

# METROPOLITAN COAL LONGWALLS 301-303

## PUBLIC SAFETY MANAGEMENT PLAN



## **METROPOLITAN COAL**

### **LONGWALLS 301-303**

## **PUBLIC SAFETY MANAGEMENT PLAN**

#### **Revision Status Register**

<b>Section/Page/ Annexure</b>	<b>Revision Number</b>	<b>Amendment/Addition</b>	<b>Distribution</b>	<b>DP&amp;E Approval Date</b>
All	PSMP-R01-A	Original – Draft for Consultation	DP&E, DRE, DSC & WaterNSW	-
Sections 4.3 and 11, Figure 3	PSMP-R01-B	Minor amendments	DP&E, DRE, DSC & WaterNSW	-

**November 2016**

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## 1 INTRODUCTION

Metropolitan Coal is a wholly owned subsidiary of Peabody Energy Australia Pty Ltd (Peabody). Metropolitan Coal was granted approval for the Metropolitan Coal Project (the Project) under section 75J of the New South Wales (NSW) *Environmental Planning and Assessment Act, 1979* (EP&A Act) on 22 June 2009. A copy of the Project Approval is available on the Peabody website (<http://www.peabodyenergy.com>).

The Project comprises the continuation, upgrade and extension of underground coal mining operations and surface facilities at Metropolitan Coal. The underground mining longwall layout is shown on Figure 1. Following the anticipated completion of Longwall 27 in 2017, Longwalls 301, 302 and 303 (herein referred to as Longwalls 301-303) define the next mining sub-domain within the Project underground mining area (Figures 1 to 3).

### 1.1 MINING SCHEDULE

Longwalls 301-303 and the area of land within 600 metres (m) of Longwalls 301-303 secondary extraction are shown on Figures 2 and 3. Longwall extraction occurs from north to south. The longwall layout includes 163 m panel widths (void) with 45 m pillars (solid).

The provisional extraction schedule for Longwalls 301-303 is provided in Table 1.

**Table 1**  
**Provisional Extraction Schedule**

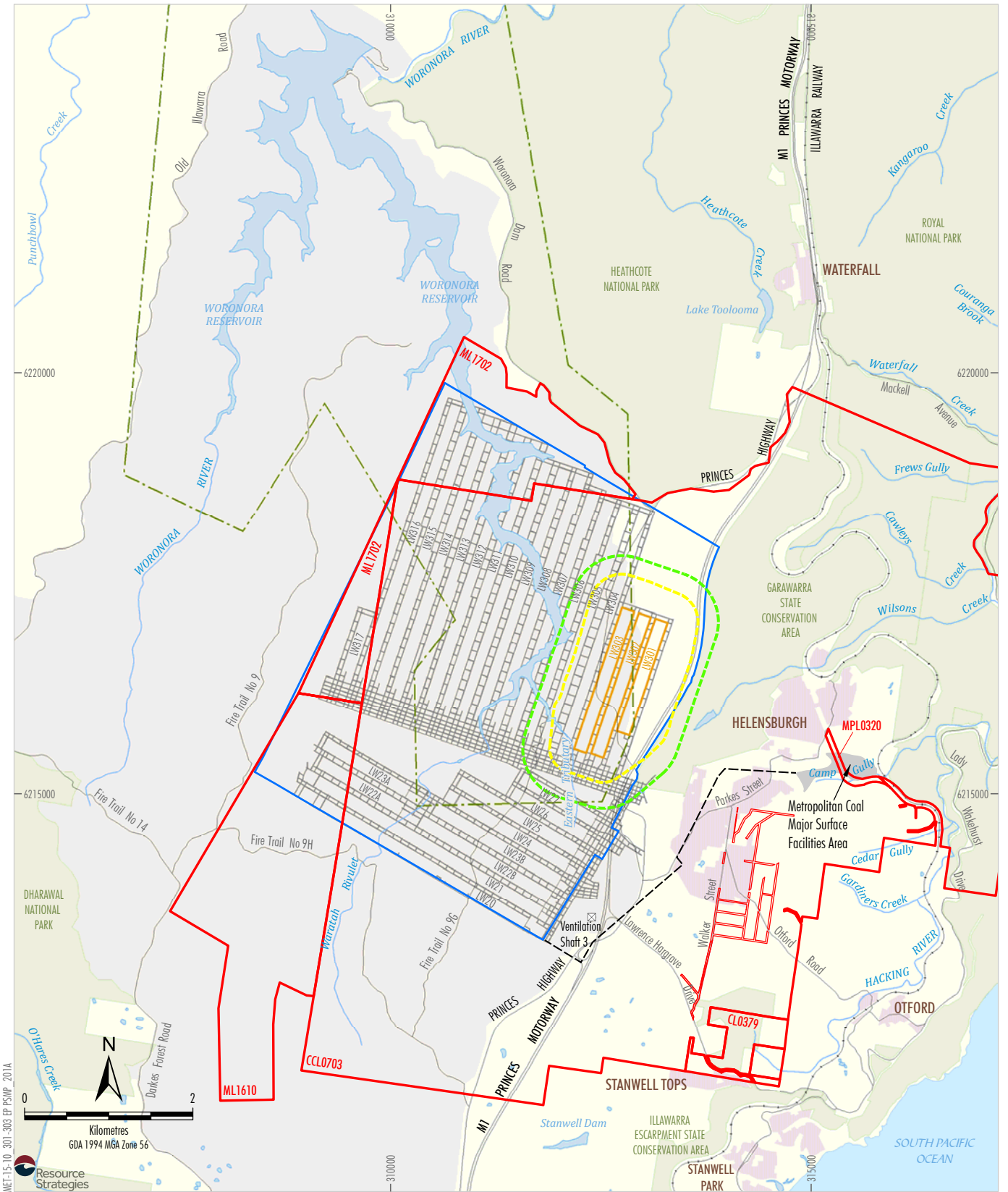
Longwall	Estimated Start Date	Estimated Duration	Estimated Completion Date
301	April 2017	6 months	September 2017
302	November 2017	7 months	May 2018
303	June 2018	7 months	December 2018

The layout for Longwalls 301-303 (i.e. 163 m panel widths [void] and 45 m pillars [solid]) will be trialed to build on the experience and dataset obtained from Longwalls 20-27. The outcomes of the trial will be used to inform the potential for a similar mine layout to be applied to the next Extraction Plan (i.e. Longwall 304 onwards).

### 1.2 PURPOSE AND SCOPE

In accordance with Condition 6(g), Schedule 3 of the Project Approval, this Public Safety Management Plan (PSMP) has been prepared as a component of the Metropolitan Coal Longwalls 301-303 Extraction Plan to manage the potential consequences of the Extraction Plan on public safety within the mining area.

The relationship of this PSMP to the Metropolitan Coal Environmental Management Structure and to the Metropolitan Coal Longwalls 301-303 Extraction Plan is shown on Figure 4.



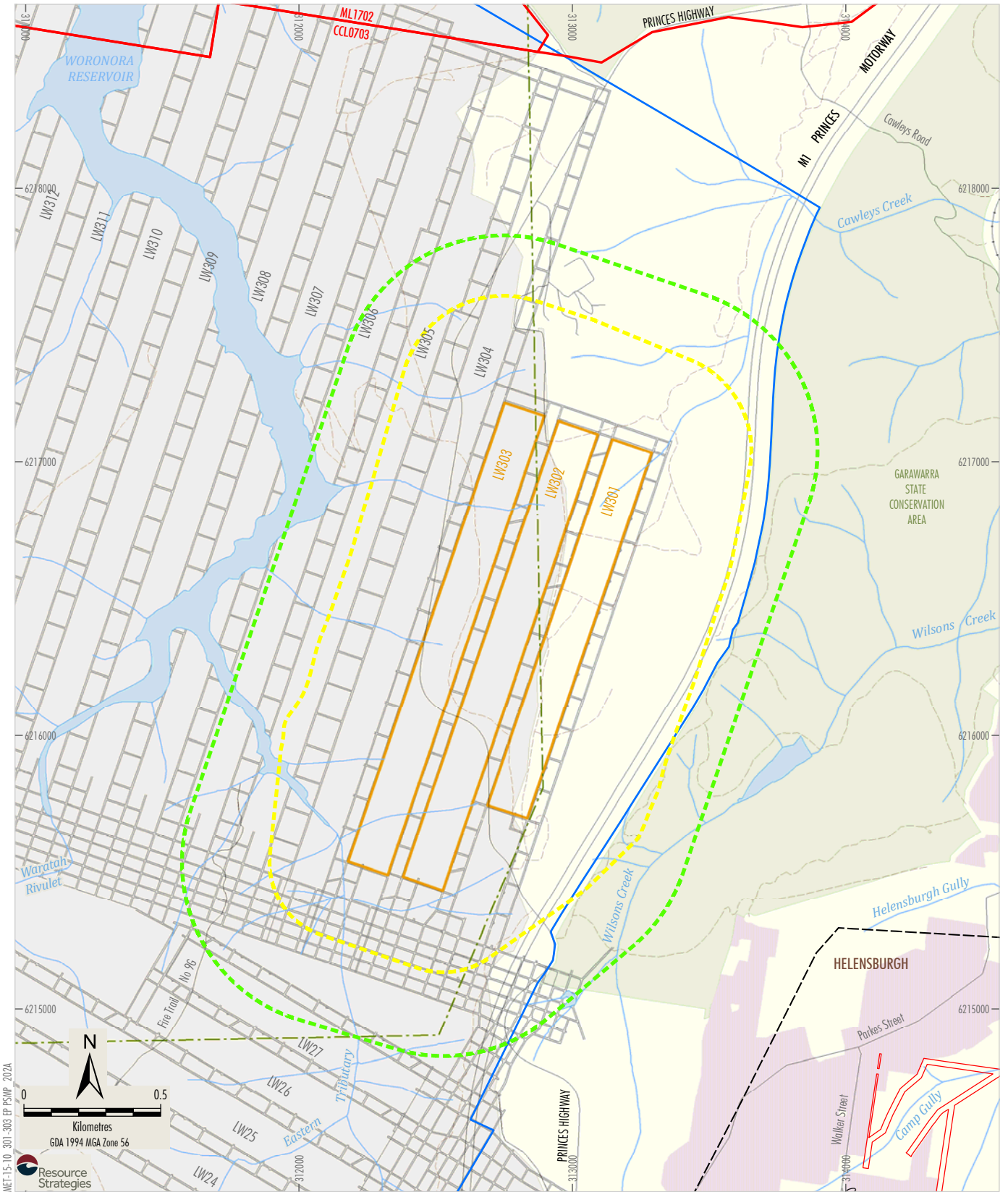
MEF-15-10-301-303-EP-PSMP-201A  
 0 2 Kilometres  
 GDA 1994 MGA Zone 56  
 Resource Strategies

- LEGEND**
- Mining Lease Boundary
  - Woronora Special Area
  - Railway
  - Project Underground Mining Area  
Longwalls 20-27 and 301-317
  - Longwalls 301 - 303 Secondary Extraction
  - 35° Angle of Draw and/or Predicted  
20 mm Subsidence Contour
  - 600 m from Secondary Extraction of  
Longwalls 301-303
  - Woronora Notification Area
  - Existing Underground Access Drive (Main Drift)

