

Submission Cover Sheet

Fingerboards Mineral Sands Project Inquiry and Advisory
Committee - EES

814

Request to be heard?: Yes

Full Name: Debbie Carruthers

Organisation:

Affected property:

Attachment 1: EES_Submission_C

Attachment 2:

Attachment 3:

Comments: Attached

Dear Inquiry and Advisory Committee members,

Re: Fingerboards Mineral Sands Project EES

For the reasons outlined below, I am writing this submission to express my strong opposition to the Fingerboards Mineral Sands Project. A number of questions follow for your consideration, to assist with forming your recommendation about this project.

1) Does this project have a social licence and why is that critically important?

It is strongly contended that social licence has not been acknowledged nor addressed in the EES documents because Kalbar failed to develop the necessary trust and build confidence with the community. A social licence is necessary as a pre-condition for the mine to operate.

Social licence is granted by the community, which is composed of a network of stakeholders that are either affected by the mine proposal or that can affect the mine's operation. Social licence occurs when trust and confidence have been developed.

Kalbar have not been open and transparent in their dealings with the community, for example claiming to be 100% Australian owned when they weren't (emails as evidence can be provided). Until recently, Kalbar Operations was 94% foreign controlled until they claimed a financial error of \$147 million was made (Mine-Free Glenaladale, 2014). This shows either financial incompetence or potential manipulation or both. What else can we expect to happen if the mine was to be approved? It is clear there is no trust with the company, a situation which has been exacerbated since the appointment of a fourth CEO in the 6 years of this project.

Importantly, because of the lack of social licence, it will make it very difficult or potentially impossible for any of the mitigation strategies which strongly rely on the importance of open communication and committee-driven solutions to any problems that might arise.

Directly impacted landholders who live within 3km of the boundary of the mine project were surveyed and 85% replied that they did not want the mine on or near their land, 5% were unsure and 10% were considered to be in favour of the mine. There is also a lot of compelling evidence on Mine-Free Glenaladale's website, Facebook page and in its submission to support the position that there is no social licence for this mine to proceed.

2) Can we rely on what is stated in the EES documents?

A Parliamentary Inquiry that reviewed the EES process in 2011 found it was flawed. Fifty major recommendations were made to overhaul it. Recommendation 6.8 was that ***'The Victorian environmental impact assessment legislation include penalties for the provision of false and misleading information'*** (Parliament of Victoria, 2011; p xxvi).

Following an Auditor-General's report in March 2017, it was noted that only administrative failings with the EES process had been implemented so there are still no penalties for providing false or misleading information (Victorian Auditor-General's Office, 2017).

The consultants undertaking technical studies in the EES were sourced and funded by Kalbar. There are no independent technical studies other than the three independent peer reviews that were organised by DELWP. The parameters for the work Kalbar's consultants undertook was under the direction of Kalbar. For example, there was only one air quality monitoring station required by the EPA which was placed in an area known by locals as being in a wind shadow. This was raised with Kalbar and their consultant from Katestone at a community meeting, questioning the validity of modelling outcomes because of the location of that monitoring station.

Coffey, a consultant used for many of the EES technical studies included this disclaimer with their EES reports: "***It is not possible to make a proper assessment of this report without a clear understanding of the terms of engagement under which the report has been prepared, including the scope of instructions and directions given to Coffey, and the assumptions made by the relevant Coffey consultants who prepared the report***" (Coffey, 2020; *Important Information about Your Coffey Report – Third Parties*). Is the Panel able to request those Terms and Conditions as I do not believe they have been provided to community members who asked for them?

The above provides only some examples of why Kalbar's EES documents cannot be relied upon. This should raise serious concerns that the full risks have not been properly considered. What therefore will the real impact be on the environment, public/animal health, social and economic consequences. Mitigation strategies must also be considered inadequate for the above reasons.

3) What are the implications of inconsistencies and flaws in the EES?

