

# Fingerboards Mineral Sands Project Environment Effects Statement

## Inquiry and Advisory Committee Direction No. 26 — EES submissions summary 7 January 2021

This document has been prepared by Kalbar Operations Pty Ltd in response to Direction No.26 issued by the Inquiry and Advisory Committee on 23 December 2020. It is split into two Parts:

- Part 1 addresses EES submissions made by State government agencies and regulators, and by local government (including the report prepared by SLR) and submission 662; and
- Part 2 addresses all other EES submissions.

## 1.0 Government and agency submissions

### 1.01 General

Issue #	Issue description	Submission number #
1.	Requests establishment of a specialist panel to provide ongoing monitoring of the project due to the regulatory effort required for oversight by individual regulators.	291, 358, 552
2.	Concern that the draft work plan does not address Project-related activities outside the mining lease area, including modifications to road infrastructure, and other infrastructure.	716
3.	Concern that there is no historic heritage assessment report for the Project, nor has such a report been submitted to Heritage Victoria.	716
4.	Recommends specific amendments to the Incorporated Document, Work Plan and EMF to reflect the fact the <i>Environment Protection Act 2017</i> (as amended by the <i>Environment Protection Amendment Act 2018</i> ) ( <b>New EP Act</b> ) will commence in 2021. Particular amendments include: <ul style="list-style-type: none"><li>• specific reference to the new duties that will be imposed under the New EP Act; and</li><li>• conditions which require the Work Plan, EMF and the management plans prepared under the Incorporated Document to be updated to the satisfaction of the EPA within 12 months of commencement of the New EP Act.</li></ul> Also recommends that the EMF be amended to consistently refer to the <i>Environment Protection Act 2017</i> (not the 2018 amending Act).	514

Issue #	Issue description	Submission number #
5.	Recommends amendments to the EMF, Airborne and Deposited Dust Risk Treatment Plan, Environmental Noise Risk Treatment Plan and to the Water Quality, Hydrology Risk Treatment Plan and Mitigation Register.	514

## 1.02 Biodiversity

Issue #	Issue description	Submission number #
1.	Concern whether assurances can be provided that no additional vegetation, beyond what has been assessed, will be removed during the lifespan of the Project.	716
2.	Comment that the risk assessment should consider the loss of aquatic habitat through a loss of containment including but not limited to flocculants that are toxic to aquatic biota and with long retention times on all species and communities.	716
3.	Considers the highest value biodiversity areas at risk from the proposed mine are: <ul style="list-style-type: none"> <li>the vegetation communities along the Crown land rail and roadside reserves;</li> <li>the remnant native vegetation in gullies on private land and adjacent to riparian areas;</li> <li>large trees in the paddocks; and</li> <li>water quality and quantity affecting aquatic biodiversity in the Mitchell River and Gippsland Lakes.</li> </ul>	521
4.	Concern over the lack of a detailed site assessment for the property at 2705 Dargo-Bairnsdale Road, Glenaladale.	521
5.	Concern over the failure to include appendices associated with the DELWP Native Vegetation Removal Report in Appendix 6 of the Detailed Ecological Investigations report.	521
6.	Concern that opportunities to avoid and minimise impacts on native vegetation have not been fully explored nor substantiated.	521
7.	Native vegetation losses require offsets for 18 different species (including 2705 Dargo-Bairnsdale Road). Of these species, only 7 have species habitat units available for purchase from the Native	521

Issue #	Issue description	Submission number #
	Vegetation Offset Register. Comment that Kalbar must provide an offset strategy that demonstrates the offset requirements are available and able to be secured, should clearing be approved.	
8.	Concerns with the location of the railway siding and haulage road given risks to threatened flora and vegetation communities, namely: Gaping Leek-orchid, Purple Diuris, native grassland, native woodland and Saplings Morass Flora and Fauna Reserve.	521
9.	Considers the current impact assessment of the railway siding option to be inadequate. Requests provision of: <ul style="list-style-type: none"> <li>• details of other options available for a railway siding and joining points that avoid and minimise impact on these values (e.g. locating the siding at the mine site, moving the current joining point further east or to other sites impacting on Lowland Forest areas rather than grassland communities or utilising existing sidings at Bairnsdale and Hillside);</li> <li>• detailed construction plans and on-going vegetation management requirements to the satisfaction of the Department of Transport for these sites and the Fernbank East option;</li> <li>• a full biodiversity assessment of the direct and indirect impacts of each option including impacts on FFG Act and EPBC Act listed threatened flora and vegetation communities; and</li> <li>• mitigation and compensation measures for any of these impacts.</li> </ul>	521
10.	Requests full details of biodiversity-related mitigation measures to demonstrate what actions will be undertaken by Kalbar and how any success be measured, particularly in relation to aquatic species such as Australian Grayling, Groundwater-dependent ecosystems and riparian values.	521
11.	Concern over consistency with Municipal Strategic Statement, Environmental Significance Overlay and Vegetation Protection Overlay due to extent of impact on roadside vegetation.	521

### 1.03 Groundwater

Issue #	Issue description	Submission number #
1.	Concern about gaps in the documented conceptual groundwater model, and inconsistencies in the inferred groundwater flow direction in the water table aquifer.	716
2.	Concerns about the aquifer test and analysis, in particular that the water was pumped at a lower rate	716

Issue #	Issue description	Submission number #
	than extraction, insufficient pumping rate and time to enable assessment of properties of overlying aquitard, no discussion of hydraulic conductivity of aquitard, potential underestimation of potential drawdown in section 4.2 of Appendix 7, and no mention of groundwater temperature and whether this changed over the test (as geothermal properties are a beneficial use).	
3.	Concern that drawdown in the borefield will be significantly greater than modelled, and that extraction from shallow aquifer will be required to augment supply.	716
4.	Concern that the assessment does not capture all potential users of groundwater and GDEs.	358, 716
5.	Concern that the impact assessment doesn't address the potential for change in water quality from displacement and increased discharge of groundwater to GDEs.	358, 716
6.	Concern about modelling Mitchell River with a fixed water level, when the EES reports groundwater discharges to the Mitchell River under natural conditions and based on groundwater mounding.	716
7.	Concern that the proposed filling of voids and groundwater mounding presents the potential for layering in the Coongulmerang Formation that would impede the downward drainage from filled voids.	716
8.	Concern that there is a potential for the use of Latrobe Valley Group groundwater in the WSP to have implications for the chemistry of mine void seepage water.	716
9.	The TSF/dams and filling of voids could have implications for groundwater quality, and associated mounding could result in increased discharge to GDEs and the Mitchell river, shallow drainage lines on-site which could affect land stabilisation, structures and adjoining pits.	291, 358, 692, 716
10.	Concern about the suitability of the leachate testing, and the fact that there appears to have been no testing of Latrobe Group groundwater.	716
11.	Concern about the potential for groundwater mounding to interfere with hydraulic connection between sediments under the site, the Mitchell river flats and the Latrobe Valley Group at Woodglen.	716
12.	Concern about the potential implications of groundwater mounding for borefield drawdown if tailings seepage is less than modelled.	716

Issue #	Issue description	Submission number #
13.	Concern about reduced yield from Woodglen borefield due to groundwater pumping.	692
14.	Concern about adverse impacts to groundwater levels and quality at the Woodglen borefield (due to potential seepage from TSF).	692
15.	Concern about the available information about the measures proposed to minimise the discharge to groundwater, the concentrations of any potential contaminants, along with demonstration that either the discharge will not exceed the environmental quality objectives specified in SEPP (Waters) or that risks to beneficial uses of groundwater are minimised and are not unacceptable.	514

#### 1.04 Water catchment

Issue #	Issue description	Submission number #
1.	Requests further justification for the conclusion that minor changes in groundwater, surface water flows and water chemistry, as well as spills and leaks, will not affect downstream water quality/Gippsland Lakes.	716
2.	Concern that erosion and sediment mobilisation from the Fingerboards mine site could adversely affect the Mitchell River, Perry River and the Gippsland Lakes.	358, 552, 716
3.	Concern that better definition is required for the performance standards, using quantitative standards where practicable.	552
4.	Concern that there is insufficient detail about monitoring, and whether results will be publicly available.	358, 552
5.	Clarification sought on how the 3% AEP design criteria was determined for the Mitchell River spillway discharge, and why it is different to the Perry River design criteria of 1% AEP.	358, 716
6.	Comment that characterisation of mine run-off water quality assessment should also address salinity, pH and radionuclides, and the potential for accumulation of salt in mine water storages.	716
7.	Concern that the DAF does not demonstrate reduction of radionuclides, nitrogen or copper levels, and	514, 716

Issue #	Issue description	Submission number #
	its effectiveness in reducing contaminant loads in downstream receiving waters.	
8.	Concern about uncertainty and limitations associated with the water balance – risk assessment and strategy for managing 'change' and contingency planning for failure in the water treatment system.	358, 716
9.	Concern about the use of flocculants, and how these could impact on water quality.	514, 716
10.	Comment that the impacts on water quality should address loads, not just concentrations, of potential pollutants on Perry and Mitchell Rivers.	358, 716
11.	Concern about the management of water offsets, and Council's involvement in regulating this practice.	716
12.	Clarification sought for the sediment dam design criteria.	716
13.	Clarification sought for the Mitchell River mine water discharge design criteria and the predicted frequency of overflows.	716
14.	Query as to whether the positive environmental outcome of preventing the uncontrolled release of mine contact water to the Mitchell and Perry rivers outweighs the reduction in water flowing to each system (130 – 270 ML/year of annual flow volume for Mitchell river, and 0.5% - 1.05% for the Perry river, depending upon mine operational conditions).	716
15.	Concern about effects of project on surface water and groundwater, especially 'chain of ponds' features of the Perry River system.	358, 662
16.	Concern about the level of consideration of operational requirements, dam safety obligations (including the allowance for the potential of cascading dam failures should upstream dams fail, impacting on downstream dams which also contain mine site sediments), and management of instream environmental and biodiversity impacts.	291
17.	Concern about management of the release of captured water into the receiving waterways, how this will work in practice, and how it will be monitored, managed and reported on.	291, 358
18.	Concern that the proposed valley fill (Perry Gully) does not replicate the existing geomorphology or hydrology.	358

## 1.05 Water supply

Issue #	Issue description	Submission number #
1.	Concern about reduced surface water availability from Mitchell River due to surface water extraction. Comment about the need for strict regulation of water offsets, and Council involvement in this practice, to protect downstream receiving waters	692, 716
2.	The information provided in the EES regarding impacts of the proposed surface water and groundwater licences is not at a level sufficient for the licence application process.	291

## 1.06 Air quality

Issue #	Issue description	Submission number #
1.	Comment that the predicted exceedances of the 24 hour criterion for PM <sub>10</sub> will need to be mitigated in accordance with a management plan that includes triggers for their application of the mitigation measures.	716
2.	Concern about the approach taken in the air quality assessment to addressing the 11 day gap in PM <sub>10</sub> and PM <sub>2.5</sub> data.	716
3.	Concern about over-reliance on the precision of the air quality modelling and on ceasing mining works to address potential non-compliance with PM <sub>10</sub> criteria at receptors.	716
4.	Concern about assessing PM <sub>2.5</sub> emissions against dated 24 hour and annual average standards.	716
5.	Concern that the assessment relies on criteria from other jurisdictions rather than SEPP (AAQ) criteria.	716
6.	Comment that there is no regulatory standard for dust deposition on vegetables.	716

Issue #	Issue description	Submission number #
7.	Concern about airborne contaminants reaching raw water storage at Woodglen.	692

### 1.07 Climate change and Greenhouse Gas Emissions

Issue #	Issue description	Submission number #
1.	A comment is made that the Project is expected to be a relatively minor contributor to state and national greenhouse gas inventories for scope 1 emissions, and that emissions associated with roads/rail transport are a relatively minor contributor to the total scope 1, 2 and 3 emissions.	716
2.	Concern that the emissions factors used in the greenhouse gas emission calculations were not documented.	716

### 1.08 Noise

Issue #	Issue description	Submission number #
1.	Concern is expressed that predicted construction noise at sensitive properties will give rise to non-conformance with the relevant criterion.	514, 716
2.	Concern that the EES approach of relying on noise monitoring to trigger mitigation actions on the basis of measured noise levels is not best practice.	716
3.	Concern about potential impacts of heavy vehicle traffic to the Giant Burrowing Frog identified within or adjacent to project area.	716
4.	Query as to whether NATA calibrated noise loggers were used.	716



Issue #	Issue description	Submission number #
5.	Concerns that the background level presented in the EES, and its relevance or otherwise to determining the NIRV criterion, are incorrect.	716
6.	Comment that duration adjustments should be documented, and the use of a 10dB transfer is required.	716

### 1.09 Radiation/Heavy Metals

Issue #	Issue description	Submission number #
1.	The baseline radiation monitoring is incomplete, and additional operational monitoring should include radon and thoron, radionuclides in flora, and analysis of specific radionuclides and airborne dust as TSP concentrations.	716
2.	Recommended monitoring of ore, HMC concentrate, and tailings be conducted to confirm classification of the materials. Suggest the latest dose factors be used in a re-assessment.	716
3.	Concern that the Health risk assessment incorrectly and incompletely calculates a potential dose from the baseline measurements and notes that the result is less than the screening level of 1mSv/y.	716
4.	Concern over whether surface water and groundwater discharges and the DAF plant are radiation sources within the meaning of the <i>Radiation Act 2005</i> .	514