Source: Land and Property Information (2015); Department of Industry (2015);  
 Metropolitan Coal (2016); MSEC (2016)

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 Project Longwalls 20 - 27 and  
 Longwalls 301 - 317 Layout

**Figure 1**

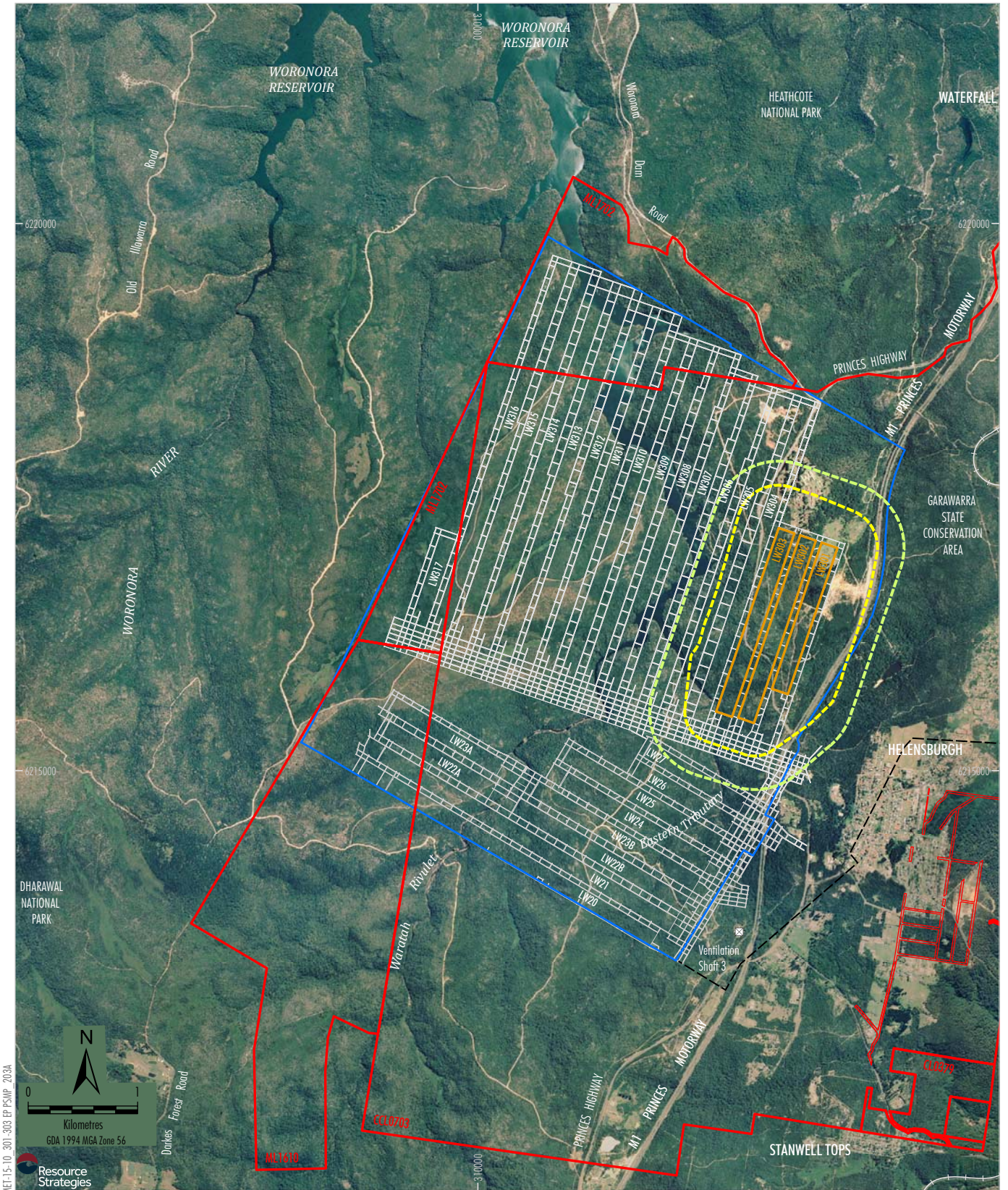


- LEGEND**
- Mining Lease Boundary
  - Woronora Special Area
  - Railway
  - Project Underground Mining Area Longwalls 20-27 and 301-317
  - Longwalls 301 - 303 Secondary Extraction
  - 35° Angle of Draw and/or Predicted 20 mm Subsidence Contour
  - 600 m from Secondary Extraction of Longwalls 301-303
  - Woronora Notification Area
  - Existing Underground Access Drive (Main Drift)
  - Road
  - Vehicular Track

Source: Land and Property Information (2015); Department of Industry (2015); Metropolitan Coal (2016); MSEC (2016)

  
**METROPOLITAN COAL**  
 Longwalls 301 - 303 Layout

**Figure 2**



- LEGEND**
- Mining Lease Boundary
  - Railway
  - Project Underground Mining Area  
Longwalls 20-27 and 301-317
  - Longwalls 301 - 303 Secondary Extraction
  - 35° Angle of Draw and/or Predicted  
20 mm Subsidence Contour
  - 600 m from Secondary Extraction of  
Longwalls 301-303
  - Existing Underground Access Drive (Main Drift)

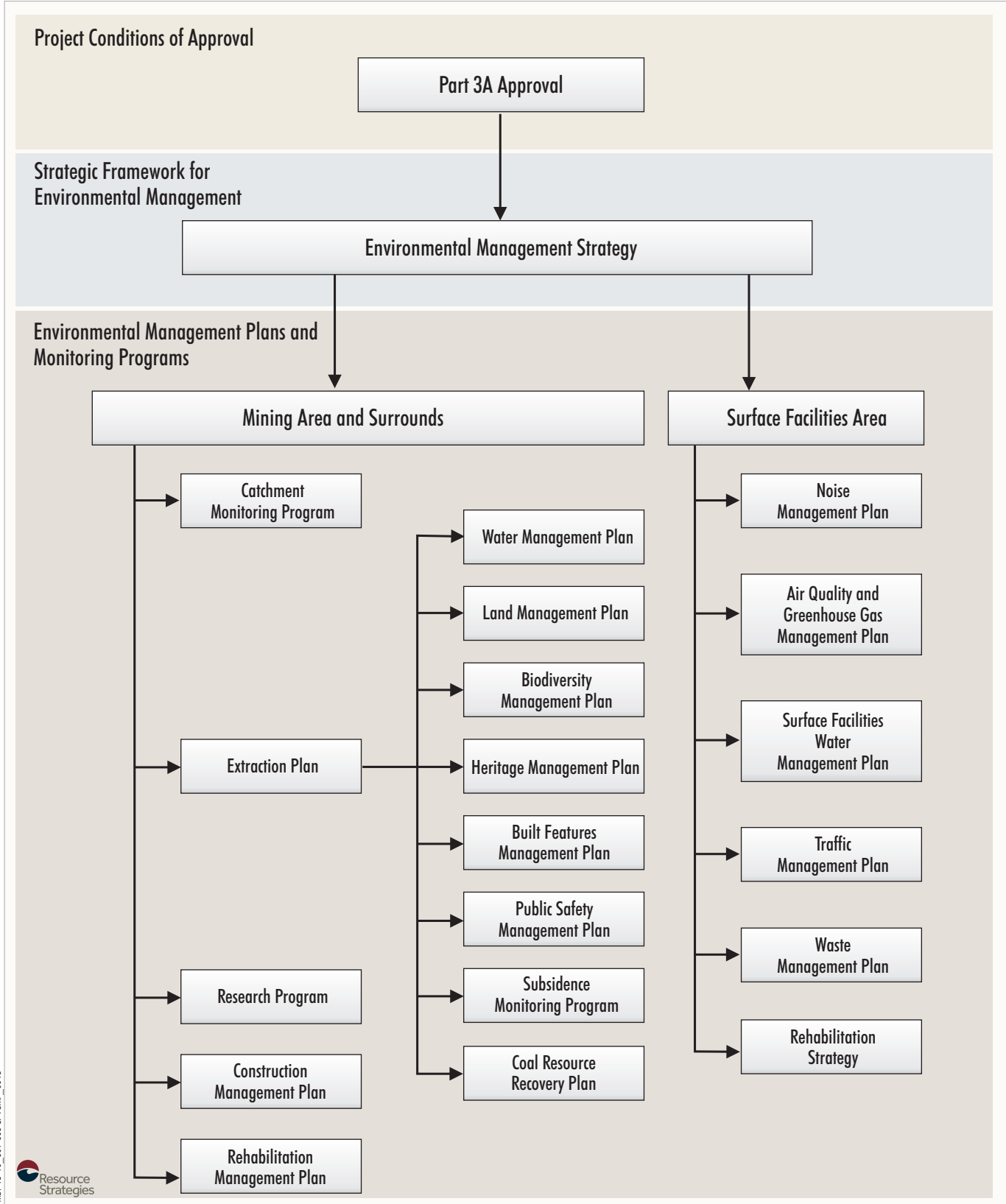
Source: Land and Property Information (2015); Date of Aerial Photography 1998;  
Department of Industry (2015); Metropolitan Coal (2016); MSEC (2016)



**METROPOLITAN COAL**  
Project Longwalls 20 - 27 and  
Longwalls 301 - 317 Layout -  
Aerial Photograph

**Figure 3**





ME1-15-10-301-303 EP PSMP\_001B



METROPOLITAN COAL  
Environmental Management  
Structure

Figure 4

## 2 PSMP REVIEW AND UPDATE

In accordance with Condition 4, Schedule 7 of the Project Approval, this PSMP will be reviewed within three months of the submission of:

- an audit under Condition 8 of Schedule 7;
- an incident report under Condition 6 of Schedule 7;
- an annual review under Condition 3 of Schedule 7; and

if necessary, revised to the satisfaction of the Director-General (now Secretary) of the NSW Department of Planning and Environment (DP&E) to ensure the PSMP is updated on a regular basis and to incorporate any recommended measures to improve environmental performance.

The PSMP will also be reviewed within three months of approval of any Project modification and if necessary, revised to the satisfaction of the DP&E.

The revision status of this PSMP is indicated on the title page of each copy. The distribution register for controlled copies of the PSMP is described in Section 2.1.

Revisions to any documents listed within this PSMP will not necessarily constitute a revision of this document.

### 2.1 DISTRIBUTION REGISTER

In accordance with Project Approval Condition 10, Schedule 7 'Access to Information', Metropolitan Coal will make the PSMP publicly available on the Peabody website. A hard copy of the PSMP will also be maintained at the Metropolitan Coal site.

Metropolitan Coal recognises that various regulators have different distribution requirements, both in relation to whom documents should be sent and in what format. An Environmental Management Plan and Monitoring Program Distribution Register has been established in consultation with the relevant agencies and infrastructure owners that indicates:

- to whom the Metropolitan Coal plans and programs, such as the PSMP, will be distributed;
- the format (i.e. electronic or hard copy) of distribution; and
- the format of revision notification.

Metropolitan Coal has made the Distribution Register publicly available on the Peabody website.

