

3.1**PROJECT OVERVIEW**

The strategic purpose of the project is to obtain a single Project Approval for the continuation of existing operations at HVO South to replace the existing consents and allow for the expansion of mining areas, infrastructure upgrades and modifications, and the relocation of powerlines, water lines and phone lines. Approval for the relocation or reconfiguration of the Comleroi Road and HVGC airstrip and associated facilities will also be sought. A single Environmental Assessment Report will be prepared to support this Part 3A Project Application.

In addition, an application to the Department of Primary Industries – Mineral Resources (DPI-MR) is being considered for a Mining Lease that, where appropriate, encompasses the Project Application area. This will improve and simplify the mining tenure situation currently in place for HVO South.

The project objectives are centred around providing maximum flexibility and operational efficiencies at HVO South. The Environmental Assessment Report will contain the justifications for new proposals regarding operational efficiencies and assess the potential changes to current activities.

The provision of a single approval for HVO South will assist CNA in responding to changing economic drivers and to the changing market conditions and needs of customers in relation to coal quality and quantity. The extension to mining will allow the ongoing employment of personnel.

In summary, the key modifications to the project involve modifications to existing infrastructure and the continuation of mining. Descriptions of the mining extension areas are provided in Section 3.3.

A total of approximately 250 ha outside of the existing approved area of approximately 2980 ha will be required for mining purposes, of which 76 ha is not currently owned by CNA. The previous landuse in this area was grazing. The land to be affected by mining is detailed in Section 1.6.1 and *Figure 3.1*.

3.2**BENEFITS OF THE PROPOSAL**

The project will improve many of the environmental, social and economic outcomes of HVO South. The major project benefits are outlined below.

Environmental benefits include:

- Better assessment of cumulative issues. Reporting for a consolidated HVO South will improve CNA's ability to manage cumulative impacts from the operations; and
- Continued assurance of 'best practice' final landscape design. The project provides an opportunity to present a conceptual landscape strategy that includes rehabilitation to pre-mining land capability, wildlife corridors, final voids and final landform, ensuring that approved fundamentals are in place for mine closure.

Social benefits include:

- Security of employment. Increasing the financial strength of the operation will provide assurance to HVO employees that their current place of employment is secure. This benefits the well-being of the local and regional communities;
- Improved amenity outcomes. Greater efficiencies in operation will improve management of environmental outcomes and may reduce the impacts of aspects such as noise and dust emissions; and
- The local and regional communities will benefit from a consolidated approach to mine closure.

Operational and economic benefits include:

- Enhancing the economic position of HVO South. The single approval that allows the integration and extension of mining will make HVO South financially stronger with the flexibility to mine coal from different seams in different pits to suit market demand. In addition, operational efficiency will be increased in line with the greater flexibility in mining operations;
- Recovery of additional coal reserves by an existing mining operation. This includes Deep Cheshunt coal reserves which occur within an existing approved mining footprint, Riverview coal reserves to the south west and south east, and reserves west of South Lemington Pit 1. The coal reserves below the Cheshunt Pit would otherwise be sterilised;
- Government royalties. Approval to mine additional coal reserves will prolong the life of operations within HVO South and enhance overall HVO net present value. The overall intent is to utilise valuable coal resources and prevent sterilisation. This will ensure that the NSW Government will continue to receive royalties;
- Reduction in administration time. Obtaining one Project Approval for HVO South will remove some of the anomalies and unnecessary and outdated approval conditions that are a legacy of the 25 separate approvals and associated modifications gained through a process of expansion and acquisition. In addition, the existence of the 25 approvals, issued by different consent authorities with varying conditions, reporting requirements and different approval periods, is an impediment to both rational mining operations and administrative practices. This hinders not only CNA personnel but also the regulatory authorities; and
- Cost saving for both CNA and the government. Past experience with minor changes in projects / operations is that they require modification to the consent conditions. The proposed consolidated approach to mining will greatly reduce the need to seek modification, thus reducing costs for both CNA and the determining authority.