### 1.10 Traffic and transport

Issue #	Issue description	Submission number #
1.	Concern that only limited detail has been provided in the EES regarding the timing, approvals and required works for the railway siding and associated road network, and whether road haulage will be	632, 716

Issue #	Issue description	Submission number #
	required pending the development of the Fernbank rail siding.	
2.	Concern that the Department of Transport will need to take action to make the temporary roads permanent in the event the mine defaults before the Dargo Road is reinstated in its road reserve.	632
3.	Comment that there is no intersection performance analysis for the two post-Avon Bridge route options.	716
4.	Concern that there is limited information to validate the turn warrants, and no turn warrants were undertaken at all for the pre-Avon River Bridge routing scenarios in the safety assessment.	716
5.	Concern that there is limited information to validate representativeness of heavy vehicle demands, and the assessment makes no allowance for ongoing operations such as diesel deliveries and site waste collections.	716
6.	Concern that there is insufficient geometric details to independently verify that the realignment of council roads will conform with relevant design requirements.	716
7.	Concern about whether there is sufficient spacing between Fernbank-Glenaladale Road - private haulage road intersection and the proposed Bairnsdale-Dargo Road.	716
8.	Concern about the appropriateness of introducing roundabouts onto the Princes Highway from a road hierarchy perspective.	716
9.	The proposed use of Racecourse Road under the Post-Avon River Bridge-Option 2 scenario is inconsistent with council's intention for freight movement to be facilitated by Collin Street/Bosworth Road, not Racecourse Road.	716
10.	Concern that there is no detailed intersection performance analysis for the two Post-Avon River Bridge routing options.	716
11.	Concern about the lack of information about the mechanism to manage impacts on road pavement quality.	716
12.	Concern that the use of the road network could impact amenity of residents, particularly as a result of	113, 716

Issue #	Issue description	Submission number #
	the use of declared roads. Requests that rail option (preferably daytime movements) be used for the life of the Project.	

## 1.11 Cultural heritage

Issue #	Issue description	Submission number #
1.	Concern that the EES incorrectly describes the registration status of Fingerboards LDAD 2 in the Executive Summary, and the assessment does not consider CHMP 16068 and VAHR 8322-0244.	716
2.	Concern that Chapter 8 of the EES over-relies on desktop data and mis-describes the methodology for sub-surface testing.	716
3.	Concern that the survey could not access some properties, and about discrepancies in the reporting of the number of stone artefacts.	716
4.	Concern about the timing of cultural heritage assessments did not take account of the RAP being in administration.	662
5.	Concern that the assessment of impacts on cultural heritage does not take into account the nature of the sites in the geographic region, especially representativeness or rareness. No assessment of cumulative impacts, and concern the estimate of impacts on unknown heritage may be underestimated.	662, 716
6.	Concern that there has been no consultation with the local heritage society.	716
7.	Concern that the EES does not include a historian's report or historic heritage report, noting the former primary school was surveyed but not mentioned in the heritage assessment in the EES.	716
8.	Concern that the cultural heritage assessment did not capture oral history and intangible values, and did not consider the cultural landscape.	662

Issue #	Issue description	Submission number #
9.	Concern the EES does not acknowledge the cultural values of flora and fauna.	662
10.	Concern that Kalbar engaged with an Aboriginal organization outside the Gunaikurnai settlement area (in connection with rehabilitation planning and contracting).	662

### 1.12 Socioeconomic

Issue #	Issue description	Submission number #
1.	Concern about perception of how Kalbar conducts its community engagement.	716
2.	Concern about the absence of a draft Implementation Strategy/Social Management Plan or framework for implementing the measures recommended by the Socioeconomic Impact Assessment.	716
3.	Concern that there is no assessment of cumulative effects for social or economic impacts.	716
4.	Concern that the tourism impact assessment is insufficiently detailed to confirm impacts of the Project on the broader tourism sector, beyond a 5 – 10 kilometre area.	716
5.	The Project will bring significant economic and social benefits (local procurement and job creation).	113

### 1.13 Rehabilitation

Issue #	Issue description	Submission number #
1.	Proposed land rehabilitation practices are conceptual and have not been trialed on a landscape with characteristics similar to the Fingerboards site.	552
2.	Concern about the length of time and responsibility for post-closure monitoring.	552
3.	Concern that the rehabilitation performance criteria and associated monitoring/measurement does not include a carrying capacity measurement for grazing land.	716

Issue #	Issue description	Submission number #
4.	<p>Comments about the proposed performance criteria and associated monitoring/management for rehabilitation:</p> <ul style="list-style-type: none"> <li>• They should apply to post-mining land use compliance during the progressive rehabilitation of the mine, not just at the end of mine life;</li> <li>• There needs to be a pre-mining baseline of land capability before mining is commenced, not reliance on reference sites;</li> <li>• Radiation surveys and monitoring should be undertaken on rehabilitated areas during progressive rehabilitation, and not just at the completion of rehabilitation; and</li> <li>• Site contamination issues need to be addressed, particularly related to progressive rehabilitation should it be required based on incidents, historical and recent land use impacts.</li> </ul>	716
5.	Concern that there has been insufficient assessment of risks associated with unplanned closure (temporary or permanent).	716
6.	Concern that the description of stockpile height description in EES is inconsistent with <i>Guidelines for environmental management in exploration and mining</i> .	716
7.	Comment that the work plan needs to describe availability and volumes of key materials required for rehabilitation for each domain.	716
8.	Comment that a map of Australian soil classification soil types within the Project area, or recommended stripping depths of soil types, should be developed.	716
9.	<p>The Rehabilitation Plan needs to provide details that clearly identify:</p> <ul style="list-style-type: none"> <li>• the areas to be revegetated and the management standards to be achieved; and</li> <li>• the on-title security mechanism(s) to be used to ensure any revegetated areas have long-term protection and native vegetation cover is established.</li> </ul>	521

## 1.14 Planning/Planning Scheme Amendment (PSA)

Issue #	Issue description	Submission number #
1.	Concern that the EES does not adequately address how land acquisition will occur if Kalbar does not own the land.	632
2.	Concern that the Land Use Planning Impact Assessment does not address how private land is affected by the PSA relating to land use compatibility.	716
3.	Concern about how Fingerboards could constrain land in the surrounding Farming Zone outside the proposed ML and SCO, and whether other mine infrastructure could be required outside these areas.	716
4.	Council does not support commercial/accommodation uses in the surrounding area.	716
5.	<p>Comment that various changes should be made to the PSA:</p> <ul style="list-style-type: none"> <li>• A mapping sheet for the pump station north of the site must be included;</li> <li>• Changes to the explanatory report required to address State and Local policy, alignment with the <i>Gippsland Regional Growth Plan</i> and <i>Gippsland Regional Plan 2015-2020</i>, elaborate on which authorities have been engaged during the preparation of the amendment, provide discussion around the proposed Public Acquisition Overlay, and respond to the greenhouse gases, land use planning and agriculture/horticulture sections of the main volume of the EES;</li> <li>• The PSA should include an updated list of amendments;</li> <li>• Various changes to the Incorporated Document;</li> <li>• Contain maps of the final haul road and water pipeline to clearly identify its alignment and written documentation on how native vegetation removal has been avoided; and</li> <li>• Address roles of EPA and the Head Transport for Victoria, and payment of bonds and section 173 agreements regarding the timing, delivery and remediation of State transport assets.</li> </ul>	514, 632, 716
6.	Concern that the PSA does not discuss the impact on the objectives and decision guidelines of any land within the project area affected by Environmental Significance Overlay Schedule 1, 2 and 3 or Vegetation Protection Overlay Schedule 1.	521

## 2.0 Other submissions

### 2.1 General

Issue #	Issue description	Submission number #
1.	Light pollution due to nighttime operations.	12, 266, 268, 305, 481, 488, 652, 659, 672, 813, 837, 875, 887
2.	Concern about exporting HMC to China/overseas. Including the issue of waste generated overseas. Loss of opportunity locally to process and create end products.	11, 222, 226, 303, 586, , 602, 615, 664, 682, 705, 711, 712, 715, 718, 725, 744
3.	Supports the Project	10, 108, 125, 140, 151, 231, 379, 387, 666, 685
4.	General concern about impacts on farmers and nearby towns, and on the rural and natural environment and visual amenity	3, 5, 12, 23, 24, 74, 77, 82, 83, 84, 86, 91,104, 106, 107, 112, 124, 136, 141, 143, 152, 154, 155, 156, 157, 158, 160, 163, 166, 169, 170, 171, 173, 174, 175, 176, 178, 179, 180, 181, 182, 184, 185, 187, 188, 189, 190, 192, 193, 194, 197, 198, 200, 201, 202, 203, 205, 206, 207, 208, 209, 210, 212, 214, 215, 217, 219, 220, 223, 224, 225, 226, 227, 228, 229, 230, 231, 233, 234, 236, 238, 239, 240, 242, 243, 245, 247, 248, 249, 250, 251, 252, 254, 255, 256, 258, 261, 262, 265, 267, 271, 272, 274, 275, 276, 278, 279, 280, 282, 283, 286, 287, 288, 289, 290, 292, 293, 294, 295, 298, 299, 300, 301, 302, 304, 305, 306, 307, 309, 311, 312, 323, 327, 330, 331, 332, 333, 334, 336, 340, 341, 342, 344, 345, 351, 354, 359, 363, 364, 365, 368, 370, 371, 372, 373, 380, 381, 386, 389, 392, 394, 397, 398, 402, 403, 404, 406, 407, 410, 411, 412, 418, 420, 422, 425, 426, 427, 428, 430, 432, 436, 438, 439, 440, 444, 447, 455, 460, 461, 462, 463, 473, 478, 480, 482, 483, 486, 487, 490, 494, 505, 506, 511, 513, 518, 520, 523, 525, 531, 534, 548, 564, 622, 624, 629, 637, 641, 643, 650, 652, 656, 657, 660, 663, 664, 665, 667, 669, 670, 671, 672, 677, 681, 682, 687, 688, 689, 690, 699, 693, 695, 696, 697, 698, 701, 702, 703, 706, 710, 712, 713, 714, 715, 717, 719, 721,

Issue #	Issue description	Submission number #
		723, 724, 726, 727, 728, 729, 730, 731, 732, 736, 737, 741, 744, 745, 775, 777, 781, 786, 788, 791, 801, 810, 813, 814, 817, 820, 822, 825, 831, 833, 835, 837, 839, 840, 842, 844, 847, 849, 851, 852, 855, 857, 872, 875, 878, 881, 882, 884, 894, 900, 901, 906
5.	Impacts of blasting and excavating. Concern blasting will be required for construction of dams.	71, 72, 268
6.	Impact on land values	74, 77, 157, 172, 212, 305, 335, 375, 389, 439, 466, 673, 761, 781, 795, 813, 834, 837, 839, 843, 862, 893
7.	Only directly affected landowners are compensated under the <i>Mineral Resources (Sustainable Development) Act</i> , what compensation and protections are available for people/community and businesses affected by pollution, radiation, etc.	77, 79, 157, 225, 268, 375, 473, 484, 509, 520, 522, 593, 652, 673, 743, 781, 837
8.	Concern that Kalbar is receiving government grants for infrastructure, water dams, etc	77, 673, 715
9.	The EES under-represents the number of receptors in the vicinity of the project, as well as a concern that a 5km assessment radius is insufficient.	81, 267, 268, 288, 303, 484, 506, 520, 546, 564, 682, 713, 765, 812, 813, 814, 837, 844
10.	Council's Lindenow and Community Plan does not foresee a mine in the area. The current or future land use is not compatible with the proposed project.	81, 267, 601, 680, 703, 713, 745, 765, 747, 812, 814, 838
11.	Comment that everyone uses products that come from mineral sands.	151, 232
12.	Concern Project will operate 24/7, particularly given noise and dust impacts.	171, 201, 225, 226, 231, 234, 252, 266, 268, 281, 296, 482, 484, 492, 506, 529, 535, 557, 559, 564, 570, 594, 638, 672, 673, 698, 709, 727, 748, 749, 750, 840, 843, 844, 845
13.	Concern the Project is only a "stage" of a larger project and that Kalbar intends to extend the	199, 203



Issue #	Issue description	Submission number #
	Project area and will not have to go through a further approvals process for the extension area.	
14.	Concern about the stability of the mine walls and residences close to the Project area.	225, 831, 837
15.	Concern about proximity of the Project to the Mitchell River National Park.	244, 535, 546
16.	Concern that project power demand will place unacceptable burden on existing power supply.	583
17.	Will Kalbar have the capacity to fight fires at their site, will Kalbar employees fight fires that do not impact their site, how will it be communicated that the TSF water cannot be used to fight fires. This can be extended to floods as well.	679, 715, 837
18.	Concern about chemical hazards. Procedures for accidents, fire extinguishers, first aid, CPR instructions, and induction of training and so on. There are also potential impacts on other users of roads while transporting HMC.	813
19.	Community testing of soil and groundwater condition by NATA-accredited laboratory is inconsistent with descriptions in the EES.	813
20.	Concern that mitigation measures are insufficient, and that the project might not be financially viable should all necessary environmental mitigation measures be included.	554, 813
21.	Concerns that the work plan is insufficient or unacceptable, including that the work plan: <ul style="list-style-type: none"> <li>• does not provide an economic business case or financial capability information;</li> <li>• is based on the EES findings and shaped by the EES scoping requirements;</li> <li>• could be varied without opportunity for public comment; and</li> <li>• does not take into account the 2019 revised ANCOLD guidelines.</li> </ul>	813
22.	Concern about landscape and visual impacts of the Project and the adequacy of the landscape and visual assessment in the EES. Particular claims include: <ul style="list-style-type: none"> <li>• that many of the references in the assessment are out of date and are not Australian based</li> <li>• that the assessment focuses only on trenching for the ore, which conveys only a limited impression of the heavy industrial site locals and visitors will see, hear and have to</li> </ul>	813

