

Rio Tinto Coal Australia Pty Limited  
GPO Box 391  
Brisbane Queensland 4001  
Australia  
T +61 (0) 7 3625 3000  
F +61 (0) 7 3625 3001

**Private and confidential**

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LBL Review  
Regulatory Reform and Advice Branch  
Environment Protection Authority  
PO Box A290  
SYDNEY South NSW 1232

By email: [LBL.Review@epa.nsw.gov.au](mailto:LBL.Review@epa.nsw.gov.au)

**Review of the Load-based Licensing Scheme**

Rio Tinto Coal Australia (“RTCA”) manages Coal & Allied’s two open cut operations - Mount Thorley Warkworth and Hunter Valley Operations - near Singleton in the Hunter Valley. These operations together employ almost 2,700 employees to produce 25 million tonnes of coal per annum.

Coal & Allied’s operations are regulated under the NSW integrated development assessment process through development consents and by environmental protection licences issued under the *Protection of the Environment Operations Act 1997*. Operations are assessed under the risk-based licensing system and licenses and operational management plans that incorporate the outcomes of various Pollution Reduction Programs.

We hold to the view that efficient and effective environmental regulation is obtained through the selection and application of the most appropriate regulatory mechanism rather than an approach where multiple overlapping regulatory approaches are applied with outcomes including increased regulatory burden and costs, potentially conflicting regulatory mechanisms and excessive complexity. Our experience is that the former approach will result in beneficial environmental management outcomes rather than directing limited resources solely toward compliance management.

We note a number of references within the “Review of the Load-based Licensing Scheme: Issues Paper” (the Issues Paper) that highlight mining industry emissions and cite mining industry examples. Specifically, we do not consider that Load-Based Licensing (LBL) is suited to fugitive dust emissions from mining, nor do we consider that a case has been made for the application of LBL to either fugitive dust emissions or mine-affected water releases. There are good reasons why LBL has not been applied to these aspects and these are discussed below.

**Fugitive emissions and the mining industry**

For the LBL scheme to apply to any emission source it must be possible to measure the emission source with sufficient accuracy and at a sufficient frequency to be able to

quantify changes in emissions. Without this ability, there is no opportunity for load-based licensing to provide an incentive to reduce emissions or to penalise increases in emissions – the fundamental basis of any LBL system.

For fugitive emissions from mining operations, emissions estimation methods are based almost exclusively on applying a derived emission factor to a production rate, and then applying assumed control factors where these apply.

Contemporary fugitive emission estimation methods are still based on factors derived from the 1980's and 1990's and then largely from methodologies unrelated to the Australian environment. This situation is a key factor in the poor correlation between emissions estimates and recent ambient air quality study findings, with the former significantly overestimating fugitive emissions from mining in contrast to contemporary ambient air quality findings. While the industry has invested heavily in research to improve this situation, we are still some way from approaches having sufficient research support and field verification to allow their adoption by industry or regulators.

This is a significant challenge both with respect to providing a justification for LBL regulation, as well as for implementing a LBL approach where sufficient sensitivity exists to both quantify emissions and to incentivise mitigation actions under a LBL mechanism.

Current fugitive air quality emissions are regulated through a combination of ambient air quality limit conditions and management measures developed and demonstrated over time through consent conditions, environment protection licence conditions and pollution reduction programs. The NSW Minerals Council estimates the current cost to the NSW coal industry of compliance with existing air quality regulation to be \$168M annually. Given existing regulatory controls and the inability of current estimation methods to quantify emissions to a level able to incentivise further reduction, the marginal cost of abatement associated with the introduction of an additional layer of regulation through LBL will be economically prohibitive.

## **Water emissions and the mining industry**

RTCA is currently subject to the Hunter River Salinity Trading Scheme which provides an economic mechanism to regulate mine-affected water releases. The issues paper suggests that, before being considered for inclusion within LBL, other water quality constituents require further investigation. RTCA's own water quality data provides no suggestion of water quality parameters of concern that might then be suited to further regulation by an LBL system. As per our comments above, we agree with the position that the introduction of further regulatory mechanisms should be based on strong scientific evidence in relation to the existence of cumulative impacts, their cause and the most appropriate regulatory mechanism to apply.

From the information provided in the Issues Paper, RTCA does not believe that a justification exists for extending the LBL scheme to mining particularly with respect to the highlighted issues of fugitive dust emissions and emissions to water. We would be particularly concerned if the key drivers for extending the scheme related to principle rather than a sound, scientific and economic basis. We continue to hold to the principles that regulatory mechanisms should be effective, efficient and based on sound scientific evidence.

RTCA supports the submission made by the NSW Minerals Council.

Any inquiries in relation to this matter should be directed to Stuart Ritchie, Manager Environment by email [stuart.ritchie@riotinto.com](mailto:stuart.ritchie@riotinto.com) or by phone 07 3625 4781.

Yours sincerely



Stuart Ritchie  
Manager Environment, Coal Australia