



Fingerboard Mineral Sand Mining Project

IAC Presentation
Wednesday 30th June, 2021

Fingerboard Mineral Sand Mining Project

Who Am I?

Holder of Degree in Education (Commerce Law/Economics)

Degree in Counselling and Post-Graduate in Family Therapy

40 years of experience 20/20 Education/Health Professional

Chairperson (retired) East Gippsland Suicide Intervention Network

Permanent resident of East Gippsland – Paynesville

Key concern – Equity- Fairness, Balance of Entitlement

FINGERBOARD SAND MINING -KALBAR	EAST GIPPSLAND COMMUNITY
<p>Shareholders – Overseas Interest & Value Added</p> <p>Singular cohort representation of stakeholders– Appian</p> <p>No inter-generational re- investment. Limited tenure.</p> <p>Not Ratepayers. Faceless (OS) & Transit residents (vs permanent residents)</p> <p>High level of entitlement</p>	<p>Shareholders – Australian Interest & Value Added</p> <p>Diverse industries, landholders, infra-structures and community organisations, governmental bodies & agencies, residents and guests/visitors</p> <p>Intergenerational history; successional history; value added <i>remains</i> in East Gippsland/Australia</p> <p>Rate payers. Sustainable & continual income generation & contributors. Risk of reduced/no entitlements in their place of residence/work</p>

Key concern – Equity- Fairness, Balance of Entitlement

FINGERBOARD SAND MINING -KALBAR

- **Foundation/framework** of the project.
- The EES. A document inherited with a status of **conflict of interest.**
- **Concern:** Limited and/restricted terms of reference, information invested solely in mining projects' interests (e.g. profit); exclusion of social licence data. Singular entity.

EAST GIPPSLAND COMMUNITY

- **Foundation/framework** – diverse, unrelated & **independent** organisations, groups and parties. Submissions – own entities.

Duplicate entities

- Shire of East Gippsland
- Mine Free Glenaladale (Multiple disciplines)
- Independent Organisations/representatives
- Conservation Group/s
- Dept of Environment, Land, Water & Planning
- Gunaikurnai Land & Water Aboriginal Corp
- Agricultural – Landholders, operational farming entities, farmers & governing bodies of the industry (e.g. QA, H.A.R.P.S. Auditors)
- East Gippsland Water (Page 16)
- Government bodies (e.g. Heritage, Transport)
- Residents – households/business owners
- Plus more measured by over 900 Submissions


Key concerns - Cause No Harm – Duty of Care

FINGERBOARD SAND MINING -KALBAR

Working Definitions Offered

- Words to the effect that to cause no Harm is to be legally interpreted and considered as equating to 'reasonable based on given evidence'
- Mitigation/offsets will address projected reasonable harm – implied/understood interpretation

EAST GIPPSLAND COMMUNITY

- **NO Harm** must be **ABSOLUTE** if there is evidence of potential, possible, expected or risk of harm
- **Language** (verb/noun) Sourced: Oxford Dictionary
NO = 'not any; non-existent'
HARM = 'damage, hurt'
None/Nil risk to occur

- Offsets and Mitigation – *intrinsic action planning against* risks of harm.
- EES meets *reasonable evidence by proponents* to persuade EG safety to proceed with the project. Reasonable is **NOT** absolute.

Key concern - Cause No Harm – Duty of Care

continued

FINGERBOARD SAND MINING -KALBAR

Meaning of reasonable

- REASONABLE = 'fact adduced or serving as argument, motive, cause or justification; what is right or practical, moderation..stand to hear, listen..let oneself be persuaded

Sourced: Oxford Dictionary

EAST GIPPSLAND COMMUNITY

- **Mining History.** No evidence of capacity to 'rehabilitate' to 'original' status. Proponents' limited mining experience.
- **Sensitive receptives** – households, schools, businesses, people – **not** innate entities. **Are absolutes.** Environment is absolute. Waterways are absolutes. Quality of air is absolute.
- Reasonable to expect that No Harm equate to no harm as an absolute.
- Proactive action = Preventative against risks – the word of intrinsic expectation of harm.
- Landmark action and decision is the invitation

Key concern - Cause No Harm – Duty of Care

continued

FINGERBOARD SAND MINING -KALBAR

ESS and Technical Expert Representation:

- Assertion of no/limited risk to physical wellbeing
- Assertion no/limited risk to quality of life

EAST GIPPSLAND COMMUNITY

ESS – Limited

Concerns: Excluding 'hidden' risks.