Metropolitan Coal is responsible for maintaining the Distribution Register and for ensuring that the notification of revisions is sent by email or post as appropriate.

In addition, Metropolitan Coal employees with local computer network access will be able to view the controlled electronic version of this PSMP on the Metropolitan Coal local area network. Metropolitan Coal will not be responsible for maintaining uncontrolled copies beyond ensuring the most recent version is maintained on Metropolitan Coal's computer system and the Peabody website.

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### 3 STATUTORY REQUIREMENTS

Metropolitan Coal's statutory obligations are contained in:

- (i) the conditions of the Project Approval;
- (ii) relevant licences and permits, including conditions attached to mining leases; and
- (iii) other relevant legislation.

These are described below.

#### 3.1 EP&A ACT APPROVAL

Condition 6(g), Schedule 3 of the Project Approval requires the preparation of a PSMP as a component of Extraction Plan(s) for second workings. Project Approval Condition 6(g), Schedule 3 states:

##### **SECOND WORKINGS**

##### **Extraction Plan**

6. *The Proponent shall prepare and implement an Extraction Plan for all second workings in the mining area to the satisfaction of the Director-General. This plan must:*

...

*(g) include a Public Safety Management Plan, which has been prepared in consultation with DRE and the DSC (for any mining within the DSC notification area), to ensure public safety in the mining area.*

...

Condition 2, Schedule 7 of the Project Approval outlines management plan requirements that are applicable to the preparation of the PSMP. Table 2 indicates where each applicable component of the condition is addressed within this PSMP.

#### 3.2 LICENCES, PERMITS AND LEASES

In addition to the Project Approval, all activities at or in association with Metropolitan Coal will be undertaken in accordance with the following licences, permits and leases which have been issued or are pending issue.

- The conditions of mining leases issued by the NSW Division of Resources and Energy (DRE), within the NSW Department of Industry, Skills and Regional Development (NSW Department of Industry) under the *NSW Mining Act, 1992* (e.g. Consolidated Coal Lease [CCL] 703, Mining Lease [ML] 1610, ML 1702, Coal Lease [CL] 379 and Mining Purpose Lease [MPL] 320).
- The *Metropolitan Coal Mining Operations Plan 1 October 2012 to 30 September 2019* approved by NSW Department of Industry.
- The conditions of Environment Protection Licence (EPL) No. 767 issued by the NSW Environment Protection Authority (EPA) under the *NSW Protection of the Environment Operations Act, 1997*. Revision of the EPL will be required prior to the commencement of Metropolitan Coal activities that differ from those currently licensed.
- The prescribed conditions of specific surface access leases within CCL 703 for the installation of surface facilities as required.

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**Table 2  
Management Plan Requirements**

Project Approval Condition	PSMP Section
<b>Condition 2, Schedule 7</b>	
2. The Proponent shall ensure that the management plans required under this approval are prepared in accordance with any relevant guidelines, and include:	
a) detailed baseline data;	Section 4
b) a description of:	
• the relevant statutory requirements (including any relevant approval, licence or lease conditions);	Section 3
• any relevant limits or performance measures/criteria;	Section 6
• the specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the project or any management measures;	Section 6
c) a description of the measures that would be implemented to comply with the relevant statutory requirements, limits, or performance measures/criteria;	Sections 7 and 8
d) a program to monitor and report on the:	Sections 7 and 8
• impacts and environmental performance of the project;	
• effectiveness of any management measures (see c above);	
e) a contingency plan to manage any unpredicted impacts and their consequences;	Section 9
f) a program to investigate and implement ways to improve the environmental performance of the project over time;	N/A
g) a protocol for managing and reporting any:	
• incidents;	Section 10
• complaints;	Section 10
• non-compliances with statutory requirements; and	Section 10
• exceedances of the impact assessment criteria and/or performance criteria; and	Section 10
h) a protocol for periodic review of the plan.	Section 2

- Water Access Licences (WALs) issued by the Department of Primary Industries (DPI) Water under the *NSW Water Management Act, 2000*, including WAL 36475 under the *Water Sharing Plan for the Greater Metropolitan Region Groundwater Sources 2011* and WAL 25410 under the *Water Sharing Plan for the Greater Metropolitan Region Unregulated River Water Sources 2011*.
- Mining and workplace health and safety related approvals granted by NSW Department of Industry and WorkCover NSW.
- Supplementary approvals obtained from WaterNSW (previously the Sydney Catchment Authority) for surface activities within the Woronora Special Area (e.g. fire road maintenance activities).

### 3.3 OTHER LEGISLATION

Metropolitan Coal will conduct the Project consistent with the Project Approval and any other legislation that is applicable to an approved Part 3A Project under the EP&A Act.

The following Acts may be applicable to the conduct of the Project (Helensburgh Coal Pty Ltd [HCPL], 2008):

- *Contaminated Land Management Act, 1997;*
- *Crown Lands Act, 1989;*
- *Dams Safety Act, 1978;*
- *Dangerous Goods (Road and Rail Transport) Act, 2008;*
- *Energy and Utilities Administration Act, 1987;*
- *Fisheries Management Act, 1994;*
- *Mining Act, 1992;*
- *Noxious Weeds Act, 1993;*
- *Protection of the Environment Operations Act, 1997;*
- *Rail Safety (Adoption of National Law) Act, 2012;*
- *Roads Act, 1993;*
- *Threatened Species Conservation Act, 1995;*
- *Sydney Water Catchment Management Act, 1998;*
- *Water Act, 1912;*
- *Water Management Act, 2000;*
- *Work Health and Safety Act, 2011; and*
- *Work Health and Safety (Mines and Petroleum Sites) Act, 2013.*

Relevant licences or approvals required under these Acts will be obtained as required.

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## 4 BASELINE DATA

Baseline data in relation to the potential consequences of mining is provided in the various management plans prepared under the Extraction Plan as shown in Figure 4. The plans of relevance to public safety include:

- Metropolitan Coal Longwalls 301-303 Land Management Plan which describes potential consequences on cliffs, overhangs, steep slopes and land in general; and
- Metropolitan Coal Longwalls 301-303 Built Features Management Plan (BFMP) which describes potential consequences on surface infrastructure. BFMPs have been prepared for the following infrastructure:
  - Garrawarra Centre Complex buildings and services (BFMP-Garrawarra [BFMP-GAR]).
  - M1 Princes Motorway including bridges (BFMP-Roads and Maritime Services [BFMP-RMS]).
  - Old Princes Highway (BFMP-Wollongong City Council [BFMP-WCC]).
  - Waterfall General [Garrawarra] Cemetery (BFMP-Cemetery [BFMP-CEM]).
  - Water mains (BFMP-Sydney Water [BFMP-SYDWATER]).
  - Transmission lines and towers (BFMP-Endeavour Energy [BFMP-END] and BFMP-TransGrid [BFMP-TRA]).
  - Telecommunication cables (BFMP-Telstra [BFMP-TELSTRA], BFMP-Nextgen [BFMP-NEXTGEN] and BFMP-Optus [BFMP-OPTUS]).
  - Telecommunication towers and compounds (BFMP-TELSTRA, BFMP-Axicom [BFMP-AXICOM] and BFMP-Sydney Trains [BFMP-SYDTRAINS]).
  - Illawarra Railway (BFMP-SYDTRAINS).

### 4.1 LONGWALLS 301-303 LAND MANAGEMENT PLAN

#### *Cliffs and Overhangs*

As described in the Longwalls 301-303 Land Management Plan, cliffs are defined as a continuous rock face, including overhangs, having a minimum height of 10 m and a slope of greater than 66 degrees ( $^{\circ}$ ). The location of cliffs within the Project underground mining area (Figure 5) was determined by MSEC (2008) from site inspections and from 1 m surface contours of the area. Overhangs associated with cliffs and/or considered sensitive to potential mine subsidence movements (due to their location relative to the Waratah Rivulet) were also identified within the Project underground mining area (Figure 5).

Site inspections of cliffs and overhangs within 600 m of Longwalls 20-27 secondary extraction were conducted by MSEC prior to the commencement of Longwalls 20-22 and/or Longwalls 23-27. The baseline characteristics of each cliff and overhang were recorded. The data obtained includes:

- photographic records of each cliff and overhang;
- sketches of overhangs;
- mapping of the approximate location of the cliff/overhang face and the rear extent of the overhang/undercut; and
- mapping of the location of the cliff or overhang relative to the Waratah Rivulet (where relevant).

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The detailed baseline information for each site containing a cliff and/or overhangs is provided in the Longwalls 301-303 Land Management Plan, namely sites COH1, COH2, COH3, COH4, COH5, COH6, COH6A, COH7, COH8, COH9, COH10, COH14, COH15 and COH16 (Figure 5).

The extent of weathering was observed to vary from well weathered rock faces to relatively freshly exposed rock surfaces where weathering was not advanced and vegetation cover had not established.

Jointing is considered ubiquitous within the Hawkesbury Sandstone and cliff lines have developed in association with the conjugate joint sets present. Differential weathering has exposed the sub-horizontal layers at varying rates, reflecting the natural variation in rock strength through the profile. In places the differential weathering has resulted in overhangs, essentially reflecting the erosion of weaker layers below more competent strata units that can span varying distances.

No cliffs have been identified within 600 m of Longwalls 301-303 (Figure 5). The nearest cliffs are located more than 800 m to the west of Longwalls 301-303 (Figure 5).

### ***Steep Slopes and Land in General***

Consistent with the Project Approval, steep slopes are defined as an area of land having a natural gradient of between 33° and 66°. In the Project EA subsidence assessment (Appendix A of the Project EA) MSEC (2008) defined steep slopes as an area of land having a natural gradient of between 18° and 63°. The steep slopes were identified from surface level contours generated from 1 m contours of the area. Both definitions of steep slopes are shown on Figure 5.

Steep slopes have been identified to highlight areas where existing ground slopes may be marginally stable. However, no significant slope failures have been observed in the Southern Coalfield as a result of longwall mining. Steep slopes within 600 m of Longwalls 301-303 secondary extraction are shown on Figure 5. The central area of Longwalls 301-303 is at a topographical high point. The majority of the steep slopes are located away from this area and to the west and south of Longwalls 301-303 (Figure 5).

The surface soils generally consist of soils derived from Hawkesbury Sandstone, in varying stages of weathering and fracturing. The majority of the slopes are stabilised, to some extent, by trees and other natural vegetation.

