Submission Cover Sheet

Fingerboards Mineral Sands Project Inquiry and Advisory Committee - EES

679

Request to be heard?: Yes

Full Name: Y Coleman

Organisation:

Affected property:

Attachment 1: EES_submission.p

Attachment 2:

Attachment 3:

Comments: See attached submission

ENVIRONMENTAL EFFECTS STATEMENT THE FINGERBOARDS MINERAL SANDS MINE PROJECT SUBMISSION

29th October 2020

Dear Inquiry and Advisory Committee members,

Thank you for the opportunity to outline my concerns in response to the EES for the Fingerboards Mineral Sands Mine Project. I object to approval of the mine for the reasons outlined below.

As a bit of background, I grew up in the Glenaladale area and, whilst I currently live elsewhere, it is still "home" for me – in fact the property is still in the family, and sadly, will be irrevocably changed if the proposed mining processes are approved.

We grew up knowing there was a family of emus on the plateau and we often saw them on the skyline, and as the chicks grew, much to our delight "Dad" emu would sometimes bring them down round the house; in time one family became several – and we took pleasure in seeing them all there. Fortunately some of them survived the 2014 bushfires.

We also grew up knowing we would see kangaroos and wallabies on the plateau first thing in the morning and in the late afternoon –as they heard us creeping up on them they would stand up, ears pricked, watching us, and when we were too close, would suddenly turn and hop away – not too far and not in fright but just enough to maintain a safe distance.

If we saw an echidna we would approach it as noisily as possible so we could watch it burrow furiously into the ground to protect it's underbelly, and if we stayed still for long enough then we would see it cautiously peep out and around to make sure it was safe and then amble off to somewhere else.

We were always on the look out for wombats as there weren't many around and we were fascinated by their appearance as they looked like logs on legs, and we would check out their huge burrows for any extensions as they are phenomenal burrowers.

I remember watching a wedge-tailed eagle circling overhead one afternoon, and it suddenly swooped down and grabbed dinner (a rabbit) and flew off again – it was so fast and also so graceful and elegant.

My mother enjoyed the return of the swifts every year, and had much pleasure watching them as they swooped and swirled on the air currents at the front of the house – she was sure they were performing specially for her!

This has been a beautiful, safe part of the world until now – and now all those animals and birds are at high risk from the proposed mining project – death by destruction of their habitat, by being run over by the mining vehicles, by being hit and seriously injured by the mining vehicles (and the vehicles not stopping and attending to the injuries), and by having their burrows crushed and so nowhere safe to go and if they are inside at the time then … a disturbing thought.

So why am I objecting to the proposed mining application? I have many concerns about the lack of information in the EES document, and so have outlined my objections under 4 key headings, being – Health, Wellbeing, Food security, and General. If we have to have a mine that will irrevocably wreck our beautiful corner of the world then lets make it as safe as possible for all stakeholders, the larger community, and the environment and its inhabitants whilst the mine operates, and that post closure it is as safe and environmentally supportive as the latest technology and information can achieve.

Health

Health is defined as “a state of complete physical, mental and social wellbeing and not merely the absence of disease or infirmity”.

The EES focuses on the motherhood statement “risk-based impact assessment considering the baseline and predicted health risk to members of the local community from exposure to contaminants that may be released into the environment as a result of the project” – sounds great - but there is no document outlining how this will proceed, so my questions are

- how will the proponent conduct a “risk-based impact assessment”?
- who will conduct the “risk-based impact assessment”? will the application tools be validated to the populations being tested?, and will that data be published in a reputable journal? and of necessity it will have to be independent of the proponent;
- how will predicted health risks be determined? by whom? and based on what data?
- will the predicted health risks include mental health risks?
- will the proponent fund a service offering ongoing regular monitoring for a range of parameters for the local and broader community? will changes in the data be acted upon? and will the findings be published?
- why is there no document outlining the management strategies for the proposed risk-based assessment for baseline and predicted health risks? Exclusion of this document means we the community cannot determine the acceptability of what will be offered – this is an unacceptable omission and if deliberate then could be considered negligent.
- What happens to these decisions if the mine is on-sold and/or goes into caretaker mode?