3.3

CONTINUATION OF MINING

The currently consented area of mining in HVO South is approximately 2980 ha (refer to *Figure 3.1*). This includes the Cheshunt, Riverview and Lemington Pits. Each of the current mining areas have been consented to operate for 21 years. The intention has always been to continue mining in accordance with approved mine plans. The legislative process has meant approvals are generally issued for periods of no more than 21 years.

The long term mine planning process at CNA has identified reserves available for opencut, highwall or punch longwall mining through to 2037. Of this approximately 85 Mt of additional coal is accessible by opencut mining methods (refer *Figure 3.1*). Additional areas potentially available for highwall and/or punch longwall mining have also been identified across HVO South. These areas and their order of priority are highlighted in *Figure 3.2* with approval only sought for those areas identified as 'likely highwall mining'.

These mining areas fall within the currently consented boundaries excluding a small portion of the Riverview Pit south east area. Project Approval for the further development of these pits as detailed below will add significant coal reserves and will significantly increase the value of HVO.

While CNA holds extensive subsurface mining consents, no underground mining is proposed under this Project Application

3.3.1

Deep Cheshunt

Mining within the Cheshunt Pit is currently consented from surface to the base of the Vaux seam. This Project Application will seek approval to mine approximately 80 m deeper to the base of the Bayswater seam. Approximately 60 Mt of ROM coal will be mined by opencut mining methods. The area of surface disturbance will remain largely unchanged from the approved footprint in existing plans. The total surface area of the extension area for the Deep Cheshunt reserves measures approximately 450 ha.

Coal volumes potentially available for access by highwall mining to the north east of the Cheshunt Pit (refer green hatching *Figure 3.2*) have not been quantified at this time.

3.3.2

Riverview Pit South West

Mining in the Riverview Pit to the south west (approximate area 120 ha) will access the remaining coal reserves that were not included in the original South Pit consent due to the 21 year consent period. Approximately 15 Mt of coal will be removed by opencut mining methods in this extension area.

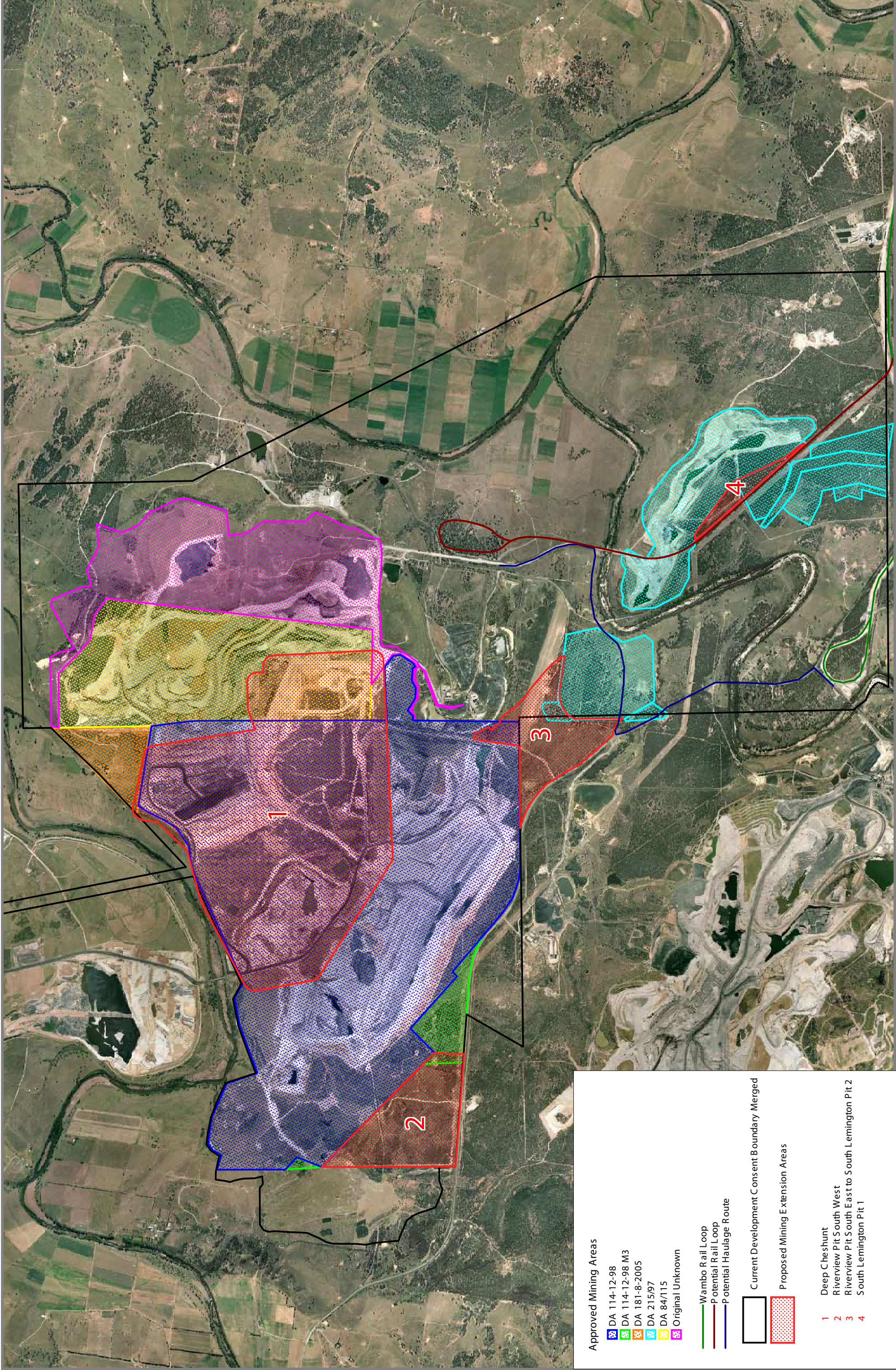
Coal volumes potentially available for access by highwall or punch longwall mining to the north and south of Riverview Pit (refer blue and red hatching *Figure 3.2*) have not been quantified at this time.

