



Hunter Community Environment Centre  
167 Parry Street, Hamilton East, 2303

Mining and Major Industry Projects  
Dept of Planning and Infrastructure  
GPO Box 39  
Sydney 2001

Please accept this submission to the Moolarben Coal Complex Stage 2 \_ Preferred Project  
Report: Project No: 08\_0135

Sincerely,

Ben Latta, Nicola Bowskill and Annika Dean  
Hunter Community Environment Centre

<b>INTRODUCTION .....</b>	<b>4</b>
<b>AIR QUALITY .....</b>	<b>5</b>
<b>BIODIVERSITY AND ENDANGERED ECOLOGICAL COMMUNITIES.....</b>	<b>6</b>
<b>UNSUSTAINABLE WATER MANAGEMENT AND DAMAGE TO RIVER SYSTEMS .....</b>	<b>7</b>
<b>SOCIAL IMPACTS.....</b>	<b>8</b>
<b>CLIMATE CHANGE .....</b>	<b>8</b>
<b>CONCLUSION .....</b>	<b>9</b>
<b>REFERENCES .....</b>	<b>10</b>

**Figure 1: Corner Gorge Goulburn River**



## Introduction

The Hunter Community Environment Centre Inc. believes this project should not be approved due to the high levels of unavoidable and irreversible damage it will inflict on communities and the environment. Both the Environmental Assessment presented on behalf of Moolarben Coal and professional independent monitoring and research show that this project would cause a range of negative impacts on the ecological systems of the area, physical and social health of communities, other industries (specifically agriculture) and air and water quality. Furthermore, this project threatens the visually dramatic and culturally significant Drip and Corner Gorges (see figure 1 above for a photo of Corner Gorge). The negative impacts of this project would continue long after the life span of the mine, in most cases being irreversible.

Due to existing coal-mining operations in the area such as the Ulan, Wilpinjong and Moolarben Stage 1 mega mines, ecological systems, communities, water sources and air quality have already been heavily impacted. The cumulative impacts of the surrounding mines should be considered in the Environmental Assessment. There is no regulation that can ensure against huge losses, including human life, due to ongoing coal mining operations in the Ulan region. Current monitoring and impact avoidance undertaken by coal mining companies, including that for Moolarben stage 1 operations, have failed to prevent direct negative environmental impacts. It would be irresponsible for the Department of Planning and Infrastructure to allow this massive expansion to go ahead when there is uncertainty about whether communities and the natural environment can recover from the current extent of operations and the damage they continue to cause.

The following sections of this submission present some of the negative impacts the Moolarben Coal Complex Stage 2 such as impacts on air quality, biodiversity and water.

## Air Quality

Stage 2 of the Moolarben Project would exacerbate the high levels of air pollution that communities in the region already suffer. It is doubtful that management strategies to avoid or minimise coal dust would bring coal dust pollution within acceptable levels, given that levels of coal dust in the area are already unacceptable due to existing mining operations. In this sense, Stage 2 of the Moolarben Project is in contravention to the Declaration of Human Rights, insofar as it prevents fulfillment of “the right of everyone to the enjoyment of the highest attainable standard of physical and mental health” (Article 12, International Covenant on Economic, Social and Cultural Rights).

Medical research shows that fine dust particles released in the process of coal mining penetrate deeply into the lung where they have the potential to directly cross into the blood stream, thereby not only affecting our lungs but also our cardiac and nervous systems (Castleden et al. 2011; Lockwood et al. 2009).

The Environmental Assessment of the project states that Moolarben Coal would “acquire properties that experience dust levels in excess of criteria following implementation of dust control measures, where this impact is shown to be the result of the mine” (Wells Environmental Services n.d. p. 14). Displacement and loss of sense of place directly threatens the rights and livelihoods of the nearby communities, and is a pertinent example of the negative social impacts of the project. Furthermore, the proponents of the project cannot ensure that they will be able to acquire the land titles that they refer to, as this is actually not up to them, but rather the current owners of the land. Thus, there is no guarantee that the proposed management strategy for coal dust will be achievable or effective. Furthermore, the air quality impact assessment predicts “85% reduction in estimated dust emissions on trafficked areas” (Wells Environmental Services, n.d. p. 15) as a basis for its air quality modeling. This is inaccurate and misleading. The chemical dust suppressants that the proponents speculate they would use have no proven success-record. Therefore, the entire air quality impact assessment is based on hopeful assumptions, rather than actual data. The misleading information contained in the Environmental Assessment compromises the entire document.