Issue #	Issue description	Submission number #
	<p>respond to (i.e. including truck movements, loss of trees and vegetation, change in landform).</p> <ul style="list-style-type: none"> <li>that the sites chosen to assess the current and changed visual environment are not representative of viewpoints from many receptors or impacts on visitors travelling to and from the Mitchell River National Park.</li> </ul>	
23.	Concern with the option to ship the ore from Port Anthony in Corner Inlet.	429, 546

## 2.2 Biodiversity

Issue #	Issue description	Submission number #
1.	<p>The Project will have adverse impacts on ecology and natural habitat including GDEs, and require the removal of native vegetation including large old hollow bearing trees, which exacerbates the losses from recent bushfires. Specific species about which concerns are raised include:</p> <ul style="list-style-type: none"> <li>Gaping Leek-orchid; and</li> <li>Grassy Woodlands and Associated Native Grassland.</li> </ul> <p>Biodiversity-related mitigation measures proposed by the proponent lack sufficient detail to demonstrate what actions will be undertaken by Kalbar and how any success be measured.</p> <p>Concern that fauna relocation plans will not work given most wildlife is territorial and will kill interlopers.</p> <p>Concern that not all feasible options have been explored to avoid and minimize impacts on native vegetation. Kalbar needs to demonstrate clear changes to the project have been made to avoid adverse impacts on native vegetation with the highest biodiversity values and reduce the total area of native vegetation proposed for removal. Further efforts should be made to avoid the removal of native vegetation in gullies.</p>	<p>3, 4, 5, 7, 12, 14, 19, 27, 28, 29, 30, 50, 51, 52, 58, 66, 67, 68, 70, 71, 72, 73, 74, 77, 78, 90, 91, 97, 104, 109, 110, 115, 120, 142, 156, 157, 158, 159, 160, 162, 163, 178, 181, 186, 188, 189, 201, 201 205, 206, 209, 210, 212, 219, 221, 225, 238, 239, 250, 253, 266, 268, 279, 288, 290, 296, 299, 302, 306, 308, 316, 319, 322, 323, 328, 331, 335, 341, 351, 352, 365, 371, 373, 374, 375, 376, 382, 388, 403, 405, 408, 412, 413, 417, 420, 421, 422, 423, 436, 439, 440, 441, 442, 444, 446, 459, 478, 481, 487, 488, 489, 492, 495, 500, 516, 521, 522, 531, 532, 534, 535, 540, 546, 547, 554, 555, 557, 562, 563, 570, 575, 582, 584, 585, 597, 606, 608, 609, 614, 638, 648, 652, 659, 660, 661, 663, 667, 672, 673, 679, 683, 686, 688, 689, 690, 693, 702, 703, 704, 709, 712, 713, 721, 724, 725, 733, 734, 737, 740, 744, 748, 749, 751, 753, 754, 763, 765, 767, 770, 774, 775, 777, 779, 789, 791, 794, 800, 812, 813, 814, 820, 823, 826, 831, 832, 833, 834, 835, 837, 840, 845, 846, 848, 850, 853, 855, 856, 857, 858, 862, 863, 870, 871, 874, 875, 876, 879, 880, 883, 886, 891, 892, 893, 895, 898, 909</p>
2.	<p>Concern about the adequacy and robustness of the ecological surveys, including concerns that:</p> <ul style="list-style-type: none"> <li>the survey was deliberately framed to minimise likelihood of finding high biodiversity values in project area ;</li> </ul>	<p>12, 76, 90, 163, 167, 178, 201, 221, 239, 253, 268, 288, 352, 365, 388, 401, 408, 417, 429, 431, 441, 484, 488, 502, 516, 520, 521, 535, 541, 546,</p>

Issue #	Issue description	Submission number #
	<ul style="list-style-type: none"> <li>• only desktop studies were completed to map certain areas;</li> <li>• the consultant failed to appropriately consider the effects of the 2014 bushfires;</li> <li>• drought and seasonality of species were not appropriately considered;</li> <li>• <i>appendices associated with the DELWP Native Vegetation Removal Report was not included in Appendix 6 of the Detailed Ecological Investigations report;</i></li> <li>• concerns that the EES has underreported the number of species likely to be affected;</li> <li>• the ecological study should have utilised the comprehensive and up to date record of birds is the birdata base maintained by Bird Life Australia, which is available on its website;</li> <li>• “inadequate” surveys were undertaken for the Powerful Owl and Masked Owl, given they are a cryptic species. Audio recording at least 4 times across the year would have been more appropriate; and</li> <li>• the survey focused only on ‘significant’ species, not more common species.</li> </ul>	557, 575, 648, 680, 686, 712, 734, 763, 774, 812, 813, 814, 830, 870
3.	Concern about impacts on aquatic biodiversity, especially in the Mitchell River and Gippsland Lakes. Concerns regard impacts on turtle species, Australian grayling, platypus, Burrunan dolphin, bream breeding and bass hatcheries.	7, 313, 319, 328, 335, 351, 352, 355, 357, 365, 370, 373, 376, 378, 382, 388, 389, 401, 404, 405, 408, 417, 429, 433, 446, 489, 516, 529, 534, 540, 554, 557, 563, 575, 586, 606, 660, 672, 673, 704, 708, 712, 734, 777, 813, 837, 850, 853, 856, 857, 867, 893, 897, 900
4.	<p>Impacts (noise, light, dust, etc) on fauna and the further fragmentation of habitat. Specific wildlife species raised include:</p> <ul style="list-style-type: none"> <li>• Giant Burrowing Frog</li> <li>• Powerful Owl;</li> <li>• Sooty Owl;</li> <li>• common wombat;</li> <li>• echidna;</li> <li>• sugar glider and feather tail glider;</li> <li>• Wedged tail eagles;</li> <li>• swift parrots</li> <li>• painted honeyeater;</li> <li>• Dwarf Galaxis;</li> <li>• goanna;</li> <li>• deer; and</li> </ul>	14, 110, 153, 167, 259, 302, 308, 312, 317, 322, 325, 328, 335, 341, 348, 351, 352, 363, 372, 373, 388, 389, 401, 405, 408, 413, 417, 420, 421, 430, 431, 432, 441, 458, 484, 488, 516, 540, 563, 559, 575, 608, 609, 614, 638, 657, 663, 665, 673, 679, 715, 720, 721, 725, 733, 749, 753, 812, 813, 828, 840, 846, 850, 851, 857, 863, 869, 875, 881, 893, 895, 909

Issue #	Issue description	Submission number #
	<ul style="list-style-type: none"> <li>• Grey Headed Flying Fox.</li> </ul>	
5.	<p>Comment that Kalbar needs to demonstrate that it can obtain adequate offsets. Concern that offset estimate is seriously undervalued and that the current offset strategy does not satisfy DELWP requirements as only some of the offsets required are currently available and able to be secured. General concern with offsetting as a principle.</p> <p>Comment that mature hollow bearing trees cannot be offset.</p>	268, 429, 484, 521, 638, 672, 680, 712, 724, 734, 813, 909
6.	<p>Concern regarding the impact of the infrastructure on biodiversity. Including:</p> <ul style="list-style-type: none"> <li>• Fernbank East railway siding <ul style="list-style-type: none"> <li>○ due to the highly significant biodiversity values present within the railway reserve, the road reserve and at Saplings Morass Flora and Fauna Reserve</li> <li>○ Forest Fire and Regions Group (FFR) provided biodiversity exclusion zone maps and requested detailed biodiversity assessments and construction plans for this site and has requested alternative sites be adequately assessed. Kalbar has yet to provide this information</li> </ul> </li> <li>• proposed haul road and rail siding, particularly given the number of large old trees that will require removal and the proximity to Sapling Morass. Submitter suggests an alternative route for the haul road so as to avoid removal of large old trees (i.e. the unused road from the bore field that extends onto the Bairnsdale-Dargo Road from Cowell's Lane then continue through the mined out area on the south side of Bairnsdale-Dargo Rd to the processing plant).</li> </ul>	268, 521, 813
7.	Potential for dust to 'smother' vegetation and prevent photosynthesis.	77, 673
8.	Comment that impacts on biodiversity far outweigh economic benefits that accrue to a few people.	456, 813
9.	<p>Comment that even though the ecological assessment identified only 4 of the 18 migratory species as being potential users of the proposed mine site, the records of all 18 of these species are old. Of these species, only the Rufus fantail was observed during the surveys, but was not recorded in the bird data surveys.</p> <p>It is suggested that the proposed Fingerboards site is not likely to be a critical habitat for any of the listed migratory species.</p>	408
10.	Comment that Red Gum Grassy Woodlands and associated wetland communities exist in the area	638

Issue #	Issue description	Submission number #
	because of abundant underground aquifers. Concern that removal of the vegetation will damage the aquifers and surrounding areas will dry out, impacting vegetation beyond the mine footprint.	

## 2.3 Groundwater

Issue #	Issue description	Submission number #
1.	Concern that groundwater extraction will lower the water table and affect other groundwater users	20, 21, 32, 54, 57, 70, 79, 137, 166, 169, 181, 191, 202, 223, 228, 241, 243, 252, 258, 268, 271, 288, 308, 310, 344, 352, 388, 390, 391, 445, 455, 460, 491, 533, 600, 631, 647, 660, 664, 677, 691, 712, 713, 743, 759, 765, 763, 787, 813, 814, 824, 826, 829, 837, 847, 887, 889, 890
2.	The extraction of groundwater will affect groundwater dependent ecosystems.	672, 777, 813
3.	Effects of groundwater mounding.	77, 268, 672, 673
4.	The Project will affect the recharging of aquifers, perched aquifers and spring fed dams that supply water to farm dams and rivers.  Concern that removal of vegetation will damage aquifers.	91, 484, 488, 568, 631, 638, 672, 691, 713, 812, 813, 814, 831, 837
5.	Concern about groundwater modelling, including oversimplification of the Coongulmerang Formation.	97, 271, 423, 568, 763, 813
6.	Concern about contamination of groundwater or river water, including via tailings seepage).	241, 243, 259, 271, 489, 514, 523, 529, 532, 540, 546, 547, 557, 584, 597, 753, 761, 766, 777, 780, 781, 813, 821, 823, 831, 837, 841, 881, 887

## 2.4 Water catchment

Issue #	Issue description	Submission number #
1.	<p>Pollution, contaminated run off and discharges from the mine and associated infrastructure will affect water quality in the Mitchell and Perry rivers, and other downstream water resources, in particular the Gippsland Lakes.</p> <p>Specific issues raised include:</p> <ul style="list-style-type: none"> <li>• gullies and sandy soils present risk of toxic contaminants entering groundwater and spreading to river systems;</li> <li>• effect of sediments being discharged into the Mitchell River;</li> <li>• concern that contamination from the mine will negatively affect fishing and migratory birds;</li> <li>• concern about proximity of project to the Mitchell River;</li> <li>• haul road and container loading facility were not considered a source of pollution in the EES;</li> <li>• fresh water from the Mitchell River will increase salinity levels in downstream waterways to dangerous levels. Reduction in environmental flows would be contrary to Australian National Audit Office advice; and</li> <li>• erosion and runoff will result in loss of soil nutrients.</li> </ul>	<p>7, 8, 14, 15, 16, 17, 18, 19, 20, 21, 22, 24, 25, 26, 27, 28, 30, 32, 33, 51, 54, 59, 60, 63, 64, 66, 71, 72, 74, 77, 78, 79, 80, 81, 86, 87, 89, 92, 93, 94, 96, 98, 100, 109, 110, 116, 117, 118, 119, 120, 122, 126, 129, 130, 135, 136, 138, 139, 142, 145, 154, 155, 159, 160, 161, 163, 164, 169, 171, 176, 178, 179, 180, 181, 183, 190, 191, 192, 201, 202, 203, 205, 206, 207, 208, 210, 212, 219, 222, 223, 225, 226, 233, 237, 238, 240, 241, 242, 243, 244, 246, 252, 253, 255, 259, 260, 261, 262, 263, 264, 266, 267, 268, 269, 271, 279, 280, 281, 288, 290, 296, 300, 301, 302, 304, 308, 314, 315, 316, 317, 319, 321, 325, 329, 332, 335, 336, 339, 340, 341, 344, 346, 348, 349, 351, 352, 356, 357, 365, 366, 370, 371, 372, 373, 374, 375, 378, 382, 384, 385, 386, 388, 390, 393, 394, 395, 399, 400, 405, 406, 408, 410, 413, 417, 420, 423, 424, 426, 429, 433, 434, 436, 437, 439, 440, 442, 444, 446, 447, 450, 452, 453, 457, 459, 469, 470, 472, 474, 475, 477, 478, 480, 487, 489, 492, 497, 500, 501, 511, 516, 522, 524, 525, 535, 537, 538, 542, 544, 546, 551, 552, 554, 557, 559, 561, 562, 563, 566, 568, 569, 570, 572, 574, 575, 577, 582, 583, 586, 587, 590, 591, 592, 593, 594, 595, 596, 597, 600, 602, 605, 613, 615, 620, 621, 623, 624, 626, 627, 630, 638, 643, 654, 657, 660, 663, 664, 665, 667, 668, 670, 671, 672, 673, 674, 680, 682, 683, 684, 686, 687, 690, 693, 696, 697, 698, 702, 704, 706, 708, 709, 710, 712, 713, 715, 717, 718, 720, 721, 729, 727, 732, 734, 735, 737, 739, 740, 742, 748, 749, 751, 752, 753, 754, 755, 756, 758, 760, 761, 763, 765, 766, 768, 770, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 788, 794, 799, 800, 812, 813, 814, 816, 818, 819, 829, 821, 824, 826, 827, 829, 830, 831, 832, 834, 836, 837, 839, 840, 841, 844, 845, 846, 848, 850, 851, 853, 855, 859, 860, 862, 863, 864, 865, 866, 867, 869, 870, 872, 873, 875, 876, 877, 879, 881, 883, 884, 886, 887, 889, 890,</p>

