Submission Cover Sheet

Fingerboards Mineral Sands Project Inquiry and Advisory Committee - EES

896

Request to be heard?: Yes

Full Name: John Hine

Organisation:

Affected property: [redacted] Bairnsdale 3875

Attachment 1:

Attachment 2:

Attachment 3:

Comments: See attached submission

I am John Hine, vegetable grower on the Lindenow Flats/Mitchell River and I am extremely concerned with Kalbar's proposal to establish a Mineral Sands Mine five hundred meters above my farm on the plateau.

Our farm has Quality Assurance SQF 2000 as our standard for supplying both fresh and supermarket outlets.

The lines we grow include broccoli, cauliflower and sweetcorn as well as Lucerne. We also run a small beef herd as well as operating a trucking company with one B Double and three semi-trailers regularly transporting vegetables and general freight to Sydney and Melbourne.

We must be able to guarantee that the products we grow are free from contamination or we are at risk of losing our markets and contracts.

I have spent a large amount of time over the past six years learning about this type of mining. This included a five day trip to Western Australia and three days at Kanagulk at Iluka's mine in Western Victoria.

The seven or so Mineral Sands Mines that we were taken to in the Busselton area were not comparable to the Fingerboards site as they differed greatly in both terrain and soil structure. The land at Busselton was fairly flat in nature with the ore body much closer to the surface, between three and sixteen meters in depth.

Rehabilitation at Busselton was much easier because of the shallower nature of the excavations as well as the topsoil being of better quality and much deeper at around 500 mm.

I noted that in both of these areas the top wind speed was around 40 knots (70-75kph) which makes a massive difference to the amount of dust produced on site which cannot be adequately contained. With wind speeds of up to 100 kph at the Fingerboards when blowing from the north west (which is the prevailing wind during the summer months when temperatures are higher and dust is a greater problem due to drier soils), dust blowing on to the flats will be a greater problem than the dust issues seen in Western Australian mines.

Comparing the mine sizes in Western Australia to the proposed Fingerboards project with much larger areas disturbed, dust will be a major issue especially to vegetable producers like myself.

The rainfall in the West is similar to Glenaladale except that in the West they are not subject to East Coast Lows which can dump 200-300mm of rain over a 3 day period. The runoff from these rain events will not be able to be controlled even with Kalbar's proposed mitigation measures will result in serious erosion from the disturbed areas of their mine site leading to contamination of the Mitchell River and the Lakes system including the RAMSAR wetlands.

On page 2 of Kalbar's Horticultural Report, there is a claim made that dust will be washed from crops during irrigation suggesting that mine dust will not detract from the saleability or quality of produce. This is a totally misleading statement as crops regularly would not be watered within two weeks of harvest leaving plenty of time for dust accumulation to occur. If Kalbar is trying to suggest that crops should be watered to remove their dust immediately prior to harvest when such a watering is unnecessary for plant growth the mining company should be prepared to take responsibility for any fungal diseases such a s white blister or club

root which can occur within 24 hours of unnecessary watering making the crop unfit for market.

White blister on Broccoli head caused by unnecessary watering

White blister Spores on leaf which has the potential to further contaminate all brassica crops in the area

Unnecessary or overwatering can also cause such disease as Club Root which causes deformity of roots, wilting and stunting of plants making the crop unsaleable.

Wilting of plants and deformity of roots caused by Club Root

Because of the location of the proposed mine in relation to the Lindenow Valley and the Mitchell River with a drop of 90 meters from the plateau to the river, there will be turbulence created through wind movement. This turbulence will result in dust being dropped over the Valley both on to crops and into the river. As farmers rely on this water source for irrigation, ice production and washing vegetables as well as household and stock water, it is essential that the quality of this water is not compromised. This is something that Kalbar through its incomplete modelling and mitigation measures cannot guarantee. There is no room for compromise or risk taking with this issue as this water source is of too great an importance to the local economy and community.

Because of the difference in chemical composition of the dust which will be produced by the mine and the dust produced by normal farm practices, the comparison of the dust impact of the two dust sources is inappropriate. There are substances in the mine dust which if detected through quality testing will lead to condemning the crop whereas this is unlikely to occur with dust from normal agricultural activities.

Even though Kalbar states on page 33 of the Horticultural Impact Study that they "will cease certain activities likely to produce dust when real time monitoring indicates that trigger levels …have been reached…to avoid excessive dust emissions", these trigger levels or the certain activities remain undefined. There is nowhere in this document that suggests that these levels have been discussed with and predetermined by local farmers and as we can see from this document that both Kalbar and its consultants seem to be lacking in farming knowledge the making of such a statement and its practical application may be poles apart.