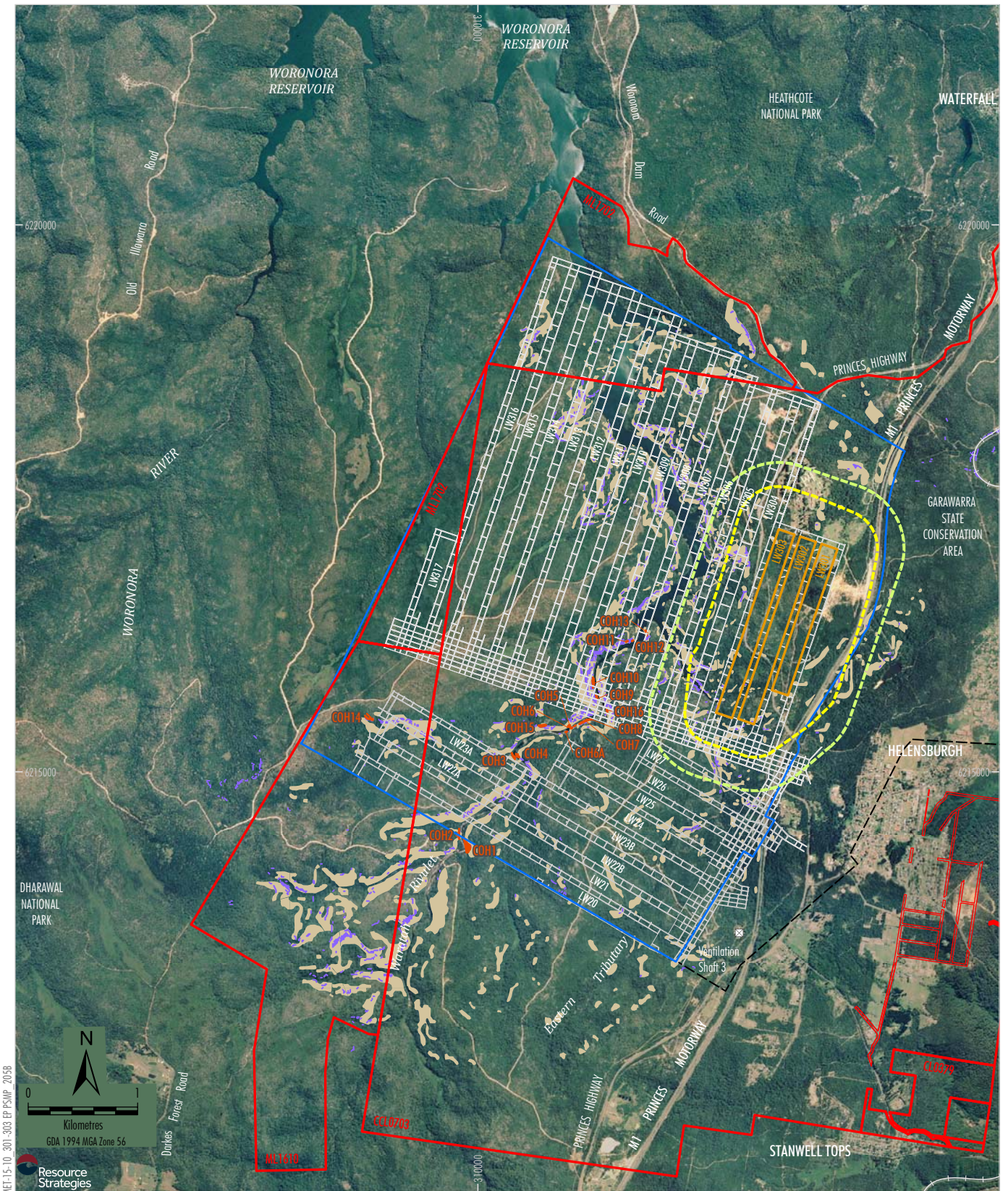
Land in general refers to the general landscape other than cliffs and steep slopes. A series of en-echelon rock ledges occur on the steep slopes and other land, as well as other rock formations such as boulders and rock pavements. Natural cracks along exposed rock ledges are common and migration of leaf litter and establishment of vegetation within these zones is common. Freshly exposed cracks attributable to mining would be readily apparent, at least in areas of no soil cover. No surface tension cracks as a result of previous mining have been observed within the 35° angle of draw and/or predicted 20 mm subsidence contour of Longwalls 301-303 to date (i.e. at the time of PSMP development).

Land in general also includes other land features such as fire trails and vehicular tracks. Unsealed vehicular tracks and fire trails are located throughout the Project underground mining area and above Longwalls 301-303 (Figure 5).

### ***Environmental Risk Assessment***

The Environmental Risk Assessment conducted for the Land Management Plan indicated that there was no change in the previously assessed risk to cliffs and overhangs, steep slopes and land in general (Metropolitan Coal, 2016).

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- LEGEND**
- Mining Lease Boundary
  - Railway
  - Project Underground Mining Area  
Longwalls 20-27 and 301-317
  - Longwalls 301 - 303 Secondary Extraction
  - 35° Angle of Draw and/or Predicted  
20 mm Subsidence Contour
  - 600 m from Secondary Extraction of  
Longwalls 301-303
  - Existing Underground Access Drive (Main Drift)

- Cliffs and Overhangs
- Steep Slopes (Project Approval)
- Steep Slopes (Project Environmental Assessment)

Source: Land and Property Information (2015); Date of Aerial Photography 1998;  
Department of Industry (2015); Metropolitan Coal (2016); MSEC (2008; 2016)

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Cliffs and Overhangs, Steep Slopes and  
Land in General within the Project  
Underground Mining Area and Surrounds

**Figure 5**



## 4.2 LONGWALLS 301-303 BUILT FEATURES MANAGEMENT PLAN

Each BFMP includes the collection of baseline data (e.g. by visual audit / inspection) in relation to the integrity of the built features, considering safety, serviceability and the ability to repair, and associated access roads/tracks.

Baseline subsidence survey and monitoring about each infrastructure asset is described in each BFMP and outlined in the Metropolitan Coal Longwalls 301-303 Subsidence Monitoring Program.

Individual risk assessments were conducted with representatives of the asset owners as follows and the outcomes and actions are summarised in the respective BFMPs:

- BFMP-TELSTRA<sup>1</sup> (11 August 2016);
- BFMP-OPTUS (12 August 2016);
- BFMP-SYDWATER (15 August 2016);
- BFMP-CEM (15 August 2016);
- BFMP-WCC (15 August 2016);
- BFMP-SYDTRAINS (18 August 2016);
- BFMP-END (19 August 2016);
- BFMP-RMS (25 August 2016);
- BFMP-TRA (26 August 2016);
- BFMP-AXICOM (26 August 2016); and
- BFMP-GAR (20 October 2016).

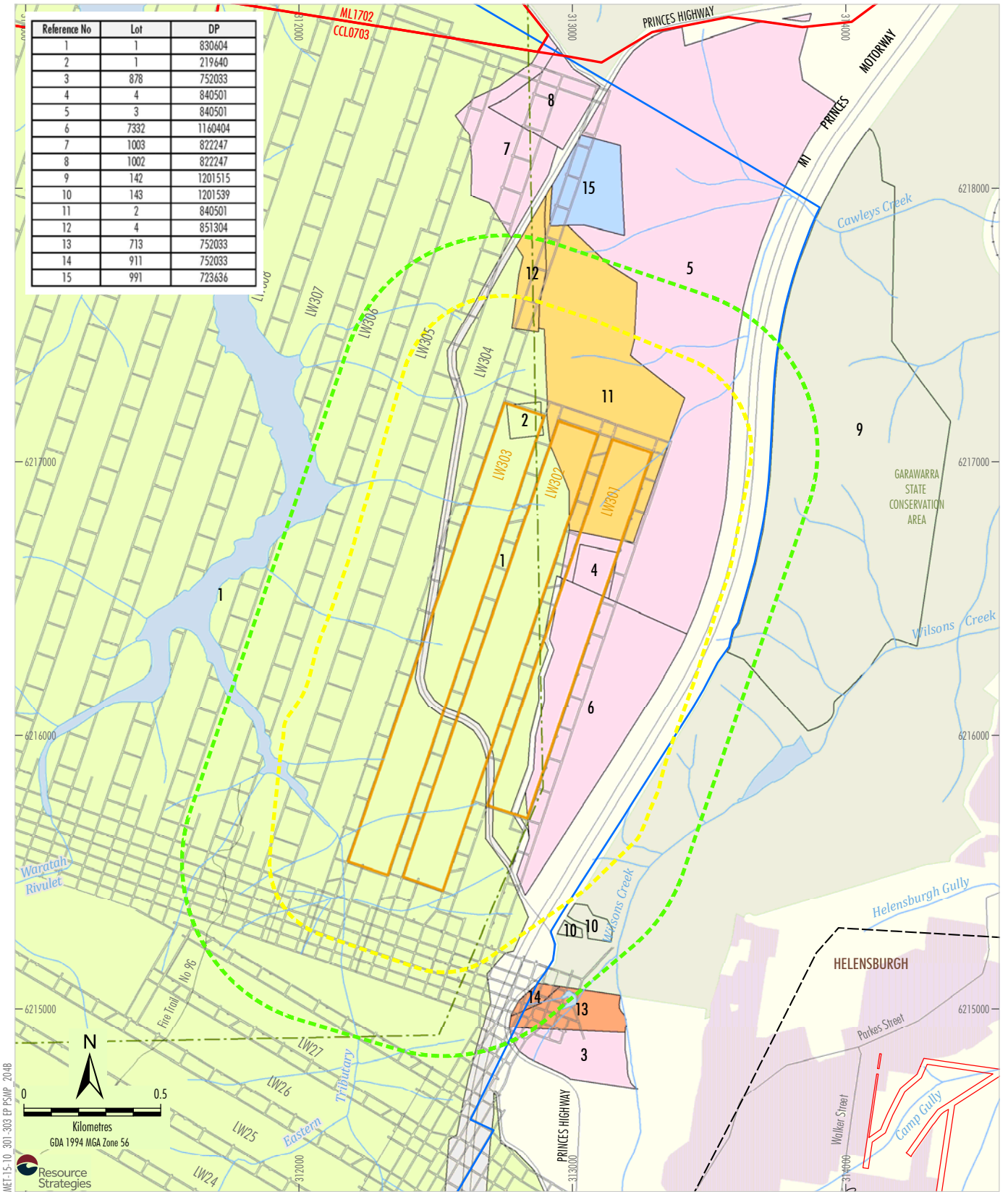
## 4.3 LAND OWNERSHIP

A land ownership plan is provided on Figure 6. In summary, 12 lots are located within 600 m of Longwalls 301-303, and the ownership details are as follows:

- two lots are owned by WaterNSW;
- two lots are owned by Robert and Carolyn Stewart;
- four lots are owned by The State of New South Wales (Crown Land);
- two lots are owned by The State of New South Wales (Garawarra State Conservation Area); and
- two lots are owned by the Health Administration Corporation.

Metropolitan Coal has consulted with all landowners within 600 m of Longwalls 301-303 in relation to the Longwalls 301-303 Extraction Plan.

<sup>1</sup> The risk assessment outcomes were directly applicable to the BFMP-NEXTGEN (Comms Network Solutions Pty Ltd was the representative for both Telstra and Nextgen).



- LEGEND**
- Mining Lease Boundary
  - Woronora Special Area
  - Railway
  - Project Underground Mining Area  
Longwalls 20-27 and 301-317
  - Longwalls 301 - 303 Secondary Extraction
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20 mm Subsidence Contour
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Longwalls 301-303
  - Woronora Notification Area
  - Existing Underground Access Drive (Main Drift)

- Landholder**
- WaterNSW
  - The State of New South Wales  
(Crown Land)
  - The State of New South Wales  
(Garawarra State Conservation Area)
  - Health Administration Corporation
  - The Trustees of the  
Macedonian Orthodox Monastery  
R & C Stewart

Source: Land and Property Information (2015, 2016); Department of Industry (2015); Metropolitan Coal (2016); MSEC (2016)

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**Land Ownership Within  
600 m of Longwalls 301 - 303**

**Figure 6**

Metropolitan Coal has also consulted with the Sutherland Shire Sports Flying Association, which uses a former quarry on Lot 1003, DP 822247 for club activities (Figure 6). It is understood that the Sutherland Shire Sport Flying Association club house and air strip are located on this property, however are located beyond 600 m of Longwalls 301-303.

