

Fingerboards Mineral Sands Project Environment Effects Statement

Inquiry and Advisory Committee Direction No. 26 (23 December 2020) — Response by Proponent to issues raised in submissions

8 February 2021

This document has been prepared by Kalbar Operations Pty Ltd (**Kalbar**) in response to Direction No. 26 issued by the Inquiry and Advisory Committee on 23 December 2020, which requires:

‘A response by the Proponent to the issues raised in submissions and where they are addressed in the EES documentation, PSA, Work Plan or Works Approval application should be provided to the IAC by 10.00am on Monday 8 February 2021. This response will then be uploaded to the Engage Victoria website. This should include a response to any requests for further information made in submissions’.

Kalbar’s response 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.

The first three columns of this response are identical to Kalbar’s issues summary table in IAC Document 25 (being Kalbar’s response to IAC direction 26, dated 7 January 2020).

The below responses provide Kalbar’s starting (that is, Day 1) position in relation to the issues raised, having reviewed the submissions and considered the expert evidence reports it relies on¹. As the hearing progresses, and the issues are understood and explored in greater detail, Kalbar commits to maintaining an open mind about introducing further appropriate mitigations in responses to suggestions raised and explained by submitters. Accordingly, its position on particular issues may change during the course of the hearing and Kalbar will make this clear, e.g., in its Part B submissions, closing submission, technical notes or similar.

It is noted further that there are many entries in the table concerning matters that are simply in dispute or represent opposing and/or differing views about the Project. Kalbar does not propose to provide arguments in response through this document, but rather to point to information sources that inform the issue raised, to the extent it can.

¹ Please note that, unless otherwise specified, a reference to an expert witness statement is a reference to the expert witness statements filed by the Proponent on 2 February 2021. Please additionally note that, where a reference is made to an un-numbered page within an appendix to an expert witness statement, the pinpoint is instead given to the relevant page of the PDF.

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1.0 Government and agency submissions

1.01 General

Issue #	Issue description	Submission #	Response
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	Kalbar is not opposed to this suggestion, in principle, although the need for a specialist panel is not yet clear and seems to be a matter within the control of the regulators rather than Kalbar.
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	<p>Refer evidence of John Glossop (Planning), [14]-[26].</p> <p>Works outside the mining licence area will be subject to control under the East Gippsland Planning Scheme via the proposed Specific Controls Overlay, Incorporated Document and the plans / documents approved under this.</p> <p>Works within the mining licence area will be subject to control under the work plan. The work plan is a statutory instrument under the <i>Mineral Resources (Sustainable Development) Act 1990</i> ('MRSDA'). The MRSDA and the associated Mineral Resources (Sustainable Development) Regulations 2019 prescribe the content and scope of work plans approved under this framework. Such plans regulate mining and exploration activities on land covered by approved exploration, mining, prospecting or retention licences.</p>
3.	Concern that there is no historic heritage assessment report for the Project, nor has such a report been submitted to Heritage Victoria.	716	<p>The Project area does not include any places included on the Victorian Heritage Register (VHR) and is not covered by the Heritage Overlay under the East Gippsland Planning Scheme.</p> <p>EES Appendix A017 includes an assessment of historical heritage and sets out survey findings at section 6.3.3 assesses historic heritage. Two properties of 19th century construction were investigated further, but not found to meet significance thresholds for inclusion on the VHR.</p> <p>Despite the above, Kalbar is open to documenting existing historic features of the Project area through archival photography, relocating structures and other archival means, if recommended by the IAC. However, its current position is that the historical heritage significance of the Project area is low and fabric retention within the mining area is not</p>

Issue #	Issue description	Submission #	Response
			warranted.
4.	<p>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>) (New EP Act) will commence in 2021. Particular amendments include:</p> <ul style="list-style-type: none"> • specific reference to the new duties that will be imposed under the New EP Act; and • 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. <p>Also recommends that the EMF be amended to consistently refer to the <i>Environment Protection Act 2017</i> (not the 2018 amending Act).</p>	514	<p>Editorial changes to consistently refer to the <i>Environment Protection Act 2017</i> (not the 2018 amending Act)) are accepted.</p> <p>Kalbar is still considering the specific changes to the Incorporated Document and Work Plan (note the EMF is a descriptive part of the EES, not a proposed statutory instrument) requested by the submitter.</p>
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	The suggested changes are noted but will need to be considered further after hearing the evidence.

1.02 Biodiversity

Issue #	Issue description	Submission number #	Response
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	The general extent of vegetation removal required for the Project is assessed in the EES (see evidence statement of Aaron Organ and EES Attachment E: Biodiversity Offset Management Strategy). Whilst exact numbers may be refined through further monitoring and approvals associated with offsetting, it is not expected that these will present significant departures from what has been assessed in the EES.
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	Refer Draft Work Plan Risk Assessment Table, items 76-78 (pdf pp 210-211) and the relevant mitigation measures identified there. Anionic PAM flocculants are proposed for the Project. These are regularly used across Australia and are considered safe to use in freshwater environments. See also expert witness statement of Tony McAlister at pages 16-17.
3.	Considers the highest value biodiversity areas at risk from the proposed mine are: <ul style="list-style-type: none"> the vegetation communities along the Crown land rail and roadside reserves; the remnant native vegetation in gullies on private land and adjacent to riparian areas; large trees in the paddocks; and water quality and quantity affecting aquatic biodiversity in the Mitchell River and Gippsland Lakes. 	521	Please see responses provided in Aaron Organ's expert evidence statement – Impacts to significant flora and fauna species and ecological communities (Page 43), and Environmental impacts to the Mitchell River, the Gippsland Lakes and river system health and aquatic flora and fauna (pages 37 and 38).
4.	Concern over the lack of a detailed site assessment for the property at 2705 Dargo-Bairnsdale Road, Glenaladale.	521	Please see responses provided in Aaron Organ's expert evidence statement (Pages 22 and 23).
5.	Concern over the failure to include appendices associated with the DELWP Native Vegetation	521	Please see responses provided in Aaron Organ's expert evidence

Issue #	Issue description	Submission number #	Response
	Removal Report in Appendix 6 of the Detailed Ecological Investigations report.		statement (page 23). This information will be provided to the submitter.
6.	Concern that opportunities to avoid and minimise impacts on native vegetation have not been fully explored nor substantiated.	521	Please see responses provided in Aaron Organ's expert witness statement, pages 23-25 (response under the heading "Feasible opportunities to avoid and minimise impacts on native vegetation have not been adequately assessed".)
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 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.	521	Please see responses provided in Aaron Organ's expert witness statement (pages 23-25).
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	Please see responses provided in Aaron Organ's expert witness statement (pages 26-27).
9.	<p>Considers the current impact assessment of the railway siding option to be inadequate. Requests provision of:</p> <ul style="list-style-type: none"> • 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); 	521	Please see responses provided in Aaron Organ's expert witness statement (pages 26-27). The Alternatives Chapter (CH04) (i.e. Section 4.9.1, Table 4.7 and Section 4.11, Table 4.9) in the EES also provides a comparative assessment of the impacts of different transport options.

Issue #	Issue description	Submission number #	Response
	<ul style="list-style-type: none"> • 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; • 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 • mitigation and compensation measures for any of these impacts. 		
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	This concern with lack of detailed mitigation plans / measures is noted and can be explored further, however Kalbar's starting view is that the level of detail provided to date is fit for purpose, with more detail necessarily to be developed through detail stages of the project, to the satisfaction of relevant authorities, in this case, DELWP.
11.	Concern over consistency with Municipal Strategic Statement, Environmental Significance Overlay and Vegetation Protection Overlay due to extent of impact on roadside vegetation.	521	Please see responses provided in Aaron Organ's expert witness statement (pages 28-32).

1.03 Groundwater

Issue #	Issue description	Submission number #	Response
1.	Concern about gaps in the documented conceptual groundwater model, and inconsistencies in the inferred groundwater flow direction in the water table aquifer.	716	Please see expert witness statement of Hugh Middlemis, at pages 7-12. Please also see expert witness statement of Joel Georgiou at pages 74-77. See particularly at page 74.
2.	Concerns about the aquifer test and analysis, that the water was pumped at a lower rate than extraction,	716	Please see expert witness statement of Hugh Middlemis, at pages 7-12.

Issue #	Issue description	Submission number #	Response
	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).		Please also see expert witness statement of Joel Georgiou at pages 74-77. See particularly at page 74.
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	Please see expert witness statement of Hugh Middlemis, at pages 7-12. See particularly at page 10. Please also see expert witness statement of Joel Georgiou at pages 74-77. See particularly at pages 74 and 76.
4.	Concern that the assessment does not capture all potential users of groundwater and GDEs.	358, 716	Please see expert witness statement of Hugh Middlemis, at pages 7-12. See particularly at page 10. Please also see expert witness statement of Joel Georgiou at pages 74-77. See particularly at pages 73 and 77.
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	Please see expert witness statement of Hugh Middlemis, at pages 7-12. See particularly at page 11. Please also see expert witness statement of Joel Georgiou at page 73. Please also see expert witness statement of Joel Georgiou at pages 74-77. See particularly at pages 73, 75 and 77
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	Please see, generally, expert witness statement of Hugh Middlemis, at pages 7-12. Please also see expert witness statement of Joel Georgiou at pages 74-77. See particularly at page 75.
7.	Concern that the proposed filling of voids and groundwater mounding presents the potential for layering in the Coongulmerang Formation that would	716	Please see expert witness statement of Hugh Middlemis, at pages 7-12. See particularly at pages 10-11. Please also see expert witness statement of Joel Georgiou at pages 74-

Issue #	Issue description	Submission number #	Response
	impede the downward drainage from filled voids.		77. See particularly at page 77.
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	Please see expert witness statement of Hugh Middlemis, at pages 7-12. See particularly at pages 10-11. Please also see expert witness statement of Joel Georgiou at pages 74-77. See particularly at page 77.
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	Please see expert witness statement of Hugh Middlemis at page 11. Please also see expert witness statement of Joel Georgiou at page 73. Please also see expert witness statement of Joel Georgiou at pages 74-77. See particularly at page 77.
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	Please see expert witness statement of Hugh Middlemis, at pages 7-12. See particularly at pages 10-11. Please also see expert witness statement of Joel Georgiou at pages 74-77. See particularly at page 76.
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	Please see expert witness statement of Hugh Middlemis, at pages 7-12. See particularly at pages 10-11. Please also see expert witness statement of Joel Georgiou at pages 74-77.
12.	Concern about the potential implications of groundwater mounding for borefield drawdown if tailings seepage is less than modelled.	716	Please see expert witness statement of Hugh Middlemis at page 10. Please also see expert witness statement of Joel Georgiou at pages 74-77. See particularly at page 74.
13.	Concern about reduced yield from Woodglen borefield due to groundwater pumping.	692	Please see expert witness statement of Hugh Middlemis at page 6.
14.	Concern about adverse impacts to groundwater levels and quality at the Woodglen borefield (due to potential	692	Please see expert witness statement of Hugh Middlemis at page 6.

Issue #	Issue description	Submission number #	Response
	seepage from TSF).		
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	Please see expert witness statement of Joel Georgiou at pages 73-74.

1.04 Water catchment

Issue #	Issue description	Submission number #	Response
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	Please see expert witness statement of Tony McAlister, in particular at pages 6 and 17-21.
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	<p>The water management strategy is framed around diverting mine contact water to a dissolved air flotation (DAF) treatment plant prior to any discharge from the site. This is achieved using a series of dams that redirect flows across sub-catchments within the site.</p> <p>In addition, best practice sediment management processes will be applied to minimise sediment transport during construction phases and from unsealed roads.</p> <p>See in particular the evidence statement of Tony McAlister for further information.</p>
3.	Concern that better definition is required for the performance standards, using quantitative standards	552	A series of draft risk treatment plans have been prepared for the project (Appendix B of the Draft Work Plan) including a water quality and hydrology risk treatment plan. Kalbar's current position is that the level

Issue #	Issue description	Submission number #	Response
	where practicable.		of prescription within the proposed mitigation measures and plans are fit for purpose.
4.	Concern that there is insufficient detail about monitoring, and whether results will be publicly available.	358, 552	Please see expert witness statement of Tony McAlister, in particular at pages 13-14. Kalbar's current position is that the monitoring arrangements proposed in the draft Water Quality and Hydrology Risk Treatment Plan (Appendix BC4 of the Draft Work Plan) is fit for purpose.
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	Please see expert witness statement of Joel Muller at page 62.
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	Please see expert witness statement of Tony McAlister at page 15.
7.	Concern that the DAF does not demonstrate reduction of radionuclides, nitrogen or copper levels, and its effectiveness in reducing contaminant loads in downstream receiving waters.	514, 716	DAF outputs will be diluted in the freshwater dam, and further upon discharge to the Mitchell River. Concentrations are anticipated to be well within acceptable limits.
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	See evidence of Jarrah Muller generally. Uncertainty analysis focusing on water losses has been conducted. The water management system has an inbuilt level of redundancy through storage capacities, however if the water treatment plant were offline for an extended period, this could require reductions in processing output from the mine.
9.	Concern about the use of flocculants, and how these could impact on water quality.	514, 716	Please see expert witness statement of Tony McAlister at pages 16-17. Anionic PAM flocculants are proposed for the Project. These are regularly used across Australia and are considered safe to use in

Issue #	Issue description	Submission number #	Response
			freshwater environments.
10.	Comment that the impacts on water quality should address loads, not just concentrations, of potential pollutants on Perry and Mitchell Rivers.	358, 716	Please see expert witness statement of Tony McAlister at pages 15-16.
11.	Concern about the management of water offsets, and Council's involvement in regulating this practice.	716	Refer EES Chapter 5 (Regulatory Framework) and Chapter 12 (Environmental Management Framework). Water licensing is regulated by Southern Rural Water.
12.	Clarification sought for the sediment dam design criteria.	716	Sediment dams will be constructed to current best practice guidelines. Details of the arrangements will be finalized during design following approval.
13.	Clarification sought for the Mitchell River mine water discharge design criteria and the predicted frequency of overflows.	716	See expert evidence statement of Jarrah Muller, p 10.
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	Kalbar does not propose to harvest runoff water, providing a neutral water volume influence in this regard.
15.	Concern about effects of project on surface water and groundwater, especially 'chain of ponds' features of the Perry River system.	358, 662	See evidence of Joel Georgiou, Hugh Middlemis and John Sweeney.
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	291	Please see expert witness statement of John Sweeney at page 34. See also expert witness statement of James Weidmann at page 24.

