

Submission
No 148

**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
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Submission to the Legislative Council Portfolio Committee No.2 – Health

Inquiry into the current and potential impacts of gold, silver, lead and zinc mining on human health, land, air and water quality in New Sout Wales.

My family and I live within 10 kilometres of the Cadia Valley Operations Gold and Copper mine outside Orange NSW. We have multiple test results which show our rain water tank that we use for all domestic purposes including food preparation, drinking and cleaning has been contaminated by unsafe levels of nickel and lead and very high levels of copper and zinc. Our house was built after 1990 and we regularly clean the tanks and gutters and have previous professional tests that show no issues with heavy metals in our water. Blood tests of different members of the family show higher than safe levels of heavy metals, these have been provided to the EPA and the Department of Health.

We have no confidence in the Planning and Health agencies, Ministers and the NSW Government as the response had been obstructionist, concealing, opaque and totally inadequate. Even though we made multiple reports to the EPA and Department of Health over months about dust issues and emissions from Newcrest Cadia Valley Operations as well as our water test results it was only when media coverage began and a new person was in charge of the Environment Protections Agency (EPA) that anything was done. This was even though we were only one family of many different community members who were contacting the regulators including the Environment Protection Agency and the Department of Health on multiple occasions over many months.

The current legislative, regulatory and administrative arrangements on mining completely undermine NSW's regulatory frameworks, legal system, as well as our democracy, because any action against the states 2nd largest polluter has been completely dependent on who an individual CEO or departmental head is. There needs to be clearer reporting and regulatory frameworks, lines of responsibility and clearer substantial penalties to make sure this does not continue to happen and to ensure that all regulators and Ministers are allocating resources to ensure that independent regulatory monitoring and action is taking place.

Interactions with Environment Protection Agency (EPA)

The management change at the EPA has finally seen some action taken against Newcrest Cadia Valley Operations to clean up the dust that was raining down on me and my family. However the current framework does not allow transparent examination of whether the regulatory authorities are even responding to complaints and concerns from communities. There is also no compulsion for the agency to undertake investigation or take any action.

Personal Interactions with the EPA

The main area of contact the communities have with the Environment Protection Agency is through their phone line. I personally was left in tears after calling them on four different occasions regarding the dust I saw from the mine on a specific day and the water results from our home rainwater tank. The response from the EPA phone people each time was to try to personally shame me that it was because I wasn't keeping our tanks clean. I argued that we did professionally clean our water tank but it didn't matter how many times we cleaned our tanks if the EPA was continuing to allow Newcrest Cadia mine to emit high levels of dust. That the dust was landing on our roof and then with each rain event washing into our tank. That there was ongoing accumulation of contaminants affecting us. I would just get the rote response again about cleaning my tank. A couple of the people were very rude when I was at no time abusive or using inappropriate language, and when I requested they transfer me to a supervisor they refused. They refused to give me any individual staff identifier and I was given no individual registration number for my complaint so I am unsure whether it was ever even registered.

In March 2023 after finding, through other means, another EPA contact at a middle management level who had responsibility in the Central West EPA I called this woman. I was completely dumbfounded by the lack of knowledge or understanding of what should be core business for the EPA. When I spoke to her of my concerns she was completely unaware of the population levels in the area around Cadia. She was very surprised when I quoted the last census data which clearly shows there are over 2000 people living in the immediate vicinity of Cadia Mine, all of whom are on tank water, and many are young families so over 50% are children. I also expressed my concern that the topography of the area with Mount Canobolas to the west of the mine site concentrated, with prevailing winds, dust emissions to the South, East and North of the Cadia Valley mine operations. That this included the systems of creeks to the north that feed into the Gosling Creek dam that is part of Oranges water supply. I told her that there were bad water results coming from tanks in properties within 3 kilometres east of Oranges Gosling Creek water supply. I was shocked that even though Cadia is the second largest underground gold mine in the southern hemisphere and the second largest polluter in NSW that she had no knowledge of the site or its proximity to these high population areas including the over 40,000 people living in Orange. She also had no knowledge of the Zephyr report which was provided to the Department in August 2022.

I also brought up with her the fact that Spring Terrace Public School operated on tank water and in the previous year had been found to have such high levels of lead in the water that friends whose kids attended had been told by the school they had to bring in their own water and the school stopped the kids from using the bubblers. I also informed her that a house directly adjacent to the school, that was a post 1990s build had tested their water tank and also had very high heavy metal levels. I challenged her on the Zephyr report that the EPA was given a draft of in June 2022 by Newcrest with the final provided in August 2022 that showed their vent shafts with fans operating at 100km per hour, 24 hours a day, seven days a week were exceeding their allowable levels of heavy metals. I asked why was nothing being done to protect us. There was no answer.

When I asked what the links were between the EPA pollution reports that are made and workplace safety for the workers on site she just said the worker safety for mining sat with the Department of Planning. My concern was if the dust was causing issues for us kilometres away what was it doing to the workers on site and underground.