Other health issues the EES acknowledges include air quality, noise and vibration, and radiation - for all of which there are regulatory compliance requirements and penalties for non-compliance, so my questions are

- will the proponent conduct the monitoring? and if so will there be frequent external unannounced visits by relevant authorities to check reliability of the recordings? will the external checking include actual measurements rather than just checking paperwork? ? Ultimately community health will suffer if there is non-compliance and therefore redress is essential;
- what happens to these decisions if the mine is on-sold and/or goes into caretaker mode?

The EES has only acknowledged some short term negative health impacts and not addressed those with a longer time to onset and typically with a longer duration of significant incapacity, so my questions are

- how will the proponent address the issues of chronic medium term health problems such as cardiovascular disease, diabetes, cancers, etc that have a delayed time to onset and that negatively and progressively impact health outcomes and wellbeing, and are a direct consequence of the mining processes?
- how will the proponent address the issues of chronic long term health problems such as neurodegenerative disorders, that are likely to manifest after the mine has closed, and are a direct consequence of the mining processes?
- what happens to these decisions if the mine is on-sold and/or goes into caretaker mode?

Given toxic metals can displace physiologically required metals in many metabolic processes, the consequences of bioaccumulation for both radiation and toxic metal accumulation is potentially profound - this is an acknowledged health risk that has not been addressed in the EES, so my questions are

- how will the proponent fund both the immediate and long term health impacts caused by bioaccumulation?
- who will administer the funding? and of necessity it will have to be independent of the proponent;
- what happens to these decisions if the mine is on-sold and/or goes into caretaker mode?

There is evidence that in the presence of inadequate levels of iron, zinc and calcium there is increased cadmium uptake with consequent increased risk of renal toxicity that can ultimately result in the necessity for haemodialysis – a range of commonly prescribed medicines decrease absorption of iron, zinc and calcium, therefore my questions are

- will the proponent be funding a service that will regularly monitor blood levels of iron, zinc, calcium and cadmium?
- will the proponent be funding appropriate interventions to prevent increased cadmium uptake and renal toxicity?
- will the proponent fund a haemodialysis service if required?
- who will provide the monitoring service? and of necessity it will have to be independent of the proponent
- what happens to these decisions if the mine is on-sold and/or goes into caretaker mode?

This is brown coal country and brown coal contains goitrogens which are substances that bind iodine and result in altered thyroid function; some of the toxic metals that will be concentrated due to the proposed mine processes are also goitrogens and will further exacerbate health problems associated with altered thyroid function, so my questions are

- will the proponent fund a service that will regularly monitor thyroid function?
- will the proponent fund appropriate interventions to minimise alteration to thyroid function?
- who will provide the monitoring service? and of necessity it will have to be independent of the proponent;
- what happens to these decisions if the mine is on-sold and/or goes into caretaker mode?

The proponent has not included an evaluation from a health economist with regard to negative health impacts and their consequent economic and societal costs, so my questions are

- why are the societal and individual health impacts costs not documented and costed?
- will a health economist's report be publicly available at some time prior to the public hearings? and how will it be distributed to interested parties?
- will ERR be commissioning a health economist's report to advise the calculated health costs to the community as part of their final evaluations of the merit of the application? and if not why not?
- will the proponent be required to pay a health bond to cover the estimated costs for the increased range of health services and specialist health services that will be required by the community for the duration of the mine's operations plus 50 years to cover late-onset disease, as a consequence of the mining operation?
- will ERR also be required to contribute to the health bond as the poor health that will be sustained will be a consequence of the decisions by both ERR and the Minister for Mines?

- will the proponent be required to pay a health compensation bond to cover compensation payments to those who as a consequence of the mine's processes, experience significant negative health impacts that result in reduced capacity to earn and/or loss of capacity to earn?
- who will administer the compensation scheme? and how will it's effectiveness be monitored? and of necessity it will have to be independent of the proponent;
- what happens to these decisions if the mine is on-sold and/or goes into caretaker mode?

