

Submission Cover Sheet

Fingerboards Mineral Sands Project Inquiry and Advisory
Committee - EES

843

Request to be heard?: No

Full Name: Gordon Sparks

Organisation:

Affected property:

Attachment 1:

Attachment 2:

Attachment 3:

Comments: See attached submission

Submission for the Mineral Sands Mine at the Fingerboards proposed by Kalbar Operations Ltd

Thank you for the opportunity to express my objections to the above mine.

*Please note that when I refer to 'Kalbar' I am referring to Kalbar Operations Ltd which is the latest name for the original Kalbar Resources Ltd. When I refer to 'the Community' I mean both the local and surrounding communities and include the people of Bairnsdale and the communities around Bairnsdale as these will be the people most impacted by the mine. The 'local community' are those who live within 10 kms of the Fingerboards intersection and includes Lindenow.

I personally support the mining industry as long as the assets, needs and values of the Community near which a mine is located are clearly identified, the risks to both the environment and the Community honestly and fairly assessed and the resource protected from exploitation when the risks are too great. Many in our Community are worried that the State Labor Government's priority will be to sacrifice the environment of this region and the livelihoods, wellbeing and amenity of our Community for the sake of the comparatively few jobs, if any, the proposed mine will create once Kalbar's exaggerated figures are reduced to a more realistic picture of the actual jobs that will be available, once the short term construction jobs and part time work are viewed in perspective, and once the number of those at present working in the Agriculture and Horticulture industries are accounted for when they are lost due to adverse impacts of the mine on these industries. During the time since Kalbar first apprised the Community about the mine, the number of jobs it claimed would be created by the mine has jumped dramatically as people's concerns about the project gradually turned into determined opposition.

I realise that the Victorian economy has been badly impacted by the Covid crisis and the State Government is under pressure to find and endorse projects which will provide jobs and stimulate the economy. But in the case of the Fingerboards' open cut mine, the proposed location on an extended plateau of land almost directly above the Mitchell River and opposite vegetable crops, will be too risky for the sustainability of the existing Horticulture industry which extends the length of the Lindenow Flood Plain in the Lindenow Valley. I notice that in the map of the Horticulture area Kalbar has indicated the areas where vegetables are grown in the Lindenow Valley as small blocks shaded green whereas vegetables are grown over the entire area of the Valley not just in the small blocks of land as shown on Kalbar's map. This is very misleading to those who haven't seen this vast expanse of vegetables with their own eyes. These crops are downstream from the mine site and will be exposed to the risk of dust blown by the prevailing south westerly winds.

In the EES Kalbar describes the dust created by the mine operations as having a 'neutral' impact, however the depth of the mine is deeper than most other mineral sands mines- up to almost 50 metres deep where the rare earth metals are found, some of which are radioactive or harmful to human health. While deep in the earth they are harmless but once exposed, brought to the surface and then crushed they can be harmful to people's health. Tiny invisible particles of Silica or other potentially harmful substances can become airborne in the dust and be blown over the vegetables, over people's homes, dams and the Mitchell River which provides drinking, household and water for commercial use for the whole of Bairnsdale and surrounding districts.

There is also the risk of pollutants being washed into the river water which irrigates the crops. Even if the dust is 'neutral', excessive deposition of dust on vegetables like cauliflowers will damage their flowerets and be trapped inside when the leaves enclose them. The dust will settle on people's roofs and will pollute their tank water, dams, pastures and even the Woodglen water storage which is about 3.6 kilometres from the mine site and as I mentioned above, provides commercial, household and drinking water for every residence in Bairnsdale and the surrounding suburbs.

I have attended almost every Community meeting organised by Kalbar and although they have maintained that dust from the mine will not be an issue because it won't travel far enough to adversely impact the vegetables (the closest crops are only 500 metres across the river from the mine site), or people's residences, they have never disclosed what exactly is in the ore body although this question has been asked of them on several occasions. If they don't know the answer they should tell the Community this, otherwise it becomes just another of the many evasions of the proponent to provide honest, open and transparent information, that has frustrated and angered Community members. Kalbar has acknowledged that some of the minerals mined have radioactive properties including the rare earth metals but continue to describe the dust as being 'neutral' (see the EES) and having 'nuisance' value only. Yet one property owner whose land they wanted was told that he wouldn't be able to stay in his home because 'there would be too much dust'. Ian Ross, Landcare Manager at Kanagulk near the Douglas Mineral Sands Mine, told the Community at a meeting in Bairnsdale to which he was invited, that the people there had huge problems with dust from Iluka's Douglas Mine and this appears to be a common message from many communities impacted by dust from a nearby open cut mineral sands mine.

