

Spur Hill Underground Coking Coal Project
Project Description and
Preliminary Environmental Assessment



April 2014



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1 INTRODUCTION

1.1 PURPOSE AND STRUCTURE OF THIS DOCUMENT

Spur Hill Management Pty Ltd (SHM) is seeking consent to develop an underground coal mining operation in the Upper Hunter Valley, herein referred to as the Spur Hill Underground Coking Coal Project (the Project) (Figure 1).

This document has been prepared to provide Project information to key State regulatory agencies, facilitate the discussion of issues that will need to be addressed during the environmental assessment process and initiate the preparation of the Director-General's Requirements (DGRs) under clause 3 of Schedule 2 of the New South Wales (NSW) *Environmental Planning and Assessment Regulation, 2000* (EP&A Regulation).

The remainder of this document is structured as follows:

- Section 1 Introduction – provides a background to the development of the Project and an overview of the proposed Project activities.
- Section 2 Local and Regional Context – summarises the local and regional context of the Project (including surrounding development).
- Section 3 Project Description and Justification – provides a clear and concise description of the Project, indicates the types of activities that will be undertaken, includes a justification for the Project and summarises alternatives to the Project considered.
- Section 4 Planning Considerations – describes the permissibility of the Project and applicable statutory planning instruments and strategic planning documents.
- Section 5 Preliminary Environmental Assessment – identifies key environmental issues of particular relevance to the Project based on a preliminary risk assessment, provides an analysis of the likely nature and extent of potential impacts, and identifies strategies to address the impacts identified.

Section 6 Stakeholder Consultation – outlines consultation (with the community, local councils and Government agencies) already undertaken and proposed to be carried out for the Project.

Section 7 References – Lists documents referenced in Sections 1 to 6.

1.2 BACKGROUND

Historic exploration activities were undertaken within or near the Project area by the Joint Coal Board in 1949, the Bureau of Mineral Resources in the 1950s, the Department of Mines in the 1970s and the Carpentaria Exploration Company in the 1970s and 1980s.

Exploration Licence (EL) 7429 was granted to Spur Hill U.T. Pty Ltd & Spur Hill No.2 Pty Limited on 18 December 2009 for a period of 5 years as part of a competitive tender process. Exploration activities and environmental studies commenced for the Project in early January 2012.

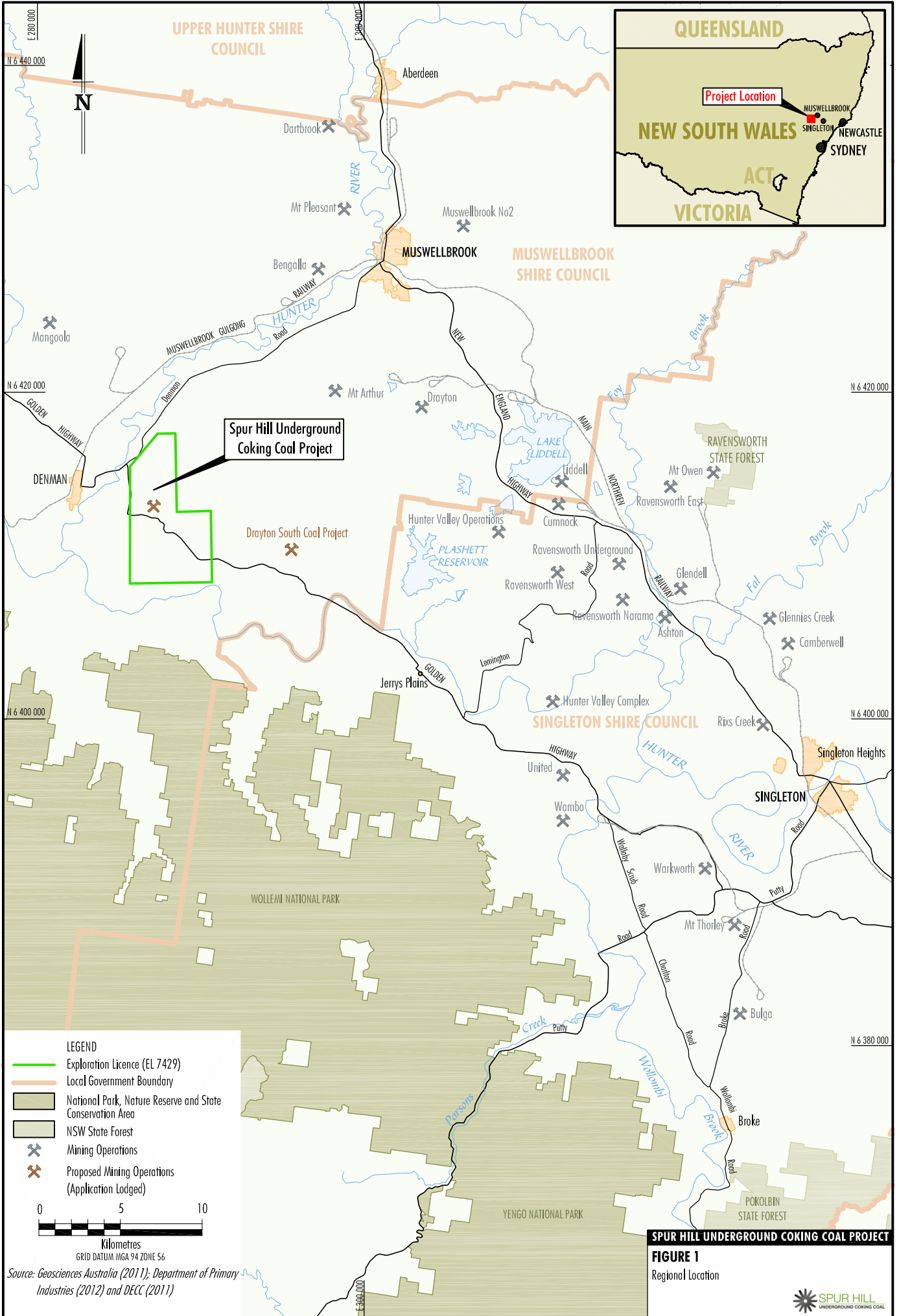
SHM manages the Project on behalf of the joint venture between Spur Hill U.T. Pty Ltd & Spur Hill No. 2 Pty Limited. SHM is managed by Spur Hill No. 2 Pty Limited, which is a wholly owned subsidiary of Malabar Coal Limited, an Australian Stock Exchange (ASX) listed company.

SHM lodged an application for a Gateway Certificate to the Mining and Petroleum Gateway Panel (Gateway Panel) in December 2013. The Gateway Panel issued a Gateway Certificate for the Project on 19 March 2014 in accordance with the *State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007* (Mining SEPP).

The Project will also be referred to the Commonwealth Minister for the Environment for consideration as to whether the Project is a 'Controlled Action' and requires approval under the Commonwealth *Environment Protection and Biodiversity Conservation Act, 1999* (EPBC Act).

The DGRs will be prepared by NSW Planning & Infrastructure in consideration of:

- this document;
- any key issues raised by public authorities;
- recommendations of the Gateway Panel set out in the Gateway Certificate; and
- the decision of the Commonwealth Minister for the Environment regarding the referral under the EPBC Act.



SPUR HILL UNDERGROUND COKING COAL PROJECT

FIGURE 1
Regional Location



1.3 PROJECT OVERVIEW

The Project is a proposed development of an underground coal mining operation with a mine life of up to 25 years (including construction, development and operation).

The Project underground mining area would be located entirely within EL 7429. The Project would also include development of facilities for handling, processing and transportation of coal.

SHM is seeking approval from the NSW Minister for Planning and Infrastructure for a Development Consent under Division 4.1 of Part 4 of the NSW *Environmental Planning and Assessment Act, 1979* (EP&A Act) for the Project.

The Project would include the following activities:

- longwall mining from a number of seams in the Wittingham Coal Measures within the underground mining area of EL 7429;
- production of up to 8 million tonnes per annum (Mtpa) run-of-mine (ROM) coal;
- development of mine access drifts and mine infrastructure area, including administration offices, bathhouse, workshop compound, store buildings, coal stockpile areas, bunded fuel tank, laydown areas, car parking and access road;
- development of surface infrastructure associated with mine ventilation and gas drainage infrastructure;
- construction and operation of a coal handling and preparation plant (CHPP), including ROM and product coal stockpiles;
- construction and operation of a train load-out facility including turnout, rail spur, loop, signalling and associated infrastructure;
- emplacement of waste rock excavated during the construction of access drifts and shafts and emplacement of CHPP coarse rejects and fines generated during the initial processing of ROM coal;
- progressive development of sumps, pumps, pipelines, water storages and other water management infrastructure;
- ongoing exploration activities within EL 7429;
- surface monitoring, rehabilitation and remediation of subsidence effects; and
- other associated minor infrastructure, plant, equipment and activities.

An indicative Project general arrangement is shown on Figure 2.

Additional details of each of the main Project components are provided in Section 3.

2 LOCAL AND REGIONAL CONTEXT

2.1 LOCATION AND MINING TENEMENTS

The Project is located in the Upper Hunter Valley east of Denman and south-west of Muswellbrook (Figure 1). The Project underground mining area is entirely located within EL 7429 which comprises of an area of approximately 33 square kilometres (km²).

A preliminary Schedule of Lands for the Development Application Area¹ is provided in Attachment A. The Development Application Area is within the Muswellbrook Local Government Area (LGA).

