects. These development assessment requirements apply only where the applicable local planning scheme has not yet been amended to appropriately reflect the requirements and outcomes of the new single SPP. Instances where the interim development assessment provisions apply will only occur when the preparation of a local planning scheme preceded the introduction of the new single SPP, that is the local government planning scheme predates the new single SPP. At the time of preparing the SREIS, the majority of local government planning schemes in Queensland fall into this category and all local government planning schemes within the Project area have not yet been amended to reflect the new single SPP.

Over time, as new planning schemes are introduced or existing ones are amended to integrate the SPP, the interim development assessment provisions will progressively become redundant. As such, it is expected that there are elements of the new single SPP which will have applicability to the Project; an assessment of these state interests against the Project is undertaken in the Table 2–1 below.



Table 2-1 Compatibility with New Single SPP

State Interest	Relevant Interim Development Assessment Requirements	Project Management Measures	EIS / SREIS Reference
Planning for liveable comm	unities and housing		
Liveable communities Planning delivers liveable, well-designed and serviced communities that support wellbeing and enhance quality of life.	The SPP does not prescribe any interim development assessment requirements for this state interest.	 Where there is a potential for the Project to impact on community and urban infrastructure that make a community 'liveable' (e.g. adequate accommodation, provision of community services, protection of residential amenity, etc.), Arrow has developed a range of management strategies to mitigate those impacts as detailed within the EIS and SREIS. This will be achieved through compliance with Queensland resources and energy sector code of practice for local content (2013) and implementation of relevant management plans, including its Social Impact Management Plan (SIMP), that includes Action Plans for: Workforce management; Housing and accommodation; Health and community wellbeing; and Cumulative impacts. 	Land Use and Tenure chapter (Section 19) and Land Use and Tenure Technical Report (Appendix Q) and Social Impact Management Plan (Appendix V) of the EIS. Land Use and Tenure chapter (Section 13) and Social Impact Management Plan (Appendix N) of the SREIS.
Housing supply and diversity Diverse, accessible and well-serviced housing and land for housing is provided.	The SPP does not prescribe any interim development assessment requirements for this state interest.	Arrow will limit its impact on the availability of supply and diversity of housing by providing temporary workforce accommodation facilities for both its construction and operational workforce. Arrow has committed to a range of measures to mitigate and manage impacts on housing through the implementation of the Housing and Accommodation Action Plan contained in the SIMP. This includes examination of opportunities for investment in the Isaac Affordable Housing Trust to address housing availability and affordability issues in the region should monitoring indicate that the project is contributing to these issues.	Land Use and Tenure chapter (Section 19) and Land Use and Tenure Technical Report (Appendix Q) and Social Impact Management Plan (Appendix V) of the EIS. Land Use and Tenure chapter (Section 13) and Social Impact Management Plan (Appendix N) of the SREIS.



