

24 August 2015

Ms Anne Bignell
Manager Operations
Earth Resources Regulations
Department of Economic Development, Jobs Transport & Resources
55 Grey Street
TRARALGON VIC 3844

Dear Anne

Re: Mining Licence 5189
Proposal: Work Plan Variation
Location: AGL Loy Yang Traralgon South

Thank you for requesting Southern Rural Water's (SRW) comments regarding the proposed work plan variation for mining Licence 5189.

As you will be aware SRW has the delegated responsibility to manage groundwater in Southern Victoria. In this particular instance SRW manages groundwater licences issued to the Latrobe Valley Coal Mines. In addition SRW is also the Resources Manager for the Latrobe River Bulk Entitlements.

SRW interest in this matter specifically relates to ongoing licensing requirements for groundwater and surfacewater.

The draft Loy Yang Work Plan Variation (WPV) (June 2015) provides information on the proposed continuation of mining and mine rehabilitation at closure. SRW's initial review of the WPV has highlighted a number of areas that we believe are not covered in sufficient detail to be able to assess the possible risks and impacts to groundwater from the proposed work. These areas include:

- **Mining Operations:**
 - The document does not adequately describe the scope of depressurisation requirements as the mine advances, in particular any change required to aquifers to be depressurised, depressurisation volumes or potential impacts to groundwater levels or groundwater quality;
 - The potential environmental impacts of ongoing aquifer depressurisation are not adequately discussed or how existing groundwater licence conditions will be incorporated into ongoing monitoring as the basis for depressurisation impact assessment;

- The proposed placement of overburden and power station ash materials into the mine void as an internal overburden dump has potential to impact groundwater quality prior to and during mine closure. There is insufficient information presented to determine how the dump will be designed, constructed and monitored to manage potential water quality risks, particularly at mine closure where it appears a significant area of the dump will lie below the proposed lake level;
- **Mine Closure:**
 - The WPV indicates that mine closure incorporates flooding of the final mine void. This process may take in excess of 85 years and includes the use of all existing water licences (surfacewater and groundwater) for an extended period as the initial water sources for void filling. Subsequent filling appears to rely on water obtained from surrounding catchments that would otherwise flow to the Latrobe River. There are a significant number of risks related to the long term availability of water for mine void filling and potential consequent impacts on regional water resources to achieve the proposed mine rehabilitation which are not addressed in the Plan;
 - The rehabilitation plan does not address potential water quality management issues during and post mine filling. The water quality objectives for the void lake, the maintenance of water quality given exposed coal batters and a closed system water environment for many years of filling and potential risks to groundwater quality through interconnection between the pit lake and aquifers exposed within the mine void, are not addressed in the WPV;
 - In addition, the rehabilitation plan does not contain any criteria, or propose a methodology to determine criteria, for the monitoring and assessment of rehabilitation performance on surface water, groundwater or the environment. These criteria need to be in place well before closure as they may influence closure strategy. The completion criteria provided in 6.4.4.1 do not mention lake water quality or confirmation that the proposed lake water balance will maintain lake water quality objectives in perpetuity;
- **Other Matters:**
 - What happens to the high level storage and settlement pond post closure given the high risk status of the structures and the need for annual maintenance and performance review;
 - Current Licences do not allow for ongoing depressurisation after the term of the licence. In addition current Bulk Entitlement from the Latrobe system does not allow water use for mine flooding;

- Ongoing ownership of the mine itself and water entitlements has not been addressed;
- Location and serviceability of groundwater pumping bores post closure has not been addressed;
- Ongoing maintenance and management of the regional bore monitoring networks has not been adequately addressed;
- The closure of the Loy Yang mine should be coordinated with other mine operations and closure – this must be considered.

SRW believe there are significant risks related to groundwater management inherent in the mine closure plan proposed in the WPV. The plan does not provide a program to better assess the risk and uncertainties in closure methodology related to water availability and lake water quality.

These assessments should be undertaken well in advance of closure such that risk mitigation methods can be identified and incorporated into the closure strategy. This work will also provide an improved basis to assess potential impacts on groundwater resources post mine closure.

Note

In addition to the above, I have been advised by the DELWP, Water Resources Branch (Simon Baker), that a meeting with themselves together with their groundwater and Ecosystems representatives to discuss the amendment and potential implication for water management is essential. Hopefully this can be accommodated prior to corresponding further with AGL Loy Yang.

Please contact me on telephone 5139 3113 if you require further information.

Yours sincerely



Vince Lopardi
Manager Water Resources & Catchment Planning