2.2 LAND USE AND BUILT FEATURES

Land within the Project area is primarily used for agricultural (predominantly cattle grazing), and rural residential purposes. A small vineyard is located on a property in the north-west of the exploration area. The vineyard is owned by Spur Hill Agricultural Pty Limited, a company owned by Spur Hill No. 2 Pty Limited and Spur Hill U.T. Pty Ltd.

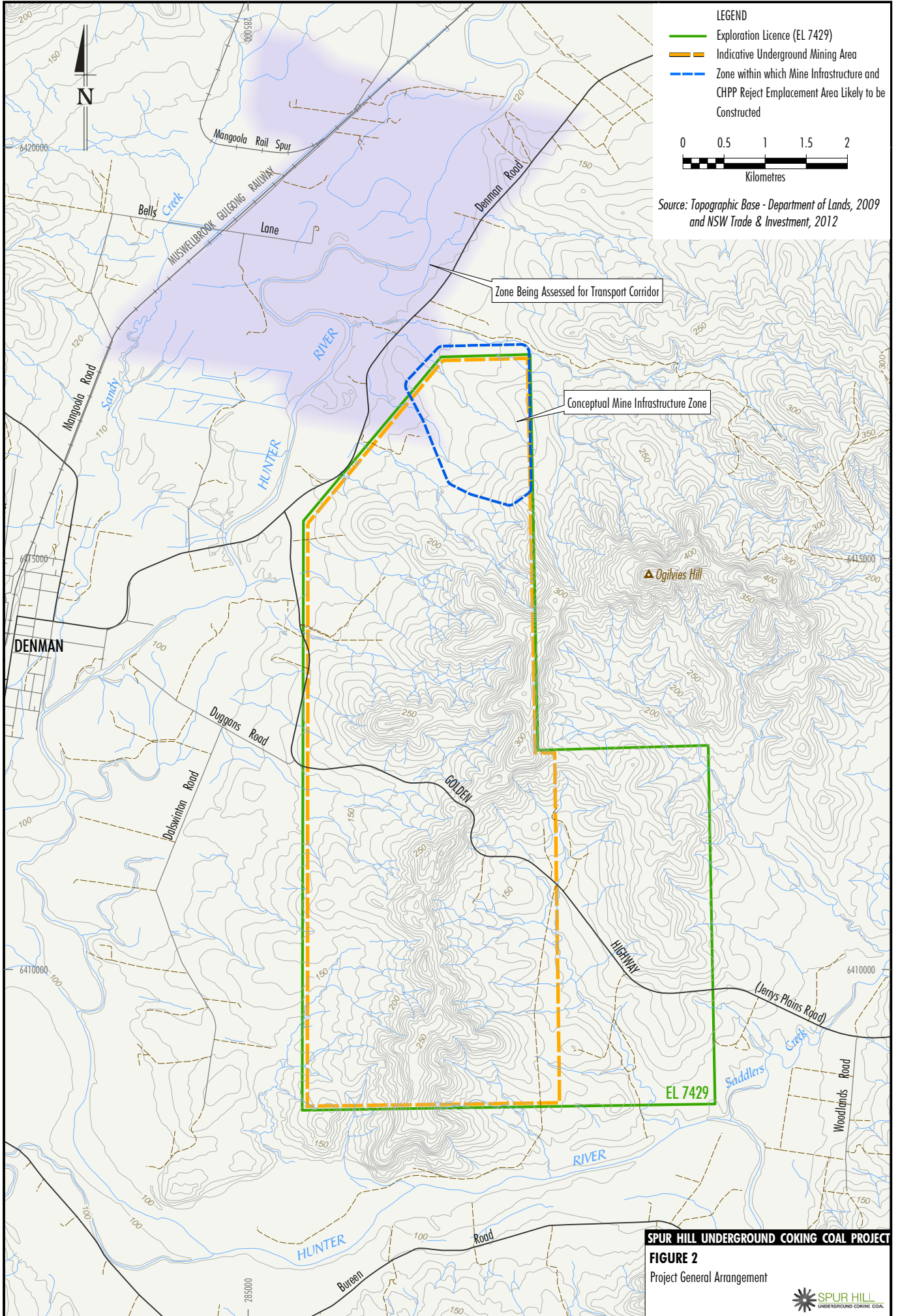
Agricultural industries within the surrounding locality include beef cattle, dairy cattle, horse breeding and viticulture (La Tierra, 2013), as well as aquaculture.

The dominant agricultural enterprise within the Project underground mining area is production of weaners/vealers on natural pastures (Figure 3) (La Tierra, 2013). Within the underground mining area are areas of woodland vegetation (generally on the steeper slopes), which are occasionally used to graze cattle.

Existing development within and immediately surrounding the Project area includes:

- the Golden Highway (State Route 84), Denman Road and Dalswinton Road;
- electrical infrastructure (66 kilovolt [kV] and low voltage powerlines);

¹ Note the Development Application Area may be subject to change following detailed mine planning, environmental assessment and consideration of alternatives conducted for the EIS.



LEGEND

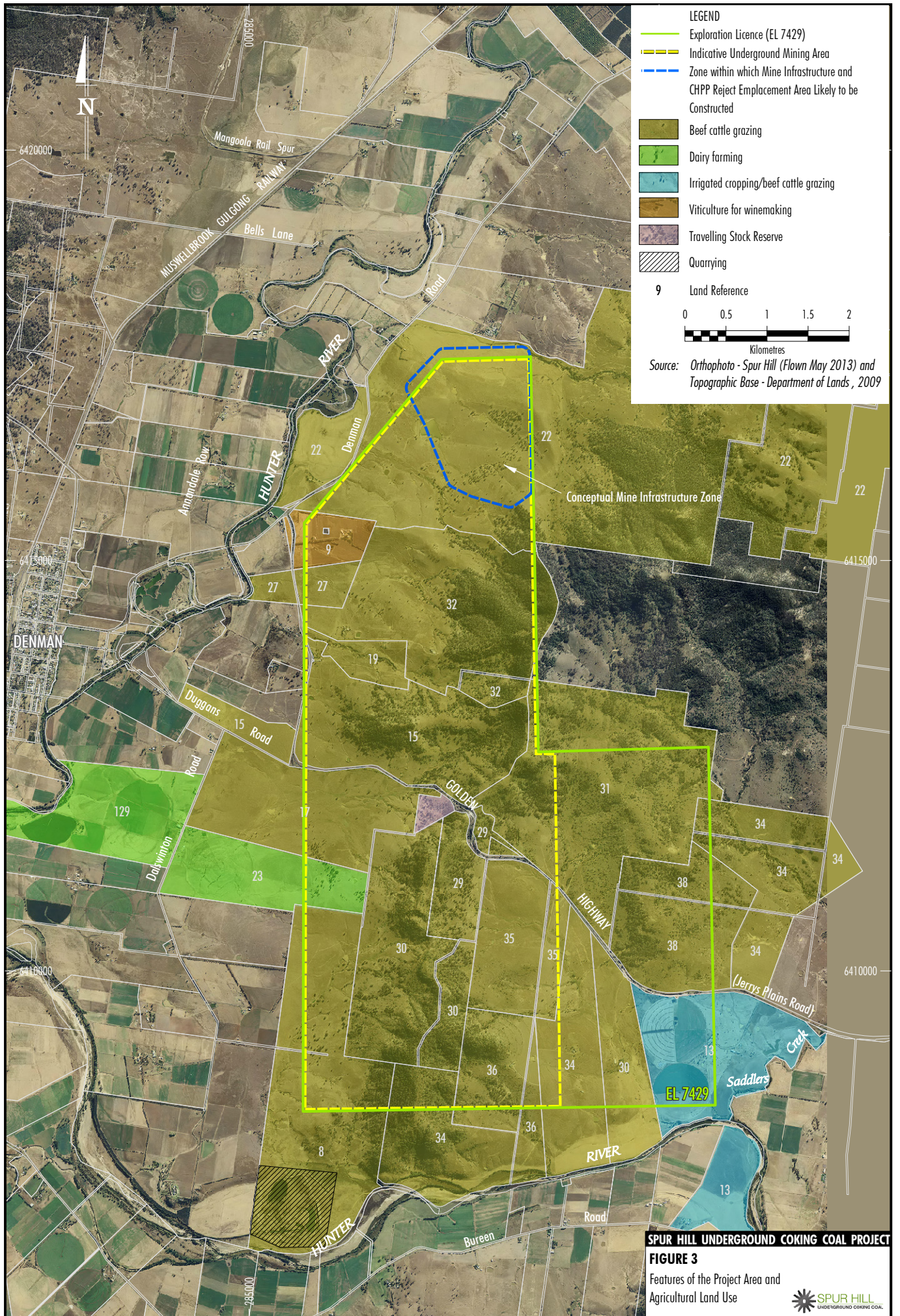
- Exploration Licence (EL 7429)
- Indicative Underground Mining Area
- Zone within which Mine Infrastructure and CHPP Reject Emplacement Area Likely to be Constructed

0 0.5 1 1.5 2
Kilometres

Source: Topographic Base - Department of Lands, 2009 and NSW Trade & Investment, 2012

SPUR HILL UNDERGROUND COKING COAL PROJECT
FIGURE 2
 Project General Arrangement





- quarrying operations;
- telecommunications infrastructure (buried fibre optic and copper cables); and
- residential and rural buildings and farm dams.

