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Resource and Energy Assessments  
Department of Planning and Environment  
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SYDNEY NSW 2001

Attention: Philip Nevill

Email: [philip.nevill@planning.nsw.gov.au](mailto:philip.nevill@planning.nsw.gov.au)

**BY PLANNING PORTAL**

Dear Mr Nevill,

**RE: Request for Advice - Modification 7 Tarrawonga Coal Mine Life of Mine Modification (MP11\_0047-Mod-7)**

I refer to the request for advice received by the Environment Protection Authority (EPA) on 14 May 2020 in relation to the Tarrawonga Coal Mine Life of Mine Modification – Modification 7 (MP11\_0047-MOD7).

The EPA has reviewed the Modification Report titled, '*Tarrawonga Coal Mine Life of Mine Modification – Modification Report*' and has determined that it is unable to recommend project approval conditions for the proposal due to inadequate information provided in the Modification Report.

The EPA provides comment and / or requires additional information on the following aspects:

1. **Air Quality Impact Assessment** – additional information to assess the air quality impacts due to increased mining operations.
2. **Noise Impact Assessment** – application of *Interim Construction Noise Guidelines* (DECC, 2009).
3. **Water Quality Impact Assessment** – additional information to assess water quality impacts associated with the transfer and use of groundwater from the proposed Vickery Expansion Project.
4. **Waste Impact Assessment** – additional information to assess potential waste impacts due to increased mining operations, and transfer and use of groundwater from the proposed Vickery Extension Project.

Specific comment and information requirements are provided at Attachment A. Once the information identified in Attachment A is received, the EPA will review the additional information and provide recommended project approval conditions, if appropriate.

Please contact myself on (02) 6773 7000 or by email to [armidale@epa.nsw.gov.au](mailto:armidale@epa.nsw.gov.au) if you wish to discuss the matter further.

Yours sincerely



**REBECCA SCRIVENER**  
**Head, Regional Operations Unit**  
**Environment Protection Authority**

Encl: Attachment A – EPA Additional Information

## ATTACHMENT A

### Additional Information Required to Inform EPA Assessment of Modification 7 - Tarrawonga Coal Mine Life of Mine Modification (MP11\_0047-Mod-7)

#### 1. AIR QUALITY IMPACT ASSESSMENT

The EPA has reviewed the Air Quality Impact Assessment (AQIA) information contained in the Modification Report. Modelling results show that there are no predicted exceedances of the relevant criteria for long-term PM<sub>10</sub> and PM<sub>2.5</sub> fractions, short-term PM<sub>2.5</sub> fractions, and long-term total suspended particulate matter and dust deposition criteria. Modelling predicts additional exceedance days of the cumulative 24-hour average PM<sub>10</sub> criterion, attributable to the proposed Modification.

While the AQIA generally addresses the potential air quality impacts associated with the Modification, further information is required from the Proponent on the following matters:

##### a) **Mitigation of modelled exceedances of the cumulative 24-hour average PM<sub>10</sub> criterion – Year 3**

Air quality dispersion modelling for Year 3 predicts exceedances of the cumulative 24-hour average PM<sub>10</sub>, 50 µg/m<sup>3</sup> criterion, as established by the *National Environmental Protection (Ambient Air Quality) Measure (Ambient Air Quality NEPM)* (Department of Environment, 2016). The EPA notes that exceedances of the criterion already occur at private receptors (AQIA - Table 6-2 – Background and existing mines). The modelling indicates with the modification, the cumulative impact will result in additional days over the NEPM criteria at these receptors.

For year 3, there are seven receptors where the Modification is predicted to result in one additional exceedance day (73, 30, 80, 78, 70, 39 and 37) and four receptors where two additional exceedance days are predicted (79a, 87b, 79b and 573b). For year 7, there are six receptors where the Modification is predicted to result in one additional exceedance day (30, 80, 79b, 70, 39 and 37) and three receptors where two additional exceedance days are predicted (79a, 87b and 573b).

The EPA notes that the Proponent proposes to prevent short term exceedances of the cumulative 24-hour PM<sub>10</sub> criterion through the application of the '*BTM Complex Air Quality Management Strategy*'. The EPA notes that this Strategy has not been provided as supporting documentation for the Modification Report and the AQIA does not specify or identify specific mitigation measures to be employed.

**Additional information:** The EPA requires the Proponent to demonstrate what reasonable and feasible measures will be implemented to mitigate against the modelled exceedance of the cumulative 24-hour PM<sub>10</sub> criterion, and how the proposed mitigation measures will be monitored to ensure the relevant *Ambient Air Quality NEPM* criteria are achieved.

#### 2. NOISE IMPACT ASSESSMENT

The EPA has reviewed the noise impact assessment information contained in the Modification Report. Results presented in the assessment show that there are no predicted exceedances of relevant operational noise criteria, cumulative noise criteria and road traffic noise criteria associated with the Modification.