Issue #	Issue description	Submission number #	Response
	environmental and biodiversity impacts.		
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	<p>Volumes of captured water will be monitored via water level sensors in dams.</p> <p>Water quality in the fresh water dam would be tested prior to releases. Releases would be made only if the water is of a suitable quality for release.</p> <p>Releases would be made via pipelines delivering water from the freshwater dam to the discharge point. At the discharge point rock local armouring would be used to allow dispersion of water velocity energy for erosion prevention.</p>
18.	Concern that the proposed valley fill (Perry Gully) does not replicate the existing geomorphology or hydrology.	358	The proposed valley fill will allow existing erosion issues within this gully to be halted and are expected to improve water quality outcomes in the Mitchell River.

1.05 Water supply

Issue #	Issue description	Submission number #	Response
1.	<p>Concern about reduced surface water availability from Mitchell River due to surface water extraction.</p> <p>Comment about the need for strict regulation of water offsets, and Council involvement in this practice, to protect downstream receiving waters</p>	692, 716	<p>The site would not seek to take water during the summer irrigation season when water resources are scarce. The site would only take water during winter months, and only during relatively high flow periods when the extraction would not affect current users.</p> <p>The site would take up to 40 ML/day only when the river flows are greater than 1,400 ML/day. During drought conditions, the winter fill threshold flow rate would not be met and the site would take no water from the river.</p> <p>If river water were not available due to low flow conditions, the site would obtain groundwater, or reduce production rate.</p> <p>See also Mitigation measure SW01:</p>

Issue #	Issue description	Submission number #	Response
			<p>“Surface water will be extracted from the Mitchell River in line with the conditions, timings, and limits detailed in any licence issued by Southern Rural Water.”</p> <p>Water licensing is regulated by Southern Rural Water.</p>
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	Additional information will be supplied with any application for a licence.

1.06 Air quality

Issue #	Issue description	Submission number #	Response
1.	Comment that the predicted exceedances of the 24 hour criterion for PM ₁₀ will need to be mitigated in accordance with a management plan that includes triggers for their application of the mitigation measures.	716	Please see expert witness statement of Simon Welchman at page 29.
2.	Concern about the approach taken in the air quality assessment to addressing the 11 day gap in PM ₁₀ and PM _{2.5} data.	716	Please see expert witness statement of Simon Welchman at page 29.
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 ₁₀ criteria at receptors.	716	Please see expert witness statement of Simon Welchman at pages 29-30.
4.	Concern about assessing PM _{2.5} emissions against dated 24 hour and annual average standards.	716	Please see expert witness statement of Simon Welchman at page 30.
5.	Concern that the assessment relies on criteria from	716	Please see expert witness statement of Simon Welchman at page 30.

Issue #	Issue description	Submission number #	Response
	other jurisdictions rather than SEPP (AAQ) criteria.		
6.	Comment that there is no regulatory standard for dust deposition on vegetables.	716	Please see expert witness statement of Simon Welchman at page 30.
7.	Concern about airborne contaminants reaching raw water storage at Woodglen.	692	Please see expert witness statement of Simon Welchman at page 30.

1.07 Climate change and Greenhouse Gas Emissions

Issue #	Issue description	Submission number #	Response
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	Noted. Also, please see statement of Simon Welchman at page 31.
2.	Concern that the emissions factors used in the greenhouse gas emission calculations were not documented.	716	Please see statement of Simon Welchman at page 31. Emissions factors are provided in Table 34 of Technical Study report A009 (Stage Two Air Quality and Greenhouse Gas Assessment).

1.08 Noise

Issue #	Issue description	Submission number #	Response
1.	Concern is expressed that predicted construction noise at sensitive properties will give rise to non-conformance with the relevant criterion.	514, 716	Please see expert witness statement of Christophe Delaire at pages 42-51, and in particular at page 49.
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	Please see expert witness statement of Christophe Delaire at pages 42-51, and in particular at page 49.
3.	Concern about potential impacts of heavy vehicle traffic to the Giant Burrowing Frog identified within or adjacent to project area.	716	<p>The submission notes (SLR Report, pdf p 72) that Giant Burrowing Frog is unlikely to be present however suggests "additional mitigation measures should populations of Giant Burrowing Frog be identified within or adjacent the project area should be developed and included in the EES and incorporated into subsequent Management Plan documentation". Kalbar will need to consider this suggestion further through the course of the hearing.</p> <p>With regard to the likelihood of the Giant Burrowing Frog occupying the habitat within the project area and impacts to this species associated with the project, please see expert witness statement of Aaron Organ at pages 44-45.</p>
4.	Query as to whether NATA calibrated noise loggers were used.	716	NATA calibrated noise loggers were used. See expert witness statement of Christophe Delaire at p 42.
5.	Concerns that the background level presented in the EES, and its relevance or otherwise to determining the NIRV criterion, are incorrect.	716	The background level is not relevant in setting the NIRV noise limits for a mining project. Please see expert witness statement of Christophe Delaire at at page 43.
6.	Comment that duration adjustments should be documented, and the use of a 10dB transfer is required.	716	These are documented. Please see expert witness statement of Christophe Delaire at page 45.

1.09 Radiation/Heavy Metals

Issue #	Issue description	Submission number #	Response
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	Please see expert witness statement of Darren Billingsley. See, particularly, at pages 31-32. Recommendations for additional baseline monitoring is stipulated in Section 8 of Darren Billingsley's Witness Statement.
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	Please see expert witness statement of Darren Billingsley. See, particularly, at page 32.
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	Accepted that clarification required, although not considered to be of consequence.
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	They are not, as defined under the <i>Radiation Act 2005</i> . Please see expert witness statement of Darren Billingsley at pages 29-31 and page 44.

1.10 Traffic and transport

Issue #	Issue description	Submission #	Response
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 required pending the development of the Fernbank rail siding.	632, 716	Kalbar's preferred option is to use the Post-Avon River Bridge Option 1 – Fernbank East rail siding only for product transport. The intent is to use this as the sole product transport route, and other alternative options will not be pursued if the Fernbank East siding option were to proceed. During October and November 2020 Kalbar held a competitive tender process to select a preferred Logistics Operator. As part of this process both Kalbar and the tenderers are working with V/line and subsequently

Issue #	Issue description	Submission #	Response
			<p>with Metro Trains and the Department of Transport with regard to the mainline connection, rail timetables and rollingstock configurations.</p> <p>The rail siding at Fernbank East will be classified as “a private siding” and will therefore be under the effective management and control of Kalbar’s nominated Rail Infrastructure Manager. This role will be performed by the preferred logistics operator – both of which are accredited to perform this function. To minimize risk to the mainline connection and siding is being designed to conform with V/Line’s technical standards.</p> <p>Given the advanced work done to date, Kalbar’s view is that there is no reason to expect that the rail siding could not be designed, approved, and constructed in time for the export of product to proceed when required to suit the mines development timeframe.</p>
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	Noted.
3.	Comment that there is no intersection performance analysis for the two post-Avon Bridge route options.	716	Please see expert witness statement of Paul Carter. See in particular at pages 72-73.
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	<p>Please see expert witness statement of Paul Carter. See particular at pages 77-78.</p> <p>As part of the Traffic and Transport Impact Assessment (Appendix A012 of the EES), investigations were undertaken to determine the need for upgraded turning treatments (e.g. channelized or auxiliary turning treatments) under Austroads guidelines. For all route options, a channelized right turn lane treatment is recommended for the new Fernbank-Glenaladale Road (north) / Bairnsdale-Dargo Road intersection.</p> <p>A number of intersections are recommended to be upgraded to roundabout control as part of the transport route options - these intersection types do not require consideration of the Austroads turn</p>

Issue #	Issue description	Submission #	Response
			<p>lane warrants.</p> <p>Existing turn treatments at the intersections of Fernbank-Glenaladale Road / Princes Highway, Bairnsdale-Dargo Road / Princes Highway and Lindenow-Glenaladale Road / Bairnsdale-Dargo Road remain appropriate for the anticipated traffic volumes at these intersections and no further improvements are required under Austroads Guidelines.</p> <p>Refer Section 4.3.1 of Paul Carter's Expert Witness Statement for further information on turn warrants at the Lindenow-Glenaladale Road / Bairnsdale-Dargo Road intersection which confirms the existing basic turn treatments are appropriate.</p> <p>See Section 4.4.16 (Part 7) of Paul Carter's Expert Witness Statement for further detail on the above.</p>
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	<p>Please see expert witness statement of Paul Carter. See particular at page 74.</p> <p>These movements associated with diesel and waste were not included in the Traffic and Transport Impact Assessment (Appendix A012 of the EES) as the information was unavailable at the time. Updated information indicates movements associated with transport of waste, diesel and flocculants would be low with two return trips per day on average. It is recommended that heavy vehicle movements be required to utilise declared roads and approved product transport routes for access to site.</p> <p>The additional traffic movements would not create any notable traffic efficiency impacts given the proposed upgrades and capacity of the surrounding road network, and similarly are not considered to have a significant impact from a safety or road asset perspective.</p> <p>Refer Section 4.3.4 of Paul Carter's Expert Witness Statement for further detail.</p>
6.	Concern that there is insufficient geometric details to independently verify that the realignment of council roads will conform with relevant design	716	<p>Please see expert witness statement of Paul Carter. See particular at page 78.</p> <p>The road designs are being developed by Kalbar and it is noted that</p>

Issue #	Issue description	Submission #	Response
	requirements.		<p>updated road diversion plans were provided to the Inquiry and Advisory Committee on the 18 January 2021 (IAC Documents 45-48). A preliminary review of these plans is provided in Section 4.3.5 of Paul Carter's Expert Witness Statement and highlights the required design refinements as the proposed road realignments are developed.</p> <p>Final designs of any proposed road or intersection changes would be further developed and assessed should the project proceed. Subsequent planning and approvals would include agreement from the relevant responsible road authorities (VicRoads and Council) which would include further design development and engineering assessment, design compliance reviews, road safety audits and extensive stakeholder consultation.</p>
7.	Concern about whether there is sufficient spacing between Fernbank-Glenaladale Road - private haulage road intersection and the proposed Bairnsdale-Dargo Road.	716	Please see expert witness statement of Paul Carter at page 41 (bottom) and pages 78-79. See also suggested additional mitigation at Table 14.
8.	Concern about the appropriateness of introducing roundabouts onto the Princes Highway from a road hierarchy perspective.	716	<p>Please see expert witness statement of Paul Carter. See particular at page 80.</p> <p>Refer sections 7.3.1 and 9.3.1 of the Traffic and Transport Assessment (Appendix A012 of the EES) for further detail regarding the proposed roundabouts along Princes Highway.</p>
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	<p>Please see expert witness statement of Paul Carter. See particular at pages 71-72.</p> <p>This option was identified following consultation with Council and the TRG.</p> <p>A summary of the assessment of alternatives that was discussed with Council is provided in Section 6.4.2 of the Traffic and Transport Assessment (Appendix A012 of the EES).</p> <p>The Racecourse Road option was preferred as it avoids interaction with the schools precinct, level crossing on Bosworth Road and pedestrian</p>

Issue #	Issue description	Submission #	Response
			<p>activity in west Bairnsdale.</p> <p>Ultimately, however, Racecourse Road is not a B-double approved route and would require approval of EGSC as outlined in the Traffic and Transport Assessment (Appendix A012 of the EES) should this be the confirmed position and this alternative product transport option be pursued.</p>
10.	Concern that there is no detailed intersection performance analysis for the two Post-Avon River Bridge routing options.	716	<p>Please see expert witness statement of Paul Carter. See particular at pages 72-74.</p> <p>Intersection performance for intersections part of the two post-Avon Bridge route options that are common to the Pre-Avon Bridge option are provided in Section 7.2 of the Traffic and Transport Impact Assessment (Appendix A012 of the EES). This includes intersections such as the Princes Highway and Lindenow-Glenaladale Road.</p>
11.	Concern about the lack of information about the mechanism to manage impacts on road pavement quality.	716	<p>Please see expert witness statement of Paul Carter. See generally at pages 44-80. See in particular at page 79.</p> <p>A monitoring and asset protection plan is recommended by the Traffic and Transport Impact Assessment (Appendix A012 to the EES) to be developed and agreed between the project and the relevant road authorities to manage pavement impacts due to product transport for the project.</p> <p>Refer Section 4.1.2.5 of Paul Carter's Expert Witness Statement for further details regarding the recommended asset protection plan, and Section 4.4.16 (Part 10) for specific response to submission 716 concerns regarding management of pavement impacts.</p>
12.	<p>Concern that the use of the road network could impact amenity of residents, particularly as a result of the use of declared roads. Requests that rail option (preferably daytime movements) be used for the life of the Project.</p> <p>Rail transport via Fernbank is Kalbar's preferred</p>	113, 716	Rail transport via Fernbank is Kalbar's preferred option.

