This Submission to the Independent Planning Commission (IPC) has been prepared following a review of the Environmental Impact Statement (EIS) and associated documentation, the Submissions Report, reports prepared by the Departmental Planning and Environment's (DPE's) own experts, DPE's assessment report and draft conditions of consent.

This submission covers a number of issues in relation to the proposed Bowdens Mine SSD 5765. Taking all the below matters into consideration, **the impacts of the proposed project on are considered to be significant and the proposed project should not be approved**.

Biodiversity

The impact on groundwater dependant ecosystems has not been properly considered. The Montane Peatlands and Swamps EEC is present at numerous locations adjacent to the mine site and there are strong grounds to believe it is present within the mine site, as there is 29 springs mapped across this site.

The EIS and its associated documentation is not fit for purpose and the DPE's assessment is flawed as both **fail to consider the potential impact of the proposed project on the Montane Peatlands and Swamps EEC, in relation to the NSW Biodiversity Conservation Act 2016 and the Commonwealth Environment Protection and Biodiversity Conservation Act 1999. This means there is a failure to meet the assessment requirements under the Bilateral Agreement EPBC 2018/8372** (Department of the Environment and Energy, 2019).

The impacts on biodiversity that have been assessed are of major significance. Critically Endangered Ecological Communities should never be cleared, yet this project proposed to clear 180ha of this vegetation. Koalas are known to be present on the site and the Regent Honeyeater are considered likely to be significantly impacted. There is already only a slim chance that these two key species will be prevented from extinction and the impacts from this proposal would only put another nail in the coffin. This impact can not simply be offset. Contrary to DPE's statement, it is not possible for this project to result in improved biodiversity outcomes in the medium to long term.

Water:

a) Process

In relation to process, the project's Secretary's Environmental Assessment Requirements (SEARs) (revised) were issued on 21 June 2019. These set out a number of specific requirements which the EIS for the development "**must comply with"**. The SEARs requirements included the following in relation to surface water assessment:

- the proposed project's water demand,
- assessing the full impacts of the meeting the water supply requirements of the proposed project,
- demonstrating an adequate and secure water supply,
- a water balance considering quantity, quality and source including water requirements
- a management plan to address spill/leak management

The EIS and associated documentation has failed to meet these critical mine viability-determining aspects of SEARs.

The failure of the EIS and associated documentation to meet the requirements of the SEARs in multiple instances means that:

- the determining body, in this case **the IPC does not have sufficient information to make an informed decision,**
- in making a recommendation for approval, DPE appears to have lowered the standard required to assess the impacts of the project,
- **matters which should be determinative have been conditioned** to be dealt with in post-approval management plans,
- there will be no independent review of any of the post-approval management plans proposed,
- **there is a failure of due process** which undermines the confidence the community has in the decision-making process with regards to planning approvals. No confidence from the local community and stakeholders in the assessment process means **no social licence.**

b) **Technical**

It is unclear what the true area of the Mine Site catchment is, as the mine site boundary is approximately 1000ha, significantly more than the 550ha included in the water balance model. This casts uncertainty over the modelled impacts.

There is a high level of uncertainty with regards to the water demand of the project particularly in regards to the dust suppression requirements. The DPE's own expert also repeatedly raised concerns over water requirements for dust suppression. The dust suppression modelling in the low runoff scenario seems particularly unrealistic.

There is a high level of uncertainty with regards to the AWBM water balance model and its sensitivity to key parameters. As such, its ability to reliability predict the likely impacts of the proposed mine is questionable. It also means there is a flawed understanding of the rainfall runoff responses of the upper Lawson Creek catchments and, consequently, how much water is available to be used in mine processing.

The AWBM water balance calibration has been undertaken at an unsuitable location and "excludes recent very dry weather when instream losses appear to be most". There is no verification, it presents only average results, and there is no sensitivity analysis for key parameters such as evaporation and dust suppression requirements. There is no consideration of climate change, despite the proponent admitting the mine intends to be a long term prospect.

The likely impact of the mining operations on the surface water is unacceptable. A close reading and analysis shows that the "average" annual site water balance removal from the project area catchments is:

- 924 ML/year in rainfall and runoff, and
- 27 ML/year in clean water harvesting

giving **a total of 951ML/year removal from the project area catchments, far more than the than 177 ML/year indicated by the proponent.**

There is not a viable water supply for this mine. When the impact of removing 951ML/year is considered, there is potentially a:

- 44% reduction of flows from Hawkins Creek downstream of the mine site
- 11% reduction of flows from Lawson Creek downstream of the mine site.

The proposed water to be drawn from the catchment due to the mine is estimated to be 2.6ML/d. For 40 percent of the time, flows in Lawson Creek are less than 4ML/day and 30 percent of the time they are 2.4ML/day. **The proposed mine will take 66.1% and 110.2% of these flows respectively**.