## Biodiversity and Endangered Ecological Communities

The project will also have numerous impacts on the unique ecology of the area. It involves the clearing of over 900 ha of native forest (123ha EEC Box Woodland). In total, the project has a disturbance footprint of 1546 ha of native vegetation, including 4.1 km of Murragamba Creek and 4.1 km of Eastern Creek.

Clearing of the critically endangered White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland Ecological Community is unacceptable.

According to advice given to the Minister for the Environment and Heritage from the Threatened Species Scientific Committee (TSSC) in 2006, this ecological community has been heavily cleared, with the remnants highly fragmented. The TSSC stated that in NSW alone, 93% of this ecological community has been lost. Clearly this ecological community is under extreme stress and cannot tolerate any further loss.

The project's Environmental Assessment states that the endangered ecological community will not be adversely affected, as impacts will be offset through biodiversity offsets and the rehabilitation and re-vegetation of the site. However, the proposed 'biodiversity offsets' are located outside the Hunter Valley catchment area and do not represent 'like for like' nor replace the net loss to the region. The Environmental Assessment fails to provide adequate justification for the loss of an endangered ecological community that is in critical need of conservation. Due to the nature of the disturbance of open cut mining, it is almost impossible to restore the soil profile and water to pre-mining quality. The impact management strategy is unrealistic and over-confident. Even with world's best practice, rehabilitation and re-vegetation works could not recreate the original ecological community with its specific dynamics. Instead, a substitute system would be created, which would be unable to provide the diversity of habitat and species mix that currently exists, failing to achieve what the Environmental Assessment proposes.

## Unsustainable water management and damage to river systems

The project would require approximately 10.55 mega liters of water per day (roughly 3850 ML/annum). Water for coal washing would be sourced from the Ulan Coal Mine surplus groundwater before additional extraction from the Northern Borefield (adjacent to the Goulburn River). There is low levels of confidence that the groundwater modeling assessment accurately depict water impacts, as there is significant discrepancies between the groundwater assessments conducted for Moolarben and the nearby Ulan Mine.

The negative affects would occur not only locally but also throughout the entire catchment area. Polluted water would also impact downstream industries, especially agriculture, which relies on clean water for irrigation. There has been no consultation with industries and community of the upper and mid Hunter who would be subjected to water pollution and suffer loss to economic viability as a result of the project.

The impacts of the project on water are some of the most concerning. The project would have permanent damage (at least 100 years) to the Goulburn River and it's connected groundwater system. The permanent damage to the Goulburn river and its connected ground water system, extensive diversion of creeks and loss of creek habitat would mean the loss of a natural water system millions of years in the making. Furthermore, the aforementioned culturally significant and visually striking Drip and Corner Gorges have not been included in the offset package of the mine. The Drip and Corner Gorges should be incorporated into the Goulburn River National Park. Communities across NSW have called strongly for the protection of these natural areas and water systems. For example, incorporating the Drip Gorge into the Goulburn River National Park has the support of the Aboriginal Cultural Environment Network (ACEN), the Hunter Central Rivers CMA, Mid-Western Regional Council, Mudgee District Environment Group, Central West Environment Network and the local community. The Mudgee-Gulgong district has no other natural assets of this significance accessible from a major road.

## Social Impacts

The social impacts of this project are too numerous to comprehensively cover, but some of the more significant impacts are mentioned below. The Project site is culturally significant, and home to over 148 Aboriginal Cultural Heritage sites. For this reason, the Goulburn River corridor and adjacent escarpment have been nominated for listing by the National Trust.

Impacts on surrounding communities will also be numerous, including excessive noise levels due to the location of conveyors on top of ridges. These should be set lower on the landscape to minimize noise dispersal. The increased housing and services pressure on the Mudgee region has not been addressed in the Environmental Assessment. Nevertheless, this is an indirect impact caused by the mine and should be acknowledged and addressed.