At this time I also tried to work out from the EPA website what enforcement activities they were undertaking, all that it detailed was how they were in partnership with business and then some very low level enforcement action they had taken against individual farmers for spray drift, building developers for run off from building sites in Sydney and some action against a couple of local government entities. No actions against large multinational corporations or national corporate bodies. In other words they were only targeting very easy and small scale operations not ones that could affect thousands or tens of thousands of people.

I also find it alarming that an enforcement agency is clearly stating that it is in partnership with the people they are meant to be monitoring and taking enforcement action against. These mining companies are multibillion dollar companies with no desire except to maximise annual profit for their executives, boards and shareholders who in the majority of cases are based overseas. As the Australian Minerals Councils stated in a report released on 4 September 2023 they want to see environmental protections wound back to make it easier for the companies to mine without any limitations.

Until the new head of the EPA commenced in early 2023 a lot of the local community have been calling the EPA “the Environmental Polluting Agency” – they will licence big business to pollute you and then look away and not monitor whether these multibillion dollar companies are even complying with their licences. If you complain to the EPA they might note it down if the person on the phone feels like it and they won’t do anything anyway. It is left up to these companies to self monitor, test and report.

Department of Health Interactions

The Department of Health, has had no change to the Secretary and Executive levels and it continues on with its modus operandi on the issues affecting human health in areas where there is mining. They continue to tell the several thousands of people affected by Newcrest Cadia Valley Operations that we are not qualified to say our kids or ourselves have skin rashes, and high levels of heavy metals in our water, urine and blood. This is even though we have documented proof from independent accredited medical experts and NATA accredited laboratory results supporting our assertions. The Department of Health continue to say to media and to our doctors in our area that we have “self tested” like we are sitting in our kitchens with tin foil hats on and a kids science set testing our own water, blood and urine rather than having samples tested by NATA accredited laboratories and pathology laboratories. Yet they have NEVER referred to Newcrest monitoring and testing as “self testing” even though Newcrest have undertaken private testing of private properties through the Cadia area including on samples collected by Sage Consulting (who is not NATA accredited to take samples) and these were then tested by the same NATA accredited company that was used by residents to do their testing.

The Department of Health is a dirty word to many in our community as their actions have been inadequate and deliberately obstructionist and opaque. They have put in an “expert panel” to examine whether the mine is affecting us but have not identified in any community consultation or the media who is on the panel, what are their qualifications are and whether they have any professional (including funding sources for research they have undertaken), financial or political

affiliation now or in the past with industry, mining industry, industry lobby groups, government departments or political parties that would affect their objectivity.

In addition the Department of Health has told our GPs during Department of Health webinars (as detailed in The Guardian news reports occurred on 14 June 2023) not to test our blood or urine unless we have very specific symptoms and then only to test for a very small number of different minerals. This is even though of Newcrests own reports (including the report in 2022 by Zephyr) on Cadia Mine have over listed over 20 different minerals (including lead, cobalt, nickel, copper, arsenic, zinc, and also several radioactive elements) that we have been exposed to through their vent shaft emissions and tailings dams. Many of these minerals have extremely detrimental effects on human health (as noted in multiple research published in International peer reviewed Medical Journals) that even very small levels, let alone the unknown of multiple different levels of many different toxic minerals, can cause serious disease including cancers, developmental delays and dysfunction in children, and immune system dysfunction.

The direct action the NSW Department of Health took with GPs in their webinars needs further investigation as it seems to indicate they are trying to limit the data available for consideration by their own Expert Panel.

My family and I have also provided blood test results personally to the Department of Health that show problems but we have been provided with no information on whether this was even provided to the Expert Panel. At no time have they sent an investigative team to look at the properties infrastructure to further inform this panel yet they use uninformed speculation to give specific excuses to the contaminations issues for specific families including my own (please see below my discussion of this). With their other action trying to limit the amount of human blood and urine testing and therefore restricting the data being provided to the Expert Panel we have no confidence that our data has been included. There has been no direct link to this Expert Panel provided by the Department of Health to community members, therefore we cannot send our data directly which further raises our suspicions.

My Personal Interactions with the Department of Health

The employee the Department of Health keeps putting into community engagement in the Cadia area is only a low level middle management Department of Health employee who is the [redacted] and in his own LinkedIn page has only a Bachelor of Science degree with a couple of subjects in environmental science. At this level of education he has not been required to undertake any sort of research in even environmental science, let alone independent peer reviewed research and has NO QUALIFICATIONS IN HUMAN HEALTH. Yet this is who the Department of Health has got to sign off on the health requirements for the recent Lead and Silver mine approvals near Mudgee and has been the person who was sent to provide the Health information at the government information session held in Millthorpe on health response to the Cadia mine affected area.

