

Submission
No 126

**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

Date Received: 4 September 2023

Partially
Confidential

Hi Committee,

I am writing to you of my concerns about or neighbour Cadia Valley Operations (CVO).

We live about 14 km's away and in the past wouldn't consider them close enough to impact us.

But we have had water tested from multiple groups to finds concerning results that we are still investigating.

CVO are a large mining business, and with this comes responsibilities that they have not met by a long way.

These are not isolated incidence. These dust emissions from vent shafts (eg. VR8) before June / July 2023 have not been controlled by CVO and not regulated by the EPA. Action is being taken by CVO and EPA now.

This is only due to a strong community group with evidence of real health impacts from drinking tank water.

On the 2nd of July I read this:

<https://www.theguardian.com/australia-news/2023/jul/02/theres-already-anxiety-residents-living-near-cadia-goldmine-demand-answers-on-dust-pollution>

Here is my concern:

Those preliminary air pollution results came from the mine's main vent, VR8, which is known as the "crusher vent" because it extracts contaminated air from where the ore is crushed deep underground. **It was expelling up to 570 milligrams per cubic metre of dust, despite a new ventilation system that included installing a bag house which catches one tonne of dust an hour. An EPA expert told Guardian Australia that's just a tenth of all emissions leaving that vent.**

At this pace we are talking about 240 tonnes a day before any filtering was installed!

These are not isolated incidences. I assume you will receive information about past disasters with tailings dam wall failures.

I have attached a PDF of an independent ZEPHYR report of CVO's dust emissions from around 1 year ago. Either they ignored this report or have no one in upper management with any concern for the environment and the residents around the mining area.

CVO had no intention to filter their dust emissions. I had a conversation with CVO management on the 30 of September this year at a public meeting. I asked why they hadn't installed filters years ago. The answer I received was: " we assumed it wasn't an issue, no other mines do it". In my view it is a culture problem across the mining industry. I have also emailed EPA management in early July to ask questions of news articles and what regulation and monitoring they were doing on CVO. I was given a quick response that they would get back me with answers to those concerns. We are now in September.

I'm still waiting!

I will send you those emails as a PDF too.

I also would like to point you to the Board of Directors and Executive team.

<https://www.newcrest.com/about-newcrest/leadership>

All have Business, Engineering, or Geology degrees. I don't find any qualifications of Environmental Science. This also is clear that no Environmental Science staff attend Triple C meetings and community group meetings held for residents

I am bewildered with a \$15 000 maximum plenty for pollution. Look at fines given out the big banks, individuals that pollute water ways or discharge refrigeration gases to the atmosphere as a few examples.

Show me the incentive and I'll show the behaviour!

This in combination with being self regulated is a recipe for future disasters!

Australian Nuclear Science and Technology Organisation ANSTO did a 1 year report to examine any dust impact from CVO. A PM2.5 study only finds particulate matter that has been burnt. CVO are crushing around 30 million tonnes of ore per year. Crusher dust is PM10 and above. Thus a flawed study without examining particles larger than PM2.5. ANSTO did point out that their study wouldn't find those larger particles. ANSTO did make comment that those larger particles would travel large distances.

I understand there are Rainwater harvesting guidelines. These are managed by the home owner. But neighbours are experiencing industrial mining dust, from either vent shafts and / or tailings dust from previous disasters.

I will explain that not all dust is created equal.

Soil and mining ore are two distinct geological materials with different properties and purposes. There are many differences between them:

Composition:

Soil: Soil is the top layer of the Earth's surface composed of a mixture of organic matter, minerals, water, and air. It forms through the weathering of rocks and is crucial for supporting plant life.

Mining Ore: Mining ore, on the other hand, refers to rocks and minerals that contain valuable elements or minerals, typically in higher concentrations of heavy metals than what is found in regular soil. Also plant life cannot be sustained in areas like tailing areas.

Environmental Impact:

Soil: While human activities can degrade soil quality, they can also be managed sustainably to protect and improve soil health. Soil erosion, pollution, and depletion can have negative environmental consequences.

Mining Ore: Mining activities can have significant environmental impacts, including habitat destruction, water pollution, soil erosion, and the release of greenhouse gases. Sustainable mining practices aim to minimise these negative effects.

In summary, soil is a natural, dynamic resource that supports life on Earth, while mining ore is a geological material containing valuable elements or minerals that are extracted for economic purposes. The two serve very different roles in the natural world and human industry. So dust in a rainwater system for human consumption needs to be taken seriously.

Solutions:

I found an article on how Canada regulate their mining industry. Please note the particle size of dust and elements of concern.

<https://www.canadianminingjournal.com/featured-article/a-guide-to-air-pollution-monitoring-in-mining/>

Communities in large cities have independent monitoring of local emissions.

Real time monitoring like tunnels.

<https://www.linkt.com.au/using-toll-roads/about-sydney-toll-roads/westconnex/tunnel-air-quality-m4/sydney>

The community deserve better from our mining industry and Environmental authorities.

Thank you,