3.3.3 *Riverview Pit South East*

Mining of the Riverview Pit to the south east by approximately 100 ha will allow the efficient connection to the previously consented South Lemington Pit 2 (refer to *Figure 3.1*). This will access approximately 5 Mt of coal by opencut mining methods in this extension area.

3.3.4 *South Lemington Pit 1*

South Lemington Pit 1 is currently consented to allow mining of a further 2 strips followed by highwall and/or punch longwall mining. Geological investigations have identified a further 5 Mt of coal resources that may be mined by opencut mining methods in the extension area to the west in an area of approximately 30 ha.



Approved Mining Areas

- DA 114-12-98
- DA 114-12-98 M3
- DA 181-8-2005
- DA 215/97
- DA 84/115
- Original Unknown

- Wambo Rail Loop
- Potential Rail Loop
- Potential Haulage Route

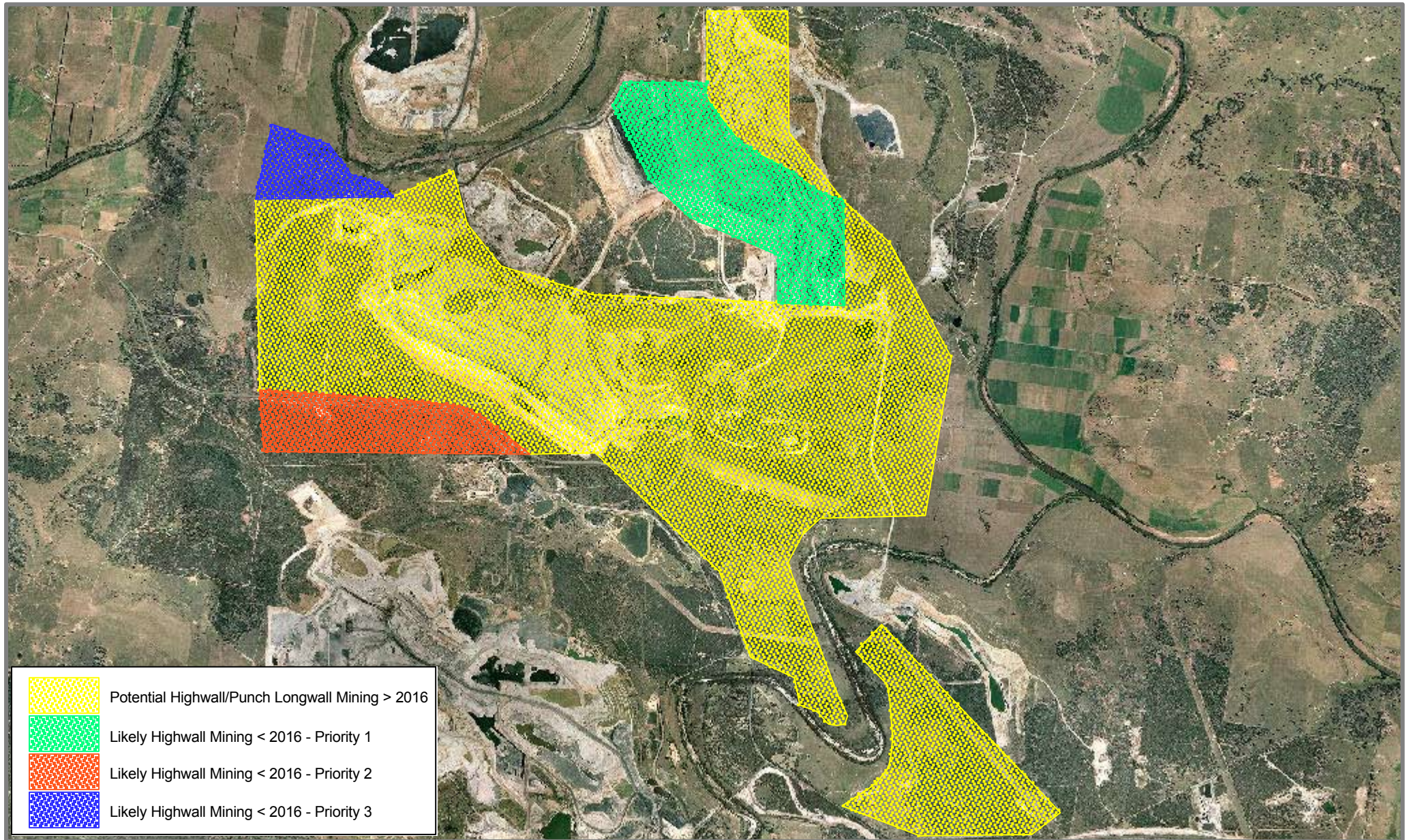
- Current Development Consent Boundary Merged
- Proposed Mining Extension Areas

- 1 Deep Cheshunt
- 2 Riverview Pit South West
- 3 Riverview Pit South East to South Lemington Pit 2
- 4 South Lemington Pit 1



Figure 3.1

Proposed and Approved Mining Areas and Modifications within HVO South



Kilometres

Figure 3.2

Potential Highwall and Punch Longwall Mining Areas

Hunter Valley Operations South Coal Project

3.4

OPERATIONAL EFFICIENCIES

A review of current activities has identified areas that, if fully integrated, will result in operational efficiencies and improved economies of scale. The management structure and size of the HVO mining complex is such that planning, equipment and facilities can be modified easily to meet changing market needs. To achieve this flexibility this project seeks Project Approval for:

- Mining and processing of 16 Mtpa ROM coal (under one Approval) for all operations within HVO South to align mining production rates with the West Pit consent (DA 450-10-2004) and the planned throughput of the LCPP;
- Highwall and punch longwall mining of identified priority areas (referred to as 'likely highwall mining' on *Figure 3.2*) at the conclusion of opencut operations within areas of the South Lemington, Cheshunt and Riverview Pits;
- Ability to use draglines and truck and shovels at HVO South as suits the operation. This will include the ability to use up to three large shovels and two draglines at any one time across HVO South;
- Ability to transport coal from each HVO South pit to each coal preparation plant within HVO for processing (HVCPP, HCPP, NCPP, and LCPP) and to all HVO coal loading points (proposed Lemington Load Point (LLP), HVLP and NLP);
- Ability additional to that consented under the West Pit consent to transport rejects and overburden across locations from HVO North to HVO South consent areas to assist with final landform construction;
- Ability to relocate heavy equipment including draglines, trucks and shovels across Jerrys Plains Rd from MTW, and within HVO across Hunter River and Wollombi Brook (at earth ramp or bridge crossing);
- Tailings storage facilities and ability to reprocess tailings;
- Relocation of powerlines, water lines and phone lines;
- Reviewing the general location of the currently approved corridor for the overland conveyor (from HVO South to HVCPP); and
- Inpit crushing and conveying of overburden within the HVO mining complex.