State Interest	Relevant Interim Development Assessment Requirements	Project Management Measures	EIS / SREIS Reference
Planning for economic grow	wth		
Agriculture Planning protects the resources on which agriculture depends and supports the long-term viability and growth of the agricultural sector.	The SPP does not prescribe any interim development assessment requirements for this state interest.	 Key agricultural land within the Project area will be protected through the provisions of the Mackay Isaac and Whitsunday Regional Plan and Central Queensland Regional Plan (CQRP). Strategic Cropping Land is protected through the provisions of the Strategic Cropping Land Act 2011. Whilst this is likely to be repealed during 2014, the outcomes and intent sought from this Act are likely to be continued through the provisions contained within the Regional Planning Interests Bill. Arrow makes commitments to: Work with landholders to configure well development plans to minimise impacts on prime agricultural land to the extent practical, including placement of gas wells and infrastructure in areas that avoid high quality agricultural land to the extent practical and possible [B629]; and Where suitable proponent-owned land is available, consider leasing to farmers to support agricultural production of that land [B627]. 	Land Use and Tenure chapter (Section 19), Land Use and Tenure Technical Report (Appendix Q), Soils and Land Suitability chapter (Section 12) and Soils and Land Suitability Technical Report (Appendix K) of the EIS. Land Use and Tenure chapter (Section 13) of the SREIS.
Development and construction Planning supports employment needs and economic growth by facilitating a range of residential, commercial, retail and industrial development opportunities, and by supporting a strong development and construction sector.	The SPP does not prescribe any interim development assessment requirements for this state interest.	 The Project is expected to generate significant economic growth and support for the Central Queensland region. Its direct and flow-on economic benefits will result from: Capital investment in upstream gas production, processing facilities and other supporting infrastructure; Export revenues generated from additional LNG production; Additional employment; and Increased fiscal receipts to the Queensland and Commonwealth Governments in the form of taxes and royalties. The Project will have a significant positive impact on the regional, State and national economies. Arrow will work with government, industry and the community to maximise the economic benefits 	Social chapter (Section 24), Social Technical Report (Appendix U), Economics chapter (Section 23) and Economics Technical Report (Appendix T) of the EIS Social chapter (Section 15) and Social Technical Report (Appendix M) of the SREIS.



State Interest	Relevant Interim Development Assessment Requirements	Project Management Measures	EIS / SREIS Reference
		including compliance with the Queensland Resources And and Energy Sector Code Of Practice For Local Content (Queensland Resources Council, 2013) and implementation of the SIMP and its associated action plans that include:	
		Workforce management; and	
		Housing and accommodation.	
Mining and extractive resources Mineral, coal, petroleum, gas, and extractive resources are appropriately considered in order to support the productive use of resources, a strong mining and resource industry, economical supply of construction materials, and avoidance of land use conflicts wherever possible.	 Development applications relating to a key resource area (KRA) must ensure that: a) for development within a resource/processing area for a KRA – the undertaking of an existing or future extractive industry development is not significantly impeded, and b) sensitive land uses are avoided within the separation area for a resource/processing area of a KRA, and c) for development within the transport route separation area of a AKRA – the number of residents adversely affected by noise, dust and vibration generated by the haulage of extractive materials along the route does not increase, and d) for development adjacent to the transport route – the safe and efficient use of the transport route by vehicles transporting extractive 	No KRAs exist in in the Project area, however the Project will also result in the efficient use of gas resources within its tenements further strengthening the gas production industry in the region and supporting this requirement of the SPP. While there are overlapping resource tenements within the Project area, the design and location of wells and gathering lines, as well as the rates of production, will have flexibility to allow for consideration of future operations such as coal mining. As stated in the EIS, Arrow is committed to establishing agreements with overlapping tenure holders to minimise impacts of the Project on the mining of coal resources within the Project area, as per the provisions of the <i>Petroleum and Gas (Production and Safety) Act 2004</i> and the <i>Mineral Resources Act 1989</i> . Arrow is aware that at the time of preparing the SREIS, a number of changes were being initiated by the State government with regards to the way overlapping tenures are managed and administrated in Queensland. As such, any negotiations and subsequent agreements with overlapping tenure holders will be developed in accordance with the regulatory framework at the time.	Land Use and Tenure chapter (Section 19) and Land Use and Tenure Technical Report (Appendix Q) of the EIS. Land Use and Tenure chapter (Section 13) of the SREIS.