Issue #	Issue description	Submission #	Response
	option.		

1.11 Cultural heritage

Issue #	Issue description	Submission #	Response
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	<p>LDAD 2: Fingerboards LDAD 2 is not currently registered with the Victorian Aboriginal Heritage Register (VAHR), as additional phases of complex assessment through the development of the Fingerboards Project Cultural Heritage Management Plan (CHMP 14969) are ongoing.</p> <p>CHMP 16068: this was completed on 16 May 2019, after the VAHR searches were undertaken to prepare Appendix A017 (see Part 3.1.2.3). Its findings and implications are being incorporated and managed through the preparation of CHMP 14969.</p> <p>VAHR 8322-0244: this was registered as part of the preparation of CHMP 16068, following the VAHR searches undertaken to prepare Appendix A017. Its findings are being incorporated into CHMP 1496,9. Kalbar notes that the approved CHMP 16068 permits harm to VAHR 8322-0244</p>
2.	Concern that Chapter 8 of the EES over-relies on desktop data and mis-describes the methodology for sub-surface testing.	716	<p>The EES relied on desktop and standard assessment with only a baseline investigation intended to characterize and confirm the nature of subsurface archaeological deposits. The studies were intended to address the scoping requirements, not meet the needs for CHMP 14969.</p> <p>A complex assessment was undertaken in November and December 2020 following consultation with GLAWAC and Aboriginal Victoria. Further consultation with GLAWAC and Aboriginal Victoria will determine the requirements for any additional investigations required in order to seek approval of CHMP 14969.</p>
3.	Concern that the survey could not access some properties, and about discrepancies in the reporting	716	Kalbar and its advisers cannot survey land if the landowners refuse

Issue #	Issue description	Submission #	Response																				
	of the number of stone artefacts.		<p>access.</p> <p>If landowners continue to refuse access to survey land, this will be managed through the 'obstacles' section of the CHMP, and Aboriginal Victoria may also support and adopt some post-approval management conditions that apply to these areas if access is not granted during the preparation of the CHMP 14969.</p> <p>The artefact numbers are correctly reflected Appendix A017, as follows:</p> <table border="1" data-bbox="1279 497 2107 689"> <thead> <tr> <th>Place name</th> <th>Surface</th> <th>Subsurface</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td>Fingerboards LDAD 1 (8322-0226)</td> <td>8</td> <td></td> <td>8</td> </tr> <tr> <td>Fingerboards LDAD 2 (8322-****a)</td> <td>60</td> <td>63</td> <td>123</td> </tr> <tr> <td>Fingerboards Artefact Scatter Components (8322-****b)</td> <td></td> <td>218</td> <td>218</td> </tr> <tr> <td>Total</td> <td>68</td> <td>281</td> <td>349</td> </tr> </tbody> </table>	Place name	Surface	Subsurface	Total	Fingerboards LDAD 1 (8322-0226)	8		8	Fingerboards LDAD 2 (8322-****a)	60	63	123	Fingerboards Artefact Scatter Components (8322-****b)		218	218	Total	68	281	349
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Total	68	281	349																				
4.	Concern about the timing of cultural heritage assessments did not take account of the RAP being in administration.	662	<p>The timing of Kalbar's Notification of Intent (NOI) to prepare a CHMP was not influenced by GLAWAC being in administration. Kalbar has throughout the EES, and during the preparation of CHMP 14969, consulted with GLAWAC with regard to:</p> <ul style="list-style-type: none"> • Inception meetings • the requirements and methodology of the cultural heritage assessments to be undertaken • the findings of the cultural heritage assessments • the registration of cultural heritage places • the conditions and contingencies of CHMP 14969 <p>GLAWAC representatives have also been present and participated in both the standard and complex assessments undertaken during the preparation of CHMP 14969.</p>																				
5.	Concern that the assessment of impacts on cultural heritage does not take into account the nature of the	662, 716	Kalbar will seek to more fully explore the nature of sites (inclusive of statistical analysis) within the geographic region during the preparation																				

Issue #	Issue description	Submission #	Response
	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.		<p>of CHMP 14969. This will be finalized when the CHMP activity area is finalised following the EES process.</p> <p>This information will then inform the cumulative impact analysis required for the CHMP 14969. This assessment can not be completed until GLAWAC and Aboriginal Victoria have agreed that a sufficient level of assessment (standard and complex) has been undertaken for the preparation of CHMP 14969.</p>
6.	Concern that there has been no consultation with the local heritage society.	716	There was contact during the preparation of the EES with people that had historical associations with the area – see response to item 8 below.
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	Appendix A017 addresses historical cultural heritage. No registered places or objects of historical significance were identified within the activity (see Sections 5.3.2 and 5.5.2 of Appendix A017), and no historical cultural heritage materials or archaeological structures of historical significance were identified during the site survey reported in Section 5.8 of Appendix A017.
8.	Concern that the cultural heritage assessment did not capture oral history and intangible values, and did not consider the cultural landscape.	662	<p>Kalbar and its advisers approached GLAWAC several times for information regarding oral history and intangible values, such as the cultural landscape, during the preparation of the EES.</p> <p>Kalbar has engaged a historian at the recommendation of GLAWAC who will assist in documenting the traditional owners' oral history, intangible values and cultural landscape via a cultural values assessment. These findings will be incorporated into the preparation of CHMP 14969 and will involve -</p> <ul style="list-style-type: none"> • gathering indigenous oral histories of the region • studying early historical accounts of colonial contact between the Gunaikurnai and the first European settlers • studying the most up-to-date scholarship on cross-cultural contact in the region

Issue #	Issue description	Submission #	Response
			<ul style="list-style-type: none"> interviewing current landowners, including farmers and other relevant persons, about the history of their properties and region
9.	Concern the EES does not acknowledge the cultural values of flora and fauna.	662	<p>It is acknowledged the EES does not address this issue.</p> <p>This will be explored with the Gunaikurnai during the cultural values assessment (point 8), and the findings will be incorporated into CHMP 14969.</p>
10.	Concern that Kalbar engaged with an Aboriginal organization outside the Gunaikurnai settlement area (in connection with rehabilitation planning and contracting).	662	<p>Kalbar consulted with Moogji Aboriginal Council East Gippsland Inc., as well as GLAWAC and the Gippsland and East Gippsland Aboriginal Cooperative (GEGAC), about their interest in establishing a nursery in collaboration with Kalbar to grow native grass seed and plants for rehabilitation purposes. These were commercial discussions, and were unrelated to cultural heritage matters.</p> <p>As a matter of clarification, Kalbar has only consulted with GLAWAC and Aboriginal Victoria about cultural heritage matters concerning the Fingerboards Project.</p>

1.12 Socioeconomic

Issue #	Issue description	Submission number #	Response
1.	Concern about perception of how Kalbar conducts its community engagement.	716	Relevant references within the EES are: Chapter 6 (Stakeholder Consultation), Appendix A018 (Social Impact Assessment) and the draft Community Engagement Plan at Appendix C of the Work Plan.
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	The proposed mitigation measures are outlined in Appendix A018 (Socioeconomic Impact Assessment) and are proposed to be incorporated in a Social Management Plan (SMP) compliance with which will be required via statutory approvals for the Project. Provided the proposed mitigation measures are identified at this stage in the process, Kalbar's current position is that the content of the SMP can be developed at a later stage and approved to the satisfaction of relevant authorities.

Issue #	Issue description	Submission number #	Response
3.	Concern that there is no assessment of cumulative effects for social or economic impacts.	716	Kalbar considers that the Socioeconomic Impact Assessment (Appendix A018) was fit for purpose having regard to the scale of the Project and its potential risks and impacts on socioeconomic matters
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	Refer section 6.3.2 and Table 6.11 of the Socioeconomic Impact Assessment (Appendix A018), which contains an assessment of tourism impacts. As described in Section 1.5 of the Socioeconomic Impact Assessment, the study area includes East Gippsland and Wellington shires and Latrobe City, covering an area much greater than a 10km radius.
5.	The Project will bring significant economic and social benefits (local procurement and job creation).	113	Noted.

1.13 Rehabilitation

Issue #	Issue description	Submission #	Response
1.	Proposed land rehabilitation practices are conceptual and have not been trialled on a landscape with characteristics similar to the Fingerboards site.	552	Please see expert witness statement of Dr Rob Loch. See particularly at pages 16-17. The proposed land rehabilitation practices have been applied widely across Australia in pastoral, construction, and mining activities, and have been successful across a wide range of environments over many years. For example, there has been successful establishment of grass pasture on parts of the Hazelwood Mine.
2.	Concern about the length of time and responsibility for post-closure monitoring.	552	Please see expert witness statement of Dr Rob Loch. For example, see page 16. Rehabilitation monitoring will continue until closure/completion criteria are met.
3.	Concern that the rehabilitation performance criteria and associated monitoring/measurement does not	716	Please see expert witness statement of Dr Rob Loch. page 18.

Issue #	Issue description	Submission #	Response
	include a carrying capacity measurement for grazing land.		
4.	<p>Comments about the proposed performance criteria and associated monitoring/management for rehabilitation:</p> <ul style="list-style-type: none"> • They should apply to post-mining land use compliance during the progressive rehabilitation of the mine, not just at the end of mine life; • There needs to be a pre-mining baseline of land capability before mining is commenced, not reliance on reference sites; • Radiation surveys and monitoring should be undertaken on rehabilitated areas during progressive rehabilitation, and not just at the completion of rehabilitation; and • 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. 	716	These suggestions will need to be considered further through the IAC hearing and after hearing the evidence.
5.	Concern that there has been insufficient assessment of risks associated with unplanned closure (temporary or permanent).	716	Rehabilitation risk management is a key component of the work plan and statutory provisions in the MRSD Act including a rehabilitation bond.
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	Please see expert witness statement of Dr Rob Loch at page 23.
7.	Comment that the work plan needs to describe availability and volumes of key materials required for	716	Volumes of key excavated materials are described in Table 3 of the Rehabilitation Report (Appendix A020), p 32. The likely sequence of

Issue #	Issue description	Submission #	Response
	rehabilitation for each domain.		<p>profile reconstruction using those materials are also described at p 35. For rehabilitation planning, the project landscape has been divided into six rehabilitation zones (aka rehabilitation domains – pp, 47/48). For each domain, profile reconstruction parameters will be based on knowledge of key excavated materials and domain identity (taking into account landform, intended final land use, and perceived interactions between land use, vegetation, and landform). Treatment of key materials for topsoil and subsoil (including organic and non-organic amendments) will focus on improving plant growth and soil stability for each rehabilitated domain (e.g., increased water holding capacity, increased nutrient holding capacity, improved structural characteristics).</p>
8.	<p>Comment that a map of Australian soil classification soil types within the Project area, or recommended stripping depths of soil types, should be developed.</p>	716	<p>Please see expert witness statement of Dr Rob Loch. See generally at pages 14-59. See particularly at pages 17-18.</p> <p>In this case, clear identification and delineation of locations of the two soil forms was not considered to be of value for soil management for rehabilitation, as:</p> <ul style="list-style-type: none"> • In both soil forms, the subsoil was of low chemical and/or physical fertility, and was not planned to be recovered for placement in rehabilitation operations; and • The surface soil (A horizon) was broadly consistent in texture and chemical fertility across both soil forms, and would be stripped to <u>either 300 mm or to the depth of either gravel or heavy clay B horizon, which ever was encountered first.</u> <p>Limiting stripping of surface soil to a depth of 300 mm was recommended, as deeper soil (irrespective of texture) is low in nutrients and organic matter, and of no greater value for rehabilitation purposes than the subsoil material options currently being researched.</p>
9.	<p>The Rehabilitation Plan needs to provide details that clearly identify: the areas to be revegetated and the management standards to be achieved; and</p>	521	<p>Please see, generally, expert witness statement of Dr Rob Loch.</p> <p>Landloch’s report shows rehabilitation domains/zones (Figures 17-22), summary of areas, descriptions, and priorities for each zone (Table 5), and rehabilitation objectives, indicators and completion criteria for each</p>

Issue #	Issue description	Submission #	Response
	the on-title security mechanism(s) to be used to ensure any revegetated areas have long-term protection and native vegetation cover is established.		zone (Table 8). Rehabilitation requirements are secured under the MRSD Act.

