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: Name suppressed

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Partially Confidential

Subject: Submission to the Parliamentary Inquiry on the Current and Potential Impacts of Gold, Silver, Lead, and Zinc Mining on Human Health, Land, Air, and Water Quality in New South Wales

Dear Members of the Parliamentary Inquiry Committee,

I am writing to provide a submission to the Parliamentary Inquiry regarding the current and potential impacts of gold, silver, lead, and zinc mining on human health, land, air, and water quality in New South Wales (NSW). As a concerned citizen and resident of the local area, I believe it is crucial to address these issues for the well-being of our communities and the sustainability of our environment. It is essential to prioritise the long-term well-being and sustainability of our region over short-term economic gains.

Introduction

Mining activities have unquestionably played a significant role in the economic development of New South Wales. However, these operations have also had profound and lasting effects on the health, environment and other industries of the region. These harder to quantify costs have historically been overlooked or dismissed under the weight of minings perceived financial benefits.

This submission will outline some key concerns related to gold, silver, lead, and zinc mining in NSW and suggest recommendations for mitigating these impacts.

It will also argue that there is an imbalance between the short term needs of mining companies and the longer term needs of NSW and the local communities. At the moment it is unduly weighted to mining company interests at the expense of all other parties.

Impacts on Human Health

1. Exposure to Heavy Metals:

Residents in proximity to mining operations are exposed to heavy metals through various pathways, including drinking contaminated water, eating contaminated fish or crops, or breathing contaminated air.

Exposure to these contaminants through air, water, and soil can pose severe health risks, including neurological disorders, developmental issues in children, and cardiovascular problems. Lead is a toxic heavy metal that can cause severe health problems, especially in children and pregnant women. Even small amounts of lead exposure can lead to neurological damage, developmental issues, and behavioral disorders. There is no save level of lead exposure.

2. Dust and Air Quality: Dust emissions from mining operations can contribute to poor air quality, leading to respiratory issues, including asthma and bronchitis, among local residents and workers.

In Broken Hill, it was only in 2017 that it was acknowledged that high levels of lead contamination were a result of lead dust from the mines not 'natural environmental factors'.

The dust blown from the Cadia goldmine into local properties and water tanks shows it is still happening. Cadia air pollution breaches were not recognised until a community campaign was launched and gained high media awareness.

It must be acknowledged that the issues raised by the community are why this Parliamentary Inquiry is even happening.

The assessment of dust emissions from the Bowden lead mine and the measurement of wind directions was very poor. Yet despite that being pointed out at the hearing, the mine was approved.

Impacts on Land Quality

1. Land Degradation: Mining activities, particularly heavy metal mining, have a proven track record of causing severe environmental degradation. Extensive mining activities leads to land degradation, including habitat destruction, soil erosion, and loss of biodiversity. These effects have long-term consequences for the ecosystem and agricultural productivity.

This contamination can persist for generations, affecting the broader food chain, harming local ecosystems and endangering wildlife.

2. Soil Contamination: The disposal of mining waste, especially tailings, can lead to soil contamination with heavy metals. This can affect the fertility of agricultural land and pose health risks if crops grown in contaminated soil are consumed.

In Broken Hill, children need to wash their shoes when they have been playing outside so they don't bring lead dust into the house. As a result of mining, playing outside is toxic! How is that acceptable?

Impacts on Water Quality

- **1. Water Pollution**: Mining operations contaminate local water sources with heavy metals and chemicals. These metals can contaminate drinking water sources, rainwater tanks, harm aquatic ecosystems, and pose serious health risks to both humans and wildlife. This poses a direct threat to the health and livelihoods of our communities.
- **2. Sustainable Water Management**: Proper water management practices do not take into account a complete picture. For example, water availability for mining operations and dust management during extreme drought is a significant issue for the Bowden's mine. Dust suppression will require more water than they have. It was not adequately addressed in their proposal, yet it was approved!
- **3. Acid Mine Drainage**: When sulfide minerals are exposed to air and water during mining, they can react to produce acid mine drainage (AMD). AMD is highly acidic and can contain heavy metals. It not only harms aquatic life but also exacerbates water pollution.