State Interest	Relevant Interim Development Assessment Requirements	Project Management Measures	EIS / SREIS Reference
	resources is not adversely affected.		
Tourism Tourism planning and development opportunities that are appropriate and sustainable are supported; and the social, cultural and natural values underpinning the tourism developments are protected to maximise economic growth.	The SPP does not prescribe any interim development assessment requirements for this state interest.	 The Project's EIS constraints mapping places Category A environmentally sensitive areas (national parks, conservation parks, forest reserves) which are significant components of the region's natural values supporting tourism as constrained development zones. As a result the intent of the SPP is supported. Furthermore, amenity impacts from the Project that might affect tourism will be managed through the implementation of management strategies to minimise impacts from issues such as noise, vibration, lighting, dust, traffic and changes to the visual landscape. Arrow makes commitments to: Following detailed design, strategies for management of noise impact from flaring will be incorporated into an environmental management plan associated with a site specific Environmental Authority application. These strategies would follow a management hierarchy based on the preferences given in the Environmental Protection (Noise) Policy 2008: Avoid the noise impact (e.g. locating the position of the flare(s) in area(s) away from sensitive receptors wherever possible); Minimise the noise impact, in the following order of preference: a) Orient the activity to minimise the noise, and b) Utilise practical methods to mitigate noise at the source; 3. Manage the noise impact [B642]. 	Land Use and Tenure chapter (Section 19), Land Use and Tenure Technical Report (Appendix Q), Soils and Land Suitability chapter (Section 12), Soils and Land Suitability Technical Report (Appendix K) and Constraints Mapping (Appendix BB) of the EIS of the EIS. Land Use and Tenure chapter (Section 13) of the SREIS.
		 A RUMP will be prepared to manage and mitigate the risks and impacts of any transport related issues. The RUMP will evolve as detailed design and operation details are finalised, however an outline of the components that the RUMP should include are as follows: A strategy to safely manage road usage by construction 	



State Interest	Relevant Interim Development Assessment Requirements	Project Management Measures	EIS / SREIS Reference
		 vehicles Interaction of Project vehicles with school bus routes Interaction between stock and freight routes Detail safe driver behaviour and fatigue management protocols Consideration of specific requirements for over dimensional vehicles Interaction between Project traffic and at grade road / rail crossings Dust mitigation strategy Detail road maintenance and/or road upgrade requirements Liaise with relevant stakeholders Define community engagement strategies Suitability of existing road infrastructure [B570]. 	
Planning for the environme	nt and heritage		
Biodiversity Matters of environmental significance are valued and protected, and the health and resilience of biodiversity is maintained or enhanced to support ecological integrity.	Development applications for land relating to matters of state environmental significance must: (1) identify any potential significant adverse environmental impacts on matters of state environmental significance, and (2) manage the significant adverse environmental impacts on matters of state environment significance by, in order of priority: (a) avoiding significant adverse environmental impacts, and (b) mitigating significant adverse	 The Project supports this requirement of the SPP in its use of the following management principles: Avoidance — avoiding direct and indirect impacts to environmentally sensitive areas Minimisation — minimise potential impact on environmentally sensitive areas Mitigation — implement mitigation and management measures to minimise cumulative adverse impacts Remediation and rehabilitation — actively remediate and rehabilitate impacted areas to promote and maintain long-term recovery of environmentally sensitive areas Offset (in accordance with regulatory requirements). Furthermore, the Project considers Category A environmentally sensitive areas as development exclusion zones therefore supporting 	Impact Assessment Method chapter (Section 6), Environmental Framework chapter (Section 7), Terrestrial Ecology chapter (Section 17), Terrestrial Ecology Technical Report (Appendix P), Aquatic Ecology chapter (Section 16), Aquatic Ecology Technical Report (Appendix O) and Matters of National Environmental Significance report (Appendix CC) of the EIS.



