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## 1. INTRODUCTION

This Section describes the purpose and structure of the Environmental Impact Statement (EIS) for the South Galilee Coal Project (SGCP) and what it sets out to achieve.

This Section also provides a brief overview of the SGCP and the Proponent.

### 1.1. PROJECT PROPONENT

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The SGCP is proposed by joint venture participants AMCI (Alpha) Pty Ltd (AMCI) and Alpha Coal Pty Ltd (Alpha Coal), a subsidiary of Bandanna Energy Limited.

#### 1.1.1. AMCI (Alpha) Pty Ltd

AMCI is the manager of the joint venture and is responsible for preparation of the EIS. Consequently, for the purposes of this EIS, AMCI is herein referred to as the Proponent.

The AMCI Group was founded in 1986 and is a private global mining, investment and trading business operating in the resources industry. The AMCI Group currently holds significant strategic investments in private and public mining in Australia, the United States, South Africa, Europe and South America. AMCI is experienced in coal exploration and mine development, and was instrumental in the development of several mines in Queensland and New South Wales, including Coppabella, Moorvale, Carborough Downs and Glennies Creek.

Environmental, community and safety obligations are given priority by AMCI. AMCI has not been subject to any proceedings under Commonwealth, State or Territory law in relation to environmental protection or conservation issues. The SGCP will be undertaken in accordance with AMCI's Corporate Environment Policy (refer to **Appendix T—Corporate Environment Policy**).

Further information about AMCI can be obtained from [www.amcicapital.com](http://www.amcicapital.com).

#### 1.1.2. Alpha Coal Pty Ltd

Alpha Coal Pty Ltd is a wholly owned subsidiary of Bandanna Energy which holds four coal exploration tenements in the south-east of the Galilee Basin. A portion of two of these tenements is proposed to be developed as the SGCP.

Bandanna Energy is an exploration company listed on the Australian Securities Exchange. Bandanna Energy holds coal exploration tenements in the Bowen and Galilee Basins in Queensland. The company also holds mineral rights for oil shale and bentonite in Queensland.

Development of Bandanna Energy's port allocation at the Wiggins Island Coal Export Terminal will enable the company to move from an explorer to a producer, with the first coal from their Bowen Basin holdings scheduled to be shipped in 2014.

Further information about Bandanna Energy can be obtained from [www.bandannaenergy.com.au](http://www.bandannaenergy.com.au).

## 1.2. PROJECT DESCRIPTION

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The SGCP is a new open-cut and underground coal mining operation, located approximately 12 kilometres south-west of the township of Alpha in Central Queensland (refer to **Figure 1-1**). The SGCP will have a life of approximately 35 years. Over the life of the project, the SGCP aims to produce approximately 447 Million tonnes of product coal for the export market. Further exploration may extend the life of the mine.