I personally spoke to this [redacted] in the Department of Health, on several different occasions both face to face and over the phone. My first interaction was in February 2023 when I called regarding our water test results and asking for a response from the Department of Health. He stated that it was our own problem because it was our

own water supply and we had to keep our own tanks clean. Like with the interaction with the EPA manager I provided the information on multiple properties results through the area, the number of people and children living in the immediate vicinity of Cadia and the results of the Zephyr report. Like with the EPA manager he was surprised there was such a high population even though this is a known growth area for Orange and he works within 70 kilometres of the site. I said that we have had our tank professionally cleaned and have had it tested previously and the water was clean of heavy metals. I told him what had been happening with the water at Spring Terrace Public School being found to have lead contamination in 2022. I also told him that like many people in the area we also grow and eat our own food and spend a lot of time outside so with the dust in the area there are multiple sources of contamination if we are constantly being rained on by dust from the Cadia Valley Operations. He again reiterated our water was our responsibility and they would not take any further investigation or action.

After several more contacts and some pressure from a local community group this Manager came out to take a water sample from our house but refused to do anything other than the kitchen tap sample even though there had been no rain for over 3 weeks and therefore no disturbance of the water. He stated this was the standard and only test they would do and it was the same whether you are on tank or town water. I argued that the tanks are settling tanks so any contaminants settle to the bottom of the tank but it takes very little to stir this water up and then have it coming through the pipes to the house. I also pointed out that our tank is full at the moment and therefore the quality of water is different to during low rain periods That what comes through the kitchen after no rain is very different to after rain events or drought and unlike town water it is a very different physical process therefore should be tested differently including bottom of tank sampling. He denied this and refused to take any samples from the actual tank.

Every subsequent interaction with this manager has been to deny there is any issue and to tell me any problems are because we didn't clean our tank, I have continued to remind him that we did have it professionally cleaned and tested. Then he used the Newcrest company line that any lead etc was because of our building. I countered with our house was a post 1990 build, like over 70% of our houses in this area, and there was no lead on our roof other than what could land on it through dust. He then argued that high selenium levels were because of what we were eating. I said I had been to a dietician who said there was nothing I could cut out of our diet to reduce selenium levels as there is no source of excess selenium. He then, when I questioned further, had no idea what the most common sources of selenium are even though just several breaths before he was blaming me for our high selenium levels.

In a phone call a couple of weeks before the Millthorpe information session this Department Health Manager had told me during yet another conversation that the reason we had contamination in our water was because we have refilled our tank using bore water. I clearly stated to him at NO TIME HAVE WE EVER PUT BORE WATER INTO OUR TANK. I asked that this be clearly stated in any record they have about our family and property.

During the Millthorpe information session I overheard this Health manager telling a local resident that the contamination in their water supply was because of the farms around them and the stirring up of soil when they were putting in crops. This is completely inaccurate as the area here does not do broad acre cropping, the farming in this area is high value grazing land with some vines and small

scale horticulture, quite a few of which are organic producers. Very occasionally a paddock will be used to grow green feed for livestock but there is not any large scale cropping that could contaminate water tanks.

We have also provided to the Department of Health and the EPA our blood and water test results on multiple occasions.

We have received no advice on what the outcome of all our interactions with this employee or the Department of Health let alone any advice or assistance on health related issues.

A few weeks ago this same Department of Health manager told our neighbour that the high Cobalt levels in their water and blood results was because of the solar panels on their roof. This resident asked whether this meant the Australian Government was allowing solar panels with dangerous contaminants into the country to which he prevaricated and denied. This neighbour then told him that they actually had NO solar panels on their roof.

It seems that Department of Health instead of doing a comprehensive analysis of the problems and providing the most comprehensive information to their own expert panel so we can get the information and support we need, as well as providing qualified medical resources in the local area, are instead spending their time coming up with imaginative excuses that seem to exactly reflect the statements made by Newcrest in their community meetings.

This has left me with the feeling that the all the Department of Health are interested in are covering up any issues and providing ill-informed scenarios that could explain the water and human testing results without doing any true investigation into the source and affect of the dust from Cadia Mine landing in our area. In other words covering up their previous lack of action and providing a protective wall to the Secretary and Executives in the Department so no questions will be raised about their current decision making motivations.

This begs the question do the public servants and public service executives have to declare any personal relationships and shareholdings they or their family or family trusts hold and divest any shareholdings in companies that are subject to regulatory approvals or investigations by their organisation? The current takeover bid by Newmont will provide a huge payout to any Newcrest shareholder as long as the liabilities of Newcrest are minimised.

To many in the community the direct actions with GPs and the subsequent lack of action by the Department of Health further indicates there is a cover up underway

Many are also pointing to the link between what is happening in our area and the inadequate protections Department of Health have put in place for the new mines near Blayney and Mudgee.