State Interest	Relevant Interim Development Assessment Requirements	Project Management Measures	EIS / SREIS Reference
	environmental impacts where these cannot be avoided, and (c) where applicable, offsetting any residual adverse impacts.	 the intent of this state interest within the SPP. Arrow commits to: Aim to avoid disturbance within the following areas: Endangered EPBC Act TECs: Brigalow Ecological Community (REs 11.3.1, 11.9.1, 11.9.5, 11.4.8, 11.4.9 and 11.5.16); Natural Grasslands Ecological Community (RE 11.8.11); Semi-evergreen Vine Thicket Ecological Community (REs 11.5.15, 11.8.3 and 11.8.13); Weeping Myall Woodlands (REs 11.3.2 and 11.3.28) Category B ESAs Category C ESAs including Arthur's Bluff State Forest and gazetted nature reserves Stock routes and state or regionally significant bioregional wildlife corridors Essential habitat Core habitat for EVNT species State forests and resource reserves State forests and resource reserves 	Terrestrial Ecology chapter (Section 11), Terrestrial Ecology Technical Report (Appendix I), Aquatic Ecology chapter (Section 10), Aquatic Ecology Technical Report (Appendix H) and Matters of National Environmental Significance report (Appendix J) of the SREIS.
Coastal environment The coastal environment is protected and enhanced, while supporting opportunities for coastal- dependent development, compatible urban form, and safe public access along the coast.	The SPP provides interim development assessment requirements for development applications for coastal management districts. These are not relevant to the Project	There are no coastal management districts identified by the SPP influenced by the Project.	Not Applicable



State Interest	Relevant Interim Development Assessment Requirements	Project Management Measures	EIS / SREIS Reference
Cultural heritage The cultural heritage significance of heritage places and heritage areas, including places of indigenous cultural heritage, is conserved for the benefit of the community and future generations.	The SPP does not prescribe any interim development assessment requirements for this state interest.	 The Project supports this requirement of the SPP primarily through the following commitments: Negotiate CHMPs with the Aboriginal Parties, based on the avoidance / manage / mitigate principle [B557]; and Develop a cultural heritage management plan in consultation with the Queensland Heritage Office prior to commencement of ground disturbance works that will mitigate and manage potential impacts on non-Indigenous cultural heritage sites. This plan will include detail on legislative reporting requirements of <i>the Queensland Heritage Act 1992</i> [B561]. 	Indigenous Cultural Heritage chapter (Section 25), Non- indigenous Cultural Heritage chapter (Section 26), Indigenous Cultural Heritage Technical Report (Appendix W) and Non-Indigenous Cultural Heritage Technical Report (Appendix X) of the EIS.
Water quality The environmental values and quality of Queensland waters are protected and enhanced.	 The interim development assessment requirements in the SPP relate to development applications relevant to: Receiving waters for urban developments; Water supply catchments in south-east Queensland; and Acid sulphate soils. None of these apply to the Project. 	 The Project will support this requirement of the SPP by implementing a range of management plans designed to protect the environmental values of receiving waters. Arrow commits to: A Water Management Plan, Erosion and Sediment Control Plan, and Waste Management Plan will be designed to avoid or minimise the potential impacts of Project [B207]; An Effluent Irrigation Management Plan is prepared for any effluent irrigation area [B328]; Implement water management plan for proposed controlled proposed discharges of CSG water [B345]; and Brine residue will be managed in accordance with regulatory requirements [B609]. 	Groundwater chapter (Section 14), Groundwater and Geology Technical Report (Appendix L), Groundwater Model Technical Report (Appendix M), Surface Water chapter (Section 15) and Surface Water Technical Report (Appendix N) of the EIS Groundwater chapter (Section 7), Groundwater Assessment (Appendix E), Surface Water chapter (Section 8), Surface Water Technical Report (Appendix F), Hydrology and Geomorphology chapter (Section 9) and Hydrology and Geomorphology Technical Report (Appendix



State Interest	Relevant Interim Development Assessment Requirements	Project Management Measures	EIS / SREIS Reference
			G) of the SREIS.
Planning for hazards and sa	ıfety		
Emissions and hazardous activities Community health and safety, sensitive land uses and the natural environment are protected from potential adverse impacts of emissions and hazardous activities, while ensuring the long-term viability of industrial development, and sport and recreation activities.	The interim development assessment requirements in the SPP relate to development applications for designated management areas. No such areas occur within the Project area.	 The Project will support this requirement of the SPP by implementing a range of management plans designed to minimise impacts from emissions and hazardous activities. Arrow commits to: Following detailed design, strategies for management of noise impact from flaring will be incorporated into an environmental management plan associated with a site specific Environmental Authority application. These strategies would follow a management hierarchy based on the preferences given in the Environmental Protection (Noise) Policy 2008: Avoid the noise impact (e.g. locating the position of the flare(s) in area(s) away from sensitive receptors wherever possible); Minimise the noise impact, in the following order of preference: a) Orient the activity to minimise the noise, and b) Utilise practical methods to mitigate noise at the source; Manage the noise impact [B642]; A Water Management Plan, Erosion and Sediment Control Plan, and Waste Management Plan will be designed to avoid or minimise the potential impacts of Project [B207]; Develop and implement emergency response and spill response procedures to minimise any impacts that could occur as a result of releases of hazardous materials or any loss of containment of storage equipment [B084]; and Arrow will develop emergency response plans in consultation with emergency services organisations that includes a list of required equipment, training and other resources, and foreseeable 	Air Quality chapter (Section 9), Air Quality Technical Report (Appendix H), Noise and Vibration chapter (Section 22), Noise and Vibration Technical Report (Appendix S), Preliminary Hazard and Risk chapter (Section 27) and Preliminary Hazard and Risk Technical Report (Appendix Y) of the EIS. Air Quality chapter (Section 5), Air Quality Technical Report (Appendix B), Noise and Vibration chapter (Section 14) and Noise and Vibration Technical Report (Appendix L) of the SREIS.



State Interest	Relevant Interim Development Assessment Requirements	Project Management Measures	EIS / SREIS Reference
		emergency and crisis situations (including escapes, blowouts, gas fire, bushfire, critical equipment failure, trapped or missing people, flooding, cyclones, power failure, security incidents and threats, and transport incidents). The plans will include safe evacuation procedures, communication protocols (internal and to emergency services, including the Petroleum and Gas Inspectorate), accounting for personnel and visitors, roles and responsibilities, and requirements for training [B480].	
Planning for infrastructure	•		
Energy and water supply Planning supports the timely, safe, affordable and reliable provision and operation of electricity and water supply infrastructure.	The SPP does not prescribe any interim development assessment requirements for this state interest.	The Project will include the provision of its energy and water supply requirements in a safe and reliable manner. Power for the gas field operations will be generated by gas-fired generators or serviced by grid connections, where available. Where connection to the grid is the preferred option, a transmission network service provider may be engaged to construct transmission lines and other associated infrastructure. Power will be reticulated throughout the Project area via a combination of above and below ground powerlines co-located with other infrastructure such as water and gas gathering lines, transmission pipelines or access roads where practicable. Water supply and storage will be needed for construction activities, dust suppression, vehicle wash down, accommodation camps, and operational and maintenance activities. CSG water not needed for these purposes may be made available for beneficial use options including industry supply, agriculture, discharge to surface water or mitigation of other groundwater users as outlined in the CSG Water and Salt Management Strategy.	Project Description chapter (Section 4) of the EIS Project Description chapter (Section 3) and CSG Water and Salt Management Strategy (Appendix D) of the SREIS.



State Interest	Relevant Interim Development Assessment Requirements	Project Management Measures	EIS / SREIS Reference
State transport infrastructure Planning enables the safe and efficient movement of people and goods across Queensland and encourages land use patterns that support sustainable transport.	The interim development assessment requirements in the SPP relate to development applications for land within 400 m of a public passenger transport facility. Such an application is not expected for the Project.	 The Project will support this requirement of the SPP by undertaking road impact assessments to identify necessary road mitigation or improvement requirements and by implementing a range of management plans designed to enable the safe and efficient movement of Project traffic on public roads. Arrow commits to: A RUMP will be prepared to manage and mitigate the risks and impacts of any transport related issues. The RUMP will evolve as detailed design and operation details are finalised, however an outline of the components that the RUMP should include are as follows: A strategy to safely manage road usage by construction vehicles Interaction of Project vehicles with school bus routes Interaction between stock and freight routes Detail safe driver behaviour and fatigue management protocols Consideration of specific requirements for over dimensional vehicles Interaction between Project traffic and at grade road / rail crossings Detail road maintenance and/or road upgrade requirements Liaise with relevant stakeholders Define community engagement strategies Suitability of existing road infrastructure [B570]. 	Roads and Transport chapter (Section 21) and Roads and Transport Technical Report (Appendix R) of the EIS. Roads and Transport chapter (Section 12) and Supplementary Road Impact Assessment (Appendix K) of the SREIS.
Strategic airports and aviation facilities Planning protects the	Development application for land that contains or is impacted by a strategic airport or an aviation facility is required to comply with the <i>SPP</i>	The Project area overlies the Blackwater aerodrome, Yarabee Mine aerodrome and a number of unnamed landing grounds servicing individual homesteads and mining operations. A number of other aeronautical facilities are located within the region, but outside the	Land Use and Tenure chapter (Section 19), Land Use and Tenure Technical Report (Appendix Q), Roads



