

Submission  
No 177

**INQUIRY INTO CURRENT AND POTENTIAL IMPACTS OF  
GOLD, SILVER, LEAD AND ZINC MINING ON HUMAN  
HEALTH, LAND, AIR AND WATER QUALITY IN NEW  
SOUTH WALES**

**Name:** Mr James inglis  
**Date Received:** 5 September 2023

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Partially  
Confidential

## Submission

5<sup>TH</sup> September 2023.

My name is Jamie Inglis, I live 5 kms downstream from Bowdens with my wife Sarah and son Richie, our property fronts Lawson Creek and we have a cattle breeding operation and I'm also involved in my family business of marketing broad acre farms up and down the eastern seaboard.

The Department has made the recommendation to proceed with this mine by ignoring the advice of many of their own experts.

Lawson Creek is the lifeblood of our property – During dry times, we rely on it totally for stock and domestic water. Water from the creek was our saviour during the last drought, 1917 through to early 2020; without it we would have had to totally destock. There is simply not enough water in the Lawson Creek valley. The creek at present is a good trickle, not one megalitre a day would flow past our property and that is after one of the wettest years on record, 2022.

Key points why Bowdens Mine should not proceed.

1. There is not enough water in the valley. I spoke to a executive director of Kingsgate Mines, the previous owner of the Bowdens site and he said there was not enough water to successfully operate a mine and the lack of power was also a problem.
2. The effects on health and well being of residents will be immense. There is no safe level of lead and it is particularly harmful to children.
3. The threat of Acid Mine Drainage. The proposed tailings dam is to be constructed above Lawson Creek. Just on 2000 tailings dams have failed around the world since 1960. When will we learn.
4. The proposed mine will damage the environment, the grassy woodlands, a Koala habitat, natural springs and Aboriginal artifacts.
5. Tourism in the mid western area is a big business. The success of tourism is based on perception and one article about lead dust floating across the region will kill this industry that pumps many tens of millions into the economy.

6. Agriculture, hay making, beef cattle, fat lambs horses, etc will be put at risk as well as the long established wine industry.
7. 1.6 megalitres will leak in the aquifer daily. That is one million six hundred thousand litres a day. This is stated in the proponents EIS. This cannot be tolerated, this will be environmental vandalism at its worst.

#### RECOMMENDATIONS.

1. There must be a comprehensive management plan with key stake holders, residents, members of the Mudgee Region Action Group, etc at the table to protect water, health, the environment etc.
2. the rights for merit appeal must be restored.
3. No more tailings dams. Dry stacking must be implemented as it has been done in the US. Tailings dams fail.
4. Not one litre of toxic material or heavy metals must leave this site.
5. Harvestable rights dams cannot be bigger than is allowed to be harvested on minimum subdividable area.
6. All mine sites must be rehabilitated.
7. Developing a greens fields site, miners must be required to evaluate the health and economic impacts to all businesses and land uses within 7 ks of the site.
8. Compulsory acquisition should be enforced if miners make life unbearable for residents living within a 3ks radius.

#### Assessments.

The Department considers the key assessments issues relates to impacts of water resources, amenity and health impacts, traffic, social impacts on the local community and bio diversity.

#### Water.

As stated at the IPC hearing by Shireen Baguley,

- 1, If Bowdens is allowed to proceed, 480% more rainfall and runoff will be lost than has been assessed by the Department.

2. Clear water harvesting is also lost to the catchment and Shireens analysis confirmed that Bowdens intends to harvest more than twice the clean water it is entitled too.
3. Bowdens have had seven years to answer the questions put in SEARS and Shireen made it clear the most important ones remain unanswered and uncertain.
4. Shireen said there is no water quality model in Bowdens EIS.
5. There is no water quality management plan with appropriate triggers for action.
6. Major uncertainties remain around the final void and water flow through and the consequences for contamination of Lawson Creek valley, surface and ground water. Importantly the Departments own water expert Earth Systems has similar reservations to Shireen.

The modelling produced by the proponents is out of date, with regards to their handling storm events. They have used data that will not stack up in present day conditions. It has been widely reported that one off storm events will be more fierce and frequent.

In life we learn to manage risk, we often discuss risk management, risk assessment is a part of every day life. Bowdens does not have a risk policy. If they did they would have a second tailings dam.. – Bowdens tailings dam is on a geographical fault line and as we heard from Chris Pavich, this makes the site more unstable. Therefore, as a Condition of Consent, Bowdens must construct a second tailings dam. I am told Cadia mine at Orange is about to build its third tailings dam, part of risk management.