There are far too many flaws and inconsistencies in the EES documents to mention all of them here. These should be of concern to the Panel for a number of reasons including:

- If information and figures are different between various technical reports and the main report, what information are we meant to rely on? As an example, different figures are quoted for the size of land that will be disturbed, it's 1,350 hectares in RMCG's report (RMCG, 2020 p 14) and 1,192 hectares in the EES Summary Report (Kalbar, 2020; p 4)
- Are these errors a reflection of Kalbar's lack of attention to detail and how will these errors be manifested if the mining project is approved?
- What will be the environmental consequences if the proposed major engineering works fail given the close proximity of the mine project to major waterways, aquifers and where so many people live?

- Pages appear to have been substituted in documents such as in Appendix B of the Socio-economic Impact Assessment report (Coffey, 2020; p 1) where the Local Content Guidelines document doesn't match the same policy document on Kalbar's website; both were approved by Kalbar's Board on the same date. In the EES document 'within Australia' has been removed from the definition of local which appears in the Kalbar website version of the same date (Kalbar, 2020). So, what is Kalbar's definition of 'local' for recruitment and purchasing and how can you they the same effective date for two differently worded documents?

4) What will be in the dust and is it safe?

As the full analysis of the ore body has not been disclosed and it is not known what the laboratory was asked to analyse, there should be considerable concerns about the impact of dust on:

- human and animal health;
- on water stored (for all East Gippsland water users who aren't on water tanks) at the Woodglan Reservoir only 3.5km downwind;
- water tanks for residents living near the project;
- stock water for animals; and
- on pastures, soils and vegetable crops.

Kalbar have not reported on the toxicity of the ore body, so the full dangers have not been disclosed. Evidence of the chain of custody of the samples was not provided so the sample results must also be questioned. What will be the potential consequences from the dust as a result? It is critically important that the toxicity is fully understood because the consequences are too great (refer to the above list).

Given the nature of the materials being mined, in particular rare-earths, there are considerable risks of the take-up of heavy metals through the soils, into the plants, and then through the food chain. There are serious concerns that the real risks from radionuclides and rare-earth substances have not been fully assessed.

Dust travels a long way, so contamination and health risks are real concerns. The Government has a duty of care not to add to the cancer burden of the community.

5) What are the impacts on water and is this acceptable?

The impacts of the project in relation to its high water needs and the potential for contamination of water sources are major risks that could have catastrophic consequences if failure should occur.

A) High water usage from a source not confirmed

Over 3 billion litres of water (3GI) is being sought for the mine project annually for 15 to 20 years for processing and dust control. This shows how big a problem dust will be. What will the impact of this massive water consumption be on bores, aquifers and the Mitchell River? The source of that water is not resolved. Rio Tinto held the

licence before Kalbar and they estimated the amount of water required was in the order of 6GI so is Kalbar's estimate correct?

According to the horticulture industry's irrigation data, if that 3GI of water was redirected to the horticulture industry, 3 times more jobs could be created than the possible 193 jobs proposed by the mine. Consideration needs to be given to the best long-term use of this water which should be for safe food production.

Most of the water is proposed to be sourced from unallocated winter-fill licences from Southern Rural Water (SRW). The agriculture and horticulture industries have had applications for winter-fill licences with SRW for some time so why is it that when this mine project is being considered, that the release of 6 GI of water, which was meant to be reserved for the horticulture industry, is being considered for release now? With expansion plans pending for the horticulture industry, the need to resolve water security, and the importance of environmental flows these needs must be prioritised above the water needs for a mine. It is also vitally important that we keep the Mitchell River and Gippsland Lakes Ramsar site healthy with freshwater flows because the Gippsland Lakes wetlands are already under threat from a range of pollution sources. Some further questions follow:

- What assessment has been done of the reduced flow of the Mitchell River over the years and the further expected reduced flow over time due to climate change, also considering the need for water for environmental flows for the Gippsland Lakes?
- What impact will the mine's ability to extract water from the large bore field located outside the project boundary have on irrigators and farmers as the same aquifer is proposed to be used?
- As irrigators have experienced several seasons of full irrigation extraction restrictions from the Mitchell River due to reduced water flow, water security is a significant issue that impacts on the viability of the horticulture industry. What guarantee is there that the mine's heavy use of water will not impact on other users, what compensation will be provided if it does and how will that be done?
- What happens if the water needs for the mine are underestimated, how will this impact on other users? There are concerns that if water access becomes a problem for the mine, will the company reduce water used for dust suppression thereby increasing the risk of contamination from dust?
- What if the drought continues and there is no winter-fill in a given year or longer?
- What happens if the mine is approved and there isn't enough water from winter-fill and the bore field?
- There are plans for the expansion of the horticulture industry which has not been reported by RMCG. How is the horticulture industry's needs for more water to be met in the context of the mine's massive water requirements?

