I am writing in opposition of the proposed Bowden's Silver Mine, as I believe the negative consequences of its construction and operation far outweigh the positive benefits it would bring to the region.

I have a strong connection to the Lue region, growing up on the family farm a short distance from the proposed mine. I visit my parents, who still run the grazing property, as often as possible. One day I hope to move back to family farm and that my children have the same opportunity and privilege I had, growing up on the property in a safe and healthy environment.

However, I am deeply concerned about the impacts of lead dust, carried on the wind, may have on the developmental health, of not only my own children, but also the wider community who live within close proximity to the open cut, as well as along the transportation route. Depending on the economic circumstances of these people, they may not have the option to relocate should their health be impacted by lead exposure.

In addition to the potentially detrimental impacts to community health, I am also sceptical that a lead mine, as large as the one proposed by Bowden's would have as few impacts to the surrounding environment as alluded to in the EIS.

As an ecological consultant, after reading the Biodiversity Assessment prepared by EnviroKey for submission as part of the EIS, I have some serious concerns with the limited assessment conducted by the consultant. Some of the concerns of note include:

1) The determination that Koala's are unlikely to be significantly impacted by the proposal. EnviroKey has based this conclusion on "*the relatively localised nature of the BAR footprint when compared to the wider local and regional distribution of Koala*" and "G*reater extent of habitat in the locality known to be used by Koala*". Surprisingly, the recent impact of fire on the local Koala population have not been considered despite the Biodiversity Assessment published a short time after these events. In addition, the lack of Koala survey throughout the development footprint, in particular, along the proposed pipeline, speaks to the lack of understanding of the abundance and distribution of Koala's in the region. Further, a survey needs to be conducted to better understand the current local and regional distribution of Koala and remaining extent of habitat in the locality following the 2019/2020 bushfires. Only then can EnviroKey make a true assessment of the impacts on the Koala population.
2) EcoLogical Australia's data used by EnviroKey as part of their assessment was collected in 2014, this data is now six years old. Surely this data is outdated and too old to represent the current vegetation condition which could have changed during this time. Has EnviroKey validated any of these plots to ensure consistency?
3) There has not been adequate survey for some threatened flora, in particular, *Swainsona sericea* which was identified with in the Study Area but has not been identified in the development footprint. The 'comprehensive field survey' alluded to by EnviroKey appears to have been conducted as per Section 2.3.5 Random Meander Surveys. The methodology described appears to only include short 15 minute surveys when travelling between plots or fauna survey points. Due to the substantial distances between most of these locations, it is unlikely these short surveys would have been conducted over a large enough area to provide conclusive survey to rule out the presence of many of these species. It is far more likely that travel between sites took place by vehicle, which would not have allow detailed enough survey for threatened species such as *S. sericea*, even if it were flowering at the time. Furthermore, EnviroKey has not mapped survey tracks and have not provided sufficient evidence that the site has been surveyed adequately for threatened flora. Time spent

conducting fauna surveys cannot be included as threatened flora survey, as these surveys are vastly different, requiring focus on a very different habitat. Therefore, this methodology would not have resulted in effective coverage of the development footprint and further surveys should be conducted during the survey period.

4) For some portions of the proposed water pipeline, land access agreements were not in place at the time of the field surveys. EnviroKey have used a combination of air photo interpretation, 'over the fence' survey and the use of existing data, which was used qualitatively to 'best-guess' the BVT and presence of TEC in those portions. This may be sufficient for the purposes of some survey such as validating vegetation. Again, these areas have not been surveyed for threatened flora species and further surveys should be conducted.
5) Threatened fauna species such as Barking Owl have been identified within the Study Area. EnviroKey noted that "*No breeding site has been located within the Study Area, despite extensive searches of hollow-bearing trees. It is probable that the woody vegetation portions of the Study Area provide foraging habitat and potentially breeding habitat for Barking Owl*." EnviroKey have not ruled out breeding habitat occurring in the development footprint, and there appears to be suitable nesting hollows despite their lack of habitat mapping. Therefore, the occurrence of Barking Owl breeding habitat cannot be ruled out and species credits should be generated for areas which contain suitable breeding hollows. What about impacts to other hollow dependant species (dual credit species), namely the Gang-gang Cockatoo, Glossy Black-Cockatoo, Little Eagle, Masked Owl, Powerful Owl and Square-tailed Kite? How were offsets for breeding habitat excluded for these species?
6) There hasn't been enough information provided on the rehabilitation process. Will Bowden's be retaining hollow-bearing trees cleared from the development footprint and reinstating them on areas of rehabilitation? Is this something that will be developed before approval along with the BMP?
7) There hasn't been enough consideration given to the indirect impacts section of the biodiversity assessment. The assessment only briefly touches on the impacts as a result of increased traffic. There will be a dramatic increase to the road traffic seen in the area. This will not only have an impact on common fauna but as pointed out in the Biodiversity Assessment this will result in increased mortality of threatened fauna such as Spotted Quoll which was hit on Lue Road.
8) It is interesting that EnviroKey makes note of the benefits of indirect impacts to some threatened species in Section 7.4.9. They go so far as to provide specific examples of benefits to threatened species at other mine sites, such as Grey-crowned Babbler and Microchiropteran Bats. However, they fail to note specific examples of the negative impacts of mining at these sites or point out the relocation of these species to areas such as the car park or car park lights may be directly related to impact that mining has had on areas of breeding or foraging habitat in the locality.
9) I find it difficult to believe that there is 113.83 hectares (ha) of land within the development footprint which does not align to the Commonwealth definition of BGW. Table 21 of the Biodiversity Assessment shows the average cover of exotic species compared to native species as higher, however, it does not specify if this vegetation is perennial or annual vegetation. A predominantly native ground layer is one where at least 50 percent of the

perennial vegetation in the ground layer is made up of native species (DEH 2006)[1]. The Biodiversity Assessment does not address this. Where plots completed in these areas to confirm that they did not have a vegetation integrity score of less than 17?

10) EnviroKey have not even provided a conclusion as to whether the project would have a significant impact on the Matters of National Environmental Significance (MNES), stating in their conclusion "*The Project **could** have a significant impact on Box-Gum Woodland as listed by the EPBC Act and Regent Honeyeater.*"
11) Is the lifespan of the mine going to remain at the predicted 16 years or will it be extended in the future? Once the initial mining area has been approved, this will make it far easier for the owner of the mine to have future modifications approved leading to cumulative impacts on threatened biodiversity in the future, which wouldn't have been considered in the initial EIS.
12) Avoidance measures such as the relocation of specific infrastructure based on the presence of ecological sensitivity has not been explained in detail in Section 6 of the Biodiversity Assessment. Whilst a traffic light system has been shown in the Map 54 and Map 55, no explanation of how this mapping was used to redesign around ecological sensitive areas has been provided. Therefore, it is not understood if Bowden's have made a conscious effort to avoid impacts to threatened biodiversity.

This EIS inadequately addresses the numerous impacts associate with the construction and operation of the mine. The short term economic gain associated with the very brief lifespan of the mine (only 16 years), would not compensate for the immeasurable and largely unknown impacts associated with this mine.

[1] DEH (2006) White Box - Yellow Box - Blakely's Red Gum Grassy Woodland and Derived Native Grassland – Nationally threatened species and ecological communities. Department of Environment and Heritage. EPBC Act Policy Statements.