

"Reclaiming our Valley"

Hunter Communities Network

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**Submission**  
**Ulan Coal Mine MOD 4**  
Independent Planning Commission of NSW  
Public Meeting Mudgee  
Wednesday 19 June 2019

The Hunter Communities Network is an alliance of community based groups and individuals impacted by the current coal industry and concerned about the ongoing rapid expansion of coal and coal seam gas exploration and mining in the region.

The Department of Planning and Environment (DPE) has stated in their Assessment Report of the Ulan MOD 4 application that the coal production from the Mudgee Region has grown to such an extent that it now constitutes 20 % of the NSW coal output. Current approvals amount to 58 Mt of coal extraction per year.

The level of cumulative disturbance of the landscape over 190 km<sup>2</sup> of the headwaters of the Goulburn River is a significant permanent legacy that will not be mitigated. These large mining operations are dewatering the landscape and sterilising large areas of productive agricultural land from future use because of the permanent disturbance to productive groundwater sources.

The Ulan Mine and Moolarben Mine approved underground operations are already demonstrating a significant and under-predicted impact on all water sources. The permanent loss of bores and springs on mine owned land is not reported. The ongoing impact on private bores and spring fed dams, particularly from the Ulan Mine, is significant and has long term social and economic impact on the farming community in the region. The permanent loss of good quality water to future agriculture production has not been costed.

These impacts are not addressed in the assessment of ongoing mining expansion across a vast area.

I am a member of the Community Consultative Committee for the three mines in the area so have a fair idea of some of the key management issues. The process of getting any detailed or transparent information from the companies through these Committees can be quite frustrating.

The assessment of this proposal before you, the expansion of longwall panels at both Ulan underground mines, is an exercise that demonstrates the key failings in the current planning and approvals process in NSW.

This current modification is not a minor impact. It is additional to a major impact and cannot be considered in isolation to the damage being wrought on the environment, the Goulburn River, the regional farming community and Aboriginal cultural heritage.

The local community has engaged in the development processes for these large mining operations for the last 30 years and have seen time and time again that predictions, particularly in regard to water impacts, have been significantly understated.

We have had to work hard to gain a number of improvements in the management of environmental impacts.

Our initial focus was on the salinity levels of mine water discharge from the Ulan Mine into the Goulburn River. We had to go to Freedom of Information to get the water testing data to explain a 25 km salt slick along the river bank in the late 1990s. This finally led to an EPA pollution license with restrictions on salinity levels. However, the cumulative salt load deposited in the river sediments is still working its way down the river and the 900 EC limit is nearly three times greater than background levels.

The second issue we lobbied on and raised in ongoing submissions to mine expansion from 1998 was the condition of the river diversion at Ulan Mine. Finally, as an offset to doubling the size of Ulan Mine in 2010, DPE placed a condition on the approval requiring the rehabilitation of the river diversion. This work has finally been completed nearly 30 years after the impact occurred.

The local community has also put a lot of effort into campaigning to protect The Drip from mining impacts. The Planning Assessment Panel determining Moolarben Mine Stage 2 recognised the significance of this local natural feature and recommended its protection.

This recommendation assisted the community in getting a commitment from the NSW Government to protect the actual physical escarpment containing The Drip in an extension of the Goulburn River National Park. There is also a condition on both Ulan and Moolarben Mines for no impact on The Drip.

We are still concerned that the groundwater system behind The Drip is not protected from ongoing regional drawdown. As you are hearing today, the health of the Goulburn River and The Drip are still a key concern of the community.

We trust that Commissioners will take note of previous determinations and recommendations to improve the management of water sources impacted by mining in this region and take this opportunity to apply additional improvements.

The community has raised a number of solutions for better management of mine water discharge into the Goulburn River. We trust the Commission to give these serious consideration

### **Analysis of DPE Assessment Report**

The Report provided to you by DPE has a number of key failings and incorrect information. For example it states that the Ulan open cut mine is completed, whereas it is in care and maintenance. The analysis of submissions fails to mention that downstream water users lodged objections. The value of royalties increases through the document.

The Report states that no properties would be acquired because of MOD 4, however, then reports that the *Billil* property has recently been acquired because of current approved activities. The ongoing loss of private landholders in the region is significant and not assessed.

The Report emphasises that DPE is required to assess the modification application on its merits and that it would have a very minor impact on the Goulburn River system from both an incremental and a cumulative perspective. However, there has been no analysis of cumulative impact. No information has been provided in any of the assessment documents that outlines the level of current approved impacts on water sources from across the three mining operations.

The comparison of the MOD 4 application to the approved MOD 3 expansion fails to outline the overall impacts of the Ulan West Underground and Ulan Underground 3 combined with the impacts of the Moolarben and Wilpinjong Mines.

There is no genuine commitment from the NSW Government or its agencies to clearly consider the cumulative impacts of large scale mining, particularly in the Mudgee and Hunter regions.

