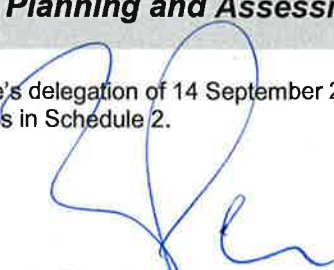


# Notice of Modification

## Section 75W of the *Environmental Planning and Assessment Act 1979*

Under the Minister for Planning and Infrastructure's delegation of 14 September 2011, I modify the project approval referred to in Schedule 1, subject to the conditions in Schedule 2.

  
Deputy Director General  
Development Assessment and Systems Performance

Sydney

2 April

2012

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### SCHEDULE 1

The development consent for underground coal mining at Tahmoor North Coal Mine (DA 67/98), granted by the Minister for Urban Affairs and Planning on 25 February 1999.

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### SCHEDULE 2

1. In Schedule 2, under "Abbreviations and definitions", delete the definitions for "AEMR", "DEC", "Department", "Director-General", "DNR" and "DPI(MR)" and insert the following in alphabetical order:

|                                  |                                                                                                                                                                                                                                                      |
|----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Annual Review                    | the review required by Condition 43                                                                                                                                                                                                                  |
| Day                              | the period from 7am to 6pm on Monday to Saturday, and 8am to 6pm on Sundays and Public Holidays                                                                                                                                                      |
| Department                       | Department of Planning and Infrastructure                                                                                                                                                                                                            |
| Director General                 | Director General of the Department of Planning and Infrastructure, or delegate                                                                                                                                                                       |
| DRE                              | Division of Resources and Energy, within the Department of Trade & Investment, Regional Infrastructure & Services                                                                                                                                    |
| EA                               | Environmental Assessment                                                                                                                                                                                                                             |
| EPA                              | Environment Protection Authority                                                                                                                                                                                                                     |
| Evening                          | the period from 6pm to 10pm                                                                                                                                                                                                                          |
| Feasible                         | feasible relates to engineering considerations and what is practical to build or carry out                                                                                                                                                           |
| Incident                         | 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 this consent                                                                    |
| Material harm to the environment | harm to the environment is material if it involves actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial                                                                                             |
| Mining operations                | extraction, processing, handling, storage and transportation of coal on the site                                                                                                                                                                     |
| Minister                         | Minister for Planning and Infrastructure, or delegate                                                                                                                                                                                                |
| Night                            | the period from 10pm to 7am, Monday to Saturday, 10pm to 8am on Sundays and Public Holidays                                                                                                                                                          |
| NOW                              | NSW Office of Water                                                                                                                                                                                                                                  |
| POEO Act                         | Protection of the Environment Operations Act 1997                                                                                                                                                                                                    |
| Privately-owned land             | land that is not owned by a public agency, or a mining company (or its subsidiary)                                                                                                                                                                   |
| Reasonable                       | reasonable relates to the application of judgement in arriving at a decision, taking into account: mitigation benefits, cost of mitigation versus benefits provided, community views and the nature and extent of potential improvements             |
| Reasonable costs                 | the costs agreed between the Department and the Applicant for obtaining independent experts to review the adequacy of any aspects of the extraction plan, or where such costs cannot be agreed, the costs determined by a dispute resolution process |
| Redbank Tunnel rail deviation    | the development described in the modification application dated 21 December 2010 (DA 67/98 – MOD 2) and accompanying EA titled <i>Redbank Tunnel Subsidence Management – Modification of Project</i>                                                 |

|                          |                                                                                                                                                                                                                                                                                                                                                                                               |
|--------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Statement of Commitments | <i>Approval – Environmental Assessment</i> , dated September 2011, including the associated Submissions Report                                                                                                                                                                                                                                                                                |
| Tahmoor Mine             | the Statement of Commitments relating to the Redbank Tunnel rail deviation (see Appendix 1)<br>the development approved under this consent, together with the development approved under consent granted by Wollondilly Shire Council dated 20 March 1975 and the consent granted by the Land and Environment Court dated 7 September 1994 (DA 57-93), considered collectively (see Figure 2) |

2. Delete all references to DEC and replace with EPA.
3. Delete all references to DPI(MR) and replace with DRE.
4. Delete all references to DNR and replace with NOW.
5. Delete all references to AEMR or Annual Environmental Management Report and replace with Annual Review.
6. Delete all references to “the project” and replace with “Tahmoor Mine”.
7. In condition 1 of Schedule 2, delete all words after “(DA 67/98);” and insert the following:
  - (vi) application dated 21 December 2010 to modify a development consent (DA 67/98 – MOD 2);
  - (vii) accompanying EA titled *Redbank Tunnel Subsidence Management – Modification of Project Approval – Environmental Assessment*, dated September 2011 and prepared by GHD, including the associated Submissions Report;
  - (viii) Statement of Commitments (see Appendix 1); and
  - (ix) conditions of this consent.
8. In condition 1A of Schedule 2, delete the word “latter” and replace with “more recent”.
9. In condition 5 of Schedule 2, delete all words after “commencement of such workings.”
10. In condition 6 of Schedule 2, delete the words “any of the three” and replace with “the two”, and delete “3A” and replace with “4”.
11. In condition 9 of Schedule 2, delete “40” and replace with “43”, and delete “Conditions 32-34” and replace with “Condition 47”.
12. In condition 12 of Schedule 2, delete “Conditions 41-43” and replace with “Condition 45”.
13. Delete conditions 32-46 and condition 48 of Schedule 2, and re-number condition 47 as condition 32.
14. After new condition 32, insert the following:

## **NOISE**

### **Noise Management Plan**

33. The Applicant shall prepare and implement a Noise Management Plan for the Tahmoor Mine to the satisfaction of the Director-General. This plan must:
  - (a) be prepared in consultation with EPA, and submitted for approval to the Director-General by 31 October 2012;
  - (b) describe the noise mitigation measures that would be implemented to ensure compliance with all relevant conditions of consent for the Tahmoor Mine;
  - (c) outline procedures to manage responses to any complaints or issues raised by the owners of affected residences; and
  - (d) include a noise monitoring program that includes a protocol for determining exceedances of all relevant conditions of consent for the Tahmoor Mine.

### **Redbank Tunnel rail deviation**

34. The Applicant shall ensure that construction work for the Redbank Tunnel rail deviation is carried out from 7 am to 6 pm Monday to Friday (inclusive) and 8 am to 1 pm on Saturday, unless at the request or direction of the ARTC.  
  
If construction may result in exceedances of the *Interim Construction Noise Guidelines* (DECCW, 2009), the Applicant shall undertake community consultation and implement associated mitigation measures in accordance with the ‘Additional Mitigation Measures Matrix’ in the *Construction Noise Strategy* (Transport Construction Authority, 2010).