B) Water contamination risks

Kalbar claims that modelling predicted that the discharge from storm events of water coming in contact with mined areas from water management spillways will have a negligible effect on water quality of the river (Kalbar, 2020 Summary report; p 16) - this is irresponsible environmental management, no contaminated water should be permitted to leave the site and contaminate the rivers and Gippsland Lakes Ramsar wetlands. The risks of negative impacts on aquatic life and contaminating ground and surface water is high and this is unacceptable.

A bore field that is approximately 1,000 hectares is located outside the project boundary. There are grave concerns by farmers who have no access to other water sources other than from their aquifer that it will become contaminated, that there will be aquifer interference and that their ability to draw water will be impacted due to the high volumes of water the mine requires. Any impact on their access to clean water will have significant detrimental consequences to their farming businesses and livelihoods. Without water from the aquifer they have no farming business.

It is acknowledged by Kalbar that the shallow aquifers on the mine footprint will be destroyed. This will impact on access to water by other users. What are the risks of contamination of those aquifers?

Can the project operate safely in two Ramsar listed wetlands (Gippsland Lakes and Corner Inlet)?

C) Nineteen dams on creeks and gullies

The map showing the proposed 19 dams on creeks and gullies was not presented to the community for consultation. Some questions arise:

- Is it legally possible for a dam to be placed on a creek?
- How are these dams proposed to be decommissioned and has this been included in the rehabilitation bond?
- Why hasn't modelling been included of what could happen if there is a flooding event or if spillways fail?
- What is the calculation of the amount of water that will be captured from these dams and therefore will not be flowing in the Mitchell and Perry River systems and ultimately into the Gippsland Lakes for environmental flows and downstream use for horticulture/agriculture?
- How will monitoring occur so that water that is captured is returned to the river system as suggested and how will be the oversight of that be managed?

- What are the guarantees that none of the returned water will have any level of contamination and how will that be monitored?

There were problems experienced by bore users when tests were conducted on the bore field so if there were problems while testing the bores, this flags that we can expect major issues if full access to water was granted at the extraction rate required by the mine project. Given SRW has indicated in correspondence that interaction of the aquifers and the river is not well understood and that there is the potential for interaction between the aquifers and the river means that the impacts of access to water from the bore field is unknown. This could result in farmers not having access to bore water which for some, is the only source of water that they have. This is an unacceptably high risk.

6) Is the risk of the tailings dam failure a risk too big to take?

The tailings dam or tailings storage facility (TSF) as it is referred to in the EES has increased over time from 60 hectares to 90 hectares (nearly 1 square kilometre) with 20m high walls. There are a number of major concerns and risks about the TSF as follows:

- No plans have been specified in the EES for construction of the TSF and no disaster modelling has been provided. How can all the risks and potential consequences be assessed as low without any plans to evaluate those risks? The risks of failure must therefore be assessed as high without that information due to the high incidence of failures of these structures.
- The TSF will be located on a ridge above the Perry and Mitchell River catchments so failure will have an impact on ground and surface water and the Gippsland Lakes Ramsar wetlands.
- Kalbar's EES consultants have acknowledged there will be leaching and mounding which could impact on ground water.
- Chemical flocculants will be used on the tailings. Safety data sheets give warnings for their use near aquatic life.
- Disaster planning is for a 1:100-year rainfall event. As the area where the mining is proposed to occur is prone to heavy rainfall from east coast lows (in particular) the risk of a major disaster is highly probable.
- The soils in the area are dispersive with tunnel erosion an unresolved problem. There are severe risks of failure of the TSF that could have catastrophic consequences given the toxic materials contained in such a large structure that will be on unstable soil, potentially entering the rivers, aquifers and wetlands.
- Contamination of the aquifers and the Mitchell River, the source of irrigation water for the vegetable produce and farms is a foreseeable and unacceptable risk.

