

Our reference: DOC14/325718; EF13/2760
Contact: Natasha Ryan 02 49086833
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Department of Planning and Environment
GPO Box 39
SYDNEY NSW 2001

Attention: paul.freeman@planning.nsw.gov.au

**CENTENNIAL MYUNA PTY LIMITED PA 10_0080 MODIFICATION
RECOMMENDED CONDITIONS OF APPROVAL**

Dear Mr Freeman

Reference is made to Department of Planning and Environment's (DPE) email dated 24 November 2014 requesting review of Centennial Myuna Pty Limited's (Centennial) application for Modification of PA 10_0080 and Recommended Conditions of Approval.

The Environment Protection Authority (EPA) makes reference to your email and the supporting Environmental Assessment titled "*Environmental Assessment Myuna Colliery Section 75W Modification to Project Approval PA 10_0080*" dated November 2014 and prepared by Centennial Coal Company Limited (EA).

The EPA understands that the proposal involves:

- Increasing extraction of run of mine (ROM) coal from 2 Mtpa to 3 Mtpa; and
- Increasing employment to 300 full time employees.

The EPA has reviewed the EA and understands that:

- Centennial is not requesting any increases in discharge of groundwater from the premises;
- the colliery's sewage effluent is discharged to Hunter Water Corporation's sewerage system via a trade waste permit;
- the project will involve an increase in the speed of the underground conveyors from 3.2 to 3.8 m/s; and
- the project will involve an increase in the amount of time that the rotary breaker will be operating, but that environmental assessment of this was previously assessed and approved in the current planning consent.

The EPA advises DPE that Centennial holds Environment Protection Licence (EPL) number 366 for Myuna Colliery and the EPA would be able to vary this licence should consent be given to the modification. The EPA advises DPE that Centennial would need to apply to the EPA for a variation to EPL 366 to increase the activity scale of the scheduled activities of *coal works* and *mining for coal* in accordance with section 58 of the *Protection of the Environment Operations Act 1997*.

Recommended Conditions of Approval

Further discussion regarding the EPA's review of the EA and recommended conditions of approval are provided at Attachment 1.

If you wish to discuss this matter further please contact Natasha Ryan on 02 49086833.

Yours sincerely

A handwritten signature in blue ink, which appears to read 'P. Jamieson', followed by the date '23-12-14' also in blue ink.

PETER JAMIESON
Head Regional Operations Unit - Hunter
Environment Protection Authority

Encl: Attachment 1: Review of EA and Recommended conditions of approval

ATTACHMENT 1

ENVIRONMENT PROTECTION AUTHORITY – REVIEW OF ENVIRONMENTAL ASSESSMENT AND RECOMMENDED CONDITIONS OF APPROVAL 10_0080 MODIFICATION CENTENNIAL MYUNA PTY LIMITED

The Environment Protection Authority (EPA) has reviewed the Environmental Assessment titled “*Environmental Assessment Myuna Colliery Section 75W Modification to Project Approval PA 10_0080*” dated November 2014 and prepared by Centennial Coal Company Limited (‘the EA’).

The following comments and recommended conditions of approval are provided to Department of Planning and Environment (DPE), should DPE consider consent appropriate.

EPA COMMENTS AND RECOMMENDED CONDITIONS OF APPROVAL

Noise Impact Assessment

The EA concludes that the modification will not result in any changes to surface activities considered as part of the Noise Impact Assessment (NIA) that was undertaken in 2011. This was however three years ago and the EPA advises that a contemporary assessment of rating background levels (RBLs) that could be used to develop contemporary Project Specific Noise Criteria (PSNL) in accordance with the Industrial Noise Policy 2000 (INP) would have been more appropriate.

However, given the minor nature of the likely impacts and that attended noise monitoring by the proponent has demonstrated Centennial has been compliant with current EPL noise criteria at sensitive receivers at all times in recent years, it is the EPA’s position that maintaining the current Noise Limits in the EPL would be appropriate. As a result the EPA recommends to DPE that the noise criteria in Table 32 on page 63 be adopted as part of the conditions of consent, noting that these are the current noise limits in the EPL.

The EPA is also aware that there is inconsistency in the noise monitoring requirements in planning approvals and the EPL noise monitoring conditions. It has been the EPA’s position that annual compliance reporting through attended monitoring be undertaken for a minimum period of 1.5 hours during the ‘day’, 30 minutes during the ‘evening’ and 1 hour during the ‘night’ at each sensitive receiver over three consecutive days. The EPA is aware that most of the underground mines in the Lake Macquarie area undertake quarterly monitoring on one day for a 15 minute attended monitoring period in ‘day’, ‘evening’ and ‘night’ as part of previous planning approval requirements.