Heritage items located within the Project area include:

- the Merton Cemetery listed in the Muswellbrook Local Environmental Plan 2009 (Muswellbrook LEP) as an item of local significance; and
- Glenmunro Slab Kitchen listed in the Muswellbrook LEP as an item of local significance.

The operational and proposed mines in the vicinity of the Project area include:

- Mt Arthur Mine, approximately 4 km east of EL 7429;
- Mangoola Mine, approximately 3 km north-west of EL 7429;
- Drayton Mine, approximately 10 km east of EL 7429;
- Bengalla Mine, approximately 10 km north-east of EL 7429; and
- Drayton South Coal Project, immediately east of EL 7429.

2.3 TOPOGRAPHY AND WATER RESOURCES

The topography of the Project underground mining area is dominated by a prominent vegetated ridgeline that trends southwards from near Ogilvies Hill through to Denman Gap to the south (Figure 2). The area ranges in elevation from a maximum of 330 metres (m) in the eastern mid-section of the site, to a minimum of 100 m in the south-eastern corner near the Hunter River.

The Project area is within the Hunter River catchment, with the Hunter River located to the north-western and southern sides of the EL 7429 boundary (Figure 2). The Project underground mining area drains to the Hunter River via ephemeral drainage lines from the ridgeline. The drainage lines in the exploration area are unnamed first, second, third and fourth order streams. There are no perennial rivers or streams within the boundaries of the area.

The natural groundwater levels within the site are expected to be topographically controlled, with groundwater flowing from higher to lower levels. The site is bounded on two sides by the Hunter River and its associated alluvium. Saddlers Creek, the only other named watercourse near the Project area, and its alluvial tract join the Hunter River near the south-eastern corner of EL 7429 (Figure 2).

The majority of groundwater usage for agriculture is drawn from the Hunter River alluvial aquifer.

2.4 ENVIRONMENTALLY SENSITIVE AREAS

A preliminary investigation of environmentally sensitive areas of State significance (as defined in the *State Environmental Planning Policy (State and Regional Development) 2011* [State and Regional Development SEPP]) with respect to the Project has identified the following:

- The Development Application Area is not within coastal waters of the State.
- No lands protected or preserved under *State Environmental Planning Policy No. 14 - Coastal Wetlands* or *State Environmental Planning Policy No. 26 - Littoral Rainforests* occur within the Development Application Area.
- No lands reserved as an aquatic reserve under the *NSW Fisheries Management Act, 1994* or as a marine park under the *NSW Marine Parks Act, 1997* occur within the Development Application Area.
- No lands within a wetland of international significance declared under the Ramsar Convention on Wetlands or lands within a World Heritage area declared under the World Heritage Convention occur within or near the Development Application Area.
- Part of the Development Application Area is mapped as “environmentally sensitive land” under the Muswellbrook LEP. No lands identified in an Environmental Planning Instrument (EPI) as being of high Aboriginal cultural significance have been identified within the Development Application Area at this stage.
- No lands reserved under the *NSW National Parks and Wildlife Act, 1974* occur within the Development Application Area.

- No lands, places, buildings or structures listed on the State Heritage Register under the *Heritage Act, 1977* occur within the Development Application Area. Merton Cottage, which is listed on the NSW Heritage Register, is located to the west of EL 7429 and outside the boundary of the Development Application Area.
- No lands reserved or dedicated under the *NSW Crown Lands Act, 1989* for the preservation of flora, fauna, geological formations or for other environmental protection purposes have been identified within the Development Application Area. Travelling Stock Reserve 40361 is located within EL 7429.
- No lands declared as critical habitat under the *NSW Threatened Species Conservation Act, 1995* or *Fisheries Management Act, 1994* occur within the Development Application Area.

3 PROJECT DESCRIPTION AND JUSTIFICATION

The Project is a proposed underground coal mining operation with a mine life of up to 25 years (including construction, development and operation).

An indicative Project general arrangement is shown on Figure 2. Table 1 provides a summary of activities associated with the Project.

Additional details of each of the main Project components are discussed below.

**Table 1
Overview of the Spur Hill Underground Coking Coal Project**

Project Feature	Project
Mine Life	Up to 25 years (including construction, development and operation).
Mining Method and ROM Coal Production	Longwall mining from a number of seams in the Wittingham Coal Measures. Production of approximately 154 million tonnes (Mt) of ROM coal over the Project life.
Mine infrastructure area	Development of a mine infrastructure area comprising administration offices, bathhouse, workshop compound, store buildings, coal stockpile areas, bundled fuel tank, laydown areas, car parking and access road.
Coal Processing, Handling and Transport Infrastructure	Construction and operation of a CHPP and associated infrastructure. Production of up to 8 Mtpa ROM coal. Construction and operation of the train load-out facility including turnout, rail spur, loop, signalling and associated infrastructure.
Ventilation and Gas Drainage	Development of a ventilation and gas drainage infrastructure.
Water Management	Development of a water management strategy based on a detailed site water balance. Water management may include reuse of water on-site, storage of water on-site, licensed water extraction, consideration of treatment and beneficial use and/or release through salinity credits under the Hunter River Salinity Trading Scheme. Development of a water management system comprising of water management storages, sumps, pumps, pipelines, sediment control, mine dewatering and sewage treatment.
Hours of Operation	24 hours per day, seven days per week.
Operational Workforce	Approximately 300 personnel (excluding service providers and general management) at peak production.
Power Supply	Power supply infrastructure would be constructed for the Project.
Exploration	Ongoing exploration activities within EL 7429.
Monitoring of Subsidence Impacts	Monitoring of subsidence and subsidence impacts over the mined and active mining areas.
Remediation and Rehabilitation Works	Progressive rehabilitation of surface disturbance areas (e.g. exploration drill pads, CHPP rejects emplacements). Ongoing surface rehabilitation, mitigation and remediation works. Rehabilitation of mine related infrastructure areas at the end of the Project life.

3.1 PROPONENT

SHM (ABN 80 139 395 967) is the proponent for the Project. The contact details for SHM are:

Spur Hill Management Pty Ltd
Level 26, 259 George St
Sydney NSW 2000

PO Box R864
Royal Exchange NSW 1225

The Project website is:

<http://www.spurhillunderground.com.au/>

3.2 EXPLORATION ACTIVITIES, GEOLOGICAL FEATURES AND COAL RESOURCE

Historic exploration activities undertaken within or near the Project area are summarised in Section 1.2.

EL 7429 was granted on 18 December 2009 for a period of 5 years and SHM commenced exploration activities in early January 2012. Aeromagnetic surveys have been conducted and 26 exploration boreholes have been drilled by SHM to date.

During the life of the Project, geological exploration activities would continue to be undertaken ahead of the underground mining operations to refine the understanding of the geological structure and coal quality as input to detailed mine planning and engineering studies. These activities would include in-seam and surface-to-seam drilling, sample analysis, magnetic, electromagnetic, gravimetric and seismic investigations.

Stratigraphy

The Project is located in the Hunter Coalfield in the northern part of the Permo-Triassic Sydney Basin, which forms the southern portion of the Sydney-Gunnedah-Bowen Basin (Department of Mineral Resources [DMR], 1988).

The target seams are located within the Jerrys Plains Subgroup, forming part of the upper and middle units of the Wittingham Coal Measures (Figure 4). The Jerrys Plains Subgroup consists of banded coal seams that split and merge. Tuffaceous claystones are characteristic throughout the sequence, adding to the banded nature of the coal seams within the Project area (DMR, 1988).

The Wittingham Coal Measures are mined at a number of locations in the Hunter Coalfield. The Project targets mining of the Whynot, Bowfield and Warkworth coal seams.

Above the target seams, the stratigraphy of the area consists of a sequence of sandstone, siltstone and laminate units within the Wittingham Coal Measures and Newcastle Coal Measures (Figure 4).

Seam Characteristics

A summary of the target seams is provided in Table 2.

Table 2
Seam Characteristics of the Underground Mining Area

Seam	Depth of Cover (m)	Average Seam Thickness (m)
Whynot Seam	160 – 340	3.1
Bowfield Seam	350 – 490	2.2
Warkworth Seam	400 – 570	3.4

Source: MSEC (2013); Geological and Mining Services Australia (2013).

The Whynot Seam would produce high quality low ash soft coking coal. The Bowfield Seam would produce high quality semi-soft coking coal. The Warkworth Seam would produce a combination of semi-soft coking coal, export thermal coal, and potentially other specialised metallurgical coal.

Coal Resource

The indicated and inferred coal resource within the target seams (Whynot, Bowfield and Warkworth) in the underground mining area is approximately 252 Mt. The target recoverable coal from these seams for the Project is approximately 154 Mt of ROM coal.

