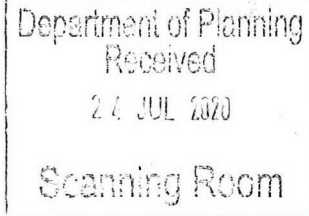


PCU079878

Planning and Assessment  
Department of Planning, Industry and Environment  
Locked Bag 5022  
Parramatta NSW 2124

SUBMISSION



Date *21<sup>ST</sup> JULY 2020*  
Name *MICHAEL BOLLER*  
Address *261 POWERS ROAD, WUE NSW 2850*

Applicant – Bowdens Silver Pty Limited

Application Number - SSD-5765

Application – Bowdens Silver Mine

I object to the BOWDENS SILVER MINE proposal.

I declare I have not made a reportable political donation in the previous 2 years.

*Michael Boller*

I would like my submission to be anonymous.

I request that you please withhold my name, do not publish my name on your website and remove my name from any documents that are already published on your website.

*Page 1*

**Mick Boller, 261 Powells Road, Lue.**

**Teacher, landcarer, birdwatcher, historian, sports coach.**

**Thank you for providing me with the opportunity to outline some of my very strong concerns about the unsuitability of this highly inappropriate and unsafe proposal.**

My property occupies 750 acres, 9 kms from the village of Lue and just over 2kms east of the proposed development at Bowdens.

The dangers this proposal poses to the residents of Lue village and the surrounding farms are by no means unique. Many small communities have been overwhelmed by proponents developing mines near settlements. Community resistance is steamrolled by mining companies with massive bank balances. This project is designated as a State Significant Project. Clearly, there are likely to be economic benefits through jobs. Just as clearly, there are likely to be ongoing physical and mental health issues for residents who are not bought out or who are unable to find a buyer and continue to live in the shadow of the proposed development. The environmental costs will span centuries.

In 2013 KCN representatives publicly admitted that the ratio of lead: silver in the proposed mine is well over 50:1. While silver is obviously more valuable than lead, the sheer overwhelming volume of lead and the volumes of dispersable dust which will come out of this proposed mine is of very great concern to the community.

Overwhelmingly, scientific research shows that there is NO SAFE LEVEL OF EXPOSURE TO LEAD. The proponents have not disputed this. The health and welfare of the entire community surrounding the proposed mine site will be irrevocably affected by long term exposure to lead particles released in to the atmosphere by the mining process and vehicular movements in and around the mine.

Lead and silica dust is certainly not the only area of concern. A very quiet rural community will be affected by substantial noise, increased night time light, increased traffic, vibration and depletion of underground water sources on farms among other adverse effects. Long term damage to underground water supplies is a critical issue. The village of Lue does not have a reticulated water supply. All residents rely upon tank water collected from rooves and/or underground aquifers.

Grazing of sheep, cattle, horses, goats, pigs and other ruminants is a major source of income for landholders in the area. Animals grazed on lead contaminated pastures may in future be condemned as unfit for human consumption. If this were to occur, properties within a 5-10 radius of the proposed mine will suffer substantial economic losses.



Page 2

Vineyards and olive groves promoting themselves as clean and green will be severely affected by lead dust contamination. Farm stay businesses trading on a quiet and pristine environment to attract visitors will also suffer significant economic losses.

A massive increase in traffic volume will make the small and narrow roads of the district far more dangerous upon which to drive.

My home is just over 2 kms on the downwind side of the proposed development. When Australia has experienced winds which carry topsoil as far as the Timor Sea, New Zealand and Antarctica, the people of Lue and the surrounding areas cannot hope to escape lead dust and silica dust fallout from the proposed mine. The response from SVL has been that they will purchase properties within 1 kilometre of the proposed mine. Should this proposal proceed to mining, it will be unsafe to reside in the village and also unsafe to live within at least 5-10 kms of the proposed mine.

When purchasing this property in 1985, I selected a grazing block with steep sandstone ridges on a dead end road (Powells Road) where there was almost no traffic. I was attracted by the permanent, safe water supply from underground springs, the abundant wildlife and the very quiet environment. The proposed work schedule at the proposed mine is 24 hours per day for 365 days of the year for some 16.5 years. This will destroy the quiet rural environment I have enjoyed for the past 35 years.

There are just 3 neighbours in this valley whose house lights are visible at night from my property. I am able to see in the very dark night sky the glow of the lights at the Ulan and Wilpinjong coal mines which are tens of kilometres to the North. I am concerned that a mine 2kms to the West of my home will turn dark nights into something like bright moonlight or worse every night.