The Central West Environmental Health Unit Manager I have been dealing with was the person who signed off on the health requirements for the Mudgee lead and silver mine. All that will be required is a yearly blood test of residents for lead. So in other words a totally unqualified man was given the delegation to determine human health requirements of something as dangerous as a large scale mining operation by the Health Secretary. The Department of Health are happy to wait until the people and their kids living there are poisoned before they will even look at it and if their response to the issues in our area are the same – they will do nothing and blame the residents.

The question then becomes

in putting in place these responses,
and devolving down the delegation for the
Department of Health approvals for mines in the Central West to a completely inappropriate level
and a person with absolutely no qualifications to make the determination?

Interactions with Newcrest Cadia Valley Operations and Newcrest Employees

The interactions with Newcrest Cadia Valley Operations and the Newcrest Executives through this entire process since January 2023 has made it very obvious that they will only take actions that they see from an economic rationalist point of view that will make the most profit and they will see maximum pollution limits as a target to get down to not as an upper limit that they should only occasionally reach. Their focus is on their own annual bonuses as well as the bonuses for the Boards and executives. Any suggestions that would make monitoring or testing independent, ongoing and fully accountable are either dismissed as impossible or unnecessary. In community meetings the information they present is often littered with misdirections and half truths.

There are no witnesses from the regulatory agencies in community meetings so they continue to state things that they are required to do that do not reflect what the regulatory agencies are telling us they are requiring. For instance in multiple meetings they have told us that they can average the emissions from the site so that they meet the maximum emission target. The EPA have told them they cannot do this.

Newcrest also throughout the process have asserted that everything to do with Modification 14 will be signed off by the government by October 2023 and they will have Modification 15 signed off by the end of the year. They have also been holding community meetings on the progress of Modification 15. This is at odds with EPA staff who have told us that until the emissions issues and pollution issues are resolved that occurred under Modification 14 are resolved they will not even consider Modification 15.

Newcrest have stated on multiple occasions that they needed no sign off to install the vent shaft fans and that they had no idea before they went into operations that they would cause any problems. The NSW Department of Planning and the EPA appear to have been left unaware that these enormous industrial fans that were put on mine shafts (including the one over the underground crushing plant operations), let alone without any scrubbers and or filters and were operating at 100km per hour seven days a week.

Newcrest Community Meetings

I attended a Newcrest meeting with the Community held at Cadia Valley Operations on 1 March 2023 that _____ and _____ both attended and participated in. During this meeting they stated that within a couple of months of the fans being installed in they noticed a lot of wear on the fan blades occurring and had to shut them down to do major maintenance on them. They also said the fans were necessary because the level of dust underground was a safety issues for their workers. Yet they still maintained any contamination issues from these fans to the community were unproven and unknown by the company until the last couple of weeks. Yet they by their own admission they knew the high levels of dust were unsafe and that once they put in the fans so much dust was being emitted that there was extreme wear happening to the industrial sized and strength fans blades. They also knew the dust contained all the minerals that were being processed through their underground crushing plant which their own Cadia Valley Operations in-house Laboratory located in a light industrial site in Orange constantly monitors to ensure they are able to maximise their ore extraction.

At the meeting on 1 March they also stated that they had been “ramping up” production through early 2023 so they would meet their annual underground extraction limits. I was very upset by this statement as I knew through multiple sources that in 2022 the site had ceased underground operations for weeks due to a vent shaft collapse and had only been processing their above ground stockpile. Therefore to meet this annual extraction limit they must have been putting huge amounts more rock through their underground crusher in early 2023. Our family water tank results had seen a huge increase in contaminants between the testing by Dr Ian Wright in December 2022 (results not available until late January 2023) and the results from ALS in February 2023 with the unsafe level of lead nearly tripling in just this same short period of time (test results have been provided to EPA and Department of Health).

In the subsequent meeting Newcrest Cadia operations held on 29 March 2023, _____ denied that they had previously said they were ramping up underground extraction to meet their annual limits and that I and other community members, who all confirmed he had said this, were mistaken. He said we must have mixed ourselves up and he had been talking about ramping up the processing through their Blayney transportation hub. We all denied this and confirmed that he had said they were ramping up to meet their annual extraction limits.

This highlights the need for not only ongoing attendance of enforcement agencies at community engagement meetings by Newcrest but most importantly that there needs to not only be a safe level of underground extraction expressed as annual limits but also clear stated as a daily limit. This then does not allow the company to average it its extraction out across the year so after major incidents they can “ramp up” production to levels that are unsafe to the community and workers.

