

**REPORT ON PROCEEDINGS BEFORE**

**PORTFOLIO COMMITTEE NO. 2 - HEALTH**

**CURRENT AND POTENTIAL IMPACTS OF GOLD, SILVER, LEAD  
AND ZINC MINING ON HUMAN HEALTH, LAND, AIR AND WATER  
QUALITY IN NEW SOUTH WALES**

**CORRECTED**

**At Club Mudgee, Mudgee, on Wednesday, 4 October 2023**

**The Committee met at 10:10.**

**PRESENT**

Dr Amanda Cohn (Chair)

The Hon. Susan Carter (Deputy Chair)

The Hon. Greg Donnelly

Ms Cate Faehrmann

**PRESENT VIA VIDEOCONFERENCE**

The Hon. Mark Buttigieg

The Hon. Emily Suvaal



**The CHAIR:** Welcome to the third hearing of the 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 South Wales. I acknowledge the Wiradjuri people, the traditional custodians of the lands on which we are meeting today. I pay my respects to their Elders, past and present, and celebrate the diversity of all Aboriginal peoples and their ongoing cultures and connections to the lands and waters of New South Wales. I also acknowledge and pay my respects to any Aboriginal and Torres Strait Islander people joining us today. Thank you for attending today's hearing.

For the information of members of the public in the gallery, today we also have members of the Committee attending today's hearing via Webex. Today we will hear from a number of stakeholders, including local resident stakeholders who can speak to the possible impacts of mining on the health of humans and animals, stakeholders who can speak to the possible impacts of mining on the wine, olive and tourism industries in the Mudgee area, and the Australian Workers' Union. I ask everyone in the room to please turn their mobile phones to silent.

Parliamentary privilege applies to witnesses in relation to the evidence they give today. However, it does not apply to what witnesses say outside of the hearing. I urge witnesses to be careful about making comments to the media or others after completing their evidence. In addition, the Legislative Council has adopted rules to provide procedural fairness for inquiry participants. I encourage Committee members and witnesses to be mindful of those procedures.

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**Mr JACK AYOUB**, Organiser, Australian Workers' Union, NSW Branch, sworn and examined

**The CHAIR:** I welcome our first witness. Thank you for making the time to give evidence today. Would you like to start by making a short opening statement?

**JACK AYOUB:** Thank you, Chair. I appreciate the Committee offering us the opportunity to make a contribution. We believe that the inquiry you are making is an important one. My contribution here on behalf of the Australian Workers' Union will cover three main tranches or ideas. The first is that workers are the front line in the regulation and safety in the workplace. The second is that metalliferous mining, which the AWU has coverage over, is essential to our renewable energy transition. We also have coverage in the renewable energy space, and so it is a keen interest for us that through the safe and proper mining of metalliferous metals and minerals relevant to the energy transition, we ensure that is done in a safe way and manufactured domestically. The third is that we believe that by and large in regional communities, particularly as you get further west, the protection, preservation and enhancement of regional communities is inextricably linked with the mining industry.

To put it all very briefly, we believe that we need to protect the environment and we need to protect local communities. We can achieve that through the protection of workers as the front line in that struggle. If we don't protect that element of employment—if we don't protect workers and we don't support these mines to do things in the correct way—these communities may cease to exist and they may wither. That's certainly one element. The second element is that when people go to purchase a Tesla or other such essential renewable energy things, such as solar panels and batteries, that the elements in those will be mined in a place and in a way that is deeply impactful to the environment and, potentially, by slave labour. We have concern about those central elements and would like to speak to the Committee about them.

**The Hon. MARK BUTTIGIEG:** Thank you, Mr Ayoub, for your presentation and for appearing today. Would you give the Committee a thumbnail sketch of the number of people employed and your membership coverage there, just so we get a feel for the influence of the union and the labour involved in the mine?

**JACK AYOUB:** Directly employed in New South Wales, we know that there are approximately 8,000 people in metalliferous mining. We don't have any coverage over coal, and I understand that is outside the terms of reference. But in terms of metalliferous mining we have approximately 8,000 workers, and we have coverage over those workers along with the Mining and Energy Union, with whom we are in alliance. But there are many associated industries. You can talk about Caterpillar as a good example in many communities that deal with the mechanical needs of the mining operations, not to mention various hospitality and other industries associated. A place like Cobar is a good example. There is a large amount of that town's economy and workforce that is reliant on the two major mines there. We know, hard figures, directly employed are about 8,000. But it would be many thousands beyond that.

**The Hon. MARK BUTTIGIEG:** So there is significant economic impact on the community in terms of employment. From your opening statement, I gathered that your evidence is that there is an opportunity here for complementarity in terms of workers being the front line in the regulatory process. In layman terms, you can envisage a situation where workers would be able to assist with making sure that the mines are doing the right thing, not just by the workers but by the community in general. Do you want to give us an outline of how good that's been hitherto and where there might be gaps or room for improvement, if you like?

**JACK AYOUB:** Certainly. I think it's a very important question. In terms of mines that currently exist is what I can speak to. I certainly can't speak beyond my expertise in terms of approvals and so on. But, in terms of the mines that currently exist, if it is the case that we are arriving at, as we have in the example with Cadia and the Environment Protection Authority, having to take litigation, I think it's too late and we have missed the boat. What we need to be doing is ensuring that the people actually in the workplace are protected in the first instance and that they, along with the relevant trade union, being us, have the powers to expose what's happening in those workplaces.

A good example I will give of that is that in the coal space they have what are called check inspectors or checkies. Those are workers who are nominated by the relevant trade union—the Mining and Energy Union, in that case. Under the legislated provisions, they have very significant powers equivalent to that of an inspector. If they were to come across an activity that was emitting an extreme amount of dust, they have legislative authority to say, "Turn it off. Stop it. We are pulling up", until such time as appropriate protections are in place. We do not have that power within the metalliferous mining space. I think that it would be a very significant change and it would have a significant impact if we could empower workers in the workplace to have legislated authority to say, "There's too much dust being created. It's unsafe for us. We, therefore, want to stop operation or advise you on how better you could do it."

Just to round that out, the current battle that we are having around silicosis is a good example. If we had given in the workplace power to workers and knowledge around the effects of silicosis, many people would not have died. That's a simple fact. In terms of the workplace, putting in place a system—like checkies or check inspectors that we have in coal—into metalliferous mining I think would have a big impact. I think it's hard to argue as to why they are not there.

**The Hon. MARK BUTTIGIEG:** This is a very interesting and important piece of evidence. Your view would be that one of the findings coming out of this inquiry would be that we should institute a parallel system of checkies, as you put it, which occurs in coal for metallurgic mines as well in order for workers to provide the frontline protection against those emissions, which are obviously going to not only protect workers but the community as well.

**JACK AYOUB:** That's correct.

**The Hon. MARK BUTTIGIEG:** Can I just ask you, Mr Ayoub, in other areas of mine workplace health and safety, what has been the experience of the AWU to date in terms of how well that's being managed and what purchase the union has over workplace health and safety generally in those mines?

**JACK AYOUB:** It's not good, to put it bluntly. We obviously have the capacity to influence work health and safety in the workplace and I think that's inextricably linked with the protection of the environment and the protection of local communities, certainly in terms of the emissions of dust. If we are reducing the emissions of dust in the workplace, then we have already beaten the broader implications. I think it's fair to say that SafeWork in New South Wales is a toothless tiger; they don't really have the power to do the things they need to be doing. I have power under the Act. I can enter a workplace under what's called a section 117 entry. That is a suspected contravention of the Act. I can then make findings after an inspection and say, "I believe that that's too dusty", or "I believe that that's not working or that's not a safe practice."

I then provide that information to the employer. It is then wholly up to them what they do. I have no power apart from referral to SafeWork, who don't have the teeth they need to say, "Well, I think you really should look at these things." So the employer says, "Thanks very much for your time, Jack. You have a nice day." So I think that providing either power to us directly or power in referral and enhancing the capabilities, capacities and, indeed, the resourcing of SafeWork would certainly help. But the ultimate recommendation that I would seek is that we have checkies. We already have a system in coal mining. I think we just transfer that system across into metalliferous mining and you would see a big impact.

**The Hon. MARK BUTTIGIEG:** Is that lack of teeth a function of SafeWork not having proactive inspections when these things are raised? In other words, does the mining operator know that they can get away with it because they know SafeWork is a light touch?

**JACK AYOUB:** Yes, I think there is an element of that. There is also an element around resourcing. Many of these mines are in remote and regional areas. We know that SafeWork has a base in Orange, of course, but there is an element of resourcing in terms of inspectors being able to travel and travel regularly. So there's two elements. Obviously, one is the power to enforce. The other is the capacity to actually get on the worksite. What are the notice provisions? Should they be giving notice? Should there be some situation where SafeWork inspectors don't appear on a regular basis? If the mine knows they are coming every three months, well, they tighten up all their discipline for that hour that they're there or so on and then it all relaxes. It's certainly part of it.

**The Hon. MARK BUTTIGIEG:** Are you aware of any prosecutions that SafeWork has brought against the mining operators historically?

**JACK AYOUB:** I do not have that to hand, but we could take it on notice.

**The Hon. MARK BUTTIGIEG:** In terms of the AWU and the union movement's view, in general, of the transition to renewables and the criticality of these mines in facilitating that and maintaining employment in that transition, do you have any commentary around that?

**JACK AYOUB:** The main comment I would make is that most Australians and certainly most citizens of New South Wales understand and acknowledge that we need to make a transition to renewable energy, but we need to do that by making solar panels, making wind turbines, making batteries and also rebuilding our conduction capacity and restructuring our networks. All of that requires metalliferous mining. It requires cobalt, lithium, copper and so on. So I think that we have got to be very cautious not to hamstring, certainly, the mines that are currently in operation and the cobalt mines proposed at Broken Hill, for example. We ought to be trying to help them do what they do as best they can, because, otherwise, the reality is that Tesla and other companies will buy their cobalt from a country where slave labour is used. So we've got to make that transition; we all agree on that. Let's do it in the best way we possibly can and do it in Australia.

**The Hon. MARK BUTTIGIEG:** Just to summarise that—

**The CHAIR:** Sorry, Mr Buttigieg. We have three other members waiting with questions. Of course, you can put questions on notice.

**The Hon. MARK BUTTIGIEG:** My apologies.

**The CHAIR:** I thank you for being here, Mr Ayoub. We are considering the impacts of mining on human health and wellbeing. Of course, the health and wellbeing of workers is a really critical part of that, and you have made some really constructive suggestions at a statewide level. This is a statewide inquiry, but we are here in Mudgee today, as you would know, because of community concern about a particular proposal at Lue that I understand is a silver and lead mine. Does the AWU have a position on this particular proposal?

**JACK AYOUB:** No, we don't have a direct position on that proposal.

**The Hon. SUSAN CARTER:** Thank you for being here today, Mr Ayoub. I am very interested in this idea of checkies that you say is working in the coal industry, and I can see very clearly what an important role they would play in worker health and safety. Is it too much to expect employees to have knowledge of broader environmental impacts and broader community concerns and to put all of that responsibility on a worker in a metalliferous mine?

**JACK AYOUB:** It is a very good question. I think that, if we were to have a situation where we had checkies in the workplace, their principal concern would be their workplace and dealing with their employer directly. What I think is giving them the power to resolve those issues at the local level, if you will, within the workplace—we actually have the capacity to prevent what may happen in the community and in the environment. So it's not within their remit of concern necessarily, what's happening outside the workplace. But by the actions that they may take in the workplace they are highly likely to prevent those external effects, if I can use that language.

**The Hon. SUSAN CARTER:** I think the focus on prevention is what's needed, absolutely, and that concept of somebody who is checking in the workplace. But I can think of a situation, for example, with respect to expelling dust from a mine, that would actually make it a safer place to work for the workers but may have impacts on those in the surrounding community. So perhaps asking the one person to be responsible for all of those interests is too much.

**JACK AYOUB:** I think that's right; I certainly think that's right. We couldn't ask them to have all the responsibility, but it's part of the solution, and it's the part of the solution we know best. I think it could work well with other agencies: the Environmental Protection Authority and SafeWork.

**Ms CATE FAEHRMANN:** Thanks for appearing today. Coming in from the Chair's line of inquiry, has the AWU ever taken a position against any mine, similar to the green bans, I suppose, in Sydney—you know, the union movement working very closely with the community to stop something that would have just been unconscionable? Has the AWU ever done that or considered doing that with any mine proposal?

**JACK AYOUB:** I don't have that information to hand. Certainly, I think we could take that on notice, but I don't know of any direct example where we have opposed mining. But I wouldn't—either, the corollary—say whether we have directly supported it. I am not too sure, but I am sure I could find that information out.

**Ms CATE FAEHRMANN:** I am just thinking, again, with this particular mine—are you from a local community, Mr Ayoub?

**JACK AYOUB:** Yes, Coonabarabran—not far away.

**Ms CATE FAEHRMANN:** So this mine—you can see largely opposition coming from the crowd in the audience—is a lead mine that is proposed to be built two kilometres from a primary school. One of the conditions of consent for this mine is for people to have semi-regular blood tests to ascertain whether there's lead and other things in their blood as a result of the mine—including babies. Is that something that the workers of the mine and your members would be concerned about?

**JACK AYOUB:** Deeply, of course. They are closer to the emission than the community. So if the community is in a situation where they're experiencing levels of toxicity, it's highly likely that our members—were we to have some in this particular project—would be highly exposed too. So I imagine—them being good, decent people who would have association with the community—they would have concern for that.

**Ms CATE FAEHRMANN:** The vast majority of this mine is lead, which is a critical mineral for Teslas and other things. I'm just wondering, have you sat down or would the union sit down with representatives of the community to hear about the impacts? I think mines, as we know, are being built all across the State. Some are in

better locations than others, I think you would agree. But I'm just wondering whether it's at all possible for the AWU to potentially consider the impacts of this on the community. I know you're here today arguing jobs. We've got submissions that suggest that within the tourism sector, for example, there are 931 people in the region who are employed in tourism. Possibly, would you agree that it's not the best location for a lead mine—two kilometres from a primary school?

**JACK AYOUB:** On my own intuition, I'm sure that's the case. I don't have expertise in that area necessarily. I don't know what benefit, with all respect, there would be in us meeting with the community. I think it's not our place to advocate for or against this thing necessarily. That's up to other independent organisations—the planning commission and so on—so I don't know what value that would have. But I think Mudgee is a unique case. I've been through it. I used to drive through it all the time when I was going to university and I come here quite frequently. It is an extraordinary community, and it is uniquely positioned. However, I don't think we can then say that that's the case in all communities. I know that Cobar Council, for example, has invested a lot of money to get reports done to try and figure out how it can use the positive impacts of the economic revenue that comes from those mining workers to diversify that local community's economy and its services. Perhaps this community is further along that journey and there needs to be a unique determination made in this case.

**Ms CATE FAEHRMANN:** I have two quick questions on data. Do you know the total number of jobs from Bowdens mine?

**JACK AYOUB:** I don't have that to hand, no.

**Ms CATE FAEHRMANN:** Secondly, do you know the proportion of workers at the Cadia mine that are members of your union?

**JACK AYOUB:** Yes. We don't have a large membership in Cadia. I can't speak for the Mining and Energy Union, but I think we have approximately 100.

**Ms CATE FAEHRMANN:** That's out of about just under 1,000. We heard yesterday that it differs, but it's something like 880. That is less than 10 per cent.

**JACK AYOUB:** Yes. We have, of course, coverage of all of them. We have put a lot of resources into trying to unionise that workplace—and particularly around safety. But the company has been very sophisticated at keeping us out, and some of our powers aren't sufficient to get in the door.

**The CHAIR:** Thank you very much for the time you have taken to give evidence today. There were some questions on notice and the secretariat will be in contact with you about those.

**JACK AYOUB:** Thank you, Chair.

**(The witness withdrew.)**

**Mr DAVID LOWE**, Mudgee Wine Association, sworn and examined

**Dr MICHAEL SOUTHAN**, Australian Olive Association, sworn and examined

**Ms LUCY WHITE**, Local Resident, affirmed and examined

**The CHAIR:** I now welcome our next witnesses. Would you like to make a brief opening statement?

**DAVID LOWE:** Yes, I would. Thank you, Chair. I represent the Mudgee wine growers and I am an organic farmer who employs currently 68 people. I have been making wine for 47 years. The Australian and the world wine industry is really in two parts: wines that are made to taste the same and that are influenced by the public perception of focus groups and what they want; and the other is those that trade on differences and use regions as the means to be different. Mudgee, like many of the 62 designated wine regions in Australia, uses the terroir principle to differentiate itself from other wine regions. For your knowledge, terroir is really the sum of the meteorology, history and culture of a region. Each year—or in each vintage, in the case of the wine industry—we have differences magnified by external circumstances, for example, mostly weather. None of Mudgee as a wine industry fits into the first category, or the "tastes the same" category. Think of Coca-Cola and a soft drink. We make every wine different.

