



Office of
Environment
& Heritage

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Contact : Khari Turnbull; 02 6773 7000
Date : 29 September 2011

Mr Howard Reed
Manager Mining and Extractive Industries
Department of Planning and Infrastructure
GPO Box 39
SYDNEY NSW 2001

Attention: Stephen O'Donoghue

Dear Mr Reed

Boggabri Coal Mine s75W Modification Application (DA 36/ 1988 MOD 2)

The Office of Environment and Heritage (OEH) refers to the Environmental Assessment (EA) Modification to Development Consent provided for the proposed continuation of Boggabri Coal Mine for a two year period. The EA was received by OEH on 13 September 2011.

OEH has reviewed the information within the EA provided by the proponent and has determined that it is able to support the proposal subject to the Department of Planning and Infrastructure (DP&I) addressing OEH's comments and recommendations as outlined in **Attachment 1** in the Conditions of Approval, if approval is recommended by DP&I. It should be noted that implementing the recommendations is important for OEH's ongoing support for the proposal.

It is expected that OEH will be given an opportunity to review the draft Director General's Environmental Assessment Report for this proposal. This will ensure that OEH has the opportunity to recommend additional Conditions of Approval, where OEH's key issues are not addressed appropriately by the draft consent conditions before determination.

OEH understands that this application is for a modification of Boggabri Coal Mine's current consent to allow continued operation of the mine until the application for expansion of the mine is determined. The mine is currently subject to an Environment Protection Licence (EPL) which permits operation at the production level requested in the Environmental Assessment dated August 2011 submitted in support of the modification.

Monitoring information available to OEH suggests that Boggabri Coal is generally complying with the conditions of their EPL. The project is therefore, unlikely to require a variation to the existing environment protection licence under the Protection of the Environment and Operations (POEO) Act 1997. However, the proponent will need to make an assessment of their existing EPL conditions and if an EPL variation is deemed necessary, make a separate application to OEH to vary the EPL if development project approval is granted.

In summary, from the information presented in the EA, OEH is of the opinion that the most significant environmental issues are:

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- Ensuring construction and operations meet appropriate noise criteria in accordance with the Industrial Noise Policy;
- Ensuring construction and operations meet appropriate air quality criteria;
- Need to minimise impacts on biodiversity and further development of an adequate biodiversity offset; and,
- Ensuring the protection of surface and ground water.

Should you have any enquiries regarding this matter, please contact Kharl Turnbull at the Armidale Office by telephoning (02) 6773 7000.

Yours sincerely



ROBERT O'HERN
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Environment Protection and Regulation
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Encl: Attachment 1 – Key Issues Identified in OEH Review of Environmental Assessment- Modification to Development Consent (DA 36/1988 MOD 2)

ATTACHMENT 1 – KEY ISSUES IDENTIFIED IN OEH REVIEW OF ENVIRONMENTAL ASSESSMENT-MODIFICATION TO DEVELOPMENT CONSENT (DA 36/ 1988 MOD 2)

A. NOISE ASSESSMENT

Issue 1: The Noise Assessment for the modification predicts that noise limits on the current Environment Protection Licence (EPL) may be exceeded adverse weather conditions (i.e. inversion conditions).

Recommendation:

The EA (section 6.2.4 [Noise] Mitigation and Management) provides an undertaking that "... Boggabri Coal will ensure that the PSNC [Project Specific Noise Criteria] are met at all privately owned residences for the duration of this Modification." This undertaking satisfies OEH that the current noise limits on the EPL are adequate for this Modification.

Issue 2: OEH notes that Section 4.13.13 of the AIA does not adopt explicit criteria for cumulative noise. It states that cumulative noise impacts associated with the operation of the nearby existing Tarrawonga Coal Mine have already been accounted for when determining noise criteria for the subject project. It also states that the EA for the proposed Maules Creek Coal Mine concludes that there are no cumulative noise impacts associated with its proposed operation.

Recommendation:

Further detail should be provided in this section regarding the maximum potential noise impacts from all of these existing and proposed projects at sensitive receiver locations, together with their cumulative impact.

B. AIR QUALITY ASSESSMENT

Issue 3: The project is predicted to comply with the OEH's 24-hr PM₁₀ criteria at all private receptors. However, cumulative impacts within the Gunnedah Basin have not been assessed.

