The Bathurst Community Climate Action Network (BCCAN) is comprised of individuals and groups from the Central West region who want to promote action in response to the Climate Emergency by collaborating with all levels of government and other environmental organisations to protect our environment and biodiversity from the impact of unsustainable human activity. We have a number of concerns with the proposed Bowdens mine near Lue. These principally relate to the impact of the mine on water availability and quality in a period where climate forecasts suggest a much less predictable rainfall.

Our particular concerns are:

1. Does the life of Ulan and/or Moolarben coal mines allow for water to be provided during the life of the Bowdens mine? Mining data gave its mine life of Ulan as 12 years as of January 1, 2020. A modification to was approved to extend it 2 years beyond August 2031, i.e. to August 2033.
   At present, Moolarben has approval to 2038.
2. The tailings dam is planned to have a 56 metre high wall. In the extremes of climate that are unfolding, and driven by climate change, more intense droughts and rains are expected. A flooding event could see the dam wall overflow and the toxic tailings sent downstream towards the Mudgee water supply and Burrendong Dam. Has the latest NSW Government climate modelling been used?
3. Re mine water being sourced from Moolarben/Ulan mines. This water proposed to be brought onsite is highly problematic. Studies published in 2021 (source quoted below *), found that coal mine discharge water from Tahmoor Colliery, NSW, was saline, alkaline, with ecologically hazardous concentrations of several metals including aluminium, arsenic, nickel, and zinc. There may be variations compared to what is found in the Moolarben/Ulan water both of types of contaminants and to greater or lesser degrees; however, the seriousness of this addition to the ecological impact on the site is not adequately acknowledged and addressed in the proposal. For example, surface dust suppression with this water therefore introduces these contaminants. With additional waterings, drying out and wind, these will become increasingly concentrated on surfaces and in the soils over time. Does mine equipment traverse where the water is sprayed, carrying it elsewhere? Does the whole mine site have impervious drainage retention and perfect dust suppression so that none of this dust and/or mine water is able to escape from the site? Does the introduction of these contaminants mean that subsequent revegetation cannot thrive, or would it limit possible growth to a narrow range of plants, e.g. very hardy grasses? Will biota concentrate some of these contaminants, passing them down the food chain and causing problems with plant and animal health? Bearing in mind that the mine site will be there in perpetuity, what on-going checks and protection exist into the future?
4. Re the water pipeline proposed from Moolarben/Ulan mines. Although it is to be buried, it is 58 km long, and over that distance and over the life of the mine, it would be subject to a degree of chance of being broken or pierced. The damaging effects of a spill of mine waste water (see above), would be significant. What safeguards will be in place? Along its 58km length there would be the destruction of many trees, along with the habitat they provide to insects, birds, reptiles, koalas and the natural cooling effect they give to the land. Is this being taken into account? When the life of the mine is over, what will happen to the pipeline? Would it be dug up and removed, or left in situ? Would its inner lining be contaminated and be forever hazardous, due to the water content that perhaps may have adhered to the inside of the pipe? What is the working life of the pipeline?

5. Although the mine water has been said to be possibly be able to be used as stock water, the mine waste water should be fully analysed and these figures be freely available and interpreted so that all landowners can take this into account before deciding whether or not to allow the pipeline to cross their land.

In conclusion, we suggest that these points be submitted to the proponent for their response.

* https://researchdirect.westernsydney.edu.au/islandora/object/uws%3A59218 "14-month water quality investigation of coal mine discharge on two rivers in NSW, Australia: implications for environmental regulation."