Submission Cover Sheet

Fingerboards Mineral Sands Project Inquiry and Advisory Committee - EES

Request to be heard?: Yes

Full Name:	Kimberley Nightingale
Organisation:	
Affected property:	
Attachment 1:	Kim_Nightingale_
Attachment 2:	Kim_Nightingale_
Attachment 3:	
Comments:	See attached submission



Dear Inquiry and Advisory Committee members,

I am writing this submission about the EES and related

documents/attachments/appendix's for the Fingerboards Mineral Sands Mine project to inform you that I strongly oppose the mine for reasons outlined below.

As a resident of a nearby town to the proposed mine site, I have strong concerns over:

- Close proximity of the mine to the Mitchell River and Gippsland 'food bowl'.
- The massive size of the proposed project site and exploratory licensee application boundaries.
- The compulsory acquisition of land outside this area and alterations to landscape, including the visual and biodiversity in the immediate and surrounding areas.
- Sleep is an essential part to human health. Noise at the site would exceed the criteria at 9 receptor sites overnight. Science shows significant long term health impacts of sleep disruption and noise pollution to human health and this MUST not be underestimated.
- I have concerns over contamination from dust and particulates into surface and underground waterways, adding further strain on the ecosystem: contamination to the food chain, food crops, insects and food sources for animals, birds and aquatic life, in addition to long term and short term impacts on human health.

The EES and supporting documents have contradictory information presented. In one section it talks about negligible impact from dust contamination, yet says that there will be significant differences in amount of dust produced into the environment during the mine and after rehabilitation of the project site. If it is a significant difference then there is a real and perceivable impact of dust contamination of adjacent and nearby communities, food produce, surface water and national parks.

Air pollution and other contaminants would affect people's health, especially those with respiratory issues. Wind currents in the area have identified that dust contamination is highly likely.

Assuming that mitigating actions by the mines to stop dust contamination of nearby properties and water are always adhered to which is unlikely given the history of many mines - it will not completely stop contamination of nearby towns, waterways and food from dust and other airborne particles etc. In addition the mine is in close proximity to the Mitchell River Valley vegetable industry that employs up to 2,000 people. The risk of contamination to food and grazing land is not worth any perceived payoff of mining operations.

- Impact of 24/7 mine operation regarding noise and lighting effects on nearby residence health and nocturnal wildlife. National parks exist nearby and future plans for the mine site may impact on these areas. As highlighted in the report this location is "classified as an intrinsically dark landscape".
- I am concerned about biodiversity and the loss of endangered bird, flora and aquatic life identified in the report. Areas of significant value have been identified of being at high risk. Furthermore "diverse flora and fauna communities are present, many of which are absent from, or rare in, the rest of Victoria" as noted in the report highlighting the significant value that would be lost to the region.
- Presence of heavy metals, radioactive and other cancer causing substances present in the dust.
- I have concerns that competing agricultural and horticultural industries already present in the community as well as potential investment and East Gippsland reputation as a 'food bowl' lost. This industry is a huge resource to our community and has far less impact to the health and wellbeing of the area than a proposed mine. The \$155M/year Mitchell River Valley vegetable industry which is as close as 500m downwind from the mine. Impact has been noted in the EES report regarding operational impacts and potential contamination would be highly likely. Recent investment opportunities have not been mentioned in the report, for example as advertised on Woolworths website, "Woolworths organic growth fund" has been established in partnership with heritage bank to "invest in organic farming projects in Australia"...offering "up to \$30 million over a five year period."
- EES proposes potential economic gain from the mine for the area. I would like to know what the proposed net economic gain is after deductions are made for the loss of economic income generated by the 19 farms that would be given compensation due to mine impact in addition to lost income from tourism to the area and other recreation businesses' etc affected.
- I have concerns about Loss of socioeconomic value, community lifestyle and landscape. The visual impact in the area, especially given the close proximity to Mitchel River National Park and Den of Nargun as well as dust fallout and reduced area quality to surrounding tourist and natural areas such as the Saplings Morass Flora and Fauna

Reserve, Providence Ponds Flora and Fauna Reserve, Fernbank, which are all is close proximity to the proposed mine site and mine exploratory boundaries.

- Loss of tourism to and surrounding areas and impact on community recreation and views.
- How the terrain will affect the area post mine rehabilitation due to changes in soil etc composition. The risk of erosion and loss of viable land for other uses.
- Loss of Biodiversity, endangered species and habitat. I have strong concerns over impact on aquatic fauna and habitat. The testing done was severely inadequate. As highlighted in chapter 8, especially section 8.2.2.3 for testing for aquatic life species, where the area size tested and duration of survey were too small. Testing one month of a year is inconclusive especially when fish species are seasonal. Impact of dust contamination, water seepage and runoff could kill the food source for fish which will have significant and widespread impact on the entire ecosystem.
- I have strong concerns of water contamination and impact on surface and ground water levels, volume and quality.

The Mitchell River is a vital source of the Gippsland lakes system. It is also a major fish environment right down into the Gippsland lakes. Damage to this water system has wide ranging implications to health of humans, fish and other aquatic life, tourism industry and community lifestyle.

As highlighted in the report water levels are expected to reduce over coming years due to climate change, hence the mine has planned for transition towards a heavier reliance on groundwater in later years of the project to compensate for this. Compared to agricultural industries the amount of water that would be used from river/water systems is excessive. Thus earlier and tighter restrictions on users reliant on water from the Mitchell River (such as the horticulture industry) would be highly likely.

