Submission Cover Sheet

Fingerboards Mineral Sands Project Inquiry and Advisory Committee - EES

243

Request to be heard?: No

Full Name: Kevin and Glenda Hine

Organisation:

Affected property:

Attachment 1: Kalbar_EES_submi

Attachment 2:

Attachment 3:

Comments: Please see attached submission

26.10.20

To whom it may concern,

We are writing in opposition to the proposed Kalbar Mineral Sands project proposed near the Mitchell River Flats. We hold a number of properties on the Mitchell river flats and property near the proposed water production bore field and have been farming adjacent to the Mitchell River for nearly **50 years.** We hold extreme concerns about the impacts on our livelihood that might result should the project go ahead.

We are concerned about the direct impacts the project may have on the Mitchell River with **water extraction and pollution** which will impact on our livelihood. Recent drought followed by bush fires had a significant impact on the river and resulted in severe water restrictions meaning we were unable to source sufficient water from the river to irrigate food crops and livestock fodder.

Kalbar have outlined their plans to remove available water in three ways which may impact on water availability. The proponent has identified "*Surface water from the Mitchell River is noted as the preferred supply source for the project*" and they will be seeking a winter-fill licence for 3GL/year. Kalbar's proposed 3GL/year water consumption is a significant volume when compared to **the entire irrigation needs of the Mitchell River Flats and the portable water supply for the majority of East Gippsland residents only uses 13.4 GL/year**. The sheer volume of water extraction is of grave concern as farmers are completely reliant on water supply and unavailability of water threatens our future livelihood. There is already a recorded 12% decline in water in the Mitchell basin (Department of Environment, Land, Water and Planning, 2019). We are also concerned about resulting subsequent impacts threats on the local environment, species and lake system especially from the reduction in the winter flushing of the lakes system.

Water extraction given has been underestimated given in dry years (40% of the time) Kalbar anticipate they will need a 'top-up' water supply from ground water. Groundwater has also already recorded declines, by up to 1m, (Department of Environment, Land, Water and Planning, 2019). Kalbar are **predicting up to a 14m decline in groundwater** during operations. Kalbar estimate 5m declines impacts on overlying aquifers but only modelled for a 3 year period and not for the projected project life. The ground water aquifer proposed to be used is the Latrobe Group – the same aquifer currently being topped up with winter flow as water security for existing users. The timing of the increased extraction of groundwater coincide with the times of increased need for the horticultural industry.

The potential impacts of using an **unlined tailings dam and mine void** as a disposal site when the **groundwater movement is believed to flow north-westerly directly towards the Mitchell River and the surface and groundwater are directly linked** is of the gravest concern. Given the slow groundwater flow rates the impacts of groundwater contamination would not be realised for years – long after the Kalbar project have been completed. Thirdly they proposed to direct storm water runoff into dams – removing yet more recharge water

from both the surface water and ground water systems which has not been taken into account.

We note similar concerns raised in the water independent peer review report and are disappointed the proponents response was not to address the raised concerns but to provide a counter (non-independent) report that their assessment was adequate.

We find it highly concerning there are no regulatory standards for dust deposition levels on vegetables and that company modelling predicts exceedance beyond air quality criteria and an increase in the "*radiation concentrations in the soils in horticulture areas*". Compounding these concerns is the possibility for a road transport route traversing within a significant length of Mitchell River Flats. The **cumulative impacts** on the nearby horticultural area of water extraction and contamination (air, water and soil) need to be addressed as a whole rather than broken down into separate assessments.

In the proposed 15 years of the project we are worried the impacts on the Mitchell river flats will be beyond recovery and the **highly arable land could be permanently impacted**. Even in the impossible case of zero physical impacts as the local produce will be tainted as being of inferior quality and potentially contaminated just from the mines presence.

The impacts from the mine, **especially water extraction**, need to be considered in light of the current condition of the Mitchell River and existing impacts. We have noticed a steady decline in the river over the past half century from:

- Land clearing resulting in erosion along the banks
- Invasive carp reducing water quality by eroding banks and displacing native species and vegetation
- Invasive willows, a weed of national significance, which "s*pread their roots into the bed of a watercourse, slowing the flow of water and reducing aeration. They form thickets which divert water outside the main watercourse or channel, causing flooding and erosion where the creek banks are vulnerable. Willow leaves create a flush of organic matter when they drop in autumn, reducing water quality and available oxygen, and directly threatening aquatic plants and animals. This, together with the amount of water willows use, damages stream health"* (Weeds of National Significance website)
- Droughts being more severe and frequent coupled with an overall decrease in rainfall resulting in decreased water available in the system
- Bush fires increasing sedimentation from ash, subsequent erosion and fire retardant
- Portable water supply demands from increased consumer areas and rising populations

Monitoring the health of the Mitchell Basin has only begun recently and the data sets are insufficient to determine both the health of the system and any changes. We have witnessed first-hand a decline in the health of the Mitchell River over the past 50 years and hold grave concerns about assessments made based on the present state of the river and the groundwater. Climate change predictions within the Kalbar report support predictions

of reduced annual rainfalls and increased evaporation rates consistent with what we have already witnessed firsthand in the past. Farming is subject to weather conditions and climate change will continue to increase the severity and frequency of these events. It is **nationally important** that protection is given to multiple key sites to allow for fresh food availability to buffer against various sites being impacted from these weather events.

The food production sector is the fundamental driver of the local economy but the value goes beyond local production. The Mitchell River Flats is some of the **most productive land in the country**. These national implications are unlikely to be duly considered by the proponent, at a local government level or even at a state level. The scope of the assessment process needs to include the value of the existing commodity and the protection of the same. **The Mitchell River Flats are already under pressure from various sources**, it is already predicted these stressors will escalate in the future and the additional pressures of Kalbar's 15 year proposal is **unacceptable** given the alternative long-term productivity offered by food production.

Yours Sincerely,

Kevin and Glenda Hine
[redacted] Walpa