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Nature Conservation Saves for Tomorrow

30 October 2014

Department of Planning & Environment
GPO Box 39,
Sydney NSW 2001

Airly Mine Extension Project - SSD 12_5581
Submission re Environmental Impact Statement

Dear sir / madam,

The Blue Mountains Conservation Society is a community organisation working to achieve the preservation and regeneration of the natural environment of the Greater Blue Mountains. The Society has a membership of around 900 people.

In relation to the EIS for the Airly Mine Extension Project, it is noted that the 1.8 metre subsidence in the EIS has now been reduced in the context of the recent determination of the Airly Mine MOD 3. However, the Society believes that the proposed mine plan will not adequately protect the significant pagoda landform with its extensive biodiversity and spectacular visual landscape which overlies the proposed mining and is contained in the Mugii Murum-ban State Conservation Area (MM SCA).

Our concerns are, in summary, as follows:

- Whilst mining is permitted in a state conservation area, SCAs are reserved for their conservation values under the *National Parks and Wildlife Act 1974* (NPW) Act and these values need to be preserved;
- The requirement to apply the precautionary principle to the management of MM SCA (the site of the proposed mining) as set out in the OEH Statement of Intent is not recognised and applied;
- As an SCA, Mugii Murum-ban SCA should protect any adjacent or connected high value conservation areas and not be a means to bring any polluted mine discharges into the adjacent Greater Blue Mountains World Heritage Area (GBMWH);

- The EIS does not contain any explicit reference to, let alone commitment to, restricting extraction of the resource to 50% as previously made to conservation groups at the time of the dedication of MM SCA;
- The impacts of subsidence are not independently substantiated and do not provide sufficient confidence that impacts to the pagodas, cliffs, deep canyons and gullies will be negligible. Expert review has identified concerns about the predicted level of subsidence and contradictions with the mine plan for the Airly Mod 3 which would warrant review of the EIS.;
- The EIS does not adequately protect the remarkable remains of our industrial heritage in the remains of the Airly shale mining activities.

These points are discussed below. The Society intends to provide a supplementary submission shortly.

Mugii Murum-ban SCA's Significant Conservation Values

The proponent is seeking approval to continue and extend underground mining extracting up to 1.8Mtpa for 25 years from the expiry date of the current consent, in other words to continue until October 2040. The approval also involves construction of associated coal handling facilities.

Mugii Murum-ban SCA contains towered pagoda rock formations which occur in the north-western Blue Mountains region: namely, across parts of the Blue Mountains and Wollemi national parks; within the Gardens of Stone NP; the Newnes Plateau; Ben Bullen State Forest. [H Washington and R Wray (2011), *The Geoheritage and Geomorphology of the Sandstone Pagodas of the North-Western Blue Mountains Region(NSW) Proceedings of the Linnean Society of NSW* 132, 131-143 at p.131). The Genowlan and Airly mesas are contained in Mugii Murum-ban SCA. The Gardens of Stone Stage 2 proposal for future conservation under the *National Parks and Wildlife Act* covers the Newnes plateau and Ben Bullen Forest. The Society accepts that mining is permitted in the MM SCA.

The pagoda structures have been recognised as “a unique landform on a world scale...” Further, “..They are part of a landform consisting of multiple pagoda structures and intervening sections of cliffs, with steep slopes and dissecting gullies below”. [Planning Assessment Committee (PAC)’s *Review Report on the Coalpac Consolidation Project* and quoted in PAC *Determination Report for Coalpac Modifications 2014* at page 9]

The proposed project area contains 85% (3,090 ha) of MM SCA. The plan would extend underground mining eastward and beyond the existing development consent and mining lease areas to include Genowlan Point and the eastern part of Genowlan mountain (an additional 1238 ha or 32%) Genowlan Point is a recognised biodiversity hotspot and the location of the only known population of Genowlan Point *Pultenea*.

State Conservation Areas and the National Parks and Wildlife Act

Under the *National Parks and Wildlife Act* (NPW Act) section 30G (1):

“ (1) The purpose of reserving land as a state conservation area is to identify, protect and conserve areas:

(a) that contain significant or representative ecosystems, landforms or natural phenomena or places of cultural significance, and

(b) that are capable of providing opportunities for sustainable visitor or tourist use and enjoyment, the sustainable use of buildings and structures or research, and

(c) that are capable of providing opportunities for uses permitted under other provisions of this Act in such areas, including uses permitted under section 47J, [Provisions relating to mining]

so as to enable those areas to be managed in accordance with subsection (2).

