Department of Industry
Resources & Energy

BN15/8578

Mr Hamish Aiken
Team Leader
Resource Assessments
Department of Planning and Environment
GPO Box 39
SYDNEY NSW 2001

Email: hamish.aiken@planning.nsw.gov.au

Dear Mr Aiken

Rixs Creek Mine - Continuation of Mining Project (SSD 6300)
Review of Environmental Impact Statement

I refer to your email of 2 November 2015, regarding Bloomfield Collieries Pty Ltd's application for the Rixs Creek Mine - Continuation of Mining Project in the Singleton Council local government area.

NSW Department of Industry, Division of Resources & Energy (the Division) has reviewed the Rixs Creek Mine - Continuation of Mining Project Environmental Impact Statement (EIS), dated October 2015.

The Division supports the Rixs Creek Mine - Continuation of Mining Project (the Project) as a responsible utilisation of the State's coal resources that will, if approved, provide continued employment for around 150 personnel in a typical year of production and up to 225 personnel at full production and bring economic benefits to the local region and the State as a whole.

The following comments are directed at specific areas of the Division's responsibility for this proposal.

MINING TITLE
As coal is a prescribed mineral under the *Mining Act 1992*, the proponent is required to hold appropriate mining titles from the Division in order to mine this mineral. The Proponent holds mining titles; Coal Lease 352, Mining Lease 1432 and has lodged Mining Lease Application 487 (MLA 487) for mining purposes on 23 February 2015.

The proponent has demonstrated that the proposal has sufficient title over the project area to satisfy the requirements of section 380AA of the *Mining Act 1992*.

Under the *Mining Act 1992*, mining and rehabilitation are regulated by conditions included in the mining lease, including requirements for the submission of a Mining Operations Plan (MOP) prior to the commencement of operations, and subsequent Annual Environmental Management Reports (AEMR).

REHABILITATION

The Division notes that the EIS has identified general rehabilitation strategies and objectives and adequately describes the functional domains of the project. Specific performance objectives and standards of each domain have been satisfactorily described.

The Division requires final landform design to be consistent with the surrounding topography and the EIS has provided objectives and criteria to which they will be implemented.

ASSESSMENT OF THE RESOURCE

While amendments to the State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007 (Mining SEPP) have removed the provision that made the economic significance of the resource the principle consideration when determining mining projects and requires the NSW Department of Industry to assess the significance of the resource, the Division considers that an analysis of the resource utilisation and its economics will assist the consent authority in considering the efficiency or otherwise of the development in terms of resource recovery (cl15(1) of the Mining SEPP).

This analysis concentrates on geological, mining and economic aspects of the project and the Division makes the following assessment:

Size, quality and availability of the resource

Bloomfield Collieries Pty Ltd is a subsidiary of the Bloomfield Group, which owns and operates the Rixs Creek Mine. The Proponent is seeking approval for the Rixs Creek Mine Continuation of Mining Project which will allow the continuation of the existing multi-seam open cut mining operations.

If approved, the Project will allow the mine to continue operations and utilisation of existing infrastructure until approximately 2038. The Project includes a new mining lease application (MLA 487) to the west of the existing mining lease to accommodate a proposed new overburden emplacement area. The life of the Project will be around 25 years, and approval is being sought to extract at a rate of up to 4.5 million tonnes per annum (Mtpa) of run-of mine (ROM) coal that would produce up to 2.7 Mtpa of product coal.

The Division has verified that the Project will provide approximately 46 million tonnes (Mt) of ROM coal and approximately 25 Mt of product coal. The Proponent has completed resource and reserve estimation for the Project in accordance with the Australasian Code for Reporting Exploration Results, Mineral Resources and Ore Reserves 2012 "the JORC Code".

Two export quality coal products, a semi-soft coking product and a thermal product are proposed to be sold by the Proponent. It is expected that 60% of production would be sold on the export coking coal market and 40% on the export thermal market. The Division has examined the coal quality data of the seams to be mined

from the Project and is of the opinion that the quality of the coal from the Project area will allow these products to be sold on the export market. The majority of product coal is expected to be sold to established markets mainly to Japanese customers.