For 170 years, this region has developed and refined our wine and food proposition. This comes with the risk of the season, consumer acceptance, policy and, more recently, social licence. Through this, we have maintained our position and improved our reputation both nationally and internationally. For me, representing grapegrowers, to have someone come in to exploit our backyard and add another layer of risk is something the wine industry won't accept. Our submission mentions many consequences, but it is the industry for the future generations that is the most galling for me. In terms of today, the terms of reference would be 1 (b), (c), (e) and (i). Thank you.

**LUCY WHITE:** Good morning, Chair and Committee. Thank you for the invitation to attend today's hearing. I'm here to speak as a tourism professional, not for any particular organisation but as someone who has worked in this region solely focused on improving and growing regional visitor economies for over 25 years. I have been the CEO of Mudgee Region Tourism, executive officer of Central NSW Tourism for four years and destination development manager at Bathurst Regional Council for a couple of years. For the last five years I've been the general manager of Destination Country and Outback, which is one of seven regional networks established by the State Government in 2017.

I'm here today to speak directly to the impact of this lead mine on tourism and the visitor economy, and specifically to item (1) (h) of the terms of reference and in particular whether the regulatory framework for heavy metals and critical minerals mining, including communities, economies, job creation, are appropriately balanced. The issue we have here, and the one that needs to be raised, is that the tourism industry was not taken into account during the assessment. It did not happen, so how can we ensure something is balanced when it has been ignored? Was this a massive oversight or a deliberate accounting error? Either way, as a tourism professional, I intend to demonstrate why this oversight is unacceptable when the visitor economy is one of the three key engine industries in this region. The numbers will tell you the story.

I'll give you some data—fast facts. In the Mudgee region, the tourism industry is worth \$334 million annually. The Mudgee region attracts 724,000 people annually. These people spend \$923,000 every day; that's \$641 every minute. Our own council's economic development strategy places the tourism industry as the third largest in the region, and it actually supports 2,074 jobs. Why were these numbers ignored when the lead mine was approved? That's hardly balanced. How is it that 200 jobs are more important than 2,074 that currently exist in the tourism industry. Let me reiterate, this industry was not considered at all. Once a lead mine is in operation, no amount of publicity campaigns can take back that perception that lead mines ruin industries and then ruin places.

The cost to this area will be devastating. Let's look at jobs: We'll lose them. Let's say 50 per cent of them go, that's 1,000 people, average wage \$70,000—\$70 million wiped. Let's look at people and numbers: 724,000 people stop visiting. Why? They fear health concerns once confronted with a lead mine. Let's look at perception: Mudgee's reputation as a top tourism destination is shattered. Clearly, we have a beautiful region. This is the stunning location where winemakers, vigneron and grapegrowers have been plying their craft for over 170 years. It is a panorama of mini vistas and valleys, like Lue; family-owned vineyards producing quality wine; valuable, productive sheep, beef and grazing enterprises; arts and culture; a rich cultural Wiradjuri heritage; hobby farms; olive groves; world-class food products; and a tourism industry attracting nearly one million people to holiday every year. We've been voted twice by hundreds of thousands of Australians as a top tourism destination, with good reason: the place, the product and the people; it speaks for itself.



Now we want to poison it with a lead mine built smack bang in the middle of this. Lead is poison, poisonous to people and perception. Who will want to visit a region that is widely publicised with images and issues as damning as poison? We all know the volumes are 90 times more lead than silver. You might be sitting here thinking, "What impact will this actually have?" I repeat, once a lead mine is in operation, no amount of publicity, campaigns or creative promotion can take back the perception that lead mines destroy places. The cost to this area will be devastating. The fact that we're sitting here today discussing impacts of a lead mine at a parliamentary inquiry—there is nothing positive about this for the local tourism industry. Publicity has already generated statewide TV broadcasts, ABC and commercial radio stories, and print articles in national newspapers. The negative impacts are already visible and they're real.

Not once in nearly 30 years of working in regional tourism have I ever seen, nor do I have an example of, a promotional campaign that successfully overrode the impacts of unsound decision-making and negative publicity. No amount of money can underwrite a campaign to reverse this brand damage. It's fairly clear that this mine poses a massive risk to the tourism industry and there is not a balance of economics, job creation nor the economy or the environment. Tourism businesses are spending millions of dollars every year developing vineyards and investing in visitor accommodation and fabulous experiences, setting themselves up for another 165 years. The lead mine developers have publicly stated they will be here for 16. So what's the industry going to look like when that's done in 16 years? They're gone, and we're all here.

It defies belief that, on one hand, the State Government continues to invest appropriately and heavily in the visitor economy and, on the other, another agency, in isolation, approves a toxic lead mine, which will devastate the industry, the environment, the community and our own human health. What government would want to threaten and promote the demise of this industry in this way, and why are we taking this risk? The process and the subsequent approval of this mine in the middle of the State's and Australia's most successful tourism destinations without robust or social economic assessment is, I believe, irresponsible and, in all probability, will have a devastating impact on this remarkable and distinctive region. It's incongruous and absurd.

**MICHAEL SOUTHAN:** As Lucy has mentioned, many of the wineries have olive groves and olive trees associated with them. We have some very big and very important olive groves that stand alone that are very close to the proposed mine site. The Australian olive industry is a very important one because it underpins not only tourism in this region but, nationally, Australia produces the highest quality extra virgin olive oil, which is the underpinning ingredient to the Mediterranean diet, which is well known for the health benefits that it imparts.

The key issue we see is that because lead is known to be a compound that can peroxidise oil and therefore change the quality of, in this case, extra virgin olive oil and reduce its quality, it's actually something that will allow our competitors—and I'm talking about the importers. We produce about 20 million litres of extra virgin olive oil per year in Australia, but our importers are bringing in about double that—about 40 million litres. They're looking for any excuse they can find as to why they can promote their product as being better than Australian. This potentially provides that excuse.

If it becomes known and if it's found that extra virgin olive oil is contaminated or the quality is affected by lead, the importers will make a lot of use with that. Therefore, we have the whole reputation of this industry at risk because of this mine. Potentially, we have a healthy product that may be a product that may not be available and, therefore, a lesser quality product being promoted to the consumers because of potential lead contamination of olive oil.

**The Hon. SUSAN CARTER:** Thank you very much, all of you, for being here today, and thank you for your submissions. I wonder if I could address my first question to Mr Lowe and Dr Southan, because both of your submissions mentioned the idea of acid drainage and the environmental risks that presents. I wonder if you could talk a little bit more about that and, in particular, identify whether this is something that can be detected and prevented or, once it is detected, if there is no prevention of the environmental damage possible at that point.

**DAVID LOWE:** Thank you for the question. Certainly, with the acid drainage, it will end up in water aquifers, which will end up through the Lawson Creek and run into the Cudgegong River. I don't know the exact number, but I would expect the majority of grapegrowers and winemakers would be taking water from those sources. We can use up to two million litres of water a year. With our climate change projections, our evapotranspiration and our extreme heat frequency, what's called the aridity index is going to double in the next 30 to 40 years. So we're going to need much more water to apply.

Certainly, the risk of water being contaminated is really high. We are going to rely more and more on water, use it sensibly, and we see any risk to the existing water we have now as a real problem for our continuum. It takes about three to four years when you plant a vineyard to get a crop, and another two to three years to get the wine right. I've made the decision three years ago to plant double my vineyard capacity for new things, for

expected climate change. I've done it on the basis of meteorological data, not on external forces, which is what this mine is about.

**The Hon. SUSAN CARTER:** If the acid damage is detected, can it be remediated?

**DAVID LOWE:** No.

**MICHAEL SOUTHAN:** I concur with what David said. The issue is when you're bringing material from underground to the surface and you get oxidation, that's when you get this acid mine drainage, so containing that becomes very important, but you've got to contain water. Once you get that leaching, it can be surface run-off. It gets into the aquifer as well. Despite what most people might think, while olives are very drought hardy, you need to irrigate them to produce a good crop, so they need water as well.

**The Hon. SUSAN CARTER:** I will ask one follow-up question to both of you. I was very interested to see in your submissions the possible effects of lead on photosynthesis—on the vines and, I presume, on the olive leaves. Have you got any modelling or any more information you can tell us about the possible impact of lead dust settling on leaves?

**MICHAEL SOUTHAN:** Not specifically. My main thrust was really more about the lead entering the leaves, either through dust or uptake through the water, causing damage to the oil itself so that we end up with a lesser crop and product.

**DAVID LOWE:** There are certainly two parts to that. One would be the accumulation through the leaves in what they call the chloroplasts, which is part of photosynthesis, where photosynthesis is interrupted. It certainly can stall the ripeness and products of our wine. The ripening process of sugar comes from photosynthesis. That's directly correlated to grape flavour. So, certainly, any impairment of photosynthesis would impair wine flavour. The second bigger issue that is to be determined is that Australia exports two-thirds of its wine to survive. The classic issue about exporting wine is what they call MRLs: maximum residue limits. Each country that imports Australian wine has their own MRLs and they are very sensitive to any change in the status of analysis, particularly of wine. Wine is blotting paper for the environment around it. That's why it's such a good indicator of climate change. It's also a great indicator of anything that goes wrong in your soil. Once it's in the wine, it's fast, it's fixed—it can't be removed. They're extra things that we're aware of, particularly that we will always have to export our wine.

**The Hon. SUSAN CARTER:** I have one last question. We have focused on the side effects of lead if that lead cannot be contained as part of the mining process, but Bowdens is also a silver mine. Do you have any environmental concerns in relation to the silver mining aspect of the mine?

**DAVID LOWE:** I have no knowledge of that, no.

**MICHAEL SOUTHAN:** Not silver specifically, but it's the far greater quantity of lead which is the issue. One other thing I didn't mention is that olive oil actually has an Australian standard. It's the only food that has an Australian standard, so producers have to have their product chemically tested. Any heavy metals which show up, particularly things like lead and other heavy metals, would therefore be of great concern because it would therefore not meet the Australian standard.

**The Hon. SUSAN CARTER:** Ms White, do you have any comment about the reputational risk of a silver mine as opposed to a lead mine?

**LUCY WHITE:** Absolutely none, because it's not a silver mine; it's a lead mine. Ninety times more—we can do the maths.

**Ms CATE FAEHRMANN:** I will go to you first, Ms White. You mentioned at the beginning that the IPC process didn't take into account the impact on tourism. Can you expand on that in terms of your input—yourself, your organisation and the businesses you represent? Were you heard by the IPC? Were your views considered?

**LUCY WHITE:** To be clear, Cate, my submission was based as a professional. It was done with the endorsement of my employers but with no declaration needed. I have taken annual leave. In fact, I have done that today—just to make that clear—and I'm not a State Government employee, just for the record. I am on annual leave. There is clear evidence that the \$334 million very resilient, very vibrant, very long-term sustainable high-yield tourism and visitor economy industry was ignored in the economic assessment in assessing this proposal.

**Ms CATE FAEHRMANN:** Thank you. In the economic assessment, that's useful. I turn to the impact of this mine on the extra virgin olive oil declaration that you were just referring to. Is it true that the EIS or

Bowdens has said how much is going to be emitted into the atmosphere—you have a fair idea, do you, in terms of what is going to be emitted in terms of tonnage? Can you talk the Committee through that?

**MICHAEL SOUTHAN:** There was certainly modelling done to show how far dust could carry. Within the local government area I think the whole region, potentially, is at risk of some dust being deposited, depending on weather conditions, and it could travel a lot further.

**Ms CATE FAEHRMANN:** Just to be clear, we keep hearing this word "dust"—but it is lead-containing—

**MICHAEL SOUTHAN:** Dust containing lead and other metals, potentially, but lead being the main one. Yes, there is the potential for it to cover a wide area. The local government area has about 44,000 olive trees. It's significant for the industry, but the biggest issue is that that particular number of trees—and it could be more—it's the impact on the total national industry's reputation.

**Ms CATE FAEHRMANN:** Your trees live a long time, don't they?

**MICHAEL SOUTHAN:** It's well known there are olive trees that are over 2,000 years old. It's a truly sustainable industry, and one of the few industries shown to be carbon positive because of the longevity of the trees. Also, the fact they are producing olive oil means more carbon is sequestered than is actually used. It's very attractive from a carbon credits point of view.

**Ms CATE FAEHRMANN:** Mr Lowe, is it the same issue with grapes, I'm assuming? Do you have organic and biodynamic industry here as well? All grapegrowers are concerned, but are people concerned about that in the same way?

**DAVID LOWE:** I can answer that with some knowledge. I have been certified since—organic, not just certified mad!—since 2003. Part of the role of certification is your compliance and also management of risk. We need duty of care with our neighbours to make sure that we respect each other's operations. We need to demonstrate that we can deal with any problem that comes up. We need to log everything that occurs. It's onerous and it's expensive, but we think it's about truth and being authentic. Anything that's going to be extra than what we have to cater for is going to be onerous and expensive. We certainly see that any dust or any pollution that comes from air pollution is going to make it more difficult. We can't control what happens in the air. We have to put in tree lines around my 1,000-acre farm to stop any drift.

**Ms CATE FAEHRMANN:** Do you think the trees are going to stop the drift?

**DAVID LOWE:** No, but that's a requirement for organic certification.

**Ms CATE FAEHRMANN:** But it won't stop the—

**DAVID LOWE:** No, of course not. It's more to do with sprays from neighbours and things like that. It's a practical consideration. It's pretty onerous to be organically certified. It's a huge investment for us. It pays dividends; the market loves and respects the fact that we are audited and checked by a third party. All of this just adds complications and extra onerous activities on us as a farmer with our right to farm.

**The Hon. GREG DONNELLY:** Thank you all for coming along today. To help explain the history, particularly to the extent that it's taken place or did take place, of the engagement between government agencies and the tourism industry, and government agencies and the horticultural industry, I'd be interested to know what took place or didn't take place over what period of time, who might have been involved, and what was your involvement and input into that?

**LUCY WHITE:** If that's a question to me, there was none that I can see. I don't see any evidence in the economic assessment of the Bowdens proposal of robust, if any, meaningful consultation with the visitor economy, proponents and businesses in the region at all.

**The Hon. GREG DONNELLY:** Obviously there was a change of government in March this year. When would this consultation have taken place, if it was to take place, in terms of the mine proposition?

**LUCY WHITE:** During the development of the development application process.

**The Hon. GREG DONNELLY:** What time line would that have been, approximately? Just roughly.

**DAVID LOWE:** The licence to operate that thing has been a long time. There are different ownerships.

**The Hon. GREG DONNELLY:** So the ownership has changed.

**DAVID LOWE:** I don't know the detail, but there have been two or three owners of the site.

**LUCY WHITE:** The current owner is the fourth. The previous three proponents walked away because of water issues, like the ability to prove that there was sufficient water to operate functionally, properly and sustainably. To my knowledge, it has been over a decade in the process for approval.

**The Hon. GREG DONNELLY:** In regard to the Bowdens ownership of the mine, that has been about roughly a 10-year period. Is that right?

**DAVID LOWE:** No, less.

**The Hon. GREG DONNELLY:** You said they are the fourth owner.

**LUCY WHITE:** It was 2016 that Bowdens—

**The Hon. GREG DONNELLY:** I am just trying to get the time lines right here because this will help inform our thinking and our report. In that period from 2016 on, when there was obviously a live examination of the proposal for the Bowdens mine to proceed, there was no consultation at all with hospitality in the visitor economy industry here? That's what I'm trying to nail down, that there was just none at all.

**LUCY WHITE:** I will take that question on notice, but not that I'm aware of. If there was, it certainly didn't manifest as evidence and facts in the economic assessment.