(2) A state conservation area is to be managed in accordance with the following principles:

(a) the conservation of biodiversity, the maintenance of ecosystem function, the protection of natural phenomena and the maintenance of natural landscapes,

(b) the conservation of places, objects and features of cultural value,

(c) provision for the undertaking of uses permitted under other provisions of this Act in such areas (including uses permitted under section 47J) having regard to the conservation of the natural and cultural values of the state conservation area,”

MM SCA's values which made it worthy of being reserved as an SCA are recognised in the Statement of Intent (SOI) for MM SCA. A Statement of Intent guides the management of an SCA until there is a management plan made under the NPW Act in place. The EIS refers to the draft Plan of Management but not the SOI for MM SCA. However, as the draft Plan of Management is not yet publicly available, this submission discusses the only existing formal statement about how the MM SCA should be managed.

The SOI states that MM SCA contains “a great diversity of ecosystems, supporting several threatened plants and animals and two threatened ecological communities”, areas of” particular significance to Wiradjuri Aboriginal people and ... numerous significant historic heritage sites” (pp.2-3) The first two Issues listed in the SOI are

“Significant geological features of the park (notable Pagodas) are susceptible to physical damage from a range of human activities.” and

Past and future mining activities in the park have the potential to affect park values” (at p3)

Requirement to apply the precautionary principle

Most importantly, the SOI says that “parks and reserves without a plan of management are to be managed in a manner consistent with the National Parks and Wildlife (NPW) Act 1974 and the ‘precautionary principle’” (para 1) This is one of *principles of ecologically sustainable development* and is defined as follows:

“ the precautionary principle—namely, that if there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be

used as a reason for postponing measures to prevent environmental degradation.” [Protection of the Environment Administration Act 1991, Section 6 (2) (a)]

The SOI reinforces the need to apply the precautionary principle consistently and rigorously in the proposed mine plan and minimisation of resulting environmental impacts so that the specific and special conservation and visual values of MMSCA are protected.

Centennial’s Commitment to only extract up to 50% of the resource under Mugii Murum-ban State conservation Area

Centennial made a commitment to conservation groups at the time of the declaration of MM SCA that only 50% of the resource in MM SCA would be extracted in recognition of the importance of preserving the unique landform on the surface. (This commitment was raised most recently by several conservation groups in submissions to Airly Mine Mod 3) The fact that this commitment is not mentioned in the EIS at all is a major omission by Centennial, a breach of trust and of great concern. Given the importance of this central commitment, Centennial needs to explicitly explain whether and how this commitment is met through the proposed expansion project.

Interested parties have tried to work out what the proposed level of extraction is in a plan which contains different mining treatments in the different zones. The Colo Committee has undertaken this analysis and concluded that the proposal would actually remove up to 66% of the resource in the Panel and Pillar, Partial Pillar extraction and New Hartley Mine zones. [Colo Committee submission at page 3] This last zone is an area which has already experienced subsidence from previous mining and has a predicted further subsidence of up to half a metre.

Mine Discharges through MMSCA to World Heritage Area

The EIS acknowledges that polluted mine discharge is likely to enter Airly Creek, Gap Creek and Genowlan Creek and that this will lead to impacts on the quality and quantity of water entering Gardens of Stone National Park (via Airly Creek) and the Wollemi National Park (GAP and Genowlan Creeks via Capertee River). It is unacceptable that pollution from mining should be conveyed through a reserved conservation area and into the GBMWA. [EIS at p.305-6] A conservation area should act as a buffer around the more highly valued GBMWA rather than as a conduit for pollution and should be avoided not tolerated. The Society believes that this should not be permitted.

Subsidence impacts on pagoda landform

Subsidence can cause impacts on the landform structures; on the biodiversity by removing habitat or draining away water which supports that habitat; and on the striking visual impact of the pagodas, cliffs and canyons. The mine plan proposes five zones containing different methods and levels of extraction. The EIS acknowledges that there

will be some damage to cliffs because of the predicted level of subsidence and impacts on groundwater and proposes monitoring and adaptive management of operations rather than avoidance. [EIS, at pp.243 – 250]. It seeks to minimise the impacts for instance claiming that up to 10% of cliffs might have rockfalls but these would only be “isolated rocks” [EIS at p.245] This is not substantiated and does not rely on independent advice.

