Response to a State Significant Development Bowdens Silver - Development of an open cut silver mine and associated infrastructure at Lue (SSD-5765)

Submission to Independent Planning Commission Directors.

24/02/2023.

Introduction.

My name is Hunter White.

I am a farmer and have lived in the Lue community all my life.

I live less than 10 km from the centre of the proposed Bowdens Silver Mine pit.

I have assisted the Lue Action Group with their submission.

I am opposing the mine development as it presents a significant risk to the Lue Community, Lawsons Creek catchment and wider Mudgee region.

Thank you for the opportunity to speak before the IPC Commissioners and thankyou for the opportunity to provide a written submission.

This is a complex project with significant risks resulting from the mine operation and post mining legacy to water and the environment which may come at an unacceptable environmental cost. This is a greenfields mining site and the unproven technology is being tried for the first time in this region. Extra precaution is recommended. The recommendation from DPE should not be accepted as the current mining proposal presents an unacceptable risk based on social and economic factors with intergenerational risks. Residences within 2 and 3km of the mine will be most severely affected which will mean the end of the village of Lue.

There is currently no water supply for the mine development including mining operations, processing and dust suppression. The impact of water use has not adequately considered other users including agriculture and the town of Mudgee.

The potential for increased flood risk from a large water storage, created by the tailings dam for example, puts at risk houses along the Lawsons Creek which sit within 1M of the high water level of previous floods. This is an avoidable risk which has not been covered by the proponent or DPE recommendation.

I am all for the creation of jobs and personally do all I can to create a safe and happy community. I am encouraged to hear that the Renewable Energy Zone will provide 3,200 jobs in the Central West REZ. The 200 jobs provided here or 300 during construction should not put at risk a currently vibrant community with such a strong brand. Brand Mudgee.

I am sumarising below my comments about the recommendations from DPE which we have been asked to comment upon. I feel there are sufficient significant issues raised by myself and others which need consideration by the Commissioners before making a decision here.

The most significant question remains about water supply and the risks of Acid Mine Drainage.

Yours faithfully Hunter White

Development Consent Conditions NSW Department of Planning and Environment

SCHEDULE 2

Part A Administrative Conditions

A1-A4 Obligation to minimize harm to the environment.

Comment: this is a complex project with significant risks resulting from the mine operation and post mining legacy to water and the environment which may come at an unacceptable environmental cost. This is a greenfields mining site and the unproven technology is being tried for the first time in this region. Extra precaution is recommended.

Action: the current mine application does not sufficiently address the risks to Water in NSW and should be rejected

A12 Community Consultative Committee

Comment: The Community Consultative Committee process has been very difficult with a high personal cost to those involved. It has been difficult to ask a question. This has not been a safe workplace or best practice.

Action: independent chair is supported and can we include a grievance policy process with option for third person review to protect people involved?

Part B Operations and Specific Environmental Conditions

B1-B4 Construction Noise Criteria and B5-B8 Operational Noise Criteria

Comment: Background noise levels are not contemporary, most of the monitoring was conducted in 2011, 2012 and 2013 although more recent data is also included from 2017. The monitoring indicates very low background levels in the order of 25 dBA.

Noise levels set by the Consent recommendations sets this level at 35dBa for evening. While this is best practice compared to Government set benchmarks, the reality is that this is a significant increase on current levels and likely to lead to unacceptable conditions for close residents.

The threshold for number of residences within a 2 or 3km radius may have been exceeded which would require IPC to not grant approval.

Action: Reject the Mining application if this condition is not met or number of residences within a 2km distance is exceeded. Improve VLAMP conditions to acknowledge pre mining development land values where it is found necessary for a landholder to sell and relocate.

B26 Air Quality Criteria

Comment: Air quality criteria of $2 \text{ g/m}^2/\text{month}$ maximum increase in deposited dust level (Table 6) may allow unacceptable levels to accumulate over time. This could be cumulative and lead to unacceptable levels of lead contamination. It is not clear that sufficient water is available to manage dust on the mining site to mitigate this risk. The risk is human health issues from lead ingestion.

B34 Materials Classification Verification Program

Comment: risk from potentially acid forming (PAF) waste rock or Acid Mine Drainage (AMD)is not sufficiently managed. This is supported by DPE consultant Earth Systems concerns about the storage of PAF rock after mining.