The change from dairying to horticulture occurred in the 1970s and 1980s therefore the current health of the population can be considered to be stable, which can be confirmed with relevant Department of Health statistics, therefore any significant changes will be due to the mine processes, so my questions are

- what actions will be initiated by the proponent to monitor for changes in health status for the duration of the mine's operation plus 50 years?
- what actions will be initiated by the proponent to initiate interventions to mitigate the harm caused either directly or indirectly as a consequence of their mining processes?
- what public health strategies will the proponent fund and promote to minimise the negative health consequences of their mine on the local and broader community?
- what happens to these decisions if the mine is on-sold and/or goes into caretaker mode?

Wellbeing

The initial establishment of the mine will necessitate a large demand for short term labour that may not be available in the local community, so my questions are

- how will the proponent manage the impacts of this population influx on local community structure?
- how will the proponent evaluate the extent of the impact of the risky lifestyle behaviours such as drug use and alcoholism on the local community? and how will the proponent manage these risky lifestyle behaviours?
- given mining creates one offsite job for every onsite job whilst the horticultural creates four offsite jobs for every onsite job, how will the proponent compensate the local and broader community for the likely loss of employment opportunities?

The immediate area surrounding the proposed mine site is utilised for agriculture and grazing, and is inhabited by a small community that is still recovering from an unnecessary and profoundly destructive bushfire in 2014, and is now also dealing with the potential advent of a mining company that will irrevocably harm their business models, consequently there are seriously increased stress and anxiety levels; the proponent has not at any time in the last 6 years behaved in a manner that generates trust and confidence in this directly-impacted community, so my questions are

- how will the proponent address the issues of stress and anxiety within this community?
- since the proponent's behaviour throughout the last 6 years ticks all the boxes for being socially unacceptable +++, how can the community have confidence in a neighbour with such a bad reputation?
- reports from another mine site in which some of the proponent's current directors were involved, indicated a lack of compliance with their own EES-documented strategies with a particular example being *… they would stop mining on dusty days …* however they did not cease mining operations when it was dusty, so how can our community believe that they will do as they say this time?

- will there be any monitoring for compliance with the EES document? and if not why not? And if so then who will provide the monitoring service? and of necessity it will have to be independent of the proponent;
- what happens to these decisions if the mine is on-sold and/or goes into caretaker mode?

The broader community, especially situated on the eastern side of Bairnsdale ie an area not directly impacted by the proposed mine, have apparently benefitted from the proponent's smallesse such as contributions to local sporting clubs, however the local directly-affected stakeholders have had to, and continue to have to deal with the unpleasant experiences of sustained socially unacceptable behaviours such as bullying, harassment, intimidation and misrepresentation, so my questions are

- does the proponent propose to mend their fences and try and establish some degree of trust with their neighbours? and how will that success be determined? by whom? and will the affected stakeholders be included in that assessment?
- as trust once lost is very difficult to regain, how do they propose to generate that trust?

Food Security

Food security is a growing problem globally due to both rapidly diminishing availability of uncontaminated land, and the increasing mass of land and water that is contaminated means increasingly contaminated foodstuffs are being produced and consumed with consequent short term, medium term, and long term health and socioeconomic impacts, so my questions are

- how will the proponent address the contamination consequences due to dam wall failure, or vehicle accident or other incident resulting in unexpected contamination of air, land, water – including cleaning up the mess, removing the contamination, replacing all that was lost?
- the local horticultural industry accesses the Mitchell River for water for irrigation and for washing their produce, so how will the proponent advise them of any incident resulting in contamination of the Mitchell River, and compensate them for subsequent losses? Further the loss of foodstuffs from this source significantly impacts vegetable prices in Melbourne – so will the proponent be subsidising the cost of vegetables to consumers in Melbourne when there is a mine-caused loss of onsite-production?
- how will the proponent compensate the national horticultural industry in the event of catastrophic event resulting in loss of our horticultural export markets?

Many people in the directly-impacted area, and downwind of the proposed mine site grow their own vegetables and are dependent upon tank water for their drinking water, therefore they are at high risk of consuming contaminated produce and water due to air and water contamination - what strategies will the proponent be implementing to prevent contamination of these important resources?