This mine has only been designed to manage up to 250 mm in a 72-hour period yet an isolated storm in the Lue valley over Havilah, of 220mm in 9 hours on Rylstone Show day 22nd February 2003. This event was the biggest flood in living memory on the Lawson Creek. This storm headed north and created untold damage.

Mudgee Region Action Group

recorded 325 mm in 36 hours in February 2003. It lives about 500 metres from Lue school. When a storm of this magnitude happens again the tailings dam will overflow.

You cannot beat nature, you must work with it. These so-called one-off storms will happen again, next year, in ten years, 30 years when the mining is finished, toxic materials will overflow into Lawson Creek.

In the assessment it states key infrastructure has been designed to limit the risk of failure, overflow and seepage. The assessment states, in line with best practise AMD management, Bowdens would separate the PAF material extracted during mining and encapsulate it within the waste rock emplacement. Best practise in this situation is not good enough and Government policy is not strict enough in such a sensitive mine and area.

The Department has recommended conditions requiring Bowdens to update the groundwater model every 3 years, to ensure the final void remains a groundwater sink in perpetuity and demonstrates that seepage from the void would not cause adverse impacts on the environment. Every three years is not nearly enough and should be every six months.

There should not be one litre of seepage. The Lawson Creek valley is totally pollution free and it is an outrage to even contemplate seepage.

Amenity Impacts.

Air dispersion modelling of the project under different mining scenarios indicates that there would be no exceedances of any of the impact assessment criteria of any private residences for particulate matter, total suspended particulates, deposited dust, silica or gaseous pollutants.

A human health risk assessment included in the EIS showed that the intake of any metal as a result of the project would almost be negligible.

The above comments are outrageous and totally irresponsible. At the IPC hearing in Mudgee doctors, veterinarians, health workers, nurses and qualified professors all stated the harmful effects of lead and there is no safe level of lead. They have stated there will be lead dust. How can this be allowed; we all know the ramifications of lead dust.

The Department has recommended Bowdens monitor metal concentrates in deposited dust at residences and develop a trigger action response.

This trigger action will be far too late. Once consumed by humans and animals, lead dust can not be excreted.

### Social Impacts.

In the DPE's assessment they recognise that all those who live round Lue will suffer the negative impacts from mining. The government is asking the residents of Lue to sacrifice their wellbeing for the greater good. Because of this sacrifice the residents should be able to exit if so desired as a Condition of Consent via voluntarily acquisition of all those properties affected. Bowdens mine is allowed will destroy Lue, people will not put up with lead dust, noise, traffic and the constant activity of the mine.

Again there must be voluntary acquisition of all properties within 3 km of the site.

### Bio Diversity

The project has been designed to avoid and minimise the disturbance of native vegetation as much as practicable. Approximately 381 ht of native vegetation comprising seven plant community types would have to be cleared. 180 ht of this vegetation meets the definition under the BC act for critically endangered ecological community, white box, yellow box, blakelys red gum woodland ( box gum woodland )

Box Gum woodlands is a critically endangered ecological community that supports a significant diversity of plant and animal species,( such as Koalas) including many threatened species. Although this ecological community was once widespread from Southern Queensland to Victoria, it is estimated that only 5 % remains today.

It is crucial that these rare woodlands are preserved.

Ground water dependant ecosystem are defined as ecosystems that need access to groundwater to meet all or some of their water requirements to

maintain their communities of plants and animals, ecological processes and ecosystem services.

If this mine gets the go ahead, here is another part of nature and the environment that is lost forever. The environment is vital to life and people and animals and if we destroy this ecosystem, it will be shameful.

Vineyards in this region will suffer from lead dust. Vineyard owners cannot set up watering systems to wash their grapes, it is not viable and if it was the dust will be absorbed through the soil. The wine industry in Mudgee is world renowned, which attracts many tourists to Mudgee. Bowdens will not be able to contain lead dust, no lead mine around the world has been able to.

The risks with this mine are immense, this is a sensitive area and the mine is too close to the 133 houses in the Lue area. Also the mine is located just above Lawson Creek the lifeblood to many people, farmers, lifestyle and Lue residents.

This region is thriving on tourism, vineyards and agriculture, please don't destroy this wonderful part of NSW.