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Submission to EIS on Bowden Silver mine, Project SSD-5765

OBJECTION TO BOWDENS MINE PROPOSAL

My name is Sally Nagel, I am an owner of a cattle property, Old Bara which is located 8kms as the crow flies from the proposed Bowdens lead/silver mine. I have lived in the Mudgee region for 27yrs and am very passionate about the great and healthy lifestyle we have by choosing to live in this area.

The reasons why I object to this proposal are:

1. I am very concerned about the huge amount of water which is needed if this project goes ahead, both the ground and surface water levels will be substantially effected. The ground water on the mine site will drop by 25 metres and the open cut pit will continue to draw on ground water for up to 100 years after the mine has been abandoned. Bowdens mine will use more water from the Lawson Creek catchment than all current users combined. The water level in the creek will drop by one metre rendering much of the creek dry for other users.

Future droughts have not been considered. In the past 13 years, droughts have caused the Bara creek to dry up completely twice, the most recent time being the beginning of 2020. Climate change must be taken into consideration before relying on the water source in this area.

The area of Lue and Bara does not have enough water to support this project. Even if the piping of water from Ulan mine is granted, which is not definite to date, this will only supply 15% of the water needed. This geographical area does not have enough ground or surface water to support this project. If the creeks run dry, not only will this mean that the Bowdens silver project will not be viable, this will also have a massive effect on the agricultural land surrounding the mine site. Very well-established sheep and cattle properties are reliant on this water, including Old Bara. Life is not possible without water.

- 2. The mine will produce 95000 tonnes of lead a highly toxic mineral. There is no safe level to exposure of lead. Lead is a cumulative toxicant that affects multiple body systems. A deadly cyanide processing plant is proposed to operate on site. We breed Angus beef cattle, if there is any trace of lead in their blood, they will be deemed unsalable. If this mine is given approval, we will be taking blood tests before the project commences. We will also be testing our soils, as we do this regularly.
- 3. A highly toxic large tailings dam will be constructed less than a kilometre from Lawson Creek and will be there FOREVER long after the mine has been abandoned - these dams have been known to fail. The result would be an environmental disaster for Lawson Creek which feeds into the Cudgegong River at Mudgee. It will pollute our water supply forever. Tailings dams regularly fail around the world, in fact there 23 tailings dams have failed in the world in the last five years including the dam at Newcrest Mining's Cadia Gold Mine near Orange NSW.
- 4. Acid mine drainage (AMD) occurs when mining operations result in sulphate bearing ores, such as pyrite and chalcopyrite being exposed to the air and water. Over time, sulphides react with oxygen to form sulphates, these dissolved in water forming sulfuric acid which then leaches heavy metals from rock exposed by mining. The mine will produce two massive dumps of 56 million tonnes of acid forming rock and tailings (crushed ore remnants post processing) above the water table and local creek catchments of Price Creek, Hawkins Creek and Lawson Creek. Once you disturb a metal sulphide deposit and allow water and oxygen to enter, Acidithiobacillus will ensure acid mine drainage occurs and continues until the sulphide is all converted. There is no known solution to this reality, and acid mine drainage can continue for hundreds of years, Bowdens Silver's failure to discuss this is both unscientific and unethical. The EIS is thus totally inadequate scientifically and ignores and downplays the risk of acid mine drainage. The United Nations have labelled AMD as the second biggest problem facing the world.

- 5. The environmental and economic effect on tourism in the Mudgee region. The tourism industry is likely to diminish if our water and air is polluted. Old Bara also runs a tourism business, made up of people wanting to escape to peace and quiet and fresh clean air. The noise level from a mine operating 24hrs a day, 7 days a week will destroy any peace and quiet, also due to the light pollution, the ability to see stars at night will be minimised, this is a major attraction for visitors from cities. One word about a lead mine in close proximity could destroy the whole Mudgee region tourism industry for the sake of a handful of jobs promised by Bowdens silver mine. If the proposal to operate the mine 24 hrs a day, seven days a week is true, the effect from noise, dust and light is totally unacceptable for all residents of Lue and Bara.
- 6. 227000 tonnes of ore will be trucked along the winding and narrow Lue Road through Mudgee town ship. Our local road is already very busy with tourists and commuters from Rylstone and Kandos. In order to cope with the proposed use of B Double trucks, the road would have to be upgraded significantly if the mine goes ahead.
- 7. Bowdens does not offer a suitable plan for rehabilitation of the mine. When the mine closes the tailings dam and all the PAF will remain forever, an environmental disaster!

I believe this project should be rejected. Thank you for taking my submission into consideration.