General

The EES document does not seem to include any reference to the inclusion of new technologies to reduce environmental damage, and in fact seems to be depending on "old" strategies such as containing solubilised Heavy Metal Concentrate (HMC) on the ground and surrounding it with high mud walls, and containing contaminated water in dams. The Tailings Dam for Stockton Mine at Omeo (Lake St Barbara) has leaked contaminated water into the Tambo River for the last 20+ years; the State government "rehabilitated" it in the early twenty noughties (it still leaks) and part of the "rehabilitation" included the application of an impermeable membrane. It seems to me that application of impermeable membranes offer some significant advantages such as:-

a. covering the mud walls to minimise dust production during hot dusty summers, and spread of solubilised mud in wet weather,
b. lining the ground beneath the HMC to minimise HMC seepage into the ground and subterranean aquifers and consequent contamination,
c. lining the dams to minimise seepage of contaminates into the ground and subterranean aquifers,
d. lining the sides of the private road to minimise seepage of contaminates into the ground and subterranean aquifers as a consequence of vehicle accidents.

So my questions are

- will the proponent be applying impermeable membrane technology?
- will the impermeable membrane have a life expectancy of a minimum of 100 years?
- will the proponent maintain the impermeable membrane until it's removal?
- what happens to these decisions if the mine is on-sold and/or goes into caretaker mode?

Other technologies remove metals from water through various filtration methods, application of filtration technologies would reduce the contamination harm in the event of a dam wall failure or vehicle accident, so my questions are

- will the proponent install filtration technologies in/beside all water masses as a strategy to reduce the toxic substances load?
- will the proponent maintain those filtration technologies until all the relevant water masses are decommissioned?
- what happens to these decisions if the mine is on-sold and/or goes into caretaker mode?

The EES indicates the proponent plans to dam all the gullies and creeks as a strategy to acquire sufficient water for their mine to proceed, however there are increasing environmental concerns about the consequences of impairing water flow, so I have some questions

- does this strategy necessitate special permission? and is the relevant authorising body?
- what are the downstream impacts of reduced water flow on water availability for wildlife and the environment?
- what are the downstream impacts of reduced water flow for other stakeholders who are dependent upon that water for their stock?
- what are the impacts of reduced water flow on the Mitchell River and the RAMSAR-listed Gippsland Lakes?
- how will the proponent decommission the tailings dams? and will the proponent fund supervision of the decommissioning by relevant experts?
- if the tailings dams fail and the mine is in caretaker mode, then will the proponent be liable for the cleanup and pay compensation to all relevant stakeholders?
- how will the proponent compensate the local and broader community in the event of catastrophic event such as dam wall failure, resulting in significant contamination of both the Mitchell River and the RAMSAR-listed Gippsland lakes?

- who will be monitoring water quality throughout the system? and of necessity it will have to be independent of the proponent;
- what happens to these decisions if the mine is on-sold and/or goes into caretaker mode?

The rehabilitation process is about returning the land to at least pre-mine fertility and productivity – it is not about making it look the same as it was before the mine, so my questions are

- is there a defined period after closure of the mine in which the rehabilitation process is to be completed? And what is that timeframe? Are there penalties if the rehabilitation process is not completed within the defined timeframe?
- how many mines are in caretaker mode and so have not proceeded with the rehabilitation process?
- can mines be in caretaker mode indefinitely? and if so why is this permissible? I see this as a strategy to bypass their rehabilitation commitments;
- how many mines have been in caretaker mode for more than 10 years? at what point does ERR initiate action to formally close the mine? has ERR ever closed a mine that has been in caretaker mode for a considerable period of time?
- if mining companies do not fully meet their rehabilitation commitments are they granted further mining licenses? and if so why? Surely a previous episode, or episodes, of inadequate rehabilitation would be deemed an alarm for future non-compliance?
- what happens to these decisions if the mine is on-sold and/or goes into caretaker mode?

