



# Mackay Conservation Group

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The Senate  
Environment and Communications References Committee  
Parliament House  
Canberra  
By email: [ec.sen@aph.gov.au](mailto:ec.sen@aph.gov.au)

Thank you for the opportunity to make a submission on this important matter of public importance. Mackay Conservation Group is the lead environmental organisation in Central Queensland. We have been working on issues related to the environmental impact of mining since the 1980s. In that time we have made various submissions on mine proposals, undertaken legal action to prevent environmental harm from mining and more recently engaged in a public campaign around the growing problem of regulatory failure regarding mine rehabilitation.

This submission has been prepared by Peter McCallum, Mackay Conservation Group coordinator on behalf of the group.

Regards

Peter McCallum  
Coordinator

### **Financial Assurance**

Mackay Conservation Group (MCG) is concerned that the rehabilitation of mine sites in Central Queensland, in particular the large open cut mines in the Bowen Basin is not proceeding fast enough and in some cases may never occur. In correspondence to MCG the Queensland Environment Minister recently outlined the total calculated cost of rehabilitation for all mining in Queensland to be \$8.18 billion. The Qld Government holds financial assurances (FA) of \$7.06 billion, the difference is due to discounting.

The Queensland Government's policy of providing up to 30 per cent discount on financial assurance will inevitably lead to a shortfall in funding for mining rehabilitation when a mining company fails and no buyer can be found for the mine site. At that point the government must step in and undertake the site rehabilitation using the money it obtains from the FA. If the government has not collected the full FA then rehabilitation may never be completed and important environmental remediation measures may never be undertaken.

Last year the Qld Department of Environment and Heritage Protection's (EHP) high level Compliance Steering Committee commissioned an enquiry by the Business Centre Coal into the adequacy of the FA system in the coal mining sector. It produced the *Report of the Targeted Compliance Program: Financial Assurance for Queensland Coal Mines (TCP 15-009)*. The report found that \$4.54 billion is held in FA in the coal sector. By examining the FA held at 15 sites across Queensland the TCP report found a shortfall that if extrapolated to all coal mines in Queensland would total \$3.2 billion.

In Queensland 220,000 hectares have been disturbed by coal mining. However only about 500 hectares have been rehabilitated to the point that the mining companies can relinquish them. EHP has produced a calculator that mining companies can use to determine the level of FA that would apply to a project. Using the base level of \$108,000 per hectare for rehabilitation, the total cost of rehabilitating coal mines in Queensland would total close to \$24 billion. We can see from the figures that have been provided variously by EHP there is a wide discrepancy in the cost of repairing land affected by mining to protect the national estate.

The failure to undertake full and proper remediation could lead to impacts on environments that are a Commonwealth responsibility. An example of this is the former Mount Morgan gold mine, where the mining company failed and inadequate funds are available for the site to be fully rehabilitated. The site leaches toxic and acidic material into the Dee River and the water is not suitable for swimming, fishing or drinking 55km downstream from the mine. This water eventually makes its way to the Great Barrier Reef World Heritage Area by way of the Fitzroy River. While the Mount Morgan mine is no the most significant source of contamination in the Fitzroy Basin, it is an additional burden on a degraded system.

### **Adequacy of Control**

We know that the most effective method of rehabilitating open cut coal mines is to do it progressively. This enables the operator to learn what works and what doesn't at the site. Progressive rehabilitation is also much less costly. However mining companies avoid progressive rehabilitation because it involves an item that appears as a current cost to the company but is not listed as a future liability.

In Queensland Environmental Authorities (EAs), which are licences to undertake activities that could potentially impact on the environment such as mining, there are often provisions that dictate that rehabilitation should be conducted within a set period after areas of mine sites become available. The problem with this provision is that the term "available" is not defined and it is up to the mining company to determine when rehabilitation should commence. Obviously there is an ambition on the

part of the government to see mines rehabilitated progressively but the proportion of disturbed land that has had any rehabilitation undertaken on it has declined over the past decade.

On a visit to Glencore's Rolleston coal mine last year we observed progressive mine rehabilitation in action. Glencore provides incentives to its staff to ensure that rehabilitation is conducted at the site in the form of a bonus for planning, undertaking and certification of rehabilitation. As far as we know, Glencore is the only company that provides this form of financial incentive to undertake rehabilitation. The company representatives on the site inspection estimated the cost of rehabilitation at the site to be as low as about \$15,000 per hectare because the company can take advantage of equipment downtime in the mining operations to undertake rehabilitation activities. Of course this is a cost to the company in the short term but it is a more effective and efficient process in the long term.