1.14 Planning/Planning Scheme Amendment (PSA)

Issue #	Issue description	Submission #	Response
1.	Concern that the EES does not adequately address how land acquisition will occur if Kalbar does not own the land.	632	Land acquisition is proposed to be undertaken by negotiation with owners. Compulsory acquisition is not proposed.
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	Consideration of land use compatibility issues are an integral component of the EES, e.g., through dust, noise, landscape and visual studies. Kalbar considers sufficient information is presented in the EES to consider land use compatibility issues.
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	Please see expert witness statement of John Glossop, particularly at pages 21-22. No unacceptable impacts/constraints on surrounding Farming Zone land are expected. The assessment of impacts on surrounding land is a key component of the EES. The Specific Controls Overlay covers all mining infrastructure outside the mining licence area.
4.	Council does not support commercial/accommodation uses in the surrounding area.	716	Additional commercial/accommodation uses in the surrounding area are not anticipated to be required. (see Section 6.4 of Land Use and Planning Impact Assessment, Appendix A013).
5.	Comment that various changes should be made to the PSA:	514, 632, 716	These changes will be considered further and responded to via the Proponent's substantive submissions.

Issue #	Issue description	Submission #	Response
	<ul style="list-style-type: none"> • A mapping sheet for the pump station north of the site must be included; • 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; • The PSA should include an updated list of amendments; • Various changes to the Incorporated Document; • 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 • 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. 		
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	Please see expert witness statement of Aaron Organ, particularly at pages 28-32.

2.0 Other submissions

2.01 General

Issue #	Issue description	Submission number #	Response
1.	Light pollution due to nighttime operations.	12, 266, 268, 305, 481, 488, 652, 659, 672, 813, 837, 875, 887	Section 6.4.3 of the Landscape and Visual Impact Assessment (Appendix A014) describes the type of lighting impacts likely to be experienced. Overall, these are assessed as low.
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	Noted.
3.	Supports the Project	10, 108, 125, 140, 151, 231, 379, 387, 666, 685	Noted.

Issue #	Issue description	Submission number #	Response
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,	The communities' concerns are noted. Kalbar is seeking to mitigate the impacts of the proposal, as will be explored further through the IAC process.

Issue #	Issue description	Submission number #	Response
		690, 699, 693, 695, 696, 697, 698, 701, 702, 703, 706, 710, 712, 713, 714, 715, 717, 719, 721, 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	<p>Mineral sand mining does not involve blasting as there is no hard rock involved.</p> <p>The sites of the proposed dams (freshwater storage, process water, contingency water, water management) are within the Coongulmerang or Haunted Hills Formations which are rich in clay and sand but not basement rock.</p>
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	Section 6.6.1 of the Socioeconomic Impact Assessment (Appendix A018) discusses property values and Kalbar defers to this discussion.
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	Compensation arrangements will be in accordance with Victorian law.
8.	Concern that Kalbar is receiving government grants for infrastructure, water dams, etc.	77, 673, 715	The Fingerboards Mineral Sands Project is not receiving government grants.
9.	The EES under-represents the number of receptors in the vicinity of the project, as well as a concern that	81, 267, 268, 288, 303, 484, 506, 520, 546, 564, 682, 713,	Section 6.3 of the Human Health Risk Assessment (Appendix A019) discusses how and why potential receptors were identified.

Issue #	Issue description	Submission number #	Response
	a 5km assessment radius is insufficient.	765, 812, 813, 814, 837, 844	<p>It is acknowledged that some receptors have not been identified on the maps produced.</p> <p>Although this is not expected to have an impact on assessments (e.g., because the nearest sensitive receptors have been identified – although this is a matter that will be explored through the evidence) an updated map is being prepared and will be provided to the IAC and submitters in due course.</p>
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	The project is being assessed in accordance with relevant statutory frameworks.
11.	Comment that everyone uses products that come from mineral sands.	151, 232	Noted.
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	Noise and dust management measures form part of the Draft Work Plan. Legally enforceable targets will apply under this document.
13.	Concern the Project is only a "stage" of a larger project and that Kalbar intends to extend the Project area and will not have to go through a further approvals process for the extension area.	199, 203	The Fingerboards project is a stand-alone project as presented in the EES.
14.	Concern about the stability of the mine walls and residences close to the Project area.	225, 831, 837	<p>Geotechnical risks are required to assessed and planned for in a work plan.</p> <p>Section 4.6 of the draft Work Plan, EES Attachment B, presents the findings of relevant geotechnical studies.</p> <p>In this instance, the Draft Work Plan for the Project defines Geotechnical Risk Zones (GRZ) around each mining panel. Risks were assessed for assets within each GRZ. This was achieved by completing slope stability analyses of selected locations that represent a range of</p>

Issue #	Issue description	Submission number #	Response
			conditions, with a focus on the deepest parts of the mining operation.
15.	Concern about proximity of the Project to the Mitchell River National Park.	244, 535, 546	<p>The Mitchell River National Park has been considered in the following reports within the EES:</p> <ul style="list-style-type: none"> • Detailed Ecological Investigations (Appendix A005) • Landscape & Visual Impact Assessment (Appendix A014) • Socioeconomic Impact Assessment (Appendix A018)
16.	Concern that project power demand will place unacceptable burden on existing power supply.	583	The Project will be supplied with power from the Ausnet 66kV high voltage sub-transmission network. The Project is not anticipated to present an unacceptable burden on existing power supply.
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	Site emergency response plans that are required for the Project will detail response measures for both internal and external site fire risks and all personnel will be trained to respond as required. Regular desktop and practical drills will be conducted with input from local emergency services where possible.
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	<p>All chemicals used on Kalbar sites will be listed on a register and will include all relevant Safety Data Sheets (SDS). Safety audits will be undertaken to ensure all precautions are followed regarding transport, storage and use, and that all personnel using the chemicals are appropriately trained and competent in line with the requirements of the SDS.</p> <p>Incidents (accidents) that occur will be responded to with the aims to preserve life and to minimize environmental impact. All incidents will be reported and investigated in line with site procedures. At the completion of the investigation process, corrective actions will be implemented to prevent reoccurrence.</p> <p>Site inductions and other scheduled training will ensure that personnel are trained to respond to emergencies as detailed in site emergency plans. This will include fire extinguisher, first aid (including CPR & defibrillator use) where deemed required by specific job roles and risk</p>

Issue #	Issue description	Submission number #	Response
			assessments.
19.	Community testing of soil and groundwater condition by NATA-accredited laboratory is inconsistent with descriptions in the EES.	813	Kalbar expects that the submitter will address this further at the hearing and through evidence.
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	Kalbar has endeavoured to adopt mitigation measures to reduce impacts as far as reasonably practicable, to prevent harm to human health and to the environment. Kalbar's view is that the project is viable with mitigation.
21.	<p>Concerns that the work plan is insufficient or unacceptable, including that the work plan:</p> <ul style="list-style-type: none"> • does not provide an economic business case or financial capability information; • is based on the EES findings and shaped by the EES scoping requirements; • could be varied without opportunity for public comment; and • does not take into account the 2019 revised ANCOLD guidelines. 	813	Kalbar expects that these issues will be raised further through the IAC process.
22.	<p>Concern about landscape and visual impacts of the Project and the adequacy of the landscape and visual assessment in the EES. Particular claims include:</p> <ul style="list-style-type: none"> • that many of the references in the assessment are out of date and are not Australian based • 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 	813	<p>Landscape and visual impacts are assessed in EES Appendix A014, using industry accepted methodologies.</p> <p>The process for selecting viewpoints is presented in Section 6.2 of Appendix A014, and was informed by the ZVI modelling presented in Figure 20.</p> <p>The viewpoints selected and analysed in the EES and Appendix A014 are augmented by the further photosimulations and supporting information undertaken in response to IAC Questions (see response to Section 10 of the IAC's request for information, 11 December 2020, IAC Document 16). These will be provided in a separate Technical Note.</p>

Issue #	Issue description	Submission number #	Response
	<p>respond to (i.e. including truck movements, loss of trees and vegetation, change in landform).</p> <ul style="list-style-type: none"> 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. 		
23.	Concern with the option to ship the ore from Port Anthony in Corner Inlet.	429, 546	Kalbar's preferred option is to transport Heavy Mineral Concentrate to the Port of Melbourne via a private siding to be constructed at Fernbank.

2.02 Biodiversity

Issue #	Issue description	Submission number #	Response
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"> Gaping Leek-orchid; and Grassy Woodlands and Associated Native Grassland. <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</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,</p>	<p>See response in the expert evidence statement of Aaron Organ (see in particular, pp 37-43).</p>

Issue #	Issue description	Submission number #	Response
	<p>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>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"> • the survey was deliberately framed to minimise likelihood of finding high biodiversity values in project area ; • only desktop studies were completed to map certain areas; • the consultant failed to appropriately consider the effects of the 2014 bushfires; • drought and seasonality of species were not appropriately considered; • <i>appendices associated with the DELWP Native Vegetation Removal Report was not included in Appendix 6 of the Detailed Ecological Investigations report;</i> 	<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, 557, 575, 648, 680, 686, 712, 734, 763, 774, 812, 813, 814, 830, 870</p>	<p>See expert witness statement of Aaron Organ (see pp 37 to 43, and 46-47).</p>

Issue #	Issue description	Submission number #	Response
	<ul style="list-style-type: none"> concerns that the EES has underreported the number of species likely to be affected; 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; “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 the survey focused only on ‘significant’ species, not more common species. 		
3.	<p>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.</p>	<p>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</p>	<p>See expert statement of Aaron Organ, relevantly:</p> <ul style="list-style-type: none"> - Aquatic values along Mitchell River and Gippsland Lakes (see pages 34-38) - Australian Grayling (see pages 37-38) - Gippsland Lakes Burrunan Dolphins (see page 45) - Other species (see page 48)
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"> Giant Burrowing Frog Powerful Owl; Sooty Owl; common wombat; 	<p>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,</p>	<p>See expert statement of Aaron Organ, relevantly:</p> <ul style="list-style-type: none"> - Fragmentation (see pages 40-41) - Giant Burrowing Frog (see pages 44-45) - Owl species (see page 39) - Grey-headed Flying-fox (see pages 43 and 44) - Other Significant species (see page 43)

Issue #	Issue description	Submission number #	Response
	<ul style="list-style-type: none"> • echidna; • sugar glider and feather tail glider; • Wedged tail eagles; • swift parrots • painted honeyeater; • Dwarf Galaxis; • goanna; • deer; and • Grey Headed Flying Fox. 	869, 875, 881, 893, 895, 909	
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	<p>See expert statement of Aaron Organ (see Section 8 – Biodiversity Offsets and pp 18-20).</p> <p>Offsets will be in accordance with the relevant legislation [i.e. the Commonwealth EPBC Act and State Government Policy (i.e. Guidelines for the removal, destruction or lopping of native vegetation' (DELWP 2017)]</p>
6.	<p>Concern regarding the impact of the infrastructure on biodiversity. Including:</p> <ul style="list-style-type: none"> • Fernbank East railway siding <ul style="list-style-type: none"> ○ due to the highly significant biodiversity values present within the railway reserve, the road reserve and at Saplings Morass Flora and Fauna Reserve 	268, 521, 813	See expert statement of Aaron Organ (pp 26 and 28).

Issue #	Issue description	Submission number #	Response
	<ul style="list-style-type: none"> ○ 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 • 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). 		
7.	Potential for dust to 'smother' vegetation and prevent photosynthesis.	77, 673	Please see expert witness statement of Dr Doris Blaesing, for example at pages 3 and 19.
8.	Comment that impacts on biodiversity far outweigh economic benefits that accrue to a few people.	456, 813	Kalbar's position is that biodiversity impacts can be appropriately offset.
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</p>	408	See expert statement of Aaron Organ (p 37).

Issue #	Issue description	Submission number #	Response
	migratory species.		
10.	Comment that Red Gum Grassy Woodlands and associated wetland communities exist in the area 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.	638	Impacts on GDE's are considered extensively in the EES and the expert evidence. This issue will be explored further throughout the hearing.

2.03 Groundwater

Issue #	Issue description	Submission number #	Response
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	Drawdown is modelled in EES Appendix A006-AppB (Groundwater modelling report). This shows that there may be some local water table drawdown in the vicinity of the borefield, however substantial drawdown is not expected. Please see expert witness statement of Hugh Middlemis, particularly at page 8. Refer expert witness statement of Joel Georgiou, particularly page 38.
2.	The extraction of groundwater will affect groundwater dependent ecosystems.	672, 777, 813	Please see expert witness statement of Hugh Middlemis, at pages 7-12. See particularly at page 11. Please also see, generally, expert witness statement of Joel Georgiou at pages 74-77. See also at page 49 (page 52 of the PDF).
3.	Effects of groundwater mounding.	77, 268, 672, 673	Please see expert witness statement of Hugh Middlemis, at pages 7-12. See particularly at pages 10-11. Please also see, generally, expert witness statement of Joel Georgiou.

