

**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**

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Portfolio Committee No. 2 – Health
Legislative Council
Parliament of NSW, Sydney 2000

re. 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

This submission addresses item (h) of the [terms of reference](#), namely:

whether the regulatory framework for heavy metals and critical minerals mining is fit for purpose and able to ensure that the positive and negative impacts of heavy metals and critical minerals mining on local communities, economies (including job creation) and the environment are appropriately balanced.

I am an expert in social impact assessment. I have prepared a number of expert SIA reports on mining proposals including recently for the Belubula Headwaters Protection Group regarding McPhillamys Gold Mine at Kings Plains in Blayney Shire and for the Lue Action Group regarding Bowdens Silver Mine at Lue in the Mudgee region. I have also reviewed social impact assessments of other mining proposals on behalf of the NSW Department of Planning, the Environmental Defenders Office, Lock the Gate, and the North West Alliance.

My submission is informed by and reflects my many years of practice and does not represent the views of the University.

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Signed electronically in accordance with section 9(1) of the *Electronic Transactions Act 2000* (NSW)

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Submission

In my experience, assessments of mining proposals commonly overlook or underestimate an array of social costs. These costs are both financial and non-financial. Omission and/or underestimation of these costs, means they are not attributed to mining projects. This is a financial benefit to mining companies. The practice also makes mining proposals appear more profitable than they actually are.

Mining companies' financial interest in their profits is supported by government interest in receiving royalties which are directly related to profit levels. That is, there is a financial coincidence of interest between a mining proponent and the government in favour of the mine going ahead. The regulatory framework governing these decisions does not ensure that the likely adverse social impacts of a proposed mine are adequately weighed against its estimated profitability. This can happen in a number of ways:

- 1 **Limited requirements for offers to acquire affected properties** such that the financial burden on the mining company is minimised. In social impact terms, the effect is to minimise the size of the residential/landholder buffer around a mine site and to leave landholders outside the narrow buffer to wear the social, including health and financial, costs of proximity to the mine site.

Example: Bowdens Silver Mine

The proponent had purchased 13 properties close to the site and proposed to purchase a further 3 but this left 57 residences in the locality of Lue without compensation or realistic opportunity to move without financial loss.

Example: McPhillamys Gold Project

The proponent offered negotiated purchase agreements to 18 landholders near the site leaving 67 landholders within 2 km of the site, including 16 landholders less than 1 km from the site, without compensation or realistic opportunity to move.

In both examples, the uncompensated landholders will be within earshot and windblown dust deposits of the mine, that is, they will bear social, health and financial costs of the mine. These factors will undermine the value of their properties, restrict their options, and leave them at long term risk of damage to their health.

The problem is that these costs are not included in the assessment of the mine's profitability. They are treated as externalities to be borne locally. The costs can include direct financial and indirect health costs arising from dust dispersion, lost land value and/or lost business viability, costs associated with loss of social cohesion, increased social conflict, and loss of visual amenity.

These matters are usually raised by local residents but decision assessments appear to make no attempt to quantify the direct and indirect costs and losses that local landholders will accrue. Rather they are treated as ‘within acceptable limits’ and/or able to be mitigated.

Disregard of the social implications of this approach to a mine’s profitability was made specific in the Department of Planning’s Assessment Report regarding Bowdens Silver Mine in which it stated

‘the Department considers the financial viability of the project is a risk for the owner of the project rather than for the community of NSW.’¹

However, poor or threatened financial viability is likely to increase risks of social impacts experienced by the local community – for example due to shortcuts taken by the mining company in the name of cost saving. Contrary to the Department’s assertion, financial viability is a risk for the community of NSW.

- 2 **Acceptance of unsubstantiated claims about the number of jobs** that will arise from the proposed mine. These can take the form of simple assertion or multi-assumption calculations. In either case they are, at best, only estimates. This is a critical issue where the estimated number of jobs is claimed as a primary social benefit.

Example: Bowdens Silver Mine

The proponent said, and the Department of Planning accepted, that this project would provide an estimated 131 FTE ² construction jobs and an average of 210 FTE operational jobs.

These estimates were acknowledged to involve several uncertainties, ³ but the Department’s Assessment Report did not take the social risks of over-estimation into account,

Example: McPhillamys Gold Mine

The proponent said, and the Department of Planning accepted, that the project would require 710 construction workers and about 260 operational workers.⁴ however, the basis for the estimate was not provided.

In my opinion, insufficient attention is given to:

- the speculative nature of job numbers claimed,
- the disparity between number of construction jobs (usually short term) and operational jobs (for the life of the mine)
- the likelihood that these jobs may not reduce local unemployment, and in some cases,
- the short life of the mine.

¹ Department of Planning Assessment Report re Bowdens Silver Project, para 470

² Full time equivalent

³ Department of Planning Assessment Report re Bowdens Silver Project, p 73

⁴ Department of Planning Assessment Report re, McPhillamys Gold Project, p viii

- 3 **Assumptions that the proposed size of the mine and its likely life are accurate and fixed.** Failure to take account of statements of intention to apply for extensions to the proposed site and operational duration means that the assessment is made for a smaller site and duration than is envisaged by the proponent.

Example: Bowdens Silver Mine

‘it is worth noting that based on further drilling and resource definition, Bowdens Silver has indicated that more of the resource may be economically extractable and, if anything, the economic position is likely to be improved.’⁵

In this statement the Department anticipates an extension to the proposed project in financial terms. The social consequences of extensions of time and footprint are not included in the Assessment.