35. The Applicant shall prepare and implement a Construction Noise Management Plan for the Redbank Tunnel rail deviation to the satisfaction of the Director-General. This plan must:
- be prepared in accordance with the *Construction Noise Strategy*;
  - be submitted for approval to the Director-General prior to the commencement of construction work;
  - describe the noise mitigation measures that would be implemented to minimise the noise impacts from construction activities;
  - describe the proposed noise monitoring program; and
  - outline procedures to manage responses to any complaints or issues raised by the owners of affected residences.

*Note: construction work in Conditions 34 and 35 does not include surveys, acquisitions, fencing, investigative drilling or excavation, minor clearing, minor access roads, minor adjustments to services/utilities, works which allow isolation of the site so that access for construction can be provided (including service relocations) and establishing temporary facilities for construction (including for example an office and amenities compound, construction compound, materials storage compound, maintenance workshop, testing laboratory or material stockpile areas).*

## AIR QUALITY & GREENHOUSE GASES

### Greenhouse Gas Emissions

36. The Applicant shall implement all reasonable and feasible measures to minimise the release of greenhouse gas emissions from the Tahmoor Mine, to the satisfaction of the Director-General.

### Air Quality Assessment Criteria

37. The Applicant shall ensure that all reasonable and feasible avoidance and mitigation measures are employed so that particulate matter emissions generated by the Tahmoor Mine do not exceed the criteria listed in Tables 1, 2 or 3 at any residence on privately-owned land or on more than 25 percent of any privately-owned land.

*Table 1: Long-term criteria for particulate matter*

| Pollutant                                      | Averaging Period | <sup>d</sup> Criterion            |
|------------------------------------------------|------------------|-----------------------------------|
| Total suspended particulate (TSP) matter       | Annual           | <sup>a</sup> 90 µg/m <sup>3</sup> |
| Particulate matter < 10 µm (PM <sub>10</sub> ) | Annual           | <sup>a</sup> 30 µg/m <sup>3</sup> |

*Table 2: Short-term criterion for particulate matter*

| Pollutant                                      | Averaging Period | <sup>d</sup> Criterion            |
|------------------------------------------------|------------------|-----------------------------------|
| Particulate matter < 10 µm (PM <sub>10</sub> ) | 24 hour          | <sup>a</sup> 50 µg/m <sup>3</sup> |

*Table 3: Long-term criteria for deposited dust*

| Pollutant                   | Averaging Period | Maximum increase in deposited dust level | Maximum total deposited dust level     |
|-----------------------------|------------------|------------------------------------------|----------------------------------------|
| <sup>c</sup> Deposited dust | Annual           | <sup>b</sup> 2 g/m <sup>2</sup> /month   | <sup>a</sup> 4 g/m <sup>2</sup> /month |

*Notes to Tables 1-3:*

- <sup>a</sup> Total impact (i.e. incremental increase in concentrations due to the Tahmoor Mine plus background concentrations due to all other sources);
- <sup>b</sup> Incremental impact (i.e. incremental increase in concentrations due to the Tahmoor Mine on its own);
- <sup>c</sup> Deposited dust is to be assessed as insoluble solids as defined by Standards Australia, AS/NZS 3580.10.1:2003: *Methods for Sampling and Analysis of Ambient Air - Determination of Particulate Matter - Deposited Matter - Gravimetric Method*; and
- <sup>d</sup> Excludes extraordinary events such as bushfires, prescribed burning, dust storms, sea fog, fire incidents, illegal activities or any other activity agreed by the Director-General.

### Operating Conditions

38. The Applicant shall:
- implement best practice air quality management at the Tahmoor Mine, including all reasonable and feasible measures to minimise the off-site odour and dust emissions including those generated by any spontaneous combustion;
  - minimise any visible air pollution generated by the Tahmoor Mine;

- (c) regularly assess the air quality monitoring and meteorological forecasting data, and modify and/or suspend operations on site to ensure compliance with all relevant conditions of consents for the Tahmoor Mine,

to the satisfaction of the Director-General.

#### **Air Quality & Greenhouse Gas Management Plan**

39. The Applicant shall prepare and implement an Air Quality & Greenhouse Gas Management Plan for the Tahmoor Mine to the satisfaction of the Director-General. This plan must:
- (a) be prepared in consultation with EPA, and submitted for approval to the Director-General by 31 October 2012;
  - (b) describe the measures that would be implemented to ensure compliance with all relevant conditions of consents for the Tahmoor Mine;
  - (c) describe the measures that would be implemented to minimise the release of greenhouse gas emissions from the Tahmoor Mine; and
  - (d) include an air quality monitoring program that includes a protocol for determining exceedances with all relevant conditions of consents for the Tahmoor Mine.

#### **NOTIFICATION OF LANDOWNERS**

40. Within 2 weeks of obtaining monitoring results showing an exceedance of the relevant criteria in Tables 1-3, the Applicant shall notify the affected landowner and tenants in writing of the exceedance, and provide monitoring results to each of these parties until the Tahmoor Mine is complying with the relevant criteria again.

#### **INDEPENDENT REVIEW**

41. If an owner of privately-owned land considers the Tahmoor Mine to be exceeding the relevant criteria in Tables 1-3, then he/she may ask the Director-General in writing for an independent review of the impacts of the Tahmoor Mine on his/her land.

If the Director-General is satisfied that an independent review is warranted, then within 2 months of the Director-General's decision the Applicant shall:

- (a) commission a suitably qualified, experienced and independent person, whose appointment has been approved by the Director-General, to:
    - consult with the landowner to determine his/her concerns;
    - conduct monitoring to determine whether the Tahmoor Mine is complying with the relevant criteria in Tables 1-3; and
    - if the Tahmoor Mine is not complying with these criteria, then identify the measures that could be implemented to ensure compliance with the relevant criteria; and
  - (b) give the Director-General and landowner a copy of the independent review.
42. If the independent review determines that the Tahmoor Mine is complying with the relevant criteria in Tables 1-3, then the Applicant may discontinue the independent review with the approval of the Director-General.
- If the independent review determines that the Tahmoor Mine is not complying with the relevant criteria in Tables 1-3 and that the project is primarily responsible for this non-compliance, then the Applicant shall:
- (a) implement all reasonable and feasible mitigation measures, in consultation with the landowner and appointed independent person, and conduct further monitoring until the Tahmoor Mine complies with the relevant criteria to the satisfaction of the Director-General; or
  - (b) secure a written agreement with the landowner to allow exceedances of the relevant criteria.

#### **ENVIRONMENTAL MANAGEMENT**

##### **Environmental Management Strategy**

43. The Applicant shall prepare and implement an Environmental Management Strategy for the Tahmoor Mine to the satisfaction of the Director-General. This strategy must:
- (a) be submitted for approval to the Director-General by 31 October 2012;
  - (b) provide the strategic framework for the environmental management of the Tahmoor Mine;
  - (c) identify the statutory approvals that apply to the Tahmoor Mine;
  - (d) describe the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the Tahmoor Mine;
  - (e) describe the procedures that would be implemented to:
    - keep the local community and relevant agencies informed about the operation and environmental performance of the Tahmoor Mine, including a 24-hour contact telephone number
    - receive, handle, respond to, and record complaints;
    - resolve any disputes that may arise during the course of the Tahmoor Mine;

- respond to any non-compliance;
- respond to emergencies; and
- (f) include:
  - copies of any strategies, plans and programs approved under the conditions of consents for the Tahmoor Mine; and
  - a clear plan depicting all the monitoring required to be carried out under the conditions of consents for the Tahmoor Mine.