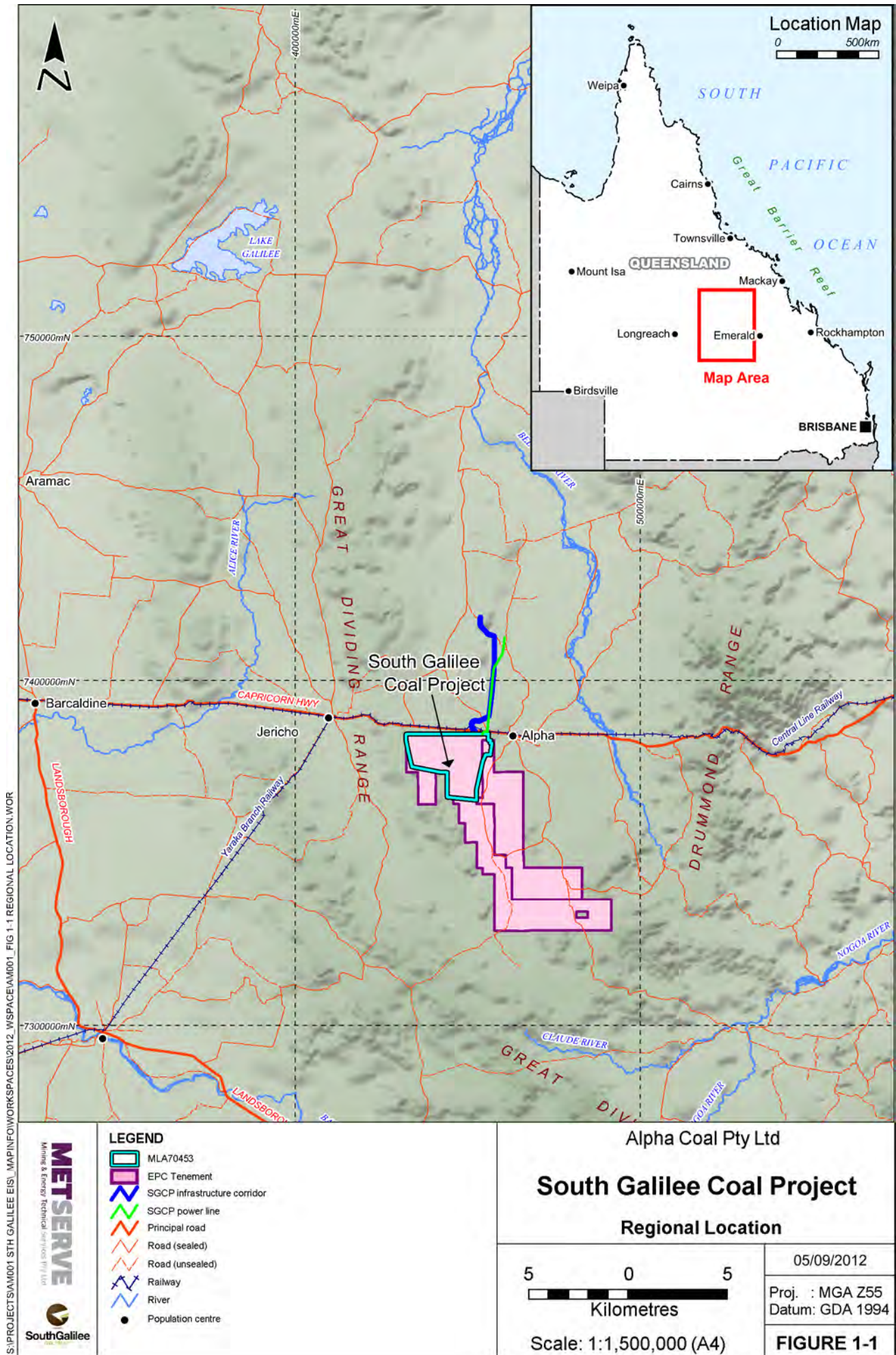
The key elements of the SGCP are shown on the conceptual mine and associated infrastructure and stage plan (refer to **Figure 1-2** and **Figure 1-3**) and would include:

- coal mining operations, including:
  - open-cut and underground mining within Mining Lease Application (MLA) area 70453, producing up to 19 Million tonnes per annum (Mtpa) of run of mine coal and 17 Mtpa of product coal for the export market
  - placement of waste rock and rejects in out-of-pit waste rock emplacement facilities
  - progressive backfilling of the open pits with waste rock and rejects as mining develops.
- development of a mine water management system including clean water drainage channels, mine affected runoff collection, sediment dams, pit water management process, on-site water reuse procedures and a permanent diversion of Sapling Creek
- underground services area
- Mine Industrial Area (containing administration, bath house, storage, vehicle parking, workshops, washdown, refuelling, controls and communication infrastructure)
- Coal Handling and Preparation Plant
- coal handling infrastructure (including conveyor systems, raw coal and product coal stockpiles)
- development of a Mine Access Road and on-site haul roads and light vehicle roads
- construction of an on-site rail component (including loading loop, breakdown and fuel sidings)
- construction of a SGCP rail spur component to connect to the common user rail component
- on-site accommodation village

- fuel, oil and explosives storage facilities
- soil stockpiles, laydown areas and a gravel borrow pit
- raw water supply infrastructure (e.g. pipeline, groundwater bores and Raw Water Dam)
- sewage and waste water treatment infrastructure
- on-site landfill facility
- electrical and telecommunications infrastructure
- ongoing monitoring and rehabilitation
- ongoing exploration activities within existing exploration tenements
- other associated minor infrastructure, plant, equipment and activities.

As described in **Section 1.3**, the SGCP will be dependent on the development of infrastructure by other proponents and/or equitable third party access. The product coal will be predominately railed to the Abbot Point Coal Terminal (APCT) for distribution to the international market, with the potential for shipping from other ports.

A detailed Project description is provided in **Section 4—Project Description**.