**The Hon. GREG DONNELLY:** You will take it on notice. I am just trying to be clear about this. So you are not sure?

**LUCY WHITE:** You would like clarified what level of consultation there was?

**The Hon. GREG DONNELLY:** If there was any. I am trying to understand.

**LUCY WHITE:** I will do my best to find that.

**The Hon. GREG DONNELLY:** Indeed. It's interesting to know whether there was some or none or, if there was some, what that was. In terms of the agriculture industry over this period, that window when this was being actively looked at in terms of the potential proceedings with the mine, was there any consultation that you had an opportunity to have some input or has this snuck up on you, so to speak?

**DAVID LOWE:** I think the last two or three years we have had galvanised interests from other producers saying, "Some headwind is coming. We need to be aware of this." I think a lot of us were ambivalent about it because we thought it was a long way away and no problem. Only in the last 12 to 18 months I have certainly been a fan of doing something about it, so I have been ignorant to a lot of it. But it's been rumoured for three years that it might be a problem and we are just now suddenly terrified about what might happen to us, not just for agriculture but for tourism. Our wine business—my business alone is 90 per cent about selling tourism at the premises.

**The Hon. GREG DONNELLY:** I appreciate the point that you have paid some more precise attention to it and I understand that. But is there active discussion on the ground—to help inform us—that movement is in fact starting to take place and there is in fact a serious proposal here that is now staring you in the face, and you need to make a decision about what to do about it?

**DAVID LOWE:** Most certainly. If I was a grapegrower closer to where I am now—and I am certainly downstream. I am an interested party because I am worried about acid movement, I am worried about particular matter, I am worried about lead and photosynthesis. But if I was close by I would be pretty alarmed at what's coming on. I think those people are going to have very little future in the wine industry if they are this close to the mine—those that are there now.

**The Hon. GREG DONNELLY:** In regards to the olive industry, have you been hearing on the ground that this is starting to develop a momentum and people are talking about it as actually something that may come to fruition?

**MICHAEL SOUTHAN:** We had no contact with Bowdens at all. It was through one of our members who is very close to the mine site that this was raised with us. When I looked into it and realised the impact it was going to have on the whole industry, it became a matter of real concern.

**The Hon. GREG DONNELLY:** In regards to the extent it has taken place, has Bowdens engaged with people—either in the hospitality, visitor or agriculture industry—to talk about their proposal and provide information about what's on their mind? Have they raised their head above the parapet, so to speak, and started to talk to people? If so, what have they said?

**MICHAEL SOUTHAN:** Not from my perspective. It could be different with individual growers. But certainly from my perspective, no.

**DAVID LOWE:** They have no particular interest with each of the agriculture industries, whether it's growing lucerne, having horses, stock, or, in the case of horticulture, olives or grapes. They've done it on a generic, regional level.

**The Hon. GREG DONNELLY:** What does "regional level" mean?

**DAVID LOWE:** They'll be talking about the zone where they're going to be and those people who are domiciled in a radius around it. They won't be looking at any particular industry dealing with the olive growers, dealing with the grapegrowers, dealing with the horse industry, dealing with the lucerne farmers, with the croppers.

**The Hon. GREG DONNELLY:** But they have not done any of this yet.

**DAVID LOWE:** No.

**The CHAIR:** Thank you very much for your time today. The questions on notice and any further questions will be sent through to you.

**(The witnesses withdrew.)**

**Dr PETER BENTIVOGLIO**, Emeritus Consultant Neurosurgeon, St Vincent's Hospital, sworn and examined

**The CHAIR:** I welcome our next witness. Thank you for making the time to give evidence today. Will you introduce yourself?

**PETER BENTIVOGLIO:** My name is Dr Peter Bentivoglio. I am a neurosurgeon and have been for 43 years. I am currently an emeritus consultant neurosurgeon at St Vincent's Hospital, meaning that I am still part of St Vincent's Hospital. Whilst I was working at St Vincent's Hospital, as the chairman for 17 years, I founded the Peter Duncan Neurosciences Research Unit at St Vincent's Hospital, which is now a very prominent unit researching—one of the topics is dementia. According to the World Health Organization, there is no safe level of lead for human beings, and yet the statement by the health department states that there are no health impacts from the Bowdens mine, which has got lead, zinc and silver in it, which certainly has deleterious effects on the health of human beings.

We are coming up, on 22 to 28 October, to the eleventh International Lead Poisoning Prevention Week. This is established by the World Health Organization, so they see it is a major problem, and it undoubtedly is a problem for the medical profession. The exposure, predominantly, will be via dust and lead dust and the toxic effects of that lead dust. The statement that says there are no health impacts as a result of the Bowdens lead mine, if it goes ahead, would have to be seriously tested. We talked about independent baseline blood levels. That's just a start. You'd have to do renal function and full blood count. That's as a baseline, and that would have to be followed up regularly, on a yearly basis, to assess the accumulation of lead in people's blood systems. We all know that lead has a deleterious effect on the brain. It causes cognitive impairment at low levels in the blood.

It also causes peripheral neuropathy of the large fibres, not the small fibres. It is also extremely important—the effect it has on children, particularly under-six-year-old children, who absorb a lot more lead than adults do. They don't have the reservoir to store it like adults do, which is predominantly—or 90 per cent—stored in the bone. Children don't have that much bone, so they can't store it, so it focuses in other areas in the brain. We know that chronic exposure to lead in children results in IQ level drops of 10 to 15 points. I don't know about the rest of you, but I don't have 15 points to throw away. So we do know that from a psychological point of view, and neuropsychometric studies are the best and most accurate way to pick up this cognitive impairment in adults and children. So that's why we, one, need a baseline and, two, need that to be followed up on a yearly basis as well.

We do know we have to do real-time dust monitoring to assess how much dust there is in the atmosphere. Now, this real-time dust monitoring is not going to be just one monitor placed somewhere; it has to be multiple monitors placed in various areas, from various distances from the mine—up to 15 kilometres from the mine—to the east, west, north and south, to assess the real-time development of lead particles in the dust that's being excreted by the mine. Now, this has to be—and I stress, has to be—independent. It can't be run by the mine. It has to be robustly done on a regular basis, every three months. If the level of toxicity gets greater, the mine somehow has to either change its ways or shut down. But, unfortunately, shutting the mine down doesn't get rid of it because there is this big hole in the ground.

This hole in the ground is going to be 1.5 kilometres in diameter, so it's going to constantly—and it's never going to be repaired—spew out dust over the countryside long after the mine has gone away. There has also got to be independent isotope studies done so that we can fingerprint where the lead is coming from, because lead is a ubiquitous thing—it is all over the place—and we have to be able to say, "It's coming from there." The only way to do that is to do isotope studies so they can't say, "It's caused by the environment; we know that." We do know that because we've done studies on our own property. It was done by Mark Taylor, who assessed the lead in the soil on our property, some of which has come all the way from Broken Hill, because it was in Broken Hill where they used a lot of lead for the lead in petrol, and that has sort of settled in the ground.

They have been able to isolate the lead that we are seeing predominantly in our own backyards. It is coming from or has come from Broken Hill. That has to be independently done. I'm sorry, but we can't trust the mining companies to do it and do it appropriately. There has to be independent monitoring of all our tank water, our drinking water. Everyone in this area gets their water from the roof. Now, that means someone has to come along and see how big the roof is and then determine how much dust is going to fall on it, and we have been told the lead dust is going to be about four grams per square metre a month. I can work it out: I know how big our roof is and I know how big our tank is. They don't know that; they have no idea of the concentration of lead developing in our tanks, so how it's going to affect us.

Until that is done, and done appropriately—not just modelled with computer programming, which can be altered according to the programmer. It has to be done with basic science. That means go along, see how big the roof is, work out how much is in the tank, how big the tank is, work out its concentration, work out how much people are drinking from it to see how it's being removed, and see how much is falling from the atmosphere,

coming from the natural atmosphere and not just the mine itself. I know what it is; I have done it in our water. They don't know what it is, and yet they're telling me what it is.

All costs of these measurements, because it is the Bowdens mine which is causing us to do all this—we don't have to do it at the moment—they should take full responsibility to pay for these monitoring systems. The responsibility for the health of the environment and the exposed cohort around the Bowdens mine should be—if it's not met, there should be significant fines, not the small amount of fines that we are seeing at other areas. Culpability should be placed on the mining people. I point out that Norway imposes fines for mining with breaches of 4 per cent of the total revenue of the mine—not the tax amount they have to pay, but the total revenue. Bowdens and the Department of Planning must take full responsibility for their actions recommending approval of a toxic, contaminated mine which will leak dust over the community uncontrolled. They say they will control it, but I don't know how they can control it with blasting three times a day. They have to be prepared to take full responsibility—legal and culpable responsibility—for any damage that they say they won't do this time.

**The CHAIR:** Thank you. I have some questions. We heard evidence earlier in this inquiry from residents in the vicinity of the Cadia mine who have taken extraordinary steps, spending thousands of dollars to put filtration systems on their household water. In your opinion, is that sort of action sufficient to prevent damage to human health from lead mining?

**PETER BENTIVOGLIO:** The only way to properly filter lead is through electrolysis or distillation. The particles get less than 2.5 micrograms. You can't filter them with a standard filter, so it has to be done either with electrolysis or distillation to clearly clean up your water.

**The CHAIR:** I also want to ask about blood testing. You have talked about, if this mine were to go ahead, the extraordinary length that we would need to go to in order to monitor blood levels of heavy metals like lead. I'm interested in your professional opinion, particularly regarding children and infants, if there were routine testing that picked up elevated blood lead levels. Is that timely enough to prevent permanent damage?

**PETER BENTIVOGLIO:** The idea of doing regular testing is to prevent that from happening. That means once they start to show raised levels, they need to be reviewed three-monthly. Appropriate action should be taken once the level has been seen; investigation into why is the lead high. What is wrong? Is it something in the pipes? Is it the dust? Is it what—or whatever it is. That should be investigated very thoroughly to try and minimise the effect on children. You have to act quickly, promptly, before permanent damage happens. Chronic exposure means more than one year.

**The CHAIR:** I have a question that's not directly related to your statement. Earlier in this inquiry we heard evidence about the role of particularly gold nanoparticles in medical research in investigation. It's not something that I'm familiar with from my own practice. Are you aware of that use of gold?

**PETER BENTIVOGLIO:** Have they told you about the toxic effects of nanoparticles?

**The CHAIR:** No.

**PETER BENTIVOGLIO:** Okay. Do you want me to tell you about them?

**The CHAIR:** That's what I'm asking.

**PETER BENTIVOGLIO:** Okay. Do you know what a nanoparticle is?

**The CHAIR:** I do, but please explain for the Committee.

**PETER BENTIVOGLIO:** It's a molecule or a group of molecules which has a three-dimensional process. It can be long or short, but it's three-dimensional. If it's a nanoparticle of lead, it doesn't behave like lead. It behaves differently to lead. It is used in clinical practice, in medicine, to help—and I can only say in neurological effects—transport chemicals across the blood-brain barrier. It just moves straight across the blood-brain barrier, because it is so small. There is nothing that's going to stop it. You are talking about 1/10,000th of a micrometre; we're talking molecule size, so it moves around very well. But unfortunately it does cause significant neurotoxic effects. It will affect the sensory and motor systems. It affects cognitive impairment. It causes apoptosis of the brain cells; that means the brain cells die in a regular fashion so it doesn't have a cumulative significant oedema effect on the brain. It's not totally harmless. Okay, they may be doing it on rats; okay, the rat died. That's what they do in research. The amount of nanoparticles they need for the research on rats is tiny, so to have a whole mine to develop nanoparticles for research on rats unfortunately does not hold up a great deal of common sense.

**The Hon. SUSAN CARTER:** Thank you very much for your submission. You laid out in your evidence and in your opening statement a very sophisticated program of testing and of checking and timetables of when that should occur. If that type of program of testing was in place, would you be confident that any health risk could be managed?

**PETER BENTIVOGLIO:** I'd have to be certain who's going to pay for it. I do not believe Medicare should have this burden placed upon it, even though the mining company thinks they should. Unfortunately, it's the mining company that's doing the polluting. It's the mining company that should be responsible for the pollution and the effects it's having on the people. My feeling is that the cost should be borne completely by the mining companies, and it's going to have to go for a long time with children because it's going to be all their life because if they have significant IQ deficiencies, they will never achieve their goals in life. They will never be able to go on and be a rocket scientist or an astronaut or something like that. They'll probably leave school in—what do we call it now—year 9 and year 10. Reading and writing skills will probably not be very great.

I see so many young workers compensation, people like this whose life is now resulting in heavy manual labour, which they have to do and their body doesn't hold up, which puts them on the scrap heap of employment for the rest of their life at the age of 35 to 40, which is a psychologically debilitating thing. You see the families break up. The wife leaves the husband. He's there living by himself, walking around with crutches. It is a soul-destroying thing to see because their education has not reached its full potential. People, especially young children, if they've got significant drops in IQ—10 to 15 points, which I can't give away so most people can't give away—that's going to be seen more and more and more.

**The Hon. SUSAN CARTER:** Just to clarify, if the tests show elevated levels of lead, is it too late at that point to reverse?

**PETER BENTIVOGLIO:** No. As I said, once you see elevated levels, you start taking steps to, one, find the cause; two, treat them appropriately—you can treat them—and, three, follow them up very closely and make sure you reverse that as quickly as you possibly can before significant neuropathic changes happen. It can be reversed in its early stage, but if you wait too long, it's too late.

**The Hon. SUSAN CARTER:** So your submission would be that if the mine were to proceed, it would have to be accompanied by a funded, committed program of testing that was reportable, presumably, to a third party to ensure that appropriate action was taken.

**PETER BENTIVOGLIO:** You'd imagine that the third party would be the local doctor or there would be a clinic which does all this themselves. There are psychologists, psychiatrists and all the relevant people, and they would be the ones treating most of these people. If they get beyond the bounds of those clinics, then they get referred to appropriate people. I would hope the GPs would be very much part of that clinic.

**The Hon. SUSAN CARTER:** But what interface would the GP have with Bowdens mine, for example?

**PETER BENTIVOGLIO:** I don't quite understand what you mean.

**The Hon. SUSAN CARTER:** What I'm suggesting is it's one thing to have the testing regime, which shows there's evidence of harm. If the source of that harm is found to be the mine and other measures need to be taken to mitigate or production needs to be stopped, one would need to link the testing regime to control over the operation of the mine for that testing regime to be sufficient, I would think.

**PETER BENTIVOGLIO:** That testing regime has to be borne out by isotope studies of the lead so you can fingerprint exactly where it's coming from. Once they have been located as the cause of a problem, the extent of the problem would be worked out—how extensive it is and what methods you have to do—and deal with the mine to reverse the problem.

**The Hon. SUSAN CARTER:** The existing EPA and IPC reports indicate that there won't be a problem with lead escape, but you're not confident that those reports are correct?

**PETER BENTIVOGLIO:** I don't believe that they will be able to stop. They said, "The dust is not going to go beyond the border of the mine." I have never seen dust respond to any border in their whole life, and I've watched dust clouds go from one side over many, many kilometres. That makes me very worried, to think that the EPA think they can control it to that degree. I don't believe they can, and that's why we have to do—if they approve the mine—all this close scrutiny and regulation. Once they deviate from that, the hammer has to come down.

**Ms CATE FAEHRMANN:** In your opening statement, you said a figure of four grams per square metre per month are landing on nearby rooftops of the mine. Where did that figure come from?

**PETER BENTIVOGLIO:** That's their figure. That's the figure that the Bowdens people put in—that it would be four grams—but they said two of those grams are probably related to the environment and already exist. That's what prompted me to go to my little old water tank to work out exactly how much dust had fallen in our water tank over the last 26 years. You want me to tell you how much?

**Ms CATE FAEHRMANN:** Go for it.



**PETER BENTIVOGLIO:** 0.8 of a millimetre a year. That is that much.

**Ms CATE FAEHRMANN:** How far do you live from the mine?

**PETER BENTIVOGLIO:** Well, the property goes anywhere between 6½ to five kilometres from the mine.

**Ms CATE FAEHRMANN:** They said that nothing is going to pass the border of the mine, but then you've got the four grams per square metre that they've said as well.

**PETER BENTIVOGLIO:** They do not say how far that's going to be up to. They don't make it a distance from the mine. They say four grams per square metre. That's what they say and that's the figure I've used.

**Ms CATE FAEHRMANN:** All of these different tests, like blood and water, you say very convincingly are absolutely essential for the community. I understand there are baseline studies now being undertaken here too. Firstly, it would seem four grams per month is landing on rooftops and going into rainwater tanks. It sounds to me that would be almost inevitable that there is going to be lead found in blood.