One of the great attractions of my property is that it has allowed me to engage in bushwalking and bird watching and bird identification for over 35 years. I did not choose an isolated rural block which backs on to a very large reserve of almost untouched natural bushland because I wanted to be near such a massive industrial development.

One of my greatest concern is that I will be trapped with a stranded asset on a beautiful property where the peaceful nights will be disturbed by bright lights and noise, where tank and ground water is no longer safe to drink, the air no longer safe to breathe, the pastures unsafe for domestic animals to graze upon and from which there is no escape because the property will be unsaleable unless the price is significantly below what it might have been worth before the proposed Lead + Silver mine emerged. Even if I was able to sell the property at a fair price it would be difficult to find something similar which could hope to replicate and compensate for the loss of the place of my memories of my 35 years in this community.

### **Consultation Issues.**

I informed the proponents SVL that I wanted all interactions to be by email. Email messages from SVL have been very rare. As recently as 9/7/2020 I emailed Mr. B Hjorth at SVL requesting historic bore testing readings taken on my property by KCN which I needed to assist in the preparation of a table relating to ground water in this submission.

At 20<sup>th</sup> July no response has been received.

The bore in question was tested on several occasions by previous proponents KCN. No further testing to establish accurate baseline data (including the severe drought of 2019) has taken place since 2016 when SVL purchased the property. This bore (equipped with a solar pump) was a critical supplier of domestic water to 2 households during that 2019 drought when all other surface water except for 1 stock dam and one spring had completely dried up.

### **Surface Water**

The EIS does not properly consider the likelihood of very heavy rainfall events in this catchment. (See Figures 1 & 2 below) The threat of failure in critical structures such as the TSF to Lawson Creek and downstream users has not been adequately addressed. When considering climate change and the certainty of more extreme weather events, a freeboard of just 0.75m in the TSF represents a real danger to Lawson Creek and its downstream users. The following photographs show moderate levels of flooding in Hawkins Creek, 2 kms upstream from the proposed project in 2017.

**Recommendation: That a 2<sup>nd</sup> protective wall must be constructed in front of the proposed TSF wall in case of overtopping or even catastrophic collapse of the single TSF wall. Such incidents are not unknown and breaches in Australia (Cadia at Orange) and overseas have been widely reported.**





