

Submission Cover Sheet

Fingerboards Mineral Sands Project Inquiry and Advisory
Committee - EES

319

Request to be heard?: Yes

Full Name: Angelique Stefanatos

Organisation: Lakes Entrance Community Landcare

Affected property:

Attachment 1: Kalbar_EES_submi

Attachment 2:

Attachment 3:

Comments: See attached submission. If it is not accessible, please contact me. Thank you.



Lakes Entrance Community Landcare's submission-

on the Environment Effects Statement of Kalbar Operations Pty Ltd – Fingerboards Project:

Dear Inquiry and Advisory Committee members,

Lakes Entrance Community Landcare group **strongly object** to the proposed Fingerboards mineral-sands mining project because it works against our group's values and our vision for East Gippsland - which we have been working towards for the past 25 years.

In future we would also like to speak our concerns to the Inquiry directly.

Our objections include those below, but are too numerous to name in this submission:

1/ The GunaiKurnai Traditional Custodians have not given permission for a mine which will damage their land, waters and air (the environment):

We acknowledge that the GunaiKurnai people were a sovereign people at the time of European settlement and did not cede any of the rights over their traditional land and waters, or their natural and cultural resources. We support their right to make decisions about the things that affect them and their country (as stated as a goal in the **GunaiKurnai Whole of Country Plan 2015**). Therefore we support indigenous organisations and individuals who object strongly to the proposed mine:

- At a shire council meeting, a **Bairnsdale Koori Youth Council** advocate stated that the GunaiKurnai people were not consulted and were not given a say as to whether the mine would go ahead or not.
- 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".

2/ Eco-anxiety – The 'Kalbar Mental Health Effect', attempted suicide & hospitalisations

The East Gippsland community has been suffering **Eco-Anxiety for 6 years** now due to the spectre of a new mine overshadowing us, as can be seen from this news article:

The Weekly Times 23 July 2014 - by Emma Field

Kalbar Resources starts mineral sands exploration in Briagolong to Orbost region of East Gippsland: A mining company has started mineral sands exploration in East Gippsland sparking fears of compulsory land acquisition in the area. Kalbar Resources, which has a mineral exploration licence covering 400 sq km from Briagolong to Orbost, has been testing sites near Mossiface and Glenaladale. Kalbar Resources managing director Rob Bishop denied they were looking to buy out farmers in the region. "There has been no discussion

*with landholders about leasing land or acquisitioning land in Mossiface or Glenaldale,” Mr Bishop said. He said the company was trying to find extensions to the deposits Rio Tino discovered and **said none of the drilling was on private land**. It was mainly on roadsides and crown land.*

The statements highlighted in orange above, have since turned out to be untrue. And since 2014, there has been a continuous stream of vagaries, errors and untruths coming from Kalbar spokespeople that have outraged the community, and contributed to destabilising the community's **PEACE OF MIND**, and has corroded **TRUST** in Kalbar.

This week, our members heard that contrary to the statement above, a farming family who live on Bairnsdale-Dargo Rd, failed to stop Kalbar - through the courts - accessing their private land for drilling. We heard that after drilling, this family will have to allow Kalbar to mine on their property **against their will**, due to the mining laws protecting mining interests over landowner's interests.

We have also heard that contrary to the statement above, denying that Kalbar were looking to buy-out farmers in the region, that is exactly what has happened since.

This is unacceptable to our Landcare farmers who pride themselves on enhancing and protecting the environment. We request a change to the laws, because at the moment the laws favour mining above Aboriginal cultural heritage, the environment, food production and community health. These laws have **no natural justice** built into them, and therefore East Gippsland residents feel a sense of **HELPLESSNESS** and **BETRAYAL**.

How can we, or the government officials reviewing Kalbar's mining application, believe anything Kalbar claim, given their long history of errors, miscalculations and lies?

The recognition of earth related mental health conditions

Professor Glenn Albrecht - professor of Sustainability at Murdoch University WA, studies the psychological distress caused by environmental change. He coined the term '**Solastalgia**' in relation to the loss of **solace** and subsequent **nostalgia** for the environment to go back to how it was before a destructive event. He has pioneered the research domain of **earth related mental health conditions** with his concept of Solastalgia: The lived experience of negative environmental change. He says "**People exposed to environmental change experience a negative affect that is exacerbated by a sense of powerlessness or lack of control over the unfolding change process.**" Worldwide, there is an increase in ecosystem distress syndromes matched by a corresponding increase in human distress syndromes. The concept of Solastalgia explores the role played by environmental changes to people's '**sense of place**' and identity.