We trust that the Commission will demonstrate its independence by not being directed by Government agencies but by commissioning your own independent research into the cumulative impacts of these large mining operations on a significant tributary of the Hunter River system.

The response to concern about the broader regional groundwater impacts states that these have been assessed for previous applications. However, the conditions of approval fail to adequately manage these impacts and the predictions on which approvals have been made are often demonstrated to be incorrect after the approved operations commence.

A statement in the Report regarding salinity levels highlights that the downstream gauge at Ulan Mine, SW02, measures lower levels of salt than further downstream gauges. We would hope so. The downstream gauges are measuring a cumulative salt load including discharges from Wilpinjong Mine and the probable salt slug moving through the system from previous deposits in the banks and riverbed and also reporting from the wider catchment.

Hunter Communities Network does not consider that additional loss of base flows, increased subsidence impacts on Curra Creek and Mona Creek, increased inflow into the mine causing

more surplus water, increased drawdown on private bores, increased salt load into the river, additional loss of threatened species habitat, additional noise impacts and additional greenhouse gas emissions is minor and of no concern.

The DPE report concludes that both ground water and surface water impacts are not significantly greater than those approved and will be adequately protected by existing performance measures and Trigger Action Response Plans (TARPs).

We strongly disagree with this conclusion and provide further comment on the document posted on the Ulan Coal Mine website titled Surface Water and Groundwater Response Plan dated 2016.

### **Analysis of Ulan Mine Surface Water and Groundwater Response Plan**

Table 3.1.6, the surface water TARP, appears to have the monitoring parameters for the upstream and downstream gauges confused under the EPL water quality section. Water quality action is based on 3 months of elevated averages before any further investigation occurs. This does not protect the health of water ways. The Stream Health monitoring needs a wider spread of monitoring points.

Table 3.4 provides the criteria, monitoring and reporting measures for Base Flow Loss for Surface Water Sites and The Drip.

The criteria for action is: other than predicted loss of base flow in the Goulburn and Talbragar Rivers, accounting for seasonal variability.

Trigger A is based on trend analysis of 2 consecutive years of base flow loss above the EA predictions or a complaint from a private landholder.

Trigger B is based on trend analysis of 3 consecutive years of base flow loss above the EA predictions or complaints are received from more than one private landholder.

The action is to review monitoring data, historical averages and operational data, then develop a remedial action plan that is reported in the Annual Review.

There is no mention of how this will be managed if base flows to The Drip are lost. Ulan Mine has a condition that they must ensure that the project has no impact on the water supply to the "Drip".

The TARP does not protect base flows to The Drip. It is a monitoring and reporting mechanism with a remedial plan left to a later stage – after 2 or 3 years of impacts have been measured. This process provides no confidence that anything will happen once base flows to The Drip are impacted. Therefore, the DPE conclusion that the TARP is adequate protection does not hold up.

Section 3.2 on ground water impacts is based on a report produced in 2009. The information on private bores does not include the increased impacts from recent approvals. The MOD 4 assessment refers to 14 private bores already impacted by MOD 3 by a significant drop in water levels and further drawn down by the MOD 4 proposal.

The assessment of ground water dependent ecosystems undertaken in 2009 failed to identify the springs that dot the landscape in the region. Many spring fed dams exist on mine owned land and are significantly impacted by subsidence and drawdown.

The permanent loss of springs impacts on the future viability of established grazing operations. Springs often provide base flows to surface water sources in dry times.

The TARP for ground waters concentrates exclusively on privately owned bores and has four main responses: increase monitoring frequency, provide alternative water supply for existing uses if Ulan operations are found to be the cause of depressurization, lower/replace borehole pump or replace entire bore.

All these options are very disruptive to a farming enterprise, often with the onus on the landholder to prove that the mine has caused bore levels to drop.

There is no mention of loss of spring water and spring fed dams in this document or any reference to monitoring these important groundwater sources.

There is an area to the west of Ulan Mine accessed by Blue Springs Rd. This name did not come about by accident. People settled these areas historically because of the access to abundant and good quality water. This is now being sucked into mining operations, polluted and spat back out as mine waste water. This is not a sustainable use of a precious, irreplaceable and critical resource.

We note that in the recommended consolidated conditions Schedule 3 condition 39 requires that the groundwater monitoring program monitor and/or validate any groundwater bores, springs and seeps on privately-owned land. As pointed, out there is no reference to monitoring springs and seeps in the TARP.

We consider that the impacts on bores, springs and seeps on mine owned land is equally as important in regard to the protection of base flows and ground water dependent ecosystems.

The fact that the groundwater model does not simulate these important natural features means that the predictions do not reflect the extent of the impacts on a landscape scale.

There is no reference in the Surface Water and Groundwater Response Plan to changing mining operations because the impacts are far greater than predicted. This means the social and economic impacts on the rural community are never clearly or fairly assessed. It also means that

the loss of GDEs that have never been mapped and their associated water sources is an unrecognized environmental impact with long term implications that are not accounted for. This is not a sustainable planning and assessment process.