The EPA notes that noise impacts associated with construction of the new site access road and intersection along a section of Goonbri Road, and the relocation of the ROM Coal Stockpile were assessed in combination with operational noise, and that combined noise levels are predicted to comply with the applicable operational noise criteria.

While the NIA generally addresses the potential noise quality impacts associated with the Modification, the EPA notes the following:

**a) Water Transfer Pipeline – Construction Noise Assessment**

The Proponent has not carried out a detailed noise assessment for the construction of the proposed water transfer pipeline. The EPA understands this is on the basis that the proposed works are greater than 5km from the closest private residential noise receiver, works involve minimal machinery (a single 15 tonne excavator), and construction works will be carried out at times corresponding to the recommended standard hours set out in Section 2.2 of the *Interim Construction Noise Guideline* (Department of Environment and Climate Change (DECC), 2009). These works are therefore not expected to generate any discernible noise impact at identified residential noise receivers.

Notwithstanding the above, the EPA considers that the relevant noise management levels as identified in Table 2 of the *Interim Construction Noise Guideline* (DECC, 2009) should apply to the proposed pipeline construction activities.

### **3. WATER QUALITY IMPACT ASSESSMENT**

The EPA has reviewed water quality assessment information contained in the Modification Report. The EPA understands there is generally a low risk of adverse water quality impacts to surface water systems associated with the Modification, and that the assessed impacts and management strategies are generally consistent with the current approved Project.

The EPA notes:

- The site water balance for the Modification predicts that there will be no uncontrolled release of water from the site water management system.
- Where existing site water storages discharge to a licenced discharge point (LDP), and these are proposed to be progressively decommissioned and replaced with the progression of the mine footprint, water quality monitoring will continue to be carried out in accordance with Environment Protection Licence 12365 at the replacement sediment basin/dam. The EPA notes that the Proponent will need to apply to vary the licence to include any proposed revised water quality monitoring points for replacement sediment basins prior to their commissioning.
- The Proponent will develop an updated Erosion and Sediment Control Plan for the Modification, if approved, and sediment basins/dams will continue to operate in accordance with the requirements set out in EPL 12365.

While the EPA considers the water quality assessment generally addresses the potential water quality impacts associated with the Modification, further information is required from the Proponent on the following matters before the EPA can recommend conditions.

**a) Characterisation of water quality proposed to be piped to the Tarrawonga Coal Mine from the Proposed Vickery Extension Project**

The EPA notes that the proposed Modification includes the construction of an above ground pipeline to deliver groundwater extracted from the Proposed Vickery Extension Project to the Tarrawonga Coal Mine. The Proponent proposes to utilise this water to supplement on-site water shortfalls, storing piped water in a raw water dam (RWD). The EPA notes that indicative electrical conductivity (EC) values for groundwater referenced in the Modification Report are for the wider Tarrawonga Coal Mine region with values ranging widely from 571  $\mu\text{S/cm}$  to 3,251  $\mu\text{S/cm}$ .

**Additional information:** The EPA requires additional information from the Proponent on the specific water quality characteristics of groundwater proposed to be extracted from the proposed Vickery Extension Project, the intended use and potential environmental impacts associated with its use at the Tarrawonga Coal Mine. Information required includes, but is not limited to, characterisation of electrical

conductivity, cations and heavy metals to enable identification of any potential pollutants. Moreover, the assessment of any potential pollution impact associated with the use of this water should consider practical measures that can be taken to prevent, control, abate or mitigate the pollution and protect the receiving environment from harm.

#### **4. WASTE IMPACT ASSESSMENT**

The EPA notes that the Modification Report does not include an assessment of waste impacts associated with the increased coal production rate proposed as part of the Modification.

Further information is required from the Proponent on the following matters before the EPA can recommend conditions:

a) **Assessment waste impacts associated with the increased coal production rate proposed as part of the Modification**

An assessment of waste impacts associated with the proposed Modification is required.

Moreover, the EPA is aware that waste tyre management is an emerging issue within the coal mining industry and encourages the Proponent to consider management strategies for the disposal of waste tyres as part of the environmental assessment for the Modification.

b) **Characterisation of water quality proposed to be piped to the Tarrawonga Coal Mine from the Proposed Vickery Extension Project**

The EPA notes that groundwater proposed to be extracted from the Proposed Vickery Extension Project and piped to the Tarrawonga Coal Mine may be classified as liquid waste in accordance with the *NSW Waste Classification Guidelines* (EPA, 2014). Accordingly, the EPA requires groundwater quality characterisation per item 3(a) above to inform assessment of the proposed receipt and beneficial reuse of this water at the Tarrawonga Coal Mine.