Figure 1 Flooding in Hawkins Creek at 261 Powells Road in 2017



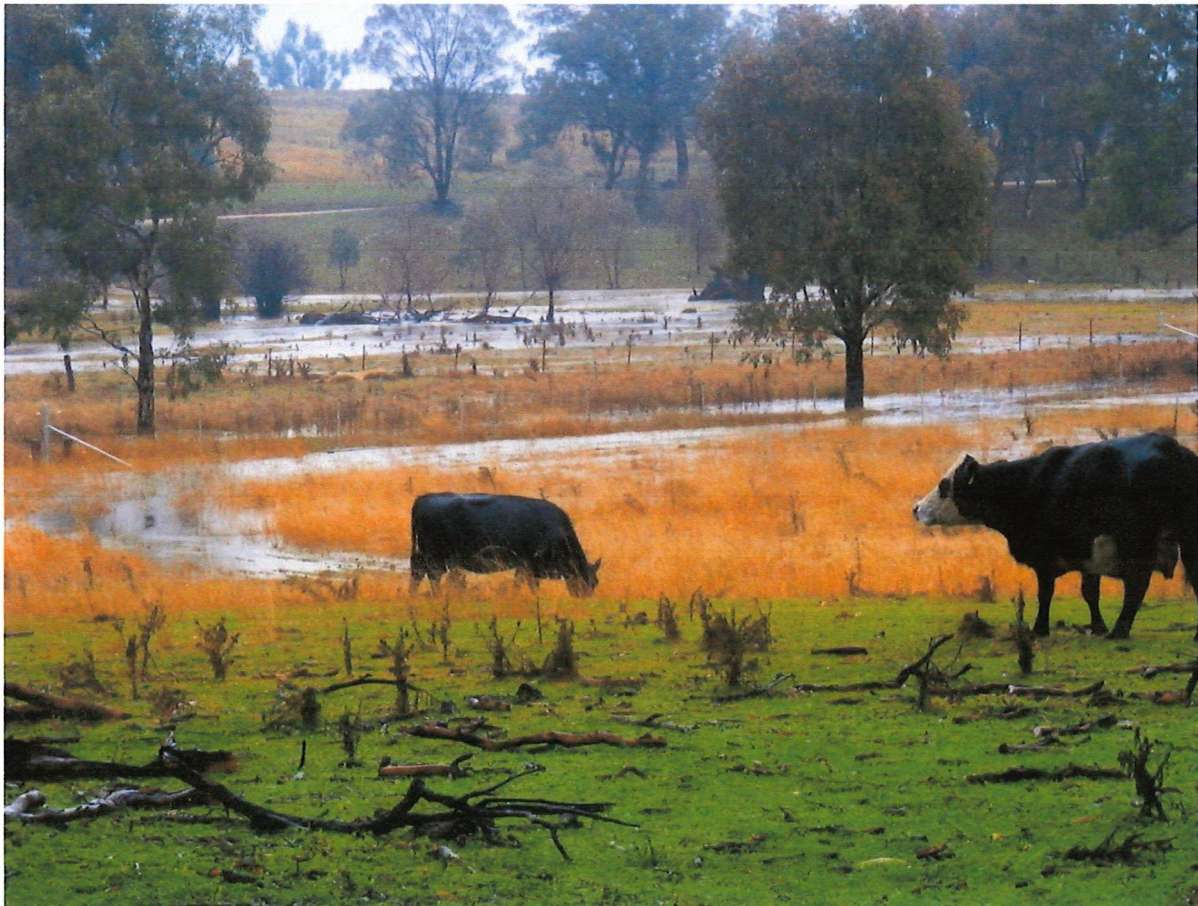


Figure 2 Hawkins Creek Crossing at 261 Powells Road, 2017

**Groundwater:** The threat to domestic and rural water supplies sourced from underground aquifers is of critical importance. Any drawdown of the water table following the construction of a 250- 300m deep pit would be catastrophic for graziers on surrounding properties who rely on underground water sources, particularly in times of severe drought such as the one experienced in 2019. In 2019 the Goorari Licensed Bore bore (**BGW02**) supplied all domestic water for 2 households and all stock water for 1 household at "Willow Springs". There is a 50 mg licence attached to this bore.

There is also no reticulated water system within 30 kms of Lue. All domestic water comes from rooves and tanks. Every home within a significant radius of Lue will have domestic water contaminated by lead dust.

Drawdown contours in the EIS extend to under 2km of the BGW02. Any faults in the modelling for aquifer drawdown will result in catastrophic consequences in terms of stock and domestic water on my property and that of my neighbours.

Table 1. A sample of groundwater depths below ground level at Windmill Paddock bore (BGW02). 261 Powells Road. These were taken when KCN were the owners of Bowdens. No baseline testing by SVL has taken place since 2016.



Date	Depth – top of pipe	Top of pipe to ground =0.45m	Depth – ground level
28.1.2012	4.20m	0.45	3.75m
5.2.2012	4.15m	0.45	3.70m
12.2.2012	4.07m	0.45	3.62m
19.2.2012	4.24m	0.45	3.79m
6.9.2012	3.20m	0.45	2.75m

A Solar pump supplying Stock and Domestic to 2 homes is in place on my property on a BGW02. In 2019 drought this was the only remaining source of Stock and Domestic water on Goorari, except for 1 dam which fell to approximately 15% of capacity and the spring shown below in Figure 3, which held this constant high water level right throughout an incredibly dry year.



Figure 3 Underground water supplying spring in the Windmill Paddock on Goorari

(Drought conditions visible in the background)





**Figure 4 Groundwater spring in intermittent drainage line on Goorari.**

**Recommendation:** If this proposal were to proceed, safe supplies of domestic water must be supplied to the village of Lue via a pipeline from Mudgee, financed by the company SVL. It is unthinkable that homes' relying on water from bores and rainwater collected from rooves will be without a safe reliable water supply.

In the case of farms surrounding the project losing access to precious groundwater, no "make good" provisions to keep large numbers of stock alive in drought conditions such as those experienced in this area in 2019 would be feasible. The loss of grazing production that would result would be very large. I would have had to completely destock my property if this had occurred in 2019. My grazing enterprises would not be able to continue in those circumstances.

**Recommendation:** Up to date Baseline data of all bores surrounding the footprint of the mine and the drawdown area must be undertaken before any mining activity commences, should approval to mine be granted.