Kalbar appears to accept that dust will be an issue and intends to use the accepted method of suppressing the dust with water. Finding the quantity of water it requires to do this successfully has probably become the biggest challenge for the proponent. Sustainable long term food production and a secure, reliable, water supply are essential for our region to thrive. To survive the next 15-20 years' duration of the mine and weather future droughts, impacts of climate change and the predicted global warming, competing with a water hungry mine may become too difficult. It is highly probable that the 3Gl of water for suppressing dust will only be sufficient for settling the dust rising from the trucks as they travel on the roads. More will be needed for settling the dust from mine operation work and processing. Kalbar is at the moment in the process of applying for more water from the Mitchell River and although I do not know all the details of their application I believe that their determination to access more than a fair share of the water available to meet the needs of the existing long term businesses that have been contributing to the regional and State economies for years, puts our region's water security at too great a risk. The 3 Gl they have already claimed they need every year is more than the volume of water in the town's drinking water supply in the Woodglen water storage approximately 3.6 kms from the mine site.

Kalbar sets out in the EES a plan to build 19 dams on the three steep gullies to capture run off water from the project area that runs either into the Mitchell or Perry River systems. It has designed the dams such that they have a dual purpose and also act as a mitigation measure to prevent the risk of sediment flowing into the Mitchell River. This plan is at best optimistic, as heavy rain over several days or the impact of an East Coast Low could cause a breach or damage to one or all of the dam walls allowing sediment to flow freely into the Mitchell River. The State Government has funded grants of thousands of dollars to reduce the impacts of erosion from properties adjacent to a waterway that flows into the Mitchell, ultimately to limit the amount of sediment in the river and Lake System. Moreover it is the policy of the East Gippsland CMA and Southern Rural Water that

permission for a gully dam will not be given if the dam stops water flowing into a neighbouring property owner's dam. But in fact the 19 dams Kalbar has outlined in the EES will impact on the dams of several neighbours which will be a huge problem for them in prolonged dry spells or drought. Like most of its strategies designed to capture sufficient water for the operation of the mine, Kalbar has not anticipated and provided rectification methods for unexpected man made or natural events.

East Coast Low events can be accompanied by gale force gusts of wind and three days or more of heavy rain. Kalbar believes that its allowance for a 'one in a hundred year' event guarantee will prevent any such disasters but in 2007 there were five successive East Coast Lows and dam walls had to withstand the repeated impacts. The long term residents here who are second and third generation farmers have the knowledge and experience of many years of battling the unpredictable weather patterns in this area. The weather can be different to the north, south, east and west of the Fingerboards - the greatest differences being between Lindenow and the Fingerboards and Fernbank to the west. It can be pouring with rain from Lindenow to roughly the Fingerboards and bone dry west from the Fingerboards to the Fernbank township, or vice versa.

There will also be a 90 hectare tailings dam on raised ground above the Mitchell and Perry rivers. The dam will contain mine tailings. Kalbar intends to add a flocculant to treat the tailings. Flocculants contain chemicals but Kalbar has not disclosed the warnings on the labels of the flocculant which is believed to be harmful to aquatic species in the river or lakes. Once again Kalbar's guarantee that there is only a one chance in a hundred that a flood will damage the dam and cause tailings water and chemicals to enter the Perry River System is not reassuring.

The Traditional Owners of the land on which the mine project is to be developed are the Gunaikurnai people. They have a deep spiritual connection and responsibility to care for country. The proposed mining operation will disturb and hurt the cultural connection of the Traditional Owners to the land, air and water that is part of the development. Significant Gunaikurnai Country artefacts and heritage deposits dating back thousands of years have been found in the area. In July 2020 a rock shelter was found in the Mitchell River National Park to have archaeological significance. Previously the shelter had not been recognised as having any cultural significance, but this find is exciting because it raises the possibility that there are far more significant discoveries to be made and identified as heritage deposits dating back many years. Less than 1% of the National Park and surrounding area has been surveyed for cultural sites making it more than likely that the land Kalbar proposes to mine still contains many artefacts which the mining will destroy forever. Kalbar has included in the EES a measure to prevent this from happening by checking for artefacts. However once construction work for the mine begins followed by excavation of the mine pit it is highly likely that the workers and their supervisors will be reluctant to spend the time required to identify and collect possible artefacts which will then be lost forever.

Recently GLaWAC held a meeting with Gunaikurnai People to discuss their stance on Kalbar's proposed mine and 81% of those in attendance voted that they were opposed to the project and will be lodging a submission. (Webinar https://youtu.be/dSbaURXc4_0) They also believe that a Gunaikurnai representative should have been on the Technical Reference reference Panel.

It is important when evaluating the risks and benefits of Kalbar's mineral sands mine to remember that if approved, the 20 year time frame will encompass many significant changes - technological, societal, economic, meteorological and political. Advances in technology, for example, could lead

to a reduction in the number of mine workers with the introduction of robots, further advances in automation and remote controlled machinery; impacts of global warming and climate change could create huge problems in the future for the safety of the environment and community.

Noise from the 24/7 mining operations for 15 or more years will not be well tolerated by the residents. Strong winds will negate the effectiveness of Kalbar's noise mitigation measures, carrying noise pollution further than the proponent anticipates because of the inadequate wind measurements from their meteorological station placed in a known wind shadow area. The measurements are also incomplete due to somehow missing readings for several months. Kalbar averaged the remaining measurements which hasn't provided accurate data used in their modelling to determine the real strength of strong wind gusts which can carry the noise (and dust) much further than their modelling indicates

. When winds are strong, the noise of trains over 10 kilometres away are audible enough to be annoying. But train noise passes by quickly unlike the continual noise of the scrapers and bulldozers which will be constant and persistent and stressful. If the mine is approved, once mining begins the complaints about noise will fall on deaf ears as has happened to other communities living near a mine.