- 4 **Substituting monitoring for precaution.** In both the Bowdens and McPhillamys mine projects, the most serious adverse social risk, namely health risks from lead and other minerals in dust, is to be dealt with retrospectively, that is by monitoring after the event.

Despite claims that the conditions of consent are ‘strict and precautionary’⁶ retrospective monitoring by definition fails the precautionary principle no matter how strict the measurement methods are. This is particularly serious with regard to risks to health from lead dust:

- according to the World Health Organisation there is no safe level of exposure to lead,
- there is no remedy for harm due to exposure to lead, and
- if monitoring reveals exposure rates of concern, mining nonetheless continues.

- 5 **The impact of exceedances.** Project assessments also appear to make unjustified assumptions that levels of dust, noise, or seepage will be continuously maintained within currently permitted, and therefore acceptable (or it may be implied tolerable) levels. This is despite the fact that conditions of consent address breaches of these standards (called exceedances) as a matter of course. The social impacts of frequent exceedance of permitted standards are rarely considered.

- 6 **Misrepresentation of funds provided to a local council as funds provided to the local community for their social benefit.** For example, funds provided to a local council for road maintenance via a Voluntary Planning Agreement (VPA) with the council, bypass a process to consider community priorities for expenditure of these funds.⁷ In my opinion, it cannot reasonably be assumed that the council is the community for this purpose.

⁵ Department of Planning Assessment Report re Bowdens Silver Project, para 470

⁶ E.g. Department of Planning Assessment Report re. McPhillamys Gold Mine p ix

⁷ This may be evidenced by the absence of a Social Plan for the local government area.

- 7 **Undue reliance on social impact management plans (SIMPs)** which lack tangible or material actions which would reliably deliver any reduction in adverse impacts on local residents. In my opinion, many SIMPs could best be characterised as intermittent PR.

Notably, the requirements for a SIMP in standard Conditions of Consent call for processes (strategies, consultations, committees, policies) but not results or outcomes. The requirements for a SIMP for both McPhillamys Gold and Bowdens Silver mines place implementation in the hands of the proponent who is also expected to fund its operation, that is, the effectiveness of a SIMP is also eroded by the conflict of financial interest inherent its structure.

Neither SIMP would meet the Department's expectation that a mitigation of adverse social impacts should be

‘... responses that are tangible, deliverable, likely to be durably effective, directly related to the respective impact(s) and adequately delegated and resourced.’⁸

In my opinion, Departmental claims that SIMPs constitute strict and precautionary conditions of consent lack credibility and undermine confidence in the integrity of the assessment and decision making process.

- 8 **Unjustified assumptions that a mineral should be mined because it is there.**⁹
The Department treats mining as resource ‘recovery’¹⁰ as if there were no alternative means of obtaining the metal or metals sought. However, the NSW Government's Minerals and High-Tech Metals Strategy includes both extraction of critical minerals from discarded mine tailings,¹¹ and obtaining some metals by recycling. The recent decisions to allow gold and silver mines to commence do not appear to have taken account of this Strategy.
- 9 **Consideration of each mining project on a one-by-one basis** fails to take account of the cumulative impact of a sequence of pits on the landscape, particularly having regard to their likely presence in perpetuity. The Minerals and High-Tech Metals Strategy's map of critical mineral and high-tech metal deposits in NSW (at p 11) reveals the potential consequence for the state if all available mineral resources were mined. A proliferation of open cut mining sites is a social risk to the state due to accumulated damage to the natural environment, the number of abandoned voids, the number of abandoned mine sites including those technically in ‘care and maintenance’ mode, and the number of spoil heaps (that may become unstable) but will exist in perpetuity. The natural landscape of the state has an important social value which the Strategy does not describe or give weight to.

⁸ Department of Planning SIA Guideline 2023 p 35

⁹ Department of Planning Assessment Report re Bowdens Silver mine p iii

¹⁰ Department of Planning Assessment Report re Bowdens Silver mine p viii

¹¹ NSW Government, 2021, [Critical Minerals and High-Tech Metals Strategy](#) p 14

Summary

Item (h) of the Terms of Reference asks

whether the regulatory framework for heavy metals and critical minerals mining is fit for purpose and able to ensure that the positive and negative impacts of heavy metals and critical minerals mining on local communities, economies (including job creation) and the environment are appropriately balanced.

In my experience, the social impacts of gold, silver and lead mining, including the adverse impacts on public health arising from proximity to mining, are not adequately balanced against the financial interests of proponents or the NSW Government.

The bias in favour of these financial interests is facilitated by:

- Conventions permitting narrow residential and other land use buffers around mining sites reducing acquisition costs for mining companies.
- Acceptance of job creation claims as primary social benefits.
- Failure to take account of likely extension proposals and to integrate the social costs of these into the assessment process.
- The practice of substituting monitoring for the exercise of precaution.
- The impact of frequent exceedances.
- Misrepresentation of VPA and similar cash incentives to local government authorities as community benefits.
- Misrepresentation of social impact management plans as strict and precautionary and likely to meet the Department's requirements for tangible, deliverable and durably effective mitigations.
- Failure to consider mining applications in the context of alternative sources of minerals.
- Failure to take account of cumulative social impacts of multiple mining operations, particularly open cut mines.