Kalbar having readily admitted that respiratory silica will be a problem and have included controls to **limit** emissions may be a satisfactory mitigation measure for their mine workers but it is causing concerns for the health and safety of farm workers from the point of view of the farm owners who have a responsibility to provide a safe work environment for their employees. As these particles are small enough to be invisible to the human eye and symptoms of silicosis may not develop for some years, control and identification is obviously not something the mining company will take immediate responsibility and this puts more responsibility on local farmers who employ workers in their paddocks.

Kalbar's contention that only 10% of local community members expressed concerns about dust on crops is deliberately under stating the issue. It has to be assumed that not all are fully conversant with quality assurance levels which have to be adhered to so many may not be aware of the risks. Rather it would have been far more relevant to have interviewed irrigation farmers to ascertain the real level of concern. As nine out of the twelve vegetable growers on the flats have expressed serious concerns about the negative impact of this proposed mine on their industry in a letter to Kalbar in 2019, this would have been a far more relevant and realistic figure to quote.

Misinformation is further perpetuated in the statement that cauliflowers would be the only crop that would be negatively impacted by dust but only if a number of factors align. Dust will certainly have a negative impact on baby leaf, broccoli, lettuce, spinach, cabbage and any crop which can be subject to damage from wind/sand blasting or which has the capacity to trap dust between leaves as it grows.

The claim that cauliflower curds are covered by leaves and therefore protected from dust is a reflection of ignorance on the part of the proponent and could be totally misleading to anyone not familiar with the growing of horticultural crops.

Typically development of cauliflower readily for harvest clearly showing that the curd is not protected by covering leaves.

Many of the farms in the Lindenow Valley rely heavily on the Latrobe Group of aquifers as well as the Mitchell River. Drawing of water from this aquifer for the mine will drop the water depth from its static level of 47 meters. During drought events due to lack of recharge this level has been known to drop below 34 meters which is close to the maximum that makes this water accessible for irrigation. Any further drop caused by the proposed mine drawing on this water will have a serious impact on the availability for vegetable production.

Economic data provide by Kalbar (which also includes production for Bruthen and Omeo) is also misleading grossly underestimating the value of production of the local Lindenow horticultural industry quoting figures that are lower than those that are accepted by the local producers, the local Member of Parliament and the Minister for Agriculture which is regularly recognized as over $150 million annually.

In terms of loyalty of employees staying in the agricultural industry there is a risk that this may not be the case. Where there is already an existing shortage of labour as demonstrated in the regular advertising for heavy transport drivers, there may be further competition for such skills and that agriculture may lose out unless of course if Kalbar use a contractor for their transport needs instead of local labour as is regularly promised.

To claim that the consumer has little concern for the source of their fresh produce and little knowledge of production measures is to be out of touch with reality. Consumers are becoming more aware of the source of the produce they consume and the environment in which it is grown. The image of the mining industry is, whether true or not, one of pollution and contamination. The conclusion reached would have to be that consumers would become more and more wary of buying produce grown near a Mineral Sands Mine. As one of Victoria's largest organic producers grows crops in the immediate vicinity of this proposed mine site, the repercussions on the industry will be severe and lasting. The local economy relies heavily on the horticultural production of the area with a 4 to 1 multiplier effect so any impact on this long term sustainability industry will have ramifications across the region.

The conclusion reached by the Horticultural Impact Assessment, *"that the greater majority of horticultural producers consulted through this study are supportive of the project as long as everything is done right .....and that these producers trust that the mine operator will need to abide by stringent environmental regulations"(p74)* flies in the face of the type of questions asked and comments made by producers at community and industry meetings.

The number of submissions expected to be submitted by horticultural producers in the area and the content of those submissions further throws into doubt yet another misconception being touted as the truth by the proponent and their consultants.

Our family farm has been operating since 1977 (43 years) and has grown in this time from 80 acres to 530 acres. It is a viable and developing operation with a turnover averaging over $5million for the last ten years. With the size of the property and the potential to support the next generation, both our children and grandchildren are motivated to continue this family operation. To enable this we have begun the succession planning process. The entire three generations of the family would be devastated if this proposed mine made our enterprise unviable.

There is absolutely no way that this Mineral Sands Mine Project can operate in such close proximity to the Lindenow Valley, the Mitchell River and its associated agricultural industries and infrastructures. Despite mitigation proposals and risk assessments done by the proponent, the two are simply not compatible.

John Hine.