7) Is the massive destruction of biodiversity and cultural heritage acceptable?

A) Biodiversity loss

Over 13 square kilometres is proposed to be excavated so the scale of environmental and biodiversity loss is massive. Given the recent bushfires that resulted in such significant loss in biodiversity and habitat, it is unconscionable environmentally to permit further losses. The status of many species in our Region remains unknown, so it is vitally important that any unburnt areas remain undisturbed to aid species recovery and assist with re-colonisation.

The potential loss of over 800 mature trees is considered to be environmental vandalism and will have a major impact on:

- habitat and biodiversity loss including EPBC threatened species;
- future shelter for grazing animals;
- significantly changing the landscape (the consultant's photographs depicting the changes in the landscape do not reflect the massive loss of trees and woodlands); and
- loss of connection with the land, its topography and biodiversity values.

Were field surveys conducted on the 1,099 hectares of private land that is outside the mine project and being put forward in the EES for approval under the Draft Planning Scheme Amendment (Kalbar, 2020; p 3)? This area includes the proposed rail siding at Fernbank which is known to contain EPBC species.

B) Cultural Heritage

With the massive scale of excavation proposed down to at least 45m, it has been acknowledged by Kalbar that it will be impossible not to destroy unknown cultural heritage potentially on a large scale. The GunaiKurnai Land & Water Aboriginal Corporation states, 'The proposed mining operation will disturb and hurt the cultural connection of the Traditional Owners to the land, air and water.' This is priceless history that cannot be saved; given the use of bulldozers and earthmoving equipment it will be impossible not to destroy artefacts and ancient history. It is totally unacceptable for this mining proposal to proceed given the expected losses that will occur and the pain that will be inflicted.

8) Is it safe for the many residents who live in the buffer zone?

Kalbar failed to identify 60% of the sensitive receptors. Within 3km of the project boundary there are over 81 residences and one primary school; Kalbar identified 49 residences and no school. Therefore, the impact of the mine in terms of dust, noise, vibration and lights was not considered on all sensitive receptors and these receptors were not part of their modelling. As a result of not identifying all sensitive receptors and the impact on all sensitive receptors, EES scoping requirements have not been met. This is another example of a major flaw of the EES which has understated and not evaluated the impact of the mine on all people living nearby. What will be the consequences of this on the community?

If you assume 4.5 people live in each of those homes that's 365 directly impacted people. How many people will be impacted if you expand that to a 5km buffer zone which is realistically the 'impact zone' for this mines? The risks are too high and mitigation strategies proposed are woefully inadequate.

9) Are threats to pre-existing industries an acceptable consequence?

This mine project will significantly threaten the viability of agricultural land on and surrounding the mine footprint, as well as the Lindenow Valley 'food bowl' that is a close as 500m downwind from the mine. The value of these important pre-existing agricultural industries must be recognised as the risks from this project will threaten their viability, the livelihoods of their business owners, the thousands who are directly employed and those indirectly employed. Agriculture has a 4.26 times job multiplier (National Farmers Federation; 2017) whereas mining has a 1 times job multiplier (Coffey, 2020; p 29).

The direct value of the horticulture industry was misrepresented by more than 50% of its current value and the indirect value of the industry was not included. This is likely because it would have shown how much financially is at risk should contamination occur, job losses, water security be impacted, or reputational damage occur. These are risks that are too great to take and the EES scoping requirements have not been met on matters such as competing with existing users for water.

Given the mine project is on top of a plateau directly above the Mitchell River, the source of water to irrigate the crops of the Lindenow Valley, with the closest vegetable fields on the other side of the river, the risks of contamination from dust and contaminated water is extremely high.