## 5 RISK ASSESSMENT

In accordance with the DP&E and DRE (2015) *Guidelines for the Preparation of Extraction Plans*, a risk assessment was held to identify and address potential safety hazards to the public, including:

- potential subsidence impacts on built features;
- potential instability of cliff formations or steep slopes caused by subsidence;
- deformations or fracturing of any land caused by subsidence, and
- any other impacts of subsidence.

The risk assessment was held on 2 September 2016 (AXYS Consulting, 2016). Risk assessment attendees included representatives from Metropolitan Coal (Manager – Technical Services; Environment and Community Coordinator; and Safety and Training Manager), Mine Subsidence Engineering Consultants (MSEC), Resource Strategies and AXYS Consulting (risk assessment facilitator).

The risk assessment included consideration of the environmental risk assessment relevant to the Longwalls 301-303 Land Management Plan (Section 4.1), the individual risk assessments conducted for each BFMP with the infrastructure owners (Section 4.2) and predicted subsidence parameters and impact assessments for land within 600 m of Longwalls 301-303 (Section 4.3).

A number of risk control and management measures were identified during the risk assessment which considered the extraction of coal beneath land and infrastructure. Monitoring of potential risks to public safety is described in Section 7. The management of risks to public safety is described in Section 8.

Metropolitan Coal considers all risk control measures and procedures to be feasible to manage all identified risks.

## 6 PERFORMANCE MEASURES AND INDICATORS

The Project Approval requires Metropolitan Coal not to exceed the subsidence impact performance measures outlined in Table 1 of Condition 1, Schedule 3.

The subsidence impact performance measure specified in Table 1 of Condition 1, Schedule 3 in relation to public safety is:

Table 1: Subsidence Impact Performance Measures

<b>Built Features</b>	
Built features	Safe, serviceable and repairable, unless the owner and the MSB agree otherwise in writing.

Metropolitan Coal will assess the Project against the following public safety performance indicator:

*Public safety will be ensured in the event that any hazard to the general public arising from subsidence effects becomes evident.*

Specific performance indicators have also been developed with each asset owner and are described in the individual BFMPs.

## 7 MONITORING

### 7.1 CLIFFS AND OVERHANGS, STEEP SLOPES AND LAND IN GENERAL

A monitoring program will be implemented to monitor the impacts and environmental performance of the Project on cliffs and overhangs, steep slopes, and land in general as outlined in the Longwalls 301-303 Land Management Plan. The monitoring program includes:

- measurement of subsidence parameters as outlined in the Longwalls 301-303 Subsidence Monitoring Program;
- monitoring of subsidence impacts on specific cliffs and overhangs (associated with previous Longwalls 23-27); and
- opportunistic visual inspections for subsidence impacts on steep slopes and land in general.

#### ***Cliffs and Overhangs***

Although no cliffs have been identified within 600 m of Longwalls 301-303, if additional subsidence impact(s) (i.e. cliff instabilities) to those recorded during the mining of Longwalls 23-27 are observed during the inspection to be conducted within one month of the completion of Longwall 27, the following details will be noted and/or photographed:

- the date of the inspection;
- the location of longwall extraction (i.e. the longwall chainage);
- the location of the cliff instability (i.e. freshly exposed rock face and debris scattered around the base of the cliff or overhang) relative to the cliff face or overhang;
- the nature and extent of the cliff instability (including an estimate of volume);
- the length of the cliff instability;
- other relevant aspects such as water seepage (which can indicate weaknesses in the rock);
- whether any actions are required (e.g. implementation of management measures, initiation of the Contingency Plan, incident notification, implementation of appropriate safety controls, review of public safety, etc.); and
- any other relevant information.

The information will be recorded in the Land Management Plan - Subsidence Impact Register (Appendix 2 of the Longwalls 301-303 Land Management Plan) and reported in accordance with the Project Approval conditions.

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### ***Steep Slopes and Land in General***

In the event subsidence impacts are identified within 600 m of Longwalls 20-27 (that were not previously recorded during the mining of Longwalls 20-27), or within 600 m of Longwalls 301-303, the following details will be noted and/or photographed:

- the location, approximate dimensions (length, width and depth), and orientation of surface tension cracks;
- the location of the surface tension crack in relation to fire trails or vehicular tracks;
- the location and approximate dimensions of rock falls (e.g. rock ledges);
- whether any actions are required (for example – implementation of management measures, initiation of the Contingency Plan, incident notification, implementation of appropriate safety controls, review of public safety etc.); and
- any other relevant information.

The date of the observation, details of the observer and the location of longwall extraction will also be documented.

The information obtained will be recorded in the Land Management Plan – Subsidence Impact Register (Appendix 2 of the Longwalls 301-303 Land Management Plan) and reported in accordance with the Project Approval conditions.

The information obtained will be used to assess required management measures in relation to public safety. Management measures are discussed in Section 8.

## **7.2 BUILT FEATURES**

Each BFMP details the relevant monitoring program to be implemented to ensure that the performance measure of 'safe' in relation to the infrastructure asset is achieved.

These include monitoring impacts to:

- telecommunication towers (Telstra, Axicom and Sydney Trains);
- telecommunication compounds (Telstra, Axicom and Sydney Trains);
- telecommunication (optical fibre, copper) and power underground cabling (Telstra, Nextgen, Optus, Endeavour Energy, Garrawarra Centre Complex);
- underground water mains (Sydney Water);
- Waterfall General (Garrawarra) Cemetery;
- public roads (M1 Princes Motorway [RMS] and Old Princes Highway [WCC]) and associated infrastructure (e.g. culverts, cuttings, roadside furniture);
- private roads (Garrawarra Centre Complex);
- bridges (RMS);
- railway lines (Sydney Trains);
- local power distribution and wooden poles (Endeavour Energy, Garrawarra Centre Complex);
- electricity transmission lines and transmission structures (330 kV [TransGrid] and 132 kV [Endeavour Energy]);

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- access roads/tracks (including fire trails and vehicular tracks);
- water storage tanks (Garrawarra Centre Complex);
- LPG storage tanks and connecting pipelines (Garrawarra Centre Complex);
- aged care (occupied) buildings (Garrawarra Centre Complex);
- abandoned buildings (Garrawarra Centre Complex); and
- residential (public) buildings (Garrawarra Centre Complex).

## 8 MANAGEMENT MEASURES

Risk controls and management measures applicable to public safety are described in Sections 8.1 to 8.4 below.

Management measures will be reported in the Annual Review in accordance with Project Approval Condition 3, Schedule 7.

### 8.1 RESTRICTED ACCESS

A large proportion of the land within 600 m of Longwalls 301-303 is owned and/or managed by WaterNSW or The State of New South Wales (Crown Land), and therefore accessibility to the general public is restricted.

The general public are not allowed in the Woronora Special Area for any recreational or other purpose. It is understood that fines up to \$44,000 apply for people who are caught ignoring restrictions in Special Areas.

Metropolitan Coal authorised personnel are permitted to access the Woronora Special Area in accordance with the WaterNSW Special Areas Consent (D2015/36043). The WaterNSW Special Areas Consent is provided in Appendix 1 and includes the following specific safety controls:

- speed restrictions
- restriction to designated access tracks;
- wet weather and fire hazard access restrictions;
- security and access keys; and
- relevant contact numbers (e.g. WaterNSW incident management and operational issues).

Metropolitan Coal's catchment induction applies to all Metropolitan Coal employees, visitors, and contactors accessing the Woronora Special Area. The catchment induction deals specifically with the safety of personnel within the catchment including awareness of the conditions of entry, suitable Personal Protective Equipment and emergency procedures.

Access restrictions are also applicable to some of the identified built features (e.g. fenced telecommunication compounds, and fenced abandoned buildings within Garrawarra Centre Complex).

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**8.2 LAND MANAGEMENT PLAN**

Where significant subsidence impacts on access roads/tracks (including fire trails and vehicular tracks) are detected (e.g. those that affect the serviceability) or at any time Metropolitan Coal, an asset owner or the landholder considers that the integrity of the access roads/tracks may be compromised, the following management measures will be implemented. Where significant cracks are detected, the cracks will be repaired as soon as practicable in consultation with the landholder. This may include the use of earthmoving equipment if considered the most appropriate means of repair. Appropriate sedimentation controls will be implemented during repair works. Management measures for access roads/tracks will be implemented in accordance with the Longwalls 301-303 Land Management Plan.

Other potential management measures in relation to subsidence impacts on land include signage to warn persons accessing the area of safety hazard, and construction of barriers to restrict access to unsafe areas.

Follow-up inspections will be conducted to assess the effectiveness of implemented management measures and the requirement for any additional management measures.

**8.3 BUILT FEATURES MANAGEMENT PLANS**

Where subsidence impacts on infrastructure items that may impact on public safety are detected or at any time Metropolitan Coal or the asset owner considers that the integrity of the asset and/or public safety may be compromised, repair works and/or contingency measures will be implemented in accordance with the relevant BFMP.

Each BFMP describes the potential repair works and/or contingency measures to ensure the performance measure of ‘safe’ in relation to the infrastructure asset is achieved in relation to subsidence impacts to:

- telecommunication towers (Telstra, Axicom and Sydney Trains);
- telecommunication compounds (Telstra, Axicom and Sydney Trains);
- telecommunication (optical fibre, copper) and power underground cabling (Telstra, Nextgen, Optus, Endeavour Energy, Garrawarra Centre Complex);
- underground water mains (Sydney Water);
- Waterfall General (Garrawarra) Cemetery;
- public roads (M1 Princes Motorway [RMS] and Old Princes Highway [WCC]) and associated infrastructure (e.g. culverts, cuttings, roadside furniture);
- private roads (Garrawarra Centre Complex);
- bridges (RMS);
- railway lines (Sydney Trains);
- local power distribution and wooden poles (Endeavour Energy, Garrawarra Centre Complex);
- electricity transmission lines and transmission structures (330 kV [TransGrid] and 132 kV [Endeavour Energy]);
- access roads/tracks (including fire trails and vehicular tracks);
- water storage tanks (Garrawarra Centre Complex);
- LPG storage tanks and connecting pipelines (Garrawarra Centre Complex);

- aged care (occupied) buildings (Garrawarra Centre Complex);
- abandoned buildings (Garrawarra Centre Complex); and
- residential (public) buildings (Garrawarra Centre Complex).

Other general potential management measures in relation to public safety include:

- traffic control including diversion of traffic;
- temporary speed restrictions;
- warning signs/lights;
- restriction of public access;
- erection of barriers;
- implementation of security services; and
- use of emergency services for public control.