The treatment of mine water, especially from the tailings dams is crucial. However, the tailings dams design for Cadia mine was a demonstrated failure. The tailings dam at Bowden's has approval to seep 1.6 ML per day of contaminated water into Lawson Creek, an important water source for downstream users, including towns. So not only do they have permission to use precious and scarce water supplies they then can pass it on as a toxic by-product.

4. Community Disruption: Heavy metal mining often requires the displacement of local communities and disrupts our way of life, traditional practices, and cultural heritage. This upheaval can have long-lasting negative effects on the social fabric of our communities.

Bowden's zinc, lead and silver mine is close to populated areas, including Lue village and school, Rylstone, Kandos and Mudgee. I know of a number of people who will not stay in the area if the mine opens, due to concerns for their children's health.

- **5. Economic Vulnerability**: Relying heavily on mining for economic growth can make our region vulnerable to market fluctuations and price volatility in metal markets. This over-reliance can result in economic instability when metal prices decline or the mine closes. Witness the uncertainty in the Hunter Region as coal mine closures are becoming closer to reality.
- **6. Lack of Long-Term Benefits**: The promise of short-term economic gains often overshadows the long-term economic and environmental costs associated with mining. Once the minerals are depleted, communities are left to deal with the legacy of environmental damage and social disruption. If there is a community that is left. The impact of mining on the land continues for generations as a result of its impact on water quality, soil degradation and disrupted local ecosystems, with the resultant habitat loss and fragmentation.

Recommendations

To address the current and potential impacts of mining on human health, land, air, and water quality in NSW, the following recommendations should be considered:

- **1. Stricter Regulations**: The government should review and enhance regulations governing mining activities to ensure that environmental and health risks are minimized. Greater penalties and stronger conditions for mining operations must be in place to prevent heavy metal contamination of the environment and community. Currently, the penalties imposed are insignificant for mining companies. It becomes easier and cheaper to pay a fine than put in place high level safeguards. The Environment Protection Agency and Department of Health must play a major role in the approvals process and be better resourced to improve regulation.
- **2. Independent Monitoring**: Establish independent monitoring and oversight bodies to ensure ongoing compliance with environmental standards and health and safety regulations.
- **3. Independent Assessment:** This need for rigorous independent assessment and approval was starkly shown in the Bowden's mine process. There was heavy reliance on the proponent's consultant reports with little or no consideration of other expert

reports. Again an example of unfair weighting to mining companies interest at the expense of everyone else.

The Department of Planning and the Independent Planning Commission must be resourced to employ independent experts to fully review information provided by proponents.

- **3. Community Engagement**: Encourage meaningful community participation in mining decisions and permit processes, giving local residents a voice in shaping the industry's direction. The process of giving the community a voice or input in the Bowden's was shown to be an empty gesture. Nothing presented was meaningfully taken into account. Bowden's input unjustifiably carried vastly more weight.
- **4. Complete Assessment**: Currently there seems to be limited criteria as to what is included in assessments. For example, in the Bowden's assessment the impact of the mine on local tourism was ignored. Even when the Mid-Western Regional Council trumpets in their 2022 annual report that "Tourism is essential to the Mid-Western Regional economy, delivering \$101.2 million annually." Assessments are disproportionately weighted in mining companies interests. There must be a complete assessment, taking into account all impacts that the introduction of a mine will have. These include the health and well-being of the community and environment, as well as the impact on other industries such as agriculture and tourism.

Conclusion

While mining has played a vital role in the economy of New South Wales, it must now be conducted more responsibly to protect the health of our citizens and the environment.

For too long it has been more convenient to believe that the impacts of heavy metal mining are localised and controlled. They are not. **The impact is never restricted to the area in which the mine operates**. Why is it permissible for a mining company to enter an area, mine the land and cause environmental, agricultural and community destruction? Why is more important to mine heavy metals than it is to protect the health of the local community and as well as all the economic and social benefits that other industries such as agriculture and tourism will continue to bring long after the mines have closed?

I strongly urge you to reconsider the approval of heavy metal mining in our region and instead explore sustainable and environmentally responsible alternatives for economic development. We must prioritize the health, safety, and well-being of our communities, protect our natural resources, and ensure a sustainable future for generations to come.

Thank you for your attention to this critical issue. I look forward to the outcomes of the inquiry and hope to see positive steps taken to mitigate the adverse effects of mining in NSW.

Sincerely,