

# Submission Cover Sheet

Fingerboards Mineral Sands Project Inquiry and Advisory  
Committee - EES

# 824

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Request to be heard?: No

**Full Name:** Colin Garth

**Organisation:**

**Affected property:**

**Attachment 1:**

**Attachment 2:**

**Attachment 3:**

**Comments:** See attached submission

## FINGERBOARDS MINERAL SANDS PROJECT INQUIRY AND ADVISORY COMMITTEE.

Dear Inquiry and Advisory Committee members,

This submission is based on experience and knowledge gained through 35 years living beside the Gippsland Lakes. I have worked in the Marine Industry on the Lakes, and also have experience working in Central Queensland where mining and tailing dams are a part of the landscape.

This ESS glosses over or ignores the risks a mine will bring to this region and the permanent negative impact it will have on the Gippsland Lakes and associated townships.

### **Historical Degradation of the Gippsland Lakes**

Since white settlement, the Gippsland Lakes have been negatively impacted by a number of irreversible actions. These actions include:

- The permanent opening of the entrance to the Lakes allowing a permanent flow of salt water into the waterway.
- The reduction of freshwater inflows due to the extraction of water for irrigation, mining, industry and local town supply.
- The construction of the Thompson Dam to divert water from the Latrobe River to supply 58% of the City of Melbourne's water. Previously this water provided a major source of fresh water to the Gippsland Lakes.
- Ground water has also been severely impacted by the offshore gas and oil industry, coal mining, irrigation and other industries. This has resulted in the level of the region's aquifer being reduced dramatically<sup>12</sup>.

Onshore the effects of this are easy to see with serious erosion due to increased salinity causing "die back" of vegetation around the shore line and on small Islands throughout the lake system. What has happened under the water is "out of sight, and for many people out of mind". Mining in the Omeo valley in the early days, and as recently as the late 1990s, has seen the discharge of heavy metals and toxic chemicals into the Tambo and Mitchell rivers, which feed into the Gippsland Lakes. The most recent discharge was in 1999 from the Benambra mine tailings dam. Leaks in this tailings dam cost the Victorian taxpayer \$6.9million to rectify, the mining company having already gone into receivership after just four years of operation<sup>3</sup>.

<sup>1</sup> Hatton, T.J., Otto, C.J. and Underschultz, J.R., (2004). *Falling Water Levels in the Latrobe Aquifer, Gippsland Basin: Determination of Cause and Recommendations for Future Work*. CSIRO Land and Water.

<sup>2</sup> PARLIAMENT OF VICTORIA (2015). *Inquiry into onshore unconventional gas in Victoria Final Report*. Environment and Planning Committee.

<sup>3</sup> ABC News (2018), Stockman mine tailings dam at Benambra gets green light amid controversial past <https://www.abc.net.au/news/2018-07-26/benambra-stockman-mine-approved/10039390#:~:text=2005%2D2006%3A%20The%20Victorian%20Government,a%20cost%20of%20%246.9%20million.>

The Datson Downs toxic waste facility discharged into the Gippsland lakes until 1992 when an ocean outfall was commissioned and the toxic waste was then diverted directly offshore. This waste is produced by Maryvale Paper Mill, brown coal mines, related power stations and other industries in the Latrobe Valley. Mercury, salt, sewage and other contaminants were discharged by these industries into the Gippsland lakes until this time.

Farmers in the Lindenow Valley have for many years suffered from unreliable and insufficient water and have lobbied for a Dam to be built on the Mitchell River. Studies were done on a site at Angus Vale but the project did not go ahead because of the environmental impact. In spite of this and the lessons of over extraction on the Murray Darling rivers, the Federal Government is currently funding the construction of "off river" storages beside the Mitchell river, which will result in an increase in the water taken from the system and a further reduction of fresh water into the Lake system.

The cumulative effect of the points raised above, have resulted in the current degraded state of the Gippsland Lakes and waterways.

### **Future Risks to the Gippsland Lakes**

The failure of tailings dams has been a feature of mining throughout the world for more than a century. As recently as 2018, at the Cadia Gold Mine near Orange NSW and 2019 in Brumadinho, Brazil, these failures have resulted in untold death, destruction and permanent pollution.

I note the Kalbar mine plans to use the same construction methods to those used in a number of these failed dams. Assuming Kalbar can afford to build a safe dam they cannot avoid the problem of overflow in the event of high rainfall. From my experience in Queensland I know that when there is high rainfall and the potential for overflow, the mine operator can apply to the EPA and gain approval to discharge from the tailings dam into the local waterway. This is justified by the EPA because the ratio of parts per million of toxic waste to water is relatively low in a flood event. It does not take into account that when a fast flowing river meets a large body of water, the sediment in the flood water settles out. This is exactly what happens on the Mitchell River in each flood event, as evidenced by the formation of the famous Mitchell River Silt Jetties. Further flood events, dredging or other activities can remobilize the sediment at any time in our future. The difference now would be that the sediment would contain the toxic overflow from the Kalbar mine in the same way as the Tambo River now contains the overflow sediment from the Benambra mine tailings dam release in 1999 and the Omeo goldfields last century. Disturbance of the heavily contaminated Gladstone Harbour ocean floor during dredging in 2012 resulted in the suspension of commercial fishing due to lesions and other deformities in marine life<sup>4</sup>.

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<sup>4</sup> Landos, M. (2012), *Investigation of the Causes of Aquatic Animal Health Problems in the Gladstone Harbour and Nearshore Waters*, [http://media2.apnonline.com.au/img/media/pdf/FFVS\\_Gladstone\\_FINAL\\_trustee\\_version.pdf](http://media2.apnonline.com.au/img/media/pdf/FFVS_Gladstone_FINAL_trustee_version.pdf)

## Summary

Given the already stressed state of the Gippsland lakes and waterways the Kalbar Mine proposal should not have advanced to the stage it has. It should not proceed further because:

- There are already insufficient fresh water inflows to maintain the Lakes System and region as we know it.
- 19 dams across gullies on the site will further reduce inflows.
- Water pumped from the Mitchell River will further reduce inflows.
- Water pumped from the aquifer will accelerate the already rapid and serious depletion of this resource.
- The risk of overflow or discharge from the tailings dam during heavy prolonged rain events cannot be avoided economically.
- Damage to the eco system and the amenity of the East Gippsland region will seriously impact the viability of tourism and the migration of retirees and families to the area which underpins the continued growth of the towns and communities.
- The costs to the Community, the Region and the State of Victoria far outweigh any benefits of this proposal.

Thank you for the opportunity to make this submission to the enquiry.

Colin Garth



## Sources

ABC News (2018), <https://www.abc.net.au/news/2018-07-26/benamبرا-stockman-mine-approved/10039390#:~:text=2005%2D2006%3A%20The%20Victorian%20Government,a%20cost%20of%20%246.9%20million.>

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PARLIAMENT OF VICTORIA (2015). *Inquiry into onshore unconventional gas in Victoria Final Report*. Environment and Planning Committee.