Inadequate and skewed reports and studies

Newcrest have produced multiple reports from different companies and self chosen ‘experts’ that government have accepted as independent yet these are based on testing and monitoring parameters set by the company and often missing key information. This is because the company determines:

- Which 'expert' or company they will pay to produce the report;
- What data is collected including which minerals to monitor;
- What data is **excluded**: including types of minerals and whether basic information on their operations is provided to the report writers (ie the installation of vent shaft fans that operate 24 hours a day without any filters or scrubbers) and when the shut downs for maintenance of the fans or underground activities will occur;
- when the data is collected (including specific day, time and length of time);
- what baseline and fingerprint data that was collected by Newcrest staff and/or their paid contractors is included in the reports;
- What physical method of monitoring is used;
- What the scope of any analysis of the data will include and exclude
- They also hold the right of review of the document prior to release to any third parties including government.

Therefore after determining the who, how, when, what and where for the 'independent' reports Newcrest also get to review the reports before the government planners and regulators and the public see them and are allowed to liaise with the report writers over the content without any transparency or oversight.

When I raised in multiple community meetings questions about why they have chosen particular solutions or testing frameworks the answer has always been either it is not required by the regulator, Newcrest own the data and will not release it to the public, there is no need or it is impossible, or there is no cost justification for them doing so.

A clear example of how this is undermining the quality and acceptability of the reports that the planning and enforcement agencies use in their decision making is the recent ANSTO report on air quality in the area. The presentation of the report Newcrest had commissioned and paid for from ANSTO was presented by the report authors over Zoom.

Newcrest had determined where the ANSTO sites for monitoring were located and knew when and how this monitoring would be done. Newcrest had also determined that the report would only cover under 2.5 micron air pollution and not up to 10 micron air pollution. This was even though community representatives prior to the testing and reporting had tried to get the 10 micron air pollution included.

The ANSTO on the report said that they were uninfluenced and unquestionable due to the fact they were a federal government agency. He stated that the 2.5 micron air pollution was inconclusive and could have come from Sydney as it is very high atmosphere pollution that can travel for hundreds of kilometres. That fingerprint data based on the baseline fingerprint for lead collected and provided to them by Newcrest was inconclusive.

When I questioned the about the 10 micron size pollution they had collected, but not included in the report, we were told it was not in the parameters set by Newcrest so they had not looked at it. When community members asked where would the up to 10 micron air pollution be expected to fall out another of the researchers said that it would probably fall out of the air within around 20 kilometres from an emission site. We pointed out that this was exactly where

contaminants were being found in peoples water tanks. The [redacted] told us this was unimportant because a bit of dust lifting off a tailings dam wouldn't cause the problem. We challenged him on this and said we were not talking about some dust off a normal tailings dam and we were talking about extraction fans above underground mine workings and crushing plant running at 100 km per hour seven days a week propelling dust with known contaminants (as detailed in Zephyr report) up into the air. And that the tailings dam wall had collapsed. The [redacted] completely then failed to address this.

Through the presentation the [redacted] ANSTO report admitted he had never actually come to the area and viewed the operations at Cadia and saw this as unimportant. He was unaware of the topography, seemed unaware of the tailings dam wall collapse and the resulting drying out and major dust events from the tailings dam and did not know about the fans. He continued to allude through the rest of the presentation about innocuous breezes on tailings dams occasionally lifting dust. He also did not when questioned have an understanding of how dust landing on roofs entering peoples drinking water and on the food they grow could be ingested. He was dismissive of this importance and refused to acknowledge it could even be a possible problem and continued to state that the only way people get the contaminants into their bodies is by breathing the less than 2.5 micron dust deep into their lungs and it transferring in to their blood. When questioned about the results he just became very defensive and talked about how his work and ANSTO should be used as the main people for investigations into air quality across the world and human health monitoring and how they had been used by multiple mine companies and countries for investigations.

Modifications Used by Newcrest to remove environmental licence conditions including protection for people, endangered species and rehabilitation of the site

Newcrest Cadia Valley Operation put through the Modification 14 without any specific reference to the industrial fans they were putting on the vent shafts that had no filters or scrubbers. Knowing they were removing dust from the mine and that the dust contained multiple different minerals. They said this was not required. When we have spoken to the NSW EPA representatives no one can clearly state where the responsibilities lie for this type of modification other than it was signed off by the head of NSW Planning.

I have also looked at previous modifications pushed through by Newcrest and there are continual alterations to remove any environmental or rehabilitation impediments and costs to their operations often without any close scrutiny or questioning by the NSW Department of Planning.

Modification 15

I have now attended 2 meetings on the next proposed Modification 15 of the Cadia Valley Operations. This has prompted me to look over the previous modifications which show a litany of reductions in environmental protections and removal of rehabilitation requirements.

I attended the Newcrest community meeting on the development and progress of Modification 15 on 23 May 2023. During this meeting they listed all the different things they were putting through changes on, one of these being that they no longer had to undertake any work for the protection of the striped legless lizard and the threatened species pink tailed legless lizard. This is listed in Schedule 3, condition 40B of the original project approval. The said that they had commissioned a

survey that said neither species was on their site. I asked who had undertaken this survey and was told it was done by a consulting firm Premis. I quickly reviewed the Premis website while Newcrest continued with the presentation. The Premis website details its people are qualified town planners with experience in planning including getting environmental sign off. I became concerned about the level of actual research they had conducted so I asked who was the lead researcher for determining there were none of this threatened species on site. The Newcrest representative said they did not know and would provide it to me later after the meeting.