#### **Management Plan Requirements**

44. The Applicant shall ensure that the management plans required under conditions of consent for the Tahmoor Mine are prepared in accordance with any relevant guidelines, and include:
- (a) detailed baseline data;
  - (b) a description of:
    - the relevant statutory requirements (including any relevant approval, licence or lease conditions);
    - any relevant limits or performance measures/criteria;
    - the specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the Tahmoor Mine or any management measures;
  - (c) a description of the measures that would be implemented to comply with the relevant statutory requirements, limits, or performance measures/criteria;
  - (d) a program to monitor and report on the:
    - impacts and environmental performance of the Tahmoor Mine;
    - effectiveness of any management measures (see c above);
  - (e) a contingency plan to manage any unpredicted impacts and their consequences and to ensure that ongoing impacts reduce to levels below relevant impact assessment criteria as quickly as possible;
  - (f) a program to investigate and implement ways to improve the environmental performance of the Tahmoor Mine over time;
  - (g) a protocol for managing and reporting any:
    - incidents;
    - complaints;
    - non-compliances with statutory requirements; and
    - exceedances of the impact assessment criteria and/or performance criteria; and
  - (h) a protocol for periodic review of the plan.

*Note: The Director-General may waive some of these requirements if they are unnecessary or unwarranted for particular management plans.*

#### **Annual Review**

45. By 31 March of each year, the Applicant shall prepare an Annual Review of the environmental performance of the Tahmoor Mine to the satisfaction of the Director-General. This review must:
- (a) describe the development (including any rehabilitation) that was carried out in the past calendar year, and the development that is proposed to be carried out over the next year;
  - (b) include a comprehensive review of the monitoring results and complaints records of the Tahmoor Mine over the past calendar year, which includes a comparison of these results against:
    - the relevant statutory requirements, limits or performance measures/criteria;
    - the monitoring results of previous years; and
    - the relevant predictions in the EA;
  - (c) identify any non-compliance over the past year, and describe what actions were (or are being) taken to ensure compliance;
  - (d) identify any trends in the monitoring data over the life of the Tahmoor Mine;
  - (e) identify any discrepancies between the predicted and actual impacts of the Tahmoor Mine, and analyse the potential cause of any significant discrepancies;
  - (f) describe what measures will be implemented over the next year to improve the environmental performance of the Tahmoor Mine; and
  - (g) assess the performance of the mine against the conditions of the consents and other licences and approvals relating to the mine.

*Note: the first Annual Review shall be prepared by 31 March 2013.*

#### **Revision of Strategies, Plans and Programs**

46. Within 3 months of:
- (a) the submission of an Annual Review under Condition 45;
  - (b) the submission of an incident report under Condition 48;
  - (c) the submission of an audit under Condition 50; and
  - (d) any modification to the conditions of this consent (unless the conditions require otherwise),

the Applicant shall review, and if necessary revise, the strategies, plans, and programs required under this consent to the satisfaction of the Director-General.

*Note: This is to ensure the strategies, plans and programs are updated on a regular basis, and incorporate any recommended measures to improve the environmental performance of the Tahmoor Mine.*

#### **Community Consultative Committee**

47. The Applicant shall establish and operate a Community Consultative Committee (CCC) for the Tahmoor Mine in general accordance with the *Guidelines for Establishing and Operating Community Consultative Committees for Mining Projects* (Department of Planning, 2007, or its latest version), to the satisfaction of the Director-General.

*Notes:*

- *The CCC is an advisory committee. The Department and other relevant agencies are responsible for ensuring that the Applicant complies with this consent.*
- *In accordance with the guideline, the Committee should be comprised of an independent chair and appropriate representation from the Applicant, Council, recognised environmental groups and the local community.*
- *This condition does not require the re-constitution of any CCC established under previous conditions of consent.*

#### **REPORTING**

##### **Incident Reporting**

48. The Applicant shall notify the Director-General and any other relevant agencies of any incident at the Tahmoor Mine that has caused, or has the potential to cause, significant risk of material harm to the environment, at the earliest opportunity. For any other incident associated with the Tahmoor Mine, the Applicant shall notify the Director-General and any other relevant agencies as soon as practicable after the Applicant becomes aware of the incident. Within 7 days of the date of the incident, the Applicant shall provide the Director-General and any relevant agencies with a detailed report on the incident, and such further reports as may be requested.

##### **Regular Reporting**

49. The Applicant shall provide regular reporting on the environmental performance of the Tahmoor Mine on its website, in accordance with the reporting arrangements in any plans or programs approved under the conditions of this consent, and to the satisfaction of the Director-General.

#### **INDEPENDENT ENVIRONMENTAL AUDIT**

50. By 30 September 2011 and every 3 years following, the Applicant shall commission and pay the full cost of an Independent Environmental Audit of the Tahmoor Mine. This audit must:
- (a) be conducted by a suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Director-General;
  - (b) include consultation with the relevant agencies;
  - (c) assess the environmental performance of the Tahmoor Mine and assess whether it is complying with the requirements all relevant development consents and any relevant EPL or Mining Lease (including any assessment, plan or program required under these approvals);
  - (d) review the adequacy of strategies, plans or programs required under the abovementioned approvals; and
  - (e) recommend appropriate measures or actions to improve the environmental performance of the Tahmoor Mine, and/or any assessment, plan or program required under the abovementioned approvals.

*Note: This audit team must be led by a suitably qualified auditor and include experts in any fields specified by the Director-General.*