**Flora and Fauna:**

**Koalas:** For some years I have been interested in the prevalence of Koalas in the Lue District. Each sighting reported to me has been logged with University of Sydney researcher Kellie Leigh. I notified Kellie Leigh of a Koala sighting as long ago as on 10<sup>th</sup> December 2013. Four more recent sightings included one beside the Lue to Mudgee Road at East Havilah, one near the Bingman Landcare sign on Pyangle Road, one at 261 Powells Road cattle yards and, on 16<sup>th</sup> July 2020, in a residential backyard in Cox Street Lue. The statement in the EIS of just 2 sightings is under reporting Koala numbers in the vicinity of the project.



Figure 5 Koala in Ironbark tree at Goorari cattleyards



There is also a most concerning paucity of information in the EIS relating to Echidnas in the mine area. The photo below is 3 Echidnas in a rock crevice on Lankeys Mountain. This triple Echidna sighting was within 1 km of the site of the eastern WRE on top of the escarpment.



Figure 6 3 Echidnas on the top of Lankeys Mountain

**Birds:** I have identified and recorded over 80 bird species on my property since 1985. These have included several vulnerable and threatened species, including Dusky Woodswallow, Hooded Robin, Diamond Firetail, Scarlet Robin, Brown Treecreeper, and Grey Crowned Babbler. I have observed groups of 20-30 Dusky Woodswallows on my property. Diamond Firetail group nests can be observed at both Glendos and Goorari on Hawkins Creek. I have observed 4 Rainbow Bee Eaters in my front yard, as well as numbers of Brown Treecreepers and Grey Crowned Babblers on Powells Road.

**Recommendation:** A much more thorough and detailed physical search of endangered and vulnerable bird and animal species must be undertaken to establish habitat crucial to those groups which is in very close proximity to the project, particularly the Regent Honeyeater.

#### Aboriginal sites and artefacts

This proposed development affects land which has sustained human habitation, art and culture for some 60 -70,000 years. Undisturbed by mining, it would continue to provide food and fibre for centuries to come.



There are at least 44 identified sites of Aboriginal cultural heritage importance from Bingman Crossing to the proposed Eastern WRE emplacement site. Other examples of Rock Art and Grinding grooves are located outside the mine footprint and within 2 kilometres of the designated pit area. These locations show how important the area was to the Wiradjuri people, in terms of survival and cultural activities. The proponent SVL has not physically investigated and identified sites which lie close to the mine footprint and which do not appear in desktop studies used by consultants in this EIS.



Figure 7 Ancient Grinding Grooves on Goorari, Lue.





Figure 8 Rock Art - Lue

**Recommendation; A full physical examination of existing sites, including at least 3 sandstone overhangs with artefact scatters to the east and within 1 km of the proposed project, the Grinding Grooves in Figure 7 (above) and Rock Art such as that in Figure 8 (above)**

**Lead and its Effects:** In 2019 the CEO of SVL publicly made much of new and up to date data collected by all experts engaged in the preparation of the EIS. Data provided by KCN was decried as out of date at a CCC meeting in Mudgee in 2019 by the SVL CEO. Scientific reports commissioned by the Lue Action Group and undertaken by Professor Barry Noller were dismissed and described as using data which was very much out of date. That same data , collected in 2012 and 2013 and dismissed as out of date in 2019 by the proponent, is used in this EIS to describe lead levels at Lue PS and in other structures in the Lue village.

See Bowdens EIS Table 4.49. Soil and Dust Samples for Lead: Existing Environment. Data provided in the following reports JBS 2013c, JBS 2013b, JBS 2013a, and JBS 2012. This clearly and unequivocally demonstrates that there is no new baseline data for lead levels in the village.

Spokespersons for both previous proponents KCN and SVL have continually stated that there is no threat from Lead (which outweighs Silver by a ratio of at least 50:1) to the health of persons in the village and attending the school and the survival and future existence of the village is not under threat. The evidence around us suggests otherwise. **There is no safe level of exposure to lead.**



I am aware that other mines which emit lead dust exist in Australia. No SVL spokesperson has yet been able to show an example of a lead producing mine opening this close to an established community with well over 100 years of continued habitation.

Residents of the village and farmers will be unable to produce fruit and vegetables in home vegetable gardens if this proposed mine proceeds. Professor Barry Noller has shown that 95% of bio accessible lead is ingested – residents will be unable to grow fresh produce because it will be unsafe to eat that produce due to lead and silica dust contamination.