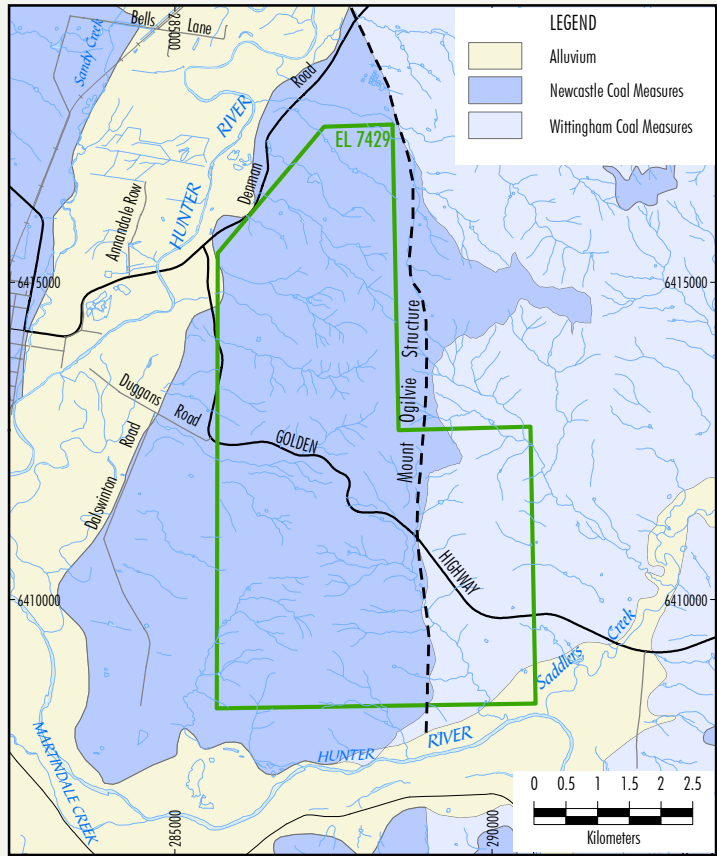
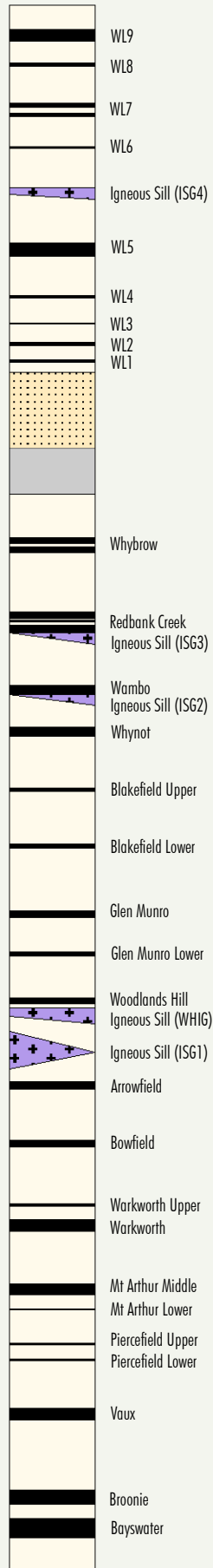
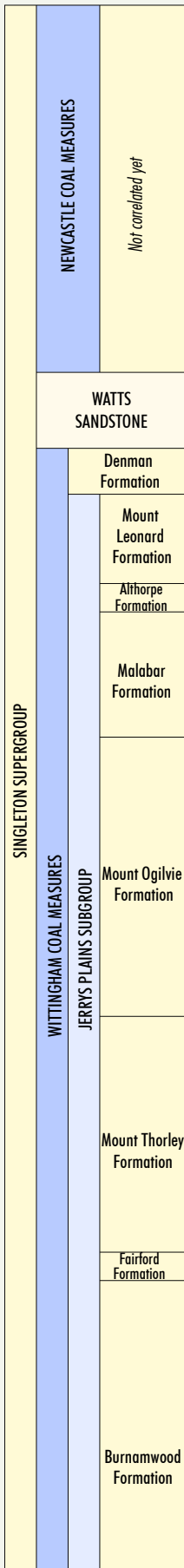
3.3 PROJECT ACTIVITIES

Development Activities

The initial construction phase of the Project would be approximately 2 years and would include the following activities.

Site Access and Site Services

- Construction of an access road from Denman Road to the mine infrastructure area.
- Installation of temporary erosion and sediment controls (e.g. filter fencing and bales).



Source: Topographic Base - Department of Lands, 2009; MGBS, 2013 and Geological and Mining Services Australia, 2013

SPUR HILL UNDERGROUND COKING COAL PROJECT
FIGURE 4
 Geology of the Project Area



- Establishment of administration offices, bathhouse, workshop compound, store buildings, bunded fuel tank, laydown areas and car parking.
- Construction of water management infrastructure, including sumps, pumps, pipelines, water storages and other water management infrastructure.
- Construction and installation of ancillary infrastructure (e.g. internal roads, electrical infrastructure, potable water supply, sewage treatment, site security).

Coal Handling Infrastructure

- Construction of ROM coal and product coal handling areas.
- Construction of a CHPP.
- Construction of train load-out facility including rail spur and loop.
- Construction of coal handling and transportation infrastructure between the mine access drifts, ROM coal handling area, CHPP and train load-out facility.

Mine Access and Underground Mine Development

- Excavation of a boxcut, portals and mine access drifts and use/emplacement of excavated waste rock during construction activities (e.g. for visual bunding, hardstand areas, dam embankments and road construction).
- Installation of ventilation infrastructure.
- Delivery, assembly and installation of mining equipment, including the longwall mining machinery.
- Development of underground main roadways and gate roads for longwall panels.
- Installation of underground conveyor systems.

Other development activities that would occur over the life of the Project would include:

- Construction of ventilation surface infrastructure and gas management systems.
- Progressive development and augmentation of sumps, pumps, pipelines, water storages and other water management equipment and structures.
- Progressive development of the underground conveyor systems and services.
- Replacements and upgrades to roadway development and longwall mining machinery.

Underground Mining Operations

The Project would involve mining from the following coal seams (Figure 5) using longwall mining methods and associated equipment:

- Whynot Seam;
- Bowfield Seam; and
- Warkworth Seam.

Some sections of the Wambo Seam may also be mined where the Whynot and Wambo Seams coalesce or as a substitute to the Whynot Seam where the Wambo Seam characteristics are preferable to the Whynot Seam. The locations where the Wambo Seam could be mined will be documented in the Environmental Impact Statement (EIS).

Underground mining activities would be undertaken 24 hours per day, 7 days per week.

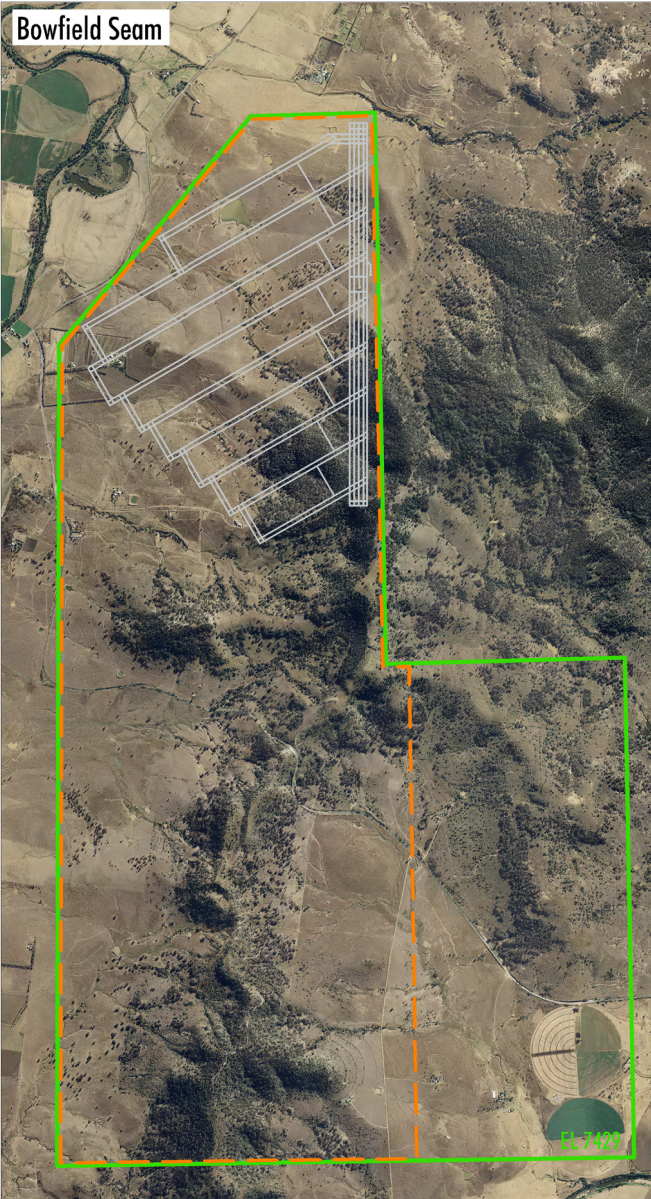
Mining would target full extraction of the seams within design constraints of the longwall mining equipment. Hence, the practical minimum extraction thickness would be 1.8 m and the practical maximum extraction thickness would be 4.5 m.

During the development of the EIS and over the life of the Project, the mining layout may vary from that shown on Figure 5 to account for factors that include: localised geological features; mine economics; coal market demand; detailed mine design considerations; and adaptive management.

The mining layout would be modified within the Project boundaries where required and would be documented in the relevant Mining Operations Plan and Extraction Plans.

Other associated infrastructure and activities would include:

- personnel and materials access via drifts from a mine infrastructure area;
- materials handling and transport systems to convey coal from the longwall and development faces to the surface;
- underground equipment (e.g. shearers, continuous miners, conveyors, bins) and mobile fleet (e.g. load haul dump vehicles, drill rigs, shuttle cars, personnel carriers);
- ventilation systems for intake and exhaust air from the mining areas;



LEGEND

- Exploration Licence (EL 7429)
- - - Indicative Underground Mining Area
- Conceptual Panel Layout

0 500 1000 1500 2000
Metres

SPUR HILL UNDERGROUND COKING COAL PROJECT

FIGURE 5
Indicative Mining Layout



- gas monitoring systems;
- gas drainage activities where required; and
- water management systems to transfer groundwater that accumulates in the underground workings to the surface.