Issue #	Issue description	Submission number #	Response
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	Please see, generally, expert witness statement of Hugh Middlemis, at pages 13-16. Please also see, generally, expert witness statement of Joel Georgiou, section 5.3.2 (Perched aquifers), pp 17-18.
5.	Concern about groundwater modelling, including oversimplification of the Coongulmerang Formation.	97, 271, 423, 568, 763, 813	Please see expert witness statement of Hugh Middlemis, particularly at pages 13-16. Please also see expert witness statement of Joel Georgiou, particularly at p 38.
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	This appears to be a key issue raised in evidence and will be explored further through the hearing.

2.04 Water catchment

Issue #	Issue description	Submission number #	Response
1.	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. Specific issues raised include: <ul style="list-style-type: none"> gullies and sandy soils present risk of toxic contaminants entering groundwater and spreading to river systems; 	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,	Kalbar relies on the expert evidence in response to these matters (see the evidence of Dr Michael Cheetham, Tony McAlister, James Weidman and John Sweeney).

Issue #	Issue description	Submission number #	Response
	<ul style="list-style-type: none"> • effect of sediments being discharged into the Mitchell River; • concern that contamination from the mine will negatively affect fishing and migratory birds; • concern about proximity of project to the Mitchell River; • haul road and container loading facility were not considered a source of pollution in the EES; • 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 • erosion and runoff will result in loss of soil nutrients. 	<p>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,</p>	

Issue #	Issue description	Submission number #	Response
		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, 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	The water management strategy aims to divert mine contact water to the DAF for treatment prior to discharge. Unplanned spill events (e.g. high rainfall when dams are already full) are modelled to have very low probabilities of occurrence. Refer expert evidence statement of Jarrah Muller, p 10.
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"> • Concern that assessment of project impacts on water quality relies too much on computer simulation and not enough on 'actual measurement'. • Overflow from dams presents a flood risk. Concern that local rainfall conditions are not well represented by rainfall data used in EES 	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	This wide grouping of issues is noted and will be responded to through the hearing.

Issue #	Issue description	Submission number #	Response
	<ul style="list-style-type: none"> 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 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. 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). 		
4.	<p>Concern with the catchment dams, including:</p> <ul style="list-style-type: none"> 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 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. 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. 	77, 97, 201, 239, 243, 267, 268, 457, 484, 487, 488, 540, 568, 672, 673, 691, 813, 814, 815, 829, 831, 832, 837, 861	<p>Water take will be licensed, with licenses managed by Southern Rural Water.</p> <p>Fresh water will be stored in an engineered fresh water dam constructed to ANCOLD standards.</p> <p>Rehabilitation of Perry Gully will halt current uncontrolled erosion.</p> <p>Details of dam construction will be developed during the project design phase. Earth fill dams are routinely designed and competent engineers will produce a design suitable for the site.</p>

Issue #	Issue description	Submission number #	Response
	<ul style="list-style-type: none"> Concern about the proposal to fill Perry gully and the impact on the surface water flow across the terrain and other gullies. Mine contact water dams in Mitchell catchment have been under-designed. What dam break analysis has been done? Need more detail of how the surface water dams are going to be constructed and managed Concern that the East Gippsland Erosion Management Overlay was not considered when designing the dams Questions if it is legal to dam the gullies. 		
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	Anioinc PAM flocculants are regularly used across Australia and are considered safe to use in freshwater environments.
6.	Concern about impacts to Providence Ponds and the Perry River	120, 130, 201, 264, 268, 271, 488, 546, 713, 745, 813	Please see expert witness statement of Tony McAlister, in particular at pages 6 and 14-18.
7.	Hydrological representation of Perry River system was inadequate: channel morphology differs to that of Mitchell River system.	488	Please see expert witness statement of James Weidmann, section 3.3.
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	Detailed design, schedules of quantities, timelines and cost estimates are detailed design matters and not considered necessary to assess environmental effects.
9.	Comment that more information is required in EPA works approval application in relation to proposed water discharges. Submission also makes	514, 813	Please see expert witness statement of Tony McAlister at page 20.

Issue #	Issue description	Submission number #	Response
	recommendations in relation to water quality compliance criteria.		

2.05 Water supply

Issue #	Issue description	Submission number #	Response
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"> • 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; • 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. 	<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,</p>	<p>The site would not seek to take water during the summer irrigation season when water resources are scarce. The site would only take water during winter months, and only during relatively high flow periods when the extraction would not affect current users.</p> <p>The site would take up to 40 ML/day only when the river flows are greater than 1,400 ML/day.</p> <p>During drought conditions, the winter fill threshold flow rate would not be met and the site would take no water from the river. If climate change reduces river flows during the winter fill period to below the winter fill threshold flow rate, the site would take no water from the river.</p> <p>If river water were not available due to low flow conditions, the site would obtain groundwater, or reduce production rate. . See also Mitigation measure SW01: "Surface water will be extracted from the Mitchell River in line with the conditions, timings, and limits detailed in any licence issued by Southern Rural Water."</p> <p>Regulatory oversight of water extractions would be applied to enable sharing of water resources by all water users.</p>

Issue #	Issue description	Submission number #	Response
		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	
2.	Concern over the quantity of water required for the project: Including issues relating to: <ul style="list-style-type: none"> • Increase in production that will lead to further volumes of water being sought • Concern the Project will require more than 3GL water per annum, particularly given study undertaken by Oresome Australia Pty 	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,	If it is found that water requirements are higher than anticipated, Kalbar may undertake measures to reduce water requirements. Options include applying additional water recovery measures to extract water from tails slurry streams, or reducing mining rate.

Issue #	Issue description	Submission number #	Response
	<p>Ltd which indicated a water requirement of 4.6-6.2GL per annum.</p> <ul style="list-style-type: none"> 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) General concerns about insufficient water supply if the project goes ahead, particularly in light of recent droughts. 	<p>851, 852, 856, 859, 861, 862, 863, 868, 872, 873, 875, 887, 895, 899, 902, 903, 905</p>	
3.	<p>Impact to other users of the water required, including:</p> <ul style="list-style-type: none"> Unpredictability of effects of water extraction on others users and the environment due to climate change. 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? Concern Project will impact the supply of water for domestic use and /or result in existing users being put on permanent water restrictions. Availability of water to the South Pines Golf Club. Increase bushfire risk 	<p>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</p>	<p>The interannual variability of rainfall illustrated in the historical climate record is much greater than the potential for climate drying over the life of the project.</p> <p>By planning for a repeat of multi-year drought conditions that have occurred in the past, the project will have water supply flexibility suitable for responding to climate change effects.</p>

Issue #	Issue description	Submission number #	Response
	<ul style="list-style-type: none"> • reduce the amount of water available for growing food and protecting the bush. 		
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	Please see expert witness statement of Joel Georgiou. In particular see at page 81.
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"> • Queries why Kalbar will be able to access water from the Mitchell River during drought • Suggestions that the intention is to extract water throughout the year. • Australian government bioregional assessments demonstrate that 1,400ML/day flows will not occur for 227 days in a given year • extraction sites are not within the tenement boundary. • The river in the area cannot supply anywhere near the volumes of water required for the Project. • 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>). 	54, 56, 61, 66, 71, 99, 131, 225, 252, 457, 530, 813	Refer to item 1 above.

Issue #	Issue description	Submission number #	Response
	<ul style="list-style-type: none"> • 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) • What is the back up or alternative strategy if water becomes unavailable? 		
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	Proposed dams would not reduce Mitchell River flow as fresh water extracted from the Mitchell River would be released to offset mine contact water captured in the water management dams.
7.	Noise and visual impacts associated with the pump station. Request that adequate mitigation will be provided.	750, 813	Please see expert witness statement of Christophe Delaire at pages 3, 7, and Appendix E (pages 27-39).
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	The hydraulics of the water delivery system will be developed to meet the project needs.

2.06 Air quality

Issue #	Issue description	Submission number #	Response
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,	Please see expert witness statement of Simon Welchman at page 32.

Issue #	Issue description	Submission number #	Response
		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, 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	Please see expert witness statement of Simon Welchman at page 33.

Issue #	Issue description	Submission number #	Response
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"> • Filtration systems to be fitted to all domestic tank within 50km radius • Ongoing tank monitoring within given radius of the project to provide assurances to residents • 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. • 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 	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	Please see expert witness statement of Simon Welchman at page 34.
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"> • 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. • Victorian EPA standards are outdated and we should be using the USA EPA standards of assessment. 	241, 268, 389, 423, 484, 516, 520, 554, 556, 582, 649, 672, 712, 813	Please see expert witness statement of Simon Welchman at pages 34-6.

Issue #	Issue description	Submission number #	Response
	<ul style="list-style-type: none"> • Some rare earth elements do not have local guidelines so there is no yardstick to measure them • The methodology used to present the airborne carcinogens in the ore and that they can accumulate in through the food chain. • The air quality assessment does not map or define the distances that dust will travel under different wind speeds. • Concern about modelled exceedances of PM₁₀ criteria in the <i>National Environment Protection (Ambient Air Quality) Measure 2016</i>. • 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. • The AERMOD modelling undertaken by the consultant has been shown to underestimate contamination from more complex topography...and therefore probably underestimates dust emissions. • The air quality assessment incorrectly calculates that Kalbar's proposed two water trucks will be sufficient to ensure dust mitigation • Concern that the mathematical modelling is inadequate for dust modelling and that various measurements involved with the dust assessment fall short of requirements. 		

Issue #	Issue description	Submission number #	Response
	<ul style="list-style-type: none"> 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. Concern that the modelling did not account for topography of the area. Concern that the modelling did not address dust impacts during years 1-3, when dust impacts would be greatest. 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. 		
5.	<p>Concern about likely effectiveness of dust mitigation measures:</p> <ul style="list-style-type: none"> The water balance does not allow for sufficient volumes of water to suppress dust. 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 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? 	57, 213, 484, 831, 225, 239, 481, 524, 541, 559, 763, 649, 675, 813	Please see expert witness statement of Simon Welchman at pages 36-7

Issue #	Issue description	Submission number #	Response
	<ul style="list-style-type: none"> 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 Concern about mine running out of water for dust suppression. 		
6.	<p>The air monitoring was undertaken at an inappropriate location/time.</p> <ul style="list-style-type: none"> Concern that there was only one monitoring station given the size of the Project area. Concern that wind speed data used in air quality assessment were not representative of local peak wind speeds. Concern that air quality monitoring stations were inappropriately placed, and provided misleading windspeed information only parts of the mining process were assessed as far as dust production Concern that the dust monitoring/weather data has a gap during the summer months ((Jan-Apr) and that wind has been under reported. 	57, 70, 135, 157, 158, 225, 268, 481, 525, 752, 812, 813, 831, 837	Please see expert witness statement of Simon Welchman at pages 37-8.
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	Please see expert witness statement of Simon Welchman at page 38.

Issue #	Issue description	Submission number #	Response
8.	Concern there is no regulatory standards for dust deposition levels on vegetables; concern about dust deposition on grapes in vineyard.	243, 509	Please see expert witness statement of Simon Welchman at page 38.
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	Please see expert witness statement of Simon Welchman at page 38.
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/m ³ for PM _{2.5} and 50 ug/m ³ for PM ₁₀ . 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	Please see expert witness statement of Simon Welchman at pages 38-9.
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	Please see expert witness statement of Simon Welchman at page 39.
12.	Estimation of radionuclide uptake in crops is flawed because it only considers soils 'not yet exposed to the impact of mining'.	516, 582	Please see expert witness statement of Darren Billingsley at page 43.

Issue #	Issue description	Submission number #	Response
13.	Visibility of dust will affect community's assessment of 'acceptability' of dust levels.	813	Please see expert witness statement of Simon Welchman at page 39.
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	Please see expert witness statement of Simon Welchman at page 39.

2.07 Climate change and Greenhouse Gas emissions

Issue #	Issue description	Submission number #	Response
1.	The Project will result in greenhouse gas emissions and exacerbate climate change effects. Kalbar should either purchase renewable energy or install a renewable energy generator given the significant energy consumption.	6, 41, 51, 67, 77, 248, 263, 268, 335, 348, 352, 388, 544, 673, 705, 813	Please see expert witness statement of Simon Welchman at pages 39-40. Note also Mitigation Measure GHG01-GHG10 which set out Kalbar's current strategies to reduce greenhouse gas emissions associated with the Project.
2.	Claim that Kalbar has made no or a limited effort to mitigate scope 2 and/or scope 3 emissions.	6, 705, 813	Please see expert witness statement of Simon Welchman at pages 40-41.
3.	Comment that removal of over 700 large mature trees will release sequestered CO2 back into the atmosphere.	156	Please see expert witness statement of Simon Welchman at page 41.
4.	Query whether Kalbar will be using conventional or unconventional gas.	473	Please see expert witness statement of Simon Welchman at page 41.

Issue #	Issue description	Submission number #	Response
5.	Concern that the GHG emissions calculations are underestimated, targets have not been set for reduction over the life of the project.	705, 813	Please see expert witness statement of Simon Welchman at page 41.
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	Please see expert witness statement of Simon Welchman at page 41.
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	Please see expert witness statement of Simon Welchman at page 41.
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	Please see expert witness statement of Simon Welchman at page 41.
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	Please see expert witness statement of Simon Welchman at page 41.

