Jan Davis.

Hunter Environment Lobby Inc.

Planning Assessment Commission Presentation
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Singleton

Wambo Mine – Modification 12 – Southern Longwall Modifications

Hunter Environment Lobby Inc. (HEL) is a regional community-based environmental organization that has been active for over 20 years on the issues of environmental degradation, species and habitat loss, and climate change.

HEL lodged a detailed submission to the PAC on Friday 4 November. We trust that Commissioners have had time to look at it.

In that submission we raised key concerns about impacts of mining on Wollombi Brook and salinity issues that need further investigation.

We also raised issues with impacts on biodiversity on and beyond the Wambo Mine site.

The lack of knowledge and clear assessment of the regional impacts of mining on Hunter water sources is of great concern. The Federal Independent Expert Science Committee have undertaken to produce a Bioregional Cumulative Impact Assessment. This is yet to be completed.

There has been no rigorous assessment of cumulative impact by the NSW Government. We consider that the impacts of large mining operations on surface water and groundwater sources in the Hunter Region are significant, far reaching and permanent.

The PAC has not been provided with enough information to determine an outcome for the Wambo Mod 12.

It is irresponsible under the principles of ecologically sustainable development to continue approving cumulative impacts on water sources within a vacuum of adequate assessment of currently approved long term and irreversible degradation. The precautionary principle must prevail with any consideration of mine expansion in this heavily impacted area of the Hunter Valley.

HEL reiterates its earlier concerns in regard to the cumulative biodiversity impacts of mining in the Hunter Region and the lack of adequate protection of biodiversity offsets and unreliable monitoring and regulation of their management.

The PAC should not approve this proposed change to Wambo Mine

Water Impacts and Salinity Management:

We do not agree with the assessment of this proposal that additional impacts on water sources will be minimal. HEL is concerned that the current large volume of water make in the Wambo underground mine of over 1300 ML/year is significant. This modification is likely to cause further increase in peak daily inflows.

HEL is concerned that high levels of salinity in Wollombi Brook have been measured at the Warkworth gauge and that these need to be further assessed. This could be a result of combined discharge and diffuse dispersion from Wambo Mine.

This issue was raised in the Hunter Catchment Salinity Assessment Report prepared by the Office of Environment and Heritage for the NSW Environment Protection Authority in November 2013.

This report says that Hunter River salt loads can be affected by the major tributaries such as the Goulburn River and Wollombi Brook.

Monitoring of Wollombi Brook during the Millenium Drought demonstrated high levels of salinity exceeding 1000 µS/cm for most of the 2000s with some very high salinity levels approaching 10,000 µS/cm recorded. These high salt readings were not well co-related with flow.

They are also clearly different to the patterns of salinity and flow upstream at Bulga which is upstream of the major mining impacts.

Further assessment is necessary to fully understand the underlying mechanisms yielding high salinity levels in Wollombi Brook at Warkworth.

There is concern that increased sources of salinity in the Hunter catchment could influence the operation of the Salinity Trading Scheme in the future. This would have implications on other water dependent industries in the Lower Hunter such as irrigation.

A return to drought conditions in the Hunter River catchment could lead to reduced flow and increases in salinity levels in the Hunter River and its tributaries and decrease the opportunities for saline discharges under the Trading Scheme.

It is imperative that a better understanding of salt movements in Wollombi Brook below Bulga is gained through rigorous assessment of all current impacts on the water source.

Any potential increases in hydraulic connectivity, release of additional soluble salts and more leakage of mine water held in onsite storages needs to be fully assessed and considered as a cumulative impact.

The proposed additional impacts on Wambo Creek, North Wambo Creek and Stony Creek and associated alluvial aquifers have not been properly assessed.

Subsidence issues

We consider the information provided on potential significant subsidence impacts is highly inadequate.

There is recognition that the proposed shift from the deeper approved Bowfield Seam to the higher Woodlands Hill Seam could exacerbate fracturing up to the Wambo Seam, in which mining has caused fracturing up to the Whybrow Seam, in which mining has caused fracturing to the surface.

There is recognition that there are likely to be some unconventional ground movements because of the multi-seam mining operations.

The South Wambo Dam is directly over the proposed changes to mining the higher coal seams in Area 2. This needs detailed assessment and consideration. The potential subsidence impacts under South Wambo Dam of the proposed changes to multi-seam mining needs further investigation.

This could cause greater leakage of saline water into the surrounding landscape.

The DPI Water requirement for further groundwater monitoring below the Dam has not been implemented. This information should be made available as part of the assessment process for the proposed changes to the mine layout.