The final location of surface infrastructure would be determined through detailed mine planning, environmental assessment outcomes and consideration of alternatives, and would be documented in the EIS.

Infrastructure and Services

A mine infrastructure area would be in the northern portion of EL 7429 (Figure 2).

The location and design of the mine infrastructure area would be determined through detailed mine planning, environmental assessment outcomes and consideration of alternatives, and would be documented in the EIS.

The mine infrastructure area would comprise the following:

- boxcut and portals, mine access drifts, shafts and ventilation infrastructure;
- ROM and product coal stockpiles and handling areas and associated conveyors;
- CHPP and associated conveyors, transfer points and surge bins;
- administration offices and workers amenities (e.g. bathhouse);
- workshop compound, store buildings and bunded fuel tank area;
- laydown areas and car parking;
- water management infrastructure, including sumps, pumps, pipelines, water storages and other equipment and structures; and
- ancillary infrastructure (e.g. internal roads, electrical infrastructure, potable water supply, sewage treatment, site security).

Access to the mine infrastructure area would be via a dedicated sealed access road joining Denman Road.

Coal Processing, Handling and Transport Infrastructure

A CHPP (coal handling and preparation plant) would be constructed and operated as a component of the Project. ROM coal would be stockpiled at the mine infrastructure area prior to feeding to the CHPP.

The CHPP would be typical of those in the Hunter Valley with the capability of producing various products, including: soft coking coal, semi-soft coking coal, and export quality thermal coal.

The Project would include the construction and operation of train load-out facilities and rail spur and loop. The rail spur would be constructed from the Muswellbrook Gulgong Railway to the mine infrastructure area, including a bridge crossing of the Hunter River and a grade separated crossing of Denman Road. The zone being assessed for the transport corridor including the rail spur and other options is shown on Figure 2. The final alignment is subject to further detailed design and finalisation of commercial arrangements.

CHPP Reject Management

Approximately 25 million bank cubic metres of CHPP reject material would be produced over the life of the Project, including coarse and dewatered fine rejects.

The Project would require emplacement areas for the management and disposal of coarse and fine rejects generated while mining operations are established.

The location and design of emplacement areas would be determined through detailed mine planning, environmental assessment outcomes and consideration of alternatives, and would be documented in the EIS.

The active emplacement area would be kept to a practicable minimum and as each section of fill reaches the designed height and landform, topsoil would be applied and re-vegetation works commenced.

SHM's strategy is to develop processes for management of coarse and fine rejects during the Project life, including beneficial uses and/or underground emplacement. These strategies and processes would be developed during the detailed mine planning and environmental assessment process for the Project.

Water Management

A site water balance model would be developed for the Project as part of the EIS.

The Project water management strategy would be developed as part of the detailed site water balance model and would be based on the following:

- separation of undisturbed area runoff from disturbed area runoff;
- collection and reuse of surface runoff from disturbed areas;
- capture of groundwater inflows and reuse as process water;
- storage of water on-site;
- licensed water extraction to supplement water supply; and
- consideration of treatment and beneficial use and/or release through salinity credits under the Hunter River Salinity Trading Scheme.

Power Supply

Power supply infrastructure for the Project would be established from the 66 kV electricity line located directly adjacent to EL 7429.

Other Activities

Other activities that would be conducted as a component of the Project include monitoring, remediation of subsidence impacts, rehabilitation of surface disturbance, and development of other associated minor infrastructure, plant, equipment and activities.

3.4 EMPLOYMENT

Employment of approximately 400 personnel would be required for the construction of the Project. The construction phase would be approximately 2 years.

During operation, the Project would employ approximately 300 personnel.

3.5 PROJECT JUSTIFICATION OVERVIEW

Alternatives Considered

Alternatives to the proposed location, mining methods and scale have been considered by SHM in the development of the Project description. An overview of the alternatives considered is provided in the points below:

- **Project Location** – the location of the Project is determined by the presence of coal seams and ability to transport product coal to market.
- **Mining Method** – the Project would be developed solely as an underground mining operation, which mitigates local issues, notably dust, visual amenity and long-term impacts to agricultural resources. The Project does not include any open cut mining. Due to the coal seam thickness, resource continuity and mining efficiency, the longwall mining method is the preferred mining method.
- **Scale** – the indicated and inferred resources within the Whynot, Bowfield and Warkworth Seams is estimated at approximately 252 Mt (as at November 2013). Resource definition and exploration drilling conducted by SHM indicates that these seams are the optimal seams for an underground mining operation.

Alternatives to be Considered

Further consideration of alternatives to location, scale, methods and management would be undertaken as a component of comprehensive assessment undertaken for the EIS. These alternatives will include:

- locations for surface infrastructure (mine infrastructure area, CHPP, train load-out facility) in consideration of detailed mine planning and environmental assessment outcomes (e.g. potential impacts on ecology and amenity);
- options for transportation of coal to the Muswellbrook Gulgong Railway using rail, conveyors or other technologies;
- opportunities for the use of existing coal processing and train load-out facilities at nearby mining operations as an alternative to the development and operation of a new CHPP and train load-out facility for the Project;

- panel layout, panel width and pillar width, in consideration of detailed geology, mine economics, safety, subsidence and environmental aspects;
- measures to avoid, mitigate, rehabilitate/remediate, monitor and/or offset the potential impacts of the Project; and
- options for the management of coarse and fine rejects (e.g. beneficial uses and/or underground emplacement).

Project Justification

The Project would facilitate the creation of employment opportunities for approximately 300 employees during the operational phase of the Project. The Project would generate annual royalties to the State in the order of \$40 million to \$60 million, along with local government rates and Federal government contributions, including tax and licence payments.

Full justification of the Project on social, environmental and economic grounds, including consideration of the principles of Ecologically Sustainable Development and a cost benefit analysis, would be included in the EIS.

4 PLANNING CONSIDERATIONS

4.1 APPLICABILITY OF DIVISION 4.1 OF PART 4 OF ENVIRONMENTAL PLANNING AND ASSESSMENT ACT, 1979

Approval for the Project will be sought under the State Significant Development provisions (Division 4.1) under Part 4 of the EP&A Act. The EP&A Act and EP&A Regulation set the framework for planning and environmental assessment in NSW.

Clause 8 of the State and Regional Development SEPP provides:

- (1) *Development is declared to be State significant development for the purposes of the Act if:*
- (a) *the development on the land concerned is, by the operation of an environmental planning instrument, not permissible without development consent under Part 4 of the Act, and*
- (b) *the development is specified in Schedule 1 or 2.*

As discussed in Section 4.4, the Project constitutes development which is not permissible without development consent under Part 4 of the EP&A Act.

Clause 5 of Schedule 1 of the State and Regional Development SEPP provides:

5 Mining

- (1) *Development for the purpose of mining that:*
- (a) *is coal or mineral sands mining...*

is State Significant Development for the purposes of the EP&A Act.

The Project represents development for the purpose of coal mining (Section 3.2).

In view of the foregoing, it is clear that the Project constitutes development to which Division 4.1 of Part 4 applies.

Development Consent will thus be sought from the NSW Minister for Planning and Infrastructure.

4.2 PLANNING PROVISIONS

State Environmental Planning Policies

The following State Environmental Planning Policies (SEPPs) may potentially be relevant to the Project:

- *State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007 (Mining SEPP);*
- *State Environmental Planning Policy (Infrastructure) 2007 (Infrastructure SEPP);*
- *State Environmental Planning Policy No. 33 (Hazardous and Offensive Development) (SEPP 33);*
- *State Environmental Planning Policy No. 44 - Koala Habitat Protection;*
- *State Environmental Planning Policy No. 55 (Remediation of Land); and*
- *Hunter Regional Environmental Plan 1989 (Heritage).*

Relevant provisions and objectives of the above SEPPs would be considered in the preparation of the EIS.

Local Environmental Plans

The Development Application Area is within the Muswellbrook LGA (Figure 1), which is covered by the Muswellbrook LEP.

The Muswellbrook LEP is discussed further in Section 4.4.

Mining Act, 1992

SHM will lodge Mining Lease Applications (MLAs) separately with the NSW Division of Resources and Energy (DRE) (within the NSW Department of Trade and Investment, Regional Infrastructure and Services [NSW Trade and Investment]) for the Project.

Under the NSW *Mining Act, 1992*, environmental protection and rehabilitation are regulated by conditions included in all mining leases, including requirements for the submission of a Mining Operations Plan prior to the commencement of operations, and subsequent Annual Environmental Management Reports.

Under section 89K(1)(c) of the EP&A Act, if the Project is approved as State Significant Development, mining leases granted under the *Mining Act, 1992* cannot be refused and are to be substantially consistent with any Development Consent granted under Division 4.1 of Part 4 of the EP&A Act.

Protection of the Environment Operations Act, 1997

The NSW *Protection of the Environment Operations Act, 1997* (PoEO Act) and the NSW *Protection of the Environment Operations (General) Regulation, 2009* set out the general obligations for environmental protection for development in NSW.

Under section 89K(1)(e) of the EP&A Act, if the Project is approved as State Significant Development, an Environment Protection Licence (EPL) under the PoEO Act cannot be refused and is to be substantially consistent with any Development Consent granted under Division 4.1 of Part 4 of the EP&A Act.

Mine Subsidence Compensation Act, 1961

The Development Application Area is located within the Muswellbrook Mine Subsidence District.