As Regenerative farming philosophy spreads so local farm practices change to integrate this philosophy into their management strategies with an expected outcome of sustainably improving fertility and productivity; the years the land is out of production, such as due to the mining venture, are lost years for improving both fertility and productivity and consequent income, so my questions are

- will the proponent fund rehabilitation processes to include improving land fertility with regenerative farming-acceptable practices ie not just a one-hit wonder with fertiliser, and to a higher level of fertility and productivity than that prior to the intervention?
- will the proponent fund rehabilitation to include decontamination of the land and all water sources and courses to potable levels so that food production can continue in this area?
- as the subterranean water supply will be irrevocably changed, will the proponent guarantee access to permanent uncontaminated water and that it will be available on each directly-impacted stakeholder's land?
- who, as in which organisation, will monitor these processes? and for what duration? who chooses, and does the choice include input from the affected stakeholders?
- will the proponent support affected stakeholders input into the acceptability of the chosen rehabilitation strategies, and subsequently authorise their implementation?
- what happens to these decisions if the mine is on-sold and/or goes into caretaker mode?

The Silt Jetties that extend the Mitchell River into the Gippsland Lakes are now the longest in the world – most of their soil originates in Glenaladale as Glenaladale soils are very fragile. Glenaladale lands are typically not ploughed or cropped because of their fragility – newcomers to the area instigate these practices and quickly learn its to their detriment. That the land is not disturbed means dust is not a problem for the downwind

horticultural industry. Any breaks through the topsoil and subsoil significantly increase the risk of tunnel erosion; tunnel erosion is an extensive problem in this area and remediation projects have failed – some of the remediation projects found extensive tunnel erosion 10+ metres below ground level. I have seen collapsed tunnel erosion that is so deep that a fully-grown cow can stand in it and not be seen at ground level. So my questions are

- will the proponent commission soil scientists with tunnel erosion expertise, and with a history of successfully remediating tunnel erosion, to direct rehabilitation of the land?
- if tunnel erosion manifests within 15 years, how will the proponent address the problem, and further compensate the affected landholders?
- it is anticipated the silt jetties will extend quite rapidly due to the proposed mining operations and the consequent erosion, so will the status of the silt jetties be monitored during and for an extended time eg 50-100 years after the proposed mining operation? by whom? will the proponent fund the monitoring? Who will organise that involvement?

Proof of sustained improved soil fertility and successful decontamination of land and water to a level that food can be successfully and safely produced, necessitates time for evidence of incremental improvements, so my questions are

- within what expected timeframe will the bond be returned?
- will the determination of the success of the rehabilitation be a coalition of the 3 main parties – being the stakeholders, ERR and the proponent? and if not then who will make that decision?
- if directly impacted stakeholders are not included in the determination of the level of success of the rehabilitation process then what are the reasons for their exclusion? and are these reasons considered valid? As this directly impacts the livelihoods of the directly impacted stakeholders, they have a significant degree of vested interest in getting this right;
- how many mines have had their bonds fully refunded in the last 10 years? what was the basis for the full refund?
- how many mines have had partial refund of their bonds? and what were the determinants for only a partial refund?
- do mines that have been in caretaker mode for more than 10 years forego their rehabilitation bond? if not why not?

Parts of the surrounding mountains have not experienced fires for more than 50 years, the 2014 bushfire partially burned the nearest mountain and mostly burned the cleared land and thus caused significant social and economic damage, thus the risk of bushfires is increasingly high, so my questions are

- will the proponent fight any fires on their site? and will they expect local CFA assistance? and would any of the fires be deemed sufficiently hazardous to require special fire-fighting gear?
- will the proponent mobilise their workforce to fight offsite fires? even if the mine is not impacted?
- how will tailings dams be identified to Emergency Services so that their water will not be used for fire-fighting purposes? In the event of a miscommunication/misunderstanding, who will fund the subsequent decontamination of impacted land?
- what happens to these decisions if the mine is on-sold and/or goes into caretaker mode?

Typically there are a number of wet seasons after a drought, so it is likely the area will be quite wet and at risk of flooding during the next few years, so my questions are

- how will the proponent prevent the solubilisation of the mudwalls during sustained wet events? Further how will the proponent prevent their consequent migration into the soils and subterranean aquifers as well as gravity-feeding down slopes into water courses? Will there be penalties for not having effective systems in place to prevent this from happening?
- how will directly impacted stakeholders, and broader community be compensated for contamination of their land and water due to solubilisation of the mudwalls?