### **Adequacy of Financial Tools**

The Queensland Government believes that mine rehabilitation is in part driven by the existence of the FA system. However, Mackay Conservation Group does not believe that FA is not an effective tool to drive rehabilitation, especially for large mining companies. Although rehabilitation bonds may be large, mining companies are not required to lodge them in cash. Instead they provide a guarantee from an authorised deposit taking institution such as a bank. The annual cost of these bank guarantees for large mining companies with strong balance sheets and high quality assets, is a fraction of one percent of the total cost of the FA. In the case of smaller mining companies, a bank guarantee may cost up to five per cent annually of the total FA cost. The low cost of obtaining a guarantee means that it is cheaper to avoid spending on rehabilitation than to undertake it.

Following the Global Financial Crisis the bankers have become more cautious about the issuing of guarantees for FAs. In effect a guarantee is now considered similar to a loan when assessing future borrowings so can affect the ability of mining companies to borrow funds. However there are companies that are not bound by these restrictions. BHP has its own insurance company that provides it with guarantees for FA. In effect a self guarantee which provides no guarantee at all to the government because the failure of one entity would naturally lead to the failure of the other.

### **Abandoned Mines**

Across Queensland there are in excess of 15,000 abandoned mines. Mine abandonment occurs when a mining company goes into liquidation and no person or entity can be found to undertake remediation of the mine site. If the Queensland Government cannot find a buyer for the mine site willing to take on responsibility for rehabilitating the site, the mine is entered on to the list of abandoned mine sites. The Queensland Government has provided \$6 million per year to administer the abandoned mines program. Last year the government provided an additional \$2 million per annum for five years. Most of that money goes to managing a number of large sites including Mount Morgan near Rockhampton, Horn Island in the Torres Strait and the subsidence of former coal mines in the suburb of Collingwood Park near Ipswich.

The Abandoned Mines unit is concerned with the protection of human health but not environmental protection unless there is a human health element. In the case of Mount Morgan for example, the very low pH water that exists within the site poses a threat to people swimming in or drinking from the Dee River. The abandoned mines unit works to ensure that the pH is lowered and the volume of water in the mine pit is reduced in order to ameliorate the impacts.

Mine abandonment continues to occur in Queensland. Recently the failure of Linc Energy has led to its underground coal gasification operation becoming abandoned. This issue results from a failure to

calculate FA correctly to ensure sufficient funds exist to enable the full remediation of the former mine site.

### **Failure to undertake rehabilitation**

BHP Billiton is the world's largest mining company. In a joint venture with Mitsubishi through the Billiton Mitsubishi Alliance (BMA) it owns several mine sites in the Bowen Basin. In 2012 BMA closed the Norwich Park coking coal mine and put it into "care and maintenance". The coal at Norwich Park is lower quality than coal from other mines BMA owns in the Bowen Basin. Most of the coal from the mine had to be mixed with coal from other mines to bring it up to a marketable quality. The coal at the site is also deeper than elsewhere requiring the removal of large quantities of overburden. In the early 2000s BMA was planning to close the mine within ten years but continued operations until 2012 at which time the company announced that the mine was no longer economically viable.

From 2012 to 2016 the cost of production of coal at mine sites in Queensland declined as mining companies focussed on cost reductions. In 2016 the price of coking coal increased to exceed \$300 per tonne. Despite the high price for coal and lower production costs, BMA did not make any move to reopen the mine and it appears that BMA has no intention of reopening Norwich Park mine. One of the conditions of the Norwich Park EA is to commence rehabilitation in areas that are available within two years. No rehabilitation has been commenced. In fact, during 2016 BMA planned to undertake no rehabilitation on any of its mine sites.

### **Economic Impacts**

By failing to rehabilitate mine sites, especially at sites that have reached the end of their life, mining companies such as BHP are avoiding their responsibility to ensure the environment is not harmed. They are also denying jobs to workers in the sector. Taking at face value EHP's cost of \$108,000 per hectare for rehabilitation there are over 6,000 jobs that could be created in mine rehabilitation in coal mines in Queensland. As previously stated in this submission, the total cost of mine rehabilitation in Queensland coal mines is close to \$24 billion. If 40% of that is wages paid at \$150,000 per annum then over 6,000 jobs could be created for ten years. This is a significant issue that needs to be considered.

As stated previously, there is an economic incentive to undertake progressive rehabilitation, but only if the company takes a whole of life view of the cost of the mining project. If there are incentives to avoid rehabilitation then the overall economic efficiency of the mine will decline. This is an issue that the Productivity Commission should investigate so that a thorough economic understanding of the costs of avoiding mine rehabilitation can be understood.