Over the life of the Project, the value of the coal produced would be worth around $3 billion in current dollars, based on the expected split between export thermal and coking coal products. The net present value of this revenue stream has been estimated by the Division at approximately $1.7 billion.

Export income is vital for the health of both the NSW and Australian economy. Export income contributes to the Nation's balance of trade, which provides positive benefits to both the NSW and Australian credit rating.

Of the 13 open cut coal mines which currently operate in the Hunter coalfield, the Project if approved, producing at its maximum ROM production rate of 4.5 Mtpa would rank twelfth of the mines operating in the region. The Project would be ranked 21st out of the 43 producing NSW coal mines as at September 2015 based on saleable coal production. The Project producing at its maximum ROM rate would be considered slightly above a small to medium sized mine when compared to other operating coal mines in NSW, i.e. the average size of currently operating coal mines in NSW in 2014-15 was around 5 Mtpa of ROM coal.

The Project is vital for the continuation of the existing Rixs Creek Mine, as without approval the current mine has a limited life that would see it close in the short term, given the low coal price environment, limited remaining coal resources and also overburden dumping issues that would be solved with Project approval.

Resource Recovery

Pit design at the Project is constrained to the south and west by the outcrop of the target coal measures (Lemington to Hebden seams). Exclusion zones adjacent to Rixs Creek and the New England Highway constrain pit design boundaries to the south and east. In the north, pit design necessarily excludes coal resources to ensure geotechnical stability of the open pit. All coal seams within the open cut are proposed to be extracted.

Given these constraints and those outlined in the Proponents EIS, DRE considers the Project mine plan to adequately recover coal resources.

Coal Royalty

The Project is a proposed open cut mine and as such a royalty rate of 8.2% applies to the net disposal value. Net disposal value is the price received per tonne minus any allowable deductions. The main allowable deduction is for coal beneficiation which is either; $3.50 per tonne for coal subjected to a full washing cycle, or $2.00 per tonne for coal subjected to a simple washing process, or $0.50 per tonne for coal that is washed and screened.

As all product coal from the Project will be subjected to a full washing cycle, a deduction of $3.50 per tonne from the value of coal produced applies. A deduction for levies also applies which would amount to no more than $1.00 per tonne. Hence allowable deductions for royalty for the Project would amount to $4.50 per tonne.

One of the most important assumptions in the calculation of future Royalty for a coal proposal is the estimate of a future coal price over the life of a project. Coal from the Project is expected to be sold into the export coking and thermal markets. Due to the existing Rixs Creek Mine having a long history of firm coal contracts with customers in Japan it is expected that these same customers will continue to purchase coal from the Project.

From June 2014 to June 2015 (Coal Services data) export thermal coal prices from NSW were around A$80 per tonne. The bottom of the price cycle (in A$ terms at least) may have occurred over this period, as the falling Australian dollar has stemmed prices falling further. Therefore the Division has assumed a price of around A$80 per tonne for the Project in the short term for export thermal coal.

Coal price forecasting is inherently difficult and over the long term time frame of the Project there will be many variations in coal prices. However, there is a growing consensus in the coal industry that coal prices will improve in the medium to long term, over the current five year lows. For its royalty calculation, the Division uses the current low short term export thermal coal prices, and medium to long term export thermal prices (in real terms) in the range of A$75 to A$110 per tonne.

In regard to export semi soft coking coal prices, from June 2014 to June 2015 (Coal Services data) coal prices from NSW were in the range A$100 to A$110 per tonne. Therefore the Division has assumed a price of around A$100 per tonne for the Project in the short term for the export of coking coal.

For its royalty calculation, the Division uses the current low short term export semi soft coking coal prices, and medium to long term export semi soft coking coal prices (in real terms) of around A$120 per tonne.

Another important aspect of future royalty calculation for a proposed coal project is estimation of future annual production. The Division has estimated that if the Project is approved, around 25 Mtpa of product coal would be able to be economically mined from the Project area from 2016 to 2038.