1. No data/evidence of correlation of how mining, historically, impacts a community's' mental/psychological wellbeing & quality of life –pre and post mining over a longitudinal study

2. Mining accidents. Historical evidence. Proponent not highly experienced entity increases risks.

Mining as a self regulatory body. Watchdog?

Key concern – Exclusion of data re Mental Health/psychological impact of the project

- **Framework** of the project – EES **not incorporate** Mental/psychological Wellbeing & Health. Different to presentation of 'low risks' to physical health e.g. cancer (Aaron Orgon 11th May 2021)

➤ To date – absence of the psychological and consequentially socio-psychological impact of the project on permanent residents of East Gippsland

Presentation based on:

- MH decline is offered in diagnostic terms* – but **no less** real. Particularly heightened concerns in regard to risk of mental health continuum, inclusive of premature deaths.
- MH risk factors presentation grounded to my given accumulated knowledge within the mental health profession and supporting independent data.

Key concern – Exclusion of data re Mental Health/psychological impact of the project

MH is inclusive of: (not an extensive list)

- Psychological/Emotional: Anxiety & depression (**situational**, seasonal, organic)
- Behavioural: Self-harm – Intentional/Unintentional (increase use of substances, tissue damage, decline in general health (e.g. Not eating well, insomnia, stress, anxiety, uncertainty), premature death – D1 & D2). **D1** Suicide. **D2** Declining wellbeing, physical illnesses and conditions, reducing natural life span and/or quality of life
- Connectivity/Relationships: – increases in relational stress, relational conflict, family stressors, violence
- Grief and loss – of ANYTHING. Employment, health, hope, relationship/s, security, capacity to achieve, function, provide, direction, future, financial generation, culture, lifestyle, historical – indigenous country, plus more

Key concern - Cause No Harm – Mental Health of East Gippslanders

Anxiety: Definition: 'response to a **real** or **perceived threat** or **fear**, originating from past, current or emerging event/s to one's life, property, significant others, inclusive of property, pets and possessions of value.' Responses to anxiety is flight, fight or freeze*.

*Freeze response. Measured in community awareness, but not public records (e.g. submissions)

- Humans /cognitive-emotional responses is the same to perceptions, as to real/factual evidence

THREAT = REAL OR PERCEIVED.

Body responds in the same way to the trigger – heart rate, hyper-tension, blood pressure changes, sweating, cognitive confusion, plus more

↓
The Land & Environments
Health **Plus**
Security of water – natural disaster reserves

↓
Capacity to generate Income/ run a business. Meet QA/HARPS standards. Accommodate change financially. Tourism risk factor

↓
Provision for Family
Quality of life
Financial security
Meeting Debt Commitments – mortgages/loans

↓
Capacity to influence, control, change the real/perceived threat/s. *The **lesser** the sense of capacity, the **greater** is the anxiety/depression; the greater the capacity, the greater the decline of anxiety /depression*

Key concern - Cause No Harm – Mental Health of East Gippslanders

Uncertainty is a significant element that contributed to **decline in MH wellbeing**

- Rural Victoria (East Gippsland) resides with continual uncertainty. Natural Disasters – Fire, Drought, Floods, pests, (e.g. mice/rate plagues, diseases)
- Covid 19. Impact on tourism, hospitality, access to pickers, farm hands, delivery of essential equipment, resources. Seen in MH presentations.
- Agriculture: Exposed to seasonal uncertainties, natural disasters, climate change. Described “a climate, not just weather” (Nick Barton)



UNCERTAINTY – ANXIETY Responses. DON'T ADD ANOTHER CHANGE/UNCERTAINTY (Sourced: Beyond Blue)

Loss of income & security. Provision to family unit. Sense of failure. Hopelessness

Confusion, Tension, Stress, Panicky, Terrified, scared, nervous

Trembling, Heart races, numbness, sweating, short of breath, dizziness

Withdrawal, substance usage
Depression
Cognitive Dysfunction

Key concern - Cause No Harm – Mental Health of East Gippsland

Statistical Data for Rural Victoria

- EG Suicide Intervention Network – Wesley Mission. **Why?** Rural Gippsland Region of Victoria represents the highest level of suicide, per capita for the State of Victoria, and East Gippsland held the highest Per capita for rural Gippsland.

Some Stats re Australian Farming community– Sourced; BMC Public Health – Social Factors and Australian Farmer Suicide qualitative study, 2018 (QLD, NSW)

- “Farmers and farm workers have been recognised as a group at high risk of suicide in Australia..higher than in other occupations in Australia and some countries around the world”
- “the phenomena of rural suicide remains poorly understood..noting the importance of community and environmental contexts on well-being, have been cited as critical to any future rural suicide prevention intervention.”