**PETER BENTIVOGLIO:** I agree. I've worked out that every year from my roof we will get 50 kilograms of dust. Have you seen 50 kilograms of dust? That's two big things of concrete.

**Ms CATE FAEHRMANN:** When you're talking about testing the lead levels of children, for example, and the questions here today are, "Well, you'll find elevated levels and then what? Will they go down? What can then be done?" If you're a family, wouldn't your only real chance of better health be to move?

**PETER BENTIVOGLIO:** You say that, but that's—

**Ms CATE FAEHRMANN:** Shut the mine down is one, but if that doesn't happen—

**PETER BENTIVOGLIO:** Shutting the mine down won't help because there's this big, raw surface already there, leaking dust and continuing to leak dust. Basically, we can't sell our properties now. There is no value in it. No-one will come along and buy our property. So it's fatuous to think that we'll be able to pick up stumps and go somewhere else to live, on the Riviera or something like that. It does not happen. That's not what it's all about.

**The CHAIR:** I ask the gallery not to disrupt the proceedings.

**PETER BENTIVOGLIO:** People will not be able to sell it. Who's going to look after it?

**The Hon. GREG DONNELLY:** Apologies for not being here for your opening statement. I had to move my car; I was almost on the time limit. Can I take you to page 1 of your submission? Under "Recommendations", the first line reads, "Suspend the Independent Planning Commission's approval". Are you able to express an opinion or a view about the approval process, such as it is, up to this point and your observations about the integrity of it, the thoroughness of it and the detail that's involved?

**PETER BENTIVOGLIO:** Okay. I'm now involved with a deep-dive group of doctors with the health department. I'm there as an observer and can ask questions. I've been invited onto this committee, which was only just established a week or two ago. Apart from that, I have not been aware of anyone speaking to the medical profession itself. Obviously the health department, if they're going to establish this special group of doctors—made up of toxicologists, neurologists, nephrologists and things like that—have significant concerns that it has not been done adequately. The person who signed off on it was not a medico; it was an environmentalist. I'm sorry, it's like having him sign off about doing an operation on someone's brain—next to not very good.

**The Hon. GREG DONNELLY:** To inform myself, this committee, such as it is, or this working group—

**PETER BENTIVOGLIO:** It is due to be put together. It's only just being put together now.

**The Hon. GREG DONNELLY:** I'm just interested because I haven't heard of it.

**PETER BENTIVOGLIO:** I was at a meeting with Kerry Chant last Thursday. She was the one who said, "We've got to do this." She called it a "deep dive", whatever that means. I assume that it meant look into it very thoroughly. She's put together a committee. They told me; I actually made the initial statement that you at least need a neurologist on this committee, and they subsequently turned round and did that. Then I said, "Can I sit and watch and observe?" They said, "Yes, and you can ask questions too." I've been invited onto this committee for this reason, because I feel that it hasn't been done properly at this stage. Obviously, the health department doesn't feel that either, otherwise they wouldn't be setting up this group.

**The Hon. GREG DONNELLY:** Does it have a term of reference about what work it does? Does it have a period of life that it's going to operate?

**PETER BENTIVOGLIO:** I assume that has to be all worked out, because this was only mentioned to me last Thursday.

**The Hon. GREG DONNELLY:** It's news to me.

**PETER BENTIVOGLIO:** You speak to Dr Chant and Jeremy McNulty. They will fill you in on it completely.

**The Hon. GREG DONNELLY:** That's very helpful. Can I take you to page 2 of your submission under "Executive Summary"—in points 1, 3 and 4—and your thoughts around the use of the word "independent"? I would like you to elucidate on—

**PETER BENTIVOGLIO:** It was very carefully chosen.

**The Hon. GREG DONNELLY:** That is indeed, I'm sure, the case. That's why I'm pressing you. In terms of "independent", you use that for a particular reason. Could you provide your reasoning for that? What would represent independent for you?

**PETER BENTIVOGLIO:** Independent would be hopefully the EPA. I do not believe independence was permitting the mining company to do it itself because in Cadia, they have been spouting dust into the atmosphere unfiltered for years when they knew they had to filter it. They've only just put the filter on it now. You cannot trust the mine to do what they are meant to do. That's why it's got to be independent. When it's independent, it will be exposed to both the mine and the people and the doctors of the area.

**The Hon. GREG DONNELLY:** Just to go back to your suggestion or your acknowledgement of what you would recognise as "independent", you would say the EPA, number one, is independent; and, number two, has the capacity to fulfil that remit of doing what is needed?

**PETER BENTIVOGLIO:** I don't think they've got the capacity to do it. Hopefully they would be independent. I think I would trust them. But I don't think they've got the capacity to do it because I don't think they've got, one, the hardware to do all the dust monitoring or; two, the staff to do it properly and test all our drinking water tanks, our irrigation tanks—all the areas that I am talking about. It wouldn't be too hard to organise psychometric studies because I've already done that, if you want to go ahead with it. It wouldn't be too hard to organise blood studies. And I've already organised that, if we want to go ahead with it. That's not a big deal. But I think things like monitoring—dust monitoring, water—are going to put a lot of stress and strain on the EPA, and perhaps they may have—it's going to cost money. It's as simple as that.

**The Hon. GREG DONNELLY:** Of course, yes, if they need more resources. Thank you, doctor. I appreciate that.

**The CHAIR:** Thank you. The secretariat will be in touch if there were any questions taken on notice. Thank you so much for your time to give evidence today.

**(The witness withdrew.)**

**Ms JADE MISKLE**, Local Resident, sworn and examined

**Ms MAREE O'CONNELL**, Local Resident, affirmed and examined

**The CHAIR:** I welcome our next witnesses. Thanks for attending today. Would you like to make an opening statement?

**JADE MISKLE:** Good morning, and thank you all for the opportunity for us to speak at today's inquiry. I am a mother. I have two sons. One is three and my youngest is six months old. I've grown up in the local community, gone to school here and my family owns and operates a business in the Rylstone region, employing 15 people from our community. I'm a fourth-generation person in my family to live in this community. As a local business, we've always contributed financially to events and always responded to help in disasters like bushfires. My family, along with the RFS and the community, spent over 60 days fighting the Black Summer fires. We are an integral part of our community and we know tough times, but we also know how to work together and support each other because we are a strong community.

Maree has a three-year-old daughter and is a resident of Rylstone. She serves the local community in her role as a healthcare professional in emergency services. I truly feel that children and mothers are often a forgotten part of our society yet we are doing one of the most critical jobs. We are raising the next generation, but it's often our voices that are unheard. Today we are here to represent the children in our community. There are at least 20 children who live within a 10-kilometre radius of the Lue mine site, with additional children living in surrounding localities. There are almost 90 children under the age of nine who live in Rylstone and, again, more living beyond those town boundaries. Our children enjoy the simple things in life: fresh air, playing outside, splashing in the creeks and rivers, caring for their animals and so on. Many of us drink harvested rainwater and eat our own homegrown food. Lead contamination is not a burden currently carried by our children. However, our fear is this will change.

We know that lead is a neurotoxin and it does not belong in the bodies of my children or any child. We know there is no known safe level of lead. It is important to note here that the threshold of acceptability set by the National Health and Medical Research Council of five micrograms per decilitre is not also a threshold for safety. It is well established that lead affects early cognitive and behavioural development, and we know children are the most vulnerable. The issues of lead poisoning cannot be overstated. As Peter said, in less than a month it is International Lead Poisoning Prevention Week, where relevant international authorities will come together to move the world towards a crucial goal of ending childhood lead poisoning. Yet here we are today in Australia in 2023 discussing a recently approved lead mine smack bang in the middle of our thriving community. Our primary concern with this mine is lead dust. I don't trust the modelling.

Independent experts have shared their concerns and I have lived in this region my entire life. I know the climate conditions. We know it's often hot and more often dry. It's not a matter of if there will be lead dust; it's a matter of when. Historically, communities near lead operations in Australia suffer from elevated lead blood levels in children and we know the statistics are shocking. In Port Pirie just last year, 64 per cent of children under the age of five had abnormal levels of lead in their blood—64 per cent. Bowdens proposal would put them as the first mine in history to have no offsite impacts, and this is simply impossible for us to believe. It's unacceptable that we will be an experimental test site. Our children are not guinea pigs.

**MAREE O'CONNELL:** Potential mitigation strategies for families are also inadequate. They will be challenging to implement and costly. Blood lead level testing has been proposed by Bowdens and subsequently recommended by the Government. Our concern is that retrospective monitoring is an insufficient method for protecting our children. Once elevated levels are discovered, the damage has already begun and there is no remedy for lead toxicity. Elevated blood lead levels won't be a trigger for compensation to affected families and there is no reason to believe that they would trigger a change in practice from the mine. Put simply, no matter what the results are, mining will continue.

Other seemingly simple mitigation strategies to use around the home are actually not simple at all. For example, always removing shoes before entering the home is not an easy routine to enforce with a toddler. If they were playing outside barefoot, as kids often do, are we supposed to wash their feet before they come inside? Jade's youngest son, still a baby, displays typical hand-to-mouth behaviour. It wouldn't be safe to let him sit in the grass outside and play as he would be ingesting dust from everything he brings to his mouth. Can you imagine the anxiety we would have as parents on a particularly windy day, as it was yesterday? Do I need to keep my child indoors? How often am I expected to wipe down my windowsills? Am I a bad parent if I didn't get time that day to vacuum with my HEPA filter vacuum?

There is a huge financial burden families will have to bear to prepare their home—apparently safely—for day-to-day living. Families reliant on rainwater will be looking at a minimum of \$2,500 for a filtration system, with a \$1,000 annual maintenance cost. A vacuum with a HEPA filter is around \$1,000. Having your own dust monitors set up at home for genuine peace of mind and control over monitoring is \$7,000. This mine will create a legacy of stress, anxiety and pressure on parents. We have no genuine assurances of our child's safety from the Government and Bowdens have failed to engage with families specifically. Blanket statements of negligible risk are not backed by rigorous evidence and full transparency in modelling. Our children must not be the collateral damage of metals mining. Our recommendation to the council is very simple: There is no safe level of lead and our children must not be expected to live with lead. Therefore, we strongly recommend the mine should not proceed.

**The Hon. GREG DONNELLY:** Thank you for coming along today and for a very powerful opening statement and reflections. I am interested in the level of engagement, if there has been any, between the company Bowdens and the community here. If we break it down to cover the whole scope of their engagement, I am keen to know what you know specifically, which might be at an individual and family level. If there are other levels as well, even if you do not have firsthand knowledge but you have heard about it, I would like you to put that in as well so we have a picture.

**JADE MISKLE:** Sure. I can definitely speak to an individual level, in terms of a family, and what sort of consultation we've had. I live less than 10 kilometres from the mine site, and I've had zero direct contact. I don't know anyone from Bowdens—a representative. I've never been contacted. I know that they state, in various publications, that they have consulted with the community by doorknocking and community surveys. No-one has ever knocked on my door.

**The Hon. GREG DONNELLY:** Sorry, I'll just interrupt you because I want to get this on record. With respect to the fact that you may have heard or seen reference to community consultation, have you read that somewhere?

**JADE MISKLE:** Just in local news interviews and things like that.

**The Hon. GREG DONNELLY:** Are these interviews with company representatives saying that they have done this?

**JADE MISKLE:** Yes, they have said that they have participated and engaged in doorknocking. As I said, I have never been contacted. No-one has ever knocked on my door, and when I speak to families that, more specifically, live within that 10-kilometre radius, at this stage, no-one has ever said that they have had any direct contact from the mine. I do believe that the community survey existed. I'm not sure how you had to seek out the opportunity to participate in that. I was not personally given the opportunity to participate in any sort of survey.

**The Hon. GREG DONNELLY:** Do you know someone that did participate and if there would be an opportunity to find a copy of the survey?

**JADE MISKLE:** Not really. No, I don't. Not personally. Most of my information or consultation that I have seen from Bowdens has come from interviews that they've conducted in local media outlets. I would just like to draw attention to the fact that there was an interview with a Bowdens representative on 3 April following the approval of the mine. It was an ABC interview and the Bowdens spokesperson actually said that those of us that were opposed or concerned about the mine were "fearmongering and spreading misinformation in the community, and that's a little bit of a sideshow really". That, to me, speaks for the disconnect of people in the community who have genuine concerns, and it disregards our feelings. They have had every opportunity to—they know parents have concerns in the community, and we should have concerns. We are allowed to. We live here. This is our home. They understand that. They have had every opportunity to draw direct contact with us and try and alleviate those, and that has not been done. I guess my last statement I would say to that question is where are Bowdens today?

**The Hon. GREG DONNELLY:** Indeed. So is your evidence that, essentially, the engagement with the community at large by Bowdens has been primarily done through the media?

**JADE MISKLE:** Correct—and through community sponsorship.

**The Hon. GREG DONNELLY:** Could you elucidate on that?

**JADE MISKLE:** There are lots of events that Bowdens are able to financially pay for naming rights so that it gives them the naming rights of an event in the community.

**The Hon. GREG DONNELLY:** Is that happening at the moment?

**JADE MISKLE:** Yes, it has been.

**The Hon. GREG DONNELLY:** Could you give the Committee some examples of that?

**JADE MISKLE:** The local bull-a-rama. It doesn't go ahead until the beginning of next year, but, up until then, it had been known as the Bowdens bull-a-rama.

**The Hon. GREG DONNELLY:** Do you have anything you'd like to add?

**MAREE O'CONNELL:** As Jade said, I live in Rylstone, so my home is actually about 20 kilometres from the mine, so much further than many other people that are here today. Nonetheless, it is still only 20 kilometres and I've absolutely, definitely heard nothing and seen nothing. I didn't even realise that it was a thing that they'd been doing.

**The Hon. GREG DONNELLY:** Sorry, is that the survey referred to?

**MAREE O'CONNELL:** The survey or any community engagement. I have read their social impact assessment, and I did note that they have put some data and some graphs in there to say that they have been engaging. Interestingly, it seemed like most of it was a newsletter, which is not a newsletter that I've seen, and I don't really count that as genuine community engagement. I understand that I'm further away from the mine, but Rylstone, compared to Lue, is a much denser population. There are quite a lot of people that live there, so you would think that there would be consultation with that community also. Especially—if you look at submissions that have come in, it's not just from the community right around the mine; it's from much further away. So they're aware that there are concerns further than just, say, a 10-kilometre radius.

**The Hon. GREG DONNELLY:** I have one final question. You don't personally know anyone around where you and your family live who has received any consultation from Bowdens?

**JADE MISKLE:** For me or for Maree?

**The Hon. GREG DONNELLY:** Let's do one at a time.

**JADE MISKLE:** For me, no, I don't.

**MAREE O'CONNELL:** No.

**Ms CATE FAEHRMANN:** Thanks to you both for coming today and for your advocacy in the community on this issue. You spoke at the beginning about the huge financial burden that's been imposed, as expected families are just supposed to do to somehow keep their houses clean and living in a toxic-free environment, if you like. Things like removing shoes before coming into the house—where is that recommendation? Who is that from?

**JADE MISKLE:** I can definitely speak to that. I can draw your attention to the EPA flyer here that is titled *Lead — your health around the home*. It states here the steps that you would want to be implementing in your home if you live close to a lead industry. So I will just give you some of the things listed on here. You would need to:

- ...wash front steps and verandas at least once a week.
- Wet-wipe benchtops, windowsills, kitchen furniture and toys using a high-phosphate detergent—

as far as I'm aware, I think that's actually been phased out, using phosphate detergents. It's not something I use in my home currently—

- Mop floors using the three-bucket system—

I will not bore you with how to mop your floor using three separate buckets.

**The Hon. GREG DONNELLY:** I'd be interested.

**JADE MISKLE:** You would like to know? "Ordinary vacuum cleaners do not filter fine lead particles." You would need one with a HEPA filter. They recommend that you "vacuum when young children are not present". I'm not sure what I'd do with my children while I do that.