2.08 Noise

Issue #	Issue description	Submission number #	Response
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	Please see expert witness statement of Christophe Delaire at pages 42-51, and in particular at page 50.

Issue #	Issue description	Submission number #	Response
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	Please see expert witness statement of Christophe Delaire at pages 42-51, and in particular at page 50.
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	Please see expert witness statement of Christophe Delaire at pages 42-51, and in particular at page 50.
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	Please see expert witness statement of Christophe Delaire at pages 42-51, and in particular at page 51.
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	Please see expert witness statement of Christophe Delaire at pages 42-51, and in particular at page 51.
6.	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	Please see expert witness statement of Christophe Delaire at pages 42-51, and in particular at page 51.

2.09 Radiation/Heavy Metals

Issue #	Issue description	Submission #	Response
1.	<p>Concern about radiation effects, including radiation waste and transport of radioactive materials.</p> <p>Queries raised include:</p> <ul style="list-style-type: none"> • What standards the Project will be required to comply with, who will monitor and will the results be made public? • 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. 	<p>22, 24, 33, 50, 68, 69, 74, 76, 79, 81, 86, 89, 153, 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>	<p>Please see expert witness statement of Darren Billingsley. See generally at pages 35-63, and particularly at page 48.</p> <p>With regard to specific issues raised:</p> <ul style="list-style-type: none"> • The Project will need to comply with the Victorian Radiation Act 2005 and its respective Conditions of license issued to Kalbar under the Act (refer Statement, Appendix F – ‘regulatory framework concerns’). • Kalbar will be required to monitor in accordance with their approved radiation monitoring program incorporated into their RMP (RAR, Section 10.1) • It is not possible to comment on whether results will be made publicly available, this is likely to be a decision that will be made in due course by Kalbar and/or the Victorian radiation regulator. • Transport requirements will be dictated only by the Victorian DHHS requirements. Decisions will be based on the radioactive concentrations of the HMC, and not the ‘monazite content’. Radioactive concentrations have been determined by laboratory analysis of sample material. (Witness Statement, Appendix F – Transport: regulatory requirement’ discusses this in further detail).
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>	<p>Please see expert witness statement of Darren Billingsley. See generally at pages 35-63. See, for example, page 41.</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.</p>	<p>52, 171, 268, 375, 408, 423, 484, 488, 613, 620, 679, 733, 777, 781, 814,</p>	<p>Please see expert witness statement of Darren Billingsley. See generally at pages 35-63.</p>

Issue #	Issue description	Submission #	Response
	Concern over the the use of appropriate HIL ranges, including bismuth, thorium, thallium uranium, vanadium and tungsten.		
4.	Concern about bioaccumulation of radionuclides and heavy metals in soil and pasture and their effect on livestock and native animals.	77, 241, 541, 673, 679, 777	<p>Please see expert witness statement of Darren Billingsley. See generally at pages 35-63. See, for example, at pages 60-61.</p> <p>Radionuclides in livestock is discussed in Darren Billingsley's Witness Statement (Appendix G, 'Dust impact on consumption of locally grown vegetables: Cattle consumption'), p 58.</p> <p>Radionuclides in native animals has been considered in the RAR (Section 9.3: Impact to the Environment'). Modelling was undertaken to undertake a Tier 1 assessment to biota in a terrestrial ecosystem. Results indicated no further assessment is required.</p>
5.	Concern about radioactive pollution of waterways and potential bioaccumulation in fish. Including atmospheric entrainment over time upwards in mountains and tributaries.	79, 181, 241, 408, 613, 620, 733, 763	Please see expert witness statement of Darren Billingsley. See generally at pages 35-63. See in particular at page 54.
6.	Concern mining of radioactive substances will cause inevitable contamination of air and water.	160, 484	Please see expert witness statement of Darren Billingsley. See generally at pages 35-63. See particularly at 50-53 (on airborne radioactive dust) and at 54-57 (dust impact on surface water quality).
7.	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.	241	<p>Please see expert witness statement of Darren Billingsley. See generally at pages 35-63. See particularly at pages 36-37.</p> <p>The Fingerboards Project involves primary separation only, separating the ore into magnetic and non-magnetic concentrate. Total activity concentrations of the HMC will not exceed ~10 Bq/g.</p> <p>There is no physical separation, chemical leaching, or solvent extraction proposed that would otherwise leading to the potential separation of the monazite and thus a lot higher radioactivity concentrations.</p>
8.	Submitter comments that the radiation assessment did not detect uranium and thorium radionuclides in	241	Please see expert witness statement of Darren Billingsley at section 8.4 (pages 14-15).

Issue #	Issue description	Submission #	Response
	PM ₁₀ particles and states that this suggests that “alternative more sensitive analytical and/or sampling techniques should be utilized to enable detection and measurement”.		
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	Please see expert witness statement of Darren Billingsley at pages 29-31 and page 44.
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	Please see expert witness statement of Darren Billingsley. See generally at pages 35-63. See particularly at pages 45-46. It should be noted that this submission and comment relates to occupational doses and not members of the public doses.
11.	Concern that there may be elevated radiation levels at areas of spillage adjacent to monazite loading and storage facilities.	763	Please see expert witness statement of Darren Billingsley. See generally at pages 35-63. See particularly at pages 47-48.

2.10 Traffic and transport

Issue #	Issue description	Submission number #	Response
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,	Please see expert witness statement of Paul Carter. See generally at pages 44-80. See in particular at pages 35-38 and 45-46. See also at pages 23-24. Safety Impacts associated with road safety regarding intersections, road geometry, lighting, driver safety, level crossings, pedestrians, schools, bus services and over-dimensional loads have been assessed with mitigation measures identified. Mitigation measures included both infrastructure and operational measures. Detail of the transport safety

Issue #	Issue description	Submission number #	Response
		877, 879, 897	<p>assessments can be found in sections 7.3, 8.1, 9.3 of the Traffic and Transport Impact Assessment (Appendix A012 of the EES) for each product transport route. Responses to specific concerns raised in submissions regarding road safety are provided in Section 4.4.1 of Paul Carter's Expert Witness Statement.</p> <p>Damage to road pavement and responsibility for maintenance / repair</p> <p>The Traffic and Transport Assessment includes recommendations that an Asset Protection Plan is developed and agreed with the relevant responsible authority to mitigate risk of pavement impacts as a result of the project (refer Section 11 of the Traffic and Transport Impact Assessment -Appendix A012 of the EES). The asset protection plan would include timing and method of monitoring as well as the reimbursement of any costs associated with significant change in pavement life that is attributed to the project.</p> <p>Refer sections 7.4, 8.2 and 9.4 of the Traffic and Transport Impact Assessment for a high-level road pavement assessment that was undertaken. Further detail regarding the monitoring and Asset Protection Plan is also provided in Section 4.1.2.5 of Paul Carter's Expert Witness Statement.</p> <p>South Pines Golf Club</p> <p>Refer Section 4.4.1.4 (p48) of Paul Carter's Expert Witness Statement in relation to the South Pines Golf Club.</p>
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	<p>Please see expert witness statement of Paul Carter. See generally at pages 44-80. See in particular at pages 44, 45-46, 50, 53, 57,</p> <p>See also, generally, expert witness statement of Aaron Organ.</p> <p>Flora and Fauna</p> <p>Specific mitigation measures (e.g. staff and contractor inductions and education, road signage, reduced speed limits, ongoing monitoring and reporting of fauna roadkill) to prevent and minimise the impacts associated with fauna road mortality will be outlined in the Biodiversity</p>

Issue #	Issue description	Submission number #	Response
			<p>Sub-plan.</p> <p>present adjacent to roads within and outside of the project area.</p> <p>Road network capacity</p> <p>Traffic performance impacts are discussed in sections 7.1, 7.2, 9.1 and 9.2 of the Traffic and Transport Impact Assessment (Appendix A012 of the EES). This indicates minimal impact during normal peak periods. It is noted that during holiday periods there would be greater impacts.</p> <p>Increased risk of crashes</p> <p>As per response to Issue #1, impacts associated with road safety regarding intersections, road geometry, lighting, driver safety, level crossings, pedestrians, schools, bus services and over-dimensional loads have been assessed with mitigation measures proposed. While the intersections would operate within capacity limits and are already approved for B-double use, mitigation measures include both infrastructure and operational measures. Detail of the transport safety assessments can be found in sections 7.3, 8.1, 9.3 of the Traffic and Transport Impact Assessment for each product transport route. Responses to specific concerns raised in submissions regarding transport safety are provided in Section 4.4.1 of Paul Carter's Expert Witness Statement.</p>
3.	<p>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.</p>	9, 268, 568, 734, 813, 837, 875	<p>Please see expert witness statement of Paul Carter. See generally at pages 44-80. See page 58 regarding tourism.</p> <p>Delays due to road diversions</p> <p>Road diversions proposed to facilitate mining activities have the potential to introduce delays to road users, in particular with the Bairnsdale-Dargo Road diversion. The final permanent alignment would result in additional travel time for road users with the additional distance to travel and additional time associated with the recommended roundabout at Bairnsdale-Dargo Road and Fernbank-Glenaladale Road. This would represent an inconvenience for local road users however the impact to the broader network is assessed as low.</p> <p>Refer Section 7.2.2 of the Traffic and Transport Impact Assessment</p>

Issue #	Issue description	Submission number #	Response
			<p>(Appendix A012 of the EES) for further detail.</p> <p>Impact to other road users</p> <p>Emergency management infrastructure will need to be considered as part of the detailed design of any changes to the road network. Consultation with the Country Fire Authority (CFA) will also be required to ensure their access requirements are catered for.</p> <p>Emergency services during any road works will also need to be considered with an Emergency Management Plan produced. Refer to Section 7.5 of the Traffic and Transport Impact Assessment for further details on emergency management during any road upgrades.</p> <p>Regarding tourism, consideration of peak tourism times has been considered as part of the safety and traffic operational assessments. Specific changes to the road and travel conditions should not impact tourists using the area, with marginal impact to travel times associated with road diversions. Refer to Section 4.4.5.1 of Paul Carter's Expert Witness Statement.</p> <p>The proposed mitigation measures utilize conventional treatments (e.g. lighting improvements, roundabouts, improved signage and line marking etc) which considers the requirements of non-familiar users. In addition to mitigating the risks associated with the project, the proposed treatments would have some safety benefits for non-project traffic (including elderly drivers).</p> <p>The recommended mitigation measures where the private haul road crosses Fernbank-Glenaladale Road includes traffic signals, a reduction in the speed limit to 80km/h, as well as advanced warning signs with flashing lights that would alert less familiar drivers or those not expecting this treatment in a rural road environment.</p>

Issue #	Issue description	Submission number #	Response
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 during transport.	171, 316, 630, 673, 869	<p>Please see expert witness statement of Paul Carter. See generally at pages 44-80. See, for example at pages 44, 66, and 71.</p> <p>See also expert witness statement of Darren Billingsley at pages 47-48, to the extent this issue concerns radiation sources.</p> <p>All transportation of materials will be managed in accordance with Victorian and Commonwealth legislation.</p> <p>Mitigation Measures include:</p> <p>(GW12) - Hazardous materials will be transported in accordance with the Australian Code for the Transport of Dangerous Goods by Road and Rail (National Transport Commission, 2017) 2</p> <p>All transportation of HMC concentrate will be in fully sealed containers (RD 04).</p> <p>(RH18) - All Hazardous materials will be managed (including storage, handling, transport and disposal) in accordance with relevant safety data sheets.</p> <p>Transport contractor will require a Radiation Management License from the Victorian Department of Health and Human Services (radiation) giving approval on safe transporting methodology and procedures (Refer to Radiation Assessment Report).</p>
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	<p>Refer Section 4.4.1.5 of Paul Carter's Expert Witness Statement for a summary of assessment of safety of cyclists on roads along product transport routes. Note the TOMP is a recommendation of the Traffic and Transport Impact Assessment and further detail of the TOMP is provided in Section 4.3.2 of Paul Carter's Expert Witness Statement.</p>
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	268, 813, 893	<p>Please see expert witness statement of Paul Carter. See generally at pages 44-80. See in particular at pages 63-64 and 68-69.</p> <p>Traffic data used</p> <p>Publicly available information was used for the majority of assessments. This was supplemented with spot counts of traffic turning</p>

