Thank you for the opportunity to present to the commission. I am a farmer in the Lawson Creek valley 5 km downstream from the proposed mine on the Lawson Creek. I am also secretary of the Lue Action Group. It is as an individual that I make this submission.

Our property, Havilah East, has a 3km frontage to the Lawson Creek which we rely on for all our stock and domestic water. I was born and raised in this valley. My family has farmed this land since the 1870's. We produce premium grass fed cattle for Coles supermarkets.

Like many people who work in agriculture, I have a passion for the land and a deep love for our property, I can't imagine living anywhere else. We love our property and our livestock and care for them by planting trees, improving pastures both native and introduced. We carefully manage our stocking rates to maintain grass cover even during dry times.

Along with a series of dams, we rely on Lawson Creek for our stock water. During the drought of 2017 to 2019 the dams dried up. The creek went back to holes but still provided us with water for our stock and we were able to keep our breeding herd.

I also have a large and busy guest house in Mudgee so am concerned about the affect the development of a mine will have on tourism in this region.

I strongly object to the Bowdens Silver Mine proposal as recommended to the IPC on the following grounds.

1. WATER QUANTITY

Bowdens has not proved it has enough water to operate a mine despite the fact they plan to reduce operations during times of water shortage. I refer to Shireen Baguley's ¹ presentation to the IPC where she said;

- If Bowdens is allowed to proceed, 480% more rainfall and runoff will be lost than has been assessed by the Department.
- Clean water harvesting is also lost to the catchment and Shireen's analysis confirmed that Bowdens intends to harvest more than twice the clean water it is entitled to.
- Bowdens have had seven years to answer the questions put in the SEARS and Shireen made it clear that the most important ones remain unanswered and uncertain.
- She said there is no water quality model.
- There is no water quality management plan with appropriate triggers for action.
- Major uncertainties remain around final void water through flow and the consequences for contamination of Lawson Creek valley surface and ground. Importantly the Department's own water expert Earth Systems has similar reservations to Shireen.
- This shouldn't be referred to the Conditions of Consent as part of the approval process. It is vital these questions be fully answered before approving this mine.

Modelling to determine water flow rates on Lawson Creek uses data from a monitor on the Cudgegong River near Rylstone, a waterway and catchment totally different to Lawson Creek. A private gauge on Lawson Creek at Phil English's property just east of Bowdens show flow rates are

¹ Shireen Baguley's report on Surface Water to the IPC Hearing 15th February 2023

currently 0.14 ML per day, the Cudgegong gauge show 2.6 ML per day; that is 20 times more than the Lawson Creek gauge.

Lawson Creek will go to back to intermittent water holes during dry periods and in large sections of the creek it will be completely dry. Many of the downstream WAL holders such as Havilah and Havilah North do not exercise their license to irrigate as there is simply not enough water to sustain irrigation projects. As mentioned above, Lawson Creek sustains our farms and businesses but only with a history of conservative management of their water rights.

Bowdens ambitious water plan is based on modelling that is not relevant to our catchment and does not have any consideration of the affect the mine will have on downstream water users.

2. LAWSON CREEK VALLEY HAS A HISTORY OF INTENSE AND HIGHLY LOCALISED RAINFALL EVENTS

On the evening of Rylstone Show, 22nd February, 2003, 220mm fell in an intense rain event over 9 hours on my brother, Hunter White's property, Havilah on our western boundary. This cell moved north towards Botobolar creating an enormous flood in Lawson Creek and to the north in Pipeclay Creek flooding vineyards and farms to the west to Henry Lawson Drive. I attach Bureau of Meteorology Data to show that 196mm was recorded at Mudgee airport over 72 hours. ²

Two weeks earlier, on the evening of 8th February, Hunter White measured 12mm, Tom Combes from Lue Station measured 20mm and in the area where Lue Road is crossed by the railway line, an enormous and intense storm estimated over 1 hour dumped an estimated 100mm to 150mm resulting in a flood – water went over the top of the railway line. Again Mudgee Airport BOM gauge measured only 12mm.

In the DPE's assessment the DPE says in high rainfall events, excess water will be transferred to the TSF, and that although there is not meant to be a discharge from the TSF, it has a spillway and has been designed to contain all runoff up until rainfall exceeds the 1 in 100 year 72 hour storm event.³

This is what concerns me. Landowners who have been in this valley for generations have rainfall records and diary notes that prove that suggest there is a far greater risk of the TSF spilling than modelling indicates.

In November 2022, Eugowra had an extreme flash flood with deadly consequences. I read with interest an article in the Sydney Morning Herald 14 November 20224, Professor Ashish Sharma, Hydrologist from UNSW said the flood may have been caused by more local rain than was recorded in official rainfall. Later in the same article I read "In 1999 the highest flood modelled was for an "extreme" one-in-5,000-year event at 11.26m. A worst-case scenario, known as a probable.

In a 2010 revision of the plan, which is still in place today, the one-in-5,000-year estimate was revised to 10.7m, 0.5m below the recent deadly event."

² Bureau of Meteorology Data from 1994 <u>www.bom.gov.au/jsp/ncc/cdio/weatherData/av?p_nccObsCode=136&p_display_type=dailyDataFile&p_startY</u> <u>ear=2003&p_c=-771307995&p_stn_num=062101</u>

³ "Water Quality and Acid Mine Drainage" DPE Assessment Page 31, Clause 144

⁴ https://www.abc.net.au/news/2022-12-06/how-an-extreme-flash-flood-destroyed-eugowra/101711140

3. WATER QUALITY AND ACID MINE DRAINAGE

We heard the Department's expert Earth Systems and LAG's expert, Michael White both agree on the unacceptable risk of Acid Drainage from the proposed mine design and the disastrous consequences of any such drainage to everyone downstream.