**Ms CATE FAEHRMANN:** They can play in the dirt outside.

**JADE MISKLE:** And then it also states that you would need to "allow time for dust to settle and then wet-wipe before the children return", "move play areas away from bare soil", "cover sandpits when they are not in use" and "regularly wash children's toys and blankets using"—again—"a phosphate detergent". It says, "Never shake or leave dusty clothes near children" and "always rinse the washing machine after use". It also then states that if you have old carpets, you would likely need to remove them. So there is another financial burden. On pets, it says that "animal coats may catch considerable amounts of dust, including lead-contaminated dust". So there

goes our family dog; he needs to leave. Move him out. These are just some. This is just one flyer that outlines—I know Maree's got some others.

**Ms CATE FAEHRMANN:** Just to be clear, that's the EPA saying that if you live near a—

**MAREE O'CONNELL:** Lead industry.

**JADE MISKLE:** A lead industry. And just to note, too—Maree provided a great example of this—during COVID we were able to neutralise bacteria, we were able to kill that off and essentially, hopefully, remove it from our home. Lead dust is not bacterial; we can't kill it. We are not removing it; we are moving it around. So if I mop my floor using the three-bucket system, where will I put the water? Do I tip it outside on the grass?

**Ms CATE FAEHRMANN:** The local school, as well, would have to do all of what you've just said weekly.

**JADE MISKLE:** You would assume that that would be a minimum. I do know that there have been education programs run for childcare facilities and schools in lead mining communities, where they have to provide parents with evidence that they are doing that to be certified as lead-safe for the children to attend.

**MAREE O'CONNELL:** And bearing in mind, these are only the things that we can do in our own home and that you would hope that a school would implement also, but we don't know what's happening in supermarkets or at our friends' homes or as soon as we leave the house. It's just a completely uncontrolled environment.

**Ms CATE FAEHRMANN:** Has this impacted the community in terms of—are families considering moving? Have there been families, people or landholders who have sold up as a result of this so far?

**JADE MISKLE:** I think yes, definitely. There are people who are considering, "Do I leave now and hopefully be able to sell my property and leave before it becomes a risk, or am I jumping the gun, as such?" Or, "Am I leaving and then it doesn't proceed, and then I've left my home for absolutely no reason?" These are all of the things that, as parents, we have to consider. The mental health burden of that—like, that is a predicament that I have been in, that we have been in, for the last 12 months or more: Do I wait and hope for the best, or do I leave? Do I try to implement these strategies and think that I can protect my child? All of these concerns are so genuine and they are not really listened to. How do you give a clearer answer on that, and where do you go?

Currently, as it stands, for me personally, my property now has an exploration licence over it from Bowdens. I would not be aware of that, only that it was in the local *Mudgee Guardian*. I believe that was how I was notified. There was actually no notification process to directly inform me of that. So now how do I actually sell my property? What value will I lose? And then I've got to relocate my family and find a new home.

**Ms CATE FAEHRMANN:** I think it would be fair to say, Ms Miskle, that your property is probably hard to sell now with all of this.

**JADE MISKLE:** Correct.

**Ms CATE FAEHRMANN:** You're facing the situation where—

**JADE MISKLE:** You're almost forced to stay.

**Ms CATE FAEHRMANN:** What about testing the children as well? Let's talk about that in terms of the stress on the kids about why they are getting tested all the time. Just that medical intervention anyway is stressful for kids. How does that make you both feel as mums?

**JADE MISKLE:** Dr Peter Bentivoglio has just obviously explained what that process would look like for us as a family. It is one thing to have access to that; it is another thing to actually implement that. We're not talking about "Okay, we're just going to go for one blood test and check everything is fine and move on." You would do that in a normal situation if your child was unwell or needed to be tested for something. That's part of normal life. But to do this ongoingly—

**MAREE O'CONNELL:** Forever.

**JADE MISKLE:** Forever. What sort of a traumatic experience is that for our children as they move into adulthood? That's no way for them to live their life. And it's not for us as parents to have to make the decision if that's appropriate to actually expose them—and traumatise them—to that experience.

**MAREE O'CONNELL:** There's even a chance that children in the community now, in the lifetime of this mine, especially if it goes for longer than they predict, which, let's be honest, it probably would—they'll have children themselves in the community if they stay here, and they would have to test their babies also.

**Ms CATE FAEHRMANN:** Do you ever wonder where the Government is in all of this? How on earth—

**The CHAIR:** I ask the public gallery not to cause disruption.

**MAREE O'CONNELL:** Can I be frank? We know where the Government is. They are doing this and they are ticking a box.

**Ms CATE FAEHRMANN:** For the purposes of Hansard, what gesture did you make for "doing this"?

**MAREE O'CONNELL:** I covered my eyes—and then they ticked a box.

**JADE MISKLE:** And, let's face it, NSW Health have signed off on it.

**MAREE O'CONNELL:** Covering their ears.

**JADE MISKLE:** They have signed off on modelling on a desktop, not real-life experiences—what these parents will be exposed to, what our life will now look like and the conditions of each of these families' homes. In saying that, too, NSW Health have not taken into consideration what are the financial implications that we will have to be exposed to. Will we have the money? Or will we also have the capability? Some people won't actually have an idea how to engage in these services that they say they will provide.

**MAREE O'CONNELL:** It requires a level of health literacy that not everyone will have.

**JADE MISKLE:** So will it be those children that are then put at risk because their parents were not able to make an informed choice on how to somewhat protect them?

**The Hon. SUSAN CARTER:** Thank you both for being here today. Let's just pretend that there is a system of testing that is in place that is being paid for by Bowdens; and that, if the test results indicate adverse circumstances, there is also an enforcement mechanism that is attached to that; and that there is a fairy that comes in and damp mops your floor every day when the kids are away; and that all of those management practices can be put into place. What do you think the psychological impacts on you, on your husbands, on the grandparents, on the children, on the extended family would be of living with that type of lead management regime?

**MAREE O'CONNELL:** It's constant fear.

**JADE MISKLE:** Exactly.

**MAREE O'CONNELL:** It's constant fear. And I think that Broken Hill and Port Pirie and Mount Isa prove that even if you do implement mitigation strategies and you have blood testing, you still end up with elevated levels in the community. Even if we did absolutely everything perfectly, there is still going to be lead there and it's still going to be in our children. The only mitigation strategy that will absolutely work is to leave.

**The Hon. SUSAN CARTER:** As I understand, you said that you had an exploration notice on your property. Can you explain what you meant by that?

**JADE MISKLE:** There's now an active exploration licence. I'm not an expert in this field, but from what I gather it now means that Bowdens are able to make direct contact with us to find out if we—well, I don't know if we even get a choice, but to come and explore for further mineral metals on our property.

**The Hon. SUSAN CARTER:** And you found that out through the newspaper?

**JADE MISKLE:** Yes. There's nothing—I don't get a letter in the mail from the Government. I don't get a phone call. I don't get a visit from whoever's taking that application out; it just exists. It's over our property and if a real estate were to come in and do a valuation on our place, that would be something they would ask us, "Is there an active exploration licence over your property?" because that would be something a potential buyer would of course want to know.

**The Hon. SUSAN CARTER:** Can you deny access or you have to provide access?

**JADE MISKLE:** You can initially as far as I'm aware. That's another gap in the system. I'm not even certain what rights I have and where I find those out.

**The Hon. SUSAN CARTER:** On the one hand we have health modelling which suggests that the mine can proceed safely. On the other hand we have lived experience which suggests that it cannot. Is there anything that you think that could provide you with confidence—any additional testing, any additional mitigation measures, any additional communication—that things could proceed safely or could proceed in a very limited step-by-step form to build that confidence and that experience of safety?

**JADE MISKLE:** No. As Maree just said, even if they started the process again and did everything perfectly, lead dust will still escape the site, and we have heard from the experts how that is likely to happen. Well, not likely, will happen. Even if the community engagement process was perfect, even if the testing protocols were perfect, we lived in a little fairy house that was perfect, then it still would not mean—

**MAREE O'CONNELL:** It still comes back to the mine.

**JADE MISKLE:** It still would come back to our children.

**Ms CATE FAEHRMANN:** Just another question around the exploration licence. Doesn't that indicate that with Bowdens having the current—I think 14 years is what I heard today. Doesn't that indicate that they may actually have further ambitions in the area and, if this gets in, it's the tip of the iceberg potentially for the Mudgee district?

**JADE MISKLE:** Yes. In the last few weeks they did the seismic exploration on the roadsides, and that went all the way to the boundary of the Rylstone town.

**Ms CATE FAEHRMANN:** I think you probably would recognise as well living in this area that there have been—you're familiar with the Wollar township, for example—towns that die as a result of mines that actually take them over and the community can't live there anymore for the reasons you're saying. Is there concern that if Bowdens goes ahead, it's the end of Lue as a vibrant town as you know and love it?

**MAREE O'CONNELL:** Yes. It's the end of Lue. It will be the end of Rylstone and anything in between. The exploration licence that goes over Jade's property comes about seven kilometres, I think it is, or eight kilometres from Rylstone town, and in my mind if they're happy to steamroll over Lue, they'll steamroll over Rylstone as well because to people that live in Sydney or wherever, shareholders that live on the Gold Coast, a small little country town of 650 people is nothing, but to us it's everything.

**Ms CATE FAEHRMANN:** And there's nothing that protects this area. I'm thinking of the kind of prime agricultural land protection that's happened kind of in the Liverpool Plains. But there's nothing that says, "Tourism and wine and agriculture, we need to protect this part of New South Wales for that." Has that been suggested by the community?

**MAREE O'CONNELL:** As far as we know, mining trumps everything.

**Ms CATE FAEHRMANN:** What would you prefer?

**MAREE O'CONNELL:** I would prefer it doesn't.

**Ms CATE FAEHRMANN:** So a recommendation to the Committee around looking at the benefits of tourism and agriculture, and wine, and protecting the region, for example, would that—

**MAREE O'CONNELL:** Absolutely. And also within that—and this might be too challenging and too esoteric—of course we have to consider tourism and agriculture in line with mining, but parents and children get left out of this equation. We're apparently not productive, we're not putting money into the economy, but we're still working and we're still a huge demographic and we're still very important. I think really we should be considered an industry alongside everything else.

**Ms CATE FAEHRMANN:** Good way to finish.

**The CHAIR:** Thank you both so much for the time that you've taken to give evidence today. If there are questions on notice, the secretariat will be in contact. We will now break for 30 minutes for lunch.

**(The witnesses withdrew.)**

**(Luncheon adjournment)**



**Mr MICHAEL BOLLER**, Local Resident, affirmed and examined

**Mr JACK WHITE**, Local Resident, affirmed and examined

**The CHAIR:** I welcome our next witnesses. Would you like to make a short opening statement?

**JACK WHITE:** Good afternoon, Chair and Committee members, and thank you for your time here in Mudgee today. I live with my wife and two young children along the Lawson Creek, 10 kilometres downstream of the proposed Bowdens mine site at Lue. Together with my brother, his wife and their two children, we run an Angus seedstock business. Over the last few years, we have been able to grow our business, and the quality of the product has been recognised in the marketplace, with bulls selling to clients spread between North Queensland and the southern edge of Victoria.

Like many other primary producers in our valley, we rely on the Lawson Creek to provide the majority of our stock and domestic water. We, like other farmers in the Mudgee area, are part of the fabric of the local economy and community. We employ dozens of local contractors throughout the year. We source all of our supplies locally, such as animal health products, vet and agronomy services. We market our livestock through our agents in Mudgee, and we sponsor community groups like the Rylstone show and the Gulgong Campdraft. We are just one of many agricultural enterprises that contribute to a unique and valuable industry that collectively manage over 20,000 hectares of productive land in our area. Together, we produce lamb, pork, beef, goat, fine wool, olives, grapes and cereals, and are able to currently do so in harmony with other industries in our region such as coalmining and tourism.

Due to the extreme variation in water availability in the last five years, with record lows in 2019 to record-high floods in 2022, we have recently invested heavily in infrastructure to not only protect the creek but also ensure we use the water as efficiently as possible. For our property, this has included fencing to exclude stock from the access to the waterways, solar pumps and many kilometres of pipe and troughs to ensure supply of clean water when dams dry up, as they inevitably do. We also have a 77-megalitre irrigation licence. However, in dry times, there is simply not enough pooled water in the creek to pump from, so it is essentially useless for drought purposes and highlights the ephemeral nature of the Lawson Creek.

For the last six years, I have also been president of the Bingman Landcare group, working with the Lue and now Mudgee Region Action Group, which has been actively involved in coordinating technical experts to look at the finer details proposed by the Bowdens mine. The devil really is in the detail with this project, but I understand that you are already across many issues, particularly human health, so I stand here today as a farmer and my key concerns are around the quantity and quality of our water, as well as long-term contamination risks to our products.

Firstly, on water quantity, the proponent intends to take over 1,000 megalitres of water from the valley every year and yet still does not have enough water to supply to operate at full capacity all of the time. The consent condition that they must scale back operations in dry times is a concern, because it will likely fall on monitoring and the community to first feel this impact. On water quality, there are three main issues, and all of them are permanent. They will remain on the site forever. The waste rock emplacement contains all of the acid-forming material produced during the mine life and must be sealed to prevent the pollution of the creek. Experts have stated that the lining method is inappropriate and the base of the rock dump could be eroded by extreme flood events.

The tailings storage facility is proposed over a mapped fault structure which has not been thoroughly investigated. Lined with plastic and clay layers, leakage from this dam is expected to eventually occur, and during dry times will be another source of dust. The final void pit lake will be an eternal groundwater sink. If modelled evaporation rates are wrong, it could have a 50 per cent chance of overflowing into our waterways. If nothing else, when the IPC granted development consent, we were left with far more questions than answers.

There was a lack of clear due process, with very clear dot points set out in the SEARs, such as a site water balance, water quality impacts and trigger action plans not addressed at all but rather added as dot points to the conditions of consent. Experts such as Earth Systems, commissioned by the DPE themselves, were not asking for the designs to be finessed but rather to be entirely redone. With the sheer number of unresolved issues, Bowdens is barely a pass mark. As a result, we have genuine fears that the design solutions required to make this project safe are either extremely expensive and sophisticated or not at all possible for this site.

What does this toxic intergenerational legacy mean for primary producers along Lawson Creek into the future? Who will be responsible for the maintenance of these liabilities to ensure their integrity? If they fail, who will be there to clean them up? When we consign our cattle for sale, will we have to tick the box on the NVD which says they carry chemical residues? What will happen to the quality of our product? Will we still achieve

high market acceptance? These are all questions that we do not have answers to. In closing, it certainly looks like the predicted economic benefits will be for the short term and the long-term environmental costs will be borne by future generations.

**MICHAEL BOLLER:** Good afternoon. Thank you for the opportunity to speak. I wish to acknowledge that I'm standing on Wiradjuri land, that I live on Wiradjuri land and that the benefits that my family enjoy are the result of the dispossession of the original inhabitants of that land. I have lived on Powells Road for almost 40 years, since 1985. We are a small operation compared to my compatriot beside me. My family raise cattle, sheep and horses on 750 acres and we are direct neighbours with the proponent on our western boundary. Our two children attended Cudgegong Valley Public School and Mudgee High School. Our home is actually 2.5 kilometres from the waste rock emplacement, according to Bowdens. We're just outside the magic ring, where nobody will be affected. This is the great concern in our community, that the proponent consistently has stated that anybody living two kilometres or more away won't have anything to worry about. I wonder whether the delineation of the two-kilometre buffer zone, if you'd like to call it that, was influenced by the presence of Lue village and the school.

I've been involved with the Lue action group since 2011 and I've served on the Bowdens community liaison group and the community consultative committee. I feel I have a very comprehensive understanding of this proposed project and its possible impacts on Lue, its surrounding farms, tourism and the importance to agriculture of Hawkins and Lawson creeks and the Cudgegong River from Mudgee to Burrendong and beyond. Issues I'm ready to give evidence on include the regulatory process, lead dust and homes, groundwater dependent ecosystems, koala sightings, the Bowdens CCC, and the community consultation process.

My submission, in fact, focused on the regulatory process for projects like this. It's a process which has become corrupted and heavily biased towards proponents over decades and successive governments. Firstly, once a project is labelled a State-significant project, the affected community is doomed. The process from thereon is designed to guarantee approval, no matter the health, environmental and property value impacts and damage to existing jobs and businesses. Secondly—and I have to apologise for my strong language—the EIS process is a sham process, both here and elsewhere. The proponent chooses the consultants, so they are immediately compromised.