Issue #	Issue description	Submission number #
		892, 895, 896, 897, 898, 900, 902, 905, 906, 909
2.	Concern that major rain events will lead to overflowing of tailings dams that will result in discharges to Perry and Mitchell River systems and erosion.	43, 57, 74, 94, 191, 225, 239, 268, 271, 335, 392, 395, 408, 434, 436, 440, 448, 516, 524, 529, 532, 547, 552, 630, 660, 672, 691, 713, 813, 823, 824, 859, 862, 866, 875, 887, 889
3.	<p>Concern that baseline water quality and meteorological data used in surface water modelling were inadequate or incorrect. Effects of significant rainfall events and weather impacts and how these risks have been measured/modelled and are managed:</p> <ul style="list-style-type: none"> <li>• Concern that assessment of project impacts on water quality relies too much on computer simulation and not enough on 'actual measurement'.</li> <li>• Overflow from dams presents a flood risk. Concern that local rainfall conditions are not well represented by rainfall data used in EES</li> <li>• Concern that the EES does not account for the effects of unpredictable weather events and 'East Coast Lows,' in terms of runoff and pollution potential and has in fact underestimated the weather variation within the project footprint</li> <li>• Comment that the majority of rainfall monitoring in the EES was undertaken towards the end of a significant period of drought and may not reflect future rainfall patterns. Concern that the flood modelling may not be adequate given major flooding events typically occur every 8-10 years.</li> <li>• Concern that dam design and surface water assessment do not take into account local meteorological conditions and will not provide adequate protection against flood / sediment movement (detailed discussion provided).</li> </ul>	70, 123, 135, 155, 168, 191, 201, 239, 268, 429, 457, 524, 525, 530, 546, 568, 649, 672, 673, 708, 712, 713, 732, 763, 781, 812, 813, 837, 843, 846, 866, 875, 896
4.	<p>Concern with the catchment dams, including:</p> <ul style="list-style-type: none"> <li>• Water catchment dams will interfere with the Mitchell and Perry River's hydrology and ecosystems and the Fingerboards' capacity to act as a gravel 'recharge' area</li> <li>• how water required for the Project will be stored and what checks and balances are in place to ensure clean water is fed back into the system.</li> <li>• Concern Kalbar intends to collect storm water in dams, removing recharge water from both surface water and groundwater systems, which has not been taken into account in the EES.</li> <li>• Concern about the proposal to fill Perry gully and the impact on the surface water flow across the terrain and other gullies.</li> <li>• Mine contact water dams in Mitchell catchment have been under-designed. What dam break analysis has been done?</li> <li>• Need more detail of how the surface water dams are going to be constructed and managed</li> <li>• Concern that the East Gippsland Erosion Management Overlay was not considered when</li> </ul>	77, 97, 201, 239, 243, 267, 268, 457, 484, 487, 488, 540, 568, 672, 673, 691, 813, 814, 815, 829, 831, 832, 837, 861

Issue #	Issue description	Submission number #
	designing the dams <ul style="list-style-type: none"> <li>• Questions if it is legal to dam the gullies.</li> </ul>	
5.	Concern about the use of flocculants and their potential effects on water quality on and discharging from the site.	109, 137, 268, 281, 296, 429, 654, 673, 770, 791, 813, 843, 847
6.	Concern about impacts to Providence Ponds and the Perry River	120, 130, 201, 264, 268, 271, 488, 546, 713, 745, 813
7.	Hydrological representation of Perry River system was inadequate: channel morphology differs to that of Mitchell River system.	488
8.	EES documentation contains insufficient detail about drainage design and water management during emergency events. Calculations, design details, schedules of quantities, timelines and estimates of costs are not presented.	494, 813
9.	Comment that more information is required in EPA works approval application in relation to proposed water discharges. Submission also makes recommendations in relation to water quality compliance criteria.	514, 813



## 2.5 Water supply

Issue #	Issue description	Submission number #
1.	<p>Demand for up to 3GL of water will compete with agricultural uses and prevent expansion of agricultural industries, which some submissions emphasise is a particular problem in drought-prone country. This includes issues relating to the following:</p> <ul style="list-style-type: none"> <li>• Comment that water used for agriculture would give a better economic return than water used for mining purposes; view that use of water for dust suppression is not a good use of a scarce resource;</li> <li>• Perception that mining operators will enjoy priority access to water. This will also affect flows in the Mitchell River and downstream water quality at Gippsland Lakes.</li> </ul>	<p>2, 7, 14, 17, 22, 27, 29, 32, 33, 35, 36, 37, 38, 39, 42, 43, 44, 45, 52, 56, 57, 58, 59, 60, 62, 63, 64, 65, 67, 68, 71, 72, 73, 74, 75, 76, 77, 79, 81, 84, 86, 87, 89, 90, 91, 97, 99, 100, 102, 109, 110, 114, 115, 117, 118, 119, 121, 126, 127, 131, 134, 135, 136, 137, 138, 142, 145, 146, 152, 156, 157, 158, 161, 162, 164, 166, 168, 169, 170, 171, 172, 174, 177, 178, 180, 181, 186, 191, 192, 194, 195, 199, 201, 202, 203, 213, 218, 220, 221, 225, 226, 229, 230, 233, 237, 240, 241, 242, 243, 244, 248, 250, 252, 257, 258, 259, 260, 261, 263, 266, 268, 271, 279, 280, 281, 288, 290, 296, 298, 299, 300, 308, 313, 316, 319, 322, 326, 328, 335, 340, 344, 352, 355, 357, 361, 365, 371, 372, 373, 374, 375, 378, 380, 383, 384, 385, 388, 389, 390, 392, 393, 396, 401, 406, 409, 410, 417, 422, 423, 430, 431, 433, 434, 436, 439, 440, 442, 444, 445, 446, 450, 452, 457, 466, 467, 469, 472, 473, 474, 478, 481, 482, 487, 491, 492, 500, 501, 504, 505, 507, 509, 510, 512, 520, 522, 525, 530, 532, 535, 540, 542, 544, 546, 548, 551, 554, 557, 559, 564, 565, 575, 576, 577, 578, 580, 583, 584, 585, 590, 592, 593, 594, 597, 598, 602, 603, 606, 607, 608, 614, 617, 627, 630, 628, 633, 634, 635, 636, 638, 644, 647, 648, 651, 652, 652, 654, 657, 660, 663, 665, 668, 670, 671, 673, 674, 675, 677, 678, 679, 680, 682, 683, 684, 686, 690, 693, 694, 701, 704, 705, 707, 710, 711, 713, 714, 718, 721, 724, 729, 727, 732, 739, 740, 742, 744, 745, 747, 749, 751, 753, 754, 756, 757, 759, 765, 766, 767, 769, 770, 771, 773, 775, 776, 777, 778, 780, 781, 783, 786, 787, 788, 796, 805, 810, 812, 813, 814, 815, 816, 818, 821, 823, 824, 826, 827, 829, 830, 831, 832, 834, 835, 837, 840, 841, 843, 845, 849, 850, 855, 862, 868, 869, 872, 873, 885, 887, 893, 895, 900, 901, 902, 903</p>

Issue #	Issue description	Submission number #
2.	<p>Concern over the quantity of water required for the project: Including issues relating to:</p> <ul style="list-style-type: none"> <li>• Increase in production that will lead to further volumes of water being sought</li> <li>• Concern the Project will require more than 3GL water per annum, particularly given study undertaken by Oresome Australia Pty Ltd which indicated a water requirement of 4.6-6.2GL per annum.</li> <li>• Concern the Project will be unable to operate safely without the required amount of water, particularly if insufficient water is available for dust suppression; water balance only allows for dust suppression on haul road – not at mining face or on stockpiles (#484)</li> <li>• General concerns about insufficient water supply if the project goes ahead, particularly in light of recent droughts.</li> </ul>	201, 225, 257, 267, 484, 535, 556, 301, 303, 305, 307, 309, 322, 335, 344, 356, 365, 371, 390, 396, 401, 408, 409, 420, 423, 424, 429, 430, 431, 434, 437, 440, 442, 444, 445, 446, 450, 455, 473, 484, 554, 600, 603, 613, 620, 628, 649, 675, 698, 713, 734, 739, 813, 847, 851, 852, 856, 859, 861, 862, 863, 868, 872, 873, 875, 887, 895, 899, 902, 903, 905
3.	<p>Impact to other users of the water required, including:</p> <ul style="list-style-type: none"> <li>• Unpredictability of effects of water extraction on others users and the environment due to climate change.</li> <li>• Climate change not adequately represented in surface water modelling completed for project. Comment that water is increasingly valuable as climate change impacts and rainfall becomes more unpredictable. Is mining the best use of this resource?</li> <li>• Concern Project will impact the supply of water for domestic use and /or result in existing users being put on permanent water restrictions.</li> <li>• Availability of water to the South Pines Golf Club.</li> <li>• Increase bushfire risk</li> <li>• reduce the amount of water available for growing food and protecting the bush.</li> </ul>	58, 66, 103, 115, 118, 131, 160, 162, 163, 168, 172, 180, 202, 203, 221, 229, 233, 243, 257, 262, 268, 279, 298, 328, 429, 434, 450, 452, 453, 457, 468, 484, 504, 505, 507, 510, 520, 548, 544, 559, 575, 594, 598, 608, 647, 649, 665, 672, 712, 724, 778, 780, 813, 831, 835, 852, 875
4.	<p>Concern the project will specifically impact groundwater for agricultural use. Particularly in regards to the pumping of the Latrobe aquifer and the interaction between the Lindenow/Mitchell catchments and the Latrobe Group Aquifer. Request for uncertainty between the relationship of the Latrobe aquifer and the shallower aquifers to ensure users of the shallower aquifers will not be adversely impacted.</p>	429, 460, 530, 533, 568, 594, 600, 813
5.	<p>Concern that the water availability is unobtainable or will be at certain times, responses have included:</p> <ul style="list-style-type: none"> <li>• Queries why Kalbar will be able to access water from the Mitchell River during drought</li> <li>• Suggestions that the intention is to extract water throughout the year.</li> <li>• Australian government bioregional assessments demonstrate that 1,400ML/day flows will not occur for 227 days in a given year</li> </ul>	54, 56, 61, 66, 71, 99, 131, 225, 252, 457, 530, 813

Issue #	Issue description	Submission number #
	<ul style="list-style-type: none"> <li>• extraction sites are not within the tenement boundary.</li> <li>• The river in the area cannot supply anywhere near the volumes of water required for the Project.</li> <li>• Kalbar has not completed adequate assessment of the impacts of extracting 3 GLpa from the Mitchell River (as required by Section 40 of the <i>Water Act 1989</i>).</li> <li>• Kalbar has misrepresented the 'un-used extraction volume' available from the Mitchell River. The RMCG report "...states that there is 6,000 megalitres of irrigation water that has not yet been allocated from the Mitchell River but does not say that it is not yet available." (#530)</li> <li>• What is the back up or alternative strategy if water becomes unavailable?</li> </ul>	
6.	Proposed establishment of dams would reduce Mitchell River flow (#509) and would reduce flow of surface water or groundwater to farm on neighbouring property (R5), reducing the amount of livestock that can be accommodated (#509).	506, 540
7.	Noise and visual impacts associated with the pump station. Request that adequate mitigation will be provided.	750, 813
8.	Concern that even though the mine requires a maximum intake of water from the Mitchell River of 37.5MI per day to compensate for the days during dry spells, the size and type of pipes is only suited to an anticipated flow rate of 25MI per day. This begs the question of where Kalbar intends to secure water to suppress airborne dust arising from haul roads.	813