## Climate Change

The project involves the production of 17mtpa of coal, which will result in roughly 41 million tonnes of carbon dioxide pollution when burned. At a time when scientists across the world are in agreement about the need to bring down our carbon emissions and take action to avoid dangerous climate change (Solomon et al. 2007), this massive coal-mining project is unacceptable. Moolarben Stage 2 is out of step with the urgent need to rapidly reduce greenhouse gas emissions, that is required if the world is to avoid catastrophic runaway climate change.

Even if emissions from all other sources were to cease tomorrow, the emissions from coal would be enough to cause catastrophic runaway climate change. Indeed, James Hansen, director of NASA's Goddard Space Institute has said that ending emissions from coal "is 80% of the solution to the global warming crisis" (Hansen, 2008).

This project will make an enormous contribution to global warming, amounting to at least 41 million tonnes of greenhouse gas emissions every year from the coal when



burned.<sup>1</sup> This is equivalent to more than 15% of all emissions from NSW annually. For this reason alone, the Project should be rejected.

## Conclusion

The list of impacts the Moolarben stage 2 Project would directly cause is extensive. The destruction of numerous indigenous cultural heritage sites, contribution to climate change from the greenhouse gas emissions of the coal when burned are just a few of the numerous impacts of this project that have not be explored in depth within this submission. The Department of Planning and Infrastructure should acknowledge the overwhelming public concern about this project and reject this proposal. The New South Wales Government should also protect the diverse and unique ecology of the area by including it in the Goulburn River National Park. This will allow the wonders of the area to be enjoyed by future generations.

The vast negative impacts of this project far outweigh any benefits. The Environmental Assessment that Moolarben Coal presented to Government illustrates this point. We are imploring the government to reject the proposal and save the region from unnecessary negative impacts and permanent damage. There is too much at stake.

The Hunter Community Environment Centre recommends that the Department of Planning appoint an independent expert panel or Planning Assessment Commission (PAC) to scrutinize the strategies, assumptions and actions of the project.

We hope that our objections raised above are taken seriously,

Thank you,

The Hunter Community Environment Centre

---

<sup>1</sup> Calculated using Australian Greenhouse Office figures: 1 tonne of coal = 2.4 tonnes of Co2.

## References

Castleden, W., Shearman, D., Crisp, G. and Finch, P. (2011) 'Mining and Burning Coal: Effects on Health and the Environment', *Medical Journal of Australia (MJA)*, 195 (6): 333 – 335.

Hansen, J. (2008) Letter from James Hansen, NASA Goddard Institute and Columbia University Earth Institute to Governor Jim Gibbons, subject: A Plea for Your Leadership, Available:  
[http://www.columbia.edu/~jeh1/mailings/2008/20080414\\_GovernorGibbons.pdf](http://www.columbia.edu/~jeh1/mailings/2008/20080414_GovernorGibbons.pdf)  
(Accessed 10/10/2011).

Lockwood, A., Welker-Hood, K., Rauch, M. and Gottlieb, B. (2009) Coal's Assault on Human Health, Physicians for Social Responsibility (PSR), Available:  
<http://www.psr.org/assets/pdfs/psr-coal-fullreport.pdf> (Accessed 8/11/2011).

Wells Environmental Services (n.d.) Moolarben Coal Project: Stage 2, Section 5, Impact Assessment, Available: [http://www.moolarbencoal.com.au/\\_documents/major-project-approvals/environmental-assessment-report/environmental-assessment-part-2/main-text/ea2\\_section\\_5.pdf](http://www.moolarbencoal.com.au/_documents/major-project-approvals/environmental-assessment-report/environmental-assessment-part-2/main-text/ea2_section_5.pdf)

Solomon, S., D. Qin, M. Manning, R.B. Alley, T. Berntsen, N.L. Bindoff, Z. Chen, A. Chidthaisong, J.M. Gregory, G.C. Hegerl, M. Heimann, B. Hewitson, B.J. Hoskins, F. Joos, J. Jouzel, V. Kattsov, U. Lohmann, T. Matsuno, M. Molina, N. Nicholls, J. Overpeck, G. Raga, V. Ramaswamy, J. Ren, M. Rusticucci, R. Somerville, T.F. Stocker, P. Whetton, R.A. Wood and D. Wratt, 2007: Technical Summary. In: Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change [Solomon, S., D. Qin, M. Manning, Z. Chen, M. Marquis, K.B. Averyt, M. Tignor and H.L. Miller (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA.