



4th October 2011

Department of Planning and Infrastructure
GPO Box 39
Sydney NSW 2001

Attention: Mr Howard Reed, Manager Mining Projects

Dear Howard,

Re Boggabri Coal Mine s75W Modification Application (DA36/1988 MOD 2)

Thank you for the opportunity to review and comment on the Environmental Assessment (EA) for the above modification to Boggabri Coal Mine. Namoi CMA has previously reviewed and provided comments on the Continuation of the Mining Project EA for Boggabri Coal Mine. That review and those comments were relatively brief and not as specific as the comments provided below.

Status of Modification Application

Namoi CMA understands that this application for modification to DA36/88 is required to enable continuation of the Boggabri Coal Mine for a 2 year period should the determination of the Continuation of the major Mining Project be delayed after the 14th November 2011.

Furthermore, Namoi CMA understands that should the Continuation of the major Mining Project be granted and able to be operated under, then this modification application will not be required to be enacted and DA 36/88 shall be surrendered in accordance with the Boggabri EA Statement of Commitments.

Catchment Action Plan 2007 and Namoi CMA Extractive Industries Policy

Namoi CMA has in past correspondence requested that the Namoi CMA's Catchment Action Plan (CAP) and Extractive Industries Policy (EIP) be considered and addressed by Boggabri Coal Mine. Both have been developed by Namoi CMA in conjunction with the catchment community with the former being approved by the former Minister of Natural Resources in 2007. The CAP from 2007 has recently been reviewed to incorporate targets developed from resilience principles.

However, the EA for the modification application for Boggabri Coal Mine fails to consider and address the 2007 CAP and its targets or the EIP and its principles.

Namoi CMA would like the proponent to explain how the proposed modification to the current consent at Boggabri Coal Mine will improve and/or maintain the catchment by either contributing and/or impacting on catchment assets, especially with regard to natural landscapes, native plants and animals, and surface and groundwater systems.

The CAP targets we would like the proponent to address include:

<i>MTL1</i>	<i>From 2006, increase the area of land managed according to Best Management Practices.</i>
<i>MTL2</i>	<i>From 2006, increase the area of land used in accordance with land capability, as measured by Land Management units</i>
<i>MTW2</i>	<i>From 2006, maintain or improve surface and ground water quality suitable for irrigation, raw drinking water and aquatic ecosystem protection.</i>
<i>MTB1</i>	<i>From 2006, maintain or improve the extent, distribution and condition of existing native vegetation of the catchment</i>
<i>MTB2</i>	<i>From 2006, support the recovery of priority fauna populations, and Threatened Species, populations and Communities</i>

It appears that the Boggabri Coal Mine modification development will erode the CAP targets especially with regard to vegetation and habitat extent and condition, land capability and long term land use, landforms and landscapes, water availability and quality.

Even though Namoi CMA is a statutory authority, the CAP is legislated under the Catchment Management Authorities Act 2003 and it was approved by the Minister of Natural Resources in 2007.

Namoi CMA recommends that the proponent address how the CAP Management targets will be enhanced or impacted in the respective Environmental Management Plans for soils and rehabilitation, water management and biodiversity management.

Furthermore, Namoi CMA has developed an Extractive Industries Policy which includes a number of policy statements including the requirement to undertake a risk assessment before and after development. The modification application fails to undertake any risk assessments at all, preferring to address some of the risk in a Statement of Commitments.

Namoi CMA recommends that the proponent address how the Extractive Industries Policy principles will be adhered to and met in the respective Environmental Management Plans for soils and rehabilitation, water management and biodiversity management.

Beside the requirement to address the broader policy issues of Catchment Action Plans and targets and the Extractive Industries Policy and its principles, Namoi CMA believes there are a number of specific issues that the proponent and the EA need to address further before Namoi CMA can be confident that the modification can precede with minimal impact.

Section 6 Impacts, Management and Mitigation

6.3 Soils and Land Capability

This section is reviewed and commented on in conjunction with appendix C.

The EA refers to 2 soil types, Brown Dermosols covering 133ha and a Brown Rudosol covering less than 1ha. The EA in section 6.3.3 states that 15mm (should be 15cm) of the Brown Dermosol will be stripped for reuse as topsoil as it has been assessed as being suitable for 'topdressing material'. However, section 6.11.2 of the EA Rehabilitation Techniques states that 100mm of topsoil will be spread and contour ploughed. Also section 4.2 of appendix C states that topsoil should be spread to a nominal depth of 100mm on all re-graded spoil. Which is it, will 15cm of topsoil be stripped but only 10cm replaced.

The proponent needs to be definitive on the depth of soil to be stripped and replaced. Namoi CMA would prefer that 15cm be stripped and replaced.

Soil Characteristics

Furthermore the EA states that 'the subsoils trended to moderate dispersion and moderate sodicity with depth'. These assessed characteristics result in the subsoil being discarded as they don't meet the mining standard for 'topdressing material'. However, the subsoils are relatively deep and are very valuable in rebuilding the soil profile as they provide foundations for plants, nutrient cycling, soil water storage, soil formation, soil biological activity, buffering against pH and Ec, and erosion mitigation. At least 1m of the subsoils should be stripped and retained, stockpiled and ameliorated if necessary, and be returned as subsoil to reproduce the soil profile which will greatly assist in the achievement of mine proposed biodiversity outcomes.

Namoi CMA is aware that Boggabri Coal Mine currently strips and replaces some subsoil which is termed 'overburden', but only if this practice fits in with mining operations. However, Namoi CMA recommends that a condition of consent be that subsoil stripping and replacement in the rehabilitated soil profile be mandatory and a conditional activity.

Land Capability

The EA classifies the Grey Brown Dermosols as Land Capability Class IV. Class IV infers that the land can be used primarily for grazing with occasional cultivation for pasture establishment, however many of the slopes within the modification area are over 10% ranging up to 20% which are generally too steep for any cultivation activities. Furthermore, the Grey Brown Dermosols are loamy sands with relatively weak structures. Namoi CMA believes that the proposed land capability classes are too exploitive especially the steeper Dermosols and recommends that the proponent re examine the land capability classes for the modification application area.

Furthermore, section 6.8 Ecology tends to support the Namoi CMA's beliefs with regard to the land capability classes as the ecological survey refers to:

- Grassy woodlands on fertile soils on the mid to lower slopes which correlates with Class IV land (fertile soils and low to mid slopes), while
- Shrubby woodland open forest on skeletal soils on mid to upper slopes which correlates with Class IV land (skeletal soils and mid to upper slopes)

These revised classifications would greatly assist the development a final landform and land capability plan (which currently does not exist under the modification application).

Agricultural Suitability

Section 3.6 of Appendix C Agricultural Suitability suggests that the Grey Brown Dermosols be classed as Class 3 moderately productive grazing land, whereas this same area is classed and mapped as Class 4 land in the Continuation of Boggabri's Mining project EA.

Namoi CMA's recommends that the proponent re examine the agricultural suitability of this area and to determine a consistent agricultural suitability for the modification area.

6.8 Ecology

This section is reviewed and commented on in conjunction with appendix H.

The modification application EA states that 114ha out of the 133ha of disturbance area will be cleared (the other 19ha has been previously cleared). The 114ha to be cleared consists of 45ha of Grassy woodlands and 69ha Shrubby woodlands and the 45ha of grassy woodland is Box Gum CEEC. There are no grasslands. The 114ha to be cleared has significant habitat, threatened species and biodiversity values. The EA highlights the resultant impacts of the clearing but does not assess the condition of the woodlands to be cleared except to state that 45ha meets the Box Gum CEEC condition criteria.

The proponent proposes to counter the clearing by dedicating the nearby 'Merriendi' property (owned by the proponent) as a biodiversity offset. 'Merriendi' occupies an area of 541ha which has been assessed to contain 174ha is Shrubby woodlands, 197 Grassy woodlands and 170ha is grassland. There is no assessment of the condition of the woodlands on 'Merriendi' except to state that 194ha meets the Box Gum CEEC condition criteria.

The proponent proposes to offset the clearing against an existing area of native vegetation which still means that there is a net loss of 114ha of native vegetation in the catchment. The only gain is that the areas on 'Merriendi' may be secured through a conservation agreement; however the area of native vegetation on 'Merriendi' was reasonably secure through the Native Vegetation Act 2003 and the Threatened Species Act 1995.

This net loss of native vegetation opposes the community's Catchment Action Plan in that both the catchment management targets of MTB1 and MTB 2 will be eroded. The details of the security arrangements for the biodiversity on 'Merriendi' are not detailed in the EA.

Furthermore, Namoi CMA is currently drafting a 'Biodiversity Offset Policy'. The policy is yet to be ratified by the Namoi CMA Board; however the policy highlights some of the poor biodiversity outcomes that are contained with the current NSW Government approaches to biodiversity offsets. The current NSW Government approaches have significant implications on Namoi CMA's ability to meet the biodiversity targets under the CAP.

Consequently, the offset proposed by Boggabri Coal Mine needs to compensate for the predicted impacts, ensure that there is no net loss of native vegetation, ensure that the development does not cross any critical ecological thresholds, and be consistent with the existing NSW Government and Commonwealth legislative biodiversity offset requirements, as a minimum standard.

The "Merriendi" biodiversity offset must meet the following principles:

- Offsets must be based on sound ecological principles and deliver on priorities identified in the draft Namoi Biodiversity Conservation Plan,
- Offsets must be beneficial and of the same vegetation type and be at least the size, equivalent biodiversity value & configuration of the vegetation lost and additional to existing native vegetation areas
- Offsets must be in perpetuity and be registered on title
- Offset conditions must be monitored, enforceable, clearly mapped, recorded and publicly available.
- An offset area, once designated, cannot be used for further offsetting.

Namoi CMA recommends the following activities be addressed by the proponent with regard to the 'Merriendi' offset property:

- Assessments be undertaken of the offset vegetation to ensure it meets the above offset principles especially with regard to condition and biodiversity value assessments
- An Agricultural Suitability assessment to be undertaken to ensure that no strategic or prime agricultural land is targeted for offsetting
- Dependent on the Agricultural Suitability assessment, all non strategic or prime agricultural land be either actively allowed to regenerate and/or be planted to grassy Box Gum woodland within 5 years of consent,
- The proponent consult with Namoi CMA on the development of the Biodiversity Offset Plan for 'Merriendi',
- The proponent provides details of the activities, security administration and financial commitment to the ongoing management of 'Merriendi'.

6.11 Rehabilitation and final landform

Namoi CMA is pleased that the rehabilitation strategy will focus on revegetation for biodiversity values and habitat for threatened species, rather than commercial forestry. Boggabri Coal is to be commended for a revegetation strategy that will reproduce grassy and shrubby woodlands habitat for threatened species, however

Namoi CMA believes that this will only be possible by returning a biological active regolith of topsoil and subsoils through the reconstructing of the soil profile.

It is recommended that the proponent consult with Namoi CMA on the development of the rehabilitation and final landform plan for the modification area.

Summary of Concerns and Recommendations

The attached table lists Namoi CMA's concerns and recommendations.

Conclusion

Namoi CMA believes that if the above additional activities are addressed by the proponent then the outcomes for Boggabri Coal, the catchment and the community will be beneficial and the potential impacts will be minimised. We look forward to receiving the Boggabri Coal's responses to our submission and partnering with Boggabri Coal into the future.

If you need to discuss this matter further, please do not hesitate to contact Glenn Bailey on (02) 6742 9204.

Yours Sincerely

Bruce Brown,
General Manager,
Namoi Catchment Management Authority

Attachment 1

Table of Concerns and Recommendations

Number	Concern	Recommendation
1	Proponent to explain how the proposed will improve and/or maintain the catchment	Proponent to address CAP catchment targets in EMP
2	Proponent fails to address the policy statements in the EIP	Proponent to address the EIP statements in the EMP
3	Proponent needs to be definitive on the depth of soil to be stripped and replaced.	Namoi CMA would prefer that 15cm be stripped and replaced.
4	Subsoil will be discarded	That subsoil stripping and replacement in the rehabilitated soil profile be mandatory
5	The steeper Brown Dermosols have land classifications that will result in these lands being used beyond their capabilities.	Proponent re examine the land capability classes
6	In consistency with Agricultural suitability classes	Proponent re examine the agricultural suitability classes
7	There are no ecological condition assessments of the vegetation to be cleared	Proponent to undertake ecological condition assessments
8	There are no ecological condition assessments of the offset vegetation on 'Merriendi'	Proponent to undertake ecological condition assessments
9	114ha of native vegetation will lost from the catchment	Proponent to address net loss of vegetation form the catchment
10	Proponent to address the draft Namoi CMA 'Biodiversity Offset Policy'	Proponent to address the draft Namoi CMA 'Biodiversity Offset Policy'
11	Strategic or Prime Agricultural land maybe used for offsetting purposes	Proponent to undertake an assessment of 'Merriendi' for Strategic or Prime Agricultural land
12	Proponent needs to optimise biodiversity offsets for local and catchment benefits	Proponent needs to consult with Namoi CMA when developing Biodiversity offset management plan
13	Slow and passive replacement of native vegetation lost through clearing	The Biodiversity offset management plan needs to detail active management for replacement of vegetation lost
14	Long lag time for biodiversity values achieved in rehabilitated areas	Proponent needs to consult with Namoi CMA when developing rehabilitation and final landform plan.