State Interest	Relevant Interim Development Assessment Requirements	Project Management Measures	EIS / SREIS Reference
operation of strategic airports and aviation facilities, and enables the growth and development of Queensland's aviation industry.	code: Strategic airports and aviation facilities.	Project area, including Moranbah Airport and Glenden, Dysart, Middlemount aerodromes. The Project does not interfere with any of the aeronautical facilities listed in the SPP, therefore it is not applicable in this instance.	and Transport chapter (Section 21) and Roads and Transport Technical Report (Appendix R) of the EIS. Land Use and Tenure chapter (Section 13) Roads and Transport chapter (Section 12), Supplementary Road Impact Assessment (Appendix K) of the SREIS.



2.3.3.3 New Statutory Regional Plans

In addition to the aforementioned statutory planning instruments, two new statutory regional plans have been drafted; the CQRP and the Darling Downs Regional Plan.

As identified in the EIS, the Project is located in both the Mackay, Isaac and Whitsunday regional planning area and the CQRP area. As such, the Project will need to be assessed against the new CQRP.

The Central Queensland Regional Plan

The Queensland Government approved the CQRP in October 2013. Much of ATP1025 located near the town of Blackwater is covered by the CQRP.

The objectives of the CQRP include resolving land use conflicts arising from agricultural and mining activities, fostering diverse and strong economic growth, planning and prioritising infrastructure, and managing impacts on the environment.

The CQRP provides policy responses to resolve the region's most important issues affecting its economy and the liveability of its towns. The CQRP specifically provides direction to resolve competing State interests relating to the agricultural and resources sectors, and to enable the growth potential of the region's towns.

The CQRP aims to:

- Protect Priority Agricultural Land Uses (PALUs) while supporting co-existence opportunities for the resources sector
 - Priority Agricultural Areas (PAAs) are identified in the Plan and comprise the region's strategic areas containing highly productive agricultural land uses. In these areas, PALU are the land use priority;
 - PALUs within the PAA will be recognised as the primary land use and given priority over any other proposed land use; and
 - PAA co-existence criteria enable compatible resource activities to co-exist with high value agricultural land uses within PAAs. This will in turn maximise opportunities for economic growth to ensure that Central Queensland remains a resilient, diversified and prosperous region.
- Provide certainty for the future of towns
 - Increasing certainty for towns in the region is delivered through the identification of Priority Living Areas (PLA);
 - The PLA is designed to provide opportunities for identified towns to expand through the establishment of a town buffer;
 - Legislation is proposed that will give councils the ability to approve resource activities within the PLA where they deem it to be appropriate and in the community's interest; and
 - Councils contribute to the safeguarding of areas required for the growth of towns through appropriate provision in their local planning instruments.

As shown in Table 2-2, the Project is compatible the provisions of the CQRP.