Furthermore reduced water levels and flow would strongly impact the entire river system right into the Gippsland Lakes impacting towns downstream from the mine site. The fact that this has been recognized by the mine indicates that water quality and ecosystem would be directly impacted by mine operations.

- Water runoff from undisturbed areas of the site demonstrates the likelihood of contamination of our waterways as nature would distribute the dust from the open cut mine over these areas; therefore the risk to the Mitchell River and connecting waterways in my view is unacceptable.
- Greenhouse gas was discussed in relation to effects on climate, however data on bushfire and natural disasters was lacking.
- On surveys for cultural heritage, and vegetation findings showed recent bush fire activity in and around the project area. This is of particular concern. Proper assessment of bushfire risk and Environmental impacts of a natural disaster on the mine and its consequences are lacking from the report and need appropriate investigation. It needs to include the environmental, social, economic and health costs to the community should the mine be exposed to or have a bushfire take hold in the mine.

Recent bush fires demonstrated that water shortage issues where a real problem in fighting the fires. Homes, properties and lives were under threat due to issues with CFA having access to sufficient water.

The probability of a mine located in this proposed site is likely. Hence if this area - and therefore the mine - were to be under threat from bushfire, resources would likely be diverted away from other community and smaller businesses to protect the mine, due to the impact a mine fire could have on the immediate and extended region.

According to the EES to reduce dust spread water is used to help settle it (Dust suppression). Bushfires generate extreme heat and unusual wind patterns. Hence assuming mitigating factors could be utilized, a huge amount of water would be diverted from the Mitchell River, Perry River etc, groundwater and dams to defend the mine. This would place an enormous strain on the water system and the community potentially at the expense of others in the area. Furthermore, water used out of undisturbed/rehabilitated areas and untreated dams on the mine property could contaminate the site and nearby land as well as water currents via runoff from the sight and straight into our waterways. What levels of environmental and human exposure to heavy metals and other contaminants could be produced in the event of a bushfire? And how much more would this be if the fire took hold in the mine?

There are people within this region that have lived through bushfires and understand the nature of them; what investigation has been done into climatic changes and wind patterns in the site area when a bushfire is present?

Though a different mine type, the Hazelwood mine fires illustrate the significant ongoing impact on the environment, health of local community, businesses and other socioeconomic factors.

It is unacceptable to consider putting a mine so close to Mitchell River, in an area previously exposed to bushfires and in such close proximity to the region's major food growing areas.

 I am very concerned over the lack of up to date scientific information on the health effects on humans and the environment from heavy metals, especially those that were shown to be over the acceptable limits at certain times during the year. Heavy metals are accumulative in the system; this needs to be taken into account when assessing the potential health effects of this type of mine. Any additional levels of heavy metals and other contaminants introduced into the environment –which is already under stain – would have real and significant health impacts to humans flora, animal, insect and aquatic life.

Some heavy metals need only low levels of exposure to impact health, especially within the young and in those with nutritional deficiencies. The proposal contains insufficient information on the health impacts of the different types of heavy metals. The EES, in my view, should encompass up to date studies instead of relying on old data about acceptable limits. I am concerned that people in neighbouring towns would be exposed increased burdens of heavy metals through dust exposure throughout the different vectors (rail, freight, wind, water contamination etc).

- Similar concerns about community and my exposure to radiation to via the transportation and freight of waste and mine products in towns. Even if it is within accepted limits, this is still an added exposure route to already existing methods, which residents did not move to this region for.
- In addition to earlier made point, I am concerned about the impact of the project on groundwater and its dependent ecosystems. The risk of seepage from the mine site and the possible effects on salinity and plant growth in the immediate and surrounding areas that these water systems connect into is concerning. In particular heavy metals are accumulative they do not dissipate in the system. Adding any extra burden to the ecosystem is unacceptable. Levels in the documents were only for normal conditions not in events of extreme weather conditions and natural disasters.
- Rehabilitation would impact terrain and landscape and post mine land use opportunities. Mine companies do not have a good record with spending sufficient time and money on this part of the project. Given the current economic climate and the mines primary sale of goods to be international export, what guarantees does the community have that rehabilitation would be done to a high standard?

There is often a lack of accountability for companies in and around this area. What are the mitigating proposed processes if the company goes bust? What accountability is there in the event the mine operators fail to mitigate damage at any point in the proposed operations of the mine?

- In regards to rehabilitation of the site I have concerns over potential contamination of soil/land post mining and the long-term health implications of people, animals and vegetation that inhabit that land. This must be properly assessed and valued.
- I have concerns over community consultation. The amount of time allocated for submission and public consultation has been woefully inadequate. It has not given the public sufficient time to be made aware of the public display process and properly read the EES and supporting document – which is a massive document – nor is it sufficient time to formulate appropriate community representation via submissions. The amount of time given for proper community consultation is even more inadequate given the current Covid

pandemic. 40 day for public consultation and submission process is unrealistic, why wasn't a more reasonable timeframe given?

- As a community member I do not want any damage done when there is no REAL value produced by placing a mine in this area. There are other established and potential industries that have less risk of catastrophic harm, which produce ADDED and REAL value to this area without exploiting the region.
- I value the health of our community and environment over any short term financial gains. I value and appreciate the health of our waterways and the reputation this region has developed as a 'food bowl'

Thank you From Kimberley Nightingale