The consultant then chooses the issues of focus in the EIS—omitting some, minimising others. There is no regulatory structure compelling consultants to highlight all possible negative impacts. In fact, it is very much in the interests of the consultant to make sure that the project gets through; otherwise, their business model is doomed as well. The DPE is unashamedly and openly partisan and does not properly consider and act upon potential damage to communities. It is a taxpayer-funded government body working against the long-term welfare of affected communities. We have to accept terms such as "minimise", "mitigate", "manage", "we will do this as far as possible" and "there will be no unreasonable risk". Who decides what is unreasonable and what isn't?

The IPC was held in Mudgee in April this year. Labelling something "independent" doesn't automatically make it so—I could call myself the King of England if I felt like it, but it wouldn't have any weight. Bearing in mind the submissions presented by community members and experts engaged by the community, no reasonable, impartial observer would conclude that there is widespread support of and practically no risk from this project. The overwhelming majority of submissions—there were about 100 in total, 85 of which were opposed—were scathing yet the IPC approved this project. The approval document for Bowdens is in fact a cut-and-paste replica of the McPhillamys approval document. These things instil no confidence in us about the integrity of the process.

The crowning insult was the removal of merit appeal rights by the previous Coalition Government. If the project is indeed world's best practice as the proponent has claimed, why are the people at the pointy end precluded from legally challenging any aspects of it? Once planning Ministers talk about slashing red tape and green tape, the health and welfare of communities and the environment are no longer of much concern.

In recommending approval for this project, the Department of Planning and Environment and the Independent Planning Commission have shown reckless indifference to the evidence of harm to human health, produce, tourism and agriculture in the Lawson Creek valley. Serious threats posed by the disturbance of lead and the loss of ground and surface water have been ignored. Compelling evidence provided by community-funded experts has been cursorily acknowledged and then ignored. Transient mining jobs lasting for 16 years have been prioritised over decades and centuries of jobs in tourism and agriculture. Some of these jobs will be lost forever.

Earlier in the day it was mentioned about our moving to a different economy—a less coal-based economy, perhaps—and critical minerals. Lead, zinc and silver are not critical minerals. To say that it is filling a void for critical minerals is just completely incorrect. Even using the fact that metalliferous mining is probably something that is on the up and coalmining is perhaps being phased out, it's a false equivalence to say that this mine should be in place to replace jobs lost in the coal industry. There is no connection between the phasing-out of coalmining and replacing it with a lead, zinc and silver mine in this area. Thank you.

**The CHAIR:** Thank you. Are there any questions from Committee members?

**Ms CATE FAEHRMANN:** Thank you both for appearing today. Mr White, I will go to you because we haven't yet really had the farmer-grazier perspective, if you like. You mentioned the water. I think we got the figure that it's more than 18,000 megalitres that Bowdens will take per year. When you're saying that there is not enough water in the licence to operate all of the time and they must cut back in dry times, are you concerned in terms of where you sit in priority for this and your access for your stock? Are you concerned about what that means for you? If they're scaling back in dry times, you are certainly quite short of water yourself. Do you want to expand on that?

**JACK WHITE:** Yes, absolutely. Thanks for the question, Cate. We source our water from a shallow well that is associated with Lawson Creek—it is about a metre deep at the best of times—and then the irrigation licence is directly from the stream flow itself. We observed in 2019 that we couldn't actually pump for irrigation purposes in that time with the existing way that the water uses in the creek upstream already exist. We have grave concerns that if you take 18,000 megalitres out of the catchment per year, it is not going to leave much for anybody else. And we see throughout dry summers like we are in now that, where it normally does flow, it does go back to pools quite frequently. The fear is that the assessment never really took into account how much water the existing industry is actually required to operate, and whether that's smaller operators like ourselves and Mick or whether it's bigger vineyard operators further downstream in the Cudgegong River as well.

**Ms CATE FAEHRMANN:** Just to be clear, there isn't an overall assessment of other requirements in the valley that—you were just saying vigneron yourself. But Bowdens has been approved for 1,800 megalitres. I'm sure there is a more specific number, but something like that I think. It is 1,800 megalitres per year and it hasn't been assessed against everyone else's requirements.

**JACK WHITE:** No, that's exactly right. In the original EIS document prepared, they intended to pipe supplementary water from Ulan coalfields based on the analysis at the time that they had that they didn't have enough onsite water to operate. Locally and anecdotally, we totally felt that that was the case. And then, over the course of the EIS, they then made some amendments and said that they could use water more efficiently on the site, no longer needing piped water from Ulan. We have major concerns that in dry times they may not wish to scale back operations and, instead of scaling back operations, they may not apply as much water onsite for, say, dust suppression, and then not only are we losing water but we are also likely to have a lot of dust coming over the village of Lue.

It's an elevated site; it's only two kilometres from Lue. There are always strong westerly winds and north-westerly winds like we had yesterday, so you can imagine in a dry time with an open-cut mine that's got to constrain the amount of water, are they going to scale back operations or are they going to spray water on the open-cut pit to prevent dust leaving the site? Stephen O'Donoghue in the assessment himself said that dust will be the key—

**Ms CATE FAEHRMANN:** Who's he?

**JACK WHITE:** Stephen O'Donoghue from the Department of Planning. He said that the primary means by which the project will be dispersing any heavy metals would be metal particles attached to dust generated from the site. So it kind of all goes hand in hand. Without the water, there are a multitude of issues.

**Ms CATE FAEHRMANN:** I have more questions for you, but I want to go to Mr Boller about koalas. I know that there has been a survey undertaken, I think it was last year, by AREA environment and heritage consultants. Do you know about that survey that found that within the mine site—this is one submission to this inquiry that's provided this. It's by P & J Smith Ecological Consultants. They said:

The survey confirmed the presence of Koala activity at 17 of 67 sites surveyed.

That's within the proposed mine site. Do you have other evidence or information about the potential of koala habitat, particularly koalas on that site?

**MICHAEL BOLLER:** Yes, I do. I omitted to say in my opening statement that I am a point of contact for koala sightings in the Lue area, and I have been doing that for probably the last eight to 10 years.

**Ms CATE FAEHRMANN:** I'm glad I asked you.

**MICHAEL BOLLER:** People in the Lue area have reported 20 separate different sightings, and some are multiple. That's why I say 20. There are more than 20 koala sightings. Several of those are either in land owned by SVL Bowdens or on roads where they own one side of the road. For example, a couple of common sites are what's called the Bingman log on Pyangle Road and the Bingman Crossing—if I go back to the Bingman log, SVL owns both sides of the land there.

**Ms CATE FAEHRMANN:** Mr Boller, can I get you to provide all of that on notice? Is that okay? I have very limited time and it would be very useful for the Committee to have that.

**MICHAEL BOLLER:** Yes. To answer your question quickly, yes, there have been at least 20 different verified GPS registered sites.

**Ms CATE FAEHRMANN:** You said you are basically a neighbour to the property. What is it looking like now for your neighbours and people around you? Are you seeing the impact on the community in terms of this approval? Have people sold up? That is also to you, Mr White, if that's relevant.

**MICHAEL BOLLER:** Probably about five bits to your question. Our little Powells Road community has been decimated by this project. Several of the properties have been purchased by the proponent, so, if you like, our social community—many of our close friends—have left the area. They didn't sell privately; they sold to the proponent. The proponents purchased properties around two kilometres from their site—some slightly further. From that perspective, we're very concerned about what the impacts are. In my original submission, I tabled a document or included a document with lead exposure to adults and privately owned residences within a few kilometres of the project. There are 120 of them and—for the benefit of the Committee, can I say the baseline on this graph is 0.35 something or other. I don't know what the 0.35 is. But every one of the 120 homes have an elevated, raised risk index to lead exposure. So when the company says that—

**Ms CATE FAEHRMANN:** Who did you say produced that document? Where is that from?

**MICHAEL BOLLER:** This came from their response to submissions. Getting back to my Powells Road and Pyangle Road areas, I'm talking about the eastern vector, and my colleague beside me spoke about the prevailing westerly winds. Pyangle Road and Powells Road—and this is borne out by the data in this table, figure 14, lead exposure to adults and privately owned residences—a total of 13 homes on those two roads have a much greater risk index than others in the Lue village. I've actually provided a table for that.

**Ms CATE FAEHRMANN:** Thank you. If you wanted to table that as well, and I am sorry to do this, we're just so—

**The Hon. GREG DONNELLY:** You have had nearly 20 minutes, Cate.

**The CHAIR:** I will allow one last question from Ms Faehrmann.

**Ms CATE FAEHRMANN:** In your opening statement you said something about designs that were asked to be entirely redone. In terms of the process, can you expand on that?

**JACK WHITE:** Sure. Earth Systems were commissioned by the DPE in 2022 to review the EIS before the DPE made their recommendation for approval. This was on top of all the experts that the Lue Action Group had already commissioned separately, so the Department of Planning thought they needed oversight on some issues, including the acid mine drainage. In its final submission in December 2022, Earth Systems wrote:

It remains our advice that the design of these facilities will need to be updated, noting that GCL liners have a limited design life, store-and-release covers are not suitable for AMD control, and the longevity of AMD generation from PAF waste rock is unknown but may continue for hundreds of years.

So it doesn't take an expert to understand that they are essentially saying that the technologies that you are proposing to contain waste on this site do not work, and they haven't been proven to work anywhere.

**The Hon. GREG DONNELLY:** Thank you, gentlemen, and thank you for the submission. This question is to both of you, if you both choose to answer it. I am interested in you informing the Committee of your knowledge of any consultation between the company and people like yourself—property owners and the community at large—about what they are planning to do. There was evidence earlier today, and I am not quite sure whether you were here.

**MICHAEL BOLLER:** I'll go first, if you like. As I said, I've been a member of the CCC and the CLG before it for seven or eight years, so I've attended all meetings except one. I know that the company has sent out brochures through the post to families in the area. I have certainly received those. One of the things that the company stated is that they have an open door policy, and they've stated that consistently so that anyone who wanted information would be welcome to go and find out that information. Personally, that's not the way that I would like to approach any issues, but they've consistently offered that opportunity.

**The Hon. GREG DONNELLY:** So a brochure was put in a mailbox. What does the brochure contain, because I haven't seen such a brochure?

**MICHAEL BOLLER:** It will usually have some photos of farming land, you know, some cattle grazing over the fence and a couple of people in hard hats with their nameplate on and testing water or looking at core samples.

**JACK WHITE:** Yes, I would say the same thing. We have never been approached directly by any of the community liaison officers from Bowdens. We live within 10 kilometres of the site, yet we've received the similar kind of marketing material and brochures.

**The Hon. GREG DONNELLY:** One witness earlier today mentioned that they were aware of a survey or the like which is being done in a certain part of the community, presumably asking questions. Have you heard of a survey being done by the company?

**JACK WHITE:** No, we've never been surveyed. I've heard of it, but it was anecdotal.

**MICHAEL BOLLER:** Going back a couple of years, I think there was a social impact survey. I don't really recall the details of it.

**The Hon. GREG DONNELLY:** I'm just trying to gather an understanding of the information.

**MICHAEL BOLLER:** Sure, absolutely. When you talk about approaching, as I said, I live 2.5 kilometres away. No-one from the company has ever investigated the groundwater-dependent ecosystems on my property. No-one has made any approach to purchase my property. Nobody has said, "You won't be able to remain living here," as they have said to another neighbour.

**The Hon. GREG DONNELLY:** Just on that, they actually met with that neighbour?

**MICHAEL BOLLER:** Yes, stood on their front verandah, looked to the west and said, "Once this project commences you won't be able to stay here."

**The Hon. GREG DONNELLY:** You've mentioned that person who had a direct meeting with the company on the verandah and had that conversation. What about—and I appreciate this might be hearsay—examples of other people you know who live around where you live who have had direct contact between the company and them? Have you heard, even anecdotally, if that's been going on, or not?

**MICHAEL BOLLER:** Anecdotally, another neighbour of ours with two small children, living within three kilometres of the project—this is completely hearsay—apparently approached the proponent asking if they could be bought out and that wasn't accepted.

**The Hon. GREG DONNELLY:** Finally, has this happened essentially since around 2018-2019?

**MICHAEL BOLLER:** This is this year.

**The Hon. SUSAN CARTER:** Thank you both for being here. Mr Boller, thank you for this. The houses in your street that have been bought out by Bowdens, were they on the basis of elevated risk exposure?

**MICHAEL BOLLER:** They were so close to the project that the person couldn't stay there. My neighbour at 45 Powells Road could throw a rock across the road and hit the waste rock emplacement, so his home was in 200 metres or 300 metres of the waste rock emplacement.

**The Hon. SUSAN CARTER:** So, essentially, they've been making their own determination of who is at risk and buying those properties?

**MICHAEL BOLLER:** Yes.

**The Hon. SUSAN CARTER:** But it seems like it's a very small circle of risk that has been drawn.

**MICHAEL BOLLER:** Incredibly so. I think I mentioned in my opening statement that I know coalmining companies seem to have quite large buffer zones around their sphere of influence. This company has consistently said that people outside two kilometres have got nothing to worry about and that they won't be buying out the people who live that close to the project.

**The Hon. SUSAN CARTER:** Do you know what they are basing their two-kilometre radius on?

**MICHAEL BOLLER:** I've got absolutely no idea. Somebody plucked a number out of the air. If I was a conspiracy theorist I would say the presence of the Lue village and the school, which is very close to two kilometres, would mean a three-kilometre buffer zone or a four-kilometre buffer zone, which would include a lot more homes, a lot more infrastructure and a lot more cost.

**The Hon. SUSAN CARTER:** Just so we can understand this, I presume "R" is for the elevated risk. Is that right?

**MICHAEL BOLLER:** Yes.

**The Hon. SUSAN CARTER:** Is it exponential? Does it go up by increments of one? What's the difference between a risk of nine and a risk of 10?

**MICHAEL BOLLER:** I can't answer that, I'm sorry. I don't have the expertise. I can only point out the top graph, which is the 120 homes in Lue and nearby. The increments on the side there are 0.1. For the 13 residences at the base, which are all owned by the proponent, the increments on the side there are 0.05. It's had the effect of flattening the graph, so it looks like it's comparable to the one above it, whereas, in fact, several of those residences have quite a high elevated risk index. But, again, I don't know what a risk index of 0.75 means.

**The Hon. SUSAN CARTER:** Essentially, anything that's on a risk index of 0.05, according to their calculations, they have bought those properties?

**MICHAEL BOLLER:** All those properties in the bottom table they now own. Some of them—one is their site office—are within the footprint of the pit, so obviously they had to purchase those.

**The Hon. SUSAN CARTER:** But the basis for this determination isn't clear?

**MICHAEL BOLLER:** No.

**The Hon. SUSAN CARTER:** Thank you.

**The CHAIR:** It is 1.00 p.m. Thank you both for the time you have taken to give evidence today and for your submissions. If there are questions on notice, the secretariat will be in contact with you.

**(The witnesses withdrew.)**

**Dr DAVID PARRY-OKEDEN**, Local Veterinarian, sworn and examined

**The CHAIR:** I welcome the next witness. Do you have a short opening statement?

**DAVID PARRY-OKEDEN:** Good afternoon and welcome to Mudgee. I will briefly introduce myself. My name is David Parry-Okeden. I grew up not in Mudgee but in Warwick Farm in Western Sydney amongst the migrant children from post-war Europe, many years ago now. After high school I studied veterinary science and on graduation was conscripted into the army at the time of the Vietnam War. I was posted to New Guinea as an infantry officer, training local soldiers of the Pacific Islands Regiment. While in New Guinea I also took the opportunity to start a correspondence degree course at the London School of Economics in International Law—more on that a little later on.

In 1974 I opened a private veterinary practice in Mudgee, which now employs four veterinarians, treating all species of animals. For some years we had a branch practice over in the Hunter Valley not far from the Widden horse stud. After several trips to the USA and Hong Kong, we set up a firm examining yearling thoroughbred racehorses in all Australian mainland States for Asian and American buyers. I sold my practice in May this year and we have begun discussions with local agents regarding the sale of our local real estate. I mention this because I feel that I have no vested interests in this matter other than my natural concern for the animals, both wild and domesticated, that will suffer if the proposed mine creates dust that is released into the surrounding forest and farmland.

I have set out my opinions on lead poisoning, adverse weather conditions and mining around Mudgee in my written application. I did not represent myself as an expert, particularly not an expert in lead poisoning. Professor Mark Taylor, who gave evidence to the IPC, is the expert in that field and I would commend his opinions in that field. I have one small correction to make to the statement that I submitted. I said that lead poisoning was responsible for the saying "mad as a hatter". I have since been corrected; it was mercury that was used in hats and not lead. Thank you, Ms O'Brien, for bringing that to my attention.