The EES table 8.3 identifies the maximum metal concentrations in topsoil, overburden and ore samples within the project area and claim they are within acceptable ranges, however arsenic is only just within acceptable range and bismuth, thorium, thallium uranium, vanadium and tungsten are not allocated HIL A levels, so my question is

- If there are no allocated Australian HIL A ranges for bismuth, thorium, thallium uranium, vanadium and tungsten, then why have not US, or UK, or European standards been applied instead?

There appears to be an error in Table 8.3 with regard to chromium – chromium is available in 2 forms – being III which is the biologically available form, and VI which is the form that is toxic to the body. I find it unusual that chromium III (the biologically safe form) has been included and not chromium VI (the biologically toxic form) – further, it concerns me that important data such as this, is not correct, so my questions are

- will clarification be sought regarding the form of chromium that was tested?
- if the biological form was tested then why was it tested and not the known toxic form? and will the toxic form ie chromium VI be tested?

The EES does not state the anticipated levels of the HMC metals. Based on the conversion of 170 million tonnes of ore into 8+ million tonnes of HMC, the concentration rate seems to be about 21.25. Application of the conversion rate to Table 8.3 then means arsenic, cobalt, nickel and lead will all be well over their HIL A levels and therefore a management plan is required. Given the short, medium, and long term health impacts with which sustained intakes of these toxic metals are associated, I have some questions

- what are the proponent's proposed management strategies for the toxic metals that exceed their HIL A levels? and why is this information not included in the EES?
- will the proponent be testing the HMC metals levels, within a very short timeframe of commencement of the HMC production, to verify levels of all the toxic metals present?
- what other metals, toxic or otherwise, are present? why haven't they been identified? And will they be identified and the information be publicly available?

The EES document does not include any documents indicating the proposed mining project's anticipated level of financial viability, so I have some questions

- what is the evidence that this proposed mining project will be financially viable without any taxpayer-funded assistance at any time during their period of operation? why is this information not included in the EES?
- will ERR be commissioning an economist's review of the anticipated financial statements to ensure financial viability during all aspects of the mining process? and if not why not?

- what is the percentage of royalties that will be paid?
- will the estimated income from the proposed mining project royalties cover all the relevant costs associated with all aspects relating to application through to closure, any provided government grants and taxpayer-funded assistance, the hidden costs of local job losses due to loss of industry, the costs relating to increased negative health impacts, and the costs of negative environmental impacts? If all these costs are not met and exceeded then why not? It is not appropriate for taxpayers to fund the destruction of the environment and/or food-producing lands;
- are the proponent's directors personally liable if there is non-compliance with environmental requirements and/or if the company goes broke? If the company is sold will compliance with environmental requirements be part of the contract of sale, or enforceable with new owners? and by whom?
- given China is the world's dominant producer of rare earths, and given the deteriorating trade relations between Australia and China, are the proposed incomes from the mine realistic?

The mine is estimated to generate $1 billion over the next 20 years whilst the horticultural industry is estimated to generate $4 billion over the same timeframe, so my questions are

- why is precedence being given to a project that has a short timeframe, that will negatively impact other, industries in the area and further, create significant irrevocable damage to the land, the environment, and to peoples' livelihoods, and will make minimal contribution to the local prosperity? The alternate choice, the horticultural industry, has capacity to expand and employ more people, is not finite, is significantly less destructive, and through spending and employing locally contributes to local prosperity;
- why are jobs for possibly 200 people more important than the jobs for the currently employed 8-10,000 people?

If this proposed mining project is sold, then the most likely buyer is a Chinese company; the Free Trade Agreement with China includes clauses that permit China to utilise their own labour, however one of the touted benefits of the proposed mining project is that it will generate jobs for locals, so my questions are

- if the mine is sold to a Chinese interest then what compensation will be paid to the locals for the loss of employment opportunities, both related to the mine and to the horticultural industry?
- can the proposed mining project be conditionally approved such that it cannot be sold, or cannot be sold to Chinese interests?