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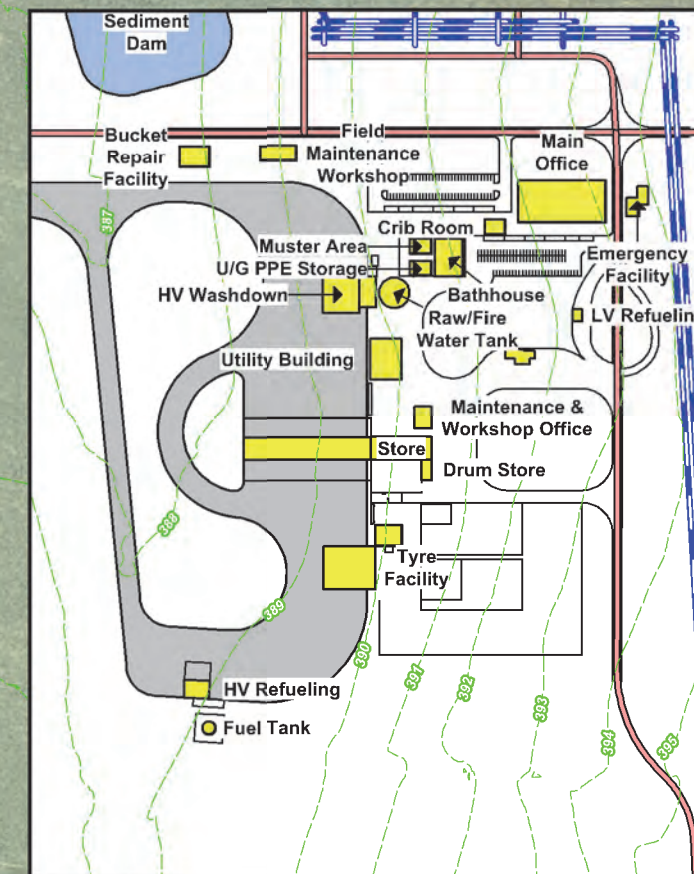
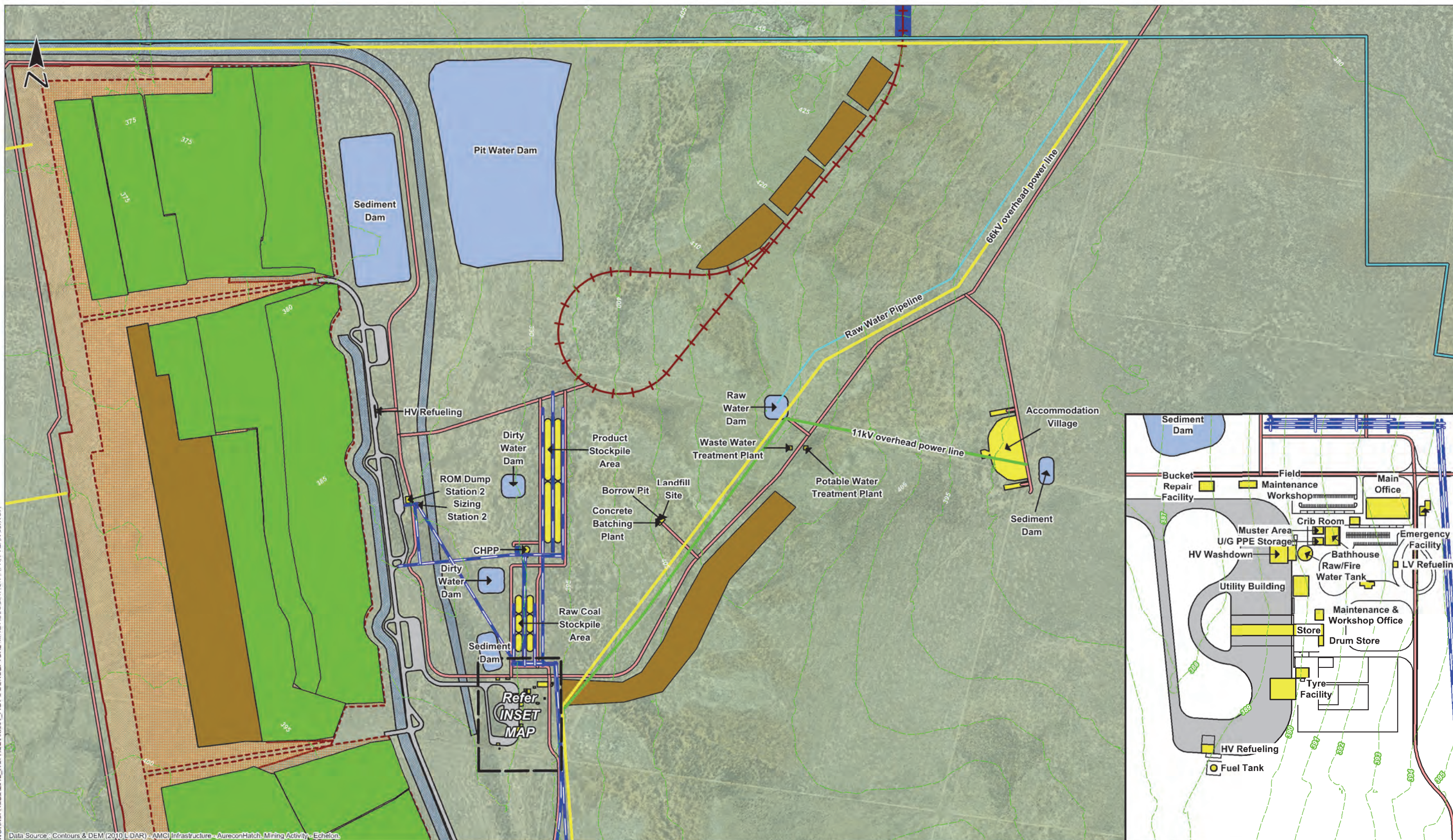