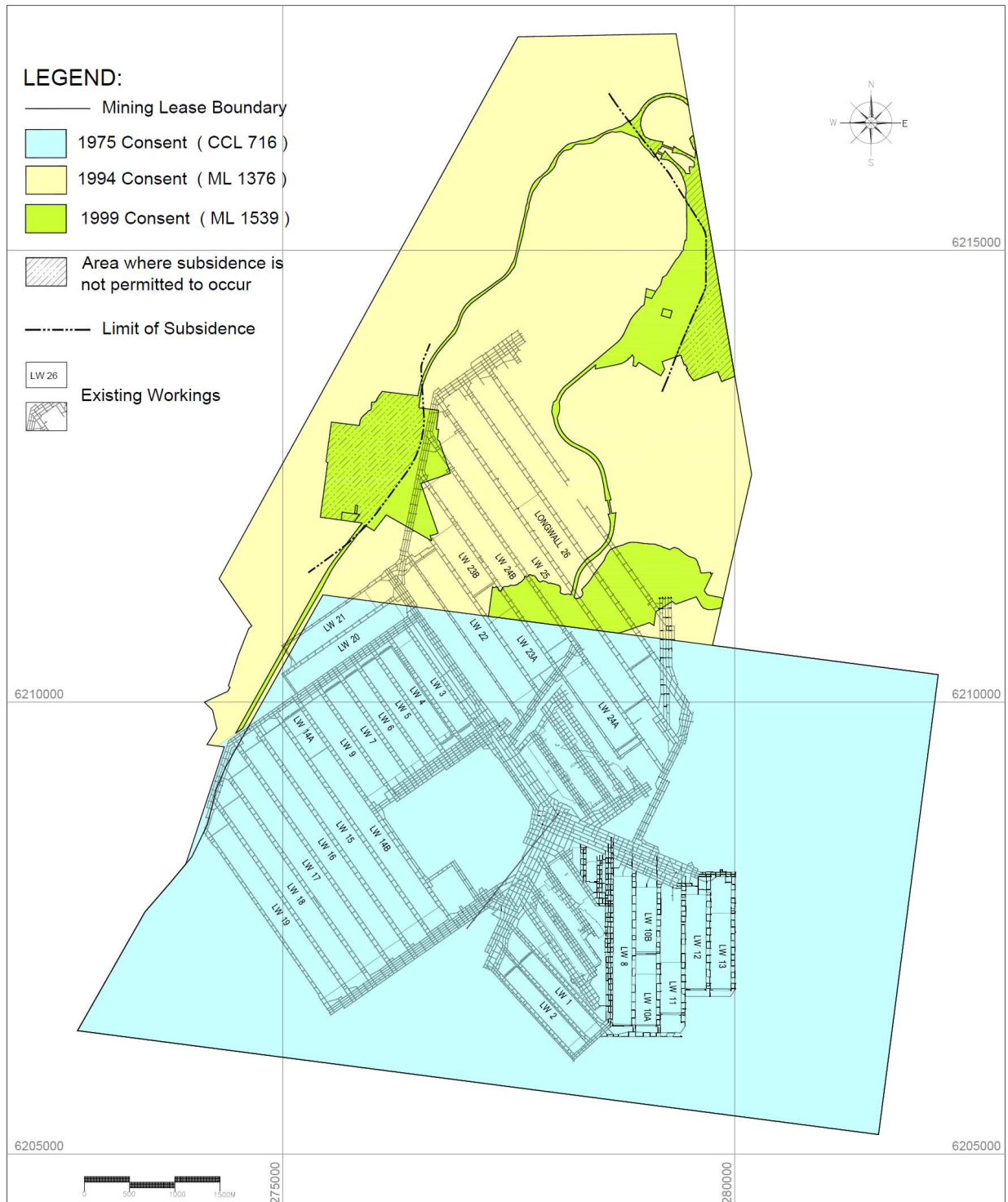
51. Within 6 weeks of the completion of this audit, or as otherwise agreed by the Director-General, the Applicant shall submit a copy of the audit report to the Director-General, together with its response to any recommendations contained in the audit report.

#### **ACCESS TO INFORMATION**

52. From 31 October 2012, the Applicant shall:
- (a) make copies of the following publicly available on its website:
    - all relevant statutory approvals for the Tahmoor Mine;
    - all approved strategies, plans and programs required under the conditions of this consent;
    - a comprehensive summary of the monitoring results of the Tahmoor Mine, reported in accordance with the specifications in any approved plans or programs required under the conditions of this or any other approval;

- a complaints register, which is to be updated on a monthly basis;
  - minutes of CCC meetings;
  - the annual reviews required under this consent;
  - any independent environmental audit of the Tahmoor Mine, and the Applicant's response to the recommendations in any audit;
  - any other matter required by the Director-General; and
- (b) keep this information up-to-date,
- to the satisfaction of the Director-General.

15. Delete Figure 2, and replace with the following:



**Figure 2:** Map of Tahmoor Mine showing two areas (in black crosshatching) where subsidence is not permitted under condition 6(i) of this consent.

16. In the title of Figure 3, insert "dated March 1998" after "EIS".

17. Insert Appendix 1: Statement of Commitments.





CLIENTS | PEOPLE | PERFORMANCE

**Tahmoor Coal Pty Ltd**  
**Report for Redbank Tunnel Subsidence**  
**Management Project**  
**Revised Statement of Commitments**

April 2012

*Revision 1*



## Statement of Commitments



| Ref No.                      | Objective                                                               | Commitment                                                                                                                                                                                                                                                                                                                                                                                 | Timing                            |
|------------------------------|-------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|
| <b>Biodiversity</b>          |                                                                         |                                                                                                                                                                                                                                                                                                                                                                                            |                                   |
| <b>Construction Planning</b> |                                                                         |                                                                                                                                                                                                                                                                                                                                                                                            |                                   |
| SC1                          | Minimise the potential impacts that may occur during construction phase | A Construction Environmental Management Plan (CEMP) would be developed for the Project and include, where applicable, the construction impact mitigation measures and principles listed below.                                                                                                                                                                                             | Pre-construction                  |
| SC2                          | Construction Staging                                                    | It is intended that areas of open water at the Project site would be progressively drained to allow relocation of native aquatic vertebrate fauna as appropriate.                                                                                                                                                                                                                          | Construction                      |
| SC3                          | Soil and surface water management                                       | The CEMP would include specific surface water management measures, which would include as a minimum the following principles to manage surface water:                                                                                                                                                                                                                                      | Construction                      |
|                              |                                                                         | <ul style="list-style-type: none"> <li>Minimise the area of disturbance, thus minimising the volume of 'dirty' surface water runoff. The clearing and construction method would generally result in soils only being exposed immediately prior to construction, with the remainder of the Project site covered by permanent infrastructure or retained or replanted vegetation.</li> </ul> | Construction                      |
|                              |                                                                         | <ul style="list-style-type: none"> <li>Minimise handling of soils through direct replacement onto landscaped open space areas and careful selection of soil stockpile locations.</li> </ul>                                                                                                                                                                                                | Construction                      |
|                              |                                                                         | <ul style="list-style-type: none"> <li>Separation wherever possible of 'clean' and 'dirty' surface water runoff.</li> </ul>                                                                                                                                                                                                                                                                | Construction                      |
|                              |                                                                         | <ul style="list-style-type: none"> <li>Install appropriate erosion control devices (such as silt fences, hay bales or equivalent) around the disturbance footprint.</li> </ul>                                                                                                                                                                                                             | Construction                      |
| SC4                          | Runoff and water management practices                                   | <ul style="list-style-type: none"> <li>Runoff from disturbed and rehabilitated areas would be diverted into sediment ponds or other measures and not directly discharged into the natural system.</li> </ul>                                                                                                                                                                               | Construction                      |
|                              |                                                                         | <ul style="list-style-type: none"> <li>Where practicable a setback is required from the base of soil stockpiles when adjoining remnant native vegetation to prevent sediment from entering waterways.</li> </ul>                                                                                                                                                                           | Construction                      |
| SC5                          | Site Management                                                         | Restrict access into adjacent remnant vegetation during construction by appropriate marking and/or fencing of the construction impact zone.                                                                                                                                                                                                                                                | Pre-construction and Construction |
| SC6                          | Fauna Management                                                        | Fauna management would involve a two-step process: fauna pre-clearance survey and management during construction.                                                                                                                                                                                                                                                                          | Construction                      |



