I wish to pay respect to the traditional custodians of this area, the Gunaikurnai people, whose connection to the land extends through thousands of years.

I want to speak about the unacceptable environmental effects of allowing the Fingerboards Mine to proceed in a populated area so close to the Mitchell and Perry Rivers. The Mitchell River flows downstream through the flourishing vegetable growing area of Lindenow, past the town of Bairnsdale, through the Silt Jetties and out into the Gippsland Lakes which are Ramsar classified wetlands. The Perry River also flows into the Lakes, joining the Avon River and entering the Lakes in Lake Wellington.

My great-great grandmother lived in Lindenow in the 1870s with a married daughter and another younger daughter. This younger daughter was Flora Minter, later Flora Gregson. She did many paintings of the area which are now held in the State Library of Victoria. Here is one she painted of Lindenow in 1872.

I live on Lake King where the Mitchell River flows into the Lakes. I have children and grandchildren living, working and going to school in the area.

The proposed Fingerboards mine poses very real threats to the health of this land. The soil at the mine site is highly susceptible to erosion and at risk of collapse. Climate change is bringing us ever increasing incidents of storms with so-called "unprecedented" rain and wind events. These are unpredictable and cannot be controlled. It was Traralgon that suffered from extensive flooding last week, but we can perhaps remember when this area was in flood. There were major floods in 1990, 1998, 2007 and 2012. Vehicles submerged, residents stranded, powerlines down, highways cut, houses and businesses inundated, rivers bursting their banks, people being winched to safety by helicopter, rockslides and landslips. The Mitchell River at those times is full of debris being carried down in the waters, huge trees that have been uprooted, even a house floated down the river in the 2007 flood. In the 2007 flood river gauges upstream from Glenaladale on the Mitchell River were washed away.

"A State of Emergency was declared as flood waters tore down the steep slopes "like a steam train", stripping away valuable top soil and leaving sheep and cattle in the branches of trees four to six meters above the ground. Residents were taken completely by surprise, and had never imagined a flood of such proportions:"¹

The geographic location and geological makeup of the proposed mine and its susceptibility to erosion means that it will be impossible to prevent highly toxic elements from being dispersed in the soil in the area and into the nearby rivers and aquifers and from there into the Gippsland Lakes.

The devastating storms paradoxically are accompanied by increasingly frequent and increasingly severe drought periods. Average river flows in the Murray Darling Basin have already dropped by 39 per cent over the past 20 years. East Gippsland Water has imposed

¹ International Journal of Mass Emergencies and Disasters November 2004, Vol. 22, No. 3, pp. 61-86 The 1998 Floods in the Tambo Valley

permanent water restrictions. We face a future where water becomes a precious commodity that needs to be protected.

This has several implications. Firstly, suppressing contaminated dust becomes highly problematic. Secondly, water flows will not be sufficient to meet the needs of the mine. Thirdly, the mines' extraction of water will have a seriously detrimental on aquifers, rivers and waterways.

The effects of the escape of toxic elements to the environment are numerous and critical and have been enumerated in detail by others. These consequences include:

- Effects on human health "Human health risks range from minor health problems, such as allergic reactions and hypersensitivity, to serious health problems, such as cancer, respiratory illness, reproductive problems and birth defects."² Children are especially vulnerable to toxicity.
- Effects on ecosystems Once in the river it is impossible to prevent the flow of toxic elements into the entire Lakes system. Whole ecosystems would be affected, many of which would never recover.
- Damage to the vegetable crops on the Lindenow Plains, leading to a loss of reputation and livelihood.
- Damage to the reputation of the area as a healthy place to settle and raise a family.
- Damage to the area's attraction for tourists.

I have other serious concerns regarding the mine proposal but don't have enough time to address them in detail. Among them are:

- A critically flawed EES whose shortcomings have been addressed in great detail by expert witnesses. Just one example is the story of the Giant Burrowing Frog, a threatened species in Victoria. It was claimed that this frog is not present in the proposed mine area. Acoustic surveys will most likely discover this frog in warm and wet weather. The survey was carried out in a drought and was random and grossly inadequate. The frog is in fact present in areas quite close to the mine.³ What does one frog matter? The truth is that we don't know why it matters. We don't understand what the cascade of impacts is through the destruction of one species. In fact, only 30% of Australia's estimated 750,000 species have been named and documented. There is currently a race to document and understand this rich biodiversity.⁴ The economic benefits of doing so are expected to be enormous. This mine will wipe out a whole ecosystem without ever understanding or caring what is there.
- A hastily prepared proposal for the use of a centrifuge which are not an economic option for a mineral sands mine. Will the mine then revert to its dangerous proposal of a tailings dam?