Under section 15 of the NSW *Mine Subsidence Compensation Act, 1961*, approval is required from the Mine Subsidence Board to alter or erect improvements or to subdivide land within a mine subsidence district.

If the Project is approved, SHM would apply for the necessary approvals associated with the development of improvements associated with the Project.

Under section 89K(1)(b) of the EP&A Act, if the Project is approved as State Significant Development, approvals granted under the *Mine Subsidence Compensation Act, 1961* cannot be refused and are to be substantially consistent with any Development Consent granted under Division 4.1 of Part 4 of the EP&A Act.

Roads Act, 1993

If the Project is approved, SHM would apply for the necessary consents under section 138 of the NSW *Roads Act, 1993* associated with mining under any public road.

Under section 89K(1)(f) of the EP&A Act, if the Project is approved as State Significant Development, consent under section 138 of the *Roads Act, 1993* cannot be refused and is to be substantially consistent with any Development Consent granted under Division 4.1 of Part 4 of the EP&A Act.

Commonwealth Environment Protection and Biodiversity Conservation Act, 1999

The Project will be referred to the Commonwealth Minister for the Environment for consideration as to whether the Project is a 'Controlled Action' and requires approval under the EPBC Act.

Commonwealth Native Title Act, 1993

The Commonwealth *Native Title Act, 1993* (CNTA) provides for the recognition and protection of native title rights in Australia. The CNTA provides a mechanism to determine whether native title exists and what the rights and interests are that comprise that native title. The process is designed to ensure that indigenous people who profess an interest in the land (or any part thereof) have the opportunity to express this interest formally, and to negotiate with the Government and the applicant about the proposed grant or renewal, or consent to access native title land.

The NSW *Mining Act, 1992* must be administered in accordance with the CNTA. The primary effect of the CNTA on exploration and mining approvals is to provide native title parties with a 'Rights to Negotiate' about the grant and some renewals by governments of exploration and mining titles. The CNTA, where applicable, would be complied with in relation to the granting of any necessary mining tenements for the Project.

4.3 PLANNING STRATEGIES

The following strategic planning documents would be considered in the planning of the Project and the preparation of the EIS:

- *Upper Hunter Strategic Regional Land Use Plan* (NSW Government, 2012a);
- *Hunter-Central Rivers Catchment Action Plan* (Hunter-Central Rivers Catchment Management Authority, 2007); and
- *Land Use Development Strategy* (Muswellbrook Shire Council, 2012).

4.4 PERMISSIBILITY OF THE PROJECT

Section 89E of the EP&A Act provides that development consent may not be granted under Division 4.1 of Part 4 if the development is *wholly* prohibited by an environmental planning instrument, but may be granted despite the development being *partly* prohibited by an environmental planning instrument.

The Development Application Area includes land zoned under the Muswellbrook LEP as:

- Zone RU1 (Primary Production); and
- Zone E3 (Environmental Management).

Under Part 2 of the Muswellbrook LEP (Permitted or Prohibited Development), underground mining is not listed as permissible, with or without consent, on lands within Zone RU1 (Primary Production) and Zone E3 (Environmental Management). Underground mining is therefore prohibited under the Muswellbrook LEP (subject to the application of the Mining SEPP as discussed below).

Clause 4 of the Mining SEPP relevantly provides:

4 Land to which Policy applies

This Policy applies to the State.

Clause 5(3) of the Mining SEPP gives it primacy where there is any inconsistency between the provisions in the Mining SEPP and the provisions in any other environmental planning instrument (subject to limited exceptions).

The practical effect of clause 5(3) for the Project is that if there is any inconsistency between the provisions of the Mining SEPP and those contained in the Muswellbrook LEP, the provisions of the Mining SEPP will prevail.

Clauses 6 and 7 of the Mining SEPP provide what types of mining development are permissible without development consent and what types are permissible only with development consent.

In this regard, clause 7(1) states:

7 Development permissible with consent

(1) Mining

Development for any of the following purposes may be carried out only with development consent:

(a) *underground mining carried out on any land,*

...

(d) *facilities for the processing or transportation of minerals or mineral bearing ores on land on which mining may be carried out (with or without development consent), but only if they were mined from that land or adjoining land,*

...

The term 'underground mining' in the Mining SEPP is given an extended definition in clause 3(2) as follows:

underground mining means:

(a) *mining carried out beneath the earth's surface, including bord and pillar mining, longwall mining, top-level caving, sub-level caving and auger mining, and*

(b) *shafts, drill holes, gas and water drainage works, surface rehabilitation works and access pits associated with that mining (whether carried out on or beneath the earth's surface),*

but does not include open cut mining.

The effect of clause 7(1)(a), in conjunction with the operation of clause 5(3) of the Mining SEPP, is that notwithstanding any prohibition in the Muswellbrook LEP, development for the purpose of underground mining may be carried out with development consent.

Accordingly, the Minister would not be precluded from granting approval under section 89E of the EP&A Act for the Project in respect of those parts of the Project land where mining is prohibited under the Muswellbrook LEP.

5 PRELIMINARY ENVIRONMENTAL ASSESSMENT

5.1 OVERVIEW

The following preliminary environmental assessment has been prepared to identify the key potential environmental issues associated with the construction and operation of the Project. This information has been prepared to assist the NSW Planning & Infrastructure with the issuing of the DGRs for the Project under clause 3 of Schedule 2 of the EP&A Regulation.

This preliminary environmental assessment has drawn on:

- understanding of the local and regional context (Section 2) and the Project (Section 3);
- feedback from stakeholder consultation undertaken to date;
- baseline environmental data collected to date;
- experience from previous environmental management and approvals processes throughout NSW; and
- a preliminary risk assessment.

The preliminary environmental assessment involved the following steps:

1. **Identification of Potential Issues –** Consideration of how the Project is likely to affect the physical or biological aspects of the environment; natural or community resources; environmentally sensitive areas; areas allocated for conservation purposes; and areas sensitive because of community factors.
2. **Identification of Key Potential Environmental Issues –** Based on the results of the preliminary risk assessment, what are the priority issues, considering the extent of the potential impacts; the nature of the potential impacts; and the potential impacts on environmentally sensitive areas.

3. **Preliminary Consideration of the Study Requirements –** Each of the key environmental issues identified above were considered with respect to the level and scope of assessment that would be required for the EIS. Preliminary strategies to address the key impacts were also identified.

The key environmental issues identified by the preliminary risk assessment are provided in Table 3 with a preliminary list of study requirements to address these issues. Recognised specialists will be commissioned to conduct the studies outlined in Table 3, and independent peer review will be conducted of key studies.

5.2 LEVEL AND SCOPE OF ASSESSMENT

In addition to consideration of the key potential environmental issues (Table 3), the following studies would be undertaken as a component of the EIS to address other potential impacts:

- subsidence assessment of potential impacts on other natural features (e.g. steep landforms);
- road transport assessment;
- rehabilitation strategy; and
- preliminary hazard analysis in accordance with SEPP 33.

Assessment of the key potential environmental issues (Table 3) and the other potential impacts identified above would include consideration of:

- existing environment using sufficient baseline data;
- potential impacts of all stages of the Project including any cumulative impacts;
- measures that could be implemented to avoid, mitigate, rehabilitate/remediate, monitor and/or offset the potential impacts of the Project; and
- contingency plans and/or adaptive management for managing any potentially significant residual risks to the environment.

Preliminary strategies to address each of the key environmental issues are presented in Table 3. These strategies would be developed and refined through the assessment process. Detail on the proposed measures would be presented in the EIS.

All assessments of potential impacts would consider all applicable policies, guidelines and plans included in contemporary DGRs for major mining projects. Therefore, these policies, guidelines and plans have not been repeated within this document.

Table 3
Key Potential Environmental Issues, Required Level and Scope of Environmental Assessment and Preliminary Strategies to Address Potential Impacts

Key Potential Environmental Issue	Likely Extent and Nature of Potential Impacts	Proposed Level and Scope of Environmental Assessment	Preliminary Strategies to Address Potential Impacts (To be refined during detailed Impact Assessment)
Impacts on agricultural land resources.	<ul style="list-style-type: none"> Potential subsidence related impacts on soils (e.g. minor soil cracking). Agricultural production would be able to continue above the underground mining area. Temporary removal of land from agricultural production as a result of land used for surface infrastructure during the Project life. 	<ul style="list-style-type: none"> Consideration of the recommendations of the Gateway Panel in the Gateway Certificate. Detailed assessment of the agricultural resources and agricultural production of the Project area, based on site-specific soil analysis, identification of current agricultural enterprises and consultation with local landholders. Risk-based assessment of potential impacts on agricultural resources and industries. Incorporation of the results of other specialist studies, including the socio-economic assessment and groundwater assessment. Investigation of measures to avoid, mitigate, monitor and/or remediate potential impacts of the Project. 	<ul style="list-style-type: none"> Consideration of environmental assessment outcomes during detailed mine planning (including the location of any biophysical strategic agricultural land). Development and implementation of Extraction Plans to mitigate, monitor and manage potential impacts on agricultural land. Remediation of subsidence related impacts on agricultural land, for example surface crack repair works and repairs to fencing. Incorporation of agricultural land in rehabilitation strategy. Strategies to maintain agricultural production on any land purchased by SHM.
Subsidence related impacts on key built infrastructure and residences.	<ul style="list-style-type: none"> Potential impacts on built features and private residences as a result of subsidence effects (e.g. tilts and strains). 	<ul style="list-style-type: none"> Subsidence assessment of potential subsidence effects on built features. Proactive engagement with relevant infrastructure owners and residents. Consideration of panel layout, panel width and pillar width, including mine economics and environmental aspects. Development of management measures to maintain safety and (wherever practical) serviceability, and to fully repair or fully compensate any loss of serviceability or damage. Investigation of measures to avoid, mitigate, remediate and/or monitor the potential impacts of the Project. 	<ul style="list-style-type: none"> Consideration of environmental assessment outcomes during detailed mine planning (including potential impacts to built features and private residences). Development of subsidence performance measures for built features and private residences. Adaptive management approach to achieve subsidence performance measures. Development and implementation of Extraction Plans (including Property Subsidence Management Plans) to mitigate, monitor and manage potential impacts on built features and private residences in consultation with the relevant owner(s). Appropriate pre-mining mitigation measures to minimise impacts, where appropriate. Remedial measures for subsidence impacts, including a commitment to mitigate, repair, replace or compensate any impacts in a timely manner.