The East Gippsland community has experienced an unrelenting fear of loss of **'sense of place'** if the proposed mine transforms the landscape:

The **'Kalbar Mental Health Effect'** has been felt across the region for **6 years**, and is unfortunately a constant topic of anxiety-raising conversation in cafes, club meetings, at BBQs and parties. The most dramatic consequence of the 'Kalbar Mental Health Effect' that our members experienced first-hand through our friendship network, was a suicide attempt by a Glenaladale resident with no previous mental health history. By some intervening miracle, the serious suicide attempt failed. Members of our group have spoken to the family effected, and the direct trigger was said to be ***"The feeling of helplessness and powerlessness to protect the people they loved from the mine's 24/7 noise pollution, environmental contamination and the destruction of the natural beauty of their area, where the family have lived for more than 30 years."***

We are also aware of mental health episodes and hospitalisations in mental health facilities that have been exacerbated by the **Eco-Anxiety** caused by the threat of a polluting mine on the edge of East Gippsland's biggest town – Bairnsdale. In fact Eco-Anxiety is so high in East Gippsland after a severe **3 year drought**, followed by the **Black Summer Bushfires**, and then by **COVID19**, that the Lakes Entrance Community Landcare committee are seeking training in **Mental Health First Aid** to support our members who are severely traumatised by the **ongoing environmental destruction in our region**.

Our members consist of both long-time farming families and many people who moved to East Gippsland specifically for its pristine, natural and wild characteristics. The thought of industrialising East Gippsland with a huge mine and the associated environmental destruction, pollution, truck traffic, noise, and loss of **'sense of place'** is abhorrent to our members and our extended community.

3/ Kalbar's Essential Ingredients or Toxic Pollutants?

Kalbar's Statement:

MINERAL SANDS are **essential ingredients** in many personal and household items including toothpaste, paint, tiles, sunscreen, computers and mobile phones, just to name a few.

Lakes Entrance Community Landcare's statement:

PURE WATER, CLEAN AIR and BIODIVERSITY are **essential ingredients** for all life on earth to continue.

Lakes Entrance Community Landcare rejects Kalbar's assertions that the mine's products are 'essential ingredients'. The Macquarie Dictionary says **"essential = absolutely necessary, indispensable"**. Human life on earth has sustained itself for hundreds of thousands of years

without the need for industrially mined and refined mineral sand and rare earth products. But what **IS** essential for human life is **uncontaminated drinking water, particle pollution-free air, sustainable food production, a healthy body and a peaceful mind**. All of which are under threat from the proposed Fingerboards mineral sand mine.

Kalbar say *“Titanium dioxide (TiO₂) is the most widely used white pigment because of its non-toxicity, brightness and very high refractive index. It is an essential component of consumer products such as paint, plastics and paper.”*

But in fact there are other safer and more environmentally friendly and energy-efficient substitutes for TiO₂ and the products that Kalbar claim are essential, for example the

MILK PROTEIN CASEIN:

Casein-based paint dates back to ancient Egypt and is still available today. Many artists have been attracted to its fast-drying properties, including Andy Warhol. One of our Landcare members painted the interior of their house a ‘bright-white’ using a bio-paint made from Casein. **The use of the milk protein Casein - which comes from cows - not from mines, would be a win for Gippsland dairy farmers and a win for the environment!** Dating as far back as the Middle Ages, records indicate that wood glues and cement-like materials were also derived of casein. Casein is still used to make glue, paint, fibre and now a bio-polymer cling wrap. The **Milk Science Update - April 2017 Issue** states *“As we look for safer and sustainable options, it seems logical to turn to the staples of our diet, and their component parts for inspiration and innovation.”*

Cancer fears for Titanium Dioxide TiO₂:

Kalbar says that TiO₂ is an essential component of consumer products such as toothpaste and food items like confectionary, yet Benjamin Kentish of *The Independent* news reported on 24 January 2017 that *“An ingredient widely used in toothpaste and a range of food products can cause cancer, scientists have found (see below research). The additive, Titanium dioxide, caused precancerous growths in 40 per cent of rats that were given the chemical in their **drinking water**, according to researchers in France and Luxembourg. It also sped up the development of these growths, which are not malignant but can develop into more dangerous cancers. **The product, which is referred to as E171, is widely used in sweets, chocolate, biscuits and chewing gum, as well as toothpaste and sunscreen, to whiten products or make them look more opaque.”***

The study into the impact of Titanium dioxide in rats was led by France’s National Institute for Agricultural Research and published in the *Scientific Reports Journal Volume 7, article number 40373 published 20 January 2017:*

Food-grade TiO₂ impairs intestinal and systemic immune homeostasis, initiates preneoplastic lesions and promotes aberrant crypt development in the rat colon:

Food-grade titanium dioxide (TiO₂) containing a nanoscale particle fraction (TiO₂-NPs) is approved as a white pigment (E171 in Europe) in common foodstuffs, including

confectionary. There are growing concerns that daily oral TiO₂-NP intake is associated with an increased risk of chronic intestinal inflammation and carcinogenesis. E171 or NM-105 for one week did not initiate intestinal inflammation, while a 100-day E171 treatment promoted colon microinflammation and initiated preneoplastic lesions while also fostering the growth of aberrant crypt foci in a chemically induced carcinogenesis model. **These data should be considered for risk assessments of the susceptibility to Th17-driven autoimmune diseases and to colorectal cancer in humans exposed to TiO₂ from dietary sources.**

And yet on the Kalbar website it says: “Titanium is one of the most biocompatible metals – the human body can handle it in large doses with no impact. In fact, it is estimated that we ingest around 0.8mg of titanium a day – most passes through us without being absorbed.”

