870 Ophir Rd
Summer Hill Creek
NSW 2800
www.cwecouncil.com

Department of Planning, Industry and Environment
Major Project Assessment
Locked Bag 5022, Parramatta NSW 2124
1

24 July 2020

Submission of Objection
Bowden Silver mine: Project SSD-5765

Introduction

Central West Environment Council (CWEC) is an umbrella organization representing conservation groups and individuals in central west NSW working to protect the local environment for future generations.

CWEC objects to the Bowden Silver Mine (the project) because the long-term environmental impacts have not been adequately assessed or mitigated.

The project is incorrectly titled as a silver mine when predictions are that 58% of mined product will be zinc and 41% will be lead. The mining of heavy metals has long-term costly environmental legacies that have not been assessed in the Environmental Impact Statement (EIS).

The EIS, as exhibited, has a number of major flaws and therefore, the project should be rejected.

Key issues of objection:

1. Biodiversity impacts

The project will destroy 381.7 ha of native vegetation including 182.3 ha of the critically endangered Box-Gum Woodland. This ecological community provides habitat for a large number of endangered species listed under NSW and Federal environmental legislation.

Koala were recorded within the disturbance footprint and a number of other threatened species, including *Acacia ausfeldii.*

The project has not identified adequate biodiversity offsets to meet the threatened species credits or ecological community credits needed to mitigate the loss of critical habitat.

2. Water pipeline from Ulan area coal mines

CWEC strongly objects to the proposal to access up to 5.5 ML/day, or a predicted 331 ML/year in an average year, of water from coal mines on the top of the Goulburn River. The water generated by both Ulan and Moolarben Mines is sourced from drawdown of base flows in the Goulburn River. This water is essential for maintaining environmental flows in this major tributary of the Hunter River.

The justification for the pipeline is to remove any uncertainties related to the availability of other water sources on site. However, the key time that local water supply will be scarce is during a drought. This is when both Ulan and Moolarben Mines need water for their own operations and also when the Goulburn River needs lost base flows to be replaced.

Both Moolarben and Wilpinjong Mines already have agreements to pipe water from Ulan Mine in times of water shortage. There is no guarantee that any water will be available from these sources when the project is short of water.

We note that there is currently no formal agreement with either Ulan Mine or Moolarben Mine giving assurance of this water supply. This source of water will most likely not be available when most required.

We also note that the proposed pipeline route does not meet the requirements of the Mid-Western Regional LEP in that it will transverse RU5 – Large Lot Residential Lands where water supply systems are prohibited.

The project is not consistent with the Mid-Western Regional LEP, as stated in the EIS (p ES-5)

3. Surface water impacts

A key issue not adequately assessed or mitigated is the placement of a 117 ha tailings dam (referred to as a storage facility) less than 1 km from Lawson Creek.

The tailings dam will store heavy metals and cyanide used in the ore processing operations.

The tailings dam is proposed to be built in three stages based on 2012 Guidelines for Tailings Dams designed to withstand a 1 in a 100 year rainfall event (100 year ARI - Average Recurrence Interval).

This does not take into account more intense rainfall events predicted by climate change modelling. The mine life is for 23 years until at least 2043. The tailings dam will be operational for the life of mine with no progressive rehabilitation.

There is a significant risk of dam failure under a rainfall event greater than 100 ARI. Rainfall events of greater magnitude have already occurred in the Mudgee Region.

There have been times when flows from Lawson Creek have been the main inflows to the Cudgegong River and into Burrendong Dam from significant rainfall events in the catchment.

The heavy metal and cyanide pollution caused by tailings dam failure will have a significant permanent impact on the ecology of Lawson Creek. Tailings dam failure also has the potential to contaminate the groundwater source associated with Lawson Creek, Cudgegong River and Mudgee town water bores.

The risk assessment of the tailings dam is highly inadequate.

4. Groundwater impacts

The project is predicted to drawdown 1.06 GL of groundwater at peak inflow into the mine pit or an average of 2.4 ML/day. This is a significant volume of a scarce resource that is far more valuable than the metals to be mined.

CWEC strongly objects to the retention of a final void or pit lake in the landscape at the end of mining. This body of highly toxic water is expected to continue drawing down groundwater sources for 200 years.

Again, the predictions for the stability of the void and potential overflow of this highly toxic water body are not based on climate change modelling over a 200 year period.

The proposed pit lake, as with the proposed tailings dam is a toxic time bomb in the Lawson Creek catchment that cannot be approved. The risk of irreversible environmental harm or damage that is highly expensive to repair has not been adequately assessed or costed.

5. Lack of assessment of acid mine drainage

The EIS is inadequate through the failure to assess the high likelihood of sulfuric acid production on the mine site and leachate into the surrounding environment including groundwater and surface water sources.

We note that the assessment of aquatic ecology identifies accidental release of pollution in poor water quality as being a potential threat to aquatic ecosystems.

However, the EIS fails to assess the environmental impact of acid mine drainage over time, during the life of the mine, and for an indeterminate length of time.

Toxic legacies from mine sites across NSW cannot be ignored. Acid mine drainage leads to significant remediation costs that cannot be met in many places. The environment and local impacted communities bear the cost.

6. Aboriginal Cultural Heritage

The project proposes to destroy 25 sites that are considered to have high cultural significance by the local Aboriginal community. The cumulative impact of mining on cultural heritage in the region has not been identified.

This was noted in the Department planning assessment of both the Wipinjong Coal Mine Extension Project and the Bylong Coal Mine.

It is unacceptable that 20% of the proposed pipeline route and the realignment of Mahoney's Rd has not been surveyed for assessment of cultural heritage impacts.

This is another example of the failing of the project EIS.

Conclusion

The EIS for this project is highly inadequate in assessing or mitigating the many significant environmental impacts that could be caused by 23 years of heavy metal production, if it were to proceed.

CWEC strongly recommends that the project be rejected as having too high a risk of long-term irreversible environmental impacts.

Yours sincerely

President