| Ref No. | Objective                      | Commitment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Timing                                                       |
|---------|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------|
|         |                                | <p>This would involve:</p> <ul style="list-style-type: none"> <li>▶ An active search for birds, nests, roosts and microchiropteran bats (stag watches with Anabat II detector). Sedentary fauna detected within the area to be cleared are to be managed in accordance with a fauna management protocol that is implemented as part of the CEMP during the construction period.</li> <li>▶ Identification and marking of habitat trees during pre-clearing surveys (habitat trees include: trees with a DBH &gt; 70 cm; trees with resident fauna or associated signs of occupation; and/or any trees with hollows).</li> <li>▶ Additional consideration for the retention of habitat trees (avoidance) during construction activities, where practicable.</li> </ul>                                                                                                                                                                                                                               | Pre-construction and Construction                            |
| SC7     | Pre-clearance surveys and CEMP | <ul style="list-style-type: none"> <li>▶ The CEMP would include specific protocols for the management of any fauna detected during pre-clearing surveys or during clearing (tree hollow clearing protocol, fallen log, tree hollow compensatory measures). Appropriate actions would be documented according to type and conservation significance of the fauna in question. The OEH would be notified if roosting threatened species are detected within the construction footprint and construction may have to be modified or delayed to further reduce the risk of injury.</li> <li>▶ During clearing operations, all cleared habitat trees would be retained as intact as practicable and placed on the surface of nearby revegetation and rehabilitation areas under the supervision of an ecologist. Where it is practical to separate any leaves, branches and seeds from native species, these items would be used for brush mulching in revegetation and rehabilitation works.</li> </ul> | <p>Pre-construction and Construction</p> <p>Construction</p> |



| Ref No. | Objective                      | Commitment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Timing       |
|---------|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|
| SC8     | Groundcover Clearance Protocol | <p>The following protocols would be included in the CEMP:</p> <ul style="list-style-type: none"> <li>▀ A pre-clearing survey for Cumberland Land Snails is to be performed and if any individuals are found, they would be relocated, along with relevant shelter substrate, to the nearest area of intact suitable habitat outside the disturbance footprint. Translocation of the species would only be performed in consultation with OEH.</li> <li>▀ As part of the pre-clearing survey, large woody debris with habitat value (excluding exotic weed material) would be identified that warrants salvage and relocation.</li> <li>▀ During construction, remove identified large woody debris using excavator grabs, where practicable and place within nearby areas of retained vegetation or revegetation areas.</li> </ul>                                                                                                                                                                                                                                     | Construction |
| SC9     | Weed and Pest Management       | <p>The following measures would be adopted to manage environmental weeds during construction:</p> <ul style="list-style-type: none"> <li>▀ Controlling noxious weed species in line with legislative obligations prior to the initiation of vegetation clearance works. Monitor seed bank reprisals after topsoil movements and emplacement in rehabilitation areas.</li> <li>▀ The transfer of seeds from non-native species through contaminated soil and vegetative material to revegetation areas would be avoided through appropriate vegetation and topsoil management. Management would include the use of herbicides prior to clearing, sterile crop covers and use of native grasses in revegetation and rehabilitation scheme – particularly Kangaroo Grass.</li> <li>▀ Stockpiles of fill or vegetation would only be placed within existing cleared areas.</li> <li>▀ Incorporate control measures, such as appropriately placed silt fences in the design of the proposed works to limit the spread of weed propagules downstream of the site.</li> </ul> |              |



| Ref No.                  | Objective                        | Commitment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Timing                                                                     |
|--------------------------|----------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------|
| <b>Post Construction</b> |                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                            |
| SC10                     | Revegetation and Rehabilitation  | <p>There is potential for the rehabilitation of land reclaimed from filling redundant sections of the rail line. The following vegetation cover is proposed for these rehabilitated areas:</p> <ul style="list-style-type: none"> <li>▀ Pasture (in consultation with the landholder).</li> <li>▀ Approximately 1.1 ha of native vegetation similar to the floristics of Shale Hills Woodland.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Post-construction                                                          |
| SC11                     | Native vegetation rehabilitation | <p>Proposed works within the 1.1 ha native vegetation rehabilitation area :</p> <ul style="list-style-type: none"> <li>▀ Place logs recovered from clearing works parallel with the contour of the rehabilitated surface.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Post-construction                                                          |
| SC12                     | Biodiversity Offset              | <p>Secure an offsite site or sites to be managed under effective and secure long term management through the retirement of biobanking credits (where appropriate credits are available). The nature of this offset would be determined in consultation with OEH in accordance with the NSW OEH interim policy on assessing and offsetting biodiversity impacts of Part 3A, State significant development (SSD) and State significant infrastructure (SSI) projects.</p> <p>The offset site or sites must contain sufficient ecosystem credits to match the development site credit profile unless varied by the Interim Policy. The composition of ecosystem credits would be defined by the Interim Policy and may comprise the following:</p> <ul style="list-style-type: none"> <li>▀ Grey Box - Forest Red Gum grassy woodland on flats of the Cumberland Plain, Sydney Basin [HN528].</li> <li>▀ Narrow-leaved Ironbark - Broad-leaved Ironbark - Grey Gum open forest of the edges of the Cumberland Plain, Sydney Basin [HN556].</li> </ul> <p>or alternative suitable vegetation types.</p> <p>The location of the offset site or sites would be determined by the guiding principles outlined in the Interim Policy. A Biodiversity Offsets Package will be prepared for approval by the Director-General DOP&amp;I that will provide the biobanking assessment of the development and biobank sites, and recommended management and monitoring measures.</p> <p>The offset site or sites must be secured within 12 months of the approval date of the Biodiversity Offsets Package.</p> | Within 12 months of the approval date of the Biodiversity Offsets Package. |