The EIS acknowledges that the mine design proposed is predicted to cause subsidence of up to 106 mm in the Panel and Pillar Zone and between 200mm to 500mm (half a metre) in the New Hartley Zone which has already been mined. (at pp.249-250). The risk of damage, set out in *Table 8.4 Expected Impacts to Key Sensitive Landscape Features*, shows up to 10% of cliff area are expected to experience rock falls. [EIS, at p.245] In discussing panel and pillar mining method, in relation to void widths, the EIS decides to use a standard of protection it explicitly says is not “optimum” [at p.228]

Instead, the EIS indicates it will rely on “performance management” of the actual mining methods rather than reducing the severity of the mining activity. [EIS at p.249] Relying on the performance of certain standards is inherently risky and once mistakes are made the damage has been done. As well, monitoring is acknowledged as being difficult to implement because of the nature of the terrain. As a result, the proposed operations will not have sufficient oversight to check that performance is meeting the proposed standards and levels of “acceptable” damage. [EIS at p.249] Instead, where there is uncertainty as here, the precautionary principle should be applied.

Under *Subsidence Management and Mitigation Measures*, all zones except First Workings rely on Trigger Action and Response Plans (TARP) to manage the system implementation (p.248) The proposed performance monitoring system “... will use TARP to define normal and abnormal behaviours (in the actual mining) items to be monitored and the actions to be taken to maintain ‘normal’ behaviour or Rectify abnormal behaviour.” [EIS at p.250] A lot of reliance is put on this approach rather than reduce the mining activity. However, the recent IESC report on the proponent’s *Angus Place Mine Extension Project (SSD – 5602)* criticises the use of TARP in the monitoring plan for Angus Place. “*The time lag between mining and the observation of impacts, particularly ecological impacts, greatly reduces the potential effectiveness of TARPS. As a result, industry experience shows that mitigation or management actions implemented as a component of a TARP have been unsuccessful in preventing impacts to or restoring the ecological function of (in this case) Temperate Highland Peat Swamps*” [IESC 2014-053: *Angus Place Mine Extension Project (EPBC 2013/6889; SSD – 5602, July 2014 at para 30, p.8.*]

If there is uncertainty about the efficacy of the mining activity, the precautionary principle would require reducing the impact rather than monitoring it. However, the EIS concludes that when balancing an economic return from the mine with the level of environmental impacts, the economic return justifies not ensuring that there will be negligible impacts on the environment. [EIS at p.250] The Society believes that this is

not an appropriate balance to strike in a location which is reserved for its significant conservation values.

As well, expert advice on the groundwater and subsidence impacts has identified serious concerns with the reliability of the predicted subsidence levels and inconsistency between the mine plan in the EIS and the June 2014 plan which was submitted with Airly Min MOD 3. This independent report concludes that the EIS should be reviewed and warrants re-submission. [Pell Consulting report on *Groundwater and Subsidence*, referred to in submission by Capertee Valley Alliance]

The Society is concerned that the mining proposal will cause irreparable damage to the biodiversity and scenic values of the MMSCA. Mining is permissible in MMSCA but it needs to retain the conservation values that justified the designation. In order to protect these values and allow mining to occur in a way that is consistent with the reservation of the MM SCA area contained in the mining proposal, the Society believes that mining in Zone 4 (New Hartley) where subsidence of up to half a metre is predicted should be restricted to first workings and, as recommended by the Pell report, that Zone 5 (panel and pillar) where subsidence of up to 106 mm is predicted, should target 20 to 30 mm. [Pell report, at p.2]

Airly's industrial heritage in a unique setting

The ruins of Airly shale mining complex are remarkably extensive remains of oil shale mining in late nineteenth and into twentieth century. It merits national heritage recognition. It is currently recognised through National Trust listing as an industrial heritage site and through the State heritage system. Its significance is enhanced by the “dramatic and highly scenic landscape characterised by dense vegetation and large sandstone mesa rising from the Capertee Valley floor” as recognised in Appendix J to the EIS.

This observation demonstrates the need for the remains of the mining complex and its technologies, the pagoda landscape and the concentration of biodiversity all to be protected from permanent damage, particularly subsidence. The Society supports the conclusion of the Colo Committee that extraction under the whole area of the oil shale ruins should only be through first workings (30% extraction). [Colo Committee submission at p.6]

Yours faithfully,



Madi Maclean

For the Management Committee