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20 December 2013

The Coordinator-General  
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### **Submission from North Queensland Conservation Council in relation to Carmichael Coal Mine and Rail Project Supplementary Environmental Impact Statement**

In accordance with the Coordinator-General's invitation to comment on 'whether [or not] the additional information adequately responds to the issues raised regarding the EIS', North Queensland Conservation Council (NQCC) makes the following comments.

#### **1. Economic Analysis**

The revised economic analysis continues to rely on a modeling technique (I-O) that has been thoroughly impugned by reputable economic analysts as well as by the Federal and Queensland governments.

The argument made by the proponent that (I-O) **assesses** impact whereas CBA (cost/benefit analysis) **evaluates** impact (made in Appendix A, emphases added) is spurious. Quite apart from the fact that the two words are synonymous, both techniques address the impact of a proposal – the former inaccurately and the latter (potentially) more accurately.

CBA enables the positive and negative impacts of a proposal to be identified and quantified. It too would have addressed the ToR – indeed addressed them better and more usefully than the widely disparaged I-O technique used.

The proponent notes that cost benefit analysis:

- Is data intensive
- requires forecast of revenues and benefits, and
- is generally done before the proponents of a project decide to proceed or not to proceed [emphasis added].

None of these points are reasons for not undertaking a CBA. Using them as such suggests that:

- the proponent is unwilling to do the work necessary to provide a useful analysis
- the proponent will be accessing (*or surely, by now, has accessed*) better data for its own purposes than it has provided to the CG and the public.

The proponent has not provided any plausible or satisfactory reason for using a technique that is no longer accepted as a legitimate tool for impact assessment. Nevertheless, the same technique is used in the SEIS.

***In this regard the SEIS has failed to adequately address comments on the EIS.***

## **2. Changes to the Proposal**

Since the SEIS was prepared, Adani has announced a massive reduction in its plans for Carmichael mine. This must have a huge impact on its economic analysis, which, therefore, needs to be redone.

The change in plans would also have a major impact on the Cumulative Impact Assessment – a faulty (see below) assessment that, nevertheless, assesses the economic impact of the mine/rail project to be high. However, the EIS CIA did not include negative economic impacts; nor does the SEIS. This does not accord with the definition of CIA – see below – and distorts the findings.

***The SEIS does not address comments made relating to the EIS with respect to the inadequacy of the economic analysis – and both the EIS and SEIS economic and cumulative impact analysis have been rendered worthless in the light of the major changes to the proposal.***

## **3. Cumulative Impact Assessment**

Throughout the EIS and the SEIS the proponent demonstrates either a failure to fully comprehend the nature of cumulative Impact assessment or an unwillingness to undertake one in a professionally rigorous manner.

Of relevance are the definitions of CIAs provided in *Cumulative Impacts - A Good Practice Guide For The Australian Coal Mining Industry* published by the Centre for Social Responsibility in Mining & Centre for Water in the Minerals Industry, Sustainable Minerals Institute, The University of Queensland:

“Cumulative impacts are the successive, incremental and combined impacts of one, or more, activities on society, the economy and the environment. Cumulative impacts result from the aggregation and interaction of impacts on a receptor and may be the product of past, present or future activities. Cumulative impacts can be both positive and negative and can vary in intensity as well as spatial and temporal extent. Cumulative impacts may interact such that they trigger or are associated with other impacts. They may aggregate linearly, exponentially or reach ‘tipping points’ after which major changes in environmental, social and economic systems may follow.” <sup>1</sup>

“Cumulative impacts are most often raised in the context of multiple mining operations in established mining provinces such as the Bowen Basin and Hunter Valley. However, cumulative impacts may also arise through the interaction of mining with other activities and industries, such as grazing and broad scale agriculture, and thus may arise in emerging and prospective mining regions such as the Surat, Gunnedah and Galilee Basins. In the case of coal, the heightened prominence of climate change, a cumulative impact writ large, adds a further layer of complexity.” <sup>2</sup>

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<sup>1</sup> Franks, DM, Brereton, D, Moran, CJ, Sarker, T and T, Cohen. 2010. CUMULATIVE IMPACTS - A GOOD PRACTICE GUIDE FOR THE

<sup>2</sup> *Ibid.* p.1

### *3.1 Exclusion of dredging and port activities*

To exclude from the CIA the dredging and port activities is untenable. The proponent's determination that they 'outside the scope of the EIS' is, patently, not in line with the definition of CIA provided by the Centre for Social Responsibility in Mining & Centre for Water in the Minerals Industry, or indeed with any sound definition of CIA. The mines and the rail would be useless without the dredging and port activities and thus are highly relevant to any cumulative impact assessment of the mine and rail.

Ironically, the S/EIS sees Terminal T0 and Dudgeon Point Port expansion as relevant, but not the dredging and dumping that is essential for either of them to occur.

The exclusion of these impacts suggest either failure to understanding the concept of CIAs or a willful intention to exclude relevant damaging impacts.

***The SEIS fails to address comments on the EIS in this regard.***

### *3.2 The CIA methodology*

Even if the CIA addresses only the select aspects of the ToR, the methodology used was (and remains in the SEIS) inadequate. This inadequacy (described in NQCC's comments on the SEIS) has not been addressed. In the SEIS the proponent appears to be blaming this fact on their consultants, GHD. The ToR requires the methodology to be described. While this has been done, the methodology is not such that would deliver a useful CIA.