On 29 August 2023 I attended another Newcrest community meeting on the development and progress of Modification 15. During this meeting they again put up the slides on the different changes they were putting through but no longer listed the legless lizards as being part of this instead only mentioning the treatment of threatened and endangered birds that they say just fly through the site. The Newcrest representative said that the legless lizard was still part of the modification as they had not found any on site. This means even though it was still part of the Modification 15 they had deliberately removed mention of it from their slides listing what changes they were seeking approval for. I asked what was the survey method used to determine there were none of these species on site. The Newcrest representative immediately stated that tiles had been put across the site over two months and checked every two to three days. I then asked what time of year the survey had been done and how many tiles were used. He said they would provide me with the details after the meeting.

To this date I have received no information from Cadia on who the researcher was, when the survey was undertaken, how many survey points were used across their very large site including on the areas that they are proposing the new tailings dam covers. Yet they are presenting this to NSW Planning as incontrovertible proof that they don't have to do any environmental work to protect this species. This is particularly relevant at the moment as the Federal Department of Environment is currently reviewing its listings of Threatened and Endangered lizards to see if they need to be changed. The Pink Tailed Legless lizard may be moved from threatened to endangered which would mean Newcrest Cadia Operations would need to comply with a whole raft of new environmental monitoring and protection activities to comply with the Federal Government legislative requirements.

What needs to change

In light of my and my family's direct experience I submit the following changes need to be made to the Legislative, Regulatory and administrative frameworks covering Mining in NSW.

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

The current framework does not consider the impact of biomagnification and bioaccumulation on local residents and mine workers. As these mines are moving into higher population areas which established communities and food production businesses this needs to be fully calculated and the people and environment protected from exposures built up over time.

The current system just sets a limit per period of time on emissions without factoring in any previous emissions or exposure. This needs to change so that cumulative affects are built in to the limits on mining companies and that penalties if they exceed them are put in place. If a company exceeds their limits then the subsequent limits need to be reduced so that the cumulative affect on the community and workers is adequately controlled.

There is no current consideration by government on the way these large population areas reliant on tank water and in the areas of newly approved mines should have their water tested and monitored. The current frameworks all rely on testing and monitoring based on town and urban water supplies. This needs immediate attention with advice from independent scientific researchers who are experts in this field.

The Department of Health has taken the stance that, even though all the scientific and medical research says that high concentrations on the minerals in the environment and peoples cumulative exposure to it causes significant developmental problems in children, increases in cancers and immune system issues, they will not take any action to monitor these mine sites on an ongoing basis or take any preventative or post incident action to protect people. This is even though the lack of action will have a significant impact on individual citizens and workers and the ongoing impact on the health and education budgets of NSW in dealing with the provision of services to people affected.

The legislation needs to be changed so that clear lines of responsibility are given to the Department of Health to ensure preventative measures are put in place around mining activities to ensure people and their children are not exposed. That the consideration of what needs to be done is carried out by experts in the fields of human health, toxicology and human environmental health. And most importantly any delegations for approval must be held by the Secretary and not delegated lower.

The Department of Health must establish a specialised unit, with the deployment and resourcing up capability to respond to where an incident of contamination occurs and the Department MUST undertake a full, transparent investigation of what has happened and collect data on all elements that people have been exposed to, and a fully independent panel established to determine what

this means and what actions need to be undertaken. That a failure to do this is directly attributable to the _____ with serious criminal and financial sanctions.

1.(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 EPA and Department of Health were both telling us to clean out our tanks. When asked what we should do with the contaminated water they said we should just let out the water. For multiple residences holding in total hundreds of thousands of litres of contaminated water this is completely inadequate and dangerous response. Our houses sit on top of a significant underground water source which feeds into the Belubula River system that then becomes downstream water source for towns and farms, before eventually ending up in the Murray River system. If every home in our area had followed the EPA and Department of Health direction and all dumped our contaminated water this ground water would become even more contaminated and the contamination would have covered a much wider area.

Instead where there is clearly a pollution event occurring by a third party across a significant area the government should use some of the hundreds of millions of dollars they have collected from the mining industry to collect the water and clean out the tanks. They can then bill the company for the costs. This would mean that these waterways would be protected from further contamination.

1.(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.

Transparency and Accountability of Enforcement Agencies

The current framework does not allow transparent examination of whether the regulatory authorities are even responding to complaints and concerns from communities. There is also no compulsion for the agency to undertake investigation or take any action.