The failure to install additional monitoring equipment is yet another demonstration of the history of poor regulation and monitoring of impacts at the Wambo Mine site.

HEL has major concerns that the proposal could cause an exponential increase in the transmission of saline water to the alluvium over the long term.

It appears that Planning has relied entirely on the proponent's subsidence model with no indication of an independent review. This is most unsatisfactory.

HEL considers that the subsidence impacts on the mine site and mine owned land are likely to be as great as those experienced on the Fenwick's property.

The assessment of current subsidence impacts and the predictive modelling relies entirely on information provided by the proponent.

HEL recommends that the PAC commission an independent subsidence review that includes inspections of areas that have been undermined.

This is also critical for the groundwater and surface water models that are informed by the predictions of the subsidence model.

Biodiversity Impacts

The potential impacts on areas of critically endangered habitat have not been clearly assessed.

HEL is concerned that the history of subsidence impacts on private property, that are still occurring 20 years post mining, has not been taken into account when considering the long term impacts of subsidence on areas of biodiversity.

The Remnant Woodland Enhancement Program (RWEP) is the key biodiversity offset mechanism for the Wambo Mine surface disturbance. However, a large portion of the RWEP, including the proposed additional 41.6 ha offset area is overlying the proposed changes to mining in Area 2.

We understand that several coal seams have already been extracted from this area. It is of great concern that the assessment of subsidence impacts for this Mod 12 proposal do not take into account previous movements resulting from the removal of the Whybrow and Wambo seams.

The maximum predicted total subsidence is 8.2m with all extractions considered. There is no rigorous assessment of the impact of this scale of subsidence on areas of remnant biodiversity, including the offset areas in the RWEP.

The dismissal that the level of subsidence impact will be negligible on threatened species habitat and offset areas overlying longwall panels is unfounded.

The Mod 12 proposal will impact on 170 ha of the critically endangered *Central Hunter Valley Eucalypt Forest and Woodland* ecological community (CEEC) and 180 ha of potential habitat for the critically endangered Regent Honeyeater.

The level of cracking, slumping, ponding and sudden appearance of large holes over a long period of time post mining has not been adequately considered.

Another key area of concern is the potential subsidence impacts on Wollemi National Park that is listed as a World Heritage Area. There is no reference to the significance of this listing in Planning's Assessment Report.

We are also concerned that this issue was not adequately referred to the Federal Department of Environment under the EPBC Act referral process.

The Planning report states that existing conditions for Wambo Mine approved in 2004 already contain performance measures to offset potential subsidence impacts on Wollemi National Park.

If these performance measures are exceeded and it is not reasonable or feasible to remediate the impact or environmental consequence, or remediation measures have failed to satisfactorily do so then Wambo must provide a suitable offset to compensate for the impact or environmental consequence.

The proposal is to realign longwall panels in Area 2 and bring the Arrowfield Seam panels within 310 m and the Woodlands Hill panels within 340 m of the Wollemi National Park World Heritage Area.

Planning's Assessment Report acknowledges that there could be subsidence impacts up to and within the boundary of the reserve. The inadequacy of the subsidence model gives no confidence that the predictions of no significant impacts is correct.

HEL is concerned about the poor regulation of the current conditions of approval, as demonstrated on the Fenwick's property, and the issue of 'offsetting' impacts in a World Heritage Area.

Planning has not detailed how subsidence impacts in Wollemi National Park could be offset.

The other key biodiversity issue we have raised is the unknown and unassessed impact of the placement of 5 venilation shafts, 2 centralised gas flaring plants and associated access roads and infrastructure, particularly within offset areas.

The impact of these proposed surface structures on the RWEP and other areas of critical habitat is currently unknown. This emphasises that fact that the offset areas are not protected from ongoing impacts of subsidence and surface disturbance.

HEL considers that the biodiversity impacts of Mod 12 are unknown and the current and proposed offsets are not protected from future impacts.

The mitigation of biodiversity impacts for this proposal are unsatisfactory and should not permissible.

Conclusion

HEL considers the cumulative impacts on water sources and biodiversity of the Wambo Mine have not been adequately identified or assessed.

The proposed changes to the approved mine are significant and should not be approved as a section 75W modification. A greater level of detailed assessment is required.

The subsidence predictions of the proposal have not been independently reviewed or adequately ground-truthed

The current regulation of impacts of the Wambo Mine is unsatisfactory.

HEL recommends that the PAC not approve the proposal on the basis of the poor information provided.