Table 3 (Continued)
Key Potential Environmental Issues, Required Level and Scope of Environmental Assessment and Preliminary Strategies to Address Potential Impacts

Key Potential Environmental Issue	Likely Extent and Nature of Potential Impacts	Proposed Level and Scope of Environmental Assessment	Preliminary Strategies to Address Potential Impacts (To be refined during detailed Impact Assessment)
Subsidence related impacts on groundwater resources.	<ul style="list-style-type: none"> Potential depressurisation of coal seam aquifers and alluvial aquifers as a result of underground mining. Potential impacts on other groundwater users in the vicinity of the Project and potential reduction in baseflow contributions to local watercourses. 	<ul style="list-style-type: none"> Consideration of the recommendations of the Gateway Panel in the Gateway Certificate. Assessment of potential changes in fracture porosity and permeability of strata overlying the mine workings. Groundwater assessment, including numerical modelling of potential impacts on groundwater users and baseflow contributions to local watercourses, and consideration of the Aquifer Interference Policy (NSW Government, 2012b). Investigation of measures to avoid, mitigate, monitor and/or offset the potential impacts of the Project. 	<ul style="list-style-type: none"> Development of subsidence performance measures for alluvial aquifers. Adaptive management approach to achieve subsidence performance measures. Groundwater monitoring network. Development and implementation of Extraction Plans to mitigate, monitor and manage potential impacts on groundwater resources. Mitigation (e.g. bore re-conditioning), compensation (e.g. alternative water supply) or other contingency measures in the event that groundwater users are adversely affected by the Project. Appropriate licensing in accordance with the legislative requirements of the <i>Water Management Act, 2000</i> and the <i>Water Act, 1912</i>.
Impacts on heritage as a result of subsidence and direct disturbance.	<ul style="list-style-type: none"> Potential subsidence related impacts on items of Aboriginal heritage or Aboriginal cultural values. Potential subsidence related impacts on items of non-Aboriginal heritage. Direct impacts on items of Aboriginal heritage or Aboriginal cultural values as a result of surface disturbance. 	<ul style="list-style-type: none"> Subsidence assessment of potential subsidence effects on items of Aboriginal and non-Aboriginal heritage. Assessment of impacts on items of Aboriginal heritage and Aboriginal cultural values in accordance with NSW Department of Environment, Climate Change and Water (DECCW) (2010) and NSW Department of Environment and Conservation (2005). Assessment of impacts on items of non-Aboriginal heritage, including a Statement of Heritage Impact, in accordance with relevant Heritage Branch guidelines. Investigation of measures to avoid, mitigate, remediate, monitor and/or offset the potential impacts of the Project. 	<ul style="list-style-type: none"> Consideration of environmental assessment outcomes during detailed mine planning (e.g. locations of Aboriginal and non-Aboriginal heritage sites). Involvement of Aboriginal stakeholders during the assessment and operational phase. Surface disturbance protocols (including salvage or demarcation of sites where applicable). Development of subsidence performance measures for any significant heritage sites. Adaptive management approach to achieve subsidence performance measures. Development and implementation of Extraction Plans to mitigate, monitor and manage potential impacts on Aboriginal and non-Aboriginal heritage.

Table 3 (Continued)
Key Potential Environmental Issues, Required Level and Scope of Environmental Assessment and Preliminary Strategies to Address Potential Impacts

Key Potential Environmental Issue	Likely Extent and Nature of Potential Impacts	Proposed Level and Scope of Environmental Assessment	Preliminary Strategies to Address Potential Impacts (To be refined during detailed Impact Assessment)
Impacts on surface water resources as a result of subsidence and site water management.	<ul style="list-style-type: none"> Potential impacts on hydrology and surface drainage regimes, including localised effects on water quality and/or persistence of low flows. Potential impacts on ephemeral drainage lines including potential cracking, change in alignment and/or acceleration of erosion processes. 	<ul style="list-style-type: none"> Detailed site water balance for the Project incorporating all sources of water inflow. Development of a water management strategy for the life of the Project and assessment of potential impacts as a result of site water management. Subsidence assessment of potential subsidence effects of streams. Groundwater assessment, including numerical modelling of potential impacts on groundwater users and baseflow contributions to local watercourses. Surface water assessment of potential impacts of predicted subsidence effects and changes in baseflow contribution. Investigation of measures to avoid, mitigate, monitor and/or offset the potential impacts of the Project. 	<ul style="list-style-type: none"> Investigation of opportunities for re-use or beneficial use of site water. Water management strategy for the Project based on regular reviews of the site water balance. Erosion and sediment control during construction and operation. Surface water monitoring network. Development and implementation of Extraction Plans to mitigate, monitor and manage potential impacts on surface water resources. Appropriate control/remediation measures along drainage lines. Appropriate licensing in accordance with the legislative requirements of the <i>Water Management Act, 2000</i> and the <i>Water Act, 1912</i>.
Potential impacts on surface water flow and flood regimes in the Hunter River as a result of the rail spur.	<ul style="list-style-type: none"> Potential impacts on surface water flow and flood regimes. 	<ul style="list-style-type: none"> Detailed flood impact assessment, including hydrologic modelling, which identifies impacts on local and regional flood regimes, including consideration of flood levels and extent and flow velocities and distribution. Investigation of measures to avoid and/or mitigate the potential impacts of the Project. 	<ul style="list-style-type: none"> Construction of the rail spur above a suitable Average Recurrence Interval flood event. Investigation of design opportunities to minimise impacts on local and regional flood regimes.
Impacts on visual amenity at publicly accessible locations.	<ul style="list-style-type: none"> Potential impact on visual amenity at publicly accessible locations (including residences and cellar doors) as a result of the development of surface infrastructure. It is anticipated that there would be negligible visual impacts as a result of mine subsidence. 	<ul style="list-style-type: none"> Identification of sensitive viewsheds (including nearby residences, cellar doors and public roads) and assessment of the visual sensitivity of these viewsheds. Assessment of the degree of visual landscape alteration that the Project surface infrastructure would have on the sensitive viewsheds, including the use of visual simulations, where appropriate. Assessment of alternative locations of surface infrastructure in consideration of potential impacts on visual amenity. Investigation of measures to avoid and/or mitigate the potential impacts of the Project. 	<ul style="list-style-type: none"> Consideration of environmental assessment outcomes during detailed mine planning (e.g. visibility of surface infrastructure). Visual screening (for example vegetation screens), where appropriate. Directional lighting techniques and other measures to minimise light emissions.

Table 3 (Continued)

Key Potential Environmental Issues, Required Level and Scope of Environmental Assessment and Preliminary Strategies to Address Potential Impacts

Key Potential Environmental Issue	Likely Extent and Nature of Potential Impacts	Proposed Level and Scope of Environmental Assessment	Preliminary Strategies to Address Potential Impacts (To be refined during detailed Impact Assessment)
Noise impacts on the surrounding community.	<ul style="list-style-type: none"> Potential noise impacts resulting from Project related activities as well as road and rail movements. 	<ul style="list-style-type: none"> Modelling and assessment of potential noise impacts as a result of mining operations, including road and rail traffic. Assessment of potential cumulative impacts resulting from the Project and nearby developments and mines. Investigation of measures to avoid, mitigate and/or monitor the potential impacts of the Project. 	<ul style="list-style-type: none"> Reasonable and feasible mitigation measures on-site to minimise noise generation during construction and operation. Noise monitoring network. Acoustical mitigation at receivers where required (which may include measures such as enhanced glazing, insulation and/or air-conditioning), in consultation with the relevant landowner. Negotiated agreements with landowners where required.
Air quality impacts on the surrounding community.	<ul style="list-style-type: none"> Potential air quality impacts resulting from Project activities. Potential greenhouse gas emissions resulting from the combustion of diesel fuel and fugitive emissions from underground mining. 	<ul style="list-style-type: none"> Modelling and assessment of potential air quality impacts as a result of Project activities. Assessment of potential cumulative impacts resulting from the Project and nearby developments and mines. Assessment of greenhouse gas emissions (including scope 1, 2 and 3 emissions). Investigation of measures to avoid, mitigate and/or monitor the potential impacts of the Project. 	<ul style="list-style-type: none"> Best practice mitigation measures to minimise dust generation during construction and operation. Air quality monitoring network. Best practice energy efficiency measures. Compliance with relevant Commonwealth and State government legislation on greenhouse gas emissions and energy efficiency.
Costs and benefits to the regional and NSW economy.	<ul style="list-style-type: none"> Employment of up to 300 personnel during the operational phase, plus flow-on effects to the regional and NSW economy. Employment of up to approximately 400 personnel would be required for the construction of the Project. Ongoing payment of royalties to the State and other tax payments. 	<ul style="list-style-type: none"> Socio-economic assessment of potential impacts on the regional and NSW community and economy, including potential impacts on community infrastructure (including housing) and a cost-benefit analysis. Project justification, including consideration of alternatives, principles of ecologically sustainable development and the objects of the EP&A Act. 	<ul style="list-style-type: none"> Strategies to increase local employment and support of local businesses. Long term community contributions plan which expands as the Project transitions through its development phases of: approvals; construction; and operations.

