

Submission

Thank you for the opportunity to comment on some of the issues concerning the Bowdens Silver Project. The following five paragraphs each explores areas of major concern that I have with the proposal. I have also included a few alternatives that bypass the Project completely.

In May 2012 ABC News reported that a mining company Kingsgate Consolidated whilst carrying out earthworks for its planned Bowdens Mine **damaged** Blackmans Gully, a water course that feeds into Lawson Creek and ultimately into the Cudgong River. In November 2014 ABC News reported that the Lue community was concerned that Kingsgate Consolidated had not submitted an EIS for the proposed development. Silver Mines Limited has taken control through the Bowdens Silver Project; an EIS has been submitted. The Company's goal is "to provide exceptional returns to shareholders...." The list of top 50 mid-tier miners with a market capitalisation of less than \$5 billion at 30 June 18 does not include Silver Mines Limited. Its current share price of \$AU 0.1625 is typical of a speculative mining company. It is a concern that Silver Mines Limited, if approval to mine and process is granted, may **sell** the Bowdens Silver Project to another entity which may not adhere to the conditions attached to the approval, and that it does not have the **expertise and experience** to operating a mine and its associated facilities.

A quick calculation of the value of the 66.3 million ounces of silver + 130,000 tonnes of zinc + 95,000 tonnes lead, given in the EIS, shows an amount in excess of \$AU2,000 million for an initial capital investment value of \$246.55 million. Over the 23 year life of the Project the net economic benefits, as stated in Table ES-5, include a **net economic benefit to NSW of between \$44 million - \$146 million**, and nationally of \$89 million - \$192 million. Such predicted positive economic benefits are probably overstated, although the stated intention of Bowdens Silver Project to source goods and services locally is to be commended. On the other hand, in **2016** the Mid-Western Region **earned \$132 million from 650,000 visitors**. Over the anticipated 23 year life of the Project, tourism alone could contribute \$3,000 million to the Mid-Western's gross regional product, **a larger amount than that from the whole of the proposed mining development**.

The Mid-Western Region supported **10,095 jobs** according to its 2018 Economic and Business Profile. The planned Bowdens Silver Project that has as one of its objectives to be a stimulus for Mudgee/Rylstone/Kandos/local economies, predicts that there would be between 73 – 129 net direct FTE jobs, and 74 – 131 net indirect FTE jobs. Such predictions are often exaggerated. It is likely that some of these positions would be taken by **FIFO workers** who do not contribute significantly to local economies, and nothing to local volunteer organisations such as RFS, Emergency Services, and sporting clubs ie to the social fabric of the community. The predicted positive economic benefits are probably overstated. An **alternative employment benefit** to the region would be obtained if it became more active in the **Central West Orana Renewable Energy Zone**. Through NSW government promotion this REZ plan to deliver 3 GW of firmed renewable energy has received 113 registrations of interest totalling 27 GW, valued at \$38 billion. For example, the Beryl Solar Farm 5km west of Gulgong has been operating commercially since

June 2019, selling the electricity generated to Sydney Metro; the nearby Gulgong Solar Farm is in the planning phase. **Such activity has the potential to create many more lasting jobs than the proposed Bowdens Silver Project.**

There has been a significant increase in **land-clearing** in NSW under new biodiversity and conservation laws that were implemented in late 2017 by the NSW government. The Natural Resources Commission reported that fauna and flora in nine out of 11 regions was now at higher risk due to thinning of native vegetation for pasture expansion. There is **increased biodiversity loss**. The Nature Conservation Council of NSW is alarmed because land clearing is a key threat pushing most of the state's **threatened species towards extinction**. The proposed clearing of 382ha of native vegetation increases the likelihood of some species becoming extinct. For example, the conservation status in NSW of **Box-Gum Woodland** growing in the proposed development, 182ha to be cleared, is that of an **endangered ecological community**; its Commonwealth status is **critically endangered**. Such plant communities have a high diversity of plant species along with mammal, bird, reptile, frog and invertebrate species. They are important for insectivorous and nectar-feeding birds and mammals, and contribute to productive farming systems (stock shelter, seed sources, water-table and salinity control, resident fauna can aid in insect control on grazing properties). Apiarists locate their hives in these woodlands. The **threatened species** in the proposed development area include Ausfeld's wattle (limited distribution, conservation status in NSW is **vulnerable**), Koala (**population has decreased by two-thirds in less than 20 years so the species will be extinct in the wild over the life of the Project**), the Squirrel Glider (listed as **vulnerable** in NSW, main threat facing them is the **fragmentation and degradation** of their habitat), the Regent Honeyeater (classified by the Environment Protection and Biodiversity Conservation Act 1999 nationally as **critically endangered** with a total known population of 350 individuals). Since the listed fauna and flora are heading towards extinction, everything must be done to maintain the **extant** plant communities and animal habitats. Old growth woodland has hollows for birds and mammals which will not be the case with revegetation in the proposed biodiversity off-sets, since a long period of **time** is needed for its growth. Revegetation using species consistent with the existing vegetation communities would result in simplified ecosystems that are incompatible with maintaining and promoting biodiversity. Revegetated coal mining sites in the Hunter Valley are evidence of such simplified woodlands. A mining development should not accelerate the extinction of endemic fauna and flora.

ABC Rural posted on 20 June 2019 that the tailings dam collapse at Brazil's Brumadinho iron ore mine led to self audits of the risks of such collapse by major Australian mining companies Rio Tinto, BHP and Glencore. The audits classified a number of tailings dams within four states and territories as having the highest risk to public safety. The Bowdens Silver Project will construct a tailings storage facility (TSF), ie a **tailings dam**, which has a surface area of 103ha, capable of storing 30 million tonnes of processed rock slurry and the chemicals used including sodium cyanide. Since Silver Mines Limited is neither a top- nor mid-tier mining company it probably does not have the knowledge nor experience of managing the day-to-day operations of a functional mine, the extraction of minerals

from ores, the separation processes, and the waste generated. A tailings dam failure may not injure/kill anyone but it could have a significant environmental impact. For example, the Burton coal mine SW of Mackay contaminated surrounding land after its tailings dam failed. According to ABC News this incident in 2007 was attributed to mining company Thiess inadequately monitoring the dam, as well as failing to analyse the potential consequences. Some of the sodium cyanide used to separate silver from its ore will be in the rock/chemical slurry that is stored in the tailings dam. Since the TSF is proposed to be a self-draining landform some cyanide could leach from the tailings dam and end up in water courses that drain into the Cudgegong River; aquatic biota are much more susceptible to cyanide toxicity than terrestrial biota. This is another reason for a very cautious approach to the proposed Bowdens Silver Project.

The reasons given above show that I do not support the proposed Bowdens Silver Mine. We need to become more considered of our impact upon our environment, given that it is the only one we have.

Regards,

Aivars Rubenis.