Key concern - Cause No Harm – Mental Health of East Gippsland

Some Stats re Australian Farming community– Sourced; BMC Public Health – Social Factors and Australian Farmer Suicide qualitative study, 2018 (QLD, NSW) – continued:

- “farmers..are part of families, small and often tight-knit communities, and operate within a unique geographical, psychological, environmental and social context within Australia.”
- “farmers themselves perceive risk for suicide to result from a highly interactive combination of individual, environmental and social factors.”
- **Result:** “In the overall study, three interrelated and interdependent themes **in terms of suicide risk factors emerged:** individual, environment and social.’

Project: Individual uncertainty.
Community Division.
Landowner pressures
to bequest property.

Land classified as ‘productive
farming land’ (John Glossop – Town
Planner, Day 2) and to be preserved
by Premiers of Victoria @ risk.

Life Sources @ Risk
Heritage Mitchell
River & Aquifers

Key concern - Cause No Harm – Mental Health of East Gippsland

Some Stats re Australian Farming community– ‘Suicide in rural Australia’ National Rural Health Alliance Inc. May 2009 (Prepared in collaboration with Suicide Prevention Australia (SPA))

AIHW-Mortality Report shows that –

- ‘..age group 25-44 years..national rates for males are highest..also worse in non-metropolitan areas among 5-64 year old males..’; Suicide rates have declined slowly in major cities, but have shown little change in rates in regional areas.
- ‘..personal vulnerability is also significant..in a rural setting, may be heightened by factors such as: ..previous significant losses and the consequent lessened resilience to further adverse life events; unrecognised or untreated depression; alcohol and other drug misuse.’
- ‘..suicides are often under-reported for indigenous people..in remote areas, rates may be up to six (6) times as high, and perhaps higher, compared with those for other Australians.’

Key concern - Cause No Harm – Mental Health of East Gippsland

Some Stats re Australian Farming community– ‘Suicide in rural Australia’ National Rural Health Alliance Inc. May 2009 (Prepared in collaboration with Suicide Prevention Australia (SPA))

- “Vulnerability..appears to be a casual relationship between drought-related trauma and elevated proportions of at risk individuals in agricultural communities, such as farmers and local business people. In addition, **land degradation can damage the social structure of farming communities.**”
- “Rural communities have also been affected by the perceived devaluing (**by metropolitan communities and governments**) of rural Australia as a contributor to Australia’s social and economic fabric.”



This project is **an additional unknown variable**. **If this proceeds** = Dependency remains in the domain of an enterprise to self-regulate, in the spheres of compliance to all stated commitments. Perceived and real data on mining practices heighten concerns for land, livelihoods, quality of life, income sustainability, health plus more. What guarantees if harm is not absolute, that in time, actions by this project could be deemed ‘grounds for an inquiry’.

Key concern - Cause No Harm – Mental Health of East Gippsland

- **2018 Senate Inquiry Report** on the *Accessibility and quality of MH services in rural and remote Australia*. 18 recommendations at addressing the high rates of suicide in regional Australian communities..(where)death rates from suicide are 25 to 40% higher in rural-based men.
 - “Australian Farmers operate in a work environment that can be hazardous to their MH. Rates of depression..are higher than for urbanised Australians and non-farmers living in rural settings.”
 - “Where farmers **feel unable** to manage and deal with the impacts of external economic and environmental factors on their businesses and livelihoods, it can **cause feelings of powerlessness**. That mindset can, in turn, translate into mental health issues, which may eventually lead to suicide”.
 - “A survey of farmers by the **Australian Institute of Family Studies** found that ‘drought-declared area farmers’ were **twice as likely** to experience mental health problems...rural suicides rates, is one of many broader social effects of climate change on Australia.”

⊕ This project is an **additional unknown variable** in a known rural area prone to drought, fires, floods and **this project cannot guarantee it will not result in another environmental disaster.**

Statistics support that rural communities need equitable recognition, resourcing for sustainable and improved Mental Health.



- ▶ **(P)Perceptions are equal to (F)facts:** Perceptions of any given situation can result in MH harmful behavioural responses against any provided evidence, assurances, expert advice & assurances, and stated commitments in accordance to legislative regulations of compliance.

