

Re: Submission regarding State Significant Development - Bowdens Silver, Development of an open cut silver mine and associated infrastructure

Application Number SSD-5765

EPBC ID Number 2018/8372

We have lived in the Mid-Western Regional Council area for 18 years, and own and operate a grazing enterprise. We are both scientists; Agness has qualifications in chemistry and environmental science and spent time as manager of an environmental laboratory specialising in environmental compliance for the coal mining industry in the MWRC and Hunter Valley regions and has a good understanding and appreciation for community attitudes and expectations of mining in the region.

We do not live in close proximity to the proposed Project and it is unlikely that we would experience any direct effects from the construction or operation of the project. We have a number of friends, acquaintances and business associates in the Lue area who are concerned about the impacts of the proposed Project and these are echoed by other residents in the wider MWRC community.

In principal we are not opposed to mining and appreciate that all developments have some impact. However, we regard the Bowdens Silver development of an open cut silver mine and associated infrastructure as inappropriate development for the traditionally rural location due to its environmental, social and economic impacts and land use conflicts. Namely:

- A 24 hour, 7 day mining and processing operation and the associated increase in noise, vibration, light and traffic would have considerable impact on local amenity and the rights of quiet enjoyment of nearby village, rural and rural-lifestyle residents.
- Experience in Australia and overseas has shown that mining operations are not immune from failures, errors, negligence and unforeseen events. Accidental discharge of suspended solids, dust, metals and cyanide and leaching from waste rock and tailing storages have potential for adverse impacts on human health, the environment, agriculture and potential for contamination of food and crops. In particular, we note the risk of damage to infrastructure and impacts on groundwater, watercourses and aquatic ecosystem function arising from partial or full failure of the tailings storage facility and leaching from waste rock storages.
- Given the high level of community support for mining in the MWRC region, there is a considerably lower level of support for the Bowdens Silver Project (noting the exception of Kandos which has been heavily impacted by the closure of the Cement works) indicating the community perceives this project to be less desirable.
- The EIS states a 15% increase in traffic between Lue and Mudgee during construction and a 10% increase during the operational stage of the project, including oversize and heavy vehicle movements, however concludes that "virtually no adverse impacts to road users or the condition of the road network" would be experienced. A 10-15% increase in traffic volume will not only substantially impact road capacity, efficiency, and travel times but also contribute to wear and tear. In a region where rural roads are already in poor condition, below community expectation and MWRC road maintenance capacity is overstretched, "draw Council's attention to maintenance work required" is not considered to be a satisfactory mitigation measure.
- Agricultural land will be removed from production due to operations and, potentially, relocation of agricultural enterprises in close proximity to the Project, should development approval be granted. The EIS does not consider cumulative impacts of pressure for subdivision of agricultural land in the region, however does state that further large lot subdivision may occur in the vicinity of Lue to house the workforce during the operational stage of the mine. Influx of Project workforce also has potential to exacerbate this issue elsewhere in the region.