## 2.7 Air quality

Issue #	Issue description	Submission number #
1.	Emissions of dust (including contaminated or radioactive dust , respirable silica and carcinogens) will affect people's health through inhalation, or through contaminating horticultural produce and pasture.	3, 4, 15, 16, 20, 22, 23, 24, 25, 27, 29, 30, 32, 36, 37, 39, 42, 43, 44, 45, 48, 50, 52, 53, 54, 55, 56, 57, 58, 60, 62, 64, 65, 67, 68, 69, 70, 71, 72, 74, 75, 76, 77, 78, 79, 81, 86, 89, 91, 94, 97, 99, 102, 105, 109, 110, 114, 116, 118, 119, 120, 121, 123, 132, 135, 137, 142, 145, 147, 152, 153, 154, 157, 159, 160, 163, 164, 169, 171, 176, 178, 185, 186, 187, 190, 191, 192, 193, 197, 199, 202, 203, 205, 206, 207, 212, 213, 218, 219, 220, 221, 224, 225, 226, 227, 229, 230, 233, 234, 237, 239, 240, 241, 242, 243, 248, 252, 253, 255, 257, 259, 260, 261, 262, 263, 264, 266, 267, 268, 271, 281, 288, 296, 298, 299, 300, 310, 314, 315, 319, 322, 325, 340, 344, 349, 355, 356, 365, 373, 374, 375, 378, 383, 385, 388, 389, 392, 395, 396, 401, 406, 419, 423, 431, 433, 434, 436, 437, 439, 440, 442, 447, 451, 452, 453, 455, 468, 469, 472, 474, 475, 477, 478, 480, 481, 484, 487, 492, 502, 506, 516, 522, 523, 524, 525, 527, 529, 532, 541, 546, 547, 548, 554, 565, 568, 583, 584, 585, 595, 596, 597, 598, 601, 604, 605, 611, 613, 614, 615, 618, 620, 625, 627, 628, 630, 633, 635, 636, 638, 643, 646, 648, 649, 652, 658, 660, 663, 664, 667, 668, 672, 673, 674, 675, 676, 677, 680, 682, 683, 684, 686, 690, 693, 694, 698, 700, 702, 704, 707, 709, 712, 713, 717, 718, 720, 722, 724, 725, 727, 733, 734, 737, 740, 743, 744, 745, 747, 748, 749, 750, 751, 752, 753, 758, 759, 763, 765, 766, 767, 773, 777, 778, 780, 781, 783, 784, 788, 791, 793, 794, 796, 800, 805, 809, 810, 812, 813, 814, 817, 818, 822, 823, 826, 829, 830, 831, 833, 835, 837, 840, 841, 843, 845, 846, 847, 850, 851, 853, 855, 859, 861, 862, 865, 869, 875, 876, 878, 880, 885, 887, 889, 893, 899, 900, 907
2.	Dust emissions on water quality in Woodglen Reservoir/ Mitchell River.	32, 54, 57, 59, 61, 68, 89, 96, 109, 110, 120, 133, 137, 147, 155, 156, 158, 159, 178, 190, 201, 215, 219, 221, 225, 239, 253, 261, 263, 280, 290, 296,

Issue #	Issue description	Submission number #
		298, 300, 319, 355, 451, 468, 472, 474, 475, 477, 478, 488, 497, 520, 527, 531, 532, 535, 546, 547, 557, 559, 582, 594, 604, 605, 611, 628, 638, 649, 658, 660, 663, 673, 675, 682, 686, 704, 709, 718, 720, 724, 727, 733, 737, 739, 744, 747, 748, 749, 751, 753, 759, 770, 778 791, 793, 813, 814, 816, 817, 818, 819, 820, 823, 826, 830, 831, 832, , 838, 840, 843, 844, 845, 847
3.	<p>Dust emissions will affect water quality in dams and rainwater tanks, pools and solar panels. Submission have also included:</p> <ul style="list-style-type: none"> <li>• Filtration systems to be fitted to all domestic tank within 50km radius</li> <li>• Ongoing tank monitoring within given radius of the project to provide assurances to residents</li> <li>• Examples were provided from Kanagulk in Western Victoria radioactive dust contaminated water tanks within 7-8 km of the mine site which had to be cleaned twice a year.</li> <li>• Queries about the 12 month data set of monitoring is required so that there will be enough data to establish a robust baseline data set that can be relied on when assessing water quality of rainwater tanks and dams</li> </ul>	65, 77, 94, 96, 159, 191, 202, 203, 224, 239, 241, 253, 268, 298, 484, 488, 492, 497, 506, 514, 527, 531, 540, 541, 546, 547, 554, 638, 649, 659, 673, 677, 682, 737, 739, 750, 752, 753, 781, 812, 813, 814, 818, 831, 835, 837, 840, 843, 844, 900
4.	<p>Concern with scientific modelling and monitoring data sets that were used to develop the air quality assessment. Issues include</p> <ul style="list-style-type: none"> <li>• Concern about the adequacy of the dust forming fraction monitoring, in particular, that meteorological monitoring was only undertaken for 12 months and that the monitors did not work for 22% of that time.</li> <li>• Victorian EPA standards are outdated and we should be using the USA EPA standards of assessment.</li> <li>• Some rare earth elements do not have local guidelines so there is no yardstick to measure them</li> <li>• The methodology used to present the airborne carcinogens in the ore and that they can accumulate in through the food chain.</li> <li>• The air quality assessment does not map or define the distances that dust will travel under different wind speeds.</li> <li>• Concern about modelled exceedances of PM<sub>10</sub> criteria in the <i>National Environment Protection (Ambient Air Quality) Measure 2016</i>.</li> <li>• Concern that the peer reviewer (Denison, 2019) called into question some of the modelling predictions in the air quality assessment (Katestone, 2020) and these were not addressed.</li> </ul>	241, 268, 389, 423, 484, 516, 520, 554, 556, 582, 649, 672, 712, 813

Issue #	Issue description	Submission number #
	<ul style="list-style-type: none"> <li>The AERMOD modelling undertaken by the consultant has been shown to underestimate contamination from more complex topography...and therefore probably underestimates dust emissions.</li> <li>The air quality assessment incorrectly calculates that Kalbar's proposed two water trucks will be sufficient to ensure dust mitigation</li> <li>Concern that the mathematical modelling is inadequate for dust modelling and that various measurements involved with the dust assessment fall short of requirements.</li> <li>Concern about relying on air quality data from Traralgon in the modelling, which is the second most polluted in Victoria, as a baseline for ambient air at Glenaladale.</li> <li>Concern that the modelling did not account for topography of the area.</li> <li>Concern that the modelling did not address dust impacts during years 1-3, when dust impacts would be greatest.</li> <li>Concern that the assessment relies on outdated standards for nitrogen dioxide, sulfur dioxide and Oxy O3, as the Commonwealth government is reviewing standards in respect of these.</li> </ul>	
5.	<p>Concern about likely effectiveness of dust mitigation measures:</p> <ul style="list-style-type: none"> <li>The water balance does not allow for sufficient volumes of water to suppress dust.</li> <li>Concern about management of dust and arrangements for ceasing operations on high-wind days. Will this only be if someone complains? Concern that it will be too late to prevent nuisance if dust deposition levels exceed the trigger values for mitigating actions. Skeptical that a mining operation would actually stop on high wind days</li> <li>Under what unfavorable conditions would the mine be closed and rehabilitated rather than just being left in care and maintenance leaving heavy metal sands exposed to the weather?</li> <li>Stopping up to 90% of the dust is not very reassuring. Over 15 or so years of mining, followed by 5 years of rehabilitation, even 10% of the total of dust produced could be quite sufficient to cause health issues and contamination issues for the soil in which the vegetables are grown</li> <li>Concern about mine running out of water for dust suppression.</li> </ul>	57, 213, 484, 831, 225, 239, 481, 524, 541, 559, 763, 649, 675, 813
6.	<p>The air monitoring was undertaken at an inappropriate location/time.</p> <ul style="list-style-type: none"> <li>Concern that there was only one monitoring station given the size of the Project area.</li> <li>Concern that wind speed data used in air quality assessment were not representative of local peak wind speeds.</li> <li>Concern that air quality monitoring stations were inappropriately placed, and provided misleading windspeed information</li> </ul>	57, 70, 135, 157, 158, 225, 268, 481, 525, 752, 812, 813, 831, 837

Issue #	Issue description	Submission number #
	<ul style="list-style-type: none"> <li>only parts of the mining process were assessed as far as dust production</li> <li>Concern that the dust monitoring/weather data has a gap during the summer months ((Jan-Apr) and that wind has been under reported.</li> </ul>	
7.	Concerns about winds carrying dust to nearby residences, agricultural operations, schools and recreational facilities. Particularly when soils are bare.	58, 123, 267, 347, 365, 374, 385, 389, 395, 418, 419, 423, 436, 440, 441, 442, 445, 546, 780, 813, 862, 863, 881, 886, 887, 892, 893, 896, 899, 900
8.	Concern there is no regulatory standards for dust deposition levels on vegetables; concern about dust deposition on grapes in vineyard.	243, 509
9.	Emissions of dust and exhaust pollutants due to earthworks, wind erosion from bare ground and stockpiles, increased project traffic, vehicle movements along unsealed roads, mining equipment and the use of on-site diesel generators have the potential to affect all residents in the nearby area.	481, 664
10.	Recent changes to legislation and release of the draft 'Environmental Reference Standard' means that future compliance standards for airborne particulates will be 25 ug/m3 for PM2.5 and 50 ug/m3 for PM10. Under the new legislation, operator will be required to reduce emissions so far as reasonably practicable. Submission includes recommendations for 'trigger levels' used in monitoring. Submission also proposes changes to wind speed and vehicle speed action levels described in the Air Quality risk treatment plan (including restricting vehicle speeds on the mine to 10 – 20 km/hr).	514, 813
11.	'Based on the information provided in the Human Health Risk Assessment, EPA does not expect dust from the project to adversely affect the integrity of crops grown or human health'. Submission recommends monitoring to validate health risk predictions.	514
12.	Estimation of radionuclide uptake in crops is flawed because it only considers soils 'not yet exposed to the impact of mining'.	516, 582
13.	Visibility of dust will affect community's assessment of 'acceptability' of dust levels.	813
14.	Plume modelling and re-distribution of particulates and metal attenuation into the environment has taken a standardised multi-year approach. It does not however consider future risk scenarios. for instance local weather conditions that exceed +/- standard deviation of existing data series for wind and plume dispersion. These data sets would be of interest for local businesses as future climate change predictions identify a number of changes in weather aspects that affect eastern Victoria.	277

## 2.8 Climate change and Greenhouse Gas emissions

Issue #	Issue description	Submission number #
1.	<p>The Project will result in greenhouse gas emissions and exacerbate climate change effects.</p> <p>Kalbar should either purchase renewable energy or install a renewable energy generator given the significant energy consumption.</p>	6, 41, 51, 67, 77, 248, 263, 268, 335, 348, 352, 388, 544, 673, 705, 813
2.	Claim that Kalbar has made no or a limited effort to mitigate scope 2 and/or scope 3 emissions.	6, 705, 813
3.	Comment that removal of over 700 large mature trees will release sequestered CO2 back into the atmosphere.	156
4.	Query whether Kalbar will be using conventional or unconventional gas.	473
5.	Concern that the GHG emissions calculations are underestimated, targets have not been set for reduction over the life of the project.	705, 813
6.	Claim that Kalbar is unlikely to develop the 66kV transmission line due to its costs and will instead rely on diesel generators for power.	813
7.	The climate costs of the Project outweigh the benefits – resulting in 1.074Mt of GHG emissions per new job, compared to the State average of 41.75 tonnes per job.	813
8.	Carbon costs are likely to be in the order of \$30m based on the carbon price published in the latest Emissions Reduction Fund figures, as opposed to the \$16m in the EES.	813
9.	Criticism of the EES approach to monetizing the externality of greenhouse gas emissions as a ratio of the Victorian population to the global population.	813



## 2.9 Noise

Issue #	Issue description	Submission number #
1.	Concern that noise and vibration generated by all elements of the project (including but not limited to construction, mining operations, transport, etc), will negatively impact amenity, human health (including sleep disruption), livestock and wildlife. Some submissions express particular concern about night time noise within a low ambient noise setting.	15, 59, 69, 77, 78, 81, 89, 90, 109, 110, 157, 199, 202, 212, 225, 268, 305, 325, 344, 352, 365, 373, 375, 388, 399, 412, 436, 439, 442, 476, 478, 480, 484, 492, 506, 514, 535, 540, 546, 557 559, 564, 582, 813
2.	Concern that baseline monitoring for noise and vibration was not appropriately conducted (including the under-reporting of sensitive receptors, noise logging at inappropriate locations for an insufficient period of time, in particular L4 in Lucas Gully, or when “one-off” harvesting activities were taking place)	303, 484, 506, 813
3.	Concern noise from operations may not have been properly assessed (including by not undertaking Australian Noise Exposure Forecast mapping); noise from water pumps, Fernbank rail siding, and road and rail traffic have not been adequately considered. Concern about the assumptions used in the noise assessment about the speed of trucks on haul roads, and on the reliance of noise emission and terrain data provided by Kalbar.	54, 299, 481, 813
4.	Comment that the noise impact assessment does not comply with the scoping requirements in various respects, including diminished social wellbeing, public health, and impacts to flora and fauna	813
5.	Comment that that different equipment types in different in different soil types will vary noise effects and emissions, and that tonal variances are relevant to the effects of noise on people, citing experiences at Bendigo and Keysbrook.	813
4.	Concern that mitigation measures will not be implemented, or that monitoring and non-conformance reporting will not occur, to the required standard	202, 476, 481, 506, 813

