

PO Box 114 Mudgee 2850 14.10. 2019

# **Submission of Objection Moolarben Coal Mine UG4 MOD 15**

Mudgee District Environment Group is concerned that the infrastructure works and associated long wall mining would significantly lower groundwater levels for many kilometres permanently altering the groundwater system and potentially the water supply to The Drip and thus negate the "Nil Impacts" required at The Drip.

## The Dewatering bore opposite "The Drip" is not acceptable.

This bore is positioned near where the PZ129 monitoring bore is currently located in an extremely sensitive location on top of a vulnerable sandstone ridge. Landforms such as this are susceptible to subsidence. MDEG is concerned that there would be subsidence and cracking like that which has occurred at many other coal mining sites in sandstone country.

We read with concern on page 16 of the Moolarben 15 Modification report the following:

"MCO has identified that it would be beneficial to augment approved dewatering sites to allow for the efficient transfer of water from the mine workings to the surface during mining operations.......The revised construction method at the relocated/expanded sites involves drilling of multiple holes per dewatering site..... this is expected to increase disturbance at an individual dewatering site..."

These statements give rise to two concerns for our members:

- Whilst it may benefit the Mining company and their workers this water will no longer be following its natural flow to the Goulburn River at the Drip. The depravation of this water in the river will negate the requirement of "Nil Impacts" at The Drip
- 2. The drilling of multiple holes on this vulnerable sandstone ridge, so close to The Drip will likely result in subsidence and cracking thus further affecting any remaining natural water flows into the river.

The planned dewatering boreholes are inconsistent with 'Nil Impacts' on The Drip as required by MCC approval conditions. Moolarben Coal has failed to show how 'Nil Impacts' on The Drip water supply will be achieved monitored or managed

## The UG4 groundwater review is inadequate.

Predications are calculated on a 2007 approval based on questionable groundwater modelling while ignoring recent monitoring and increased water make (x5) than predicted and the significant groundwater impacts experienced at the adjacent Ulan Coal Mine.

New modelling for Moolarben has identified greater drawdown of groundwater than previously assessed. This needs to be fully assessed before Mod 15 can be considered.

MDEG believes, based on expert hydrology advice, that there are threats of serious and irreversible environmental damage to the water systems feeding the Goulburn River and The Drip.

The "Principles of Ecologically Sustainable Development – EPBC Act and EP&A Regulation" as quoted in table 3 page 24 of the Modification Report reads:

"In the application of the precautionary principle, public and private decisions should be guided by: (i) careful evaluation to avoid, wherever practicable, serious or irreversible damage to the environment, and (ii) an assessment of the risk-weighted consequences of various options,"

Therefore MDEG is asking that the following be implemented before approval:

- An independent groundwater report to fully inform this approval application.
  This must include impacts of mine depressurisation on Triassic/Upper
   Permian aquifers; potential interference to The Drip water supply and
   interaction with the Goulburn River.
- 2. A mandated requirement be developed on how groundwater impacts are assessed and reported that can prove/disprove "NIL Impact" on the Drip groundwater. including trigger points, clearly defined, unacceptable impacts and an appropriate response (this would include potential interaction with river and UCML east pit as well).
- 3. A clearly documented monitoring plan be in place

#### MDEG Concerns re works at Bora Creek

Risks of increased creek bed instability and sediment pollution of the Goulburn River. Surface disturbance on Bora Creek that will increase threats to the Goulburn River

Surface work may make the creek vulnerable to erosion and run off into the Goulburn River

The planned clearing and surface disturbance along the culturally sensitive Bora Creek threatens a heritage site, assessed as high scientific significance (S1MC230).

### **Biodiversity Offset**

Moolarben Coal is asking to clear 10 hectares of native vegetation including a Threatened Ecological Community (Box Woodland) within previously zoned biodiversity offset areas. This should not be permitted. Increased surface disturbance in a biodiversity offset area is not acceptable.

#### Surface disturbance

Changes to UG4 - Stage 1 "modify Moolarben Coal complex to allow for the construction ancillary infrastructure associated with UG4" includes:

- 2 more dewatering bores one opposite the Drip (where PZ129 monitoring bore is currently located) and one about 300 m south of Saddlers Creek Road (not far from the Goulburn River).
- RSIA which is a 'drop hole' into the UG workings on the north side of Bora Creek (includes construction of a crossing over the creek)
- A downcast vent shaft opposite UCML entrance (no fan).
- Clearing for a new access track.

These are substantial surface works and will impact on Water and Biodiversity. The disturbance of significant Aboriginal cultural heritage is not acceptable.

In summary Mudgee District Environment Group 5 major concerns about the proposed Moolarben Coal modifications (MOD 15) are as follows:

- 1. The installation of dewatering bores directly opposite The Drip gorge; to the east of the river upstream from the bridge and along the boundary of the national park will threaten the groundwater system and the long term health and resilience of the Goulburn River and The Drip.
- 2. Bora Creek, feeds into the Goulburn River upstream of The Drip. The works in this area will be another interruption in the flow of water into the river already depleted by the cumulative effect of the two large coal mines.
- 3. Additional clearing for access tracks will be through the declared MCO biodiversity offset area and will destroy sensitive cultural sites.
- 4. MDEG, based on current research and expert advice, believes that the UG4 mining activities especially those opposite The Drip and near the River will threaten the groundwater system irreversibly.
- 5. There is no existing effective, transparent monitoring system that will provide an early warning to guarantee "Nil Impacts" on The Drip

MDEG is asking that the Department of Planning carefully scrutinise the current Moolarben Mod 15 and the UG4 long wall mining in light of the State Government's commitment to "Nil Impacts on the Great Dripping Wall and Goulburn River.

Yours Sincerely

P Setchall

Phyllis Setchell Chairperson MDEG