Kalbar also had a licence over the Lindenow Valley until July last year. The Hon Jaclyn Symes MLC exempted 4,000 hectares of the Lindenow Valley from mining and mineral exploration recognising the need to:

'permanently safeguard this prime agricultural land that produces world class food and secure the employment opportunities it creates, well into the future' as it is an area 'of exceptional agricultural value' (Premier of Victoria, 2019).

A study released by Melbourne University last year providing a 'Roadmap for a Resilient and Sustainable Melbourne Foodbowl' spoke about the importance of protecting our diminishing foodbowls (Carey, 2019).

The numerous environmental risks from this mine threaten the viability of the Lindenow Valley foodbowl. If the Victorian Government is serious about its desire to protect agriculture and foodbowls they must protect the jobs and significant economic contribution of the agricultural and horticultural industries here and reject this mine project. With Victoria's expanding population this area is needed in the long-term to protect the country's food security.

It is not acceptable to have such a toxic mine so close to a major foodbowl, a Ramsar protected wetland, where irrigation water is sourced and drinking water is supplied for residents across the Shire. This mine proposal is putting the livelihood of farmers and horticulture business owners at risk as well as the public health and wellbeing of landholders.

10) Would the Victorian Government allow a mine on Melbourne landmarks?

It doesn't appear the Government considers current uses of land before making mining licences available (refer to the mining licence exemption granted in July 2019 on the Lindenow Valley mentioned above). An inspection of the area here would make it evident that this is a highly inappropriate and dangerous location for a mine. It is critically important that the Panel does a site tour to see the area to understand what is at stake and to see the threats that are posed to the environment and pre-existing industries. Co-existence is not possible when consideration is given to the size of the mining operation, the toxic nature of the materials being mined and its proximity to significant waterways (Ramsar) and major agricultural industries and near where so many people live.

11) Is it acceptable for a mine to operate during the night in a residential area?

The impacts to families living in the 'impact zone' of this mine from a 24-hour operation is unacceptable due to the known adverse health consequences that will occur. This is a residential area it is not remote and therefore it is dangerous to public health that the mine be allowed to operate during the night. To operate at night in this populated area is not ethically responsible and should not be allowed.

12) Due to the level of complexity of the project can it be managed safely?

As reflected in the number of questions and issues raised above, this mine project is highly complex with as yet not all of the design and plans disclosed. Given Kalbar has no experience operating a mine how probable is it that they will be able to manage the complexities of this project that is in such an environmentally sensitive location? This is an important question because any failure will have severe consequences because of the location of this mine as outlined above.

13) Is the Project economically feasible?

Has Kalbar done a final feasibility study that has been independently audited for this project? Do the finances stack-up, taking into account the financial consequences of any failures?

It seems unusual that such a significant mining proposal would have advanced to the engagement with an EES process without a more sufficient understanding of the most significant engineered structures in the proposal. There remains considerable uncertainty as to the costing of all structures.

13) Will rehabilitation occur and why is this an important question?

A review of rehabilitation in Victoria was completed by the Auditor-General's Office in August 2020. This is important reading for the Panel as major flaws were identified in Victoria's regulation and monitoring of the mining industry. The failure of rehabilitation of mines is so chronic the Department has a policy on abandoned mines. What are the environmental consequences if this mine project is abandoned due to fluctuations in resource pricing or indeed to avoid costs of any environmental failures that might occur? Victoria's track record on mine's being fully rehabilitated is woeful so the concern is that the same thing is going to happen here unless the bond is set at a high level to reflect the risks and the bond must be paid in cash before the project commences. What binding provisions would be put in place to ensure avoidance of rehabilitation through the use of 'care and maintenance' or other provisions?

14) What are the environmental consequences if the rehabilitation bond isn't set high enough?

The rehabilitation bond must be set high enough to reflect the environmental risks because failure to do so will become a liability for the taxpayer. This must be secured as cash up front. Given the Auditor-General reported that the bond calculator is outdated, what assurances will the community be given that contemporary calculations will be made? What legally and financially binding arrangements will be stipulated for the security of the rehabilitation bond on Kalbar and any company that may purchase Kalbar?

15) Should the Draft Planning Scheme Amendment (PSA) be approved?

There was no consultation with the community about the PSA. Indeed, directly impacted landholders were not consulted, they were just told what was going to happen.