## 2.10 Radiation/Heavy Metals

Issue #	Issue description	Submission number #
1.	Concern about radiation effects, including radiation waste and transport of radioactive materials.	22, 24, 33, 50, 68, 69, 74, 76, 79, 81, 86, 89, 153,

Issue #	Issue description	Submission number #
	<p>Queries raised include:</p> <ul style="list-style-type: none"> <li>• What standards the Project will be required to comply with, who will monitor and will the results be made public?</li> <li>• The EES relies on an unidentified ARPANSA publication to assert that the trucks or rail carriages will contain about 5% radioactive monazite, yet that publication specifically referred to sands when monazite was not part of the load and had been treated as a waste product after processing and return to site.</li> </ul>	<p>159, 160, 162, 169, 179, 181, 202, 212, 219, 224, 230, 231, 241, 252, 255, 257, 267, 268, 271, 281, 288, 298, 300, 314, 315, 316, 332, 340, 353, 356, 359, 361, 365, 371, 373, 374, 375, 378, 385, 388, 395, 396, 406, 408, 412, 413, 414, 418, 420, 423, 437, 439, 441, 442, 445, 446, 450, 465, 488, 489, 516, 590, 594, 628, 630, 646, 663, 679, 682, 686, 698, 717, 722, 734, 752, 754, 759, 763, 767, 769, 770, 773, 776, 777, 778, 781, 791, 810, 813, 814, 822, 826, 829, 830, 835, 837, 848, 851, 854, 855, 856, 861, 862, 876, 881, 886, 887, 893, 900, 908, 909</p>
2.	<p>Concern about the fact that the radiation assessment is based on the modelling of potentially radioactive surface soil, not the ore body that will be disturbed by mining, and that the full analysis of the ore body has not been disclosed.</p>	<p>14, 68, 74, 81, 91, 94, 556, 557, 564, 639, 648, 673, 744, 745, 765, 773, 813, 838, 843</p>
3.	<p>Concern about the effects of heavy metals. With some submitters specifically concerned about chromium and vanadium exposure and that testing and analysis is not being adequately addressed. Concern over the the use of appropriate HIL ranges, including bismuth, thorium, thallium uranium, vanadium and tungsten.</p>	<p>52, 171, 268, 375, 408, 423, 484, 488, 613, 620, 679, 733, 777, 781, 814,</p>
4.	<p>Concern about bioaccumulation of radionuclides and heavy metals in soil and pasture and their effect on livestock and native animals.</p>	<p>77, 241, 541, 673, 679, 777</p>
5.	<p>Concern about radioactive pollution of waterways and potential bioaccumulation in fish. Including atmospheric entrainment over time upwards in mountains and tributaries.</p>	<p>79, 181, 241, 408, 613, 620, 733, 763</p>
6.	<p>Concern mining of radioactive substances will cause inevitable contamination of air and water.</p>	<p>160, 484</p>
7.	<p>Comment that co-deposition of rare earth elements, such as monazite, with thorium and uranium, adds complexity to the processing of the ore which involves physical separation, chemical leaching, solvent extraction and ion exchange and treatment and disposal of radioactive waste.</p>	<p>241</p>
8.	<p>Submitter comments that the radiation assessment did not detect uranium and thorium radionuclides in PM<sub>10</sub> particles and states that this suggests that “alternative more sensitive analytical and/or sampling techniques should be utilized to enable detection and measurement”.</p>	<p>241</p>

Issue #	Issue description	Submission number #
9.	Comment that EPA will be seeking further information from the Proponent on any potential radiation associated with the surface water and groundwater discharges and the DAF treatment plant.	514
10	Concern for the health in relation to exposure of radiation including risks of lung cancer, lens of the eye where cataracts may be generated and concern that appropriate management plans and work protocols will be undertaken.	752
11	Concern that there may be elevated radiation levels at areas of spillage adjacent to monazite loading and storage facilities.	763

## 2.11 Traffic and transport

Issue #	Issue description	Submission number #
1.	Concern about trucks using the roads (and associated noise and dust impacts, and safety). This includes damage to road and some submissions question who is responsible for maintaining/repairing roads. Specific sites included: South Pines Golf Club	1, 9, 13, 34, 71, 72, 77, 89, 97, 103, 162, 171, 181, 201, 202, 212, 222, 262, 266, 268, 309, 325, 365, 389, 409, 413, 420, 423, 463, 481, 488, 506, 516, 546, 565, 582, 598, 652, 659, 664, 667, 671, 673, 677, 690, 711, 712, 727, 734, 742, 763, 781, 813, 818, 821, 822, 831, 833, 836, 837, 839, 840, 851, 862, 863, 869, 875, 877, 879, 897
2.	Overall increase in local traffic and ability to handle extra/larger vehicles. Including impact to flora and fauna and increased motor traffic accidents.	162, 180, 202, 258, 262, 268, 310, 481, 565, 633, 715, 813, 869, 875, 893
3.	Concern about the proposed road diversions and the lack of detail provided about them (timeframes, expected delays for road users, changes to water flow) including the concerns about the effect realigned roads and new roundabouts will have on the community (including elderly drivers, emergency workers and tourists). Comment that cost of road diversions is likely to exceed value of ore accessed by moving roads. Road realignment is not justified, given impacts on native vegetation and disruption to farming activities.	9, 268, 568, 734, 813, 837, 875
4.	Concern local roads will be used to transport hazardous materials and that insufficient detail has been provided about precautions to ensure there is no dangerous leakage of processed material	171, 316, 630, 673, 869

Issue #	Issue description	Submission number #
	during transport.	
5.	Road closures and redirections will adversely affect recreational cycling and sporting events. Lack of consideration for cyclist in general.	463, 690, 673, 712, 781
6.	Concerns with the way traffic study was completed including traffic counters were not used to record the current volume of traffic and that traffic analysis in the EES did not consider traffic during certain periods or events such as the COVID-19 pandemic or times such as Christmas, Easter, or long weekends.	268, 813, 893
7.	Preference for rail options and timing provided.	95, 611
8.	Concern about HMC being transported on roads used by school buses. School buses will travel through mine site.	488, 688
9.	Concern that road infrastructure has been poorly planned and not placed in the best areas including lack of consultation with residents along road routes and schools.	693, 712
10.	Concern that the rail option omitted required track upgrades and how it will be funded.	712, 813
11.	Comment querying why the diverted roads can't be built over the already mined areas south of the Bairnsdale-Dargo Rd.	813

## 2.12 Horticulture/agriculture

Issue #	Issue description	Submission number #
1.	Concern that the Project will affect food production within the horticultural area of the Lindenow Valley, and on broader agriculture within the area. Concern that the land uses cannot co-exist, particularly due to contaminated dust emissions and pollution of water, and relating to what will be the consequences if proposed mitigation measures do not succeed.	2, 8, 11, 12, 13, 14, 16, 17, 18, 21, 22, 26, 30, 32, 33, 36, 37, 39, 41, 42, 43, 44, 45, 49, 52, 53, 54, 57, 60, 64, 65, 70, 71, 72, 77, 78, 86, 88, 90, 96, 99, 102, 109, 110, 116, 118, 119, 120, 122, 123, 126, 127, 128, 130, 135, 138, 139, 142, 146, 147, 155, 157, 158, 163, 164, 169, 172, 174, 176, 179,

Issue #	Issue description	Submission number #
		180, 181, 188, 189, 195, 200, 201, 202, 205, 209, 212, 215, 218, 219, 221, 223, 225, 226, 227, 228, 229, 230, 233, 238, 239, 240, 241, 242, 243, 244, 246, 249, 252, 255, 259, 261, 263, 264, 266, 267, 268, 271, 281, 288, 290, 296, 299, 301, 304, 305, 308, 310, 311, 313, 314, 315, 332, 335, 340, 343, 344, 346, 351, 352, 353, 355, 362, 365, 367, 370, 371, 373, 375, 377, 378, 382, 383, 384, 388, 389, 390, 392, 397, 399, 400, 406, 409, 410, 413, 414, 420, 422, 423, 424, 425, 426, 427, 433, 434, 436, 438, 439, 440, 442, 444, 445, 446, 447, 448, 450, 451, 453, 465, 469, 478, 479, 480, 481, 482, 487, 491, 492, 499, 500, 509, 510, 512, 520, 522, 523, 524, 525, 526, 527, 530, 532, 535, 537, 540, 542, 544, 546, 547, 551, 554, 555, 557, 561, 564, 570, 572, 574, 577, 580, 586, 590, 594, 596, 600, 603, 604, 611, 615, 625, 626, 627, 630, 636, 642, 643, 644, 648, 649, 651, 657, 658, 659, 660, 664, 667, 668, 671, 675, 673, 679, 680, 681, 683, 684, 686, 690, 694, 696, 700, 702, 703, 704, 706, 707, 708, 709, 711, 712, 713, 721, 724, 727, 731, 734, 735, 737, 738, 740, 741, 742, 743, 744, 745, 747, 748, 749, 751, 753, 754, 756, 757, 760, 761, 763, 765, 766, 768, 770, 773, 774, 775, 776, 777, 778, 780, 781, 782, 784, 788, 791, 808, 810, 812, 813, 814, 816, 817, 818, 819, 820, 821, 823, 827, 829, 830, 831, 832, 833, 834, 837, , 839, 840, 841, 842, 843, 845, 847, 852, 853, 855, 856, 859, 863, 864, 865, 868, 871, 872, 873, 875, 876, 878, 881, 882, 884, 886, 887, 889, 891, 892, 893, 895, 896, 897, 898, 900, 901, 902, 906, 908, 909
2.	Concerns that the project will compete for labour and water with the local agricultural / horticultural businesses	1, 12, 13, 20, 22, 52, 212, 218, 219, 246, 268, 299, 308, 313, 314, 315, 316, 318, 325, 335, 336, 341, 343, 345, 351, 356, 361, 365, 371, 375, 382, 383, 385, 389, 399, 406, 410, 413, 420, 426, 439, 442, 445, 446, 541, 603, 606, 614, 627, 649, 671, 673, 679, 680, 682, 684, 686, 690, 700, 709, 711, 717, 722, 725, 738, 745, 747, 748, 749, 765, 813, 830, 837, 840, 843, 845, 847, 852, 853, 856, 860, 868, 875, 892, 895, 896, 899, 900, 908

Issue #	Issue description	Submission number #
3.	Concern that air quality (dust) will have an impact in relation to the acceptance of direct-to-market food products grown in the Lindenow Valley, including concerns that supermarkets and customers will reject vegetables that are contaminated with dust.	54, 212, 226, 314, 315, 332, 335, 336, 365, 389, 390, 399, 410, 439, 442, 445, 509, 524, 649, 668, 679, 722, 738, 813, 837, 872, 892, 893, 896, 900
4.	<p>Concerned that the EES underestimates the complexity, quality and productivity of the dryland agriculture and pasture on the Project Area. Particular concerns include:</p> <ul style="list-style-type: none"> <li>• concern about statements in the EES that certain areas are not suitable for agriculture, when many generations of families have successfully farmed these areas. Claim this casts doubt on consultant's experience with agricultural soils;</li> <li>• claim that the EES is incorrect in stating that intensive grazing/horticulture is present to the NE of the Project area when there are areas of intensive grazing on irrigated pasture within the Project area – beef, lamb/wool at the eastern end and a dairy at the western end; and</li> <li>• claim that using the intensity of agriculture as a gauge of profitability is a misleading measure because decision making within the agricultural sector is complex and includes factors such as levels of debt, climate, markets and environmental health and biodiversity.</li> </ul>	123, 268, 502, 568, 812, 813, 814, 827
5.	If water required for the Project was redirected to agriculture, many more jobs could be created than the jobs being created by the Project.	164, 177, 221, 230, 235, 257, 261, 281, 288, 296, 465, 472, 474, 475, 477, 482, 488, 491, 510, 520, 537, 542, 551, 557, 564, 570, 594, 673, 708, 751, 753, 760, 813, 830, 833, 834, 836, 884, 887, 908
6.	Concerns about the Project's potential to cause interruption to existing farming concerns in and around the project area via disruption of stock transporting routes, severance of land parcels and properties, surface water harvesting, loss of carrying capacity, management of pest animals and weeds, biosecurity risks, uncertainty and general disruption due to construction elements and mine operations.	123, 135, 157, 268, 455, 484, 502, 506, 738, 812, 813, 837
7.	Concerned that potential economic loss/damage to the Agriculture/ Horticulture industry (including value adding, indirect and/or supporting/dependent industries), for both present and future uses is inaccurate and underestimated.	355, 375, 484, 502, 530, 541, 564, 711, 743, 812, 813, 814, 829, 833, 837, 889, 896
8.	Concerns that certain types of crops are not typically washed prior to sale.	389, 390, 509, 524, 813, 892, 896
9.	Concerns about loss of viable agricultural land for farming and the ability for it to be returned to its pre-mining agricultural uses.	241, 451, 530, 606, 649, 655, 664, 679, 738, 743, 812, 813, 837
10.	Concerns about effect on livestock during and after operations; including reduced production and contamination of meat and wool due to dust and noise created by mining activities, along with the	157, 502, 738, 768, 812, 813, 814, 837, 887