Sound level, though, is not the only important element to consider. This is because, even at low volume, a sound may be annoying due to the characteristic of the noise such as pitch, duration, impulsiveness or how frequently it occurs. Noise at night has a more intrusive impact due to the cessation of daily activities and lack of competition from other sources of noise.

When Bon accord Ingram built their big dam for off river water storage I could hear the noise, carried by the south westerly winds, of the bulldozers and machinery from my home over 15 kilometres away. It was loud enough for me to find it disturbing and stressful. The noise went from early in the morning to dusk. Had it continued during the night I would not have been able to sleep. Although Kalbar says that trees and vegetation will make effective noise barriers, it won't be feasible to plant the trees and vegetation in enough time to grow and establish a noise protection screen for their 'sensitive receptors.' For a vegetation buffer to be effective as a noise barrier, dense foliage or under storey must be close to the ground, like a very dense wide hedge and must also be planted as close to the noise source as possible. (www.fs.usda.gov) 'Buffers for noise control.' Similarly the use of earth bunds which they suggest to diminish the noise will only be effective if located as close to the source of noise as possible and at eye level with the receptor. This will not be altogether possible in the case of the earth bunds Kalbar refers to and although the bunds may mitigate a small amount of noise, they will not be an effective noise barrier.

The residents in the proximity of the processing plant or the mine site should receive reasonable and equitable outcomes even if that means that Kalbar should provide sound proofing or double glazing of bed room windows rather than tell them to close their windows or move to another part of the house, or not go outside if the noise prevents them from sleeping. If that doesn't work Kalbar suggests that they might move to another area to live. There is nothing equitable about this solution. The mine is for the company's profit not for the monetary benefit of the residents. Double glazed windows comprise two panes of glass separated by a gap. The noise reduction through the window is controlled by the thickness of the glass, the width of the air gap, and the gasses, if any, in that gap. The use of thicker glazing and a wider gap, particularly if forming a vacuum, will increase the efficiency. This is a straight forward and reasonable mitigation measure to expect of the proponent. Moving away from the issue of noise there are also a variety of other issues at stake. Kalbar claims in the EES that it is proud to be a provider of local jobs. In its webinar held for the community

immediately before the release of the EES the previous CEO Victor Hugo stated that 85% of the mine's workforce would be sourced from East Gippsland. This contradicts its article in a mining magazine that Kalbar saw itself as taking on the role of the now defunct Hazelwood Mine with the strong implication that the unemployed miners in that region who are already trained would be given jobs in the Fingerboards Mine. This would probably be regarded as an inducement for the State Government which is very concerned about the unemployed miners and timber workers in the Latrobe Valley, to approve the project. If this is the case then most of the of the workers would then be living close enough to commute home after their shifts, so their wages will be spent outside East Gippsland. There will also be little benefit to accommodation or other Service providers. Yet as they work in the East Gippsland region they will still be dependent on local medical clinics and the East Gippsland Base Hospital. There is a shortage of doctors in the area and some clinics won't accept new patients so injuries to mine staff will create pressure on our medical services. If 85% of the workers are local they won't require accommodation so there will be no stimulus to the rental market. If the employees come from outside the area, or are brought in by contractors, they may require accommodation and as the rental market is already tight, that will cause rental prices to increase which will make it difficult for existing renters especially during the Covid crisis.

There is growing stress, frustration anger and depression associated with the possibility of Kalbar's open cut mine in such a risky location. Many community members who have respiratory problems, asthma and other lung conditions are concerned about the health implications from the risk of harmful pollutants in the airborne dust or in the water, other who are sick, elderly, are shift workers or who have young children are worried that they will have to move elsewhere because of the noise. Local people living near the proposed mine are frightened that their homes will lose 30% of their real value (real estate agents' estimates). The direct stakeholders who do not want to hand over part of their land to Kalbar for its project are besides themselves with the worst sort of stress imaginable. Without exception these property owners have spent all their lives building up their farm businesses to make them sustainable and viable. Any saving they had have been spent to restore their farms and stock numbers after the 2014 fires. They have struggled through one of the worst droughts on record and now they are in the position to recoup those past losses Kalbar is prepared to take what they want of these farmers' land in a compulsory acquisition. This will cost their children the opportunity to enjoy the benefits of taking over the farm business from their parents when they retire.

The very real risk of unmitigated damage to the physical environment, to the wellbeing and amenity of the community, to the incomes of many Horticulture and Agricultural businesses, to the State and regional economies (especially if the proponent leaves behind a bill for rehabilitation to be paid by the ratepayers) and the reputation of this area as a natural, beautiful place to visit or to live in is at stake and I would hope that the Government will not be influenced by Covid impacts on the Victorian economy or by political aspirations to approve a project so risky and inequitable to a community in which so few stakeholders will benefit while the rest shoulder the burden of so many losses.

Gordon Sparks