



## PIKE RIVER COAL

26 June 2009

Ministry for the Environment  
Emissions Trading  
PO Box 10 362  
Wellington 6143  
New Zealand

Dear Sir/Madam

### **NZ EMISSIONS TRADING SCHEME – DRAFT REGULATIONS FOR CLIMATE CHANGE (STATIONARY ENERGY AND INDUSTRIAL PROCESSES) REGULATIONS 2009 - COAL MINE FUGITIVE GAS EMISSIONS**

#### **Background on Pike River Coal**

Pike River Coal Limited produces premium hard coking coal for export to Japan, India and other offshore markets from a new \$250 million underground coal mine in the Paparoa Range on the West Coast, South Island.

Later this year when at full production, Pike River Coal will sell coal with a current sales value of approximately NZ\$200 million<sup>1</sup> p.a. for more than 18 years.

The international coal mining industry is extremely competitive and hard coking coal sales prices, which are set annually, are highly volatile.

Pike River Coal produces a low ash coal which is vastly more efficient in the coke making process than lesser quality 'semi-hard' coking coals and therefore produces significantly less carbon emissions than many competing coals.

Pike River Coal has 8,000 shareholders, mostly New Zealanders, and is an NZX50 company.

#### **Fugitive Gas Emissions - Methane Gas**

Pike River Coal has previously submitted (19 December 2008) that fugitive gas emissions (methane gas liberated from the coal seam when mined or from coal whilst stockpiled and transported in New Zealand) should be excluded entirely from the New Zealand Emissions Trading Scheme.

This exclusion was sought as no other country in the world currently imposes a cost (ie tax) on fugitive gas emissions from coal mining in their carbon emission schemes (although Australia is considering inclusion). Pike River Coal cannot pass such a cost on to consumers as all coal is exported.

Taxing fugitive gas emissions would penalize the New Zealand exporter compared to its competitors, potentially reduce New Zealand coal exports and discourage use of New

---

<sup>1</sup> At current sales price of US\$128 per tonne and exchange rate NZD:USD 0.63

Zealand's more carbon emission friendly coals - New Zealand export coking coal has a much lower ash content than its competitors. It would discourage further investment in New Zealand mining and result in increased coal production in countries with lower environmental and mining standards.

Further, it is not possible to accurately measure fugitive gas emissions, which is particularly difficult for opencut mines. It is not equitable to impose a carbon charge (a tax) if the actual emissions cannot be accurately measured. In Pike River's case, imposing the currently proposed default factors would result in a carbon cost (tax) four times higher than expected actual emissions.

## **Issue – Draft Climate Change (Stationary Energy and Industrial Processes) Regulations 2008**

**We believe that it would be a serious mistake for fugitive gas emissions from coal mines to be kept in the Emission Trading Scheme following the current review.**

The coking coal mining sector has in our view, been erroneously included in the Stationary Energy sector, the Regulations for which are designed primarily for New Zealand electricity generators.

**However, if fugitive emissions were to be included then an amendment to the draft Climate Change (Stationary Energy and Industrial Processes) Regulations 2008 must be made so that coal producers have the ability, if they elect, to measure actual emissions or apply for a unique emission factor rather than being taxed on the basis of erroneous IPCC guidelines.**

The draft Regulations currently propose to use IPCC 1996<sup>2</sup> guidelines rather than allowing a unique emission factor for a specific mine or measurement of actual emissions from the mine.

The Ministry for the Environment (MfE) is now proposing to use the highest factor within the range suggested by the IPCC without reasonable evidence for doing so or even for using IPCC factors.

We understand that the basis for MfE using these factors is the “Revised New Zealand Energy Greenhouse Gas Emissions 1990 – 2005” ie the National Greenhouse Inventory report. This outdated Ministry of Economic Development report was based on limited industry input – for example Pike River Coal was not included.

**Pike River Coal is a relatively low methane gas mine, with a gas content of less than one quarter of the top end of the range in the IPCC 1996 guidelines.**

This is because the Pike River Coal seam is exposed for approximately 6 kilometres along the Western Escarpment and methane has drained through the coal seam to the atmosphere for millennia thereby significantly reducing in-situ content.

Pike River Coal fugitive emissions have been estimated by CRL Energy Limited to be 0.08 tonnes CO<sub>2e</sub> per tonne of coal. This compares to the IPCC 1996 factor used in the draft Regulations of 0.385 tonnes CO<sub>2e</sub> per tonne of coal.

At a conservatively estimated carbon cost (New Zealand Unit price) of \$25 per tonne, the fugitive gas emission cost for Pike River Coal is estimated to be \$9.4 million per year or \$169 million over the mine life.

---

<sup>2</sup> IPCC is the Intergovernmental Panel on Climate Change

This cost (tax) would be \$7.4 million per year or \$134 million over the 18 year mine life more than the cost based on currently estimated actual emissions.

If the carbon cost was to be \$50 per tonne, the costs above would double. Such a cost would be unsustainable.

The consequences of the draft Regulations could surely not have been intended. There is no requirement for New Zealand to base the default factors for gas emissions on those used by MfE for the National Greenhouse Inventory. The methods (the 1996 IPCC methods) used for the national inventory are dated<sup>3</sup> and deliver a manifestly incorrect and unjust result for Pike River Coal. Even the IPCC Guidelines state that there is a very high level of uncertainty in using the default figures, and region specific estimates or direct measurement is highly preferred.

## Alternative Approach

The preferred solution is to remove fugitive gas emissions from coal mining from the ETS altogether.

If this action is not taken, then we believe that coal producers must be given the option to apply for a unique emission factor for the coal mine or measure and report actual emissions of gas.

The technical guidelines for the Australian National Greenhouse and Energy Reporting Systems (NGERS) include a methodology for the direct measurement of fugitive coal mine emissions through the monitoring of gas flow and gas composition from the exhaust points of the mine ventilation systems.

Pike River Coal submits that the best information should be used where relevant; a principle that is supported by the IPCC Guidelines. So while the IPCC 2006 Guidance provides generic global default factors (and these should be used in preference to the IPCC 1996 guidelines), where information is available that more closely reflects specific operations and geographies, that information should be used if elected by the coal producer.

Pike River Coal is open to working with MfE and others in the coal industry to develop a robust approach to deriving unique emissions factors directly relevant to New Zealand and New Zealand underground mines. This will need to consider the development of a cost effective monitoring methodology and a consistent approach to modelling emissions based on data that can be collected cost effectively, where applicable.

Yours sincerely



Gordon Ward

**Chief Executive and Managing Director**

---

<sup>3</sup> We understand the choice to use the highest value offered by the IPCC in 1996 was derived from a study based on a very small sample of old coal mines.