S:\PROJECTS\AM001 5TH GALILEE EIS\ MAP\INFO\WORKSPACES\2012\_WS\SPACE\AM001\_FIG1-3 CONCEPTUAL MINE ASSOCIATED INFRA-YEAR 33.WOR



#### LEGEND

- MLA70453
- Principal road
- Railway
- Contour AHD (10m)

- Mining Activity
- Open pit
- Waste rock emplacement

- Infrastructure
- Facility area
- Stream diversion
- Drainage channel
- Water storage dam
- Topsoil stockpile
- Topsoil spreading and rehabilitation
- Heavy vehicle road
- Light vehicle road
- On-site rail component
- Coal & rejects conveyor

- Utilities
- 66kV overhead power line
- 11kV overhead power line
- Raw water pipeline

### Alpha Coal Pty Ltd South Galilee Coal Project Conceptual Mine Associated Infrastructure Year 33

1 0 1  
Kilometres

Scale: 1:50,000 (A3)

13/07/2012  
Proj. : MGA Z55  
Datum: GDA 1994

FIGURE 1-3







### 1.3. RELATIONSHIP TO OTHER PROJECTS

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There are a number of proposed coal mines in the vicinity of the SGCP, including:

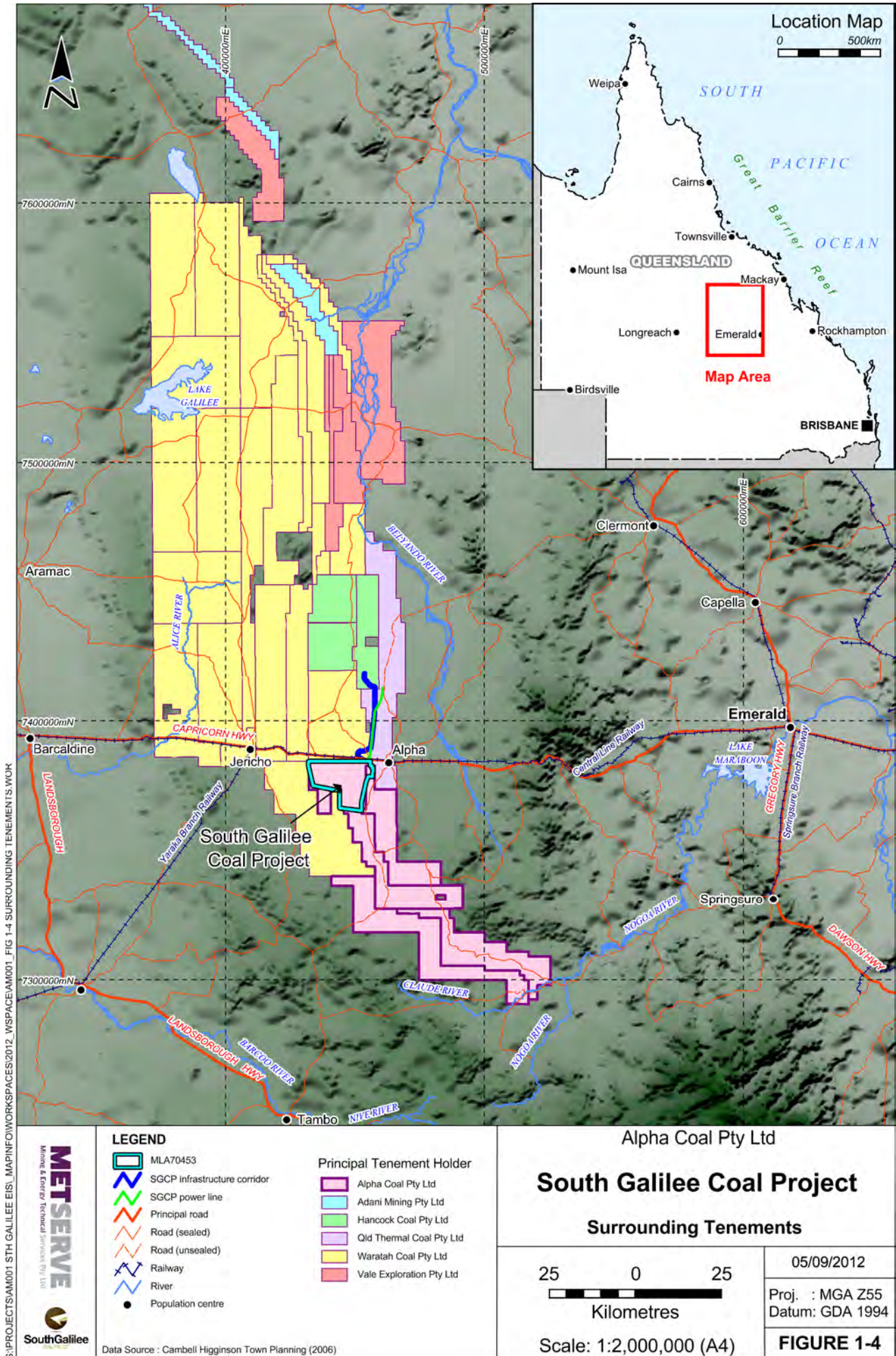
- Galilee Coal Project, proposed by Waratah Coal Pty Ltd
- Alpha Coal Mine, proposed by the GVK Group
- Kevin's Corner, proposed by the GVK Group
- Carmichael Coal Mine and Rail Project, proposed by Adani Mining Pty Ltd.

**Figure 1-4** shows the location of mining tenements surrounding the SGCP.

The development and implementation of the SGCP will be dependent on the successful development of external infrastructure (e.g. electricity, water supply infrastructure and a rail link to a coal export terminal). The proposed and existing mining/infrastructure projects described in this subsection are subject to separate Environmental Impact Assessment (EIA) and approvals processes. Although they do not form part of this EIS, their relationship to the SGCP is described in detail in **Section 4—Project Description** and summarised below:

- APCT—there is the potential for the SGCP to secure interim and long-term port capacity at GVK's Abbot Point Terminal 3 (T3). Any long-term access would be subject to GVK obtaining approvals to expand the capacity of T3.
- Galilee Basin Transmission Project proposed by Powerlink Queensland—electricity for the SGCP will be supplied by this infrastructure Project to a substation north of the SGCP (proposed Surbiton Hill Substation).
- 132 kilovolt feed line from the proposed Waratah/SGCP Substation to the northern boundary of MLA 70453—a Power Allocation (Power Enquiry) has been made to Powerlink by both Waratah Coal and the Proponent seeking confirmation of an unregulated supply to both mines.
- Standard gauge rail infrastructure linking the Galilee Basin to the APCT. The Proponent proposes to construct a rail spur component to connect to a common user rail line via a third party access agreement. On June 6, 2012, the GVK-Hancock Coal rail alignment was approved by state government to allow third party access for the transportation of coal from the Galilee Basin to the APCT.

Opportunities for co-location of existing/proposed infrastructure are discussed in detail in **Section 2—Project Rationale and Alternatives**.





## 1.4. THE ENVIRONMENTAL IMPACT ASSESSMENT PROCESS

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### 1.4.1. Objectives and Structure of the EIS

The objective of the EIA process is to ensure that all potential impacts associated with a particular development are identified and assessed and adverse impacts are avoided or mitigated.