P or F: Mining will be harmful to agriculture – farming our community, residents and tourism

- Tourism. No longer the pristine, unique, high country/water/ lake system. Tourist dollar – the projected sustainability of our environment, is the insurance for growth in the region. **Loss of income, business, ability to provide for family/children, debt.**
- Mining is **contrary to East Gippsland Water authority** that state that ‘to drawing water from the Mitchell River, the priority is to ensure minimal impact on the environment.’ (www.egwater.vic.gov.au)
- Mining is **contrary to The Victorian Health Strategy**. ‘It (Mitchell River) attributes to the financial prosperity of its community – primary/farming industries, fisheries..our organisms and aquatic life.’



What value do we input on the mandated areas of regulation of government utilities, if over-ruled by a transit entity? What value is inputted on their research, expertise and visions?
Question of equity, representation and balance of power and ownership of one’s own nation. Hope of retention critical for rural Australia, for East Gippslanders.

Key concern – Premature Death 1 – Psychological/Emotional

Premature Death 1– Successful Suicide. Hidden – Warning Signs – flagged or hidden. Assessment after ‘the fact’ that identified indicators of MH. Can be well planned. Can be a reactive response. Can be accidental. Can be spontaneous. Measurable ‘after the event’

We need to exercise an attitude of **absolute** duty of care against given statistical data.

“Not all people who die by suicide have a known mental illness at the time of their death.. Depression is the top MH risk factor” *(Sourced: Black Dog Institute 2021)*

“2019, suicide was the 13th leading cause of death in Australia; largely attributed to a rise in the suicide rate among middle-aged and young women; past 10 years, ..suicide deaths was approx. 3 times higher in males; 75% of people who died by suicide in 2019 were male.”

“Aboriginal and Torres Straits Islander people who died by suicide in 2019..was the fifth (5) most common cause of death.” *(Sourced Australian Bureau of Statistics)*

Notation

Grief and Loss – real or perceived realities

Individuals will 'act' on real and/or perceived threats and losses that cannot resolve uncertainty, hopelessness and powerlessness in their circumstances



Depression

Situational
e.g. Loss of employment,
singular event

Organic –
Cognitive Tissue
E.g. Bi-polar

Seasonal
e.g. Winter –
Low sunshine



Acts of Self – Harm
e.g. substance
abuse, tissue
damage, plans to
end life

Key concern – Premature Death 2– Physical/Tissue Damage

Premature Death 2– Decline in Physical wellness and quality of life

Sourced: Gippsland Regional Integrated Cancer Services (GRICS) 'Cancer Profile

Some Stats: (More provided in submission)

- “Cancer is the leading cause of death in Gippsland” (Source: Victorian Cancer registrar 2016)”
- “For the period 2011-2016, Gippsland population aged 65+ is projected to increase at a rate above the State average. (Sourced: Victorian Department of Planning & Community Development).
- “Estimations (2025-2029)the annual incidence of cancer will reach over 41,000; ..an increase of 39% from 2010-2014; ..new cases and deaths are increasing..largely due to the growth and ageing..population.”

Key concern – Premature Death 2– Physical/Tissue Damage continued

Premature Death 2– Decline in Physical wellness and quality of life

- “ the top five (5) cause of death in the East Gippsland Region, in order of death are: (1st) Malignant Cancers; (2nd) Cardiovascular diseases; (3rd) Chronic Respiratory diseases; (4th) Unintentional injuries; & (5th) Neurological and Sense Disorders. (Sourced: Gippsland ‘Brief Population Profile – Gippsland Snapshot, May 2016)
- Positive outcomes: Cancer death rates have declined since 1982 with average falls of 1.5% per year due to earlier screening, reduction in tobacco use and improved treatment; 5 year survival rates increased from 49% to 67% between 1989-2013. (Source: (GRICS))
 - **Risk** of reversing the positive predictions for Gippsland.
 - **Risk** of adding to the 5 causes of death for Gippslanders.

Key concern – Premature Death 2– Physical/Tissue Damage continued

Premature Death 2– Decline in Physical wellness and quality of life

? From a position of absolute no harm equating to not increasing risks

- On the subject of radiation – proponents technical expert advice, I believe (a) limited to the annual dosage for adult males; (b) not provide sufficient data of the accumulative impact on cellular changes; (c) excluded impact on children; and (d) relatively the impact on given data on cancer and death rate causes *specifically to this region* of Gippsland.
- The W.H.O. organisation identified that exposure of radiation, particularly for children is harmful - (at any level of exposure.