The main area of contact the communities have with the Environment Protection Agency is through their phone line. I personally was left in tears after calling them on multiple occasion regarding the dust I saw from the mine on a specific day and the water results from our home rainwater tank. The response from the EPA phone people each time was to try to personally shame me that it was because I wasn't keeping our tanks clean. I argued that it didn't matter how many times we cleaned our tanks if the EPA was continuing to allow Newcrest Cadia mine to emit high levels of dust, that this was landing on our roof and then with each rain event washing into our tank. I would just get the rote response again about not cleaning my tank. A couple of the people were very rude and when I requested they transfer me to a supervisor they refused. They refused to give me any individual staff identifier and I was given no individual registration number for my complaint so I am unsure whether it was ever even registered.

The other area that communities make complaints are in face to face meetings with regulatory staff members, whether at management level or at ground level.

This is the same for the Department of Health.

Therefore the system needs to be made more transparent through the following changes:

- All people working on the phone complaints lines and any other areas of the public service undertaking community engagement and managing complaints must be allocated an individual code (eg EPA780) for the staff member this would maintain the privacy of the staff member but make trackable to the public and management of the agency who they spoke to, particularly if the staff members response was inadequate or inappropriate.
- All individual complaints must also be allocated an individual registration number.
- At the end of every call, or contact, making a complaint the staff member MUST quote both their individual identifier and the complaint registration number. If the complaint is made in a face to face meeting this has to be provided within 7 working days.
- This needs to be implemented across all areas of regulatory agencies taking complaints, and at all levels.

There is no clear data on the complaints and actions taken by the agencies. There is a community perception that the EPA has only taken action against very low lying fruit – local government, individual farmers, individuals, and small developers. They never take on the large corporations for breaches or if they do the level of fines is so small as to make it more profitable to breach and risk getting caught than operate cleanly and safely. The regulatory agencies need to, as part of their reporting, provide a report to the NSW Parliament and the responsible Parliamentary Committee every 6 months on the complaints received and the action being undertaken. Once the report is accepted by parliament it needs to be published on the agency and department public websites. This data needs to be completely transparent and therefore include not only high level numbers but individual areas including the numbers of complaints made against

- A specific company
- The specific mine site
- Type of complaint and how many received including if it is related to:
 - Water
 - Air
 - Soil
 - Noise
 - Vibration
- How many complaints against this company/site have been received in the last 12 months

The report also needs to show what the regulatory agency is currently doing about complaints. This should be based on numbers to ensure confidential information is not released but allow high level monitoring of the agency. Therefore this would not be based on company name but instead the sector with importantly a clear definition between large corporate entities and individuals

- Number of current investigations including: if this is based on complaints and which sector these investigations are being undertaken in ie: mining, water treatment, energy production

and distribution, local government, property development, large scale property development, agriculture, forestry etc..

- Categorized by size of business – Business annual operating costs under \$1 million, under \$10 million, under \$100 million, and over \$100 million
- Whether this investigation was reported on in a previous reporting period and which reporting period/s.
- Numbers of current investigations proceeding to regulatory enforcement and what type of enforcement: ie legal notice, fines or court action, and what sector and size of business these investigations are in.
- Numbers of investigations not proceeding, the type of breach and the size of business and sector this is in.
- The outcomes of finalised enforcement and any court decisions. Including the amount fined, details on the breach found proven and the size of the business or corporate entity.

These reports must also be published within 1 day on the Department/Agency website and notified to the media through media release. This will make it very transparent when the fines are manifestly inadequate according to the size of business and also whether the enforcement agency is just picking the easy targets and avoiding corporations that Ministers, their staff and industry Lobby groups don't want touched.

All regulatory Departments, including the EPA and Department of Health must also be resourced and have in place rapid response teams to investigate when there are large numbers of complaints being received from particular mine operations. This includes a clear responsibility to investigate when there are independent laboratory reports provided by the residents or workers in these areas.

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

There is a frightening lack of monitoring and compliance, risk management and harm reduction from mining activities by the NSW planning and regulatory bodies at the moment. There seems to be a lack of skill and training of staff, no internal planning on how to respond to incidences and professionally guided examination of what monitoring and compliance checking should be undertaken. Including how new technologies can be used to achieve independent, publicly available, 24 hour monitoring of the site. This needs to be changed and this can only be done if the planning and regulatory authorities are properly resourced, monitored and funded. There also needs to be a fundamental cultural change that no longer says they are in partnership with the businesses they are meant to be monitoring and undertaking enforcement activities. Therefore

- Legislation changes so that 2% of all money collected from mining royalties and licencing activities must be used only for the government activities specifically related to planning approvals, monitoring and compliance, risk management and harm reduction from mining activities;
- All government employees who have management responsibilities in these activities must have the appropriate qualifications for which the specific area they are meant to be monitoring;
- All government employees and representatives, including Ministers, ministerial staff, Secretaries and the Executive, involved in monitoring and compliance, risk management and harm reduction from mining activities have to declare and divest any pecuniary interest or significant no pecuniary interest

they or their family trusts hold in any of the companies they are responsible for overseeing. That to breaches of this are a criminal offence and they are subject to investigation by ICAC.

