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Director, Mining and Industry Projects Major Projects Assessment Department of Planning GPO Box 39 Sydney NSW 2001

13 May 2014

Dear Sir/Madam,

#### Objections to Proposal MP 10\_0046 MOD 2

The Nature Conservation Council of NSW (NCC) is the peak environment body for New South Wales, representing over 120 environmental organisations across the state. We have long-standing experience in state environmental assessment and planning and are extremely concerned with the proposed modifications to Wollongong Coal's mine in the Wollongong Local Government Area (LGA).

Sydney has an extraordinary high quality water supply due to the near pristine swamps and streams that supply its dams in the Metropolitan Special Area catchments. However Sydney's Water catchment areas are facing considerable long-term environmental impacts from long wall mining. These swamps are so often destroyed by longwall coal mining that scientists have described such mining as a 'key threatening process'.

This project poses unacceptable impacts to the community, Sydney's Water supply and the environment due to the excessive additional mine subsidence and associated cracking of the surface sandstone strata. It is irresponsible to consider developing this project and we urge the Planning Assessment Commission to refuse this protect.

In this submission NCC wishes to address a number of issues relating to impacts on the community, damage to Sydney Water catchment special areas, upland swamps, loss of surface and groundwater and damage to the environment.

NCC objects to the proposal on the following grounds:

# Damage to Sydney Water Catchment Special Area and upland swamps

The proposed longwall is in the Metropolitan Special Area catchment and is located beneath two Upland Swamps of Special Significance. The first of these (CRUS 1) flows directly into Cataract Reservoir and the second (CCUS4) drains into Cataract Creek and then on into Cataract Reservoir. The predicted strain values for swamp CCUS4 are 6.7mm/m tensile and 13.4 mm/m compressive; and for swamp CCUS 1 are 9.2mm/m tensile and 18.5 mm/m compressive, both with 1.4m subsidence. Sandstone rock fracturing below these swamps will greatly increase groundwater permeability. These two swamps of special significance will dry out due to the lowered groundwater levels. The peat soils that support these swamps will then decompose.

These watercourses and swamps will be undermined and are an integral part of the Sydney Water Catchment system that supplies Cataract Reservoir. If approved the expansion of Wollongong Coal's (WC's) longwall mine will cause unacceptable risks to these Upland Swamp environments due to damage from mine subsidence which can lead to serious swamp erosion and sometimes swamp collapse (Muir, 2014).

Pells (2011) provides strong evidence that the drying of Thirlmere Lakes in the Greater Blue Mountains World Heritage Area has been the result of longwall underground mining. These findings suggest that longwall coal mining can severely affect groundwater and upland swamp ecosystems in the Sydney Water Catchment area, even when not directly above the area mined and well outside the subsidence area.

Longwall coal mining damages the surface and cracks water courses and swamps, causing water contamination and water loss (Young A 1982). These swamps and creeks in the Sydney Water Catchment Special Areas need to be protected from longwall coal mining so as to secure Sydney's water source.

## Loss of surface and groundwater

This development is expected to increase groundwater inflows to the mine from an average of 1.1 million litres a day to around 1.6 million litres a day (Hardaker et al. 2014). The four coal mines operating in the Sydney Water Catchment Special Area currently drain 3 billion litres a year (or 1,200 Olympic sized swimming pools) from the Special Areas. The Sydney Water Catchment Area supplies drinking water for 4.6 million residents of Greater Sydney area.

The proposal involves longwall mining a third seam of coal beneath two previously mined seams. Single seam subsidence impacts are difficult to predict; the uncertainty is compounded by triple seam mining and this poses unacceptable risks to the water catchment area. Application of the precautionary principle should be the basis of assessment and rejection of this proposal.

## Water threats

The project could cause serious and permanent damage to local aquifers, surface water environments and water supplies. The key issues facing groundwater and surface waters from this development are drawdown and aquifer depressurisation, creek flow losses, water quality impacts and salinity. These impacts will have an effect on catchment water resources threatening water quality and availability in the region, which poses inherent risk to the land, biota and community.

## Piecemeal planning process

Although WC claims the incremental environmental impacts of Mod 2 over and above impacts from existing operations are likely to be minimal, little evidence is provided to justify this claim. The cumulative impacts to the Special Areas of this mining along with past and proposed future workings in the Wonga East area must be considered. A piecemeal approach driven by the financial imperative of one under-resourced foreign-owned mining company, is not only bad planning, it is negligent.

An application for mining longwall 6 is already under consideration by DoPI as part of the proposed Underground Expansion Project (MP 09\_0013). It is clear that this proposal cannot sensibly be regarded as simply a modification to the Preliminary Works project. WC/GNRE is again attempting to incrementally establish its expansion project. Moreover, recent ICAC findings have exposed extensive corruption in the planning process, in particular in regard to water and coal mining. To stem further erosion of public confidence in the major project planning process, DoPI should refuse this application and complete assessment of the proposed Underground Expansion Project in a systematic and transparent manner.

The application makes the misleading claim that this development is necessary so that WC can continue to mine. In fact, WC has an existing approval to mine the V panel. It is both inappropriate and irresponsible to take up the valuable time of government agencies and community members once again to consider an application aimed at solving the immediate cash flow problems of this company.

## Air quality and community health impacts

WC's proposed mine modification is located close to the densely populated communities of Russell Vale, Corrimal and Bellambi with houses and schools bordering the site and just 250m from the huge coal stockpiles putting the health of these residents at risk. The development of the mine and extraction and transportation of the coal will cause the release of particulate mater (PM 10 and PM 2.5). Particulate pollution will increase morbidity and mortality; short-term exposure to particulate matter pollution can lead to diminished lung function, damage and inflammation of lung

tissue, increased mortality rates in children and young adults, aggravation of asthma symptoms, heightened risk of cardiac arrhythmias, heart attacks and other cardiovascular issues (Whelan 2013). Coal dust will also impact the health of residents along the trucking route to Port Kembla Coal Terminal. This project should be refused based on the health risks associated with air pollution from mining, stockpiling and transporting coal.

# Unsuitability of the proponent

WC has been responsible for multiple compliance failures and has demonstrated that it is unable to self-regulate. The Russell Vale Colliery contains antiquated infrastructure and WC has failed to fulfil requirements of previous development approvals to upgrade the facilities on the site to modern standards. These failures include: construction of a sound wall and coal loading facility and the realignment of Bellambi Creek to prevent flooding of residents downstream in the event of a major flood event. The company has also failed to pay carbon tax and mining royalties. It even failed to pay its own workers for several months in 2013.

Although WC has a different name and a different major shareholder and director, the corporation is in essence the same as GNRE, with the same staff and the same financial problems. WC should receive no special treatment for its financial woes as the new investors' due diligence would have informed them of the company's financial and planning situation.

## Conclusion

This proposal has the potential to create long-term damage to Sydney's drinking water catchment, and the health of the surrounding region. The expansion of WC's mine would add to the environmental impacts from the cumulative effects of the rapidly growing coal industry in NSW. The project goes against the principles of Ecologically Sustainable Development as it would degrade the ecological character of Wollongong LGA. The NSW government needs to manage and protect our states environmental assets so that they can continue to provide valuable environmental services to the state. Upland Swamps provide valuable environmental services and linkages between environmental processes. If these environments are harmed from longwall mining then there will be long-term environmental damage to Sydney's water supply.

The NCC is not satisfied that the impacts of mining activities could be managed and mitigated by WC to an acceptable degree. Due to threats to Sydney's water supply and public health, we urge the planning assessment commission to reject this proposal.

Yours sincerely,

Katherine Smolski

**Campaigns Director** 

#### References:

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