

Submission to Bowden Silver Mine project SSD-5765

I am a resident and home owner within the Rylstone township. I live with my defacto partner and three year old child. My partner and myself are both classified as 'essential workers' and work locally in the Rylstone/Kandos townships, myself as a Paramedic and my partner as Carpenter. We moved here with the intention to live and work in the area for a minimum of 10 years. This submission has been prepared by my partner, I fully support the opinions herein and make this submission on my own behalf.

I oppose the Bowden Silver Mine on the basis that the EIS is scientifically inadequate, the Assessment Report is not evidence based and reference to safe lead exposure levels are misleading. I also believe the mine will directly and negatively impact myself and my family's livelihood.

The Bowden Silver EIS is scientifically inadequate.

I refer to the Submission made by Dr Haydn Washington, environmental scientist, dated 16th July 2020 which raised various issues with acid mine drainage.

The Bowden Silver Assessment Report is not evidence based and reference to safe lead exposure levels are misleading.

The above report prepared by The Department of Planning and Environment states "The human health risk assessment also showed that total exposure to all metals except manganese would remain below the threshold values for adverse effects". No reference has been provided for the evidence of safe threshold levels for lead. While it seems there is a consensus worldwide amongst relevant authorities that levels of lead above 10 µg/dL has negative health impacts, below that, there appears to be no general consensus, therefore I struggle to understand how the above statement can be made.

According to the World Health Organization "There is no known safe blood lead concentration; even blood lead concentrations as low as 3.5 µg/dL may be associated with decreased intelligence in children, behavioural difficulties and learning problems" (WHO, 2023). The Centers for Disease Control and Prevention in 2021, stated "Protecting children

from exposure to lead is important to lifelong good health. No safe BLL in children has been identified” (CDC, 2021).

Further to this, Bowdens is relying on a single review published by the National Health and Medical Research Council (NHMRC) in 2015 to justify their stance that no evidence exists that lower levels of lead exposure pose health risks. I believe this is a misleading and oversimplified statement for the following reasons:

- a) The above study that they base their statement on actually states “The available evidence suggests that blood lead levels between 5 micrograms and 10 micrograms per decilitre are associated with reduced IQ and academic achievement in children”
- b) The above study also states “There is weaker evidence of an association between blood lead levels of less than 5 micrograms per decilitre and reductions in IQ or academic achievement in children”. Weaker evidence is not no evidence!
- c) The above study explains the confounding factors that make gathering data in the lower level exposure brackets very challenging, which meant they only analysed a very small amount of studies within those brackets. This would indicate that the lower level exposure brackets have not had sufficient studies carried out to draw STRONG evidence either way. We must remember that just because something wasn’t proven to be unsafe, does not mean it is inherently safe!
- d) The above report was published 8 years ago and included research from as far back as 17 years. It risks becoming outdated research before the mine would even open.

The mine will directly and negatively impact myself and my family’s livelihood.

Of particular concern to me is the possibility of lead dust falling on my home’s roof and entering harvested rainwater. We moved to Rylstone in 2018 during the drought. We were under water restrictions during this time. Although our home is connected to town water supply, we have been planning to increase our water security for future droughts. To do this we have made plans to install a large water tank to harvest rainwater. The water would be used primarily for irrigating our own home grown food crops in spring and summer, for maintain water supply to non-edibles (home to much biodiversity) as well as for drinking water and feeding back into the home, should water restrictions become more strict in the future.

Water security is amongst the United Nations 17 Sustainable Development Goals (“clean water and sanitation”). Water is necessary for life on earth. The lead dust poses a direct and unstoppable risk to water security for my family as we, as a global community, move further and further into greater climate change and risk of drought.

References

1. US CDC Advisory Committee on Childhood Lead Poisoning Prevention. CDC updates blood lead reference value to 3.5µg/dL. Atlanta: US Centres for Disease Control and Prevention; 2021 (<https://www.cdc.gov/nceh/lead/news/cdc-updates-blood-lead-reference-value.html>).
2. World Health Organization, *Lead Poisoning*, viewed 12 Feb 2023, (<https://www.who.int/news-room/fact-sheets/detail/lead-poisoning-and-health>)