I don't have anything else to add to my submitted statement, but I am happy to take questions in that regard. I have submitted two maps, which I hope everybody has. There is a blue map which comes from the New South Wales government department which indicates the lead mines or lead deposits—potential lead mines—that extend west of Sydney down through the Blue Mountains. You can see those little circles there. That's what they're aiming at. This is just a test case. They open this one and I gather, as we speak, mining companies are already looking to mine lead and silver in those areas. If you look at the second map, the green one, you will see where the Blue Mountains world heritage area exists. It's not very far from Lue. In fact, I just measured it roughly; it's about 50 kilometres upwind. The prevailing winds that come from the west and north-west travel through the Blue Mountains and on to Sydney.

Professor Taylor was one of a number of people who published a paper recently, and I've also given you an abstract of that to look at later, but briefly what it found was that after the bushfires in several areas of Australia, they measured the lead in the ash. We can all remember the ash, if we were in Sydney at that time a year or so ago, when it was dumped on Sydney. That ash was containing lead, which, through isotope testing, that Dr Bentivoglio mentioned, could be traced back to lead petrol. We've banned lead petrol. We've banned lead paint. We've banned lead toys for children. And now we propose to open up one of the largest mines in the world not far from one of the biggest cities in Australia where the prevailing winds will carry lead through our Blue Mountains World Heritage Area and potentially onto Sydney. I leave that thought with you. I am not an expert in any of those fields. It seems obvious to me and I show you those maps.

I've mentioned on the maps, too, horse studs. Those are world-renowned horse studs. Widden is the oldest horse stud in the world in one family. It has, from time to time, imported stallions from overseas which shuttle backwards and forwards. I can assure you that if those overseas owners of stallions even had an inkling of one speck of lead near their stallions, those horses would not come. A little further afield I've marked Coolmore, which is an Irish-owned stud, which has been in the Hunter for roughly 30 or 40 years. They regularly shuttle stallions backwards and forwards. These stallions are the most valuable stallions in the world. They come out here, do a season here and fly back. If lead was even thought of affecting their fertility, they would not come. That's an industry which would suffer immensely.

Over the years I've been involved in inspecting horses for Hong Kong. I can assure you that Hong Kong, up until very recently, only accepted colts anyway and if they thought that those colts were brought up in an area where their fertility might be affected as foals by lead in the environment, they would not even be considered as propositions. Those colts sell for up to \$2 million, \$3 million, \$4 million as potential stallions. It's an industry that I am familiar with, and I'm happy to answer questions.

My studies in international law go back many, many years and I haven't kept up to date, but I did just have a brief look through what is now available through the International Court of the Hague. It might sound mad, but there is now action against environmental crimes, particularly that's more directed towards people like Putin and those sorts of people, but we may find that becomes more in line towards the sorts of things we're talking of now. The piece that I've written and that you have in front of you in French has been designed with that in mind. It's only a draft. It's been prepared for release to the French social media and their press. I can assure you that from my travels I don't think there is any country in the world that holds Australia in higher regard than the French people. I don't know, perhaps it's historical, perhaps we just have something in common with them. But that's where that is headed; it's only in a draft thing. For those of us that don't read French, I have a translation into English, and it would take about 10 minutes to read it here so I thought maybe you can read that at your leisure rather than suffer.

I am on the verge of retirement and if this goes through, I will not be staying in Mudgee where I have lived for over 50 years. I'm glad my grandchildren won't be going up here, my great-grandchildren because what Dr Bentivoglio gave to you applies to animals even more so. Animals reach puberty much quicker. They do play in the dust. I can give you examples of animal poisonings if you like and they are fairly dramatic and not very pleasant, but virtually it's poisoning to the brain, liver and kidneys, and at a much younger age, and of course when they reach puberty it happens much, much quicker. I'm rambling on now, so perhaps I should stop. If anyone has got any questions, I would be happy to address them. As I said, I don't come as an expert. I'm a general practitioner in veterinary science, but I went through my career there just so that I—if not expertise, I do have some experience in what happens in this area in regard to livestock and animals of all classes.

**The CHAIR:** Thank you. I might start with my own question. I am interested in the accumulation of potential lead dust in animals, which you have alluded to. We heard evidence earlier today about the extraordinary lengths local residents would need to go to to keep their own homes and water supplies clean. That obviously doesn't apply to the kind of dams that animals drink from or the pastures that they are grazing in. How does lead accumulate in animals? Is that then a risk to people that might eat meat that is produced locally?

**DAVID PARRY-OKEDEN:** To take the questions one at a time, my experience with lead poisoning in animals was in years gone by when we did have lead paint—and animals licked the lead paint because it's sweet—and flaking paints in houses. We still see that occasionally when people are doing up their houses and lead paints around Laliue birds. Particularly little budgies will peck away at something that has lead paint on them, and they become very sick. They lose use of their legs, they become paralysed, and it's a very quick death.

Getting around to the livestock, that's more difficult. Farmers used to throw the batteries down the creek rather than dispose of them more responsibly, as they do now, and we used to see lead poisoning from them eating the batteries. That was literally mad cows, and that was pretty strong. The more chronic forms would be the same symptoms that have been described for humans. As far as the food chain goes, which is what I gather you were alluding to, this is difficult. Different forms of lead, depending on whether it's acidified in one of the four stomachs in the ruminant of a cow, are concentrated in the urine and in the kidneys and the liver, and that causes the death of a cow. If we blood-sample, we may or may not get a result because it might not go straight into the blood. It's a very difficult area. To be quite frank, we haven't been involved in it yet. If we have one mad cow that dies, well, we can sample the liver and it comes up with high levels of lead. As far as the offal in sheep which is used, that would become the problem, of course.

The rules, as I understand it, from the Department of Agriculture now are that if we get positive blood samples from livestock, that property is quarantined—no help; you just can't sell them until they come up with a negative blood sample. I tried to review the literature recently; that's a very grey area. Obviously, if the dust storm comes through and it has got lead on it and lands in the pasture, it might be burnt off. For a bushfire, the ash is still there. It's concentrated. If it comes again, the whole thing becomes a nightmare. The prevailing winds from the proposed mine go to the west. The water comes down the Lue Creek to the—sorry, to the east; the water comes to the west. If that lead from the tailings dam breaks, as it would have in the last downpour we had, what, a year or so ago, that is floods to surround Mudgee. I couldn't get out of Mudgee on Sunday morning to go and do my rounds for the animals because the floods, largely from Lawson Creek, were surrounding this town.

**The CHAIR:** To summarise, just to check my own understanding, we heard this morning what a complicated regimen of testing would be required to keep the human population safe. We're talking about three monthly blood tests on children et cetera. What I'm understanding from your answer is that it would be even more complicated than that and unclear if we were trying to actually check the health of animals.

**DAVID PARRY-OKEDEN:** Yes, it would. I think the answers haven't been, really—the research has to be done, particularly with ruminants with cattle and sheep.



**The Hon. SUSAN CARTER:** Following up on the Chair's questions, is there a regular regimen of blood testing for cattle and sheep and other animals destined for the market? Or is it only triggered if a problem is perceived?

**DAVID PARRY-OKEDEN:** I would say it would be only triggered if a problem is perceived. It's many years ago that I worked for the Department of Agriculture, and we didn't know anything about this sort of thing in those days. Jack White just alluded to the form that he has to sign when he sends stock to market, and in one of those he ticks the box that that's there. I mentioned that in my written submission, how that form works. So obviously he has to declare that he's free of those sorts of things, and that's up to him as a vendor declaration.

**The Hon. SUSAN CARTER:** I'm interested in at what point any problems might be picked up in the food chain in terms of lead poisoning of animals and that entering the food chain.

**DAVID PARRY-OKEDEN:** If they're picked up on the farm, the farm is quarantined.

**The Hon. SUSAN CARTER:** And they can't sell.

**DAVID PARRY-OKEDEN:** If there was a situation where dust was prevalent in the atmosphere, I can assure you there would be testing done and that would be stopped. It's a very emotional subject. One in three children in the world—I'm getting into the humans now—suffer from lead poisoning. That's largely not Australia yet, thank goodness. It might be places like the Third World. But it's a horrifying disease, it really is, and it's a very emotional disease.

**The Hon. SUSAN CARTER:** Yes, and it's a preventable disease.

**DAVID PARRY-OKEDEN:** If there was any suggestion of lead in this area, I can assure you no-one would come up here for a coffee on Saturday morning.

**The Hon. SUSAN CARTER:** We heard evidence this morning that for long-haired animals—dogs, for example—the dust could settle in the coat of the animal and then transfer to children playing with that pet. If the dust settles in the hair of a long-haired animal, can it enter the animal's skin that way? Or would it have to be by ingestion?

**DAVID PARRY-OKEDEN:** In all animals it's mainly ingestion, and it's mainly the dust. But the animals lick themselves; they groom themselves—cats particularly. We all know that, don't we? I don't know what the children do when they play. It's a long time since I've had children and dogs together, but they were always all over each other, weren't they? So your answer is yes, it can be transferred but through ingestion. It's not through casually rubbing your hand against the animal; it's then when the baby puts the hand in its mouth, I guess. So it's mainly ingestion. Sometimes by respiratory, but mainly ingestion and mainly the dust. That was the point that Mark Taylor made when he gave evidence to the IPC: He said it's mainly the dust.

**The Hon. SUSAN CARTER:** In your view, was that evidence considered with sufficient weight by the IPC?

**DAVID PARRY-OKEDEN:** My evidence wasn't even mentioned by the IPC. There was no mention of agriculture. I read the report. There was no acknowledgement of anything I said. I was only just a humble vet, but Mark Taylor gave evidence and he was very strong. Am I allowed to give my opinion of the IPC here?

**The Hon. SUSAN CARTER:** Yes.

**Ms CATE FAEHRMANN:** Yes.

**DAVID PARRY-OKEDEN:** It wasn't a very high one. I thought it was a show trial. I thought it was politically motivated. I paid particular attention to the evidence given by the EPA. He didn't care. His body language just came out. He knew what he said. He was on the side of the mining company. Nothing anybody else said as regards to anything was even given the slightest bit of attention. I gave a brief address; no-one asked me anything. I was like, "Fine. That doesn't matter." It was a complete and utter show trial, and it was evidenced by the way they presented it. To answer your question, no, they gave no attention to anything regarding animals, livestock, export—anything.

**The Hon. GREG DONNELLY:** Would you care to elucidate on this point, about the matter with respect to native animals or wild animals? You've specifically given evidence in regard to domesticated animals and the like and touched on matters of what could be potentially testing to test certain things—levels and what have you. Let's set that aside for the moment. Let's look at the native animals and wild animals, if we could use that phrase. What does this all mean for them potentially?

**DAVID PARRY-OKEDEN:** It's an excellent question because where all the prevalent winds are going to carry this potential dust we're all talking about, there are a lot of wild animals. Where shall I start? There's a

classic case in Esperance, in Western Australia, where they were loading lead onto the ships from some mine up-country somewhere. Someone noticed that the birds were dying and getting paralysed. It was only when they tested the birds that they realised that the lead was getting into the sludge in the area around the town. Then they went and tested the children and they got the answers there. The animals in that situation were a sort of sentinel.

There is nothing that will stop those animals drinking from the tailings dam. Lead is sweet. For the myriads of galahs, parrots and cockatoos that we see flying around this area—and you've only got to drive around at the moment and they're in abundance—there is nothing to stop them drinking from the tailings dam. They're not going to put a bird mesh over that for the next 500 years, are they? They are particularly susceptible. They say they put a fence around. Well, we've got wombats in this area and there is no fence that will keep a wombat out, I can tell you. I know it sounds funny, but if you've got fencing, you don't think it's a joke.

They are mammals, and all mammals are affected. Birds are affected. Insects are affected. Professor Taylor did a lot of good work, which he published, on the effect on bees. They had one lot of bees confined in an area that were fed some lead; there were others that got normal pollen and everything else. The ones with the lead had smaller heads. They had smaller memories. They couldn't find their way back to the hives. We all know how important bees are to our economy, but no-one has mentioned that. I mentioned that in my submission and I think it just went over like it wasn't considered.

**The Hon. GREG DONNELLY:** We had some good evidence yesterday on that matter specifically over in Orange—the bees.

**DAVID PARRY-OKEDEN:** Yes, the bees do get lead poisoning and it does affect them. It affects their memory. They can't find their way home. It's not funny, you know? We rely on bees for all our agriculture. More recently, there was a paper published—it wasn't in Australia; it was overseas in Africa—where the crocodiles in Lake St Lucia were found to have their teeth falling out and being anaemic. They found that they had very high lead levels. As I remember, I think those came from eating lead sinkers from the fishermen, so it wasn't a case at the local mine, but that is an example. I think you can carry that through, right through to the tiny little lizards and to everything in part of our ecology.

**The Hon. GREG DONNELLY:** This might sound a naive question but I will ask it anyway: Are animals capable of adapting to this?

**DAVID PARRY-OKEDEN:** You can't adapt to lead.

**The Hon. GREG DONNELLY:** No, I said it's a naive question. So it has a one-way-door effect; there's no adapting to it over time? It just has that direct impact?

**DAVID PARRY-OKEDEN:** It's poisoning for life, and most of the lives of animals are much shorter than humans. Again, getting back to what Dr Peter Bentivoglio said—and he speaks with far more authority than I as a scientist—the damage to the brain is permanent and it happens very quickly in animals, plus the liver, kidney and everything else as well. But to answer your question, no, there is no adaptation to it. If they get a little bit, they'll live with the problems; if they get more, they'll die of acute poisoning. Here we are, we've got one of the biggest lead mines in the world—you can compare it with that map with the size of the lead mines in Australia. We're not at Mount Isa, Broken Hill or McArthur River in the Northern Territory. We're here, right on the breadth of the biggest city in Australia.

I don't believe that there's the political will in this State or this country at the moment to fight the mining industry because we're all so addicted to it. We wouldn't have the great life that we have without the income from mines—but they don't mine lead. We've got a coalmine up here that has been the basis of our economy in this area for some years, but it doesn't poison the district. It gets a bit dirty on occasions, but so what? I really believe the only answer to this is to embarrass our country through the international court at The Hague, and that will be brought about by press releases in France. That's why I've given you those handouts.

**Ms CATE FAEHRMANN:** Thank you, Mr Parry-Okeden. The point that you have made quite eloquently today is that this lead mine is quite extraordinary in terms of its proposed location, compared to where lead mines historically have been built. Its position is quite extraordinary, isn't it?

**DAVID PARRY-OKEDEN:** As I understand it. I am not an expert in mining by any means. That's why I provided that map. That just speaks volumes in itself.

**Ms CATE FAEHRMANN:** Yes, and the map also indicates that there's lead deposits. Is that also what you are indicating?

**DAVID PARRY-OKEDEN:** Yes, lead deposits, I think, are the clear circles and the lead mines are the big blue circles.

**Ms CATE FAEHRMANN:** There's no big blue circles anywhere near here or anywhere near the east coast or highly populated, vegetated areas.

**DAVID PARRY-OKEDEN:** Yes.

**Ms CATE FAEHRMANN:** I want to ask a question about animals drinking from the tailings dams. In fact, yesterday we were at Cadia and outside the window of the bus—we weren't allowed to take photos, but I'm sure I can talk about this. There was a little wetland thing in the area of the Cadia mine site that had water in it and are few very unhealthy-looking reeds and other vegetation around it. There were about four ducks swimming in that. Should we be worried about what is happening to the ducks swimming in the tailings dam?

**DAVID PARRY-OKEDEN:** If they are in the tailings dam, I'd imagine they would be. If this is an area outside, it would be simple enough to test the water or whatever. But they should be doing this, shouldn't they?

**Ms CATE FAEHRMANN:** The Committee is increasingly discovering more and more communities are talking to us about contaminated waterways. I think the other day the Chair mentioned seeing at Captains Flat a kangaroo drinking out of a very contaminated creek there because the animals don't know. Have you seen or heard any evidence in your career of wildlife being impacted by coming into contact with contaminated water?