This is not a project of State significance, there are other locations where these products are being mined. The proponent should not be permitted to compulsorily acquire access to private land outside the mine footprint.

The size of the project is over 16 square kilometres (1,675 hectares). The proponent will be increasing the size of the project by 65% by claiming access to private land outside the project boundary to total 2,774 hectares. It is contended given the existing massive scale of this project that its infrastructure and pipelines etc should be confined to being located within the project area.

This is a back-door land grab that should not be allowed to proceed; this should have been planned as part of the project and the boundary of the project should have taken that infrastructure into consideration when the size of the project was determined. This draft Planning Scheme Amendment must be declined. This is a planning permit matter that needs to be considered by Council given the size and scale of what is proposed and the landholders who will be impacted.

Conclusion

This is a highly inappropriate and dangerous location for a mine for the reasons provided above and from other submissions and expert witnesses. There are many flaws and problems with the EES that will become more evident.

Given the consequences to the environment are so great with risks that cannot be resolved I respectfully request that you recommend this mine project be rejected. Should it be approved, baseline data will be gathered prior to construction and during mine operations to ensure landholders have legal recourse for any losses suffered. Some of the baseline data has already been gathered.

This is a wrong place for a mine for the reasons provided above. I believe this mine project is morally, ethically, environmentally, financially and socially irresponsible.

Thank you for the opportunity to make a submission.

Debbie Carruthers

References

Carey, R., Larsen, K. and Sheridan, J. (2019) Roadmap for a resilient and sustainable Melbourne foodbowl. University of Melbourne. doi.10.26188/5c92e85dd6edf. A WWW publication retrieved on 28 October 2020 at <https://research.unimelb.edu.au/foodprint-melbourne/publications/summary-briefing-roadmap-for-a-resilient-and-sustainable-melbourne-foodbowl>

Coffey Services Australia (Coffey). (2020). Socioeconomic Impact Assessment. Report prepared for Kalbar Operations Pty Ltd. Melbourne. Victoria.

Kalbar Operations Pty Ltd. (2020). Local Content Guidelines Policy. A WWW publication retrieved on 27 October 2020 at <https://www.fingerboardsproject.com.au/assets/files/2020/Policies/kalbar-local-content-guidelines-v1.0.pdf>

Kalbar Operations Pty Ltd. (2020). Summary Report.

Mine-Free Glenaladale. (2014). Kalbar Operations No Longer 94% Foreign Owned Thanks to a \$147 million Dollar Mistake. A WWW publication retrieved on 28 October 2020 at https://minefreeglenaladale.org/kalbar-operations-no-longer-94-foreign-owned-thanks-to-a-147million-dollar-mistake/?fbclid=IwAR15XFTz8YKV3YhVilrpXIIK23Gce9sJX2mgLR3Nvqk_v1ZrY3X7p0ou9kg

National Farmers Federation. (2017). Food, Fibre and Forestry Facts. A WWW publication retrieved on 12 October 2020 at <https://nff.org.au/wp-content/uploads/2020/01/171116-FINAL-Food-Fibre-Food-Facts.pdf>

Parliament of Victoria. (2011). Inquiry into the Environment Effects Statement Process in Victoria. A WWW publication retrieved on 28 October 2020 at <https://www.parliament.vic.gov.au/303-enrc/inquiry-into-the-environment-effects-statement-process-in-victoria-sp-515>

Premier of Victoria. (2019). Gippsland's Foodbowl Safe as Farmers Win Certainty. A WWW publication retrieved on 12 October 2020 at <https://www.premier.vic.gov.au/gippslands-foodbowl-safe-farmers-win-certainty>

RMCG. (2020). Fingerboards Mineral Sands Project Horticultural Impact Assessment Final Report V13. Report prepared for Kalbar Operations Pty Ltd. Torquay. Victoria.

Victorian Auditor-General's Office. (2017). Effectiveness of the Environment Effects Statement Process. A WWW publication retrieved on 28th October 2020 at <https://www.audit.vic.gov.au/report/effectiveness-environmental-effects-statement-process?section=>