The AQIA has adopted the impact assessment for Year 5 of the *Continuation Project* for the *Modification Project*, on the basis of their similar coal extraction rates and mine locations. The 24-hr average PM₁₀ concentrations are predicted to be below the OEH criterion (50 µg/m³) at all private residences. Additionally, the AQIA states that the *Modification Project* operations would be similar to those already occurring at the site, and based on current ambient monitoring, cumulative 24-hr PM₁₀ impacts are expected to be below the criterion.

However, OEH notes that while project-specific impacts may not change considerably, co-existence of several mining operations within the Gunnedah Basin will result in adverse air quality impacts in the region, because the interim extension period for the *Modification Project* (Nov 2011–Nov 2013) will coincide with the Tarrawonga Coal (existing) and Maules Creek Coal (from 2012, if approved) projects.

Even if currently seeking a 2-year extension only, the Proponent will need to manage the impacts of their operations on regional air quality for the purposes of long-term continuation of Boggabri Coal Mine. The Proponent must therefore align the proposed review of their existing air quality management plan with those principles employed in the earlier-proposed *Boggabri Coal Continuation Project*.

Recommendation:

A detailed air quality management plan (AQMP) for the *Modification Project* should be prepared, adopting the same principles as proposed for the *Continuation Project*.

Previously, as part of the *Continuation Project* application, the Proponent committed to initiatives such as:

- *Update of the existing AQMP in consultation with adjacent operations (Tarrawonga Coal Mine and the Maules Creek Coal Project); and,*
- *Implementation of a Real-time Environmental Management System (RTEMS) for assessing site-specific and cumulative air quality impacts.*

The Proponent has proposed a review of their existing AQMP within 3 months of grant of the *Modification Project*. The reviewed AQMP must adopt similar principles and incorporate all technologies (e.g. *Predictive Air Quality Management System*, and enclosed conveyors) and operational logistics (e.g. minimizing overburden and haul distances) that have been proposed for the *Continuation Project*. A detailed AQMP entailing the above and other initiatives that will be implemented must be provided to the OEHL within 3 months of approval.

C. THREATENED SPECIES/ BIODIVERSITY

Issue 4: Adequacy of Offset

While the use of the 'Merriendi' property as an offset is supported, it is unlikely to be sufficient to fully offset the impacts of the Modification. It is understood that the proposal utilises the Biodiversity Offset Strategy (BOS) presented in the earlier Biodiversity Impact Assessment. However, there are inconsistencies between figures in this EA and the BOS.

Vegetation community	BOS ha	EA ha
White Box - White Cypress Pine grassy woodland	163.6	194
Narrow-leaved Ironbark - White Cypress Pine Shrubby open forest	126.1	62.2
White Box - White Cypress Pine grassy woodland (Derived Native Grassland)	113.7	170.1
Silver-leaved Ironbark heathy woodland	58.2	112
Weeping Myall Woodland	Not listed	3.1
Yellow Box - Blakely's Red Gum grassy woodland	0.1	Not listed
<i>Total</i>	<i>461.7</i>	<i>541.4</i>

Recommendation:

The adequacy of the offset therefore cannot be ascertained. The proposal needs to present offset ratios that are clearly supported by a suitable metric such as the Biobanking Assessment Methodology and are supported by relevant information justifying the quantum of the proposed offset.

D. SURFACE WATER IMPACT ASSESSMENT

Issue 5 – Surface Water Management Plan

The EA states:

"the catchment areas relevant to disturbance proposed for this Modification shows that the catchment draining to the Boggabri Coal Mine "dirty" and "contaminated" water management system will increase from existing by approximately 100 ha."

"Runoff from large storm events will overtop sediment dams and discharge to Nagero Creek."

The EA does not specify that the existing Surface Water Management Plan (SWMP) will be updated to accommodate this additional 100 ha area. The updated SWMP will need to meet the design criteria of the relevant dirty and contaminated water management design criteria.

Recommendation:

The SWMP must provide for all dirty water management structures to be constructed:

- in accordance with the *Blue Book (Volume 1 and Volume 2E)*

The SWMP must provide for all contaminated water management structures to be constructed:

- to achieve permeability of 1×10^{-9} m/sec; and,
- have the capacity to contain a storm event with a frequency of a 1 in 100 year, 72 hour duration event (calculated using the Australian Standard- Australian Rainfall and Runoff Criteria).