Specific Consented Activities to be Maintained

A number of activities are presently approved under existing development consents but not currently undertaken. It is proposed that approval for these activities be maintained unchanged under the single Project Approval being sought for HVO South:

- Transportation of 4.4 Mtpa of product coal from LCPP to the MTCL via Jerrys Plains Road (Golden Highway);
- Haulage of coal from HVO South to HVO North using 240 tonne trucks with flexibility to use contractor trucks (B double or other);

- Expansion of Cheshunt bathhouse and workshop and possible relocation as mining in the Cheshunt Pit progresses;
- Continued use of Lemington offices, bathhouse, workshop and LCPP; and
- Inpit crusher and conveyor from HVO South to the HVCPP.

Activities Not Within the Application

- Relocation of Singleton Clay Target Shooting Club (gun club). The gun club, located on CNA owned land, has an agreement with CNA stating that they are to move when requested. CNA will investigate possible alternative locations.
- Any approval required by the gun club for continued operation does not form part of this Project Application and is to be followed up by the gun club.

3.5

UPGRADES AND MODIFICATIONS

The review of activities also identified areas that could be easily improved by modifications to existing facilities and infrastructure. Project Approval will be sought for:

- Upgrade or replacement of LCPP and associated stockpiles to increase its approved capacity from 660 tph (5.5 Mtpa) to 16 Mtpa ROM coal and to improve its coal processing efficiency;
- Modification to existing infrastructure as required including new or expanded administration offices, heavy vehicle wash pad, fuel storage facilities and explosives magazines;
- Upgrades and modifications to infrastructure including transport of product coal via haul road or overland conveyor to access Wambo rail spur, alternatively via a newly constructed rail spur adjacent to LCPP;
- Relocation of Comleroi Road as mining extends in the Riverview Pit to the south east; and
- Relocation or reconfiguration of the HVGC Airstrip and facilities (refer to Section 3.7.3).

3.6 CURRENT APPROVALS

3.6.1 Existing Development Consents

The activities undertaken at HVO South are currently required to be managed under the multiple approvals, some of which were granted by the SCC and others by the Minister for Planning.

Many of the approvals have different or potentially conflicting conditions and approval periods. The existence of 38 separate approvals from different consent authorities with varying conditions and different approval periods does not allow flexibility in mining and makes compliance with and administration of the consents more difficult for all parties concerned.

With the new Part 3A legislation there is a distinct benefit in applying for a new Project Approval. A new Project Approval will provide one set of conditions, one approval authority and a single approval period, which will streamline administration for DoP and CNA.

Further advantages of seeking Project Approval to replace the current consents are outlined in Section 3.2.

3.6.2 Existing Mine Leases

To further streamline administration of HVO South the option to consolidate the Mining Leases that are applicable to HVO South into one is being examined. *Table 3.1* lists the current Mining Leases. This application will be made to the DPI-MR and once this is granted CNA will surrender the old Mining Leases. This will assist with the management of tenure and compliance with Mining Lease conditions.

Further, it is proposed to align, where appropriate, the proposed HVO South Project Approval boundary with the Mining Lease tenement. This will assist operational personnel with planning processes.

3.7 NON MINE OWNED FACILITIES

3.7.1 Comleroi Road

The relocation of Comleroi Road is critical to allow the extension to mining in the Riverview Pit to the south east.

Potential alternative locations have been identified to the east and west of the current location. The options will be discussed with the SSC, the users of the road and the local community.

3.7.2 *Stock Reserve*

Two areas of stock reserve are located within the Project Application area.

Management and or/potential relocations of these areas will be discussed with the RLPB.