Issue #	Issue description	Submission number #
	loss of paddock trees and pastures post mining.	
11.	Concerns that vegetable farmers (organic included) will not be able to obtain or will lose existing certifications if their crops are contaminated with dust. Concerns that the consequences of dust in relation to acceptance of product under quality assurance schemes to horticulture have not been calculated or addressed as a key socioeconomic issue.	53, 218, 225, 268, 355, 600, 700, 738. 756, 813, 827, 829
12.	<p>Concerns around the adequacy of the EES soil assessment, including the soil testing methodology. Particular claims include:</p> <ul style="list-style-type: none"> <li>• the majority of samples were taken from the property of a “lifestyle” owner in the NE quadrant of the site;</li> <li>• sampling was not evenly distributed over the Project site;</li> <li>• sampling techniques were not standardized;</li> <li>• delay between sampling and lab analysis;</li> <li>• claim that incorrect test was used to determine the level of plant available phosphorus in the soil; and</li> <li>• the level of soil organic matter was not measured when determining soil water holding capacity.</li> </ul>	813
13.	Concerns that that the impact statements on provenance and supply chain issues are not supported by current consumer information.	277
14.	Would like to ensure that full consideration has been undertaken on consequences to provenance, image, and future sustainability; should risks occur that irrevocably impair the brand and consumer perception of East Gippsland produce, specifically from the Lindenow Valley area.	277
15.	Would like to see certainty for agricultural producers (including specific monitoring) via binding agreements regarding compensation mechanisms and levels for each breach / failure of a control mechanism which impacts on their economic wellbeing and/or physical and mental health.	738

## 2.13 Cultural heritage

Issue #	Issue description	Submission number #
1.	Concern about lack of consultation with and sensitivity to the traditional owners, and about the sufficiency of cultural heritage investigations and the potential impacts of the Project on known and unknown Indigenous cultural heritage and values.	3, 7, 11, 12, 14, 19, 27, 31, 32, 33, 51, 59, 76, 77, 78, 81, 85, 92, 109, 110, 118, 119, 120, 156, 158, 163, 166, 178, 184, 188, 189, 199, 201, 202, 203, 204, 207, 211, 219, 220, 221, 239, 241, 242, 254, 257, 268, 281, 283, 284, 285, 287, 295, 296, 297, 300, 302, 304, 310, 316, 319, 333, 335, 338, 348, 349, 350, 351, 352, 354, 356, 357, 360, 361, 362, 365, 371, 373, 374, 378, 385, 388, 394, 401, 402, 405, 406, 409, 410, 412, 413, 426, 436, 439, 440, 441, 442, 446, 451, 455, 471, 472, 473, 474, 482, 483, 485, 486, 487, 488, 489, 491, 504, 510, 511, 518, 525, 531, 532, 534, 535, 544, 546, 548, 553, 555, 557, 565, 572, 574, 578, 584, 585, 587, 597, 602, 603, 606, 607, 608, 622, 626, 627, 630, 638, 640, 648, 652, 653, 657, 660, 661, 667, 671, 673, 678, 680, 681, 682, 689, 690, 693, 703, 704, 712, 717, 720, 721, 724, 727, 728, 733, 734, 736, 737, 744, 745, 747, 749, 751, 755, 758, 763, 765, 768, 770, 773, 775, 778, 779, 780, 781, 782, 784, 788, 791, 808, 810, 812, 813, 814, 816, 817, 818, 819, 820, 821, 823, 827, 829, 830, 831, 832, 833, 834, 837, 843, 852, 875, 881, 884, 892, 893, 895,
2.	Potential implications of the Project for the Den of Nargun.	59, 69, 201, 202, 212, 253, 268, 385, 406, 455, 480, 500, 520, 522, 595, 734, 813, 840, 868, 875
3.	Concern the historical significance and heritage of the Fingerboards area and intersection will be lost.	123, 172, 813, 831
4.	Dissatisfaction with the mitigation measures proposed to protect cultural heritage	357, 361, 365, 371, 373, 374, 436, 440, 441, 442, 446, 535, 813

## 2.14 Socioeconomic

Issue #	Issue description	Submission number #
1.	Kalbar will not pay council rates, displacing an existing source of revenue from rates paid by	20,77, 201, 268, 288, 516, 673, 813



Issue #	Issue description	Submission number #
	agricultural businesses.	
2.	<p>Perceived economic benefits of the Project will not outweigh the losses and impacts.</p> <p>Claims the EES costs benefit assessment adopts an outdated model that does not consider the full environmental, social and economic costs of the Project relative to the 'no Project' scenario (i.e. benefits that ecosystems provide such as natural water filtration, carbon sequestration, contribution to wellbeing, or the cost of permanent changes such as destruction of the groundwater system).</p>	<p>13, 22, 23, 26, 28, 30, 36, 37, 39, 42, 43, 44, 45, 46, 47, 48, 51, 54, 58, 59, 66, 69, 71, 72, 74, 76, 77, 79, 85, 86, 89, 90, 100, 101, 104, 105, 109, 110, 112, 115, 119, 121, 123, 135, 136, 141, 147, 148, 150, 153, 155, 156, 157, 160, 163, 165, 168, 171, 178, 179, 184, 186, 187, 188, 189, 191, 192, 193, 194, 196, 201, 202, 203, 205, 207, 214, 215, 216, 217, 219, 220, 223, 226, 227, 229, 231, 233, 235, 242, 244, 245, 246, 250, 252, 255, 258, 259, 261, 263, 265, 267, 268, 280, 290, 299, 300, 355, 384, 451, 455, 466, 467, 468, 469, 473, 484, 495, 513, 515, 537, 541, 547, 554, 573, 574, 582, 593, 600, 603, 604, 614, 623, 631, 635, 652, 658, 663, 673, 675, 678, 679, 680, 684, 693, 705, 707, 712, 713, 715, 727, 739, 744, 777, 802, 813, 830, 838, 854, 909</p>
3.	The Project will put extra strain on community services, in particular health services, and demand for housing, water, sewage and open space.	102, 162, 212, 268, 299, 484, 600, 614, 673, 679, 680, 703, 738, 745, 813, 843
4.	Concerned that local families/young people will need to relocate from the area if the Project goes ahead. Concern this could impact upon people available to participate in volunteer fire brigades, and the unavailability of mine workers to fight fires.	142, 157, 191, 196, 237, 255, 268, 487, 604, 652, 693, 745, 813, 839
5.	Supports the Project because of the job opportunities and flow on effects to the community.	151, 232
6.	Comment that many people in the region support the Project, but do not do so publicly because they do not want unnecessary attention and abuse from the anti-mining group.	151
7.	Concern that the 200 jobs that will be created by the Project will not only go to non-locals, but is low in comparison to the jobs that could be created/lost in tourism and horticultural industries.	178, 212, 255, 259, 263, 268, 299, 306, 308, 313, 314, 335, 355, 382, 411, 452, 455, 481, 484, 500, 509, 516, 526, 541, 554, 565, 582, 593, 594, 600, 630, 724, 758, 760, 778, 813
8.	Concerns that profits from the mine will not be retained locally. There is no value adding in Australia given that mineral concentrate will be sent overseas to be processed.	186, 191, 192, 194, 203, 227, 246, 259, 266, 268, 320, 481, 484, 495, 813

Issue #	Issue description	Submission number #
9.	Concern that the mine will destroy community connections and social fabric of the community, stress on community members, and result in “solastalgia,” being the profound sense of loss experienced by communities who watch a beloved landscape destroyed. Concern over the loss of Fingerboards as a meeting place.	268, 468, 554, 614, 652, 680, 688, 693, 698, 703, 711, 744, 745, 813, 838
10.	Concern that the Project will result in loss of opportunity to expand existing land holdings and economies of scale, and the immediate landowner’s holdings will become unviable, resulting in reduced income and intergenerational inequality. Selected properties within the Project boundary will yield exorbitant prices, but the surrounding real estate prices will fall dramatically as a result of the Project, as it will become undesirable to prospective buyer.	813
11.	Comment that for the 18 stakeholders and other landowners in the Project area, the Project will result in intergenerational inequity by causing an irreplaceable loss of opportunity for future generations, and the loss of land stewardship and land husbandry.	813
12.	Claims there are other mineral sands mines in Victoria’s Western District (i.e. WIM 150, Donald, Goschen and Avonbank) that have been approved or are in advanced stages of the approvals process that are more economic/less risky to mine than Fingerboards. Similarly, claims there are other deposits in Australia (i.e. Mount Weld, Thunderbird) and around the world that could meet global demand for the products to be mined.	813

## 2.15 Human health

Issue #	Issue description	Submission number #
1.	Concern that the project (including the EES process thus far) could cause long term health effects; including but not limited to cancer, lung disease, stress, mental health issues and general impacts on health and wellbeing	32, 74, 79, 123, 135, 142, 153, 157, 159, 163, 169, 171, 179, 181, 188, 190, 197, 199, 202, 203, 212, 225, 230, 242, 261, 264, 267, 268, 281, 288, 289, 298, 303, 307, 313, 319, 344, 365, 367, 369, 370, 375, 399, 400, 412, 419, 436, 451, 465, 467, 473, 478, 479, 482, 484, 487, 488, 495, 499, 506, 510, 511, 531, 535, 537, 540, 541, 542, 544, 546, 547, 551, 554, 557, 559, 561, 564, 565, 570, 575, 576, 578, 582, 584, 594, 597, 600, 616, 638, 646, 649, 652, 667, 676, 679, 680, 684, 693, 696, 698, 703, 706, 707, 712, 713, 717, 722, 724, 733, 737,

Issue #	Issue description	Submission number #
		743, 745, 752, 753, 754, 765, 768, 770, 776, 777, 795, 781, 812, 813, 814, 821, 823, 827, 830, 837, 839, 840, 843, 845, 847, 851, 853, 855, 858, 863, 871, 875, 876, 877, 883, 885, 893, 898, 908
2.	Concern that the health risk assessment doesn't address specific health effects to a satisfactory standard (including the Assessment of Site Contamination NEPM) and the DHHS "Guideline for Assessing Human Health Risk from Environmental Hazards 2012,"), including the potential effects on mental health and the cumulative and indirect health effects of the Project. Also a concern the assessment does not sufficiently address consequences of recent bushfires, COVID-19, and is not based on site inspections.	40, 104, 241, 607, 659, 679, 703, 713, 715, 743, 813
3.	Concern that Tier 2 health risk assessment was appropriate nor required.	813
4.	Concern the conceptual site model in the health risk assessment does not identify potential sources of contaminants, in particular the overburden and ore body associated with the mine, health risk (human and animal) associated with the offsite migration of contaminants (e.g. potable tank water or ground water), the effects on other land uses such as agriculture, and risk to ecological receptors (referencing schedule B7 to the NEPM Guideline on health-based investigation levels).	813
5.	Impact of noise and light on health and wellbeing	69, 199, 219, 242, 267, 268, 299, 480, 488, 506, 535, 557, 559, 627, 638, 657, 664, 673, 698, 713, 740, 749, 750, 752, 777, 814, 831, 843
6.	Concern about impact of dust on people who have asthma (and/or lung disease), as well as particular constituents of dust including including vanadium, zirconium and titanium, as well as significant quantities of RSC.	226, 259, 375, 484, 540, 578, 579, 753, 759, 794, 810, 813, 855, 878
7.	Concern about potential contamination of crops used for human consumption, including the uptake and accumulation of radionuclides and heavy metals in plants, fish and animal products.	241, 255, 268, 308, 310, 315, 389, 390, 400, 413, 414, 418, 423, 436, 445, 450, 600, 813, 842, 885, 887, 893, 897, 900, 902
8.	Concern regarding potential contamination of water supply that is used for human consumption	241, 306, 308, 316, 355, 356, 361, 365, 366, 370, 371, 373, 378, 382, 391, 397, 401, 406, 423, 430, 433, 436, 439, 442, 446, 450, 452, 520, 525, 541, 554, 575, 630, 849, 855, 860, 862, 877, 878, 883, 884, 885, 887, 892, 893, 895, 898, 900
9.	Concern about capacity of health care services to address increased health impacts, including health impacts associated with stress. The NEPM states that concentrations less than that of the HILs do	813

Issue #	Issue description	Submission number #
	not necessarily imply that a Tier 2 risk assessment stage is not warranted. The HILs are not intended to indicate a clear demarcation between “acceptable” and unacceptable soil contaminant levels.	