² Proposed Environment Protection (Scheduled Premises) Regulations 2017

³ Atlas of Living Australia (ALA)

⁴ https://www.science.org.au/news-and-events/news-and-media-releases/mission-map-australias-biodiversity

Noise and light pollution. The mine is to operate 24/7. "Noise is a major form of pollution. 'According to the findings of the World Health Organisation, noise is the second largest environmental cause of health problems, just after the impact of air quality. Noise can interfere with communication, increase stress and annoyance, and disturb sleep, leading to lack of concentration, irritability and reduced efficiency. It can contribute to stress-related health problems such as high blood pressure."⁵

There is no social licence for this mine. Kalbar has failed to gain the trust and acceptance of the community. The promise of a limited number of jobs for a limited number of years is vastly outweighed by the potential loss of the thousands of clean, sustainable jobs that will be put at risk by having a toxic mine in the area. East Gippsland has enormous potential for development but that hinges on maintaining the perception and the reality of being clean and green. These opportunities come from building up vibrant communities around tourism and hospitality, food and fibre, and visual and performing arts. Infrastructure growth will provide more employment as more people are attracted to the area to live. The advent of Covid has seen a big push to people wanting to move to regional areas. The new trend of working from home has meant that living in regional areas has become more feasible and attractive. As overseas travel becomes more limited because of Covid and also the measure around climate change mitigation, East Gippsland starts to shine as the ideal place to develop a thriving permanent population and a major tourist destination. A mineral sands mine at Glenaladale threatens that possibility. The damage to reputation and the damage to the environment endangers that sustainable future that we can move towards.

Traditional owners are opposed to the mine and there have been more than 900 submissions presented, with only 1% in favour.

Unfortunately the mining industry has demonstrated a ruthless disregard for the environment and its social obligations, For example

- Rio Tinto on 24 May destroyed two rock shelters in Juukan Gorge in the Pilbara region of Western Australia on, despite having received five separate reports on the significance of the sites since 2013. An inquiry concluded Rio Tinto "knew the value of what they were destroying but blew it up anyway".
- In 2016 Mineral sands mining company Iluka Resources allowed a freshwater dam to overflow into the Glenelg River. They excused themselves by saying all available means of retaining storm water on site had been employed but that the available site storage of storm water was full and they had no other options to retain water on-site.
- the New Acland coalmine in Queensland's Darling Downs was caught violating noise limits 34 separate times in 10 weeks and was fined \$9,461 by state authorities. This failure by the government to appropriately penalise New Acland, which has a history of serious violations, is an insult to the communities and farmers who have been devastated by this mine."⁶

⁵ Proposed Environment Protection (Scheduled Premises) Regulations 2017

⁶ https://www.theguardian.com/environment/2020/jun/24/queensland-new-acland-coalmine-fined-just-9461-for-34-separate-noise-violations

However the Tide is Turning:

"A Dutch court on Wednesday ruled that Royal Dutch Shell, the big oil company, is on the hook both for the greenhouse gas emissions caused by its own production of oil and gas and the downstream use of those products. It's a bit of a tobacco cabal moment but for the oil industry: For the first time, an international tribunal has held a multinational company accountable for its role in accelerating climate change and ordered it to change course."¹

Not long ago, the only pressure for oil and gas companies to clean up their act came from the protests outside their office towers. Next it was at their investor meetings, from activists taking over question time or lobbying for larger emissions cuts. These, too, could often be ignored. But now, the winds of change are blowing in boardrooms.⁷

While these action target climate change particularly, climate change and environment are inextricably linked. ""It is clear that we cannot solve [the global biodiversity and climate crises] in isolation – we either solve both or we solve neither," said Sveinung Rotevatn, Norway's climate and environment minister.

The peer-reviewed report was produced by the world's leading biodiversity and climate experts, who were convened by the Intergovernmental Panel on Climate Change and the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services, both which report to the world's political leaders."

In Victoria on 1 July 2021 the amended Environment Protection Act 2017 (the new Act) will come into effect. An important part of the Act is the general environmental duty (GED). The GED says that any person engaging in an activity that can cause harm to public health or the environment, from pollution or waste, must minimise those risks. In an Australian first, the GED is criminally enforceable.²

Pollution control plans, and conditions on environmental approvals more generally, will be under the microscope following one of Australia's first successful environmental class actions (and the first funded class action to be brought against an Australian company for cross-border pollution-related damage suffered by foreign claimants).⁸

Once dismissed as a "novel perspective," the right to a healthy environment is now considered legally established around the world, he says. It is enshrined in the constitutions of more than 100 nations and has been incorporated in legislation, treaties or in other documents of at least 155 nations. Of the court cases based on a constitutional right to a healthy environment, the majority are winning. And, in the cases brought by young people, courts are receptive to recognizing that right for future generations.

"What you see in this rising tide, led by children—who have the greatest stake—of people saying to their governments: 'You have failed. We have rights and you need to abide by and

⁷ https://www.theage.com.au/business/companies/squeezing-one-last-drop-from-big-oil-the-great-climate-debate-shaking-australia-s-energy-sector-20210608-p57z54.html

⁸ https://www.claytonutz.com/knowledge/2021/april/successful-environmental-class-action-raises-question-of-whether-more-will-follow

protect those rights,'" says Carroll Muffett, president and CEO of the Center for International Environmental Law, based in Washington and Geneva.⁹

In Australia in May 2021 the Federal Court delivered an historic and landmark ruling that the federal environment minister has a duty of care to avoid harm to young people as a result of climate change.

This judgement opens the door for future litigation if the minister is not careful about approving projects that could harm the next generations of Australians.

While political terms might be only short, decisions now have intergenerational consequences for the future. Short-term financial gain can have detrimental impacts on the health and economic wellbeing of those who can't vote yet.

This mine has the potential to adversely affect our children, ourselves and our environment. It must not be allowed to do so.

¹ https://foreignpolicy.com/2021/05/27/royal-dutch-shell-netherlands-hague-court-oil-fossil-fuels-climate-change/

² <u>https://www.epa.vic.gov.au/about-epa/laws/new-laws</u>

⁹ https://www.nationalgeographic.com/environment/article/kids-suing-governments-about-climate-growing-trend