3.7.3 *The Hunter Valley Gliding Club*

The proposed extension of the Riverview Pit to the south east will impact on land currently owned and used by the HVGC which includes a grassed airstrip, hangars, clubhouse and amenities. Discussions are currently being held with the HVGC over a possible configuration change or relocation of the HVGC from its current base.

The HVGC is a non-profit co-operative with approximately 100 members, who live in the Hunter Valley and surrounding areas. The club generally operates on weekends and public holidays between 11.00 am to last light, however, operations can occur from first light to last light on any day of the year. During these times, approximately 30 flights are undertaken on any one day by an average of 30 members.

Approximately four to six times per year, the HVGC hosts special events such as training camps or cross-country and aerobatics regattas. The number of people attending these events varies but can be up to 100 persons if the regatta is a state or national competition.

The HVGC uses a tug plane to launch its gliders. A typical glider launch takes approximately 7 minutes, including 4 minutes on climb and 3 minutes on descent and taxiing.

If a reconfiguration is agreed, this would result in approximately 400 m being added to the eastern end of the glider airstrip and approximately 400 m being removed from western end of the strip. Possible relocation options are within close proximity to the current HVGC footprint and all within the current HVO South development consent boundary.

Approval for relocation or reconfiguration of the HVGC is included in this Part 3A as ancillary workings. The scenario ultimately selected will be determined in consultation with HVGC.

3.8 *KEY INFORMATION*

A summary of key project information is provided in *Table 3.1*.

Table 3.1 Key Project Information

Project Component	Summary of Existing or Proposed Activities
Proponent	Coal & Allied Operations Pty Limited
Tenement Status	- CL 327, CL 398, ML 11489 and CL 390 covers Riverview Pit; - ML 1396, ML 1465, CCL 714 and CL 327 covers Cheshunt Pit; - CCL 714 covers South Lemington Pit; - ML 277 covers new Cheshunt extension area (Barry property); - A new lease to cover the additional lands may be required; - Proposed consolidation of Mining Leases into one single lease.
Infrastructure	- Upgrade and eventual relocation of existing Cheshunt Bathhouse and associated infrastructure; - Construction of a rail spur or overland conveyor from Wambo rail spur to LCPP; - Construction of overland conveyor (approved) to HVO North; - Relocation of Comleroi Road as mining extends in the Riverview Pit to the south east; - Relocation of powerlines, water lines and phone lines; - Relocation or reconfiguration of the HVGC Airstrip and facilities; - Modification to existing infrastructure as required including new or expanded administration offices, heavy vehicle wash pad, fuel storage facilities and explosives magazines.
Mining	- ROM coal production of 16 Mtpa for all operations within HVO South; - Continuation of approved opencut and highwall mining areas located in HVO South; - Mining to a greater depth (Bayswater and Broonie Seams) proposed in the Cheshunt Pit; - Extension of mining in the Riverview Pit to the south east towards the HVGC; - Extension of mining in the Riverview Pit to the south west; - Mining extension to the South Lemington Pit 1; - Additional highwall and/or punch longwall mining to the north west and south west of Riverview Pit; - Highwall and/or punch longwall mining to the north east of Cheshunt Pit; - Ability for material and equipment movements across the HVO mining complex (from HVO North to HVO South) including coal, rejects, overburden and water; - Ability to use up to three large shovels and two draglines in any pit with associated mining equipment as required; - Ability to relocate heavy equipment including draglines, trucks and shovels across Jerrys Plains Rd from MTW, and within HVO across Hunter River and Wollombi Brook.
Processing and Coal Handling	- Ability to haul ROM coal from all pits to all coal preparation plants within HVO (HVCPP, HCPP, NCPP, and LCPP) for processing and transport product coal to all loading points (HVLP, NLP and new LLP); - Ability to transport product coal to Wambo Rail spur; - Upgrade or replacement of LCPP and stockpiles to increase capacity to 16 Mtpa of ROM coal and improve processing capability; - Tailings storage facilities and ability to reprocess tailings; - Relocation of the currently approved corridor for the overland conveyor (from HVO South to HVCPP).
Approval Period Hours of Operation	21 years 24 hours per day, seven days per week as currently approved