| Ref No.               | Objective                                                                                  | Commitment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Timing                                                                                                                                |
|-----------------------|--------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|
| <b>Visual Amenity</b> |                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                       |
| SC13                  | Minimise and/or manage adverse visual impacts of the project during the construction phase | <ul style="list-style-type: none"> <li>▶ Avoid loss or damage to vegetation including the protection of trees prior to construction and/or trimming of vegetation to avoid total removal, particularly behind residences on Remembrance Driveway.</li> <li>▶ Where site lighting is required, minimise light spillage to neighbouring properties.</li> <li>▶ Temporary hoardings, barriers, traffic management and signage would be removed when no longer required.</li> <li>▶ Materials and machinery would be stored tidily during the works.</li> <li>▶ Haul routes and roads providing access to the construction sites would be maintained free of dust and mud as far as reasonably practicable. Dust from construction sites would be minimised as much as possible.</li> </ul> | <p>Detailed design and construction</p> <p>Construction and Operation</p> <p>Construction</p> <p>Construction</p> <p>Construction</p> |
| SC14                  | Minimise and/or manage adverse visual impacts of the project during the operation phase    | <ul style="list-style-type: none"> <li>▶ Prepare Landscape plan that:               <ul style="list-style-type: none"> <li>- Integrates infrastructure (such as noise mitigation structures, structures, embankments/cuttings, bridges) into the surrounding environment.</li> <li>- Includes planting of vegetation on fill batters where practicable.</li> </ul> </li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                          | Detailed design, Construction and Operation                                                                                           |
| SC15                  | Screening                                                                                  | <ul style="list-style-type: none"> <li>▶ Maintain screening planting following the establishment phase to provide continual / improved visual screening over time.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Operation                                                                                                                             |
| <b>Traffic</b>        |                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                       |
| SC16                  | Manage the potential construction traffic impacts                                          | <ul style="list-style-type: none"> <li>▶ A traffic management plan would be developed to reduce the impact of construction related traffic on the local road network.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Pre-construction and Construction                                                                                                     |
| SC17                  | Undertake design and construction works in consultation with Council                       | <ul style="list-style-type: none"> <li>▶ Undertake design and construction works for the project access in Remembrance Driveway in consultation with Wollondilly Shire Council.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Pre-construction                                                                                                                      |
| SC18                  | Road dilapidation survey                                                                   | <ul style="list-style-type: none"> <li>▶ A road dilapidation survey would be undertaken prior to construction and affected roads restored post construction if required.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Construction                                                                                                                          |



| Ref No.                    | Objective                                                                      | Commitment                                                                                                                                                                                                                                                                                                                                                                     | Timing       |
|----------------------------|--------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|
| SC19                       | Management of construction vehicles                                            | <ul style="list-style-type: none"> <li>Use traffic controllers on Remembrance Driveway during periods of high activity, generally during set up and at the conclusion of construction.</li> <li>Minimise truck movements on the local road network between 7 – 9 am and 3 – 5 pm where possible.</li> </ul>                                                                    | Construction |
| <b>Noise and Vibration</b> |                                                                                |                                                                                                                                                                                                                                                                                                                                                                                |              |
| SC20                       | Construction Hours                                                             | The standard hours for construction activities associated with the Project will be 7 am to 6 pm Monday to Friday and 8 am to 1 pm on Saturdays.                                                                                                                                                                                                                                | Construction |
| SC21                       | Correct use of tools and equipment                                             | <p>All construction vehicles and machinery would be fitted with appropriate noise suppression devices and maintained.</p> <p>Fixed equipment (pumps, generators, compressors) would be located as far as possible from the nearest residences.</p> <p>Where possible, no plant or equipment would be left idling when operating in the vicinity of residential properties.</p> | Construction |
| SC22                       | Amend and undertake work activities to minimise noise and vibration generation | <p>Practical and reasonable measure would be implemented to minimise the noise and vibration impacts of construction activities on local sensitive receivers.</p> <p>Work methods would be reviewed with a preference for quieter and non-vibration generating methods wherever possible. This is particularly important for any out-of-hours and night-time activities.</p>   | Construction |
| SC23                       | Pile driving management                                                        | Pile driving control plans would be prepared if undertaken as part of the project construction activities.                                                                                                                                                                                                                                                                     | Construction |
| SC24                       | Inform all site workers of potential impacts                                   | All site workers (including subcontractors and temporary workforce) would be informed of the potential for noise and vibration impacts upon local residents and encouraged to take practical and reasonable measures to minimise noise during the course of their activities.                                                                                                  | Construction |
| SC25                       | Manage movement of materials                                                   | All vehicular movements to and from the site would comply with the requirements of the appropriate regulatory authority requirements for such activities.                                                                                                                                                                                                                      | Construction |
| <b>Aboriginal Heritage</b> |                                                                                |                                                                                                                                                                                                                                                                                                                                                                                |              |



| Ref No.                        | Objective                                  | Commitment                                                                                                                                                                                                                                                                                                                                                                                                | Timing                           |
|--------------------------------|--------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|
| SC26                           | Minimise impacts on Aboriginal heritage    | If feasible, impacts would be avoided to the identified Aboriginal sites Redbank Tunnel 3/A, 15/A and 35/A, and the associated area of potential for sub-surface deposits of research value at site 3/A.                                                                                                                                                                                                  | Construction and detailed design |
|                                |                                            | Where impacts would be avoided to the identified heritage evidence, appropriate protective measures would be implemented for those sites in close proximity to the construction works.                                                                                                                                                                                                                    | Pre-construction                 |
|                                |                                            | If impacts cannot be avoided to the identified Aboriginal sites Redbank Tunnel 3/A, 15/A and 35/A, an Aboriginal Heritage Impact Permit (AHIP) is to be gained for disturbance of this evidence, in consultation with the registered Aboriginal parties.                                                                                                                                                  | Pre-construction                 |
|                                |                                            | As a general principle, all relevant contractors and staff engaged on the Project would receive heritage awareness training prior to commencing work on-site.                                                                                                                                                                                                                                             | Pre-construction                 |
| SC27                           | Consultation with Aboriginal stakeholders  | Where requested by the registered Aboriginal parties, these stakeholders and a qualified archaeologist would be engaged to collect any identified surface artefacts that may be subject to impacts, and implement other measures as may be identified by the Aboriginal community in order to minimise the impacts of development on the identified heritage evidence and potential deposits at site 3/A. | Pre-construction                 |
| SC28                           | Approval of Aboriginal heritage management | An AHIP would be obtained for the entire impact area (where A unit soil is present) prior to the proposed works being undertaken.                                                                                                                                                                                                                                                                         | Pre-construction                 |
|                                |                                            | Should any previously unrecorded Aboriginal sites or objects be detected prior to or during the course of development which are not covered by an AHIP, work in the immediate vicinity of those objects would need to promptly cease and the finds be reported to OEH and advice sought as to the appropriate course of action.                                                                           | Construction                     |
| SC29                           | Management of skeletal remains             | If human skeletal remains are identified, work would stop immediately and the appropriate authorities, including the Police and OEH, would be notified. If impacts cannot be avoided, an AHIP is required prior to any impacts occurring.                                                                                                                                                                 | Construction                     |
| <b>Non-Aboriginal Heritage</b> |                                            |                                                                                                                                                                                                                                                                                                                                                                                                           |                                  |
| SC30                           | Management of heritage structures          | Protective Measures would be installed at Culverts Nos. 1 and 2.                                                                                                                                                                                                                                                                                                                                          | Pre-construction                 |
|                                |                                            | Prior to the filling or removal of Redbank Tunnel, a photographic archival recording of the tunnel would be made in accordance with guidelines established by the Heritage Office.                                                                                                                                                                                                                        | Pre-construction                 |



