

**Re: State Significant Development No. 5765**

My name is Murray Reece and I am a frequent visitor to the Mudgee district to visit relatives, local vineyards and enjoy the natural environment.

Through this letter I wish to register my objection to the mine proposed by Silver Mines Limited which is known as State Significant Development No. 5765.

I am hugely concerned about the issue of Acid Mine Drainage (AMD) escaping to the surrounding environment during and after the mine operation. The United Nations recently labelled AMD as the second biggest problem facing the world after global warming.

From the EIS I understand that 57% of the waste rock excavated during the mine life is classified as Potentially Acid Forming (PAF). The 30 million tonnes of tailings produced over the life of the mine is also classified as PAF and will contain most of the 43,700 tonnes of chemicals added during ore processing. Some of these chemicals are highly toxic. The tailings will also contain 17-20% of the lead, zinc and silver mined due to losses during ore processing. Other metals present in the tailings will include arsenic, antimony, fluorine, and manganese. The PAF waste rock will be stacked above the water table over a 77 ha area called the Waste Rock Emplacement Area (WEA).

The Project proposes to prevent leakage of AMD to the surrounding environment by a "capture and contain" strategy during the life of the mine and after mine closure. The WEA is proposed to be sealed at its base over its entire area of 77 hectares by a 1.5mm thick HDPE (high density polyethylene) liner. I've had quite of experience with heavy machinery and would like to see how they could complete this job without puncturing the liner. Has this single layer of HDPE been proven to work on this scale at a sufficient number of sites to provide at least some confidence that it will continue to work for 100's of years?

The Tailings Storage Facility (TSF) is proposed to be partially sealed from beneath the tailings over the water ponding area by a 450mm thick compacted clay layer. I question the integrity of this on-site sourced clay as it's likely to contain rocks and other materials which will cause it to leak. The 56 metre TSF dam wall is designed to be lined and to have a 40 metre deep grout curtain installed below it.

Mine closure and rehabilitation plans propose to progressively install "store and release covers" on the WEA cells as they are filled and to use the same design to cover the Tailings Storage Facility (TSF) impoundment area several years after mining has finished. These covers are designed to create a seal above the PAF waste rock and tailings.

I have been advised that AMD management technologies are less than 30 years old and there are few, if any, long term cases that demonstrate successful containment. The expert retained by Lue Action Group has advised he's not aware any mine sites where the use of this technology at this scale has been successfully employed. He advises this proposed project is using predictive modelling and small area field trials to claim its containment designs will manage and prevent AMD impacts on the surrounding environment during the project lifespan and for generations to come. However, given the lack of proven success elsewhere, there is no certainty at all that it will be effective.

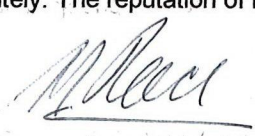
Damage to the liner could occur from sharp material above or below the liner. A sharp rock or remaining tree root below the liner could result in a perforation as weight is applied by loading from above as the waste rock is deposited.

If a large angular piece of run of mine PAF waste rock falls or rolls from height onto the 0.5m crushed rock layer above the liner this could perforate the liner and this may not be detected during operations for many years, if ever.

This concern is amplified by the fact that an independent assessment has shown that the project economics are marginal. This report indicates there are many factors which could make this project uneconomical and relatively small adverse movements in the silver price and mine operating costs will quickly make this operation unprofitable. The community would not be sufficiently mitigated by an environmental bond if the project were shut down prior to planned mine closure. Acid Mine Drainage will continue to drain into Lawson Creek and from there into Mudgee's water supply, through to Burrendong Dam indefinitely. The reputation of Mudgee as a pristine tourism destination will be lost forever.

Yours sincerely

Murray Reece



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