There is a flawed understanding of the flow rate of water in Lawson Creek and, consequently, how much water is 'available' to be used in mine processing. On-ground verification has shown that the flows in Lawson Creek are just **0.38ML/d. This is less than 2% of the 19.5ML/d that the EIS documentation states the Lawson Creek flows to be. After an extremely wet period, Lawson Creek is currently at a 'cease to flow' state**. This discrepancy between reality and the EIS appears to be due to the flawed calibration of the model.

There are a number of regulatory irregularities that undermine the validity of the proponent's water sources and status thereof. These relate to exemptions claimed in relation to harvestable rights and Water Access Licenses being required. However, criteria clearly have not been met in relation to these exemptions. The proponent's intended water extraction of 295ML exceeds the theoretical harvestable water rights by 109ML. 186.1ML is the maximum volume of dams allowed, however Bowdens' already has 59 dams across the 2580ha property. The remaining harvestable right is significantly less than 186ML. Further, harvestable rights dams must be on minor streams. This has been violated in several instances. The EIS is not factual nor fit for purpose in this regard.

There has been a failure to properly address the SEARs in relation to water quality which means that there is an insufficient understanding of the potential impacts and poorly developed mitigation measures. The risk of contamination of the Lawson Creek system is high.

Traffic and transport impacts

The idea that the mine product will be trucked out to Parkes is extraordinary and not sustainable. Lue Road is narrow, windy and dangerous and not suitable for the vehicles required. The risk of dust contamination and spillage is high and should not be acceptable. The use of Lue Road for this purpose will make it dangerous and unviable for the local community who use it as the link between Mudgee and Rylstone/Kandos.

Human Health

The elevation of the mine site, in relation to the village of Lue and the mines surrounds and the uncertainty in the estimates of dust suppression water requirements and lack of a viable water supply for the mine raises serious doubt about the accuracy of the modeled outcomes for human health. This will be a dusty site and that dust will carry lead. The risk also extends to the health of native fauna and livestock. There is no safe level of exposure to lead.

Macquarie University honorary professor Mark Taylor gave evidence to the IPC on the risk of lead and it is his assessment is that dust will be the key for exposure and that negating off-site impacts has never been achieved anywhere.

The risk of frequent, unacceptable exposure of the community around this site is high and the dust would spread far across many landholders in this LGA, and residents of Lue, Rylstone and Kandos. It is unacceptable that people who at present are not exposed to unsafe dust borne lead are put at risk for a short time mine.

I am a primary producer with an orchard and produce a beverage product from farm grown produce to the south-east of the Bowdens' site. Westerly winds are frequent and when that occurs, my property will have lead dust landing on it and my orchard. This is a fact – there is still dust I am cleaning up after the dust storms during the last drought – the storms which dumped dust across Sydney and all the way to New Zealand. These winds will pick up dust from a lead mine at Lue and drop it across all in its path. The presence of a dust producing lead mine will create significant doubt in the minds of purchasers that primary producers here are producing a natural, clean, unaffected, non-contaminated product. That remains a very significant and real concern for the community. It is not acceptable that a mine can be allowed to start operating and so detrimentally impact the existing businesses in this region.

Economic

The tourism industry in this region has gone from strength to strength, and this extends all the way from Mudgee through to Rylstone and Kandos.

Our region is experiencing tourism and hospitality growth like never before. Visits to providores, wineries, regular farmers markets and farm walk tours feature an exceptionally broad range of seasonal produce and locally made artisan fare with regional specialties. Some 660,000 people per year on average are visiting the Mudgee Region including the towns of Rylstone, Kandos, Mudgee, and Gulgong. Statistics show the Mudgee Region visitor economy is now worth over $170M annually and has seen a 26 percent growth over five years. Between 2016 and 2019, jobs in tourism in our region jumped by 100 percent, in accommodation and food services by 76 percent, in agriculture by 44 percent.

Kandos has a nascent but thriving art scene. It has long since recovered from the closure of industry 12 years ago. People have moved on and the economy has diversified.

Mudgee was voted top tourism town in the whole of Australia, for 2021, and again in 2022 and a part of the attraction of the area is the scenic drive between Mudgee and Rylstone. This is being put at risk by this proposed mine and this is not being acknowledged nor the impact assessed by the EIS and its associated documentation.

There are a range of arts and craft shops opening and cafes in both Rylstone and Kandos. Contrary to what the manager of Bowdens' might like to claim, Bowdens does not need to come to the rescue of these towns, we are doing just fine thanks. This area is not the mining dependant area of the northern part of the LGA and should not be painted as such; nor does

it wish to become so, especially not at the cost of being showered in lead dust which is the antithesis of and threatens the current economic trajectory.

As was repeatedly highlighted at the IPC hearing, there are a high number of job vacancies in this LGA. Anyone who has the ability to work can get work. Rather, what has been the issue over the past few years is finding people to fill job vacancies.

Conclusion

Taking all the above matters into consideration, **the impacts of the proposed project on are considered to be significant and the proposed project should not be approved**.