



**METROPOLITAN COAL  
CONSTRUCTION MANAGEMENT PLAN**

**SURFACE WORKS ASSESSMENT FORM**

**Subsidence Survey Lines**

**SEPTEMBER 2013**

## **Metropolitan Coal**

### **Proposed Clearing of Survey Tracks**

#### **Background**

The subject Surface Works Assessment (SWA) Form is submitted to Department of Planning & Infrastructure (DP&I) and Sydney Catchment Authority (SCA) for the proposed vegetation clearance to extend the line of sight survey walking tracks

- under the Transgrid transmission lines of approximately 1000 metres (through a previously cleared transmission line zone); and
- adjacent to the northern part of Fire road 9G of approximately 250 metres

Creating a defined path would allow surveyors to walk the same route rather than varied routes each time, which would likely lessen the potential impacts to vegetation. The surveys will be used for a number of monitoring operations in accordance with the Metropolitan Coal Project Approval and associated Environmental Management Plans and Monitoring Programs.

This SWA Form provides details of construction and environmental management measures for the proposed tracks as outlined in the Metropolitan Coal Construction Management Plan (ConMP) as approved by DP&I on 14 November 2011.

Construction and environmental safeguards detailed in the SWA Form will be communicated to on-site workers by providing copies of the documentation and holding discussions with all relevant staff/contractors prior to works commencing to ensure adherence to such safeguards. The site environmental supervisor will inspect the operations for compliance during works and following works completion. Performance will be documented in accordance with the process set out by the Construction Management Plan, which requires details to be completed in the Surface Works Register and Surface Works Performance Indicator Form, Appendices 1 and 2 respectively.

#### **Site Location**

The site is within the Woronora Special Area in the local government area (LGA) of Wollongong City Council. The Woronora Special Area covers a region of approximately 75 square kilometres (km<sup>2</sup>) and includes the catchment of Woronora Dam. SCA manages the Woronora Special Area and public access is restricted.

The township of Waterfall is located approximately 5 km to the north.

The location for the tracks is below the Transgrid transmission lines and adjacent to the northern end of fire trail 9G (see Figure 1).

**Construction Management Plan  
Surface Works Assessment Form**

**Note, this form must be completed in full  
prior to the commencement of surface disturbance works**

**Date:** *September 2013*

**Name and position:** *Ryan Pascoe, Manager – Safety & Environmental Services*

**Register number (i.e. Number 1, 2, etc.):** *6*

**RMP register number:** *6*

**Site name:**

*Transmission Line of Site Survey Tracks – Woronora Special Area, Helensburgh  
Extension of 9G Line of Sight Survey Track – Woronora Special Area, Helensburgh*

**Site type:**

*Subsidence Monitoring*

**Expected duration of works:** *Approximately 5 days (weather dependant).*

**Works schedule:**

**- Describe the activities (including timing) to be conducted during construction works.**

*After completion of aboriginal and flora surveys identify straightest possible line of sight paths with marking tape*

*Cut a 1.5 metre wide trail by cutting the vegetation above ground level and leaving the lower stem and roots in-situ to maximise the potential for natural regrowth; Vegetation cuttings will be placed in a random pattern to brush matt areas of disturbance.*

**1. Access to Survey Sites and Site Preparation:**

*Access to the site will be by 4WD vehicle on established catchment access roads.*

*It should also be noted that due to the rocky nature of the proposed area, vegetation density is sparse in places, which reduces the amount of clearing which will be required.*

**2. Use of site:**

*Survey Tools required will be transported to site by 4WD vehicle, no trucks are required.*

*The tracks will be active for the duration of the central mining area and half of the 300 series Longwalls area, which is an expected timeframe of approximately 8-10 years.*

**3. Site Rehabilitation:**

Following cessation of its use, the site will be rehabilitated in accordance with the Metropolitan Coal Rehabilitation Management Plan and in consultation with the SCA. Such rehabilitation measures include erosion and sediment control, weed management, and active revegetation using local seeding if required. Further rehabilitation details are provided in the Metropolitan Coal Rehabilitation Management Plan which can be provided on request, and is also available on the Peabody Energy website ([www.peabodyenergy.com](http://www.peabodyenergy.com)).

**4. Fuel Management:**

Refuelling of Chainsaws and brush cutter will be done over a 10 litre bucket with hydrocarbon absorbent material placed in the bucket to absorb any potential spills. A 20 litre fuel can will be banded in a 30 litre plastic container located on the access vehicle.

No fuel will be stored on site.

**5. Human Waste Water:**

A portable toilet will be available at the Fan site for the duration of the construction of the Line of sight survey tracks.