This EIS document informs the EIA process by providing information to interested bodies and persons, affected groups or persons and government agencies and referral bodies. The objectives of this EIS are to:

- provide a rationale for the Project and describe the alternatives considered
- describe the Project and how it will be implemented
- identify and assess the potential environmental, social and economic impacts of the Project
- demonstrate how potential impacts can be avoided, mitigated or managed, and present offsets for any residual impacts.

The EIS is structured as follows:

Executive Summary

- **Section 1** provides an introduction to the SGCP
- **Section 2** discusses the Project rationale and alternatives
- **Section 3** provides an overview of Project approvals
- **Section 4** provides a description of the Project
- **Section 5** provides a description of rehabilitation and decommissioning
- **Section 6** to **Section 19** presents the environmental values, potential impacts and mitigation measures for various environmental aspects of the SGCP
- **Section 20** describes the environmental values, potential impacts and mitigation measures for Matters of National Environmental Significance relevant to the SGCP
- **Section 21** includes the Environmental Management Plan (EM Plan)
- **Section 22** provides the conclusions and recommendations of this EIS
- **Section 23** lists the references cited in the EIS
- the **Appendices Section** provides additional assessment information including technical reports (refer to **Appendix A** to **Appendix U**).

### 1.4.2. Methodology of the EIS

The SGCP EIS process has been carried out under the *State Development and Public Works Organisation Act 1971 (SDPWO Act)*, administered by the Department of State Development, Infrastructure and Planning (DSDIP).

On 11 March 2010, the Proponent lodged an Initial Advice Statement (IAS) to support an application for 'significant project' status from the Coordinator-General under the *SDPWO Act*.

On 26 May 2010, the Coordinator-General declared the SGCP to be a significant project for which an EIS is required. The declaration of the Project as significant does not indicate support for, or approval of, the Project by the Coordinator-General or the Queensland Government. This declaration means the Project is required to undergo a rigorous EIS process.

The then Department of Employment, Economic Development and Innovation (DEEDI) released the draft Terms of Reference (ToR) for public exhibition and comment on 31 July 2010. Following a comprehensive assessment of written submissions received in response to the draft ToR, the final ToR were released by DSDIP on 29 November 2010 (refer to **Appendix A—Final EIS ToR**).

The SGCP was also referred to the Commonwealth Department of Environment, Water, Heritage and the Arts (DEWHA), (now Department of Sustainability, Environment, Water, Population and the Arts [SEWPaC]) on 17 May 2010 under the *Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)*. DEWHA determined the SGCP to be a controlled action on 16 June 2010, due to the potential impacts on the following matters of national environmental significance under the *EPBC Act*:

- listed threatened species and ecological communities (Section 18 and 18A, *EPBC Act*)
- listed migratory species (Section 20 and 20A, *EPBC Act*).

As a controlled action, the SGCP will be assessed under the bilateral agreement between the Commonwealth and the State, whereby SEWPaC has accredited the Queensland EIA process. The SGCP will require approval from the Commonwealth Minister for SEWPaC before it can proceed.

Mining & Energy Technical Services Pty Ltd has coordinated the environmental studies and compiled the EIS with and on behalf of the Proponent, with the assistance of specialist sub-consultants. The EIS study team is provided in **Appendix E—Study Team**. The content of the EIS reflects the assessment requirements contained in the final ToR.

The information presented in the EIS has been used to formulate an EM Plan (refer to **Section 21—Environmental Management Plan**). The EM Plan integrates the environmental management commitments, conditions and statutory requirements that the SGCP will observe.

As described in **Section 1.4.3**, following lodgement to DSDIP, this EIS will be made publicly available and submissions will be sought from agencies and the general public. **Section 1.5** and **Appendix D—Consultation Report** provide further detail on the consultation undertaken as part of the EIS process.



The Coordinator-General is required to prepare an assessment evaluating the EIS, which will take into account the EIS, Supplementary EIS (if required), properly made submissions, comments and advice from advisory agencies, technical reports and legal advice.

A detailed summary of legislation pertinent to the SGCP assessment and approval process is provided in **Section 3—Project Approvals** and **Appendix C—Project Approvals**.