6 STAKEHOLDER CONSULTATION

6.1 CONSULTATION UNDERTAKEN TO DATE

Consultation undertaken to date in relation to the Project has included:

- Ongoing consultation with local landholders regarding the Project and access for exploration and environmental baseline studies.
- Distribution of a community newsletter in March 2014 to the communities of Denman, Dalswinton, Bureen, Martindale, Mangoola and Jerrys Plains and placement on the SHM website.
- Ongoing consultation with representatives of the DRE since 2010 regarding exploration activities in EL 7429.
- Conceptual Project Development Plan meeting with representatives of the DRE on 21 August 2012, with a status update provided on 14 October 2013.
- Ongoing consultation with the NSW Planning & Infrastructure regarding the status of environmental baseline studies and the lodgement of this request for DGRs.
- Ongoing consultation with the NSW Office of Water since May 2013 regarding the groundwater assessment.
- Consultation with the NSW Department of Primary Industries (DPI) (Office of Agricultural Sustainability and Food Security) and Muswellbrook Shire Council about exploration activities in EL 7429 in March 2013.
- Consultation with the NSW Roads and Maritime Services (RMS) in March 2014 to provide a project briefing.
- Consultation with the Aboriginal community since April 2013 regarding the Aboriginal cultural heritage assessment.
- Ongoing consultation with surrounding mining and resource companies.
- Involvement of the NSW Office of Water, Commonwealth the Independent Expert Scientific Committee on Coal Seam Gas and Large Coal Mining Development (IESC) and the Gateway Panel as part of the Gateway Certificate process.

- Involvement in the Strategic Biodiversity Assessment for Coal Mines in the Upper Hunter Valley with the NSW Office of Environment and Heritage (OEH), NSW Planning & Infrastructure, NSW Trade & Investment and the Commonwealth Department of the Environment (DotE).

A Community Consultative Committee (CCC) with an independent chairperson appointed by the NSW Minister for Resources and Energy is being established for the Project.

The CCC will provide a forum for addressing community concerns and to facilitate communication between the community and SHM. The CCC will be kept informed on the status the Project, and minutes of all CCC meetings will be made publicly available on the Project website.

SHM is committed to contributing to the local community and has provided donations or sponsorship to:

- Denman Public School;
- St Joseph's Primary School;
- Denman Aged Care;
- Dalswinton Rural Fire Service;
- Upper Hunter Education Fund;
- Upper Hunter Wine and Food Affair;
- Denman Children's Centre;
- Denman and Sandy Hollow Junior Rugby League Football Club;
- Denman Rugby League Football Club;
- Denman Men's Shed;
- Denman Pony Club Showjumping Championships;
- Upper Hunter Show; and
- Lions Club of Denman

6.2 STAKEHOLDER ENGAGEMENT PROGRAMME

A stakeholder engagement programme has been developed for the Project. Key objectives of this programme are to:

- inform government and public stakeholders about the progress and nature of the Project;
- recognise and respond to local interest or concerns regarding the Project; and
- continue the ongoing dialogue between local landholders and SHM.

The issues raised and outcomes of the stakeholder engagement programme would be reported in the EIS.

The EIS consultation programme would include the use of a variety of consultation mechanisms which in summary include current and future actions such as:

- public availability of key documents (e.g. the request for Director-General's Requirements and the EIS);
- provision of Project information on the SHM website (www.spurhillunderground.com.au/);
- ongoing consultation with the local community, business owners and landowners, including through the CCC;
- meetings with the general community including Aboriginal groups and directly affected landowners;
- consultation with potentially affected infrastructure owners and surrounding resource companies;
- meetings with relevant government agencies; and
- community newsletters and community information sessions.

The consultation would include, but not necessarily be limited to, the following government agencies and authorities:

- NSW Planning & Infrastructure;
- OEH (including the Heritage Branch);
- NSW Environment Protection Authority;
- NSW Trade & Investment (including the DRE);
- DPI (including the NSW Office of Water and Agriculture NSW);
- Transport for NSW (including RMS);
- NSW Treasury;
- Mine Subsidence Board;
- Muswellbrook Shire Council; and
- DotE.

Consultation with the Australian Rail Track Corporation (ARTC) and coal chain operators would be undertaken to discuss potential rail movements. Consultation would also be conducted with Port Waratah Coal Services and Newcastle Coal Infrastructure Group.

Consultation with the Aboriginal community would be conducted in consideration of the requirements of the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (DECCW, 2010).

7 REFERENCES

- Department of Environment and Conservation, (2005) *Draft Guidelines for Aboriginal Cultural Heritage Impact Assessment and Community Consultation*.
- Department of Environment, Climate Change and Water (2010) *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010*.
- Department of Mineral Resources (1988) *The Hunter Coalfield Notes to Accompany the 1:100,000 Hunter Coalfield Geological Map*.
- Geological and Mining Services Australia (2013) *Spur Hill Coal Project Geological Report and Resource Statement EL7429*.
- Hunter-Central Rivers Catchment Management Authority (2007) *Hunter-Central Rivers Catchment Action Plan*.
- La Tierra (2013) *Spur Hill Underground Coking Coal Project Preliminary Agricultural Impact Statement*.
- Mine Subsidence Engineering Consultants (2013) *Spur Hill Underground Coking Coal Project Gateway Application – Subsidence Assessment*.
- Muswellbrook Shire Council (2012) *Land Use Development Strategy – A Guide for Strategic Land Use in the Muswellbrook Shire*.
- NSW Government (2012a) *Upper Hunter Strategic Regional Land Use Plan*. Released September 2012.
- NSW Government (2012b) *Aquifer Interference Policy – NSW Government Policy for the Licensing and Assessment of Aquifer Interference Activities*.

ATTACHMENT A
PRELIMINARY SCHEDULE OF LANDS

Tenure Type	Lot Number	Deposited Plan Number
Freehold	102	1161684
Freehold	A	33024
Freehold	2	34397
Freehold	132	43376
Freehold	1	113451
Freehold	3	113451
Freehold	4	113451
Freehold	5	113451
Freehold	2	113637
Freehold	1	165342
Freehold	1	215827
Freehold	21	228209
Freehold	1	242270
Freehold	2	242270
Freehold	1	243610
Freehold	1	243748
Freehold	2	243748
Freehold	C	379269
Freehold	1	379270
Freehold	3	388347
Freehold	1	388348
Freehold	1	571113
Freehold	2	599514
Freehold	10	618867
Freehold	136	705495
Freehold (Crown)	138	727248
Freehold	3	729967
Freehold	4	729967
Freehold	11	729968
Freehold	137	730142
Freehold	178	750924
Freehold	179	750924
Freehold	180	750924
Freehold	181	750924
-	185	750924
Freehold	186	750924
Freehold	187	750924
Freehold	22	752441
Freehold	25	752441
Freehold	26	752441
Freehold	27	752441
Freehold	28	752441
Freehold	29	752441
Freehold	30	752441
Freehold	31	752441
Freehold	33	752441
Freehold	34	752441
Freehold	38	752441
Freehold	39	752441

Tenure Type	Lot Number	Deposited Plan Number
Freehold	41	752441
Freehold	42	752441
Freehold	43	752441
Freehold	44	752441
Freehold	45	752441
Freehold	48	752441
Freehold	49	752441
Freehold	50	752441
Freehold	51	752441
Freehold	52	752441
Freehold	53	752441
Freehold	54	752441
Freehold	81	752441
Freehold	103	752441
Freehold	106	752441
Freehold	108	752441
Freehold	111	752441
Freehold	112	752441
Freehold	113	752441
Freehold	114	752441
Freehold	118	752441
Freehold	119	752441
Freehold	126	752441
Freehold	9	805027
Freehold	110	861677
Freehold	1	862989
Freehold	2	862989
Freehold	120	876115
Freehold	121	876115
Freehold	1	953903
Freehold	1	956111
Freehold	1	957501
Freehold	81	998306
Freehold	1	1046965
Freehold	7	1076625
Freehold	5	1087234
Freehold	100	1100066
Freehold	51	1105797
Freehold	1	1119296
Freehold	2	1119296
Freehold	3	1119296
Freehold	2	1143813
Freehold	18	1149198
Freehold	1	1152436
Freehold	2	1152436
Freehold	1	1163446
Freehold	2	1163446
Freehold	1	1178289
Freehold	2	1179733

Tenure Type	Lot Number	Deposited Plan Number
Freehold	1	1011689
Freehold	4	6090
Freehold	32	532856
Freehold	33	532856
Freehold	123	811176
Freehold	313	838140
-	314	860580
Freehold	2	957501
Muswellbrook Shire Council or Department of Lands (Crown)	Other roads located between or adjacent to the above parcels of land	
Crown	Hunter River located between or adjacent to the above parcels of land	