**6. Incidents:**

In the event of a site incident the SCA will be notified immediately via the SCA Incident number: 1800 061 069. Site personnel will be issued with an Emergency Contact List, including contact numbers for Fire, Ambulance & Police, SCA Incident number, OEH Pollution Line, and Metropolitan Coal contacts (Emergency – Control Room, Safety & Environment Services Manager and Mine Manager).

**Review of baseline information - site features (refer Section 5 of the Metropolitan Coal Construction Management Plan)**

**Are any of the following features located within the proposed disturbance area or immediate surrounds?**

**Are there occurrences of the Southern Sydney Sheltered Forest on Transitional Sandstone Soils EEC in the general area? No**

**Are there occurrences of the O'Hares Creek Shale Forest EEC in the general area? No**

*The site and access route (walking trail) were the subject of a flora survey (report attached – see Appendix 2) carried out by Florasearch on 20 August 2013 and found to not be within the above EECs.*

**Are there records of known threatened flora species in the general area? No**

*None of the vegetation communities found on the proposed subsidence lines (Table 3) is listed as threatened. One plant species listed as Vulnerable under the TSC and EPBC Acts, the Prickly Bush-pea (*Pultenaea aristata*), was found on the Trail 9G subsidence line (Table 3). No flora species listed as rare in the ROTAP database occurred on either path.*

*The population of Prickly Bush-pea on the proposed Trail 9G subsidence line extension is small and scattered. A total of six plants were marked. GPS locations of individual plants or pairs of plants are given in Table 4.*

*Although Prickly Bush-pea is limited geographically to the Woronora Plateau, it is a relatively common species within its distribution. It is widespread within the Metropolitan Coal project area (Bangalay Botanical Surveys, 2008), favouring damp sites on sandstone plateaux and slopes, and around the margins of swamps. It occurs regularly on the mown verges of fire trails where it survives regular mowing. This indicates that slashing and pruning are unlikely to cause plant mortality. Consequently, slashing to create an access path and line of sight for subsidence measurements is not considered likely to reduce or adversely affect the local population of the Prickly Bush-pea. Nevertheless, it is recommended that marked plants be protected from slashing wherever practical. However, in the unlikely event that unslashed plants interfere with the line of sight between measuring points, pruning of plants is unlikely to be highly detrimental.*

**Are there records of known threatened fauna species in the general area?** **No**

**Are existing (or proposed) monitoring sites located nearby?** **No**

**What vegetation type is present?** **Refer below table**

*(As per Flora Survey, FloraSearch August 2013)*

Site	Mapped Vegetation Type	Comments
Transmission Lines	Exposed Sandstone Scribbly Gum Woodland / Sandstone Gully Apple-Peppermint Forest	No threatened flora species, populations or ecological communities were recorded along and adjacent to the proposed access route.
9G extension	Exposed Sandstone Scribbly Gum Woodland / Sandstone Gully Apple-Peppermint Forest	No threatened flora species, populations or ecological communities were recorded along and adjacent to the proposed access route.

**Are known Aboriginal heritage sites present?** **No**

**Is this an area in which disturbance is to be avoided and/or limited?**

One plant species listed as Vulnerable under both the TSC and EPBC Acts, the Prickly Bush Pea (*Pultenaea aristata*) was located on and near the Trail 9G path. Individual plants within or close to the potential disturbance area were marked with pink tape. It is recommended that these plants be avoided when the subsidence path is cleared. However, if the plants affect the line of sight between measuring points, they could be pruned without causing irreparable damage.

**Date of survey for threatened flora:**

*20 August 2013*

**Name of suitably qualified ecologist conducting survey:**

*Colin C Bower (Principal Consultant Botanist, FloraSearch)*

**Have any threatened flora been identified within the proposed disturbance area or immediate surrounds?** **No**

**Will works be relocated to avoid or minimise impacts on the threatened flora species?** **N/A**

**If it is not feasible to relocate the works, have the impacts of the proposed works on the population of the threatened flora species been assessed by a suitably qualified and experienced ecologist?** **N/A**

**If No, do not proceed**

Has the assessment concluded that the proposed surface activities are likely to have a significant impact on a population of the threatened flora species? **No**

**If Yes, the proposed works are to be modified to avoid such an outcome**

[Attach any relevant ecological reports to this assessment form] – Refer attachment.

