Submission No 43

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: Colleen Wysser-Martin

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Dear Portfolio Committee No. 2,

Thank you for this opportunity to email my submission to your committee.

My name is Colleen. As a citizen concerned about the health of our environment, I am lodging this submission under term of reference B. I feel that gold, silver, lead and zinc mining impact the availability of water negatively to residents of New South Wales. Vulnerable people in the state are innocent victims being exposed unwilling to the pressures on water reserves caused by these types of mines.

Both the quality and security of the state's ground and surface water are at risk from metal mining.

In this instance I would like to refer to the Bowdens Silver Pty Ltd mine which has been approved near Lue, NSW and the effect it will have on it's surrounds.

The Bowdens mine will be located within the Lawson Creek catchment area. The Lawson Creek flows into the Cudgegong River which in turn flows into the Burrendong Dam. All three bodies are important water sources in the region. The project has an 1,825 ML water take per annum. There will be no external water supply.

Bowdens mine is a water intensive project. Water modelling for the project is flawed and fails to identify and assess impacts on ground and surface water quality and quantity, including that from acid mine drainage.

Further risks which can impact the catchments and waterways of this region, affecting both surface and groundwater, include:

1. Contamination risks

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 hazardous nature of substances in the waste rock dump and tailings dam merit a local and detailed model of hydrogeological processes to adequately manage the proposed activity.

2. Water security risks

The mine would use roughly 5 megalitres of water, which represents 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 it's 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. I would like to point out that building dams affects the existence of current catchments and waterways while using water from a tailings dam presents another level of danger to surface and groundwater, and local flora and fauna.

Bowdens' activities will result in a 10.9% loss of flow from the Lawson Creek. This will have a significant impact on all downstream land and water users with less water resources available for use. Less water will be available to wildlife and the life cycles and breeding of aquatic life will also be affected.

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.

A further factor in relation to the impact this metal mine and others in the state will have on the availability of water resources is the coming El Nino phase of dry weather and little rainfall plus the raised potential for drought that comes with it. These factors reduce the amount of ground and surface water available and places a further squeeze on water resources available to residents, and both flora and fauna.

In conclusion, metal mining is New South Wales places an enormous strain on the water resources of the state, impacts catchments and waterways, affects both surface and groundwater destined for local and town water supplies and rainwater tanks, as well as aquatic biodiversity. All metal mines must be under strict water protocols. The Bowdens Silver mine's water demands far outstrip the resources the Lue district is able to supply. Due to this fact the project must be cancelled immediately.

I give my permission for my submission to be made public.

I do not wish to give evidence at a hearing.

Colleen Wysser - Martin