| Ref No. | Objective                                       | Commitment                                                                                                                                                                                                                                                                                                                                                                                                                                 | Timing            |
|---------|-------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|
| SC31    | Management of previously undiscovered artefacts | In accordance with Section 146 of the <i>Heritage Act 1977</i> the accidental discovery of relics, other than those discussed in this report, would be reported immediately to the Heritage Council.                                                                                                                                                                                                                                       | Construction      |
| SC32    | Management of heritage structures               | Measures would be implemented along the Redbank Tunnel deviation to lessen the visual impact of the new rail deviation on the rural heritage landscape and, in particular, views to and from Tahmoor House. Such measures would include screens of natural vegetation in keeping with existing corridors of natural vegetation along Myrtle and Redbank Creeks and the existing railway line as well as the use of sound walls and mounds. | Post Construction |

#### Air Quality

|      |                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |              |
|------|------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|
| SC33 | Minimise dust generation and adverse air quality impacts during construction phase | Construction traffic would be controlled by designating specific routes for haulage and access. Vehicle speeds on unsealed surfaces would be limited to 40 km/hr with a further restriction of 20 km/hr when within 100 m of a site exit/entry point.                                                                                                                                                                                                               | Construction |
|      |                                                                                    | All trucks hauling dirt, sand, soil or other loose materials to and from the construction site would be covered when travelling on public roads.                                                                                                                                                                                                                                                                                                                    | Construction |
|      |                                                                                    | Wheel wash units or rumble pads would be installed where required. Wash-off equipment for trucks and any equipment would be available for any vehicles leaving the site to remove excessive dirt, mud or debris from tyres and other under-surfaces. Material spillage on sealed roads would be cleaned up as soon as possible.                                                                                                                                     | Construction |
|      |                                                                                    | All construction vehicles, mobile plant and machinery would be maintained and operated to minimise exhaust emissions.                                                                                                                                                                                                                                                                                                                                               | Construction |
|      |                                                                                    | A line of communication would be established between the construction contractor and the local community prior to the start of construction as part of a community consultation process. All complaints lodged by nearby residents would be recorded on a complaints register, which would also document the investigation into the source of the emission giving rise to the complaint, as well as any corrective actions taken to rectify the cause of complaint. | Construction |

#### Contamination

|      |                                                                               |                                                                                                                                                                                           |                  |
|------|-------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|
| SC34 | Develop and implement potentially contaminated material management procedures | The CEMP for the proposed works would detail appropriate procedures for the handling, stockpiling and assessment of potentially contaminated fill and ballast materials during the works. | Pre-construction |
|------|-------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|



| Ref No.              | Objective                                                                                                                       | Commitment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Timing                                                                                                                                                                              |
|----------------------|---------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Surface Water</b> |                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                     |
| SC35                 | Minimise water quality decline                                                                                                  | <p>Temporary and permanent sediment and erosion control measures to be established, in accordance with a Spoil and Fill Management Plan (SFMP) as part of the Construction Environmental Management Plan (CEMP).</p> <p>Both the SFMP and the CEMP would include details of the proposed control measures, where and how the measures are to be applied, as well as a response plan and monitoring.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Pre-Construction and Construction                                                                                                                                                   |
| SC36                 | Minimise the impact of excavation, storage and placement of material on the surface and groundwater systems during construction | <ul style="list-style-type: none"> <li>Minimise area of disturbance.</li> <li>Land adjacent to waterways to remain undisturbed for as long as possible.</li> <li>Temporary catch and diversion drains to divert runoff from upslope land and reduce erosion hazard.</li> <li>Temporary diversions would outlet to stable discharge areas with additional protection as necessary.</li> <li>Progressively revegetate disturbed areas to encourage infiltration.</li> <li>Direct sediment laden runoff through a sediment trap or basin to minimise discharge of pollutants to downstream environment.</li> <li>Direct smaller volumes of sediment laden runoff to sediment filters such as straw bale filters and sediment fences.</li> <li>Locate stockpiles clear of flood prone areas, stream banks, channels and stormwater drainage areas.</li> <li>Stabilise stockpiles that are to be in place for longer than 10 days.</li> <li>Divert flows around stockpiles by bunds/diversion drains.</li> <li>Place sediment fences downstream to capture sediment and minimise sediment discharge to downstream environment.</li> </ul> | <p>Construction</p> <p>Construction</p> <p>Construction</p> <p>Construction</p> <p>Construction</p> <p>Construction</p> <p>Construction</p> <p>Construction</p> <p>Construction</p> |
| SC37                 | Permanent sediment and erosion control measures                                                                                 | <ul style="list-style-type: none"> <li>Permanent catch and diversion drains to divert runoff from upslope land and reduce erosion hazard to be installed.</li> <li>Establish permanent diversions to outlet to stable discharge areas with protection as necessary.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <p>Operation</p> <p>Operation</p>                                                                                                                                                   |



| Ref No. | Objective                                     | Commitment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Timing                            |
|---------|-----------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|
|         |                                               | <ul style="list-style-type: none"> <li>Revegetate disturbed areas to encourage infiltration.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Operation                         |
|         |                                               | <ul style="list-style-type: none"> <li>Locate permanent areas of fill emplacement clear of flood prone areas, stream banks, channels and stormwater drainage areas.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                          | Operation                         |
|         |                                               | <ul style="list-style-type: none"> <li>Install scour protection to structures and embankments as necessary.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Operation                         |
|         |                                               | <ul style="list-style-type: none"> <li>Provide permanent diversion of flows around fill emplacement areas and quarries by bunds/diversion drains.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Operation                         |
|         |                                               | <ul style="list-style-type: none"> <li>Permanent areas of fill emplacement to have maximum batter slopes engineered for the purpose and stabilised by vegetation.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                            | Operation                         |
| SC38    | Emergency Response Plan and Spill Containment | <ul style="list-style-type: none"> <li>Develop an Emergency Response Plan, as a component of the SFMP that would address the steps required in the event that the capacities of sediment control measure were exceeded.</li> <li>During construction, refuelling of plant and machinery would be undertaken either by fuel trucks with spill trays or within bunded areas or off-site in appropriate locations wherever possible and, where topography and track elevations allow, consideration be given to the provision of a secondary containment measure to limit the discharge of spills to waterways.</li> </ul> | Construction                      |
| SC39    | Revegetation                                  | <ul style="list-style-type: none"> <li>Primary revegetation would be focused on quickly minimising the likelihood of erosion of recently disturbed areas using species that provide rapid groundcover. Following this a second revegetation phase would be undertaken that provides a permanent method of surface stabilisation.</li> <li>Where the first phase of the revegetation cannot be completed for practical reasons the use of mulch or a rolled erosion control product would be used.</li> </ul>                                                                                                            |                                   |
| SC40    | Surface Water Monitoring                      | <ul style="list-style-type: none"> <li>A surface water monitoring program would be established prior to commencement of construction.</li> <li>During construction, a surface water monitoring program would be maintained at each of the previously monitored waterways as part of the CEMP.</li> <li>Any seepage of water from the rock cutting would be tested prior to discharge to the environment.</li> </ul>                                                                                                                                                                                                     | Pre-construction and Construction |