Action: reject the current proposal as it does not adequately address the risk of AMD B36 -37 Water Supply

Comment: the applicant has not provided details on the supply of water for mining operations (Baguley 2022). The Water Balance Table does not match the water supply available. The groundwater supply is assumed in the modelling to be regular and reliable when in fact it is highly variable. Modelling of water supply is not based on local data. It does not consider climate change. It is not clear where water licences will be sourced from in an already stressed waterway. I have already had years of no allocation of water supply here for irrigation and just adequate for stock and domestic supply.

The proponent also notes there is potential for more mining operations on this site beyond the current application which might involve processing gold ore and this would require even more water.

Action: Mining application should not be approved as no water supply is available.

B46 Water Management Performances Measures

Comment: Freeboard of dam walls on the mine site may not be adequate. For example the Tailings Storage Facility (TSF) 72 hour rainfall event may not be sufficient if storage facility is at 500mm freeboard level (Table 7). Rainfall modelling of high rainfall events presented by the proponent do not align with experience of local rainfall events recorded. The dam wall is 56M high which is as high as Windemere Spillway. This is a significant structure with potential to cause severe impact if it fails which would include flooding the Lawson Creek valley to record levels if this occurred during a high flow period.

Action: review TSF construction and consider option to install a second dam wall to secure in event of dam wall failure

B47 Water Management Plan

Comment: the **Site Water Balance** and the **Surface Water Management Plan** do not accurately reflect surface water supply, particularly the high and low flow situations. The modelling appears to be based on average flow. Actual data will lead to negative water balance table events for the mine.

Surface water modelling is not reflecting my lived experience which is in excess of 220mm in a 10 hour period in February 2003 which led to significant local flooding. The high flood water level saw flooding of one house on Lawson Creek and several within I M of water entering.

I am an irrigation license holder on Lawson Creek. There has been no discussion with me about the likely impacts of supply of surface water to the mine site with me.

There have been other significant rainfall events in this region including water going over the railway line at 20km from Mudgee on the Lue Road in Feb 6 2003, approx. 4 km from the mine site. The catchment is 7.8 sq km and volume delivered in a short period less than an hour from estimated 200mm rainfall was calculated as 1280ML. 12 mm was recorded at Havilah and 20mm at Lue. There have been similar events reported in this area in the last 20 years.

On 14 November 2022 the town of Eugowra was flooded. This did not happen because the Lachlan was running at record levels approx. 500mm above the 1950 flood level record but because of local rainfall in the Mandagery Creek of approximately 100mm. This water was held up in farming country including a canola field. The water came into Eugowra with no warning and so rapidly that water levels rose to dangerous levels within $\frac{1}{2}$ an hour providing no opportunity to get out. People were caught in buildings barely able to open doors to get out. The only escape was to climb onto rooves and await air lift from their position.

Along Lawson Creek between the proposed mine site there are up to 8 houses that are within 1 M of the high water level of previous floods. The collapse of a tailings dam and other storage facilities on the mine site could lead to these houses being flooded with little warning.

Action: identify how many houses along Lawsons Creek may be impacted by flood levels exceeding 1M above previous levels and recommend actions to be taken to manage or remove this risk

Acid Mine Drainage Plan, WRE Design, Verification Plan and TSF Liner Plan have been commented upon in other reports which I have read and I share concerns raised in these reports to the IPC. *B78 Rehabilitation Objectives*

Comment: Table 9 Rehabilitation objectives for the development require a bit more detail in the areas of Final Void, TSF, Waste rock emplacement and Water quality as this is a potential intergenerational risk in terms of damage to the water table and dependent communities.

B83 Social Impact Management Plan

Comment: the social impact is greatest on the community of Lue and surrounds. The risk is placed upon a small section of community for the wider benefit. Management and consultation by the proponent so far has not been acceptable or productive. The proposal may not be compliant with current SEPP and LEPP for allowable landuse. We all agree that jobs, particularly jobs for Kandos are important. That is not challenged by me.

C5-6 Notification of exceedances

Comment: the process is acceptable but it does not cover the consequences of breaches which should be included here.

Appendix missing – Dwellings in proximity to the mine

Comment: there is no map of dwellings in proximity of the mine. The 2km perimeter seems to be so important. Can this be provided?

Appendix 6 Contributions to Mid-Western Regional Council (MWRC)

Comment: the Contribution amounts to MWRC is not clear as the line items appear to be duplicates rather than separate line items. Could this be clarified by MWRC before approval?

Bibliography

Baguley S (2022), Independent Review of the Bowdens Silver Pty Limited Surface Water Assessment – Updated, (WRM Water + Environment Pty Ltd. February 2022), Lue Action Group Submission 2023.