Issue #	Issue description	Submission number #	Response
	weekends.		<p>movement volumes at select locations during site visits in 2018 (pre-COVID-19). This level of data collection is considered appropriate for the level of investigations required at this stage of the project.</p> <p>Recent traffic counts were also conducted in November 2020 (during COVID-19) at two locations around Walpa and Lindenow South. These are discussed in Section 4.3.1 of Paul Carter's Expert Witness Statement.</p> <p>Seasonality</p> <p>Whilst volumes used for the Traffic and Transport Assessment were based on typical weekday volumes, analysis into seasonality (i.e. across a 12-month period) was carried out for the Princes Highway where increases in traffic were notable during weekends, long weekends and school holiday periods. These seasonal effects have informed the identification of mitigating measures such as the selection of intersection treatment types and recommendations to avoid product transport and road construction during busy times of the year (e.g. long weekends and school holidays).</p> <p>Refer Section 5.3.2 of the Traffic and Transport Impact Assessment (Appendix A012 of the EES) for details of the seasonality assessment.</p>
7.	Preference for rail options and timing provided.	95, 611	<p>Noted.</p> <p>Please see, generally, expert witness statement of Paul Carter.</p> <p>Kalbar's preferred option is to use the Post-Avon River Bridge Option 1 – Fernbank East rail siding only for product transport. The intent is to use this as the sole product transport route, and other alternative options will not be pursued if the Fernbank East siding option were to proceed.</p>
8.	Concern about HMC being transported on roads used by school buses. School buses will travel through mine site.	488, 688	<p>Please see expert witness statement of Paul Carter. See generally at pages 44-80. See also at pages 8 and 19.</p> <p>From a traffic and transport perspective, the key mitigation measure for addressing safety risks around schools is for product transport to avoid travel during hours of school pickup and drop off (i.e. 8:00am – 9:30am</p>

Issue #	Issue description	Submission number #	Response
			<p>and 2:30pm – 4:00pm).</p> <p>This measure focuses particularly on safety of people walking and cycling near schools but would also mitigate safety risks for school buses as the interaction with product transport would be reduced.</p> <p>It is noted that this risk would be significantly mitigated should Kalbar's preferred option to utilise a rail siding in Fernbank East be adopted (i.e. Post-Avon River Bridge – Option 1).</p> <p>Refer Section 7.3.5 of the Traffic and Transport Impact Assessment (Appendix A012 of the EES).</p>
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	The rationale for road alignments is explained in the EES (See EES Chapter 4, Alternatives).
10.	Concern that the rail option omitted required track upgrades and how it will be funded.	712, 813	<p>In terms of engineering capacity, the trains required to move the estimated volume of product take into account the axle load capacity of the Gippsland Line. Kalbar's haulage operator bidders are both proposing to use rollingstock which is commonly used on broad gauge track in other parts of Victoria.</p> <p>In terms of rail operations, Kalbar has been progressing discussions in relation to rail access with the Department of Transport since 2019, including the Department of Transport incorporating Kalbar's requirements into regular timetable cycles. The Kalbar rail solution will take advantage of the recently completed the Avon river bridge and continuing upgrade works to the Gippsland Line due for completion in 2022.</p> <p>Refer to Section 4.3.3 of Paul Carter's Expert Witness Statement for further information on train movements and rail operations, and Section 4.4.6.4 of the statement for response to submissions raising concerns regarding rail track capacity.</p>
11.	Comment querying why the diverted roads can't be built over the already mined areas south of the	813	Road diversions have been planned with consideration to mine planning requirements, environmental values, landowners and relevant

Issue #	Issue description	Submission number #	Response
	Bairnsdale-Dargo Rd.		authorities. Some road diversions in fact do occur over already mined areas.

2.11 Horticulture/agriculture

Issue #	Issue description	Submission number #	Response
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, 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,	Refer to expert witness statement of Dr Doris Blaesing at section 3.2 (Response to issues raised in submissions).

Issue #	Issue description	Submission number #	Response
		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,	Refer to expert witness statement of Dr Doris Blaesing at section 3.2 (Response to issues raised in submissions), items 74-75 (pp 28-30).

Issue #	Issue description	Submission number #	Response
		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	
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	Refer to expert witness statement of Dr Doris Blaesing at section 3.2 (Response to issues raised in submissions), see particularly item 66 (p 22).
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"> • 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; • 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 • claim that using the intensity of agriculture as a gauge of profitability is a misleading measure because decision making within the 	123, 268, 502, 568, 812, 813, 814, 827	These issues are noted and will need to be considered further through the course of the hearing.

Issue #	Issue description	Submission number #	Response
	agricultural sector is complex and includes factors such as levels of debt, climate, markets and environmental health and biodiversity.		
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	Refer to expert witness statement of Dr Doris Blaesing at section 3.2 (Response to issues raised in submissions), item 73 (p 27).
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	A response to biosecurity issues is contained in the expert witness statement of Dr Doris Blaesing at section 3.2 (Response to issues raised in submissions), item 60 (p 17). Kalbar expects that the other issues within this theme will be explored further through the hearing.
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	The information that Kalbar relies on in relation to this issue is contained in the Economic Impact Assessment prepared by BAEconomics which is appended to the Socioeconomic Impact Assessment report, at Appendix A018.
8.	Concerns that certain types of crops are not typically washed prior to sale.	389, 390, 509, 524, 813, 892, 896	Refer to expert witness statement of Dr Doris Blaesing at section 3.2 (Response to issues raised in submissions), item 61 (pp 17-18).
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	Kalbar proposes that the land will be returned to equal or better agricultural potential, post rehabilitation. However, the extent of agricultural land will be reduced, with stock exclusion areas and an approximately 200ha reinstated as a native vegetation reserve.

Issue #	Issue description	Submission number #	Response
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 loss of paddock trees and pastures post mining.	157, 502, 738, 768, 812, 813, 814, 837, 887	<p>Refer EES Chapter 9, p 9-362 (pdf p 363) which states:</p> <p>“Concerns were raised by adjacent landholders on the potential for livestock production to be impacted by dust and noise emissions from project activities. A literature review of available studies on this issue found that livestock experienced little or no effect from loud noises, such as sonic booms or aircraft noise. Additionally, if the noise is familiar, and not associated with danger, an animal’s response will become moderated. The presence of a mine close to livestock was also found to have minimal impact on production. For example, coal dust associated with a mine was found to have no effect on the palatability of feed when dust was present at a level equivalent to a dust deposition rate of 4,000 mg/m²/day (which is a typical guideline used to protect against amenity impacts).”</p> <p>Refer also to the evidence statement of Darren Billingsley, pp 60-61, which discusses the issue of inhalation and digestion of dust containing radionuclides by livestock and states:</p> <p>“Whilst this exposure pathway is considered to be negligible, the impact can be modelled using commercially available software that is available. Data on local farming practices can be used as inputs where it is applicable. I recommend that an assessment of this exposure pathway be undertaken for incorporation into the Radiation Environment Plan (refer to section 6.5.3 above). The REP requires approval from the Victorian DHHS prior to issue of a Management Licence.”</p>
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	Refer to expert witness statement of Dr Doris Blaesing at section 3.2 (Response to issues raised in submissions), item 65-67 (pp 20-24).
12.	Concerns around the adequacy of the EES soil assessment, including the soil testing methodology.	813	Kalbar expects that these concerns will be raised further through the course of the hearing and will consider these issues further through that

Issue #	Issue description	Submission number #	Response
	<p>Particular claims include:</p> <ul style="list-style-type: none"> • the majority of samples were taken from the property of a “lifestyle” owner in the NE quadrant of the site; • sampling was not evenly distributed over the Project site; • sampling techniques were not standardized; • delay between sampling and lab analysis; • claim that incorrect test was used to determine the level of plant available phosphorus in the soil; and • the level of soil organic matter was not measured when determining soil water holding capacity. 		process.
13.	Concerns that that the impact statements on provenance and supply chain issues are not supported by current consumer information.	277	Refer to expert witness statement of Dr Doris Blaesing at section 3.2 (Response to issues raised in submissions), items 77-78 (pp 32-34).
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	Refer item 13 above.
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	Kalbar’s position is that these issues are adequately addressed through existing compliance and enforcement mechanisms provided under Victorian law.

2.12 Cultural heritage

Issue #	Issue description	Submission number #	Response
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,	<p>Kalbar has consulted with GLAWAC through the EES process, and is continuing to consult with GLAWAC as part of the preparation of CHMP 14969. The conditions and contingencies of CHMP 14969 will also require continued engagement and agreement with GLAWAC.</p> <p>GLAWAC has, and continues to be, consulted with regard to the sufficiency of cultural heritage assessments. CHMP 14969 will not be finalised until both GLAWAC and Aboriginal Victoria are in agreement that a sufficient level of assessment has been undertaken and the appropriate management conditions are established.</p> <p>At the request of GLAWAC, cultural values will be further explored by a historian nominated by GLAWAC. Kalbar has engaged this historian for the purpose of collecting the Gunaikurnai oral stories and traditions and documenting them in a cultural values assessment. The findings of the cultural values assessment will be incorporated into CHMP 14969, and will enable an assessment of potential impacts on intangible cultural heritage values.</p>

Issue #	Issue description	Submission number #	Response
		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	<p>The Den of Nargun is located on a tributary of the Mitchell River about 9 km to the north of the mine area. It is also upstream of the mine.</p> <p>The downstream extraction and discharge of water from/into the Mitchell River is not anticipated to have any impact on the Den of Nargun.</p>
3.	Concern the historical significance and heritage of the Fingerboards area and intersection will be lost.	123, 172, 813, 831	<p>The Project site does not contain any places on the Victorian Heritage Register or land covered by the Heritage Overlay under the Planning Scheme.</p> <p>EES Appendix A017 section 6.3.3 outlines field survey results concerning historical cultural heritage. The study identifies two 19th century structures that were referred to Heritage Victoria, but considered not to meet the threshold for inclusion on the State Register.</p> <p>Kalbar is open to documenting existing historic features of the Project area through archival photography, relocating structures and other archival means, if recommended by the IAC. However, its current position is that the historical heritage significance of the Project area is low and fabric retention within the mining area is not warranted.</p>
4.	Dissatisfaction with the mitigation measures proposed to protect cultural heritage	357, 361, 365, 371, 373, 374, 436, 440, 441, 442, 446, 535, 813	<p>Whilst Kalbar accepts that the Mitigation Register in EES Attachment H includes general, albeit typical and, in its view, appropriate mitigation measures to protect cultural heritage, it is relevant to note that complete mitigation measures will be set out in the approved CHMP and based on the outcomes of investigations that are currently underway in consultation with GLAWAC and Aboriginal Victoria.</p>

2.13 Socioeconomic

Issue #	Issue description	Submission number #	Response
1.	Kalbar will not pay council rates, displacing an existing source of revenue from rates paid by agricultural businesses.	20,77, 201, 268, 288, 516, 673, 813	This is correct. However, Kalbar's position is that the Project will have net positive local economic benefits, as per the BAEconomics study appended to the Socioeconomic Impact Assessment report, at Appendix A018.
2.	Perceived economic benefits of the Project will not outweigh the losses and impacts. 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).	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	This is an issue that Kalbar expects will be considered further at the hearing.
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	Section 3.5 of the socioeconomic impact assessment report describes the workforce requirements for the project. The operations workforce is likely to consist of about 200 people. Kalbar expects to source most of the workforce locally, with the opportunity to train personnel once the

Issue #	Issue description	Submission number #	Response
			mine is operational. Given this use of local workforce, no significant strain on community facilities or infrastructure is expected.
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	Section 6.1.6 of the Socioeconomic Impact Assessment (Appendix A018) discusses this issue under the heading 'cohesive community' and recommends strategies to achieve net positive outcomes. Kalbar accepts that there may be both negative and positive local effects of the Project but will endeavour to support positive community outcomes, using the frameworks and strategies outlined in the EES. .
5.	Supports the Project because of the job opportunities and flow on effects to the community.	151, 232	Noted.
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	Noted.
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	Refer to response to No. 3 above. Kalbar expects to source most of the workforce locally, with the opportunity to train personnel once the mine is operational. Some competition for local horticultural / agricultural labour is acknowledged.
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	Local benefits are expected through increased employment opportunities and economic activity.
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	268, 468, 554, 614, 652, 680, 688, 693, 698, 703, 711, 744, 745, 813, 838	Section 6.1.6 of the Socioeconomic Impact Assessment (Appendix A018) report outlines the potential impact to community cohesion. The Fingerboards intersection is a community meeting place which will be directly impacted by the project, particularly during active mining when there will be a loss of access to this location and permanent changes to this intersection.

Issue #	Issue description	Submission number #	Response
	Fingerboards as a meeting place.		
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	Section 6.4 of the Socioeconomic Impact Assessment (Appendix A018) report outlines that the community and individual wellbeing may be affected by potential impacts to the reputation of the industry, particularly as a number of areas have been farmed by the same families over multiple generations. While different people will respond to these impacts in different ways it may affect how some people participate in the local community. It may lead others to decide to change or sell their business or leave their property.
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	Section 6.2.2 of the Socioeconomic Impact Assessment (Appendix A018) outlines that ground disturbance associated with open void mining is likely to impact on the connection that landholders within the project area and adjacent residents have with their land, particularly during active mining. While the progressive rehabilitation of exposed areas and return of the land to its former agricultural land use may assist some landholders in the project area and surrounds in re-establishing a connection with their land, for others this connection may be permanently modified.
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	Victorian legislation supports the sustainable development of mineral resources. The presence of other projects does not detract from the in principle support for development of mineral resources within the Fingerboards deposit.