| Ref No.                         | Objective                                         | Commitment                                                                                                                                                                                                                                                                                                                                                                                                                                 | Timing                               |
|---------------------------------|---------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|
| SC41                            | Minimise impacts to waterways                     | <ul style="list-style-type: none"> <li>Disturbance of waterways as a result of construction activities would require suitable protection and rehabilitation works to minimise these impacts. These could include silt fences and sediment traps.</li> <li>Rock beaching would be provided to protect and stabilise the bed and banks of watercourses from erosion and to minimise the velocity of stormwater flows.</li> </ul>             | <p>Construction</p> <p>Operation</p> |
| SC42                            | Minimise blockage of low flows                    | Where practicable, diversion of flows around the work area (up to the 2 year ARI) would occur.                                                                                                                                                                                                                                                                                                                                             | Construction                         |
| SC43                            | Reduce impact of waterway structures on hydrology | To minimise the potential impact on flood levels and to maintain low flows, the existing open waterway area at each waterway crossing would be maintained throughout construction activities where possible. In locations where it is feasible, the open waterway areas would be increased.                                                                                                                                                | Construction                         |
| SC44                            | Appropriate design of causeways                   | <p>Where required, either a bed level crossing through the invert of the waterway or a low level crossing with low flow culverts beneath to allow base flows to be conveyed, would be provided.</p> <p>Temporary crossings would also include a lower section for higher flows to pass with culverts extending beyond the toe of fill embankments. These crossings would be removed when not required, and the waterway rehabilitated.</p> | Construction                         |
| SC45                            | Prevent pollution of creeks                       | Closely associated with the mitigation against water quality decline and increases in scour, the placement of fill would be completed in a manner that would not result in the pollution of Myrtle or Redbank creeks.                                                                                                                                                                                                                      | Construction                         |
| SC46                            | Minimise impacts to surface water                 | A Surface Water Management Plan (SWMP) would be prepared that would include all measures provided in SC34-SC44. The SWMP would be prepared to the satisfaction of the NOW prior to commencement of construction.                                                                                                                                                                                                                           | Pre-construction                     |
| SC47                            | Minimise impacts to groundwater                   | A Groundwater Management Plan would be prepared that would detail the response to the interception of groundwater, including licensing arrangements and proposed methods of disposal for the intercepted groundwater. The SWMP would be prepared to the satisfaction of the NOW prior to commencement of construction.                                                                                                                     |                                      |
| <b>Greenhouse Gas Emissions</b> |                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                      |
| SC48                            | Reduce impacts of greenhouse gases                | Use Biodiesel blends (diesel that has a percentage of the fuel replaced with biodiesel) for construction vehicle use where practicable.                                                                                                                                                                                                                                                                                                    | Construction                         |



| Ref No.                 | Objective                   | Commitment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Timing                                       |
|-------------------------|-----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------|
| <b>Subsidence</b>       |                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                              |
| SC49                    | Mitigate against subsidence | <ul style="list-style-type: none"> <li>Prevent the collapse of the Redbank Tunnel void by filling the tunnel.</li> <li>Monitoring of rail track condition to be undertaken in accordance with the Subsidence Management Plan to be prepared for Longwalls 27-30.</li> <li>Monitoring of Subsidence in Area 3 if required, to be undertaken in accordance with the Subsidence Management Plan to be prepared for longwalls 27-30.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Pre-construction, Construction and Operation |
| <b>Waste Management</b> |                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                              |
| SC50                    | Manage waste appropriately  | <ul style="list-style-type: none"> <li>Excavated material would, wherever possible, be re-used on site, although some material may require offsite disposal.</li> <li>Topsoil would be reused in revegetation and rehabilitation of cleared areas.</li> <li>Where practical, vegetative matter, not including weeds, would be chipped and reused on-site. Logs and tree limbs suitable for habitat and or fauna refuge would be collected during clearing and placed in a location identified as suitable.</li> <li>Any green waste containing weeds would be stockpiled separately and appropriately and would be disposed of at appropriate waste management facilities.</li> <li>Demolition waste materials would be recycled and/or reused on site, or transported to an approved recycling or waste management facility, as appropriate.</li> <li>Construction materials would be sourced and ordered in appropriate quantities to avoid the creation of excess waste, recycled and/or reused on site or on other projects where possible, or transported to an approved recycling facility.</li> <li>Suitable waste bins/receptacles would be provided throughout the work site to capture all waste streams.</li> <li>Separate containers would be provided for recyclable and non-recyclable materials. These materials would be transported to an approved recycling or waste management facility, as appropriate.</li> <li>Waste would be transported from the site when storage facilities are filled. The waste storage area would be kept tidy and well maintained.</li> </ul> | Pre-construction, Construction               |



| Ref No. | Objective | Commitment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Timing |
|---------|-----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|
|         |           | <ul style="list-style-type: none"> <li>▶ Liquid waste such as chemicals, fuel and lubricants, and their containers, would be disposed of in accordance with the requirements of the <i>Waste Classification Guidelines Part 1: Classifying Waste</i> (Department of Environment, Climate Change and Water 2009).</li> <li>▶ Portable toilet facilities would be installed on site and emptied periodically by an approved contractor.</li> <li>▶ The use of packaging materials would be minimised and where possible packaging products would be returned.</li> <li>▶ A regular site clean-up would be undertaken as required and general site waste would be managed in accordance with the waste reduction hierarchy of avoidance, reduce, re-use and recycle.</li> <li>▶ Site spill clean-up material (spill kits) would be available for both fuels and chemicals.</li> <li>▶ Suitable containment and absorbent products would be stored on site in a readily accessible location.</li> <li>▶ All emergency contacts would be provided in the CEMP.</li> </ul> |        |



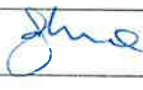
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### Document Status

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|---------|----------|-----------|-------------------------------------------------------------------------------------|--------------------|---------------------------------------------------------------------------------------|----------|
|         |          | Name      | Signature                                                                           | Name               | Signature                                                                             | Date     |
| 0       | E Shelly | S Taylor  |                                                                                     | C Gilmore          |                                                                                       | 29/2/12  |
| 1       | E Shelly | C Gilmore |  | C Gilmore          |  | 04/04/12 |
|         |          |           |                                                                                     |                    |                                                                                       |          |
|         |          |           |                                                                                     |                    |                                                                                       |          |