

**Submission  
No 39**

**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:** Des Bowden

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Dear Sir/Madam

I am writing to the PORTFOLIO COMMITTEE NO. 2 - HEALTH 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 (to raise my particular concerns pertaining to the proposed Bowdens Silver/Lead/Zinc mine in Lue, NSW) per:-

**(a) the impact on the health of local residents and mine workers, including through biomagnification and bioaccumulation**

Bowdens' groundwater assessment considers groundwater availability around the site, but no peer review has been conducted on groundwater contamination risks from dangerous chemicals like cyanide and heavy metals like lead.

There is significant risk of tailings dam leachate bypassing the seepage collection ponds and entering the groundwater system.

The data Bowdens uses in its project proposal underestimates community exposure levels of lead. It ignores concentrate, mine ore materials or tailings as potential sources of lead dust and fails to analyse the effect of peak wind events.

**(b) the impact on catchments and waterways, affecting both surface and groundwater destined for, local and town water supplies, including rainwater tanks, and on aquatic biodiversity**

The mine would use roughly 5 megalitres of water (two Olympic sized swimming pools) every day.

Earlier plans indicated Bowdens intended to pipe this water from the Ulan coalfields, as there was insufficient water at Lue to meet requirements.

Now, they are proposing to get all the water needed from Lue, either through building dams, using water caught and drawn into the open cut pit, taking water from the Lawson Creek or using water from the tailings dam.

Bowdens' activities will result in a loss of flow from 10.9% of the Lawson Creek. This will have a significant impact on all downstream land and water users.

The data relied on by Bowdens to conclude there will be no significant impact on other water users in the area is inaccurate. It is based on an inflated monthly rainfall average and an understatement of the frequency of dry years.

**(c) the impact on land and soil, crops and livestock, including through biomagnification and bioaccumulation**

Bowdens plans to stack this acid forming rock (containing iron sulphide minerals) above the Lawson Creek water table over a 77 hectare area called the Waste Rock Emplacement Area (WREA).

Over time, sulphides react with oxygen to form sulphates, which dissolve in water and form sulphuric acid which then leaches heavy metals.

This can cause large amounts of water with low pH and high concentrations of heavy metals such as manganese, iron, nickel, copper and zinc.

Discharge of acid drainage into water bodies causes an instant threat to the biota and ecological balance. It can threaten drinking water supplies and irrigation systems downstream from a mining site.

**(d) the adequacy of the response and any compliance action taken by the regulatory authorities in response to complaints and concerns from communities affected by mining activities**

Bowdens proposes to mitigate mining impacts on the community by :

- Air conditioning and double glazing.
- Bunding and screening.
- Limiting times and days when operations occur.
- Spraying for dust suppression.
- Monitoring lead levels in the community.
- Investment in the community through grants and sponsorships.

The IPC has decided that this is an adequate response to community concerns. Plainly, it isn't. The people of Lue and surrounds will be presented with:-

- Having to choose between tolerating unmitigated noise and dust, or living in a fully enclosed (air conditioned) dwelling.
- Living with on-going risks to health, and tolerating regular testing for lead in soil and water.
- Anxiety due to risks to health, particularly affecting young people and potentially realising adverse health impacts had occurred.
- Loss of many amenities of a rural way of life, including home grown food, open windows, line clothes drying.
- Loss of sense of place and visual amenity.
- Anxiety due to loss of property values, and inability to realise the previous capital value of homes and property because of the proximity of the mine.
- Loss of permanent residents despite the fall in the property values.

**(e) the effectiveness of the current regulatory framework in terms of monitoring, compliance, risk management and harm reduction from mining activities**

Plainly, as has been the experience at Cadia Mine in Orange, the current effectiveness of regulatory frameworks in terms of monitoring, compliance, risk management and harm reduction has proven to be woefully inadequate and does not auger well for how the proposed Bowdens mining operation would be managed.

**(f) the effectiveness of current decommissioning and rehabilitation practices in safeguarding human health and the environment,**

In the Bowdens proposal there is no plan to drain or remove the tailings dam, meaning it will remain in situ forever. Bowdens has acknowledged leakage from the dam will continue after mining stops, but there is no plan in place to fix this or manage it.

What does this mean? It means permitting Bowdens to build and operate this dam will sentence our region to a toxic intergenerational legacy. The dam will be there forever, and generations to come will have to live with the consequences of leakage of toxic chemicals into a currently pristine environment.

In summary, I would implore the Committee to give these matters their sincere consideration.

Your sincerely

Des Bowden