- Considering frequent exceedances of ANZ Guidelines and ADWG in background groundwater lead concentration, it is considered that (no matter how small) no further cumulative impact from the project is acceptable.
- Considering exceedances of trigger values (50% median) in background surface water (Hawkins and Lawson Creeks) lead and zinc concentrations, it is considered that (no matter how small) no further cumulative impact from the project is acceptable.
- Considering high levels in background soil and dust zinc, manganese and arsenic concentrations, it is considered that (no matter how small) no further cumulative impact from the project is acceptable.
- Considering exceedances of health guidelines in background drinking water lead, nickel, arsenic and cadmium concentrations, it is considered that (no matter how small) no further cumulative impact from the project is acceptable.
- Considering exceedances of health guidelines in background dust lead concentration, it is considered that (no matter how small) no further cumulative impact from the project is acceptable.
- It is widely accepted that low-level lead exposure, ie. at levels that do not produce symptoms, can affect brain development and function in children causing subtle and possibly permanent damage to children's cognitive functioning.
- Unsatisfactory impact on quality and availability of water to existing users: high impact on groundwater levels and groundwater availability; medium impact of reduced baseflow in Hawkins and Lawson Creeks; medium impact of contaminated discharge; medium impact of reduced water quality in groundwater systems due to seepage of contaminated water from tailings stored in TSF.
- Reduction in baseline stream flow in the ephemeral to semi-perennial Lawson and Hawkins Creeks and reduction in level of groundwater table will impact on agricultural, stock and domestic water availability, especially during times of drought. This will place further pressure on already stressed agricultural enterprises given the prediction of more frequent and severe future drought events due to climate change.
- In the event that Ulan/Moolarben water is not available as a contingency, the projects' reliance on availability of water and the additional requirement for groundwater resources will compete with environmental flows, domestic and agricultural uses, particularly in times of drought.
- EIS document does not consider the impact of transferring water from Ulan/Moolarben Coal Mines on environmental flows or water users in the Goulburn River catchment.
- EIS has not considered negative impacts on biodiversity, native flora and fauna, including threatened spp and endangered ecological communities, through direct clearing of habitat, habitat fragmentation and loss of connectivity and exposure of wildlife to contaminated water in the context of widespread biodiversity losses in NSW during the last bushfire season.
- Removal and fragmentation of BGGW EEC and derived communities negates investment made by Federal and State Governments to improve the extent and quality of these vegetation communities in the region.
- Despite biodiversity offsets providing in perpetuity conservation of land, this does not result in a net gain of biodiversity area, however, does have the potential to remove agricultural land from production.
- Tailings dam controlled discharge via emergency spillway in rare and extreme rainfall events has potential for negative impacts on downstream water quality and aquatic ecology.
- It is noted that baseline air monitoring was suspended 30 June 2018. Consequently, baseline data does not take into account drought conditions experienced in summer 2018 and throughout 2019, and associated dust storm events, or the severe bushfire events in the summer of 2019/2020. Given the predicted increase to the frequency and severity of such events due to climate change, and that background 24 hour average PM₁₀ concentrations are approaching the guideline limit (43.7 µg/m³) cumulative impacts of the project, in light of these recent events affecting air quality, should be considered.
- We note RAP concerns relating to cumulative impacts on regional Aboriginal cultural heritage values, particularly as all sites impacted by the project were determined to be of high cultural significance.

- EIS is remiss in stipulating impacts on land values in the vicinity of the Project, citing “little rigorous study” available as reference. Whether scientifically validated or not, perceived impacts of proximity to the mine have the potential to detrimentally affect not only land value but also agricultural enterprises and business operations (due to perceived contamination). The proximity of the mine may preclude future economic development, especially tourism and organic agriculture, and devalue existing operations.
- While we agree with the EIS authors that impact on tourism in the greater MWCR region is not likely to be significantly impacted, direct impact on Lue and surrounds was not adequately considered in the EIS. There is a high potential for negative impacts to tourism and associated businesses in proximity to the mine.
- The impact on housing affordability resulting from Project workforce influx into the region coinciding with other large developments eg. expansion of coal mining, was not adequately considered.
- The EIS focused on social impacts to MWRC region and global, national and NSW economic benefits. However the village of Lue, 2-3 km from the project, will bear the brunt of impacts and this has not been given the appropriate level of consideration in the EIS. There is a high level of concern in the community regarding environmental, mental and physical health impacts during construction and operation, and residual risk of tailings dam or waste rock leachate post mine closure. Given the experience of other communities located in the vicinity of lead mines eg. Mt Isa, these concerns are not unfounded.
- While the direct economic benefits for the Lue community are relatively small, it is highly probable that the Project will impact on economic stratification and social cohesiveness of the village and surrounding community.
- Local impacts of upward pressure on prices of goods and services have not been considered.
- While the EIS presents a number of positive scenarios regarding coexistence of mining and rural communities the experience in our region, specifically Wollar village, has not always been a positive one.
- Influx of migratory workforce, up to 80% during construction, has a high potential for negative social impact. Our experience of the influx of a transient, predominantly male workforce to the district, associated with increased coal mining activity or development of the coal resource, has been an increase of issues relating to alcohol and violence. We do not visit Mudgee restaurants and pubs during these periods due to past experience relating to our safety. The EIS does not consider cumulative impacts of the Project coinciding with an influx of migratory workers for other projects/developments.
- The scope, length, level of scientific and technical detail and frequent use of abbreviations in the EIS and associated documents and the relatively short time frame for review and submission, although not unique to this development, will impact on many members of the public putting forward a submission. COVID-19 restrictions and lack of reliable internet access in rural and regional areas may have further restricted access to EIS documents.

We hope you will take the above matters into consideration when assessing this project and do not grant development approval.

Yours Sincerely,
 Agness Knapik
 BEnvSc (Hons I)

Anthony Waugh
 BSC (Hons I), PhD (Physics)