We note in this document that compliance criteria based on Project Approval applies to monitoring and reporting measures for base flows loss & The Drip, environmental incidents and channel stability monitoring for Ulan and Bobadeen Creeks. There are a lot of actions with no compliance criteria. This could be tightened up through the approvals process and strengthening of the conditions of consent.

The TARP does not actually meet the condition of consent Schedule 3 condition 40.

This requires the Surface Water and Groundwater Response Plan to describe what measures and/or procedures would be implemented to:

- (a) respond to any exceedances of the surface water, stream health, and groundwater assessment criteria;
- (b) offset the loss of any base flow to the Goulburn and/or Talbragar Rivers and/or associated creeks caused by the project;
- (d) mitigate and/or offset any adverse impacts on riparian vegetation.

All these measures are pushed to an undescribed remedial plan that will be reported in the Annual Report.

### **Consolidated Conditions of Consent**

#### 1. Noise

We note that the EPA recommendation in regard to increased noise from the new ventilator shafts is to raise the complying noise levels at two properties. This is reflected in Condition 2A.

This is further demonstration of Government agencies protecting and prioritizing the proposed mining operations above the health and amenity of neighbours.

#### 2. Air Quality

The recommended Air Quality conditions 19 and 20 do not reflect the changes to national air quality standards that have been adopted in NSW. These are:

Annual average PM<sub>10</sub> standard of 25µg/m<sup>3</sup>.

Annual average PM<sub>2.5</sub> of 8µg/m<sup>3</sup> and for 1 day average PM<sub>2.5</sub> of 25µg/m<sup>3</sup>

The recommended conditions still contain the old PM<sub>10</sub> standard of 30µg/m<sup>3</sup> and have not included the new PM<sub>2.5</sub> standards at all

### 3. Water

Condition 29 dealing with Base flow offsets has not been updated with the new figures. The note on the condition states that *'As of the date of this approval baseflow losses for the Goulburn River and Talbragar River are modelled as 0.05 ML/day and 0.13ML/day respectively'*

This does not reflect the figures reported in the Response to Submissions Appendix C that states the Talbragar base flow loss as 0.217 ML/day with a predicted increase to 0.220 ML/day.

We continue to object to the modelling process used to predict base flow losses to the Goulburn River. We believe these losses are far greater than 0.051 ML/day as predicted under the MOD 4 assessment process. The groundwater gradient flowing towards the Goulburn River is a key issue that must be addressed by the Commission.

Condition 31 dealing with mine water discharges should give direction to the EPL by requiring a maximum salinity limit of 500 EC and triggers for discharge volumes based on background natural flow levels and antecedent conditions.

#### **Changes to management of mine water discharge**

We remind Commissioners that consideration has been given to lowering the salt discharge limit at Moolarben Mine. The community has been calling for consistency across the three mines to limit maximum salt levels to 500 EC.

We note that this issue was raised in the meeting between Ulan Mine and the Commission on 12 June. The proponent outlined the fine balancing act between water balance and salt balance and storage issues. These arguments are a very strong case for leaving the salt and water right where it is currently stored in the landscape.

The proposal to continue activating extraction of groundwater and salts cannot be justified. The losers in this process is the health of the Goulburn River and the impacts on the values in the National Park that are not monitored, impacts on downstream water users and possible impacts on the Hunter River Salinity Trading Scheme. Any growing compromise of the Trading Scheme will have significant economic impacts on the power industry and mining industry below the confluence of the Goulburn River. This includes many other Glencore operations in the Hunter.

#### **Economic justification for mine expansion**

Glencore does not need to produce an additional 6.4 Mt of coal to maintain a viable mining operation or provide job security. There is already approval to produce 28 Mtpa until 2033.

The entire justification for Ulan MOD 4 appears to be the royalties it will generate.

Hunter Community Network commissioned an economic analysis of the proposal by The Australia Institute that I will table. This found that the economic assessment is very poor.

The royalties under present value will likely be \$10.2 million or possibly less. This will not compensate for the ongoing economic disturbance caused by the impacts of expanded mining at Ulan Coal Mine.

### **Conclusion**

The assessment of this proposed modification appears to be rushed and very sloppy.

The current Surface Water and Groundwater Response Plan will not protect surface waters and groundwater from further impact.

The recommended consolidated conditions do not reflect contemporary standards or protect the environment from harm

There is no valid public benefit or economic justification for MOD 4

If the Commission sees fit to approve this modification then the opportunity must be taken to improve the impacts on the Goulburn River by lowering that maximum salinity levels and requiring management of mine discharge to better reflect background flows and rainfall patterns.

Additional flow and water quality monitoring is needed downstream from mining operations. Below the confluence of Wollar Creek would be an appropriate point