The proposed mining project includes installation of infrastructure that is external to their boundary – the infrastructure relates to water pipelines, bore pumps, roadworks, new powerlines, easements, rail siding, vegetation removal, etc, so my questions are

- why can the proponent consider installing infrastructure on land that is not within the defined proposed mining project area?
- why can private land be compulsorily acquired for the installation of infrastructure that has no relevance to the landowner and is likely to cause harm to their land either in its presence, installation or decommissioning?
- as there is significant native vegetation in the proposed mining project's defined area and also in the areas that are likely to be impacted by the installation of infrastructure how does the proponent plan to address it's management?
- does ERR have the authority to grant compulsory acquisition to the proposed mining project?
- what happens to these decisions if the mine is on-sold and/or goes into caretaker mode?

The CSIRO conducted a Citizen Survey in 2014, and again in 2017 – from the data included it seems mining is slowly losing favour – trust in processes, mining companies, and government processes are all slowly diminishing; it seems likely to me that post-Covid that unease and mistrust will increase exponentially.

The local community does not perceive the mining approvals process to be fair or that their inputs have been valued – in fact there is a strongly held perception of corruption and partisanship for the mining company, as the mining company has direct access to both the ERR and TRG whilst stakeholder input is seriously limited in a number of ways including limited time to respond to the EES, no direct representation on the TRG, not being informed who is on the TRG, a mostly pro-mine TRG without other relevant expertise such as economist, health economist, soils scientists, hydrology, climate, agricultural economist, psychologists, chief medical officer, etc, so my questions are

- will ERR be recommending Integrity Commission oversight of all current and pending mining licenses as a strategy to address the very deeply held negative perceptions held by the community?
- if one of ERR's roles to "assist" mining companies with their license applications, then where is the claimed impartiality in the approvals process?

The proponent has a long track record that demonstrates a lack of familiarity with the concepts of integrity, ethics, honesty and trustworthiness – so I have some questions

- why should we believe or accept the EES document for which there is no requirement for accuracy?
- given we are aware of at least one report that initially documented unfavourable findings for the proponent and was amended prior to being submitted to the ERR, how can we trust the EES contents?
- how can appropriate decisions be made on the basis of potentially flawed documents, omission of documents, and work that has not been conducted and necessitates "discussion with stakeholder at time of occurrence"?
- the submission of the EES document should mean "discussion with stakeholder at time of occurrence" is redundant – that this phrase peppers the EES document suggests to me a casualness that they don't have to do much because they are going to be given the license anyway – is this perception correct?
- why does ERR ask if a mining company is considered "fit and proper" if they do not initiate penalties when advised of sustained socially unacceptable behaviours?

If Tom Albanese, the discredited CEO of Rio Tinto, suddenly stopped promoting "the Fingerboards opportunity" and cold-called Metallic Resources to take it on, then the proposed mine is not worth much. That Metallica, a mineral sands mining company, spent time investigating the opportunity, and then decided to refuse the offer, further reinforces the perception that the proposed mine is not worth much at all. No graphs that I have seen support the proponent's claim that this proposed mine is the biggest and best in the world – it is a worry that the bureaucrats seem to believe the hype …

The precautionary principle states "… if a threat of serious or irreversible damage to the environment or human health exists, a lack of full scientific knowledge about the situation should not be allowed to delay containment or remedial steps if the balance of potential costs and benefits justifies enacting them." The proponent's EES document does not adequately identify and address all the harms that the proposed mining project will inflict on the community or environment.

ENVIRONMENTAL EFFECTS STATEMENT THE FINGERBOARDS MINERAL SANDS MINE PROJECT SUBMISSION

In summary I object to the approval of this mining application because

a. of the significant health, well-being and environmental harms,
b. there is no evidence of financial viability,
c. there is a track record of significant socially unacceptable behaviours, and
d. there is an absence of essential information in the EES document.

I wish to speak to my submission and request the allocation of an hour to do so

Thank you for the opportunity to express some of my concerns about the aspects of the EES that I consider have been either overlooked or inadequately addressed

Y Coleman