

**Michael White**  
**20 Yarraman Rd**  
**Wybong 2333**  
**25 July 2020**

## **Reasons for Objections to MCCOP SSD-5765 Bowdens Lead Zinc Silver Project**

- 1. This project will cause the creation of large areas of potentially acid forming waste rock and tailings placed in containments that are unproven in long term performance and appear difficult to construct to design.**

The project proposes to store 26 million tonnes of potentially acid forming waste rock in a 77 hectare containment area that sits above the water table and upstream of Lawson Creek.

The project proposes to store 30 million tonnes of PAF tailings in a 117 hectare containment that sits above the water table and upstream of Lawson Creek. These tailings 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% <sup>1</sup> 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 containment designs are complex and will be difficult to build to design on the uneven natural ground surface.

There is no track record to provide proof these containment designs will work and not leak during operations and for the extremely long term future that the potential for acid mine drainage will continue.

Leaks would only be detected when acid mine drainage has escaped the containments. The location of a leak would not be easy to find and repairs do not appear possible. It would then be leaking forever.

The proposed Tailings Storage Facility impoundment area base layer of less than half a metre of compacted clay will be difficult to ensure the minimum thickness is achieved and is only proposed under the decant pond area. How is the rest of the TSF impoundment area sealed?

Figure 11 in the EIS Groundwater Assessment<sup>2</sup> shows a major geological fault across the TSF area. Faults can be areas of increased permeability. There is no mention of this in the TSF design document.

- 2. The risks to human health have not been properly assessed.**

One example is the lack of recognition of wind-blown dust from the surface of the TSF in the EIS air quality modelling.

---

<sup>1</sup> Feasibility Study, Bowdens Silver Project, 14 June 2018, p.19 ASX release on company web site

<sup>2</sup> EIS Vol 2 Part 5 Groundwater Assessment, Fig. 11, p. 5-57

**3. Traffic Issues on the Mudgee-Lue Road**

Daily transport of explosives, toxic chemicals and increased heavy vehicle traffic will create a significant safety risk for the community.

**4. The external water requirements have not been adequately addressed.**

The proposed pipeline and water supply arrangements with mines near Ulan is only a concept and has no certainty of becoming a viable solution.

**5. Power supply to the Project has not been adequately addressed**

The 132kV power supply path necessary for the project has not been finalised

**6. Diversion of the 500kV transmission line has not been adequately addressed or included in capital costs.**

This is stated as being required by Year 3 of the Project

**7. The Mine Closure and Rehabilitation cost allocation of \$39.4M will be insufficient to cover leaking AMD.**

**8. The Proponent has no experience managing an operation like this.**

I submit that this Project Application should not be approved

Michael White

25 July 2020