2.14 Human health

Issue #	Issue description	Submission number #	Response
1.	<p>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</p>	<p>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, 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</p>	<p>Please see expert witness statement of Karen Teague. In particular, see at page 41.</p>
2.	<p>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.</p> <p>Also a concern the assessment does not sufficiently address consequences of recent bushfires, COVID-</p>	<p>40, 104, 241, 607, 659, 679, 703, 713, 715, 743, 813</p>	<p>Please see expert witness statement of Karen Teague. For example, see at pages 3 and 41.</p>

Issue #	Issue description	Submission number #	Response
	19, and is not based on site inspections.		
3.	Concern that Tier 2 health risk assessment was appropriate nor required.	813	Please see expert witness statement of Karen Teague. See in particular the response to submission at pdf p 39.
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	This is a technical concern that Kalbar expects will be explored further by the submitter at the hearing.
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	Kalbar's position is that if noise is managed in accordance with relevant Government policies and criteria, then health concerns are unlikely to exist. Light spill impacts are anticipated to be low and are proposed to be managed using best practice measures. Accordingly, health impacts arising from light spill are not considered to be a credible risk.
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	Please see expert witness statement of Simon Welchman, section 2.7, response to issue 1, p 32 (pdf p 35).
7. C	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	Please see expert witness statement of Darren Billingsley, in particular at pages 58-61.
8.	Concern regarding potential contamination of water	241, 306, 308, 316, 355, 356,	Refer to section 9.3 of the Human Health Impact Assessment

Issue #	Issue description	Submission number #	Response
	supply that is used for human consumption	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	(Appendix A019).
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 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.	813	Refer to expert evidence statement of Karen Teague, p 39, response to submission (all rows).

2.15 Rehabilitation

Issue #	Issue description	Submission number #	Response
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,	<p>Please see expert witness statement of Dr Rob Loch, in particular at pages 5 and 6.</p> <p>Rehabilitation requirements are set via an approved work plan, which is enforceable, and secured under the MRSD Act, including via a rehabilitation bond.</p>

Issue #	Issue description	Submission number #	Response
		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	Concern noted but not accepted.
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	This is hypothetical. The amount of the rehabilitation bond is set by the Minister under s80 of MRSD Act.
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	Kalbar relies on the evidence of Dr Rob Loch and does not accept this submission.
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	Kalbar relies on the evidence of Dr Rob Loch and does not accept this submission.

2.16 Community engagement

Issue #	Issue description	Submission number #	Our response
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	<p>Kalbar has undertaken its community engagement in accordance with the Consultation Plan it submitted to DELWP in April 2018.</p> <p>Kalbar's community engagement and stakeholder consultation - and the matters and concerns raised by the community through the consultation process - is described in EES Chapter 6 and Attachment G.</p> <p>Kalbar has acknowledged in the EES that the manner and form of consultation was at times criticised by community members, and its responses to try and address those criticisms are summarised in EES Attachment G, Table 1.</p>
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	Noted.
3.	Claim the Project has no social licence to proceed.	252, 300, 384, 575, 630, 781, 784, 813, 814	<p>Kalbar acknowledges that it, like all project proponents, needs to earn and maintain its social licence.</p> <p>Kalbar has committed to a number of measures to this end, including the preparation and review of a community engagement plan, establishing a Community Reference Group and Environmental Review Committee, a range of community outreach initiatives, , and establishing a community fund to support community events and initiatives that encourage social interaction such as sporting events and community festivals.</p> <p>See EES Section 7.7 and the Socioeconomic commitments in the Mitigation Register at Attachment H.</p>
4.	Concern Project landowners have not been adequately consulted about infrastructure proposed on their land.	268, 484, 781, 812, 813, 833, 837	A brief summary of Kalbar's approaches and consultation with project landowners is presented in EES Main Volume Section 6.4.2.1 and 6.4.3 (though the information about the number of landowner agreements is now dated).

2.17 Tourism impacts

Issue #	Issue description	Submission number #	Response
1.	Concern about the effects of the Project on the region's 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, 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,	Please refer to section 6.3.2 and Table 6.11 of the Socioeconomic Impact Assessment (Appendix A018), which contains an assessment of tourism impacts.

Issue #	Issue description	Submission number #	Response
		886, 887, 890, 891, 892, 895, 900, 901, 902, 905, 906, 908	

2.18 Planning and planning scheme amendment (PSA)

Issue #	Issue description	Submission number #	Response
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, 859, 862, 867, 870, 872, 876, 883, 884, 885, 886, 892, 895, 898	Compulsory acquisition of land is not proposed.
2.	Comment that the PSA does not address various	813	Please see, generally, witness statement of John Glossop.

Issue #	Issue description	Submission number #	Response
	aspects of the Planning Policy Framework.		
3.	Comment that Kalbar has sought the PSA to have 'ultimate control' over the land subject to the PSA.	813	<p>Please see, generally, witness statement of John Glossop.</p> <p>Use and development of the land outside the mining licence area will be subject to controls under the planning scheme. The Incorporated Document requires plans and reports to be approved to the satisfaction of the Responsible Authority. Once approved, these are enforceable by "any person" under s114 of the <i>Planning and Environment Act 1987</i>.</p> <p>Further, the Specific Controls Overlay and Incorporated Document only regulate use and development for the purpose of the Project. These controls do not otherwise change the controls applying to the land if used or developed for another purpose.</p>
4.	Comment that the planning scheme amendment includes a Public Acquisition Overlay.	813	A Public Acquisition Overlay is not proposed.
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	Kalbar's position is that this particular project will not present an unacceptable incompatibility with ongoing agricultural use of surrounding land, nor preclude the ability for the land to revert to agricultural use following rehabilitation.

2.19 Tailings management

Issue #	Issue description	Submission number #	Response
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,	<p>The characteristics of the tailings are described in Chapter 3 (Project Description) and in Part 5.6.2 of the draft Work Plan at EES Attachment B. In particular:</p> <ul style="list-style-type: none"> • The tailings do not show significant metals enrichment • Leachable elements are mostly close to or below the analytical limits of detection; and

Issue #	Issue description	Submission number #	Response
		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	<ul style="list-style-type: none"> All elements were below the 'clean fill' criteria for contaminated soil in the Industrial Waste Resource Guidelines, with the exception of arsenic (which was still below the 'Category C' waste threshold). <p>A concept design of the temporary TSF is presented in Part 8.5.2 of the draft Work Plan. The temporary TSF was given a 'Significant' risk rating under the ANCOLD <i>Guidelines on the Consequence Categories for Dams</i>, and the TSF will be designed, built and operated in accordance with these Guidelines and with ANCOLD's <i>Guidelines on Tailings Dam Design, Construction and Operation</i> ERR's <i>Technical Guideline Design and Management of Tailings Storage Facilities</i> (DEDJTR, April 2017).</p> <p>See EES Attachment B, Section 8.5 for further detail on TSF design and operations.</p>
2.	Concern about what will happen to the material in the tailings storage dam when the mine is decommissioned.	239, 509, 548, 556	<p>The temporary TSF will be decommissioned after approximately year 5 of the Project (see Chapter 3 – Project Description, section 3.6.1).</p> <p>The introduction of centrifuges, as Kalbar now propose, removes the need for the temporary TSF, allowing dried tailings to be returned directly to the mine void.</p>
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	See expert witness statements of Joel Georgiou (Sections 5.3.4, 5.4.2(xi) and 5.4.3(iii)) and John Sweeney (Sections 5.2.2-5.2.3).
4.	Concern about whether the impact of PSF failure has been modelled.	813	See Kalbar's response to IAC request for information (11 December 2020) question 9.

2.20 EES process

Issue #	Issue description	Submission number #	Response
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	<p>The EES process is established under <i>Environment Effects Act 1978 (EE Act)</i> and further developed through guidelines made under s10 of the EE Act. The current guidelines are the <i>Ministerial guidelines for assessment of environmental effects under the Environment Effects Act 1978</i>, edition 7, 2006 (Guidelines).²</p> <p>The Guidelines explain that proponents are responsible for preparing an EES, with input as to its scope, adequacy and content provided by a Technical Reference Group (TRG) comprising key Government stakeholders and authorities. The TRG is involved in the development of Scoping Requirements, which are prepared by the State Government (DELWP) and set the specific matters to be investigated and documented in the EES.</p> <p>For the Fingerboards Project, the Scoping Requirements (March 2018) are part of the ‘requirements and procedures’ set for the Project by the Minister under s8B(3)(a) of the EE Act (refer Attachment 1 to the IAC’s Terms of Reference, dated 19 July 2020).</p> <p>Consistent with the Guidelines, the Scoping Requirements for the Fingerboards Project require the Proponent to prepare the EES and commission the technical studies that underpin it. This material is then exhibited for public comment and the subject of submissions and public hearings where the material can be considered and tested before informing the Minister’s assessment, which in turn is used to inform relevant statutory decision makers about the environmental effects of the proposal.</p>
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,	The EES has been prepared in accordance with the EES Scoping Requirements, with input from the TRG, and approval by DELWP before public exhibition.

² The Guidelines can be accessed from the following webpage: <<https://www.planning.vic.gov.au/environment-assessment/what-is-the-ees-process-in-victoria>>.

Issue #	Issue description	Submission number #	Response
		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	The EES has been prepared in accordance with the applicable legal frameworks, which the Proponent has no control over.
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	Unintended errors / inconsistencies are inevitable, however, the Proponent is committed to addressing these to the best of its abilities. Errors, inconsistencies or inaccuracies that have been identified to date have been corrected via further material provided to the IAC and as outlined in expert evidence statements.
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	The EES, WAA and draft PSA were publicly exhibited for 40 business days in accordance with the IAC Terms of Reference (June 2020). The Proponent has no control over this.
6.	Concern the decision to allow the Project to proceed has already been made.	154, 290, 484, 575	<p>The Project cannot proceed without a number of statutory approvals as detailed in EES Chapter 5 (Regulation Framework).</p> <p>Further, under section 8C of the EE Act, works associated with the Project must not proceed, and no statutory approvals can be issued, until the environmental effects of the Project have been assessed via the EES, the Minister for Planning has issued his/her assessment, and the Minister's assessment has been considered by the persons / bodies responsible for issuing relevant approvals.</p>
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	The TRG was convened by DELWP and was comprised of representatives of relevant state government agencies and departments and relevant local councils. DELWP also obtained independent peer reviews of the water, air quality and rehabilitation assessments prepared for the EES.

Issue #	Issue description	Submission number #	Response
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	The Proponent has no control of the general nature of the EES process, which is established under the EE Act and guidelines approved under that Act.
9.	Concern about a disclaimer by Coffey in certain EES reports.	532, 610, 813, 814	Coffey has advised the Proponent that the Coffey Technical Appendices to the EES (being Appendices 006, 018 and 019) each describe the scope, methodology, assumptions and limitations relied upon or applied by the authors in preparing the reports. Kalbar submits that this would be apparent to any reasonable reader of those reports, and that they each can be read and understood as stand-alone documents. The authors of two of these three Appendices will be called to give expert evidence to the IAC, and can explain what process they have applied in undertaking their studies, and the relevance or otherwise of the disclaimers included in the Coffey reports.
10.	<p>General concerns with the exhibited EES, including:</p> <ul style="list-style-type: none"> • inadequate risk assessment process and plans; • precautionary principle has not been considered; • lack of peer reviews; • lack of detail (including 3D drawings and animations); • too reliant on modelling; • relies on incorrect or unsatisfactory consequence ratings or indicators; • no addressing of cumulative impacts; • ambiguous or unsubstantiated; 	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	Noted.

Issue #	Issue description	Submission number #	Response
	<ul style="list-style-type: none"> research is limited and should have been conducted over a wider timeframe or area; deals with issues only superficially; and being compiled by people who may have never been on site, or may live outside of Victoria. 		

2.21 Kalbar's track record and experience

Issue #	Issue description	Submission number #	Response
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	<p>Kalbar's Board and executive management team have significant experience in the mining industry, in Australia and around the globe. See Section 1.2.4 of the Main Volume of the EES for further information.</p> <p>It should also be noted that Kalbar will, when applying for its mining licence, also need to satisfy the Minister for Resources that it is a fit and proper person to hold the licence, has an appropriate program of work, and is likely to be able to finance the proposed work and rehabilitation – see ss 15(6) and 16 of the MRSD Act.</p>
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	<p>Kalbar Operations announced on the 29 June 2020 that Appian Capital Advisory has committed A\$144 million to take the Fingerboards Project into construction and operation.</p> <p>See also response to Item above regarding the 'fit and proper person' requirements under the MRSD Act.</p>
3.	Concern about Kalbar's corporate restructure and change in identity of proponent, and that Kalbar is	79, 142, 177, 194, 195, 198, 201, 217, 227, 239, 242, 249, 259, 268, 300, 335, 455, 457,	Kalbar Limited is an Australian company and is now the largest equity holder (circa 80%) of Kalbar Operations Pty Ltd (Australian Company) which was formed as a joint venture between Kalbar Limited and

Issue #	Issue description	Submission number #	Response
	foreign owned. Profits will go offshore.	488, 520, 564, 587, 673, 713, 715, 717, 765, 813, 838, 847, 856, 862, 865, 877, 881, 887, 899, 903, 904, 906	Appian Capital Advisory.