

PROJECT DESCRIPTION REPORT

**GLENNIES CREEK COLLIERY
SURFACE FACILITIES AND ACTIVITIES**

Inquiry in mid 1991, development consent (DA 105/90) was granted by the Minister for Planning on 1 November 1991.

The delayed receipt of Development Consent, combined with the vagaries of the export coal market and other factors in the early 1990s, resulted in major on-site activities being postponed until December 1998. The Glennies Creek Colliery now constitutes a modern, longwall mining operation.

4.0 PROJECT DESCRIPTION

4.1 Introduction

The Project to which this application relates is the use of existing mining related surface facilities/ infrastructure for the processing of coal, within or in the vicinity of the Colliery Pit Top; the Forest Road Ventilation Shaft Site; and overlaying the underground operations, together with the construction and use of additional surface facilities within each of the above areas, all of which are located in the environment of the existing, operating mine. This application does not cover any existing or proposed underground mine facilities, operations or methods. The Glennies Creek Colliery ROM coal production from underground operations is projected to increase to 4.0 to 4.5 million tonnes ROM coal per annum. It is likely that production will exceed 3.0 Mtpa during 2006. The existing surface facilities are designed and approved for the processing of up to 4.5 Mtpa ROM coal.

Sub-sections 4.2 and 4.3 identify the principal existing mining facilities which will continue to be used, while sub-sections 4.4 and 4.5 identify the limited additional facilities for which approval is sought. All features and facilities identified in these sub-sections constitute the Project.

4.2 Pit Top Area

Figures 2 and 3 show the existing mining related facilities on or in the vicinity of the Pit Top, with the principal facilities and infrastructure identified.

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Table 1 identifies and describes these principal existing mining features. With the exception of features 1 to 5 and 21 (Figure 3), all lie within the Colliery's "dirty" water management system: features 1 to 5 and 21 lie within the "clean" water management system.

TABLE 1

Glennies Creek – Existing Pit Top Features and Functions

IDENTIFIER (See Figure 3)	FEATURE	DESCRIPTION
1	Mine Entry and Existing Roads	Bitumen sealed roads from and onto Middle Falbrook Road which provide a singular access to the surface facilities area, car parks etc.
2	Main Office Buildings	Former Oak Park Schoolhouse, teacher's residence and demountable structures which provide office and support facilities for management and staff.
3	Employee Car Park	Bitumen sealed car parking area with a capacity of 80 cars used by staff, wage and contracted employees.
4	Sewage Effluent Ponds	Part of sewage management system which provides storage capacity prior to irrigation.
5	Training Room	Demountable building used for training, inductions and meetings etc.
6	Office, Control Room, Bathhouse Complex and Muster Area	Twelve demountable office buildings used as production and support staff offices, employee ablutions, changing rooms etc and a permanent control room building. The covered concrete muster area is used for lamp storage and workforce assembly.
7	Bathhouses	Two demountable buildings used for workforce ablutions. Connected by covered walkovers.
8	Potable Water Tank	100,000L tank used for receipt, storage and supply of potable water supplies.
9	Longwall Emulsion Storages	Three bunded tanks used for storage, mixing and supply of hydraulic fluid to underground workings.
10	Process Water Filtration / Treatment Plant	Provides appropriate water quality for use as cooling water in underground equipment, eg to stop precipitation of salts.
11	Electrical Power Yards, Substation and Switchroom	A receipt of incoming 66 kV power and conversion to 11 kV for distribution on site. Provides a linkage between GCCM facilities and the Integral Energy power grid.
12	Underground Fire Water Tanks	Three 100,000L tanks used for the supply of underground cooling, dust suppression and fire suppression water.
13	Transformer	Redundant feature pending removal.
14	Longwall Hardstand	Storage of longwall equipment, eg during change-outs.

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IDENTIFIER (See Figure 3)	FEATURE	DESCRIPTION
15	Access Ramp and Associated Road Network	Unsealed pavement providing equipment and personnel access within the Pit Top area.
16	66 kV Powerline	Power supply from Integral Energy grid.
17	Stores Area	Fenced hardstand area with shipping containers used for supplies storage.
18	Hardstand / Storage Areas	Unsealed hardstands used for mining equipment and supplies storage. Includes a 15m x 12m hydrocarbon storage shed.
19	Process Water Dam	Part of mine "dirty" water management system. Intermediate storage between the Portal Sump and Process Water Filtration / Treatment Plant.
20	Sedimentation Dam	Collection and detention of "dirty" water from hardstand / storage areas.
21	"Clean" Water Dam	Storage for "clean" run-off and water pumped from Glennies Creek.
22	Magazines	Licensed storages for explosives and detonators.
23	Coal Transportation Contractors' Area and Access Roads	Parking, laydown, maintenance, refuelling and office area for coal haulage contractor.
24	Portal Sump	Void within the backfilled spoil in the former Camberwell North Pit. Water level at any time reflects the water level in the spoil. Water used for supply of process water requirements underground and at Camberwell and Rix's Creek Coal Mines.
25	Portals (3 off) within the North Pit Highwall	(A) and (B) used as entry / exit points for men and materials. (C) formerly used to extract air from underground.
26	Diesel Storage Tank	Bunded 55,000L tank with associated tanker discharge area and pipework.
27	Workshop	Steel framed, concrete floored building with shipping containers. Used for welding and electrical equipment maintenance.
28	Hydrocarbon Storage and Dispensing; Washdown and Maintenance Area	Bunded, steel framed, concrete floored building with hydrocarbon storage, refuelling, washdown and drive-in maintenance areas.
29	Stonedust Shed	For storage of stonedust prior to use underground.
30	Transformers	For conversion of 11 kV to 415 V power for underground distribution.
31	Stacker Belt Conveyor CV001	Transfers coal from underground (Portal B) to Conveyor SC001 or RL48 stockpile area.
32	Conveyor Starter /	Transportable building which provides electrical control