### 1.4.3. Submissions

Copies of this EIS have been submitted to DSDIP. Following submission, the EIS will be distributed for review by government agencies and the public. A public notice will be published in local, regional, state and national newspapers to advise:

- where a copy of the EIS will be available for inspection
- where a copy of the EIS may be obtained at a reasonable cost
- that submissions may be made to the Coordinator-General about the EIS
- the submission period set by the Coordinator-General during which a submission may be made.

Electronic copies of the EIS will be placed on public display at <http://www.deedi.qld.gov.au/cg/south-galilee-coal-mine.html>.

Hard copies of the EIS will be made available at the following locations:

#### Alpha Library

Address:	Tennyson St Alpha Qld 4724
Opening Hours:	Mon 3:00 pm–6:00 pm Wed 2:00 pm–5:00 pm Fri 9:00 am–12:00 noon

#### Jericho Library

Address:	Shire Office Pasteur St Jericho Qld 4188
Opening Hours:	Mon 2:00 pm–5:00 pm Thurs 4:00 pm–7:00 pm

#### State Library of Queensland

Address:	Cnr Peel & Stanley St South Brisbane Qld 4101
Opening Hours:	Mon-Thurs 10:00 am–8:00 pm Fri-Sun 10:00 am–5:00 pm

Any person, group or organisation can make a written submission about the SGCP EIS. Such submissions do not have to relate to the whole of the EIS and may relate to any aspect. Persons making a submission do not have to be an expert in any of the issues assessed in the EIS.

EIS comments and submission must be made in writing and must be received on or before the deadline for submissions, as advertised in the public notice about the EIS.

Submissions must state the name and address of each submitter, be signed by the submitter, state the grounds of the submission and the facts and circumstances relied upon in support of the grounds. Unless submissions are properly made, the submitter forgoes the right to appeal the decision on the Project.

All submissions, comments and enquiries regarding this EIS should be addressed to:

The Coordinator-General  
Attention: EIS Project Manager  
South Galilee Coal Project  
Significant Projects Coordination  
Department of State Development, Infrastructure and Planning  
PO Box 15517  
CITY EAST QLD 4002  
Tel: (07) 3238 3131 Fax: (07) 3225 8282

As described in **Section 1.4.2**, the Coordinator-General will consider public submissions in making decisions/recommendations in relation to the SGCP. DSDIP will coordinate the consultation process between the Proponent, the Advisory Bodies and the public and collate and review all comments received on the EIS.

If required, the proponents will then prepare a Supplementary EIS addressing the comments submitted by the Advisory Bodies and the public. At the conclusion of this process, the Coordinator-General will prepare an EIS Assessment Report.

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## 1.5. PUBLIC CONSULTATION PROCESS

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A comprehensive public consultation program has been an integral component of the EIS process. Consultation will continue to be undertaken over the life of the Project.

The objectives of the public consultation program are to:

- identify stakeholders and their values, concerns and issues
- provide a foundation for long-term relationships between the SGCP and the community that is based on trust and mutual respect
- promote stakeholder confidence by ensuring open and transparent two way communication
- deliver regular, consistent and accurate information about the SGCP to educate stakeholders and make them aware of potential benefits and/or impacts associated with the Project

- provide factual information about the SGCP and ensure all stakeholders understand any potential benefits and/or impacts
- acknowledge and manage the expectations of stakeholders
- ensure community involvement/feedback mechanisms are in place to maximise opportunities for input into the EIA process and actively seek opinions from stakeholders on matters of importance to the SGCP
- work with stakeholders to develop agreed outcomes and solutions to issues where practicable
- meet the statutory requirements for public consultation and ensure stakeholder issues are appropriately addressed as part of the formal EIS process.

Consultation has been undertaken with landholders, key stakeholders, government agencies and the broader community, and has included the following engagement tools and activities:

- face-to-face meetings
- production and distribution of Project information/updates (e.g. fact sheets)
- public communication activities (e.g. Community Information Days, media releases and adverts)
- formation and meetings of interest groups (e.g. Community Reference Group and Technical Reference Group)
- establishment of Project contact points (e.g. SGCP freecall hotline, website, dedicated email and mailing addresses)
- direct mail
- community survey.

Public consultation will continue to be undertaken over the life of the Project, as detailed in the Social Impact Assessment presented in **Appendix Q—Social Impact Assessment**.

**Appendix D—Consultation Report** describes the identification of stakeholders, the consultation activities undertaken to date, outcomes of consultation and how these have been considered and/or addressed in this EIS.