As an interim measure to enable more consistency between planning approvals and EPA monitoring requirements, pending discussion between the EPA’s Noise Policy section and DPE, the EPA proposes that quarterly monitoring be undertaken for a 15 minute period, but that for one of the quarterly monitoring periods attended monitoring be undertaken for a minimum period of 1.5 hours during the ‘day’, 30 minutes during the ‘evening’ and 1 hour during ‘night’. The reasoning behind this is to replicate the worst case meteorological conditions that may occur. The EPAs recommended monitoring condition is:

To determine compliance with noise limits, attended noise monitoring must be undertaken in accordance with EPAs requirements in the EPL and:

- (a) at each one of the sensitive receiver locations identified in Table 32;
- (b) occur quarterly within the reporting period of the Environment Protection Licence with at least 2 months between monitoring periods;
- (c) occur during each day, evening and night period as defined in the NSW Industrial Noise Policy (EPA 2000) for a minimum of 15 minutes for three of the quarters;
- (d) the night time 15 minute attended monitoring in accordance with c) must be undertaken between the hours of 1am and 2am during one quarter, 2am and 3am during another quarter and 3am and 4am during another quarter;
- (e) one quarterly monitoring must occur during each day, evening and night period as defined in the

NSW Industrial Noise Policy (EPA 2000) for a minimum of 1.5 hours during the day; 30 minutes during the evening; and 1 hour during the night, and

(f) each quarterly monitoring must be undertaken on a different day of the week not including Saturdays, Sundays and public holidays; and

(g) these monitoring conditions take effect in the 2014-15 EPL Reporting period.

Water Quality Assessment

Centennial are not proposing any increase in volumetric discharge from the premises and have recently upgraded the coal stockpile dam with an automated sensor and pumping system to prevent uncontrolled overflows from the coal stockpile dam. The updated modelling that was undertaken as part of the environmental impact assessment for the Northern Coal Logistics Project has identified that there is a decrease in the expected groundwater inflows to the Myuna workings compared with the modelling undertaken as part of the Myuna Colliery Extension of Mining Part 3A application.

Water from the EPL discharge points enters Lake Macquarie via Wangi Creek. Centennial has a pollution reduction program on their current EPL that requires assessment of water quality and metals. The EPA will assess the information provided by Centennial at completion of that program and will make any adjustments to water quality monitoring and water quality limits on the EPL accordingly. As a result the EPA does not recommend conditions of approval in relation to water quality management as water quality issues are currently managed through the EPL and the modification is unlikely to contribute to additional water quality impacts.

Air Quality Impact Assessment

The EPA has reviewed the Air Quality Impact Assessment (AQIA) that formed part of the EA. This was prepared by SLR, dated 2014 and titled "*Myuna Colliery Modification Air Quality Impact Assessment*", prepared by SLR dated 29 October 2014 Report Number 630.10123.05000-R1". The EPA provides the following comments to DPE in determination of the modification with respect to air quality issues.

Dispersion modelling was conducted for the following:

- 2 Mtpa scenario (current operations); and
- 3 Mtpa scenario (proposed operations)

The AQIA has been prepared in general accordance with the *Approved Methods for the Modelling and Assessment of Air Pollutants in NSW* (the Approved Methods), however requires some additional considerations.

The AQIA predicts compliance with the EPA assessment criteria and shows small increases in particulate matter impacts from the current operations scenario to the proposed operations scenario. However the EPA recommends the AQIA be revised to include additional information and clarifications of inconsistencies between assessments for the site, specifically Heggies (2010)*.

The AQIA does not contain all information required for an emissions inventory

Whilst the AQIA outlines the assumptions and emission factors utilised for emission estimation, the actual calculated emission rates as inputted into the dispersion modelling stage of the assessment have not been presented. In accordance with Section 9.3 of the Approved Methods, the AQIA should provide the estimated emission rates for each source and scenario.

Ventilation parameters require clarification

The AQIA prepared for the Myuna Colliery Extension Project (Heggies, 2010)* presented a stack diameter of 3.9 m for the ventilation shaft whilst the presented AQIA has a stack diameter of 4.82 m. Clarification on the actual stack diameter is required, and any implications on the results and conclusions of the AQIA.

Meteorological data has not been demonstrated to be site representative

The AQIA has utilised a synthetic prognostic meteorological dataset utilising MM5 and CALMET for inclusion within the quantitative component of the assessment. The EPA notes that the meteorological data utilised to represent the site contains inconsistencies with the Myuna Colliery Extension Project (Heggies, 2010)*, specifically noting:

- Annual representation of calms of 0.3 %, as compared with 6% within the assessment provided for the Extension Project; and
- Annual representation of F class stability of 13 %, as compared with 25 % within the assessment provided for the Extension Project.

In accordance with the Section 9.4.2 of the Approved Methods, meteorological data must be demonstrated to be site representative.

The EPA recommend to DPE that prior to project determination the AQIA be amended to include:

- The emission rates included within the dispersion modelling;
- Clarification on the ventilation shaft stack diameter utilised within the dispersion modelling; and
- Additional information to demonstrate the meteorological data utilised within the dispersion modelling is considered site representative.

Should air quality monitoring at the high volume sampler not meet ambient air quality criteria for PM₁₀ in the future the EPA would recommend that the transfer of coal from the ROM bins to the stockpile be automated and enclosed. However at this stage, the EPA will continue to monitor Centennial's compliance with ambient air quality criteria, and manage any impacts under the EPL, should they occur.

*Heggies, 2010 – *Myuna Colliery Extension of Mining Project Air Quality Impact Assessment*, prepared by Heggies Pty Ltd

**Environment Protection Authority
23 December 2014**