**Vegetation clearance and site access (refer Section 6.1.6 of Metropolitan Coal Construction Management Plan)**

**Is vegetation clearing required for the construction works? If yes, describe extent (e.g. m<sup>2</sup>) and method of clearing (e.g. slashing/lopping branches/removal)?** **Yes**

*Vegetation disturbance/clearing will be kept to a minimum and will be limited where possible to the removal of saplings or clearing of vegetation.*

*A 1000 m length and 1.5 metre wide line of site access path will be prepared along previously cleared area beneath the Transgrid transmission line from Tower 101 (312450E 6214485N) to 10 metres south of the Princes highway (312800E 6215431N).*

*A 250 m length line of site access path will be prepared on the west side of Fire Road 9G 311724E 6215360N to (311684E 6215537N)*

*Soil disturbance will be minimized by cutting the vegetation at ground level and leaving the lower stem and roots in-situ to maximize the potential for natural regrowth. The removal of saplings, clearing of vegetation or lopping of branches will be conducted only where necessary. Vegetation cuttings will be placed in a random pattern to brush matt areas of disturbance.*

**Describe the access requirements for the construction site (e.g. vehicle/ pedestrian/ helicopter) and where the access will be from (e.g. which fire road).**

*Access to the site will be from established catchment access road 9G and 9K and a narrow walking track (no greater than 1.5m width) to be prepared with minimal environmental impact.*

*The disturbance of soils at the monitoring sites will be limited to the minimum required for a line of site trail to be constructed.*

**Is vegetation clearing required for site access? If yes, describe the extent and method of clearing?** **No**

**Vegetation management measures to be implemented (refer Section 6.1.4 of the Metropolitan Coal Construction Management Plan)**

*As detailed above.*

**Site Layout Plan (refer Section 6.1.5 of Metropolitan Coal Construction Management Plan)**

**Has a Site Layout Plan been prepared and attached to the Works Assessment Form?** **Yes**

**Have the following been indicated on the Site Layout Plan?** **Yes**

- Site location

- Works design

- Management measures (e.g. erosion and sediment controls, spill kits)

- Access track/s (indicate type of access, e.g. pedestrian/vehicle. Also indicate location of nearest fire trail where access will be from)
- Areas of vegetation clearance
- Location of equipment (e.g. pump, generator, fuel storage, portable toilets)
- Equipment storage areas
- Safety equipment (e.g. fire extinguisher and first aid kit)

*Refer Appendix 1.*

**Attach photographs, where appropriate**

*Refer Appendix 1.*

**Description of Photographs:**

*Refer Appendix 1.*

**Aboriginal heritage pre-clearance survey (refer Section 6.2 of the Metropolitan Coal Construction Management Plan)**

**Date of pre-clearance survey for Aboriginal heritage sites.**

*4 September 2013 – see Appendix 3*

**Name of qualified Archaeologist conducting survey:**

*Renée Regal– Archaeologist (Niche Environment and Heritage)*

**Are any Aboriginal heritage sites identified within the proposed disturbance area or immediate surrounds?** **No**

**Description of recorded Aboriginal heritage sites:** **N/A**

**Will works be relocated to avoid impacts on the Aboriginal heritage site?** **N/A**

**If it is not feasible to relocate the works to avoid impacts to the Aboriginal heritage site, management and/or mitigation measures to be implemented in accordance with the Metropolitan Mine Heritage Management Plan. Describe measures below.**

*(Impacts will be avoided)* **N/A**

**Where avoidance is not practicable, has a comprehensive baseline record been obtained and salvage considered in consultation with Aboriginal stakeholders prior to disturbance.**

*(Impacts will be avoided)* **N/A**

[Attach any relevant archaeological reports to this assessment form] – *Aboriginal site survey attached*

**Known Aboriginal heritage sites located close to surface disturbance works**

**Details of demarcation (e.g. fencing, sign-posting or temporary flagging) implemented to avoid accidental damage to known Aboriginal heritage sites located close to surface disturbance works.** **N/A**

**Erosion or sediment control measures required?**

- **Is any erosion or sediment control required?** **No**

- **If yes, has an Erosion and Sediment Control Plan been prepared and attached to the Surface Works Assessment Form?** **N/A**

**Fuel and spill management measures required?**

*Refuelling of Chainsaws and brush cutter will be done over a 10 litre bucket with hydrocarbon absorbent material placed in the bucket to absorb any potential spills. 20 litre fuel can will be banded in a 30 litre plastic container located on access vehicle*

**List Hazardous Materials and Storage Requirements**

- **Are Materials Safety Data Sheets (MSDS) for hazardous materials located at the construction site?**

20 litres of unleaded petrol will be stored on access vehicle. No fuel will be stored on site. MSDS attached in Appendix 4

**Bushfire Preparedness and Management**

- **Have Metropolitan Coal staff and contractors been provided with fire awareness and fire safety training?** **Yes**

*Metropolitan Coal Bushfire Preparedness Plan*

- **Has a Hot Work Permit been obtained from the SCA if required?** **N/A**



**APPENDIX 1: SITE PLANS & PHOTOS**



**Figure 1 Approximate location of access tracks (yellow line).**



**Figure 2 Southern end of transmission Line at transmission Tower 101**



**Figure 3 Use of Fire Road 9K where applicable**



**Figure 4 Survey Line 9G Extension**