It is noted that in regard to the longwall layout the starting position of Longwalls 302 and 303 considered the subsidence impact performance measures required to be met for the Garrawarra Centre Complex. In addition, the end position for Longwall 301 was governed by the presence of Bridge 2 (M1 Princes Motorway) which is sensitive to small differential movements. Bridge 2 is located approximately 330 m to the south-east of the end of Longwall 301.

#### 8.4 LANDOWNERS

Excluding the built features identified in the Built Features Management Plans (Section 8.3) and Lot 911, DP 752033 which has a number of residential and rural building structures located on the site (Figure 6), Metropolitan Coal understands there are no building structures present on land within 600 m of Longwalls 301-303. Notwithstanding, should any subsidence impacts be identified that pose a risk to public safety, Metropolitan Coal will implement management measures in consultation with the landowner.

It is noted that in regard to longwall layout Metropolitan Coal reduced the panel lengths of Longwalls 301-303 subsequent to the Project Approval based on geological considerations. No risks have been identified to public safety as a result of the extraction of Longwalls 301-303 within the Woronora Notification Area.

The Woronora Dam wall is located approximately 7.1 km to the commencing end of Longwall 303 and the distance from the labyrinth spillway, which is to the south of the dam wall, is approximately 6.7 km. The dam wall and spillway are located at large distances from Longwalls 301-303. It is not expected that measurable conventional subsidence movements would occur at the dam wall and spillway (MSEC, 2016). In addition, it is unlikely that non-conventional subsidence movements would be observed at the distances of the dam wall and spillway from Longwalls 301-303 (MSEC, 2016).

Metropolitan Coal is required to obtain all necessary approvals from the Minister administering the *Mining Act, 1992* in accordance with the requirements of the *Dams Safety Act, 1978* and the Dams Safety Committee.

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## 9 CONTINGENCY PLAN

In the event the built features performance measure of ‘safe’ is considered to have been exceeded or is likely to be exceeded, Metropolitan Coal will implement the following Contingency Plan:

- The likely exceedance of the built feature performance measure will be reported to the Manager - Technical Services and/or the Manager – Safety & Environmental Services within 24 hours of assessment completion.
- The Manager – Technical Services and/or the Manager – Safety & Environmental Services will report the likely exceedance to the General Manager as soon as practicable after becoming aware of the exceedance.
- Metropolitan Coal will report the likely exceedance to the DP&E, NSW Department of Industry (DRE) and relevant authority or asset owner as soon as practicable after Metropolitan Coal becomes aware of the exceedance.
- Metropolitan Coal will identify an appropriate course of action with respect to the identified impact(s), in consultation with specialists and relevant agencies, as necessary. For example:
  - proposed contingency measures;
  - a program to review the effectiveness of the contingency measures; and
  - consideration of adaptive management.

Potential contingency measures are described in Section 9.1 below.

- Metropolitan Coal will submit the proposed course of action to the DP&E for approval.
- Metropolitan Coal will implement the approved course of action to the satisfaction of the DP&E.

In accordance with Condition 6, Schedule 6 of the Project Approval, Metropolitan Coal will provide a suitable offset to compensate for the impact to the satisfaction of the Secretary of DP&E if either the contingency measures implemented by Metropolitan Coal have failed to remediate the impact or the Secretary determines that it is not reasonable or feasible to remediate the impact.

### 9.1 POTENTIAL CONTINGENCY MEASURES

Potential contingency measures for an exceedance of the built features performance measure in relation to safety include:

- The conduct of additional monitoring (e.g. increase in monitoring frequency or additional sampling) to inform the proposed contingency measures.
- The repair or replacement of the damaged asset.
- The provision of a suitable offset(s) to compensate for the loss of the asset.
- The implementation of adaptive management measures. Examples of adaptive management measures include reducing the thickness of the coal seam extracted, narrowing of the longwall panels and/or increasing the setback of the longwalls from the affected area.

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## 10 REPORTING

### 10.1 INCIDENTS

An incident is defined as a set of circumstances that causes or threatens to cause material harm to the environment, and/or breaches or exceeds the limits or performance measures/criteria in the Project Approval.

The reporting of incidents will be conducted in accordance with Condition 6, Schedule 7 of the Project Approval. Metropolitan Coal will notify the Secretary of the DP&E and any other relevant agencies of any incident associated with the Project as soon as practicable after Metropolitan Coal becomes aware of the incident. Within seven days of the date of the incident, Metropolitan Coal will provide the Secretary of the DP&E and any relevant agencies with a detailed report on the incident.

### 10.2 COMPLAINTS

A protocol for the managing and reporting of complaints has been developed as a component of Metropolitan Coal’s Environmental Management Strategy and is described below.

The Manager – Safety & Environmental Services is responsible for maintaining a system for recording complaints.

Metropolitan Coal will maintain public signage advertising the telephone number on which environmental complaints can be made. The Manager – Safety & Environmental Services is responsible for ensuring that the currency and effectiveness of the service is maintained. Notifications of complaints received are to be provided as quickly as practicable to the Manager – Safety & Environmental Services.

Complaints and enquiries do not have to be received via the telephone line and may be received in any other form. Any complaint or enquiry relating to environmental management or performance is to be relayed to the Manager – Safety & Environmental Services as soon as practicable. All employees are responsible for ensuring the prompt relaying of complaints. All complaints will be recorded in a complaints register.

For each complaint, the following information will be recorded in the complaints register:

- date and time of complaint;
- method by which the complaint was made;
- personal details of the complainant which were provided by the complainant or, if no such details were provided, a note to that effect;
- nature of the complaint;
- the action(s) taken by Metropolitan Coal in relation to the complaint, including any follow-up contact with the complainant; and
- if no action was taken by Metropolitan Coal, the reason why no action was taken.

The Manager – Safety & Environmental Services is responsible for ensuring that all complaints are appropriately investigated, actioned and that information is fed back to the complainant, unless requested to the contrary.

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In accordance with Condition 10, Schedule 7 of the Project Approval, the complaints register will be made publicly available on the Peabody website and updated on a monthly basis. A summary of complaints received and actions taken will be presented to the Community Consultative Committee as part of the operational performance review.

**10.3 NON-COMPLIANCES WITH STATUTORY REQUIREMENTS**

A protocol for the managing and reporting of non-compliances with statutory requirements has been developed as a component of Metropolitan Coal’s Environmental Management Strategy and is described below.

Compliance with all approvals, plans and procedures will be the responsibility of all personnel (staff and contractors) employed on or in association with Metropolitan Coal, and will be developed through promotion of Metropolitan Coal ownership under the direction of the General Manager.

The Manager - Technical Services and/or Manager – Safety & Environmental Services will undertake regular inspections, internal audits and initiate directions identifying any remediation/rectification work required, and areas of actual or potential non-compliance.

As described in Section 10.1, Metropolitan Coal will notify the Secretary of the DP&E and any other relevant agencies of any incident associated with Metropolitan Coal as soon as practicable after Metropolitan Coal becomes aware of the incident. Within seven days of the date of the incident, Metropolitan Coal will provide the Director-General (now Secretary) of the DP&E and any relevant agencies with a detailed report on the incident.

A review of Metropolitan Coal’s compliance with all conditions of the Project Approval, mining leases and all other approvals and licences will be undertaken prior to (and included within) each Annual Review. The Annual Review will be made publicly available on the Peabody website.

Additionally, in accordance with Condition 8, Schedule 7 of the Project Approval, an independent environmental audit was undertaken by the end of December 2011, and is undertaken a minimum of once every three years thereafter. A copy of the audit report will be submitted to the Secretary of the DP&E and made publicly available on the Peabody website. The independent audit will be undertaken by an appropriately qualified, experienced and independent team of experts whose appointment has been endorsed by the Secretary of the DP&E.

**11 REFERENCES**

AXYS Consulting (2016) *Metropolitan Coal Impact of Longwall 301-303 on Public Safety. Risk Assessment Report*. Report prepared for Metropolitan Coal.

Department of Planning and Environment and NSW Trade & Investment – Division of Resources and Energy (2015) *Guidelines for the Preparation of Extraction Plans Required under Conditions of Development Consents, Project Approvals and Mining Lease Conditions for Underground Coal Mining*. Version 5. Draft.

Helensburgh Coal Pty Ltd (2008) *Metropolitan Coal Project Environmental Assessment*.

Metropolitan Coal Pty Ltd (2016) *Metropolitan Coal Longwalls 301-303 Environmental Risk Assessment Report*.

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Mine Subsidence Engineering Consultants (2008) *Metropolitan Colliery Longwalls 20-44 Subsidence Assessment Report (MSEC Report MSEC285 Revision C, August 2008)*, Appendix A in HCPL (2008) *Metropolitan Coal Project Environmental Assessment*.

Mine Subsidence Engineering Consultants (2016) *Metropolitan Mine – Longwalls 301 to 303 Subsidence Predictions and Impact Assessments for the Natural and Built Features in Support of the Extraction Plan (MSEC Report MSEC846)*.

APPENDIX 1

WATERNSW SPECIAL AREAS CONSENT  
(D2015/36043)

Metropolitan Coal – Public Safety Management Plan		
Revision No. PSMP-R01-B		
Document ID: Public Safety Management Plan		

Ref: D2015/36043

Helensburgh Coal Pty Ltd  
PO Box 402  
Helensburgh NSW 2508

ACN 086 463 452

**Special Areas Consent – Issued under Clause 10 of the *Water NSW Regulation 2013***

**CONSENT SUMMARY**

**Consent No:**

D2015/36043

**Name of Consent Holder:**

Helensburgh Coal Pty Ltd

**Address of Consent Holder:**

PO Box 402, Helensburgh NSW 2508

**Commencement date:**

10 July 2015

**Expiry date:**

Five years from the commencement date

**Hours of Operation**

24 hours per day, 7 days per week unless otherwise specified in EP&A Act approval to a specific Permitted Activity

**Contacts**

**Water NSW Incident Management Number**

Ph: 1800 061 069

**Operational issues**

Manager Land Programs

Ph: 4774 4450

**Material changes to statutory approvals**

Manager Mining

Ph: 4724 2336

## **Standard Conditions**

### **1 Grant of Consent**

#### **1.1 Consent**

- 1.1.1 In accordance with the provisions of Division 1 of Part 3 of the *Water NSW Regulation 2013*, Water NSW grants to the Consent Holder consent to enter and remain on the Designated Area for the purpose of undertaking the Permitted Activity in accordance with the conditions of this Consent.
- 1.1.2 The Consent Holder does not commit an offence under Part 3 of the Water NSW Regulation by reason of anything done in accordance with a Statutory Approval.
- 1.1.3 The Consent Holder must not undertake any activity in the Designated Area other than the Permitted Activity.
- 1.1.4 This Consent extends to the employees, consultants and contractors of the Consent Holder who require access to the Designated Area to undertake the Permitted Activity.
- 1.1.5 This Consent also extends to stakeholders of the Consent Holder as long as they are accompanied by an employee, consultant or contractor of the Consent Holder, on the condition that the Manager Land Programs is informed 48 hrs prior to entering the Designated Area.

#### **1.2 Term of Consent**

The Consent is granted to the Consent Holder up until the Expiry Date or until such time as the Consent Holder ceases undertaking the Permitted Activity, whichever occurs first.