To simply state that 'we described the methodology as we were required to do under the ToR', while refusing to acknowledge the inadequacy of the methodology demonstrates the lax attitude toward professionalism and rigour apparent throughout this SEIS.

The CIA in the SEIS remains a black box, with no attempt to explain how conclusions have been reached.

***The SEIS has not addressed the comments made by NQCC in relation to the EIS on this aspect of CIA.***

### *3.3 Inclusion and exclusion of impacts*

The SEIS has varied the EIS in the matter of CIA to the extent that it has added the North Galilee Basin rail between Mistake Creek and Bowen. However, the reason for this inclusion is that it offers "the opportunity for co-location of infrastructure and, therefore, potential reduction of cumulative impacts." No reference is made to negative impacts associated with the construction and use of the additional railway– and CIAs require both positive and negative impacts to be assessed (see above).

Similarly, the explanation that a number of similar projects have been proposed but, as 'they will not provide any supporting infrastructure to the Project...., they have been excluded from the cumulative impact assessment', is unacceptable. As noted by Franks, Brereton et al., 'cumulative impacts may also arise 'through the interaction of mining with other activities and industries, such as grazing and broad scale agriculture.' CIAs go far beyond what contributes to the Project. These aspects not been taken into account in the SEIS, despite relevant comment on the EIS.

There is no explanation for the decrease in the impact on water resources, nor for the exclusion of koalas from the analysis.

***The SEIS has not addressed the comments made by NQCC in relation to the EIS on this aspect of CIA.***

#### *3.4 Failure to address cumulative impacts on threatened ecological communities*

The SEIS notes, "... a combined cumulative impact data [sic] is not presented due to different methodologies and hence resultant quantitative findings presented by each Project". Despite this, the SEIS purports to deliver a CIA for the Project.

***The SEIS has not addressed the comments made by NQCC in relation to the EIS on this aspect of CIA.***

#### *3.5 Failure to address cumulative impacts on listed migratory fauna*

The SEIS states '... a potential significant cumulative impact on migratory species cannot be ruled out without further information on the impacts of each proposed project to determine whether or not there is likely to be a cumulative impact'.

This dodging of the issue means that the SEIS has failed to address the comments made in relation to the EIS, and has failed to allow delivery of a CIA.

#### *3.6 Misunderstanding/misrepresentation of habitat area*

The comments in Table 41 in relation to the percentage of bioregion impacted are misleading. Habitat for species is often very specific; it will not be found uniformly across a bioregion. Therefore, use of these percentages are spurious.

#### *3.7 Reliance on universal mitigation to dismiss cumulative impacts*

The comment in the SEIS, 'Each proponent is expected to implement standard control measures to minimise [specific] potential impacts and thus no significant cumulative impact on aquatic systems, and therefore [on] dependent species, the GBRMPA and National Heritage Places are predicted', is a refutation of the very nature of CIAs, which exists in order to address the fact that the sum can often be greater than the mere addition of the parts. By assuming that a number of 'minimised' impacts when considered together will necessarily result in no significant cumulative impact suggests that the applicant is ignorant of the nature of CIAs.

***The SEIS has not addressed the comments made by NQCC in relation to the EIS on this aspect of CIA.***

The SEIS assessment of cumulative impact remains a black box, with conclusions drawn from thin air. For example, there is no explanation of why the cumulative impacts relating to surface water or groundwater have been downgraded from 'medium' to 'low' risk between the EIS and the SEIS. The CIA presented is an abysmal attempt to hide the real impacts of this project, is without professional rigour and is totally unacceptable.

NQCC concurs with the following statements made by others:

- Based on the groundwater inflow figures provided in the water balance report, 297 billion litres of water will be removed from the ground over the life of the mine and some of this will come from Great Artesian Basin Aquifers. The drawdown of aquifers in the surrounding area will have a continuing impact on surrounding cattle stations for generations after the mining has stopped and this constitutes an unacceptable impact on the water resource.
- The mine will have a profound impact on the Carmichael and Belyando rivers. The loss of groundwater inflow to the Carmichael river will increase the periods where the river does not flow, killing riparian woodlands and the animals and plants that rely on them. The mine will discharge thousands of millions of litres of mine-affected water into the Carmichael river every year.
- The mine proposes to clear habitat “critical to the survival” of two nationally threatened species and two nationally endangered ecological communities. By any reasonable measure, this is an unacceptable impact, and the mine should be refused.
- The company has not done enough work to adequately assess the impact of this mine on the precious Doongmabulla springs, which harbour endemic and threatened species, and are vulnerable to drawdown of groundwater.
- The company is proposing to clear over 9000ha of habitat that is critical to the survival of the endangered Black-throated finch (southern). This constitutes an unacceptable impact on this subspecies. There is no certainty that rehabilitated land declared as offsets will attract or maintain a population of Black-throated finch (southern).
- The company has failed to undertake adequate surveys for most threatened species, and has made fundamental errors that call the quality of the SEIS into serious question: for example, the company estimates the current extent of the Brigalow endangered ecological community to be around 75 million hectares – ten times the estimated original extent of the community, which has declined by 90% since European settlement.

I ask that these comments on behalf of NQCC be taken into account.



Wendy Tubman