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IDENTIFIER (See Figure 3)	FEATURE	DESCRIPTION
	Control House	of the underground conveyor system.
33	Fire Station	Transportable building for storage of fire suppression equipment.
34	Compressor Building	Covered, concrete floored area with compressors for underground compressed air supplies.
35	RL 48 Coal Stockpile Area	Laydown / storage areas used for emergency coal stockpiling in the event of a failure of surface conveyor system. Nominal capacity 50,000t.
36	RL 75 Coal Stockpiling and Stone Storage Area	Breaker stone disposal and emergency coal stockpiling area.
37	Conveyor SC001	Transfers coal from CV001 to transfer / breaker station.
38	Transfer / Breaker Station Area / Stone Stockpile Area	Receipt of coal from Conveyor SC001, stone removal and stockpiling and transfer of coal to Conveyor SC002.
39	Conveyor SC002	Transfers coal to RL 100 stockpile area.
40	RL 100 Stockpile Area	Coal storage prior to despatch to Camberwell CHPP by RL 100 haulroad.
41	RL 100 Area Access Ramps	Provide access between various coal stockpile areas. Positions, shapes and slopes vary over time.
42	Portal Sump Pumps	Transfer water to underground, Camberwell and Rix's Creek Coal Mines and Possum Skin Dam.
43	Pipeline P1	Water transfer to Camberwell – 225 mm welded poly pipeline.
44	Pipeline P2	225 mm welded poly pipeline with offtakes. Transfers water to underground and Rix's Creek Coal Mine.
45	Pipeline P3	400 mm welded poly pipeline with offtakes. Transfers water to Camberwell and Possum Skin Dam.
46	Pipeline P4	400 mm buried, welded poly pipeline which transfers water from P3 to Possum Skin Dam.
47	Pipeline P5	225 mm welded poly pipeline which transfers water from P2 to the Process Water Dam.
48	RL100 Haul Road	Coal haulage route to the Camberwell CHPP.

IDENTIFIER (See Figure 2)	FEATURE	DESCRIPTION
49	Possum Skin Dam	Mine water storage. 1089 ML capacity at operating level of RL 89.0. Total capacity of 1563 ML and spillway discharge level of RL 90.5. Isolated from clean surface water inflows. Capacity between operating level and discharge level capable of handling a >100 year ARI event.

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4.3 Surface Gas Drainage Boreholes

Figure 2 identifies a total of 12 gas drainage boreholes and the Forest Road ventilation shaft area, which represent the extent of existing surface facilities overlying the Glennies Creek Mine underground workings.

The gas drainage boreholes are used to remove excess gas from the underground workings. Of the 12 gas drainage boreholes installed to date, eight have been decommissioned and sealed, and four gas drainage boreholes remain active. Three further gas drainage boreholes are currently in the development stage. Each gas drainage borehole has been the subject of an Assessment of Environmental Factors and approval from the Department of Primary Industries (Minerals) – Environmental Branch.

Each gas drainage borehole comprises a 337mm diameter borehole with a 260mm grouted casing to approximately 100m below the surface and a 250mm diameter borehole from a depth of 100m to the roof of the coal seam. Each borehole is allowed to free-vent to the atmosphere initially and, if required, is subsequently fitted with a methane powered extraction plant.

Once each borehole is no longer effective, the surface infrastructure is removed, the borehole sealed with concrete below the natural ground level and the area rehabilitated.

4.4 Forest Road Ventilation Shaft (MPL 343 Sub-lease) Area

Figure 4 shows the existing mining-related features within the 3.99 ha Forest Road Ventilation Shaft (MPL 343 Sub-lease) Area located approximately 2.9 km west-north-west of the Glennies Creek Colliery Pit Top while **Table 2** identifies and describes the principal features. The Area is accessed via Forest Road, an unsealed local road which meets Glennies Creek Road immediately north of the Glennies Creek Road / Main Northern Railway Line crossing.