- Government departments must ensure they undertake regular training of staff and coordination of activities across all compliance and monitoring areas so that their responses are up to date with the latest technologies and scientific research;
- Legislation changed so that all reports used for any planning approvals, monitoring and compliance, risk management and harm reduction activities are paid for by the mining companies involved but managed by the government entity.

Fines and Criminal Charges

The fines for breaches of their licencing conditions on the mining industry are currently manifestly inadequate. So far Newcrest Cadia Valley Operations have only been fined \$15,000 for a single breach of dust in August 2023. According to the financial reports of the Newcrest their Cadia Valley Operations last year made the company over \$900 million with the overall company profit being over \$750 million. In community meetings, in the last couple of months, the Newcrest the Mine Manager has complained that they have so far spent over \$30 million addressing the problems with the vent shaft emissions. This has only occurred since the EPA stepped up its response in mid 2023. Therefore prior to this the company did not see the cost benefit in spending over \$30 million on protecting their workers and the local people, that it was more profitable for the mine to cop a fine smaller than the Board would pay for a single dinner out than to run the site safely and sustainably.

The system of fines need to be totally changed so there is a set substantial minimum for a single event that increases with each subsequent event and that there is also for any company with operating costs of over \$100 million additional fines based on the size and turnover of the company. The system needs to be changed so that breaches are so expensive the companies invest their time and infrastructure in ensuring they do not occur.

Breaches also need to include criminal charges for Mining company executives and Boards.

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

The Modification to the Mine approvals changed so that decommissioning and rehabilitation cannot be changed without a full independent report on the human health and environment impacts including whether threatened or endangered species are part of the environment. This report, paid for by the company, must be commissioned, managed and overseen by the government decision making body and made publicly available. The report must also clearly consider whether, with the proposed changes, the company will be able to actually undertaken the proposed decommissioning and rehabilitation activities given the current management and operations of the site.

The legislation changed so that only approved, fully qualified organisations and experts in their field researchers can undertake the studies. That the level of this requirement rises with the level of risk of the site the report is being completed for. Ie a small non industrial site research requirement would be at a lower level that a large industrial or mining site being run by a multibillion dollar company.

The planning and regulatory departments must be able to legally direct the company if the current operations will make the rehabilitation and decommissioning of the site untenable. All planning and operations of the site must be openly available to the planning and regulatory authorities and any decision made based on false and misleading information provided by the company will cause the cancellation of any

decision made based on this information and the individual company employees, executives and boards face substantial financial and legal penalties if found to have breached this. The company will also be subject to substantial penalties with a set minimum level and additional fine based on the size and turnover of the company.

1.(g) the effectiveness of New South Wales Government agencies to regulate and improve outcomes including:

(i) the measurement, reporting and public awareness

(ii) the provision of various protective materials

(iii) the ability to ensure the health of at risk groups

(iv) the suitability of work health and safety regulations, and

(v) the capacity to respond within existing resources

(vi) the adequacy of existing work, health and safety standards for workers

As detailed previously there is a frightening lack of effective regulation, monitoring and compliance, risk management and harm reduction from mining activities by the NSW planning and regulatory bodies. There seems to be a lack of skill and training of staff, no internal planning on how to respond to incidences and no independent professionally guided examination of what monitoring and compliance checking should be undertaken. Including how new technologies can be used to achieve independent, publicly available, 24 hour monitoring of the sites. This needs to be changed and this can only be done if the planning and regulatory authorities are properly resourced, monitored and funded. There also needs to be a fundamental cultural change that no longer says they are in partnership with the businesses they are meant to be monitoring and undertaking enforcement activities. Therefore:

- Legislation changes so that 2% of all money collected from mining royalties and licencing activities must be used only for the government activities specifically related to planning approvals, monitoring and compliance, risk management and harm reduction from mining activities;
- Legislation changed so that all reports used for any planning approvals, monitoring and compliance, risk management and harm reduction activities are paid for by the mining companies involved but managed by the government entity seeking the report for decision making purposes.
- All government employees who have management responsibilities in these activities must have the appropriate qualifications for which the specific area they are meant to be monitoring;
- All government employees and representatives, including Ministers, ministerial staff, Secretaries and the Executive, involved in monitoring and compliance, risk management and harm reduction from mining activities have to declare and divest any pecuniary interest or significant no pecuniary interest they or their family trusts hold in any of the companies they are responsible for overseeing. Any breaches of this are a criminal offence and they are subject to investigation by ICAC.
- Government departments must ensure they undertake regular training of staff and coordination of activities across all compliance and monitoring areas so that their responses are up to date with the latest technologies and scientific research;

1.(h) 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

Please see my responses above to explain why the current regulatory framework is NOT fit for purpose and needs immediate reform.