Key concern – Premature Death 2– Physical/Tissue Damage continued

Premature Death 2– Decline in Physical wellness and quality of life

? From a position of absolute no harm equating to not increasing risks

Source: Children's Health and the Environment – Training package for the Health Sector, W.H.O.
www.who.int/ceh

- Identified routes of internal exposure inclusive of Inhalation (Air, Water Vapour), Ingestion (Contaminated food or water), Skin, wounds, Parenteral (Medical) & Transplacental (Maternal contamination)
- External routes of exposure – whole body, partial body and or localised body exposure
- Health Effects are evident in 2 types: (a) Deterministic – tissue destruction, cell loss = acute radiation illness; developmental damage due to early exposure; (b) Stochastic – Cells are not killed, but are modified

Key concern – Premature Death 2– Physical/Tissue Damage continued



Premature Death 2– Decline in Physical wellness and quality of life From a position of absolute no harm equating to not increasing risks

Source: Children's health and the Environment – Training package for the Health Sector, W.H.O. www.who.int/ceh

- Real Concern: “Radiation-induced cancer is indistinguishable from cancer from other causes. The probabilistic nature of this risk means that children have more time to accumulate exposures and damage, and more time after exposure to develop disease” (Slide7 Notations)

Source: www.cancer.gov/about/cancer-prevention/risk/radiation National Cancer Institute USA

- Radiation exposure* for children carries unique considerations in children – (a) considerably more sensitive than adults demonstrated in epidemiologic studies; (b) longer life span, results in a larger window of opportunity for expressing radiation damage”.
- A child exposed to environmental as well as medical radiation is at a higher risk



CLOSURE – Absolute assurance to Gippslanders

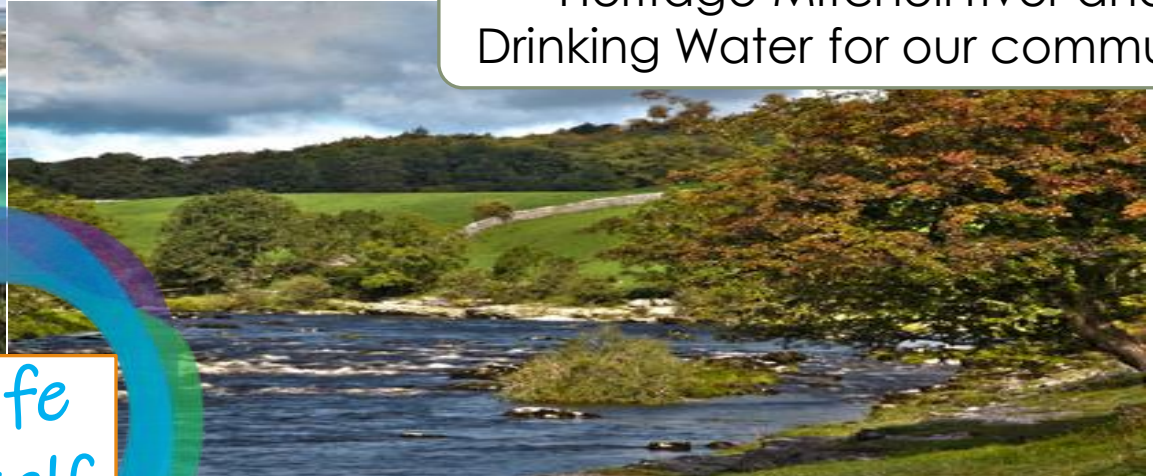
- That a singular entity interests are *reasonably* weighed against:
 1. The diversity and independent entities (Submissions opposing the Project), across government departments, inclusive of the Premiers Department, government established legal utilities (e.g. EG Rural Water, EG Shire, Conversation Group that has identified The Mitchell River as a Heritage Listing, varied medical sources, inclusive of the Department of Health statistics and W.H.O., individuals, farmers, business owners, plus more. **Equity of resources and power.**
 2. The real and perceived impact on the environmental, social, physiological, communal and businesses on the critical Lindenow Growers and allied businesses, that already must meet QA and HARPS requirements. Consideration for Organic Farmers. **Sustainable Value Added beyond the project.**
 3. **Absolute** position to **not cause harm** by introducing the probability of additional natural disasters – water and soil – against an existing landscape of natural disasters – flood, fires, climatic events, pests; risk to health and life quality or life span. **Not compromise ‘health’ as a comprehensive statement.**
 4. The justice that ‘compensation’ is **not the answer** or security for probable or reasonable harm due to mining. To not pursue absolutes is not exercising, in my view, true duty of care. The cost of risks is too high. One lost life is a cost too high.

Our pristine & vulnerable 'Lake' system.



Many thanks for the opportunity to offer this presentation to the honourable members of the IAC

Heritage Mitchell river and Drinking Water for our community



Life itself



Productive horticultural and agricultural land and farming community that feeds many.