## 2.16 Rehabilitation

Issue #	Issue description	Submission number #
1.	<p>Concerned that the rehabilitation plans/designs and proposed monitoring are not adequate and that Kalbar will not meet their commitment and obligations to rehabilitate the mine (including plans for the native grassy woodland); and the lack of government enforcement/regulation to ensure this occurs appropriately.</p> <p>Concern that no actual mitigation measures have been specified (i.e. to prevent erosion), and no meaningful commitments or targets have been set. Claim that too much reliance is placed on solutions that may be possible, or solutions that are yet to be researched.</p>	14, 23, 24, 32, 54, 68, 69, 74, 76, 77, 79, 90, 97, 100, 101, 114, 120, 130, 133, 135, 137, 144, 155, 162, 163, 168, 172, 178, 180, 181, 191, 201, 202, 203, 207, 212, 221, 225, 227, 229, 237, 238, 239, 241, 248, 250, 259, 264, 268, 288, 308, 315, 316, 330, 335, 352, 388, 399, 409, 413, 418, 423, 429, 436, 439, 442, 450, 468, 473, 480, 484, 488, 506, 509, 516, 534, 535, 541, 546, 554, 556, 557, 568, 582, 594, 614, 630, 631, 649, 652, 663, 673, 679, 690, 704, 711, 712, 713, 742, 743, 745, 747, 749, 755, 760, 761, 763, 766, 767, 774, 777, 781, 812, 813, 814, 821, 823, 826, 831, 832, 834, 837, 845, 846, 847, 848, 849, 850, 855, 858, 862, 864, 878, 881, 883, 884, 885, 893, 895, 897, 898, 899, 900
2.	Concerned that Kalbar has underestimated how many years mine rehabilitation can take.	77, 160, 266, 535, 679, 837
3.	Concern that the rehabilitation bond may not be adequate to cover the cost of rehabilitation and/or that current penalties are not enough of a disincentive, including concern that the work plan is not a reliable basis for calculation of the rehabilitation bond. Concern that, should a legal action be brought for environmental or other damage, Kalbar would lack the financial resources to provide adequate remedy.	162, 201, 225, 229, 241, 268, 288, 429, 455, 506, 516, 557, 649, 672, 680, 682, 690, 704, 708, 763, 813, 814, 815, 830, 845
4.	Concern about Kalbar’s ability to reinstate a productive post-mining soil profile, including the ongoing prevention of tunnel and gully erosion.	135, 144, 268, 429, 502, 516, 552, 568, 582, 652, 673, 679, 691, 746, 777, 781, 812, 813, 831, 837
5.	Concern that project will be put under indefinite ‘care and maintenance’ once high grade ore has been extracted; concern about unplanned closure.	455, 509, 554, 557, 594, 679, 682, 690, 698, 71, 831

Issue #	Issue description	Submission number #

## 2.17 Community engagement

Issue #	Issue description	Submission number #
1.	Criticism of Kalbar's community engagement and stakeholder consultation	12, 19, 27, 70, 88, 130, 135, 168, 253, 268, 303, 319, 410, 433, 437, 473, 484, 488, 522, 534, 535, 548, 564, 568, 598, 616, 690, 698, 703, 715, 745, 777, 781, 813, 814, 831, 833, 837, 838, 843, 847, 851, 865, 868, 875, 893, 899, 900, 909
2.	Submitter is impressed with the inclusiveness and lengths Kalbar has gone to in keeping East Gippslanders informed of the Project over the last 3 years.	232
3.	Claim the Project has no social licence to proceed.	252, 300, 384, 575, 630, 781, 784, 813, 814
4.	Concern Project landowners have not been adequately consulted about infrastructure proposed on their land.	268, 484, 781, 812, 813, 833, 837

## 2.18 Tourism impacts

Issue #	Issue description	Submission number #
1.	Concern about the effects of the Project on the regions tourism and visitor economy as well as the local area's "clean green" image.	1, 3, 8, 11, 12, 14, 15, 16, 18, 23, 30, 36, 38, 52, 56, 57, 69, 71, 72, 76, 77, 79, 88, 94, 96, 102, 109, 110, 119, 147, 153, 156, 160, 162, 164, 174, 192, 202, 206, 203, 212, 213, 214, 214, 218, 221, 226, 228, 229, 233, 238, 239, 240, 242, 244, 246, 248, 253, 255, 258, 268, 271, 281, 300, 304, 308, 313, 316, 325, 329, 335, 345, 351, 353, 354, 355, 365, 367, 370, 373, 382, 389, 395, 401, 406, 409, 410, 411,

Issue #	Issue description	Submission number #
		414, 421, 428, 429, 436, 439, 440, 442, 444, 445, 447, 450, 452, 455, 463, 466, 469, 473, 480, 483, 509, 516, 519, 520, 524, 525, 535, 537, 542, 544, 546, 551, 554, 555, 557, 564, 574, 575, 577, 582, 593, 594, 597, 600, 603, 605, 611, 613, 619, 620, 622, 625, 630, 633, 635, 637, 644, 645, 649, 650, 652, 657, 658, 659, 660, 663, 664, 671, 673, 679, 680, 681, 682, 683, 684, 687, 688, 702, 706, 707, 708, 710, 711, 712, 713, 714, 722, 724, 727, 728, 733, 734, 739, 740, 741, 745, 747, 749, 753, 757, 761, 763, 766, 770, 774, 777, 778, 781, 782, 784, 788, 810, 813, 818, 823, 825, 827, 830, 831, 832, 833, 837, 838, 840, 841, 847, 848, 849, 853, 858, 860, 863, 865, 867, 868, 870, 872, 875, 876, 881, 882, 886, 887, 890, 891, 892, 895, 900, 901, 902, 905, 906, 908

## 2.19 Planning and planning scheme amendment (PSA)

Issue #	Issue description	Submission number #
1.	Opposition to compulsorily acquiring interests in land, particularly outside the mining licence area.	. 14, 15, 22, 23, 24, 25, 29, 32, 54, 57, 58, 68, 69, 70, 71, 72, 74, 76, 78, 87, 90, 94, 96, 99, 114, 119, 120, 131, 133, 137, 145, 158, 160, 162, 163, 166, 176, 181, 195, 197, 201, 203, 221, 225, 229, 238, 239, 253, 268, 288, 298, 300, 308, 315, 335, 340, 353, 365, 373, 375, 377, 392, 395, 399, 400, 404, 405, 410, 414, 418, 420, 431, 436, 437, 439, 440, 442, 444, 446, 455, 476, 480, 492, 520, 522, 527, 540, 546, 547, 548, 555, 557, 564, 574, 594, 596, 601, 607, 618, 628, 633, 635, 648, 660, 668, 672, 679, 680, 682, 686, 690, 704, 708, 711, 713, 715, 727, 733, 734, 744, 745, 747, 759, 761, 763, 765, 773, 777, 810, 814, 816, 817, 818, 820, 821, 825, 826, 827, 829, 830, 831, 833, 838, 840, 845, 847, 848, 855, 856, 858,

Issue #	Issue description	Submission number #
		859, 862, 867, 870, 872, 876, 883, 884, 885, 886, 892, 895, 898
2.	Comment that the PSA does not address various aspects of the Planning Policy Framework.	813
3.	Comment that Kalbar has sought the PSA to have 'ultimate control' over the land subject to the PSA.	813
4.	Comment that the planning scheme amendment includes a Public Acquisition Overlay.	813
5.	Comments that mining and agriculture are not compatible, and that while mining is exempt from planning schemes in some situations (ie, when assessed in an EES), the planning scheme also supports agriculture.	813

## 2.20 Tailings management

Issue #	Issue description	Submission number #
1.	Concern about the design (and lack of available detail) of the tailings dam, and that the tailings are toxic and could be released into the environment, either due to leaching and/or dam failure.	11, 14, 23, 27, 32, 54, 57, 60, 61, 65, 76, 77, 79, 81, 89, 90, 91, 96, 110, 114, 120, 130, 135, 137, 145, 153, 155, 158, 160, 168, 176, 178, 203, 212, 221, 222, 225, 228, 233, 238, 239, 246, 253, 259, 266, 267, 268, 281, 288, 296, 299, 314, 319, 351, 365, 371, 373, 376, 377, 392, 399, 408, 413, 423, 429, 433, 436, 439, 442, 444, 446, 448, 455, 472, 474, 475, 477, 478, 481, 482, 487, 488, 509, 524, 532, 540, 546, 547, 557, 584, 585, 593, 594, 597, 602, 608, 615, 628, 647, 654, 659, 668, 672, 673, 679, 680, 682, 683, 690, 706, 708, 715, 724, 734, 737, 747, 749, 751, 761, 765, 766, 770, 791, 813, 814, 817, 820, 823, 824, 826, 830, 831, 832, 834, 837, 838, 840, 843, 847, 851, 852, 853, 854, 856, 860, 862, 865, 866, 873, 875, 877, 881, 887, 889, 890, 892, 893, 896, 897, 899, 900, 909

Issue #	Issue description	Submission number #
2.	Concern about what will happen to the material in the tailings storage dam when the mine is decommissioned.	239, 509, 548, 556
3.	Concern about impacts on the Chain of Ponds / Mitchell system (and associated biota) if water were to seep from the tailings storage (including flocculant).	455, 480, 489, 520, 540, 547, 557, 594, 627, 668, 673, 680, 682, 709, 734, 737, 744, 748, 813, 909
4.	Concern about whether the impact of PSF failure has been modelled.	813

## 2.21 Kalbar's track record and experience

Issue #	Issue description	Submission number #
1.	Kalbar has no experience in the mining industry, nor a demonstrable track record of environmental performance or rehabilitation of land.	7, 17, 25, 30, 32,36, 37, 39, 41, 43, 44, 45, 52, 56, 58, 71, 72, 86, 102, 117, 121, 135, 164, 168, 201, 203, 230, 259, 260, 268, 355, 361, 383, 406, 423, 443, 444, 479, 484, 488, 511, 513, 516, 517, 520, 554, 564, 576, 582, 598, 600, 602, 630, 654, 663, 652, 673, 679, 682, 711, 757, 814, 837, 841, 868
2.	Concern with Kalbar's financial capacity and "fit and proper" state to undertake the project along with concern that the resource is uneconomic to mine given the constraints and if the mine proceeds It will go into care and maintenance mode if the commodity price falls. Concern about its capacity for ongoing monitoring and management.	180, 252, 267, 268, 271, 335, 423, 429, 473, 484, 575, 649, 673, 679, 713, 764, 812, 813, 814, 815, 831, 834, 862, 889, 894
3.	Concern about Kalbar's corporate restructure and change in identity of proponent, and that Kalbar is foreign owned. Profits will go offshore.	79, 142, 177, 194, 195, 198, 201, 217, 227, 239, 242, 249, 259, 268, 300, 335, 455, 457, 488, 520, 564, 587, 673, 713, 715, 717, 765, 813, 838, 847, 856, 862, 865, 877, 881, 887, 899, 903, 904, 906



## 2.22 EES process

Issue #	Issue description	Submission number #
1.	Concern that the EES process is not independent because it relies on Proponent funded studies.	11, 54, 72, 79, 80, 99, 166, 169, 190, 201, 212, 218, 225, 227, 268, 300, 335, 410, 423, 433, 436, 437, 522, 525, 548, 554, 565, 575, 649, 679, 682, 690, 705, 717, 742, 761, 765, 795, 813, 814, 831, 837, 852, 861
2.	Concern that not all relevant information has been disclosed in the EES, including the full analysis of the ore body and feasibility studies undertaken by previous tenement holders.	27, 74, 81, 120, 133, 137, 158, 162, 197, 199, 204, 221, 229, 231, 267, 300, 335, 410, 423, 436, 437, 455, 472, 474, 475, 477, 484, 525, 548, 556, 575, 594, 610, 648, 679, 682, 690, 712, 734, 743, 813, 814, 821, 823, 825, 830, 831, 832, 849, 861, 866, 867, 872, 887, 892, 893
3.	Concern that Kalbar has no legally enforceable obligation to tell the truth in the EES.	813
4.	Concern about errors, inconsistencies and inaccuracies in the EES, including maps that are incorrect and pages that are unreadable.	144, 199, 204, 211, 219, 239, 268, 271, 484, 520, 532, 546, 556, 564, 652, 690, 708, 720, 726, 742, 765, 777, 812, 813, 814, 831, 837, 892, 893, 898, 899, 900
5.	Concern about the size and complexity of the EES, including not enough time to clearly and appropriately respond.	145, 168, 202, 203, 231, 239, 268, 484, 502, 522, 541, 554, 565, 575, 652, 673, 690, 720, 726, 742, 763, 766, 777, 831, 833, 861, 889, 900, 899
6.	Concern the decision to allow the Project to proceed has already been made.	154, 290, 484, 575
7.	Concern the TRG did not include people with expertise relevant to the Project such as representatives from horticulture, agriculture, public health, hydrology, geology, climatology, tourism, the Chief medical Officer, soils scientist, disaster management. TRG did not include community representation.	268, 480, 516, 568, 575, 582, 663, 690, 813, 831
8.	Concerned that the EES process is flawed, outdated, open to political influence and needs reform, along with a lack of confidence in ability of regulatory systems to properly oversee mining activities.	241, 429, 546, 522, 525, 554, 575, 674, 679, 763, 765, 813, 814, 603, 846, 909
9.	Concern about a disclaimer by Coffey in certain EES reports.	532, 610, 813, 814

Issue #	Issue description	Submission number #
10.	<p>General concerns with the exhibited EES, including:</p> <ul style="list-style-type: none"> <li>• inadequate risk assessment process and plans;</li> <li>• precautionary principle has not been considered;</li> <li>• lack of peer reviews;</li> <li>• lack of detail (including 3D drawings and animations);</li> <li>• too reliant on modelling;</li> <li>• relies on incorrect or unsatisfactory consequence ratings or indicators;</li> <li>• no addressing of cumulative impacts;</li> <li>• ambiguous or unsubstantiated;</li> <li>• research is limited and should have been conducted over a wider timeframe or area;</li> <li>• deals with issues only superficially; and</li> <li>• being compiled by people who may have never been on site, or may live outside of Victoria.</li> </ul>	14, 212, 216, 219, 225, 239, 271, 299, 311, 410, 494, 554, 600, 649, 679, 690, 705, 781, 813, 815, 829, 831, 837, 865, 885, 892