Using the above parameters the Division has calculated that in a typical full production year the State will receive around $9 million in royalty and $240 million over the life of the Project. The net present value of this royalty stream would be A$130 million using a 7% real discount rate.

Other Factors

The Division also notes from the Economic Assessment prepared by the Proponent that the Project will:

- contribute $394 million to NSW in Gross State Product
- contribute $104 Million to regional Gross Regional Product
- generate a net economic benefit of around A$250 Million (NPV using a 7% discount rate)
- spend a total of around A$110 million in capital expenditure over its life, and
- will employ around 150 personnel in a typical year of production and up to 225 personnel at full production.

DRAFT RECOMMENDED CONDITIONS OF APPROVAL

DRE recommends the following conditions be incorporated into the Development Consent, if granted:

Rehabilitation Objectives and Commitments

The Proponent shall rehabilitate the site to the satisfaction of the Director, Environmental Sustainability in the DRE.

Rehabilitation must be substantially consistent with the Rehabilitation Objectives described in the EA (and Appendix Q of the EA) and the following objectives in Table 1.

Table 1

Rehabilitation Feature	Objective
Mine site (as a whole of the disturbed land and water)	Safe, stable and non-polluting, fit for the purpose of the intended post-mining land use(s).
Rehabilitation materials	Materials (including topsoils, substrates and seeds of the disturbed areas) are recovered, appropriately managed and used effectively as resources in the rehabilitation.
Landforms	Final landforms sustain the intended land use for the post–mining domain(s). Final landforms are consistent with and complement the topography of the surrounding region to minimise the visual prominence of the final landforms in the post mining landscape. Final landforms incorporate design relief patterns and principles for consistent with natural drainage.
Water Quality	Water retained on site is fit for the intended land use(s) for the post-mining domain(s). The potential ecological, hydrological and geomorphic impacts from post-mining water discharges on receiving creeks are assessed and appropriate mitigation measures are effectively implemented as part of the closure plan. Water management is consistent with the regional catchment management strategy.
Native flora and fauna habitat and corridors	Size, locations and species of native tree lots and corridors are established to sustain biodiversity habitats. Species are selected that re-establishes and complements regional and local biodiversity.
Post-mining agricultural pursuits	The land capability classification for the relevant nominated agricultural pursuit for each domain is established and self-sustaining within 5 years of land use establishment (first planting of vegetation.)

Progressive Rehabilitation

The proponent shall carry out all surface disturbing activities (eg pre-stripping in advance of mining operations) in a manner that, as far is reasonably practicable, minimises potential for dust emissions and shall carry out rehabilitation of disturbed

areas progressively, as soon as reasonably practicable, to the satisfaction of the Secretary of the Department of Industry, Skills and Regional Development.

Rehabilitation Plan

1. The proponent must prepare and implement a Rehabilitation Plan to the satisfaction of the Secretary of the Department of Industry, Skills and Regional Development.
2. The Rehabilitation Plan must:
   a. be submitted and approved by the Secretary of the Department of Industry, Skills and Regional Development prior to carrying out any surface disturbing activities of the development, unless otherwise agreed to by the Secretary
   b. be prepared in accordance with DRE guidelines and in consultation with the Department, OEH, EPA, DPI - Water, Council and the CCC
   c. incorporate and be consistent with the rehabilitation objectives in the EIS, the statement of commitments and Table 1
   d. integrate and build on, to the maximum extent practicable, the other management plans required under this approval
   e. address all aspects of mine closure and rehabilitation, including post mining land use domains, rehabilitation objectives, completion criteria and rehabilitation monitoring and management.

   Note: The approved Mining Operation Plan (which will become the REMP once the Mining Act Amendments have commenced), required as a condition of the Mining Lease(s) issued in relation to this project, will satisfy the requirements of this condition for a Rehabilitation Plan.

Should you have any enquires regarding this matter please contact William Hughes, Director Mineral Operations on (02) 9934 0784.

Yours sincerely

K Hargreaves 7.12.15

Kylie Hargreaves
Deputy Secretary
Resources & Energy