**Recommendation: Up to date Baseline data on lead levels in the village of Lue and on surrounding properties must be required of the proponent. Testing of baseline blood levels of all residents of Lue village and students attending the Lue Public School and public and private High Schools in Mudgee, Rylstone and Kandos schools must be taken before any mining disturbance occurs.**

Lue Public School has recently celebrated 100 years of service to the local community. When parents become fully aware of the very damaging effects of exposure to small amounts of lead on young children, the current enrolment of students will fall. Once the enrolment falls below 19 students, the school will lose the services of a second teacher allocated to the Staff. Further dramatic falls in enrolment would almost certainly lead to the closure of the school. School closures due to mining have occurred at Upper Bylong Primary school and Wollar Public School within the last decade.

**Risks:** The success of the project is heavily reliant on the price of Silver, which is volatile. One risk is the project being put in to care and maintenance mode if the Silver price falls below an economic level. The expected mine life of 16.5 years would turn in to decades if the mine were to be put into care and maintenance in the event of falls in the price of silver.

SVL has consistently said the void will not be backfilled because “that would make the project financially unviable”. Leaving voids unfilled is not best practise in countries with more stringent environmental protocols than Australia and it is becoming less acceptable in Australia. An unfilled void which is predicted to take 200 years to fill with water, thus depleting groundwater in the Lawson Creek Valley for 220+ years, is unacceptable. Backfilling the void may also help to reduce the threat of Acid Mine Drainage from exposed WRE material being influenced by oxygenation and rainfall.

**Recommendation: The proponent SVL must be instructed to backfill the void and restore the pre mining landscape as part of any approval to mine.**



### **Other Suggested Changes**

**Buffer Zones:** Reasonable and fair buffer zones must be placed around villages like Lue, so that proclaimed settlements like Lue, Wollar, Bulga, Bylong, Camberwell, Jerrys Plains, Sutton Forest and others like them are forever protected from mining projects which threaten their very existence.

Two kilometres is too close.

### **A Minister and a Department to Oversee the Welfare of Displaced and Disturbed Communities.**

Who in Government is looking after the needs of the community? There will be health issues, stranded assets, depletion of value, and possible loss of the school and many other consequences of approval to mine.

It is grossly unfair to expect small communities to withstand the juggernaut of well-resourced companies.

The financial burden on resident groups of employing independent experts is prohibitive and completely unreasonable.

The problems faced by the residents of Lue village and the surrounding farms are by no means unique. Many other small communities have been overwhelmed by mining companies developing mines near settlements. These include villages and towns like Ulan, Wollar, Bylong in this district and Sutton Forest, Werris Creek, Bulga, Maules Creek, Narrabri, Camberwell, Coonabarabran, Pilliga and Watermark on the Liverpool Plains. In each case, the communities are mostly too small to be able to defend their homes, businesses and lifestyle. They are unable to raise the funds necessary to pay for scientific research. They have 30- 60 days to scrutinise a mountain of information in Environmental Impact Statements which have been developed over years by the proponents.

This land has been productive for tens of thousands of years. The many and varied Aboriginal sites point to a place rich in history and culture. All will be lost for 16.5 years of jobs. The land will be out of meaningful production forever. The precious and life sustaining underground water supply will possibly be ruined forever.

The environmental Impact assessment principal publicly boasted of having provided supporting information for over 200 projects, none of which were rejected on health and social impact grounds. This project must be the exception. It is the most dangerous and environmentally damaging project ever proposed in the MWRC area.

Page 15

I asked a Department of Planning Officer in a meeting about Bowdens and attended by around 10 people the following question –

**“Which Department is responsible for the Health and Welfare of the people impacted adversely by this proposed State Significant Project?”**

I asked the question on three occasions in the same meeting. The DPI Officer was unable or unwilling to provide an answer.

It seems that everyone – NSW Government, taxpayers, the proponent, construction and mine workers – are to benefit from projects such as the SVL proposal.

The people most impacted – landholders, school children, small businesses like Olive growers and vigneron, families who can't sell their homes – are the ones paying the real costs.

There are many concerns surrounding this proposal. Large coal mining projects in this area have resulted in the obliteration of small communities like Ulan and Wollar. The tiny village of Bylong faces the same fate. They are now nothing more than ghost villages.

There must be a fair system which treats the legitimate concerns of small communities seriously and one which properly compensates people unable to continue living close to such massive industrial developments.

Michael Boller

21. 7. 2020