Table 2-2 Compatibility with the Central Queensland Regional Plan

Regional Outcome	Regional Policy	Compatibility of Project			
Protecting PALUs while supporting	Protecting PALUs while supporting co-existence opportunities for the resources sector				
Agriculture and resources industries within the Central	Protect PALU within PAA.	There are no PAA within the Project area covered by the CQRP.			
Queensland region continue to grow with certainty and investor confidence.	Maximise opportunities for co-existence of resource and agricultural land uses within PAAs.	There are no PAA within the Project area covered by the CQRP.			
Providing certainty for the future	of towns				
The growth potential of towns within the Central Queensland region is enabled through the establishment of PLAs. Compatible resource activities within these areas which are in the communities' interest can be supported by local governments.	Safeguard the areas required for the growth of towns through establishment of PLAs.	In the CQRP there is one PLA (Blackwater) within the Project area. The Project has the potential to impact on amenity afforded to urban land uses with the Project area, such as Blackwater township. These impacts are anticipated to be relatively minor as no Project infrastructure is proposed within the urban areas as defined by the relevant local government planning schemes. In addition, urban uses are not anticipated to encroach upon the various Project facilities during its operational life due to the limited scale and intensity of urban growth into the surrounding rural areas.			
	Provide for resource activities to locate within a PLA where it meets the communities' expectations as determined by the relevant local government.	As discussed above, no Project infrastructure is proposed within the urban areas as defined by the relevant local government planning schemes. Should such activities be required within the identified urban area, Arrow will liaise with the Central Highlands Regional Council.			

The CQRP aims to resolve land use conflicts arising from agricultural and mining activities, foster diverse and strong economic growth, plan and prioritise infrastructure, and manage impacts on the environment. The region was formally designated on 29 June 2012, with the Regional Planning Committee gazetted on 20 July 2012 and the committee's inaugural meeting held in Emerald on 27 July 2012.

On 14 October 2013, the Deputy Premier and Minister for State Development, Infrastructure and Planning approved the CQRP.

2.4 Off-tenure Infrastructure

Where any Project infrastructure extends beyond the bounds of the granted resource tenements, in this instance, areas of Petroleum Leases (PLs), the exemptions afforded under the SP Regulation will no longer apply. Item 1, Table 5 under Schedule 4 (of the SP Regulation prescribes that development



for an activity authorised under the P&G Act, cannot be declared as 'assessable development' under any statutory planning instruments under the SP Act). This applies equally for areas of land located internally to PLs (i.e. surrounded by PLs) but not located within the bounds of the PL, that is land which is 'tenure locked'. In these instances, the infrastructure extending 'off lease' in adjacent areas will require both planning and environmental approvals.

However, where this infrastructure is sought under the P&G Act via a Petroleum Facilities License or a Petroleum Pipeline Licence, the need for planning approval under the SP Act is again negated.

2.4.1 Summary

This revised Project Approvals section has been developed in accordance with the changes that have occurred to the Queensland regulatory and statutory planning framework since the issuing of the EIS. It is noted that the Queensland regulatory and statutory planning framework is still undergoing a period of change and will likely undergo further changes. The approvals outlined in this chapter are current at the time of writing. However, it is noted that the approvals process will be undertaken in line with the applicable statutory requirements at the time of application.

2.5 Additional Policies

The following policies will also be considered in the assessment of the Project in addition to those policies identified in the Project Approvals chapter (Section 2.5) of the EIS.

Table 2-3 Relevant Policies and Guidelines

Policy or Guidelines	Purpose	Legislation Addressed
Waterway barrier works approvals and fishway assessments: Departmental procedures FHMOP008	 The purpose of this policy is to: Provide clarification on the elements of waterway barrier works; and Adequate provision for fish movement for decision makers dealing with waterway barrier works development applications. The policy aims to ensure that fish movements and access to habitats in Queensland are maintained. A fisheries development approval is not required for waterway barrier works that are authorised under a self-assessable code. Self-assessable codes put considerable restrictions on the way in which waterway barrier works can be built and/or operated, in order to ensure that impacts on fish movement are acceptable. 	Fisheries Act 1994 Water Act 2000 Land Act 1994 Coastal Protection and Management Act 1995