**DAVID PARRY-OKEDEN:** I did mention the one which is publicised, the one in Esperance in Western Australia. That is the classic one. They noticed the birds being affected and couldn't fly and couldn't walk et cetera. It was only when they tested them that they found out. And then they went back and tested the children. In that situation, that was sort of simple. That's one very well-publicised and accepted instance. I am sure there are others. I haven't had direct experience around here because we've been blessed.

**Ms CATE FAEHRMANN:** You haven't had a lead mine.

**DAVID PARRY-OKEDEN:** We haven't had a lead mine and we haven't had much contamination either. Since the 1970s all of those nasty chemicals have been banned that we used to see, like dieldrin and all the rest of it. I'm sorry, I can't reel off incidents. If I saw a kangaroo drinking from a tailings dam, I wouldn't be giving a lot of hope for that kangaroo or it's joey. I guess that's common sense.

**Ms CATE FAEHRMANN:** We are also hearing that some of the community around Cadia have been requested to provide a livestock quality assurance audit. Have you been involved in that or would you be worried about what this might find for some of the people who live near Cadia and what might be found in the blood? I assume, that means testing the blood, does it, of their livestock?

**DAVID PARRY-OKEDEN:** Yes, the blood testing at the moment on post-mortem, you can pick up liver or biopsy the liver and that would be more indicative. But, yes, I would be concerned, particularly around here. If we had a lead mine here pushing lead dust into the district, it would become automatic.

**Ms CATE FAEHRMANN:** So that's a livestock quality assurance audit. Could you explain to the Committee what that is?

**DAVID PARRY-OKEDEN:** Yes. It's in my submission there. Jack White mentioned too that, before he sells his stock, he signs a form that—I haven't got a copy with me, I'm sorry—sets out that he hasn't got certain diseases and that they haven't been in contact with this, that and the other. One of the things is that it's chemical-free. And as he said, do I tick that box or not? Well, he can't tick it if they've got lead in their system. I mean, lead is the most frightening and most emotional poison that we know of in the world. Google it. You'll see there are millions and millions of entries for lead poisoning all over the world in every language imaginable.

There is nothing that will bring more disparagement and bad reputation on this country than to have lead in our exports of any form at all—the moment we're picked up. Indonesia just barred our cattle because it was perceived that they had lumpy skin disease. It was nothing of the kind, but they didn't hesitate to bar them. If we had lead in our cattle or in our meat, that export industry would go. Our fine wool, which goes to the fussiest buyers in the world in Italy, they will not even have wool from sheep that have been mulesed or been cruelly treated in any way. They wouldn't even consider it. Our green reputation would disappear from this country overnight, and yet we are proposing to put up the biggest lead mine in Australia to get the silver, simply through pure greed.

**The CHAIR:** I am going to need to stop you there.

**DAVID PARRY-OKEDEN:** Don't get me started.

**The CHAIR:** Thank you very much for your time giving evidence today. If there are questions on notice, the secretariat will be in contact.

**(The witness withdrew.)**

**Ms FIONA SIM**, Local Resident, affirmed and examined

**CHRISTINE MOLONEY**, Local Resident, sworn and examined

**The CHAIR:** I now welcome our final witnesses. Would you like to make a short opening statement?

**FIONA SIM:** First, I would like to pay respect to and acknowledge the Wiradjuri people who are the traditional custodians of this land we are meeting on today. I would also like to pay my respects to Elders past and present and any Aboriginal people here today. Thank you for the opportunity to appear before this inquiry. We are here to represent Running Stream Water Users Association, which was formed over 30 years ago when the first coalmine threat to our area appeared. Just over a decade ago three more coal exploration licences were granted. To date, no coal has been mined here, but we live under that threat. Running Stream is a productive agricultural area and our community relies on the water from hundreds of local springs as well as rainwater for livestock, wildlife and human use. Our organisation was set up to protect our water for current and future generations. Water is our most precious resource and we believe it must be protected as a first priority.

High-value agricultural land must be protected as a second priority. Without agriculture there is no society, and only a small proportion of Australia's landmass is of this type. The Mudgee and Orange regions are high-value agricultural areas, and yet both are under threat from airborne and waterborne contamination from mining activity as well as the impact of the extraction of high volumes of water, which is used in all mining operations. At present our organisation is particularly concerned about the planned Mudgee region lead mine—well, the lead, zinc and silver mine at Lue, 30 kilometres from Mudgee and 40 kilometres from my own community of Running Stream.

We're also here today to express our solidarity with the people of the Mudgee region who oppose the lead mine—people who just want to live normal lives and keep producing food that feeds people throughout New South Wales, Australia and overseas. Despite the huge negative community response to the proposed mine and the very real possibility of mining activities contaminating air, water and ecosystems, and using more water than is sustainable in a dry environment, the mine was approved. This appears to reflect a failure by the regulatory authorities to carefully analyse the DA, to listen to the people who will be directly affected by the mine or to think about the health of people throughout the State who consume produce from this very productive agricultural area.

The proposed mine is going to operate just two kilometres from the town of Lue. The mine threatens to damage human and animal health and the environment through pollution from dust containing lead and other heavy metals and toxins, pollution of creeks and river water, the risk of failure of the proposed tailings dam and the transfer of toxic mine products over our rural roads. Recent events around Cadia mine have revealed the extent to which the current regulatory framework has failed to monitor mining company compliance. This framework, in which the mining entities are supposed to self-monitor, and are occasionally given such low fines for breaches that they are probably considered by the miners to be just one of the costs of doing business, is not working.

The situation at Cadia leaves us with concerns that our own community may face similar problems if the Mudgee region mine goes ahead. With the proposed lead mine, we are talking about the potential poisoning of thousands of residents of, and visitors to, the area, as far as the winds carry the toxic dust, not to mention the produce from that area—olives, grapes, wheat and canola, and cattle and sheep—which feeds so many people. The current regulatory framework is not fit for purpose either, in relation to the mine approvals process, the oversight of existing mines or in the remediation of decommissioned mining sites. An overhaul of the system is needed so that the rights and needs of humans, animals and the environment are held to be more important than the short-term financial gains of mining to the very few who profit greatly from it and who do not themselves live anywhere near the mines.

To sum up, our concerns are the low value placed on water, ecosystems, biodiversity and food production as compared to that placed on short-term economic profit for corporations; the legislated power imbalance between corporations and individuals; the lack of transparency into the lobbying of elected representatives and Executive government, such as politicians, public servants and councillors, by the miners; and local governments and councillors having a great deal of power and decision-making responsibility, but not having the expertise to make such decisions—in short, a regulatory environment that is not fit for purpose.

**Ms CATE FAEHRMANN:** Thanks for coming along today. I just wanted to see if you could talk about the scale and the impact, potentially, of the tailings dam of Bowdens mine. I don't know if we have really quite got our heads around the scale of it. It's 112 hectares across—that's how big it is, this massive tailings dam—and Bowdens itself has acknowledged that it will have a leakage rate of 1.6 million litres per day. That is, 1.6 million litres per day, as Bowdens has acknowledged. That will leak into creeks, I imagine, and waterways. You're here representing the Running Stream Water Users Association. What's your opinion of that?

**FIONA SIM:** Yes. It won't be our waterways at Running Stream, but it will be waterways that feed into creeks that go into the Mudgee area, on which people rely for drinking water for humans and livestock, not to mention all of the wildlife.

**Ms CATE FAEHRMANN:** Does that concern you, because that sounds like that would impact the region in quite a big way?

**FIONA SIM:** It's a really major concern. When we've seen the failure of the tailings dam at Cadia, and you had testimony yesterday from Cath Sullivan and Craig Day about the tailings dam on their property that has failed in the recent large rain events, yes, I don't think that it's out of the question that Bowdens' tailings dam may also fail. I believe it's built over some kind of a geological fault as well. It's a massive dam. I live on a property that is 60 hectares—the whole property. That's more than twice the area of my property. So, yes, it's huge.

**Ms CATE FAEHRMANN:** What's your view on the 1,825 megalitres of water per year that Bowdens says they'll use?

**FIONA SIM:** It's great that they've acknowledged that. But I'm surprised that is acceptable to the powers that be, that in a currently kind of pristine environment that suddenly that can be released and that's okay. I just don't understand how that could possibly have been approved.

**Ms CATE FAEHRMANN:** Why don't you understand that? Is that because that seems to be a large amount of water for the area?

**FIONA SIM:** It seems a huge amount of water.

**CHRISTINE MOLONEY:** It's huge, yes.

**FIONA SIM:** We are a very productive rural area but it also can be quite a dry area. I just don't know. Suddenly they have said that they can get sufficient water for their operation and I don't see how that suddenly materialised either.

**Ms CATE FAEHRMANN:** Yes, that's right. It's 1,800 million litres of water per year—so 1,800 more, then.

**FIONA SIM:** Yes.

**Ms CATE FAEHRMANN:** That's got to come from somewhere else, doesn't it?

**FIONA SIM:** Yes.

**Ms CATE FAEHRMANN:** It's not like within this area there is a catchment for existing water users that on a good year—or heaven knows, coming into a drier year—1,800 million litres. Do you think it has to come from other water users?

**FIONA SIM:** Possibly, yes. Is it going to be taken out of the base flow of the river? I don't know. Will residents be told that they can't water their gardens because Bowdens needs the water? Maybe you can't have as many cattle on your property because there is not enough water. I don't know.

**CHRISTINE MOLONEY:** But we are concerned.

**FIONA SIM:** Yes.

**Ms CATE FAEHRMANN:** Can I also ask you about the ecological impact? In your submission you also talked about your concerns around the clearing of the native vegetation. Is that right? Are you happy to talk about that as well?

**FIONA SIM:** I think so.

**Ms CATE FAEHRMANN:** There's more than 600 hectares of native vegetation that will be cleared. Lots of it is critically endangered—the box gum grassy woodland is a critically endangered ecosystem. There are no offsets for that as it is because it is so critically endangered. Does that concern you? Would you both care to speak a bit more about the loss of native vegetation in this area, which is actually really, really special, and also what makes this area so unique?

**FIONA SIM:** Look, I can't really answer that in detail, but I think that the loss of any kind of special environment like that—like you say, there is no replacement for that. That is it. If we destroy it, it is gone. So you can't kind of say, "Well, we'll destroy this and this one will be preserved," if there isn't another one to preserve. In this area we are bordered by national parks like the Blue Mountains National Park and the Wollemi National Park. It's a really special area. I know that there's quite a lot of agriculture here, but there are also a lot of areas, even on

people's individual farms, where there is a lot of uncleared original bushland that supports a lot of wildlife. Yes, 600 hectares of clearing is huge. It's a lot of trees.

**The Hon. SUSAN CARTER:** Thank you both for being here today. I have one follow-up and just one more question in relation to the tailings dam. I note in your submission you identified "faulty tailings dam specifications". Are there any particular reasons why you believe the specifications for the tailings dam are faulty?

**FIONA SIM:** I'm going to have to take that question on notice, I'm sorry. I guess we were just following the advice that we had heard from the Mudgee District Environment Group and other people about that tailings dam.

**The Hon. SUSAN CARTER:** If you could take it on notice and get back to the Committee, I'd be very grateful.

**FIONA SIM:** Yes, sure.

**The Hon. GREG DONNELLY:** Thank you both for coming along and thank you for a very well-prepared submission. With respect to the matter of regulation or deficiencies with respect to regulation around such projects, you deal with that on page 5 of your submission. Can I take you to page 5? It speaks for itself; I've read that. I just wanted to take the opportunity to invite you to focus on any particular aspects of your concerns about the regulative process or are we to just essentially take it that overall you think it's a deficient process or a deficient procedure and it really needs root-and-branch reform?

**FIONA SIM:** I think it needs root-and-branch reform. We think that the current system seems to privilege money and the mining company making money over the needs of the environment and humans.

**The Hon. GREG DONNELLY:** Can I just test that a little bit because that's something that we do hear from time to time, and I understand that line of argument. I'm wondering, can you give a specific example which would underline, if you will, that concern whether this is privilege or failing to take in considerations? Can you give just a practical example that demonstrates the point you make?

**CHRISTINE MOLONEY:** The Bowdens mine: the facts, the objections and the quantity of information, but it was still approved. That seemed to be ignored. All of the concerns that were made seemed to have been ignored.

**The Hon. GREG DONNELLY:** With respect to the capacity for local communities to be engaged in this process of consultation, you mentioned in your observations—you may have been here earlier today when I presented this question to witnesses about what engagement were they personally associated with or did have or people they knew. We seemed to have heard that some people had received a survey, some people had received a flyer in the letterbox. There at least was one example where a Bowdens representative went and met with someone. Do you have any general understanding about what the level of engagement has been and the effort made by the company to engage?

**FIONA SIM:** I don't, actually. Like I said in my submission this morning, we are about 40 kilometres from the mine where we live, so our community wasn't directly consulted. I am not sure about what has happened with local residents, so I can't answer that question. Sorry.

**The Hon. GREG DONNELLY:** Just returning to your submission, the EPA has come in for some interesting character assessments, if I could describe it that way, over the course of the inquiry. What's your opinion about the EPA, its role and how it does its work and carries out its functions?

**FIONA SIM:** I can't really answer that in detail. The general impression that we have of all of these authorities is that (a) there are too many of them and it's really confusing just for ordinary people to know which one to apply to and—

**The Hon. GREG DONNELLY:** So there's a multitude—

**FIONA SIM:** There's a multitude.

**The Hon. GREG DONNELLY:** —that have got some role to play.

**FIONA SIM:** Yes, exactly, and these roles also seem to cross over. So it's difficult to know where the boundaries are. The process itself just doesn't seem to favour ordinary people having an opinion and being able to make that opinion heard. Our organisation has made lots of submissions over the years, not just relating to minerals mining but also to coalmining and coal seam gas—even a very inappropriate quarry that's being proposed in our area. It's a difficult process, and it's also something that takes a lot of time and energy and effort for people who are just doing their ordinary jobs but trying to do this on the side.

**CHRISTINE MOLONEY:** And it feels relentless.

**FIONA SIM:** It does feel relentless, yes.

**The Hon. GREG DONNELLY:** Do you see scope for any mining activities in this region, or is the position that, really, mining should be taken off the table?

**FIONA SIM:** I think a few people have said here today that mining has brought a lot of good things to the Mudgee area, the coalmining. Our organisation would prefer it wasn't happening, but—

**The Hon. GREG DONNELLY:** What, no mining?

**FIONA SIM:** Yes.

**The Hon. GREG DONNELLY:** No, I'm not putting words in your mouth. I'm trying to understand.

**FIONA SIM:** Really, we would prefer that there was no mining, but we all are a part of this society that needs energy and that requires metals for our cars and all of our gadgets. We just want to see it happening in a very responsible way, and perhaps in a way that's not wholesale, just gouging out the environment. In the old days when things happened more by hand and when people probably suffered a lot more as miners, they didn't make such a huge impact on the land, I guess.

**The Hon. GREG DONNELLY:** Is your submission, essentially, that it's really irreconcilable and that you can't have mining because it's—

**FIONA SIM:** No, I don't think so. I think probably this lead mine is not reconcilable with people living and agriculture happening around it. Like people have said, the coalmining has been here for some time. It has managed to co-exist with the wine-growing and the olive-growing and other agriculture around here and tourism and people living here.

**The Hon. GREG DONNELLY:** That's primarily underground. Is that a bit of the reason for that?

**FIONA SIM:** Yes, and I think they're not extracting something—

**The CHAIR:** I ask the gallery to be silent and let the witness answer the question.

**The Hon. GREG DONNELLY:** The reason I said that is one of the witnesses said that earlier today about underground coalmining. That's why I raised it.

**FIONA SIM:** It's not all underground.

**The Hon. GREG DONNELLY:** No, no. I'm just clarifying.

**FIONA SIM:** I think it's mainly in relation to the fact that what they're pulling out of the ground is not as toxic as what is going to come out of the mine at Lue.

**The Hon. GREG DONNELLY:** So what's front and centre at this particular mine is the extraction of the lead?

**FIONA SIM:** Of the lead, yes. I mean, there's more lead coming out of it than silver. Yes, we're worried about the dust, and it can blow a long way. We don't really know the ramifications of that.

**The CHAIR:** Thank you both very much for your time today and also for the time you've put into preparing the submission. If there are questions on notice from members, the secretariat will be in contact with you. In closing today's hearing, I want to note and acknowledge the large presence of community members we've had in the gallery all day, who have been very patiently watching the proceedings. Thank you for participating as well.

**(The witnesses withdrew.)**

**The Committee adjourned at 13:55.**