#### **1.3 Responsibility for other persons**

The Consent Holder must ensure that all persons carrying out the Permitted Activity in the Designated Areas are familiar with the terms of this Consent, including the requirement to comply with the conditions of this Consent.

#### **1.4 Reservation of Rights by Water NSW**

This Consent does not limit the statutory powers of Water NSW under the *Water NSW Act 2014* or the *Water NSW Regulation 2013* or any other law.

#### **1.5 No assignment**

Subject to clause 1.1.1, this Consent is personal to the Consent Holder and the Consent Holder may not assign, transfer, charge or otherwise deal with or dispose of its interest in this Consent.

## **2 Regulatory Conditions**

### **2.1 Access to Information**

The Consent Holder must notify the Manager Mining, in writing, as soon as practical when there is a material change to any Statutory Approval.

## **2.2 Compliance with Statutory Requirements**

The Consent Holder must comply with the Statutory Approvals in undertaking the Permitted Activity.

## **2.3 Consent Fee and Cost Recovery**

- 2.3.1 The Consent Holder must pay to Water NSW the Consent Fee, if required, in the manner set out in Item 8 of the Reference Schedule.
- 2.3.2 The Consent Holder must pay to Water NSW all reasonable costs incurred by Water NSW to engage suitably qualified and independent experts to review and advise for the purpose of determining:
- (a) the adequacy of any plans or monitoring programs reasonably required as a condition of this Consent; and
  - (b) whether the Consent Holder has complied with the conditions of this consent.
- 2.3.3 The Consent Holder must pay to Water NSW all rehabilitation and compliance costs incurred by Water NSW by reason of the breach of this Consent by the Consent Holder. Where possible Water NSW will consult with the Consent Holder in determining the value of these costs.

## **2.4 Goods and Services Tax**

All sums payable under this Consent are exclusive of GST. Where those payments are consideration for a taxable supply, or adjustments to the consideration of a taxable supply, the amount payable will be increased by a sum equal to the amount of the payment multiplied by the then current rate of GST.

# **3 Operating Conditions**

## **3.1 General**

- 3.1.1 Subject to the terms of the Statutory Approvals, the Consent Holder is permitted to access the Designated Area during the Hours of Operation.
- 3.1.2 Water NSW may restrict access to the Designated Area in accordance with the Water NSW Regulation at any time due to weather or fire conditions or any other operational reason.
- 3.1.3 Where any doubt exists as to whether the Designated Area has been closed by Water NSW, the Consent Holder must contact Water NSW prior to accessing the Designated Area to determine whether the Permitted Activity may continue.
- 3.1.4 Wet weather access must be in accordance with the approved *Special Areas Wet Weather Management Plan* (Schedule 8).
- 3.1.5 The Consent Holder must ensure all employees, contractors and consultants undertake any Designated Area inductions and training sessions reasonably required by Water NSW prior to their first entry onto the Designated Area and from time to time as required during the term of the Consent.



- 3.1.6 The Consent Holder may not access the Designated Area or any Water NSW water storages, rivers, lakes or other watercourses within the Designated Area by boat unless the Consent Holder obtains prior written approval from Water NSW and complies with the SCA's Watercraft Safety Work Instruction (CD2010/067) and Water Safety Procedure (CD2010/66) as provided on request.
- 3.1.7 All plant and equipment used by the Consent Holder in the Designated Area must be:
- a) maintained in a proper and efficient condition; and
  - b) operated in a proper and efficient manner.

### **3.2 Roads and Fire Trails**

- 3.2.1 The Consent Holder must comply with the Water NSW's Road and Fire Trail Rules listed in Schedule 7.
- 3.2.2 The Consent Holder may utilise WaterNSW roads and fire trails listed in Schedule 4.
- 3.2.3 The roads and fire trails that are the sole responsibility of the Consent Holder to maintain and repair are indicated in Schedule 4.
- 3.2.4 The Consent Holder must maintain and repair the roads and fire trails listed in Schedule 4 in accordance with the SCA Roads Management Manual (Schedule 5).

### **3.3 Security**

- 3.3.1 When entering or exiting the Designated Area the Consent Holder must ensure that all site access points including gates and barriers remain closed, locked or otherwise secured to prevent unauthorised access to the Designated Area.
- 3.3.2 Any damaged gates or barriers must be temporarily secured by the Consent Holder and reported immediately to the Water NSW Incident Management Number as shown in the Consent Summary.
- 3.3.3 The employees, contractors and consultants of the Consent Holder must:
- (a) carry photographic identification which must include the name and address of their employer at all times when they are in the Designated Area; and
  - (b) produce the photographic identification if requested by an Authorised Officer of Water NSW.
- 3.3.4 Where short term or one off access is required by contractors or consultants, they do not require photographic ID, provided they are accompanied by the Consent Holder who has photo ID as required by 3.3.3(a).
- 3.3.5 Water NSW access keys are issued to the Consent Holder for use by employees, contractors and consultants of the Consent Holder. Water NSW access keys are issued subject to the following conditions:
- (a) Water NSW keys must only be used to access the Designated Area in accordance with the conditions of this Consent;
  - (b) access keys are issued to the Consent Holder and must not be transferred;

- (c) if the Consent Holder no longer requires access to the Designated Area to conduct the Permitted Activity or when this Consent expires, the Consent Holder must return all SCA and Water NSW issued access keys to Water NSW;
- (d) if an access key is lost, the Consent Holder must notify Water NSW within 24 hours of becoming aware that the key has been lost. Notification must be made in writing to the Water NSW Manager Land Programs;
- (e) new keys will not be issued by Water NSW without a written request which provides detailed reasons why a new key is required. The Consent Holder will bear any costs incurred by Water NSW to issue new keys;
- (f) the Consent Holder agrees that all keys remain Water NSW property and undertakes to return keys from a key holder as soon as the valid need for access ceases; and
- (g) the Consent Holder agrees, if requested, to pay a bond of \$150.00 per key issued.

3.3.6 The Consent Holder must not place its own locks on gates in or to the Designated Area unless it obtains the prior written approval of Water NSW.

3.3.7 The Consent Holder must maintain a current list of all employees and contractors who have an SCA or Water NSW issued access key in their possession and make that record available to Water NSW on request.

3.3.8 The Consent Holder must maintain a log of all persons entering the Designated Area under this Consent which includes details of the time of entry and exit on each day.

### **3.4 Waste Management**

The Consent Holder must provide and maintain toilet facilities on the site where two or more persons are working in one location for a period of two days or more, and all site personnel must use and be instructed to use such facilities.

### **3.5 Work Health & Safety**

3.5.1 All activities under this consent must be carried out in accordance with the duties under Work Health and Safety legislation.

3.5.2 Persons entering the Special Area must take reasonable care for his or her own health and safety and take reasonable care that his or her acts or omissions do not adversely affect the health and safety of other persons.

3.5.3 All activities under this consent must be carried out in accordance with the Safe Work Plan (SWP).

## **4 Reporting Conditions**

### **4.1 Incident Management**

4.1.1 The Consent Holder must make each of its employees, consultants and contractors aware of the need to report and provide information via the Incident Management Number of any incidents or non-compliances as required by clause 4.1.2 and clause 4.3 through.

- 4.1.2 If the Consent Holder is required to report an incident or non-compliance under a Statutory Approval, the Consent Holder must also report that incident to Water NSW as soon as reasonably possible after becoming aware of that incident.
- 4.1.3 If a pollution incident occurs in the course of the Permitted Activity in the Designated Area so that material harm is caused or threatened to the environment as defined in section 147(1) of the *Protection of the Environment Operations Act 1997* the Consent Holder must notify Water NSW immediately of the incident and provide all relevant information.

## **4.2 Non Compliance**

- 4.2.1 If the Consent Holder fails to comply with any condition of this Consent, the Consent Holder must notify Water NSW immediately upon becoming aware of the breach through the Water NSW Incident Management Number. The Consent Holder must also provide Water NSW with a comprehensive written report in relation to the non-compliance within 14 days of first becoming aware of the non-compliance. The following must be addressed in the written report:
- (a) Consent reference and Condition number not complied with;
  - (b) Summary of particulars of non-compliance (no more than 50 words);
  - (c) Dates when the non-compliance occurred;
  - (d) Precise location where the non-compliance occurred (attach a map or diagram);
  - (e) Cause of Non-compliance;
  - (f) Action taken to mitigate any adverse of the non-compliance;
  - (g) Action taken to prevent a recurrence of the non-compliance.
- 4.2.2 The Consent Holder's compliance with the conditions of this Consent may be the subject of monitoring or audit by Water NSW from time to time. The Consent Holder must fully cooperate in the compliance monitoring or audit process.

## **4.3 Annual Statement of Compliance**

The Consent Holder must provide Water NSW with a signed Annual Statement of Compliance in the form set out in Schedule 6 indicating its compliance or otherwise with the conditions in this Consent for each 12 month period ("reporting period") with the first report due on 31 March 2016, then annually thereafter. The Consent Holder must sign and endorse the Annual Statement of Compliance and submit it to Water NSW within 60 days of the end of each reporting period.

# **5 General Conditions**

## **5.1 Release**

By accessing the Designated Area, the Consent Holder agrees to exercise the rights granted by Water NSW at its own risk and to release to the full extent permitted by law, Water NSW, its employees, agents and contractors, in the absence of any negligence on their part from all suits, actions, demands and claims of every kind resulting from any damage or destruction to any property (both real and personal) and injury suffered or sustained by any persons (including death) arising out of or in connection with the Permitted Activity.

## 5.2 Indemnity

- 5.2.1 By accessing the Designated Area, from the date of the consent, the Consent Holder agrees to indemnify and keep indemnified, Water NSW, its employees, agents and contractors in the absence of any negligence on their part from and against all its actions, demands, claims, proceedings, losses, damages, costs (including legal costs), charges or expenses incurred by Water NSW or for which Water NSW may become liable resulting from any damage or destruction to any property (both real and personal) and injury suffered or sustained by any persons arising out of or in connection with the Permitted Activity.
- 5.2.2 The Consent Holder indemnifies Water NSW against all losses and liabilities incurred by Water NSW in connection with the undertaking of the Permitted Activity by any employee, consultant or contractor of the Consent Holder or any other person that the Consent Holder permits to undertake the Permitted Activity without the consent of Water NSW.

## 5.3 Warranty

Water NSW provides no warranty that the Designated Area is suitable for the Permitted Activity.

## 5.4 Insurance

- 5.4.1 The Consent Holder must, prior to accessing the Designated Area, provide Water NSW with a certificate of currency for Public Liability Insurance for the amount specified in the Reference Schedule covering property, injury or death arising from the Consent Holder undertaking the Permitted Activity in the Designated Area.
- 5.4.2 The policy must note the insurable interest of Water NSW.

## 5.5 Additional conditions

The Consent Holder must comply with the additional conditions contained in Schedule 2. To the extent that there is any inconsistency between the standard conditions of this Consent and the additional conditions in Schedule 2, the additional conditions take preference to the standard conditions in this Consent, to the extent necessary to resolve the inconsistency.