In relation to the above scientific research, *The Independent* news reported in 2017 that “Previous research by the International Agency for Research on Cancer found **inhaling titanium dioxide, which is also used in products such as paint, could cause cancer** – but this is the first time such link has been shown when the product is consumed orally.”

Is Titanium dioxide really essential? Is it safe as either particles blown in the air or as an ingredient in food?

Kalbar also states that “Rare earth metals and alloys that contain them are used in many electronic and communications devices that people use every day such as computer memory, DVDs, rechargeable batteries, and mobile phones.”

How many old mobile phones does your family have in a drawer somewhere?

Lakes Entrance Community Landcare believes in recycling and reducing consumption, therefore we believe that rather than dig more metals and minerals out of the ground, a better system for recycling mobile phones, batteries, computers and electrical goods needs to be enforced by government at all levels; and is the **EARTH-FRIENDLY** way of the future.

Risk of Silicosis from mine air pollution

The US Department of Safety calls Silica “**A carcinogen**”.

According to worldwide medical advice “**Any level of silica exposure can result in silicosis.**”

This leads Lakes Entrance Community Landcare to conclude that a mineral sands mine is too dangerous to be placed so close to houses, schools, cropping land etc.

Acute Silicosis, forms a few weeks or months after silica exposure, and the condition progresses rapidly. The survival times of Silicosis from the year of diagnosis to death are: Stage III = **6.8 years**; Stage II = **15.8 years**; and Stage I = **21.5 years**. (From the research paper *Natural Course of Silicosis in Dust-Exposed Workers*, Yang, Yang, Zhang & Chen)

Is it worth risking the health of Victorians for a mine that will only be productive for about 15 years?

Having Silicosis increases your risk for respiratory infections.

During a COVID19 pandemic, shouldn't the Victorian Government be consistent in being overly cautious in protecting the lungs of all Victorians, whether from a virus or from Silicosis? Or are the mining royalties worth the sacrifice of Gippslanders?

4/ The Gippsland Lakes RAMSAR Wetlands of International Importance

The federal Australian Government website states: *"In designating a wetland as a Ramsar site, countries agree to establish and oversee a management framework aimed at conserving the wetland and ensuring its wise use. **Wise use under the Convention is broadly defined as maintaining the ecological character of a wetland.**"*

Lakes Entrance Community Landcare members believe that:

- a) Each river and lake has a right to exist in its own right, and should not be treated as something for human 'use' only.
- b) We acknowledge that Indigenous Australians name individual rivers and water-bodies, and consider them as living spiritual entities and/or relatives to be cared for.
- c) A large 13 square kilometer mineral sands mine footprint, at 45m deep, with an almost 1 square kilometer tailings dam located high above both the Perry and Mitchell Rivers is a risk to the Gippsland Lakes system and would not maintain the 'ecological character' of the tributaries to the RAMSAR wetlands.

We object for a number of reasons including:

- There are no details in the EES for the dam's construction.
- A breach or leaching from the tailings dam will release waste and chemical flocculants harmful to aquatic life.
- Over 3 billion litres of water (3GL) is required by the mine annually for up to 15 years for processing and to control dust. We are concerned about the loss of the water for the environment and water available for farmers.
- The potential toxic dust impact on bores, aquifers and the Mitchell River.
- The risk of the river being contaminated, impacting the health of the river and the Gippsland Lakes, negatively affecting the wildlife and vegetation reliant on them; along with risks to tourism, fishing and agriculture from contamination.
- The Gippsland Lakes are already being polluted via the Tambo River by heavy metals from the failed tailings dam from a mine in Benambra (now the Stockman Mine), that forced the Victorian tax payers and the government to spend about \$5 million on rehabilitating the site.

With a plethora of failed tailings dams around the world and a lack of fully completed mine rehabilitation in Victoria, why should the East Gippsland community trust the soothing reassurances of either Kalbar or the government?

5/ Tree Removal

Our Landcare members spend their free-time planting tiny seedling trees. We know how long it takes for trees to grow, especially before they are mature enough to provide large hollows for fauna (approximately 120 years for small to medium hollows, and about 200 + years for large hollows big enough for large owls and gliders.)

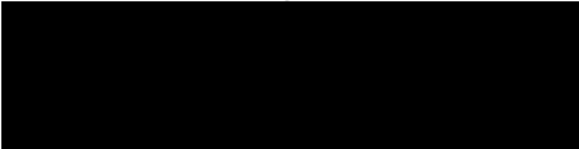
The Black Summer Bushfires destroyed unprecedented amounts of habitat, along with the loss of 3 billion wildlife. Adding to the environmental destruction was the removal of 1000s of mature trees along the roadsides of East Gippsland during road clearing activities after the fires. **So protecting EACH and EVERY mature tree is more critical now than at any other time in Australia's history!**

Therefore we find the removal of over 700 mature trees, along with countless numbers of other vegetation types for a mine, unacceptable.

Thank you for taking the time to consider our submission.

Sincerely on behalf of the Lakes Entrance Community Landcare committee and members,

Angelique Stefanatos (secretary)



27th of October 2020