The DPE in their own words have recommended a range of strict conditions, including a further verification process to confirm the volumes of PAF and the preparation of a detailed AMD management plan. This is not enough to ensure Acid does not get in to ground water and the Lawson Creek. A second wall or tailings dam as a back-up is not negotiable as far as I am concerned. Cadia Gold Mine is preparing to build a 3rd tailings dam as insurance against a dam wall collapse such as happened with the first tailing dam in 2018. Bowdens must be required to have a backup TSF.

4. SOCIAL IMPACT

Bowdens speaks glowingly of their own sponsorship to local organisations – they have certainly been a very visible supporter of local groups. They see it as part of their community engagement, but it can be more rightly portrayed as community bribery as we know they called on the groups they have sponsored to support them at the IPC and with submissions.

The mental stress and strain of dealing with a well-funded mine developer and a Department of Planning propelled by the NSW government's Critical Minerals & High Tech Metal Strategy 2022 which a guideline to develop mines such as Bowdens is being encouraged, is taking its toll on us all.

The whole planning and approval process is designed to make it as hard as possible for the community to object.

- The proponent can take years to produce an EIS yet we are asked to respond within weeks. The EIS for Bowdens was put on exhibition towards the end of first Covid lockdowns when we had strict conditions about public meetings.
- As a nearby landowner, I received a letter from the DPE dated the 16 July 2021 alerting me to the Amendment and its public exhibition commencing **four days later** on 20 July 2021.
- The DPE's assessment and recommendation to approve the mine was announced a day before the Christmas holidays commenced effectively removing four weeks out of the time we had to prepare for the IPC hearing. Many of our experts and our committee were away on annual holidays.
- The IPC was scheduled right in the middle of an election campaign so our concerns about this mine could not become an election issue.

The cost to the mental health of this community should be quantified. I can only speak from my own experience; we are all exhausted. We live in a rural area where we farm our land, raise our families, run our businesses, contribute to the community, we choose to live here because it is rural. The DPE recommends Bowdens develop a heavy metal mine, near our farms, upstream of our precious water source and near 120 residences, most of which the mining company doesn't have to acquire or compensate their owners.

They need our water, our properties will be devalued, we will have to worry about whether lead dust gets in our water or on our crops and how long before, not if, exacerbated by the effects of climate change, the next extreme weather event occurs in this valley.

This is no way to live.

5. SUBMISSIONS

In the Assessment, the DPE refers to the submissions of the EIS showing 79% supported the project, further analysis showed support for the project came from those who didn't live near Lue. LAG (I am the Secretary) was told by Rose-Anne Hawkswood that the DPE would consider one liner and proforma submissions as one submission, like a petition. So, we asked those objecting to write individual submissions. The DPE considered all those proforma submissions as individual submissions and the proponent and the DPE have quoted these results to show how popular they were in all their publicity ever since.

I refer to the attached are examples of many of the submissions in support of the EIS.⁵

At the IPC this week Bowdens referenced an independent survey through SEC Newgate Research conducted in November 2022 which again showed support and awareness for the project. I asked Blake Hjorth for more information on this survey which he agreed to provide. When I saw him the next day, he said he would not provide them to me. I looked at SEC Newgate Research's website and Bowden Quantitative Research page was a heading only, the detail has been removed from the website.

I raise this because I was interviewed some time ago in this survey and I found it to be little more than an awareness exercise for Bowdens with the questions framed to inform the respondent on just what a wonderful project it will be for the region. I ask that the IPC request further information about this survey.

6. TOURISM

In their assessment, the DPE take no consideration of the value of our local tourist industry as we heard from Lucy White at the Hearing.⁶ The word "tourism" barely gets a mention, yet it contributes \$200 million to the local economy each year and the region attracted 826,000 visitors in 2020-21. Lucy White presented a strong argument for the value of our tourist economy and what damage a mine such as Bowdens, both because of the type of mine and its location, could do to that industry.

I endorse Lucy White's request for the Commissioners to assess the critical economic impact of this mine on both tourism and agriculture. This is the wrong mine in the wrong place.

⁵ Lue Action Group Report and Response to the 500kV Transmission Line Ammendment and Bowdens Response to Submissions August 2021

⁶ Lucy White's presentation to the IPC Hearing Thursday 16th February 2023

7. CONCLUSION

The DPE notes that mitigation measures proposed by Bowdens are considered best practice. They are not and I strongly object to the Assessment prepared by the DPE and their recommended Conditions of Consent.

The mine must not be allowed to proceed.

- The mine poses an unacceptable risk to all those downstream landowners as the the design of the tailings dam is inadequate.
- The people around Lue must be compensated if the Government and its department continue to allow this type of mining, in fact any type of mining, so close to people's home.
 They cannot continue to destroy communities without placing a far higher value on those who lose out.
- I urge the Commissioners to request more detail on modelling especially about surface water and creek flows, and to order the DPE experts to consider rainfall records of local farmers as the Lawson Creek valley has a history of localised, intense storms.
- The DPE must consider the cost this mine will have on tourism and agriculture in the region.