## 5.6 Definitions

- 5.6.1 In this Consent unless the contrary intention appears:
- a) **Authorised Officer** means a member of staff, and includes any class of persons prescribed by the regulations, who is designated by Water NSW as an authorised officer whose official duties are concerned with the enforcement of the *Water NSW Act 2014* or the regulations or with the investigation or prosecution of offences or alleged offences against the Act or the regulations.
  - b) **Authority** means any government or any governmental, semi-governmental, quasi-governmental, administrative or judicial body, department, commission, authority, tribunal or entity which has power to provide a Statutory Approval.
  - c) **Commencement Date** means the commencement date of the Consent set out at Item 3 of the Reference Schedule.
  - d) **Consent** means this document and all schedules to it.

- e) **Consent Holder** means the party identified at Item 1 of the Reference Schedule.
- f) **Consent Holder's Equipment** means all the equipment brought onto the Designated Area by the Consent Holder, its employees, contractors and consultants.
- g) **Consent Fee** means the amount payable by the Consent Holder in accordance with clause 2.3 and set out in Item 9 of the Reference Schedule.
- h) **Designated Area** means that part of Water NSW land described in Item 2 of the Reference Schedule.
- i) **EP&A Act** means the *Environmental Planning and Assessment Act 1979*.
- j) **Expiry Date** means the date of the Consent will expire as set out at Item 4 of the Reference Schedule.
- k) **Hours of Operation** means times at which the Consent Holder is permitted to access the Designated Area for the purpose of the Permitted Activity. Hours of Operation are outlined in the Consent Summary.
- l) **Permitted Activity** means the activity for which the Consent is required as described in Item 5 of Reference Schedule.
- m) **Reference Schedule** means Schedule 1 of this Consent.
- n) **SCA** means the Sydney Catchment Authority.
- o) **SCA Roads Management Manual** means the Water NSW produced document listed in Schedule 5.
- p) **Statutory Approval** means any licence, approval or consent issued by any Authority permitting the Consent Holder to undertake the Permitted Activities in the Designated Area.
- q) **Water NSW Act** means *Water NSW Act 2014*.
- r) **Water NSW Regulation** means *Water NSW Regulation 2013*.
- s) **Water NSW Road and Fire Trail Rules** means the rules set out in Schedule 7.

**ISSUED BY:**



**FIONA SMITH**  
**Executive Manager Water Quality,**  
**Catchment Protection and People and Culture**  
**Water NSW**

**DATE:** 10/07/15

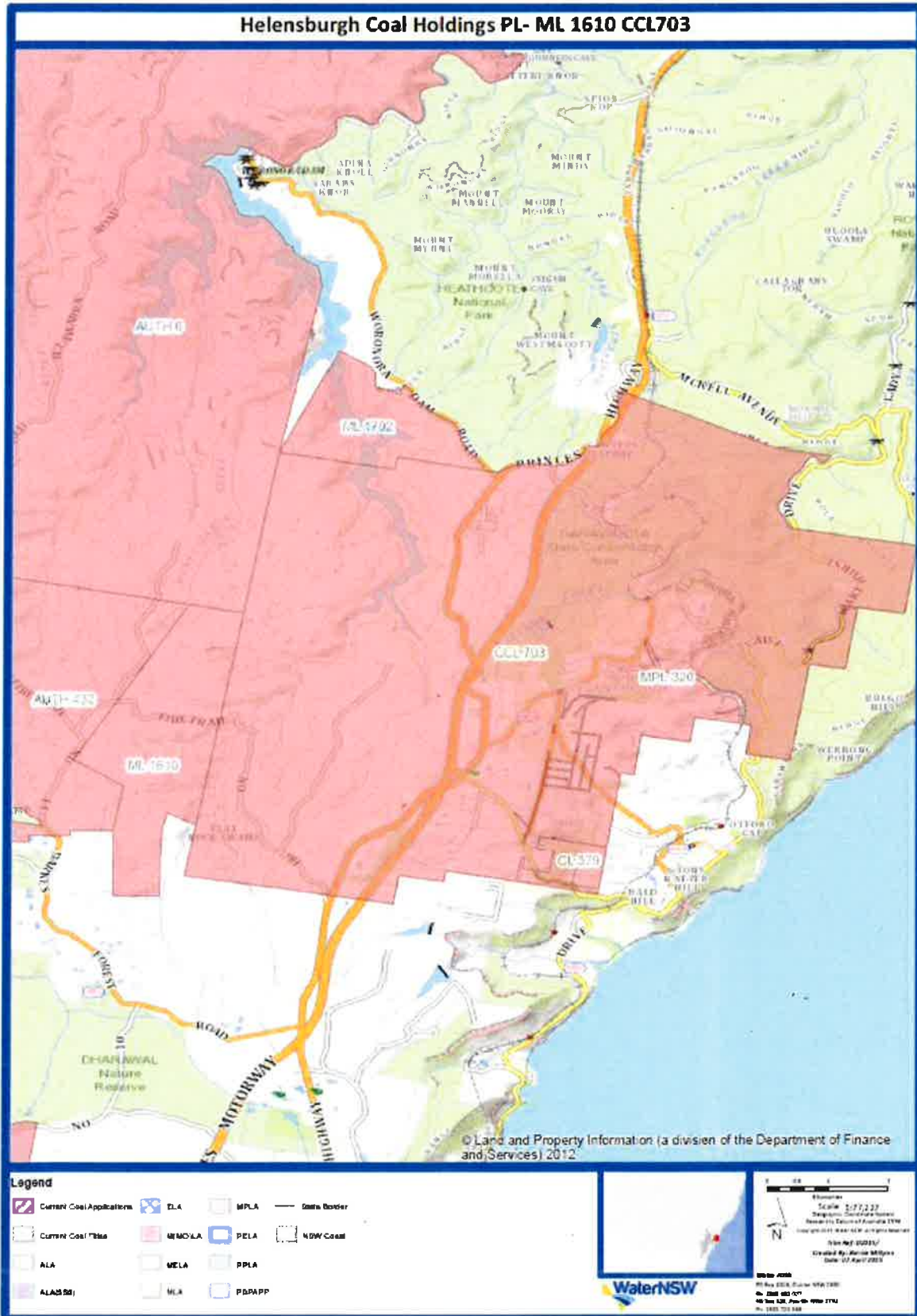
## Schedule 1 – Reference Schedule

Item 1	Consent Holder:	Helensburgh Coal Pty Ltd
Item 2	Designated Area:	The surface area of the Woronora Special Area associated with Mining Purposes Lease ML1610, CCL703 (Schedule 3) as required to be accessed in accordance with a Statutory Approval.
Item 3	Commencement Date:	10 July 2015.
Item 4	Expiry Date:	Five years from the commencement date.
Item 5	Permitted Activity:	To enter and remain on Special Area land and carry out activities that are otherwise prohibited by the Water NSW Regulation 2013 to the extent necessary to carry out the requirements of any Statutory Approval.
Item 6	Hours of Operation:	24 hours per day, 7 days per week unless otherwise specified in EP&A Act approval to a specific Permitted Activity.
Item 7	Insurance	Public Liability Insurance of up to \$25M for any one occurrence unlimited to the number of occurrences in any one policy year.
Item 8	Consent Fee	Not used.

## **Schedule 2 – Additional Conditions**

Not Applicable.

### Schedule 3 – Map Helensburgh Coal mining leases - ML1610, CCL703





## **Schedule 4 – List of Fire Trails as at 30 July 2015**

**List of Water NSW roads and fire trails which may be utilised under this consent:**

9  
9B  
9C\*  
9D  
9E  
9F  
9G  
9H\*  
9I  
9J  
14

\* indicates the roads and fire trails that are the sole responsibility of the Consent Holder to maintain and repair in accordance with the SCA Roads Management Manual (Schedule 5).

## **Schedule 5 – SCA Roads Management Manual**

SCA Roads Management Manual - Design, construction & maintenance guidelines for sealed and unsealed roads and tracks – June 2008 (CD2008/90).

## Schedule 6 – Annual Statement of Compliance with Consent Conditions

**Consent Holder**

Helensburgh Coal Pty Ltd

**Consent Number**

D2015/36043

**Reporting Period**

{insert dates}

**Compliance with Consent Conditions**

1. Were all of the following documents complied with during the reporting period? ( tick a box)

Consent/Approval	Yes	No
a. conditions of this consent;		
b. All statutory approvals;		
c. any environmental management plans, rehabilitation plans, revegetation plans, soil and water management plans, water monitoring plans or other plans required by Water NSW.		

2. If you answered "No" to any part of question 1, please supply the name of the non compliance/incident and the date the written report was provided to Water NSW, in the table below:

Non Compliance/Incident (one line)	Date written report provided to Water NSW

3. How many pages have you attached?  
(Each attached page must be initialled by the person(s) who signs section 4 of this statement of compliance)

#### 4. Signature and certification

The Statement of compliance must only be signed by a person(s) with legal authority to sign it as set out below:

- By affixing the common seal in accordance with Corporations Act 2001, or
- By 2 directors, or
- By a director and a company secretary, or
- By a person delegated to sign on the company's behalf in accordance with the Corporations Act 2001 and approved in writing by Water NSW to sign on the company's behalf.

Signature:

Name:

(printed)

Position

Date:

Signature:

Name:

(printed)

Position

Date:

SEAL (if signing under seal)

The Consent Holder can request Water NSW approval for the compliance requirements of this Consent to be linked to and built into other compliance reporting that may be required under approvals issued under the EP&A Act.

## **Schedule 7 – WaterNSW Road and Fire Trail Rules**

1. The driver of any vehicle must hold a current driver's licence and obey all speed advisory and warning signs. Vehicle speed must not exceed **40 km/h** on public access roads at WaterNSW owned sites such as picnic grounds unless otherwise signposted and **60 km/h** for all other Water NSW roads and fire trails unless otherwise signposted.
2. Any motor vehicle used to travel on any surface within the Designated Area must be registered and suitable for the purpose for which it is being used. The minimum vehicle standard for use in the non publically accessible areas within the Designated Area is a vehicle with All Wheel Drive or Four Wheel Drive capabilities.
3. All vehicles must carry appropriate safety and recovery gear consistent with the Consent Holder's Safe Work Plan or other WHS requirements.
4. All drivers of vehicles must be competent to operate or drive, and be appropriately licensed, for the type of vehicle in use.
5. The Consent Holder must not drive or use any road or fire trail in the Designated Area if the road or fire trail is not suitable for type of vehicle in use, or if driving or using any road or fire trail will result or is likely to result in damage to the road or fire trail or damage to the surrounding catchment area.
6. Vehicles must not be driven on the roads or fire trails in the Designated Area if they have been closed by Water NSW for any reason.
7. Vehicles may only be driven on formed fire trails in the Designated Area, unless permitted by the Statutory Approvals.
8. Vehicles must not be driven around fallen branches and trees on any road in the Designated Area. The Consent Holder must remove any items obstructing the road or report their location to WaterNSW. Vehicles must not progress along a road unless the obstruction has been removed first.
9. Access is restricted to vehicles essential to undertake the Permitted Activity and vehicle movements must be kept to a minimum.
10. For the purpose of this section, the term "vehicles" includes all vehicles including cars, trucks and any machinery driven on roads and fire trails.

## **Schedule 8 –Special Areas Wet Weather Management Plan**

A wet weather management plan is to be negotiated within 6 months of the commencement of this consent.